Annual Report on the Welfare State

2002

graphic project and co-ordination:
General Service Network srl

General Index

index

FOREWORD

This second "Report on the Welfare State" further attests to Inpdap's effort to contribute to the debate on social protection.
The analyses and issues covered in the previous edition are taken up again and expanded to consider new aspects; in addition, new themes and areas are explored, including relations between public and private sectors, with respect to both the financing and provision of welfare services.

Today there seems to be a trend in favour of market-based solutions, fostering the expectation of better services at a lower cost and the elimination of some inequalities determined by the anomalous development of the welfare state, without however raising serious barriers to access. To this end, the systems where the market and competitive forces play a significant role are reviewed, in order to determine whether there has been any improvement, not only in terms of efficiency but also in terms of equity.

Another topical theme is that which concerns the rules on the exit of workers over fifty from the labour market. The expulsion of older workers from the labour market is a widespread phenomenon in the Member States of the European Union, but there are different forms of protections and interventions. Whilst older workers exiting the labour market in Italy are afforded income protection by so-called seniority pensions, other European countries resort extensively to other income protection measures for older unemployed workers, encompassing unemployment benefits, early retirement pensions, disability pensions granted for socio-economic reasons, which these workers collect until they qualify for old-age pensions.

The 2002 Report analyses the European healthcare systems. The different models are compared, with reference to both expenditure incurred to provide the relevant services and their financing. The analysis of public and private spending reveals a trend towards the stabilization of total expenditure and the growing importance of the private component; on the funding front, however, there is a sharp difference between countries where financing through general taxation prevails and countries where mostly contributions are used.
While Europe does not have a single model, healthcare systems within the EU do have some elements in common that set them apart from their American counterpart. The most important among these elements include the central role of the state, significant public expenditure as a percentage of healthcare spending, the universalistic nature of the system.

Moreover, two new sectors of the Italian social protection system, healthcare and assistance, are investigated. The institutional development of the national healthcare system is illustrated up to the most recent reform processes, which are examined in light of their possible effects on its efficiency end equity. Welfare spending is too low and fails to protect citizens against the risk of poverty.

Recent measures and the prospects of the Italian pension system are assessed.
Following up on and concluding the analysis started with the first Report, the Italian pension system's ability to ensure adequate pension coverage in the future is discussed. The simultaneous occurrence of several phenomena, such as the reduction and irregularity of contributions along a worker's careers, the lower replacement rates in the contribution-based system, and the indexation of pensions, raises serious doubts on the future adequacy of social security; so far the case for postponing the retirement age and the introduction of supplementary pension benefits have not shed those doubts.
In the area of supplementary pensions, an examination of the relevant draft enabling law brings to the fore the need to solve the problems related to compulsory participation, to worker guarantees and to the inflow and use of resources.
Financial sustainability is key to any social protection system; however, a society that has social cohesiveness at its foundation cannot undertake to reform its welfare system only in light of such feature.

If both social cohesiveness and financial sustainability are considered interrelated and unavoidable, it is important to understand that it is extremely difficult to satisfy both conditions at the same time. In any case, as shown by the relevant analyses, a market-oriented approach does not, in and of itself, achieve that result but does question the levels and certainty of protection.
The old European social protection model, regardless of the more or less profound differences among individual states, seems to be, in the end, that which is most capable of ensuring a high level of cohesiveness, taking care not to exclude any part of society.
Both aspects can be reconciled by constantly revising the institutes of the welfare state, to adapt them to the changing needs of the community, underlining that, more than economic, this is a policy choice designed to distribute the output.

As with the preceding Report, this too was prepared in cooperation with qualified scholars, whom the Institute wishes to thank. We also wish to thank the National Institute of Statistics which, this year too, made available its model to forecast pension spending.

Finally, I offer my heartfelt thanks to all INPDAP employees who, in various capacities, contributed to prepare the 2002 Report.

Rocco Familiari
INPDAP Chairman

Rome, November 2002

Key points in brief

Public and private sectors in the welfare state

In advanced Western countries, the reform of welfare systems is at the forefront of the discussion among political, social and economic forces, turning sometime into a heated contention, given the ideological overtones this issue is charged with. All this often prevents actions unanimously considered necessary from being taken. On the other hand, when it is introduced, change is often characterized by hesitancy, which indicates the complexity of problems and the difficulty to identify totally satisfactory solutions.

Almost all reform designs, proposed or carried out, affect the relationship between public and private sectors – more generally, between the public sector and other players – in funding and providing welfare services. So much knowledge and experience has been accumulated on this relationship as to prompt in-depth reflection.

As far as theory is concerned, attention is called to the fact that the nature of the social goods and services provided by the welfare state makes it extremely difficult for the market to deliver results that are both efficient and equitable, or even just efficient. To this end, there is a general consensus on the results of theoretical analysis, but it should be specified that market failures cannot translate, almost automatically, into a greater, and generic, state involvement. In fact, the literature and experience are replete with non-market failures.

Typically, welfare services often generate positive externalities or are actual public goods; a market-based approach would not be able to deliver those public goods efficiently, or even, in some cases, to meet the social demand. Furthermore, it should be added that in the field of social goods and services it is very hard to obtain accurate and timely information, undermining the mainstay of proper market workings, i.e. informed consumers.

The information problems combine with other factors to develop a preference for solutions that, in terms of efficiency and equity, shun the individualistic stance of a market-oriented approach. In particular, the compulsory collective insurance schemes typical of social security systems may lead to better results than individual and optional insurance plans.

* * *

Starting from WWII, social spending in Western countries has been marked by different phases. The sustained growth throughout the entire area, between the 1950s and the 1970s, was followed by a trend reversal in the 1980s, involving almost all advanced economies. In particular, during the 1990s, most OECD countries experienced a significant slowdown in social spending, while very few showed an actual decrease. The available evidence indicates clearly that the private component of social spending is rising almost everywhere. This can be seen, for instance, in the healthcare sector, where expenditure for private services is increasing. According to OECD data, Italy is the country where this phenomenon is spreading more rapidly than anywhere else.

Thus, the change under way since the 1980s has not determined, overall, a downsizing of social spending to the extent hoped for by the most fervent *laissez-faire* advocates. If, however, account is taken of a rise in the demand for social services due to such social and economic changes as the lengthening of human life, the modification of households, the greater participation of women in the labour market, the slowdown of social spending does point to tighter conditions.

At the heart of these trends there are financial and efficiency problems, but sometimes also equity problems. A shift to the private sector would lead to expect not only an improvement in the public budget, which should be an obvious consequence, but also better services and at a lower cost, especially thanks to competitive forces, and even a more equitable treatment, due to the removal of some distortions attributed to the welfare state. Among these distortions, reference is made constantly to the entitlements the middle class has been able to secure thanks to the voting power it wields with political decision-makers. While there has not been a clear rush toward the liberal model of minimal or residual welfare state, opinions have definitely changed, originating several efforts to reform the mechanism to finance and provide welfare services, which are all intended to affect those aspects of the system not deemed in keeping with a market-oriented rationale. However, it should be emphasized – confirming the complexity of the problems – that sometimes in the countries where a liberal type of welfare is predominant, steps have been taken, or at least are being considered, in the opposite direction.

The variety of the reforms adopted, or merely attempted, on welfare systems in the different Western countries does not make it possible to draw a final map of their development. However, some common trends can be identified for some countries with similar starting conditions with respect to the financing and provision of services. In general, on the financing side, change was prompted to ease the impact on the cost of

labour attributed, rightly or wrongly, to welfare. The problem came into sharper focus where social contributions payable by both employers and workers constituted the main sources of funds for the system. Germany is a case in point as it tried, though with little success, to reduce total healthcare expenditure as a share of labour costs. Market-oriented changes have taken place more deeply and extensively on the provision than on the funding side. First of all, an attempt was made to introduce market-based solutions and to encourage competition in hopes that efficiency in the provision of services would improve (replenishing also public coffers) and that citizens would have more choice, thus addressing one of the main concerns arisen in this debate.

These attempts involved mainly the healthcare and education systems: measures were implemented (such as the issuance of vouchers) with the stated intention to increase competition between public and private schools (particularly in the United States). In the healthcare area, the creation of internal markets or quasi-markets was pursued (a pioneer in this respect was the United Kingdom under the second Thatcher government).

Still on the provision side, numerous and often successful attempts were made to better control and select access to social services or transfers, also with a view to mitigating one of the most serious risks in a universalistic welfare system, namely the opportunistic behaviour of beneficiaries, which leads, in general, to free riding. The irresponsible use of pharmaceutical drugs, the all-too-easy availability of medical care, the utilization of unemployment benefits beyond acceptable levels and other forms of income supplements are some of the most glaring examples. The prevailing opinion is that at least some of these behaviours distort the working of markets to such an extent as to hamper the growth process; this would be the case, in particular, with excessively generous and largely unchecked unemployment benefit plans. To this end, some countries decided to clamp down on abuses and welfare-to-work policies were adopted. The most significant example is the reform introduced by President Clinton in the United States in 1996, but worthy of note are also some experiences in other countries, particularly the United Kingdom.

The efforts intended to determine in advance the services to be provided, particularly in the healthcare area, should be regarded in light of the goal to prevent opportunistic behaviours, which are harmful to economic growth and to the public coffers: in this way, an attempt was made in particular to prevent waste and inefficiencies, which often result from the collusion with public providers of these services.

In general, the attention paid to the risk of opportunistic behaviour has given rise to a number of recommendations calling for a closer link between services and contributions, in accordance with an individual more than social insurance rationale. Thus, it is not a coincidence that these recommendations are advocated in the unemployment, healthcare and pension areas.

Expectations on the effects of a more extensive use of a market-based approach, however, fail to take into account market shortcomings in financing and providing social services.

Therefore, it is necessary to scrutinize closely the working of systems in

which the provision of social services and benefits, and possibly their financing, relies strongly on competition among private operators.

* * *

The most advanced experiment on the introduction of school vouchers to foster competition within the education sector is that conducted in the United States. The available information indicates some improvements, most of all in terms of benefit perception by service users. However, there is no evidence of more objective and general improvements. At any rate, it appears that the peculiarity of education and the mentioned information problems do limit, or discourage, the type of competition typical of open markets, as often they cannot pursue efficient results and equity may be jeopardized.

The reduction of benefits against the risk of unemployment does not constitute, in itself, a favourable measure for the market and private operators. These types of action, however, are expected to boost employment. The reform implemented by the Clinton administration in 1996 is the most far-reaching attempt to replace past protection measures with welfare-to-work programs. The available data seem to show that more stringent welfare requirements translated into a faster placement of unemployed workers on the labour market. There is a doubt, however, on whether this was due to the reform. A positive contribution certainly came from a favourable economic cycle, which lasted for very long in the United States before the downturn. Furthermore, the relationship between the reform on one side and the spread and seriousness of poverty on the other are not completely clear and are somewhat a cause for concern.

In this context, as in others, the outcome depends crucially on execution. The way to combine welfare-to-work measures with other social programs is key, in this case, to reduce the negative effects of too generous benefits without originating other, undesirable, consequences.

* * *

Failure by President Clinton to reform the healthcare system in the mid-1990s throws light on the limits of a system based largely on the financing and provision of healthcare services by the private sector. In particular, voluntary insurance, which the reform intended to curtail drastically, shows also in practice what theory has long known. Mainly as a result of information problems, the voluntary nature of insurance is such that the persons most at risk are shut out of the system. As persons without health insurance cannot be denied medical care under certain circumstances, hospitals are forced to recover these costs by raising the prices they charge insurance companies, which in turn increase insurance rates with the result of creating further exclusions. All this not only constitutes a problem from a social standpoint but is inefficient. That is why reform plans were made; these, however, clashed with the interest of many companies – which in the United States decide whether to buy insurance for their employees – in preserving their freedom of choice.

The awareness of the limits of the American model should set the search

for a solution to the problems of European healthcare systems on different directions. Actually, all efforts undertaken in Europe never went so far as to question the predominant role of both public financing and compulsory social insurance.
In the wake of developments in the United Kingdom, the main reform concerned the introduction of greater competition on the service provision side; this was to be achieved with the creation of so-called quasi-markets, which rested, among other things, on the separation between service and fund providers.
Steps were taken also in other areas – in particular, prices for the different services were supposed to be established in advance in order to reduce incentives to swell expenditure – but the most significant considerations involve the actual effects of the competition introduced with quasi-markets.
There is a widespread consensus on the fact that a negative consequence has been the increase in the transaction costs related to the operations of quasi-markets. Competition, in fact, gives rise to some peculiar costs that are not always offset by its benefits. To this end, the peculiarity of the goods and services handled is paramount.

* * *

Experiences in supplementary pension schemes provide interesting indications and confirm some of the conclusions already mentioned. Also in this case, execution is key, as demonstrated by Chile, United States, United Kingdom and Sweden.
The degree of freedom granted in choosing a pension fund – which is extremely large in Chile and in the United States while it is basically nonexistent in Sweden – the integration among the various pillars, and the role played by the public system are all elements that may result in differences that affect the performance of the different systems.
The performances of the funds may vary, depending on the period of time considered. For instance, in the United States, between 1981 and 2000, the real average annual rate of return, inclusive of management costs, was 10.6 percent; this was significantly higher than the GDP growth rate, which is the rate of return for pay-as-you-go systems. On shorter time horizons – particularly after 1995 – the results have been markedly lower. In Chile too, the funds' average annual rate of return was extremely high in the 1985-1998 period, exceeding 12 percent. However, starting in 1990 the annual rate of return of defined-benefit pension funds invested in U.S. equity markets has been around 5 percent. These figures, however, do not take into account management costs, which can be very high, despite the competition, as shown by the Chilean and British cases. In Sweden – where an attempt was made to strike a balance between freedom of choice and centralization – these costs are very low. Substantial costs for governments can arise from the transition process from a pay-as-you-go to a funding system, mainly due to the need to protect vested rights. To this end, the Chilean experience is rather telling.
In terms of actual pension coverage for workers and the overall equity, there are typical problems highlighted by theory in analysing voluntary

insurance; coverage in general is limited and the benefits accrue mostly to persons in high-income brackets. This raises significant doubts on long-term sustainability, suggesting that government might end up filling the vacuum of an excessively free and voluntary supplementary pension system.
Sweden, which assigns a truly supplementary role to the funded pillar, has adopted a number of measures to avoid financial sustainability problems in its public budget. In particular, in the basic funded system a transition was made from an earnings-related to a contribution-based system, with a minimum retirement age of 61 and incentives to postpone the exit from the labour market. In addition, a clear separation was achieved between assistance and social security, between insurance and social policies.
In conclusion, designing policies that allow welfare systems, such as Italy's, to improve efficiency, quality and equity simultaneously is not easy. Ruthless market mechanisms or traditional competition are not part of the actions most likely to produce these desirable and difficult improvements of almost all welfare services.

The European systems and the Italian peculiarities
Comparisons between the Italian welfare system and that of other countries, mainly in Europe, confirm that the recurring criticism on the supposedly worrying aspects of the former is not supported by an adequate knowledge of facts and may be misleading, also with respect to the definition of possible reform plans.
A review of European trends, on the basis of recent Eurostat data, did not reveal any significant change in overall social spending and its components from the previous year.
In 1999, European countries spent on average 26.4 percent of their GDP for social purposes, attesting to the stabilization process under way for some years.
This trend, which is a common feature of most European countries, though to a varying degree, is due to the drive to reduce social spending as a share of GDP that began in the mid-1990s.
Against this background, in 1999 social spending in Italy was 2 percentage points below the European average, compared with 0.4 percent below the same figure in 1990, showing a slower growth rate.
The two main items are old age and healthcare which, on average for Europe, account for approximately 68 percent of total welfare expenditure, with the former representing slightly less than 40 percent.
This average was calculated on the basis of widely varying situations among the different countries. Besides the diversity among welfare systems, this depends also on the lack of consistency among data and accounting methods, which make comparisons meaningless at times.
A more in-depth analysis to overcome this inconsistency shows that pension spending in Italy, as a percentage of GDP, is not as anomalous as it would appear at first, but is in line with the European average and lower than that of France and Germany.
Also with reference to medium-to-long-term prospects, Italy's rate of increase seems less pronounced, despite one of the most negative future demographic scenarios in the Continent.

Compared with the average for European countries, whereby pension spending as a share of GDP should increase by 2.9 percent, least favourable scenarios for Italy call for a rise of 0.3 percentage points.

* * *

An examination of the ways welfare systems are financed, a process with significant implications for the competitiveness of a productive system and labour costs, shows that social contributions are only part of the burden borne by salaries to maintain social protection in place. In fact, all countries resort to general taxation, though to a varying extent. Thus, it is necessary to assess jointly the weight of taxes and contributions on labour costs, the so-called tax wedge.
A comparative review of this indicator reveals that Italy is in line with France and Germany, two countries with welfare structures similar to its own; a much lower tax wedge is that of the United Kingdom, where workers, however, buy in the open market with their take-home pay the social goods and services their continental counterparts receive from the welfare state. The tax wedge, that is taxes and social contributions as a share of total labour costs, for an unmarried worker without dependants receiving an average manufacturing wage, is 51.9 percent in Germany, 48.1 percent in France, and 47.2 percent in Italy (considering the regional tax on productive activities – IRAP – that percentage goes up to 48.8 percent); for the United Kingdom this percentage is lower, 30.8 percent. During 2000, all countries showed a tendency to reduce the tax wedge. Contributions are the main component in France, Germany and Italy, while they are more or less the same as taxes in the United Kingdom.
The tax wedge of a single-income household with two children is lower. In relation to the cost of labour, of which the tax wedge is a part, Italy stands at a level below that of the United Kingdom, with the lowest labour cost per unit of output among European countries. However, the United States stands at an even lower level on this scale.
Thus, compared with other European countries, the Italian situation is not so negative as to warrant drastic remedial actions.

* * *

The examination of the process of the exit of older workers from the labour market in Europe highlights, on one side, some important developments in the area of unemployment of workers over fifty and, on the other, significant institutional differences among the different countries, which are normally underestimated.
Regarding the first aspect, in most European countries unemployment for male workers over fifty has been increasing in the past decades, with a slight slowdown during the last two or three years.
Between 1983 and 2000, the ten European countries under review showed a trend toward lower activity rates for all age groups. In the case of older groups, the decline from 72 percent to 64 percent is greater than that of the central age class, even though the base values are markedly lower.
Regarding the second aspect, it appears that the manners older workers

exit from the labour market vary significantly, due to institutional differences.
While in Italy seniority pensions constitute a common tool to accompany the exit of older workers from the labour market, elsewhere specific unemployment benefits, early retirement pensions or disability pensions granted on the basis of socio-economic reasons are utilized until these workers qualify for old-age pensions.
Also the analysis of the composition of the income of individuals and households, according to age, shows that differences in pension transfers tend to be made up with other types of benefits. All this does not mean that the different systems are alike. In fact, a drawback of seniority pensions is that they can be paid also to those who are not expelled from the labour market. On the other hand, it is true that the economic and social cost related to the growing number of early exits from the labour market is a widespread problem in all European countries and such problem can only be dealt with by encouraging workers to remain active as long as possible, thanks to well-calibrated measures that might be customized to meet the specific social and production requirements of each system.
Mandating a higher retirement age, without any other arrangement, might defeat the financial purpose such measure is intended to achieve. Given a labour market uncapable of absorbing all older workers, the risk is that a measure of this nature might translate, more or less directly, into a growing pressure on other forms of social protection, which Italy is seriously short of.
The objective should be that to implement an Active Ageing Policy; such tool would certainly try to reduce the risk of excluding older workers as a result of the technological development and the barriers created by the knowledge society. From this point of view, Italy has a serious problem, together with many other European countries.

* * *

Comparative data show that, as far as the provision of services and spending in the healthcare area are concerned, the stabilization trend of the overall expenditure goes hand in hand with the growing role of private operators. During the 1990s, Italy saw one of the fastest rise in private spending. In terms of financing, there is a split between countries that rely on general taxation and those that resort to contributions. In common with almost all the other countries, Italy has witnessed the growing tendency to have citizens share the costs of the services rendered, the so called ticket system, in order to keep spending in check and to inhibit opportunistic conduct. While the ticket system is designed to combat waste, it affects adversely low-income people; this regressive character stands in contrast to the need to have a more egalitarian redistribution.
In the future long-term patients will represent a significant problem in most countries. So far this has been handled in different ways and it has been rather limited. In the near future, however, Italy and the other countries might encounter serious difficulties, as this phenomenon becomes more common.
There might be further problems at the European level concerning the

recognition of the portability of healthcare rights, which is being fostered, and will increasingly be so, by the unification of Europe. The recognition of this type of international mobility will constitute a type of competition whose implications will likely be more far-reaching than those determined by the attempts to introduce competition within the individual countries.

Developments in the Italian welfare system

Over the past few years, social spending in Italy, inclusive of administrative costs and with reference also to private institutions, has settled at around 25 percent of GDP. This, however, takes no account of the various taxes recipients pay on the benefits which, at 2 percent of GDP, mitigate the weight of such expenditure on the public budget.
Social security is foremost among the different types of social expenditure; in 2001 it accounted for more than 60 percent of total benefits and more than 13 percent of GDP. Healthcare uses up to 5 percent of the GDP, net of administrative expenses, while assistance – including the assistance component built in pensions, which is reported by INPS in the accounts of Gias, a separate entity that manages assistance services and support for pension operations – represents less than 4 percent of GDP. Such significant share of pensions means that three-quarters of the benefits are monetary outlays.
These data bear witness to the fact that the Italian welfare system provides little assistance benefits and that it is designed to accommodate workers' needs, more than citizens'. Noteworthy, however, is that pension spending tends to stabilize as a percentage of GDP. In 2001 total pension outlays accounted for 13.5 percent of the GDP, though they would drop to 11.3 percent if the assistance benefits provided by the GIAS were not considered.
Concerning the financial sustainability of pension spending, in 2001 the negative balance resulting from the difference between contributions paid and pension expenditure fell, thus confirming and reinforcing the positive effects of the reforms implemented in the 1990s.
A review of data by geographic area shows that – even considering the population – pensions, are concentrated, by number and size, in Northern regions. A significant portion of these are so-called IVS pensions (i.e. invalidity, old-age, survivor pensions), which include seniority pensions, which are provided mostly in the developed regions of Northern Italy.
In 2001, the amount spent for the different forms of unemployment insurance was unchanged from the previous year. Unemployment benefits (Indennità di disoccupazione) rose to more than half of total expenditure, while availability-for-employment allowances (Indennità di mobilità) and early retirement pensions accounted for 16.3 percent and 12.1 percent, respectively. The ordinary and extraordinary redundancy fund used up around 6 percent of the total each.

* * *

A more in-depth review of the Italian healthcare system conducted after the period following the 1978 reform reveals that public healthcare spending rose to a peak in 1991 (6.5 percent of GDP). At the time the

national healthcare system was established, this item represented slightly less than 5 percent of GDP. Eventually, that figure fell to 5.2 percent in 1995, while over the past few years there has been an increase. Pharmaceutical spending is the main component of total healthcare expenditures.
An examination of the available information indicates that much criticism levelled at the national healthcare system is unwarranted, despite the numerous problems that undermine its efficiency, equity and adequacy and which should be addressed in an effective manner.
Worthy of note is that in Southern Italy people seem to be healthier, though mortality due to diseases of the circulatory system is higher than that for other regions, while cancer-related mortality is close to that in Central and Northern regions. Perhaps this geographic inequality has been partly corrected by the national healthcare system, which over time has rebalanced, though not completely, regional healthcare spending. This should be assessed in light of a transition to federalism of which very little is known at this time.
More generally, badly designed federalism and heightened competition might give rise to problems in relation to redistribution to poorer regions and to the incentives for greater accountability as well as to higher transaction costs.

* * *

Poverty is widespread in Italy, and most of it concentrated in the South. In 2001, 12 percent of all Italian households (representing 13.6 percent of the population) stood below the poverty threshold set for a basket of goods which a household with two members could purchase with € 815.00 per month. In Southern Italy there were 66.3 percent of poor households, representing almost 70 percent of poor people. Still in that geographic area, relatively poor households constituted 24 percent of total households (compared with 5 percent in Northern Italy and 8.4 percent in Central Italy). Households in conditions of "absolute" poverty, as defined with reference to a basket of goods with a value, in 2001, of approximately € 516 per month for a household made up of two persons, represented 4.2 percent of total households, or 3 million people. In this case, there was a more marked concentration in Southern Italy. This because in Italy poverty is a phenomenon which is still closely related to unemployment, although the shortcomings of Italy's welfare system certainly play a part. Spending on social assistance as a percentage of GDP is significantly lower than in other countries of the European Union, also taking into account that some expenditures in that area are accounted for as social security outlays. Overall, this item represents 4 percent of GDP and less than 17 percent of total social spending.
This inadequacy is related to the spending structure, which excludes some citizen categories and which, most of all, does not have many tools of a universalistic nature available to alleviate poverty.
Family allowances and unemployment insurance (unemployment benefits, availability-for-employment allowances, redundancy fund) are available to those who have entered the regular workforce. Thus, the funds available to persons who do not meet specific employment, age or disability

requirements are very limited, around 0.6 percent of GDP.
It is only during the past few years that some measures of a universalistic nature have been introduced against poverty, such as the allowance to households with at least three children and the minimum placement income (reddito minimo di inserimento). However, in 2001 a very small amount was spent for the former (approximately € 280 million), while the latter has long been in an experimental stage, its future uncertain. Spending for social assistance pensions is limited.
In 2000, social pensions, which are not related to a previous work activity of those who qualify for one such pension, represented 0.2 percent of GDP; benefits paid in Southern Italy accounted for 47.8 percent of the total. Sicily was the region with the largest number of recipients, followed by Campania, Latium and Lombardy. In the same year, civil invalidity pensions, which include benefits payable to blind and deaf-mute people, amounted to 0.6 percent of GDP. Also in this case most recipients were in Southern Italy, while the region with the largest concentration of such recipients was Lombardy.
The role of local authorities, particularly municipalities, in assistance spending has become increasingly important over the past few years. With respect to the total population, such expenditure is greater in large towns. In addition, this expenditure tends to focus mainly on "assistance, charity and sundry services to persons". There is a marked tendency to cooperate with external entities for the provision of this service in Central and Northern Italy, contrary to what happens in Southern Italy.

The Italian pension system: a comprehensive overview
In Italy, the pension system, more than any other component of the welfare state, continues to play a central role in the economic, social and political debate.
The long-awaited government review of the relevant effects confirmed that the reforms implemented in the 1990s stabilized pension spending as a share of the GDP, at least for the short run. The savings achieved and the expected results until 2005 are better than those set by reform law 335 of 1995. The General Accounting Office (RGS – Ragioneria Generale dello Stato) revised downward the average annual rate of change of this expenditure over the 2001-2010 ten-year period, from 2.38 percent to 2.12 percent, namely below the expected GDP growth rate. This means that, until 2010, pension spending should increase at a slower pace than the GDP's, resulting in a lower level of resources devoted to that area.
After 2010, assuming a macroeconomic and demographic scenario giving rise to an average yearly GDP growth of approximately 1.5 percent, the RGS forecasts call for a progressive increase of the ratio of pension spending to GDP until 2035, when it should be around 2 percentage points higher than the current one.
Forecasts compiled in this Report on the basis of ISTAT's Modsim-P model bear out the RGS's projections, provided that the same scenario is adopted. However, it is reasonable to assume that different scenarios can occur.
The progressive transition from an earnings-related to a contribution-

based system, linking the amount of pensions to the retirement age, should cause the latter to be raised. Assuming a slow increase of the average retirement age, which would rise progressively by about three years starting ten years from now, and considering that the resulting postponement of new retirements should achieve its full effects around 2035, in that period the ratio of pension spending to GDP would decrease by 0.3 percentage points.

The relative expansion of the pool of atypical and self-employed workers, for whom current arrangements are such that they will receive lower pension benefits than those payable to employed workers, will translate into a corresponding decrease in the average pension amount. Assuming a change of about ten percentage points in the employment composition, pension spending as a share of the GDP would decline by 0.7 percentage points when its amount is highest.

Policymakers should not only regard an average annual GDP increase greater than 1.5 percent for the next half century as desirable but even feasible, this being the growth rate assumed for the scenario adopted by both the RGS for its forecast and this Report for the base forecast. Assuming a more desirable and realistic trend, whereby productivity increases at a pace consistent with the average GDP growth rate of 2 per cento per annum, the ratio of pension spending to GDP would be constantly lower than the base forecast by approximately one percentage point.

Combining in the same scenario the three mentioned assumptions, a higher average retirement age, a different employment composition and a faster GDP growth, the ratio of pension spending to GDP should decrease, on a long-term basis, below 13 percent.

An update of the MOPI model developed by INPDAP, to forecast specific trends in the pension system for public employees, confirms the negative effects of a lower employment level in the public sector on the financial viability of this area of the social security system. This problem would be compounded by the implementation of policies designed to further reduce employment in government, utilizing more atypical or temporary workers, and by the pick up of the privatisation or subcontracting of activities carried out by public authorities.

The growing instability of economic aggregates and the increasing variability of demographic trends as well as immigration make it difficult to forecast where the ratio of pension spending to GDP is headed over a half-century period.

Given such uncertainty, there is no reason to believe that one of the scenarios reviewed is more likely to occur than another, but all – from the worst-case scenario, whereby thirty years from now the ratio will increase at most by approximately two points, to the best-case scenario, whereby the long-term trend is expected to decline - are reasonable.

In addition, account should be taken of the fact that the scenario adopted by policymakers will affect the variables considered. If, for instance, a worst-case scenario is deemed most likely, chances are that policy would lean toward a tightening stance, resulting in a lower growth rate of the GDP and, consequently, in a higher pension-spending-to-GDP ratio. On the other hand, the effects of self-fulfilling assumptions cannot be determined with certainty.

* * *

After reviewing the results of the reforms carried out in the 1990s, the Government implemented two measures in the area of social security. One, included in the budget law for 2002, called for the increase of minimum pensions and is already operational, even though the € 2.2 million appropriation has not been fully utilized yet. Concerning the second measure, the draft enabling law on social security intends to perform some structural adjustments, including a higher retirement age, a change in the public-private mix within the social security system and lower labour costs. The incentives designed to raise the retirement age may turn out, however, to be inadequate to affect worker choices. To this end, as an indirect incentive, the rules allowing the accumulation of pensions and salaries, as laid down in the draft budget law for 2003, seem to be somehow more effective.

The reduction of up to five percentage points in pension contributions payable by firms would significantly abate the cost of labour; however, this measure should be assessed also in light of its effects on the public budget, on the actuarial balance of the social security system, on income distribution and on the shift of the focus of the Italian production system on quality.

In fact, in the years to come it will be necessary to make up for the loss of contributions either by increasing taxes or by cutting expenses.

Without a change in the way pensions are calculated, which is not currently on the agenda, the actuarial balance between contributions and benefits will be structurally affected. The reduction of contributions by companies, especially if accompanied by a corresponding reduction of pension benefits – which might be a compelling issue as early as in the medium term due to the need to have the actuarial balance restored without burdening the public budget – might be regarded as a redistribution of income in favour of businesses. On the other hand, workers would lose their severance payments, as the provisions to the employee severance funds (so-called TFR, or trattamento di fine rapporto) would be needed instead to fund pension benefits, which would somehow compensate for the losses on public pensions, instead of supplementing them.

The reduction of labour costs determined by lower pension contributions would no doubt boost the competitiveness of Italian companies in the short run. However, the cost of labour per unit of output in Italy is already among the lowest in Europe and, besides, cannot be brought down to the same levels as those in developing countries. Therefore, it is reasonable to question whether pursuing price competitiveness – by reducing labour costs today the way competitive devaluations were pursued years ago - is the most effective policy to respond to the challenge posed by globalisation. More plausibly, for an advanced economy, such as Italy wishes to remain, competitiveness should be pursued essentially in terms of quality, stimulating innovative investments and the employment of adequately-compensated skilled workers.

* * *

With the progressive application of the contribution-based system,

replacement rates will fall to a significant extent. Lower benefits will result also from the change in transformation coefficients and the diffusion of working and contribution careers different from those falling within the scope of law 335.
The RGS forecast shows, together with a decrease in the ratio of pension spending to GDP after 2030, a substantial and progressive reduction of the average pension with respect to salaries and wages.
Replacement rates will be mostly insufficient. A much more serious problem lingering over the horizon is the inability of the Italian pension system to ensure in the future an adequate level of pension protection. Data show that, currently, old age is not the main reason for poverty, except for some particular cases. This is due to the high level of pension coverage provided by the social security system. However, the future appears uncertain, also in consideration of the insufficient indexation of pensions.
In assessing the Italian pension context, perhaps emphasis should be placed on the adequacy of the current system. In fact, this resulted from a labour market radically different from that which is taking shape and which is increasingly affected by the conflicting aims of financial sustainability, need to maintain a viable social security system and labour cost reduction.

* * *

Given these conflicting needs, supplementary pensions based on a funded system are considered a key tool to improve the efficiency and effectiveness of the social security system. In fact, in 1995 the reform law introduced them as an optional while the draft enabling law has made them mandatory.
However, a supplementary pension system relies on the availability of additional savings and, in the current framework, it appears as an instrument that can provide an income supplement only to those who collect a sufficient public pension and can count on a severance payment; such system does not seem to be capable of providing adequate protection to those with a low and/or discontinuous income.
Noteworthy is that in Italy, so far, not many young workers have joined the new pension funds. In fact, most of these young people hold jobs whose terms and conditions are governed by so-called atypical contracts and often receive low salaries.
Furthermore, there seem to be some inconsistencies also in the tax incentives to join the new pension funds. In fact, these favour medium-to-high-income workers, who are likely to be enrolled in other supplementary pension plans, encouraging them to increase their contributions or to extend their contributions for dependants, but are not effective for those who are not enrolled and do not enjoy an income level high enough to join a pension scheme.
Besides, the current performance of financial markets raise a red flag with respect to the risk and the lack of guarantees that characterize funded systems.
During the twelve months following June 2001, occupational funds posted on average a 2.2 percent loss; open funds lost 7.4 percent.

During the first eight months of 2002, both types of fund experienced a loss of 3.3 percent and 10.5 percent, respectively.
Obviously the results achieved in a period of crisis, such as that the world equity markets are undergoing, cannot be generalized and used to express a negative view on funded schemes; however, a positive opinion, based on the unusually high returns generated by markets over the years of the speculative bubble, would be equally misleading. Moreover, in comparing the performances of the funds and the growth rate of the GDP, it should be noted that a pension fund cannot be fully invested in shares and that administrative and management costs are borne by members, thus reducing net returns.
Within limits, which may vary depending on the situation, a diversification of retirement savings may be useful both for the individual and for the system as a whole; however, the economic and social costs related to the greater uncertainty of funded schemes should not be underestimated, as this uncertainty is a burden not only for individuals but for the entire economy.
Basically, a funded pension system is not a panacea for the problems of social security systems.
Concerning the connections between the development of new funded schemes and the growth of the Italian economy, account should be taken of some financial effects that the former would have on the latter.
A breakdown of assets under management reveals the predominance of bonds over stocks (73 percent vs. 18.5 per cento).
By geographic area, investments are concentrated mostly in the euro area, as far as debt securities are concerned (91 percent of the total), while in terms of equity securities, stocks issued by listed U.S. companies account for a significant share (25 percent).
Investments in Italy represent 52.3 percent of the total.
In terms of equity securities, Italy accounts for 18.3 percent of the total, the remaining countries of the euro area receive 37 percent of the investment flow, while the rest of the world is allocated the remaining 44.7 percent.

* * *

The private sector is estimated to make annual provisions to employee severance funds (Tfr) in the amount of approximately € 14 billion, a substantial sum, especially when compared with the about € 1,150 million in contributions to occupational funds for employed workers. A shift of the Tfr to the new pension funds would cause the latter to witness an inflow of around € 100 billion over a period of 7 years.
Another issue to be explored, which is by no means of lesser import, is the use of such resources. A desirable spillover effect determined by the development of pension funds is the growth and modernization of the Italian financial market, which are expected to be brought about by the new institutional investors that would mushroom as a result of the such substantial monetary flow out of the Tfr. However, predictably, the new sustained demand for financial assets by the new funds would go largely unmet due to the inadequate supply of securities issued by Italian firms, which are mostly small-sized and are not inclined to seek listing on the

stock exchange. Data on financial assets held by existing pension funds, broken down by debt or equity securities and by geographic area, leave no doubt on the fact that only a small amount would be invested in stocks issued by Italian firms. If current trends remain unchanged – and they are more likely to be more emphasized by the increase in funds available – the € 14 billion that flow yearly into the Tfr that currently finance Italian firms would be mostly diverted and allocated to purchase government and foreign corporate securities.
Only the few Italian firms capable of raising capital abroad would be in the position to make up for the loss of the Tfr as a source of financing.

Inpdap's pensions

Inpdap pays more than 2.3 million pensions, with total annual outlays of € 38,000 million.
The main fund, in terms of number of members and amount of benefits, is that devoted to retired state employees, accounting for more than half of the number of pensions and of the total expenditure, followed by the retired employees of local authorities, with total pensions slightly below 900,000 for a total yearly expenditure of € 12,000 million.
Overall, the average annual pension paid by Inpdap amounts to € 16,129. Most pensions (38 percent of the total) range from € 516.5 to € 1,032.9 per month; pension payments between € 1,032.9 and € 1,549.4 per month and those in excess of € 1,549.4 represent 34 percent and 22 percent of the total, respectively. At the end of 2001, benefits lower than € 516.5 per month accounted for 6.1 percent of the total.
Old-age pensions, where recipients are 65 or older, represent 60 percent of the total number of pensions provided by Inpdap.
The analysis of the 1996-2001 period shows how new pensions, especially seniority pensions, were deeply affected by the reforms in the 1990.
The data on the first two years of the period reviewed were distorted by the exodus of workers from the labour market triggered by reform announcements. The following years were affected instead, though to a progressively decreasing extent, by the measures blocking retirement and the subsequent retirement of the workers blocked in 1997.
Thus, despite the more stringent requirements to access pension benefits, the first two years under review experienced substantial yearly pension applications; while in the subsequent years the number of new pensions fell significantly and stabilized, as it went from a peak of 132,784 units in 1997 to 49,762 in 2001.
Age and the number of contribution years at retirement have been, in turn, affected by the reform process and by the described events.
In 1997, as a result of the exit from the labour market, age and contribution years declined; in the following period, instead, both age and the number of contribution years rose. In particular, the average age, which in 1997 dropped to 55.7 years, increased in the successive years until it reached 59.6 in 2001. The number of contribution years went from 33.8 in 1996 to 32.2 in 1997, and up to 34.1 in 2001.

* * *

Closing remarks

The analysis of the different positions in the debate on the welfare state and of the choices made in the various countries shows a constantly changing scenario, where old and new problems intertwine in a complex and multi-faceted whole.

Data cannot be easily accessed and interpreted; international comparisons, which are conducted paying special attention to the consistency of the data compared and to reconstruct some significant experiences, give cause for reflection and point to new interesting areas, especially with respect to the need to devise reform plans in keeping with the Italian reality.

* * *

The question around which the debate on possible alternatives revolves is the complex relationship between state and market, between public and private sectors in the domain of social services and benefits. In some specific areas, the advantages of the public sector's effort in financing and providing many of these services are not adequately appreciated, even though the scientific literature has long identified them and their soundness is attested by practical experience. In these cases, with private operators engaging in the provision of social services, even when they are not driven by the profit motive, there might be a risk of attaining sub-standard results not only in terms of equity but in terms of efficiency as well.

In other words, the experience so far in most European and non-European countries is that, in the field of social insurance, the underlying principles of compulsory public systems have withstood the test of time, as well as the pressures dictated by demographic changes and financial difficulties. There is clear evidence to bear this out, especially in the healthcare and retirement areas.

Social developments and public budget conditions are very important, but they do not undermine the basic rationale of social protection. What seems to be needed is a well thought out adjustment of the institutions and functions of the welfare state to the new economic and social context originated by current demographic trends and by the globalisation processes, more than a radical reassessment of the principles that lie at the foundation of a European-type welfare state. To that effect, among the various suggestions, it appears that adopting financial sustainability as the main criterion to change the current arrangements – especially if it is defined in too strict a sense – may lead to solutions worse than the problem, not only in terms of social balance, but also in terms of economic results for society as a whole. In fact, taking a less narrow view and looking at the broad picture of collective well-being, the opinions on the various alternatives discussed are likely to change. The recent position of the Labour Government in England to resort to general taxation to improve the national healthcare system seems to be a step in this direction.

Moreover, there are very close connections among the different welfare areas, which often translate into actual complementarities. This aspect is important both in terms of the increased effectiveness deriving from the

reinforcing action of several activities implemented at once and in terms of the possibility that an expenditure cut in one area is matched, in whole or in part, by an increase in other items, with modest or even negative overall financial effects.
At the foundation of all this, on one side there are social needs that cannot be eliminated and, on the other, there is the possibility to cope with these needs by using different tools. These considerations lead to the conclusion that it is necessary to adopt a global approach to welfare and its reform. Taking coordinated actions in presence of complementarities means, for instance, to increase the likelihood to have a more equitable system, without raising the expenditure level.
Finally – and partly as a consequence of the above – attention is drawn to the fragmentation of the decision-making centres in the welfare area and the resulting consequences for efficiency and equity. In order to take advantage of complementarities, also to benefit more extensively from the compulsory insurance system, it is necessary to have a wide pool of beneficiaries.
This consideration should be a useful guide in the search for solutions to the sensitive problem of the harmonization of the different government levels involved in social policy and to the definition of the scope for possible re-distributive actions.

* * *

In drawing a comparison between welfare systems, Italy's spending was markedly lower than that in other European countries, an area which should be addressed for purposes of policy choice. Not only are resources assigned in general to social policy inadequate, but there is also a shortfall in funding the various forms of unemployment benefits known locally as "social shock absorbers", and aid to needy citizens as well as a continuing difficulty in mitigating the higher poverty levels in Southern Italy. Moreover, there is a risk of increasing geographic disparities, which constitute the main structural obstacle to Italy's economic and social growth, if the decentralization process started is not accompanied by adequate forms of compensation and by actions capable of encouraging economic growth in the least developed regions.
On the other hand, an in-depth comparative analysis shows that in other respects Italy's welfare system is in line with that in the other European countries. A government review of the effects of the pension reforms implemented in the 1990s indicated that pension spending has stabilized and, if compared on a consistent basis, as a percentage of the GDP is basically in line with that of the main EU countries. Comparative long-term forecasts on the macroeconomic sustainability of pension spending by the European Commission show that, within the Union, the future of Italy's system is among the least worrying.
Instead, there are serious doubts on the ability of Italy's current system to provide, in the near future, an adequate pension coverage for most retirees. In absence of offsetting measures, the partial indexation of pensions, the lower benefits resulting from their automatic adjustment to the average increase in the cost of living, the higher number of workers employed on the basis of atypical contracts (characterized by lower and

discontinuous contributions) will greatly widen the gap between pensions and salaries. Replacement rates, or the former as a percentage of the latter, will be insufficient for workers whose careers are marked by longer periods in atypical employment arrangements.
The expected widespread insufficiency of coverage built in the Italian public pension system can hardly be remedied with supplementary pension schemes, whose development is hampered, among other things, by the growing uncertainties related to the yields on assets traded in financial markets, high management costs, the burden the necessary incentives would constitute for the public budget, which is already under pressure for the effort to achieve fiscal equilibrium, and, finally, by the clear difficulties for workers and companies to adequately fund the new schemes. In fact, the possibility to use the TFRs has, on one side, met the resistance of companies, which are demanding some sort of compensating measures for the loss of this significant source of financing, and, on the other, been cause of concern for workers who would lose a significant component of their gross salary.
In fact, in this case the TFR would be used to replace, not to supplement, workers' current PAYG-based pensions. As a matter of fact, the proposal to reduce the contributions payable by companies is very likely to result in a reduction of the rates at which public pensions are currently calculated.

* * *

The goal to reduce the cost of labour by partially curtailing the pension contributions payable by firms should be assessed in light of two additional considerations. The first is that a focus on price competitiveness, achieved by lowering Italy's labour costs – which, in terms of productivity, is among the lowest in Europe – would relieve companies from the pressure to become more competitive by raising the quality of products via innovative investments.
The second is related to the awareness that, over the past decades, higher unemployment has been the reason for the growing financial charges borne by welfare institutions; this means that the latter have been adversely affected by, more than being the cause of, the diminished pace of economic growth.
This last consideration represents the ground on which it should be reiterated that the welfare state should not be regarded as a financial charge, something which is acceptable on the social plane but which constitutes a burden that prevents economic growth, and that consequently should be scaled back in a recession phase. Actually, the institutions of the welfare state are an indispensable tool for social cohesiveness, contributing to the increase in national income while mitigating the extent and consequences of recessions, thus affirming their central role in social and economic development.

chapter 1

The evolving welfare state: the shifting public-private borders

Synopsis

Welfare reform is the focus of heated debates not only in advanced Western economies but also in other regions of the world. Often, these debates are not followed by action. In many cases, however, reforms have been started, even though with some waverings, which are indicative of the difficulties that have to be overcome.

The reforms, both proposed and completed, hinge around the public-private relationship – or more generally the relationship between the public sector and other players – in financing and providing the services typical of a welfare state. The theoretical knowledge and practical experience on this theme are so extensive as to allow some in-depth reflections.

This chapter illustrates first of all the characteristics of the social goods and services provided by a welfare system which, contrary to other products, the market alone may not be well equipped to deliver. To this end, theoretical analysis has reached sufficiently clear conclusions, even though market failures in this area cannot be automatically considered as evidence of the need for greater state involvement.

To this end, among the many significant aspects, special attention should be paid to the analysis of the reasons why compulsory social insurance yields more efficient results than voluntary insurance.

A review of the data covering the period starting in the years immediately after WWII makes it possible to identify rather specific, and well-known, phases in the changes in social spending and the role of the welfare state. The rather sustained and widespread economic growth experienced by the West in the period between the 1950s and the 1970s was followed by a reversal at the beginning of the 1980s; this was felt at first by a limited number of countries and then in increasingly larger areas. The theoretical reasons and the policy support given in this phase are indicative of the varying nature of the problems to be solved, encompassing both the founding principles of welfare systems and the way these systems work.

The case for improving welfare systems, which can only occur with radical reforms, is made without taking into adequate consideration the failures of the market in the provision of social goods and services.

These arguments are founded on spending and efficiency grounds, though sometimes also on equity considerations. The private sector, it is alleged,

The evolving welfare state: the shifting public-private borders

would improve services (often thanks to the virtues of competition) and deliver them at a lower cost; would be able to eliminate some of the iniquities that have allegedly flourished under the welfare state (capture of the middle class) and there would be no serious access difficulties.
For these reasons the attempted innovations do not concern only public spending, even though this is the stated goal. It would be interesting to know whether there have been improvements in terms of efficiency and effectiveness, as well as equity.
To that end, four different welfare areas (education, unemployment, healthcare, and social security) are explored, to check the actual results obtained by those systems where significant tasks have been delegated to private operators or that have been open to competition. In particular, the review will focus on the voucher system in the United States, the welfare-to-work reform implemented by President Clinton in 1996, the failed attempt to reform the healthcare system in the United States in the mid-1990s and supplementary pensions in Chile, United Kingdom, United States and Sweden. From the examination of these cases, there emerge useful elements to evaluate some reform proposals and to appreciate the importance of the ability to fine-tune policy actions, without falling into the dangerous trap of oversimplification.

1.1 The economic characteristics of social goods and services

For most advanced market economies, the years immediately following WWII were marked, on the one hand, by a sustained growth in spending for social goods and services and, on the other, by a proliferation of institutions operating in the welfare sector. Both trends were fuelled by a new economic, political, social and cultural climate, which fostered the development of a demand for social goods, services and insurance. There was also a greater inclination to meet these emerging needs and to call for state intervention in implementing the relevant programmes.

The increase in social spending, both public and private, as a percentage of national income that took place in developed countries can be explained also with the economic and productive nature of the goods and services to be produced.

In the case of healthcare, for instance, services rendered are knowledge- and labour-intensive; while the use of capital-intensive method has risen over the years, workers cannot be easily replaced. New technologically-advanced equipment has improved the quality of the goods and services provided but did not replace the human factor. Actually, workers become increasingly expensive as they have to perform more complex tasks, which require a higher educational and training level. In healthcare, and in the service sector in general, gains in productivity are not comparable to those achieved in manufacturing, for instance, where more advanced machinery have been able to substantially lower unit costs.

For social goods and services, the rise of relative prices, determined by the peculiar patterns of productivity and labour costs, has not been offset by a reduction in consumption; actually, the quantity consumed of such goods and services did increase despite the upward change in prices, as their demand is inelastic. In fact, these are goods and services whose demand increases at a faster rate than the corresponding increment in disposable income.

Within the context of social spending, pension and income-support transfers play an increasingly important role. In addition to mitigating evident social risks, social security and unemployment benefits represent, from an individual's standpoint, a way to organize savings, so as to allocate the income produced in active years along a lifespan; from the point of view of the community, these systems apportion current income between active workers and retirees, between employed and unemployed workers.

The need to redistribute income has always existed, but this has been further emphasized by the development of the economy and of capitalist societies. The simultaneous occurrence of such phenomena as migration to cities, the diminished family role and the development of financial markets has been such that the mentioned need is increasingly satisfied by modern retirement and insurance systems, both public and private. Over the past few years, and in the more developed countries, population aging and the higher instability of economic systems have made it even more necessary to have an adequate social security and insurance system in place. Such need can be met by public and private financial undertakings, though personal or collective schemes, voluntary or compulsory, on the basis of funded or pay-as-you-go systems. At any rate, what for an individual is a form of saving, or a reallocation over a given time horizon of one's

income, for society as a whole this is a current reapportionment of the overall disposable income.
Other explanations for the growth of social spending are related to considerations of a macroeconomic nature. An important characteristic of social goods and services is that these do not simply satisfy some sort of higher-order need but constitute also a significant investment in human capital, which is the cornerstone of economic growth and development. It is a kind of investment whose yields are long-term in nature, and the result of which has been the remarkable economic development achieved over the past decades by what are today the most advanced economies. Social spending, then, should not be regarded solely as a form of consumption, an effect of wealth, but also as an investment, namely a potential creator of prosperity.
From a macroeconomic point of view, noteworthy is that, in addition to its long-term results, social spending translates into a short-term demand and, when there is unused productive capacity, it affects positively economic growth and employment. This awareness, together with the widespread adoption of the Keynesian approach, has contributed to the significant increase in social spending in the years after WWII.

1.2 The economic theory: the reasons for state intervention
The economic and productive characteristics of social goods and services contribute to explain the growth, in richer countries, of the share of the national income devoted to them, whether they are provided by private operators or through state intervention.
As Beveridge and Keynes's ideas gained currency in the social and macroeconomic areas, respectively, they contributed, together with welfare economics – the strand of microeconomic analysis that has studied also market shortcomings – to create the theoretical framework for state intervention, especially in the social field, both in terms of economic efficiency and with reference to social equity.
Welfare economics has repeatedly and consistently shown that there are many good reasons for state intervention both with respect to social goods and services, such as education and healthcare, and with respect to social security and income protection for individuals. State intervention may be appropriate for efficiency and equity reasons and may come in different shapes, which may supplement or substitute market-based solutions. Moreover, the optimal extent of such intervention depends on a number of factors, to be assessed on a case-by-case basis.
Social goods, services and insurance are often public goods, because it is very hard for private operators to provide them in the open market and at a price that is both remunerative for producers and accepted by consumers, or that allows resources to be allocated equitably and in an economically efficient manner.
In some cases, the value and the importance the community assigns to the availability of some goods and services are ignored by individuals and are not part of the decision-making processes that determine the production and consumption choices made through market devices; thus, the "myopia" of individuals requires remedial actions that take into account the general interest.
Factors such as high fixed costs and high market entry and exit barriers

can make it impossible for private operators to produce and distribute some social goods and services, owing to the difficulty to reconcile the need to keep prices low for competitive reasons with that to achieve a profit or even to break even. Under these circumstances, the increase of the scale of production in order to reduce unit costs is conducive to a monopoly condition whereby, however, in the case of private operators, price and production choices would be inconsistent with the efficient allocation of resources and the maximization of the community's satisfaction.
The satisfaction of some communal needs may be appropriate, especially in light of the necessity to guarantee a level of collective well-being below which there would be some social imbalances, which would have some negative consequences for the efficiency of the production system. In addition to being simply equitable, income redistribution goals are warranted also by the existence of a link between social cohesion and production efficiency.

1.3 Social risks: voluntary and compulsory insurance

In assessing the role of the state in solving the problems related to the production of social goods and services, special attention should be paid to risk. A comparison between voluntary insurance and compulsory insurance merits closer scrutiny, also because of the importance this issue has in the current debate.
Diversity is a key feature of communities. Individuals have different opportunities in life as a result of their personal characteristics (natural talent, health, education, etc.), of the social class to which they belong, of the particular development stage in their lifecycle, and so on. The well-being of individuals, thus, has many implications and is fraught with uncertainties. Economic uncertainty gives rise to individual risk, or the likelihood to have little education, bad health, to live in a poor area with few opportunities to find work, and thus to be in a state of poverty.
The more an individual has a socially disadvantaged background, due to adverse circumstances, the more such individual is forced to conceal his/her personal and social conditions at the time he/she acquires an insurance policy. Private insurance companies fear attempts by high-risk individuals to take advantage of asymmetric information on their personal living conditions. In fact, it is difficult to know precisely the likelihood of incurring a loss, and consequently it is impossible to rank all individuals on a risk scale. Since they are often faced with this opportunistic behaviour, known as moral hazard, private insurance companies tend to impose punishing terms and condition for the policies they sell to high-risk individuals. Thus, high-risk individuals are negatively affected by a phenomenon known as adverse selection: potential buyers of insurance are screened by companies, as the latter try to sell policies to people with a low-to-average risk to incur a loss triggered by a negative event (sickness, unemployment, etc.).
While this is due to opportunistic behaviour (the moral hazard related to the concealment of the likelihood to incur a loss due to a negative event), the attempt by insurance companies to screen potential policy buyers on the basis of their risk assessments is not only a breach of the horizontal equity principle but also a market failure. In fact, making insurance policies available only to low-to-average risk buyers and the inability by the private

sector to fill the potential demand constitute a case of missing market.
From the standpoint of economic theory, welfare institutions, whose task is to protect individuals from the risks of low education (free public school), sickness (national healthcare system), of living in a poor area (monetary transfers and aid and other in-kind benefits), are designed to make up for the shortcomings of private insurance policies.
State intervention to fill this void in the insurance area means, however, that public insurance institutes cannot achieve actuarial equity in the provision of policies.
Actuarial equity does not mean that the odds of a contract should be against the provider, but that the price per unit of insurance coverage at which such contract is offered should be commensurate with the expected occurrence of the negative outcome. The implied contract in the insurance provided by the state usually does not reflect that proportion. In fact, the state finances most social insurance through general taxation, which is increasingly based on indirect taxes, with the result that taxes linked to a specific service or benefit have so far represented a low share of total state revenues.
Even by implementing a direct progressive taxation, evidence shows that the poor would contribute less and obtain more benefits (as they are most subject to the various types of risk). Thus, the rich would finance with their taxes the social insurance that would mostly benefit the poor. In providing protection against risks on a universalistic basis (while insurance companies would end up excluding high-risk individuals), public institutions change what is shared risk insurance *ex ante* to income redistribution *ex post*.
Obviously, low-to-average-risk individuals are led to believe that the welfare state is, on one side, the reason for oppressive taxations and, on the other, the provider of monetary and in-kind benefits that do not reflect their preferences. However, the welfare state's ability to guarantee stable income and better living conditions (not only in economic terms but also in terms of education, health, etc.) is important not only for equity reasons but also to increase the well-being of the entire community. Since one of the main drivers of economic growth is the level of knowledge of the workforce, the investment of public resources to upgrade human capital fosters the improvement of the community, even when the allocation of resources to fill the opportunity gap in favour of the disadvantaged is unfair, from an actuarial point of view, for low-to-average-risk individuals.
Welfare institutions, namely the guaranteed provision of public education and healthcare, or such institutes as ensure income continuity (unemployment benefits), transfers, services etc., constitute a system that improves both the human and social capital of a country. Welfare institutions, moreover, perform corrective actions for many capital and credit market shortcomings. Individuals, especially the young, often run into difficulties to obtain the credit necessary to start businesses because they are asked to meet excessive collateral requirements, with respect to both the amount of the requested financing and the type of security. The reason why banks set such high requirements is, again, moral hazard. In these cases markets fail because they may reject requests to finance potentially viable projects.
Such inefficiency is the result of asymmetric information, which places the banking sector at a disadvantage, and of the inability to carry out such

industry studies as would make it possible to assess the likelihood of a project to be successful. In this way, social welfare is deprived of those benefits that many economists expect to come to life when public policy is designed with a view to achieving efficiency and equity. It is clear that introducing a measure of redistribution in credit extension – ensuring that projects undertaken by disadvantaged persons can obtain low-interest financing – might have important consequences in terms of dynamic efficiency. In fact, this would allow disadvantaged persons to be less risk-avert and to undertake business projects, to carry out new investments, to change jobs, to utilize their savings to upgrade their skills.
In discussing healthcare and pensions, the experience of some countries will be reviewed below on the basis of the principles outlined above.

1.4 Changes in social spending throughout the different periods

1.4.1 The years public spending expanded

In the three decades following WWII, all OECD countries saw their overall public spending, and the component for goods, services and social transfers, account for increasingly greater shares of their GDPs, though to a varying degree among them in terms of growth rates and size.
In the twenty years between 1960 and the end of the 1970s, public spending as a share of the GDP rose from approximately 26 percent to around 33 percent in the United States and from almost 18 percent to almost 32 percent in Japan; European countries experienced the highest increase, with the average for the OECD's member countries rising from 30 percent to 45 percent. Public spending in Italy increased from about 30 percent to more than 45 percent of the GDP, a change in keeping with the average; at the end of the period, this share was higher than Britain's (43 percent), but lower than Germany's (48 percent) and the Nordic countries', which accounted for more than 50 percent, with a peak of 61 percent in Sweden.
These increases were due mostly to the welfare systems (including the expenditure for merit goods - such as education, healthcare, housing, among others – and for income maintenance – such as pensions, unemployment benefits, sick-leave allowance, family subsidies, among others). Since the mid-1950s to 1980 all these items rose, as a share of the GDP, from almost 8 percent to approximately 19 percent in the United States and from almost 6 percent to almost 20 percent in Japan. In Europe in the mid-1950s, those shares hovered around 15 percent in Italy, Great Britain, the Netherlands and Denmark and around 19 percent in France and Germany; in 1980 they reached 36-37 percent in the Netherlands and Denmark, 32-33 percent in Germany and France and 26-28 percent in Great Britain and Italy.
In Italy, in particular, the fastest growing social spending area after WWII was that of social security and assistance (going from 9.5 percent of GDP in 1960 to 13.2 percent of GDP in 1980) and, within such area, pension benefits played an important role (from 5 percent of GDP in 1960 to 10.2 percent of GDP in 1980). On the other hand, it should be noted that, before WWII, the social security system in place was a funded scheme and was small, both in terms of availability to worker categories and in terms of the average pension as a percentage of salaries; this was wiped out by wartime inflation, which had eaten up insurance reserves. Moreover, Italy's pension

system was progressively saddled with functions that had nothing to do with its traditional purpose; in fact, pensions became a channel for assistance benefits and industrial policy which in other countries are provided through different instruments.
In the two decades under review, education and healthcare spending grew at a relatively slower pace, from 3.2 percent to 4.8 percent of GDP and from 3 percent to 5.6 percent of GDP, respectively. While it expanded owing to an extension in the years of mandatory schooling and to a substantial increase in the ratio of teachers to students, education spending is kept in check by the lower ratio of potential students to total population determined by demographic changes.
Healthcare spending rose faster than education expenditure, though not by much. In this area, demographic patterns played an opposite role; furthermore, in keeping with events in all Western countries, healthcare coverage of the population increased and, in connection with economic development, both the demand and the unit cost of these goods and services rose. Besides, once a certain level of consumption of healthcare products has been exceeded, the rate at which spending grows in this area tends to slow down in rich countries. This trend is not only due to fiscal needs, but also to the fact that, in promoting good health, healthcare spending is losing ground to other factors, such as general education and the adoption of healthier lifestyles.

1.4.2 The laissez-faire reaction: new borders between the state and the market

The end of the 1970s marked a watershed in the relationship between the state and the market, owing to changes both in the theoretical debate and in actual policy choices. The welfare state, which had been the main reason for the increase in government spending, became the focus of the criticism levelled at state intervention in the economy.
The new economic conservatism of the 1980s was founded on microeconomic and macroeconomic arguments. Concerning the former, the traditional libertarian stance of social Darwinism was reaffirmed, whereby the excessive role played by the state encourages individuals to shun personal responsibility, reducing also their freedom of choice.
Together with the contributions of welfare economics on market failures, there is also an abundant literature on non-market failures. Such literature gathers different types of analysis, centred both on the inefficiency of government bureaucracies and on the problems arising from the reliance on political mechanisms for economic decision-making. The Public Choice School plays a prominent role in this area, by asserting that politicians make choices that reflect their own self-interest, which is the adoption of spending and public policy goals that will maximize their chances of being re-elected. In light of this principle, there is also the idea that the re-distributive ability of the welfare state is undermined by political decision-making. In fact, most transfers paid for by the rich end up benefiting the middle class thanks to its voting power (which is very strong according to the median voter theorem) or in its capacity as a special interest group[1]. This would explain why the middle class seems to have been the

(1) See, among others, Buchanan-Tullock (1962) e Tullock (1971).

beneficiary in many countries of a high share of social spending. The idea that pressure groups are in the position to capture politicians was eventually applied to other public policy areas, particularly market regulation.

Basically, the goal of these types of analysis was to demonstrate the state's inability, or the practical difficulties it runs into, to be more efficient than the market, even when this cannot or fails to attain the results for which it is given credit by the laissez-faire theory. The criticisms aimed at state intervention are, one way or another, due to the difficulties in making collective choices in a democracy and to the built-in inefficiencies attributable to the operation of the administrative apparatuses of the institutions. The assessment of these limits, including those related to possible opportunistic, and quite often illegal, behaviours should take into account the same difficulties that large private companies experience in the area of agency relationships among owners, managers and employees and with respect to their inability, in non-competitive markets, to perceive the signals coming from other economic players, particularly from consumers.

At the macroeconomic level, criticism focuses on the risk that the larger share of public expenditure vis-à-vis the GDP is not sustainable and on the effects of the associated deficit spending that caused public debt in the 1970s to rise in all Western countries. Following the shocks on the supply side (sharp increase of oil and commodity prices, broad demands for pay rises) and the resulting inflationary pressures that characterized the 1970s, the 1980s witnessed the dominant role of deflationary policies. Even though there is no theory or experience whereby the limits of public spending and public deficit are set with unquestionable certainty, the conviction that those limits had been reached was gaining ground. On the other hand, tight monetary policies caused interest rates to rise, which made the public debt more costly to service and harder to repay.

In this new climate, expectations and the financial credibility of institutions that defined economic policies became more important, with the result these adopted a restrictive stance. In particular, reducing welfare spending became the virtuous thing to do. The opinion took hold that failure to reduce pension and social spending was a sign of economic and financial complacency that undermined the credibility of an economy in international markets; on the other hand, higher interest rates – which boosted transfers in favour of holders of public debt – was considered consistent with a rigorous economic policy.

Between the end of the 1970s and the early 1980s, the debate was still dominated by the themes of non-market failures and financial unsustainability in the microeconomic and the macroeconomic areas, respectively. But the idea that Western states were headed toward a fiscal crisis began to gain currency also in the economic culture more radically opposed to the market economy, even though in this case this was due to the distortions of capitalist development, which could not be remedied by embracing a free market model.

In the successive years, especially in the early 1990s, the debate on the welfare state, whether to reform it or to downsize it, became inevitably intertwined with that on globalisation. The issues of competitiveness and flexibility took centre stage together with problems carried over from previous years and determined, in general, a strengthening of criticism

against traditional welfare systems. In fact, on one side the welfare state was regarded as a rigidity factor, an obstacle to the structural adjustments required by globalisation; on the other, it was underscored that social spending translated into higher taxes which, by burdening the cost of labour, constituted a brake on the economic growth of countries in the new international competitive context. The slowdown of growth, whatever its cause, reinforced these tendencies. In practice, in every country the need to act in the welfare area to improve the overall macroeconomic performance is high on the agenda, and this cause is rallying a significant number of supporters from among those who think that they are paying too much in taxes to support the welfare state.

1.4.3 Globalisation and the changes in social structure

As theories and policies designed to reduce social spending (especially if services were financed and provided the public sector) multiplied, globalisation and other general economic developments seemed to call for additional expenditures and state intervention in the welfare area. More specifically, these developments seemed to warrant an overhaul of the welfare structure and, in particular, the expansion of some spending items. However, the large number of segments involved in the developments under way and the inevitable difficulties to cut some types of expenditure – due to the persuasive ability of some unworthy beneficiaries or, on the other side of the spectrum, to the need to mitigate some other forms of social malfunctions – were such that the restructuring problem could no longer be dealt with in terms of downsizing welfare but of expanding it.

Let us analyse the most significant elements. The first arises directly from globalisation and the resulting restructurings, greater instability (at least in some sectors) and growing demand for flexibility in production. From the workers' standpoint, these developments in general translate into greater insecurity and likelihood to experience some unemployment periods – possibly spent, at best, upgrading one's skills in order to meet new market requirements. This uncertainty spawns a demand for social protection, thereby boosting social spending. Research showed (Rodrik, 1997) that this was exactly what happened in the past: phases characterized by the opening up and integration of the economy, on the one hand, prompted an increase in public spending for protection measures, on the other; this includes not only social spending in the traditional welfare areas but also the kind of expenditure that translates into public sector jobs.

While it does not fully explain the expansion of social spending, greater economic integration makes for a higher demand for protection, which will turn into an actual spending increase, depending also on other factors including, but not limited to, the power of taxpayers on one side and that of beneficiaries on the other in their tug-of-war.

To this end, a particularly interesting example is that provided by less developed countries. In order to cope with the needs of those who have not benefited from globalisation – though they might eventually – many developing countries have expanded their protection systems, incurring also substantial expenditures. Obviously not everyone who has been harmed by globalisation deserves protection; often, these are not poor people but are just more vociferous than others, exerting strong pressures. Also because of this, protection measures may differ in nature and form.

As demonstrated by a recent study by the World Bank, over the past decade many developing countries have adopted several social protection measures, each with a different ability to reach the poorest population segments. Protection measures against the risk of unemployment were implemented through insurance policies and with some forms of mandatory retirement savings; people who were harmed the most have been helped with some kind of workfare schemes, which failed to take hold in Italy. According to the World Bank, workfare is exactly what is needed to alleviate the plight of the disadvantaged (see table 1.1).

Table 1.1 - Income support programs for the unemployed

Program and country	Workers legally covered by the program	Spending per beneficiary (US$)	Cost of the program falls on	Share of beneficiaries by earnings or consumption quintile (%)				
				Poorest	2nd poorest	Middle	2nd richest	Richest
Public works in Argentina	In principle, all	3100	Taxpayers	78.6	15.3	3.5	2.1	0.4
Training in Mexico	Elegibility on age, education	393	Taxpayers	69.9	15.5	8.1	5.0	1.5
Severance pay in Peru	Salaried, with given seniority	760	Workers and employers	4.7	9.5	28.6	33.3	23.8
Unemployment insurance in Brazil	Salaried in social security	664	Workers and employers	10.6	24.6	19.1	25.1	13.6
Individual accounts in Colombia	Salaried in social security	-	Workers	0.0	4.3	n.a.	19.1	76.6

Source: World Bank, 2002, p. 113

Other studies (Taylor 2001) show that in developing countries, where income support programmes have been implemented, economic integration took place in a context characterized by greater social cohesiveness and lower income disparity.

Globalisation also determines different demands and, more generally, needs in the area of training and human capital. Thus, also in this way there arise pressures for change.

In addition to these reasons, the demand for social protection has risen in many advanced countries also as a result of important developments involving both the social and economic sphere. The aging process in most European countries has already been mentioned.

Table 1.2 shows clearly that life expectancy at birth between 1960 and 1998 improved significantly in all OECD countries, both for men and women.[2] Particularly in the case of men, the increase seems significant and in some cases (Turkey and Mexico, for instance) quite remarkable. At the end of the past decade, there continued to be significant differences between men and women, with men showing low life expectancy especially in the former socialist countries. This suggests that the problems related to longer lifespans will be felt mostly in these countries in the near future. Chart 1.1 illustrates trends in life expectancy at birth for the population as a whole in the countries of the European Union and in the United States. The rising trend is clearly visible. Except for a short period in the mid-

(2) Unfortunately very little OECD data are available on Italy.

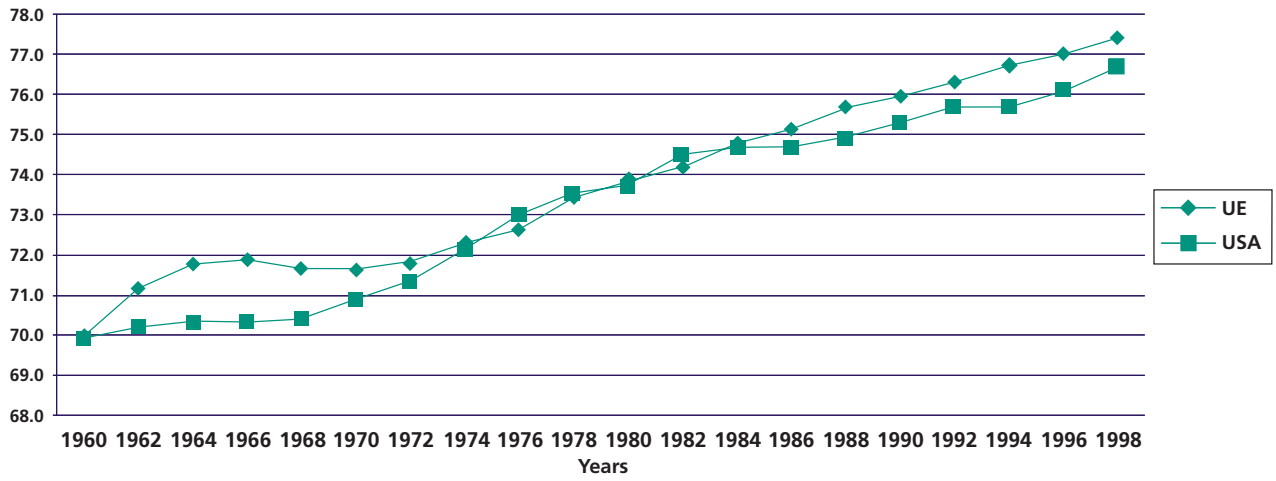
Table 1.2 - Life expectancy at birth in Oecd countries, 1960-1998

	Men			Women		
	1960	1980	1998	1960	1980	1998
Australia	67.9	71.0	75.9	73.9	78.1	81.5
Austria	65.4	69.0	74.7	71.9	76.1	80.9
Belgium	67.7	70.0	74.8	73.5	76.8	81.1
Czech Republic	67.9	66.8	71.1	73.4	73.9	78.1
Denmark	70.3	71.2	73.7	74.1	77.3	78.6
Finland	64.9	69.2	73.5	71.6	77.8	80.8
France	67.0	70.2	74.6	73.6	78.4	82.2
Germany	66.9	69.9	74.5	72.4	76.6	80.5
Greece	67.5	72.2	74.6	70.7	76.6	79.4
Hungary	65.9	65.5	66.1	70.1	72.7	75.2
Ireland	68.5	69.5	73.5	71.8	75.0	79.1
Italy	n.a.	70.6	n.a.	n.a.	77.4	n.a.
Japan	65.3	73.4	77.2	70.2	78.8	84.0
Luxembourg	66.1	68.0	73.7	71.9	75.1	80.5
Mexico	56.2	64.0	72.4	59.5	70.0	77.0
Netherlands	71.5	72.5	75.2	75.4	79.2	80.7
Norway	71.3	72.3	75.5	75.8	79.2	81.3
Poland	64.9	66.0	68.9	70.6	74.4	77.3
Portugal	61.7	67.7	71.7	67.2	n.a.	78.8
Slovakia	68.4	66.8	68.6	72.7	74.3	76.7
Spain	67.4	72.5	74.8	72.2	78.6	82.2
Sweden	71.2	72.8	76.9	74.9	78.8	81.9
Switzerland	68.7	72.3	76.5	74.1	78.8	82.5
Turkey	46.3	55.8	66.4	50.3	60.3	71.0
United Kingdom	68.3	71.0	74.8	74.2	77.0	79.7
United States	66.6	70.0	73.9	73.1	77.4	79.4

Source: Oecd (2001), *Health data*

1970s, life expectancy was always higher in the European Union than in the United States, including in 1998, the last year considered, despite the slight decline in Europe (from 77.7 to 77.4).
In order to assess the impact of longer lifespans on the share of social spending devoted to old age, it is worthwhile to consider the additional life expectancy of those who reached sixty years of age. Table 1.3, which shows all these data with reference to both men and women, reveals that over the 40 years under review this expectancy rose substantially, shifting in most industrial countries from

Chart 1.1 - Life expentancy at birth (total population)



approximately 16 to ca. 20 years for men, and from around 18 to about 23 for women. However, in all developed countries, life expectancy became higher after 1980; life expectancy at birth, on the other hand, rose more or less at the same pace in the two twenty-year periods. In some cases, such as Turkey's, higher life expectancy at birth is not due to the improved prospects of older citizens but to the reduction of infant mortality.

Table 1.3 - Life expectancy at 60 in Oecd countries, 1960-1998

	Men			Women		
	1960	1980	1998	1960	1980	1998
Australia	15,6	17,1	20,2	19,4	21,9	24,3
Austria	15,0	16,3	19,4	18,6	20,3	23,6
Belgium	15,4	16,3	19,4	18,7	20,9	24,1
Czech Republic	15,6	14,3	16,7	18,4	18,2	21,0
Denmark	17,2	17,0	18,3	19,1	21,4	21,9
Finland	14,4	15,8	18,6	17,5	20,9	23,5
France	15,6	17,3	n.a.	19,5	22,4	n.a.
Germany	15,5	16,4	19,0	18,5	20,8	23,3
Greece	17,0	18,2	20,0	18,9	20,6	23,1
Hungary	15,6	14,6	15,0	17,6	18,3	19,8
Ireland	16,3	15,5	n.a.	18,3	18,8	n.a.
Italy	n.a.	16,7	n.a.	n.a.	21,2	n.a.
Japan	14,8	18,3	21,0	17,8	21,9	26,4
Luxembourg	15,9	15,1	n.a.	18,3	19,8	n.a.
Mexico	16,8	18,5	21,2	17,6	20,1	22,6
Netherlands	17,3	17,1	18,5	19,3	22,1	23,0
Norway	18,0	17,7	19,6	20,1	22,2	23,9
Poland	15,9	15,2	16,4	18,7	19,4	21,0
Portugal	15,9	n.a.	18,0	18,6	n.a.	22,1
Slovakia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	16,5	18,4	20,0	19,2	22,1	24,8
Sweden	17,3	17,9	20,1	19,3	22,1	24,3
Switzerland	16,2	17,9	20,6	19,2	22,3	25,0
Turkey	14,2	14,8	16,0	15,4	16,3	18,1
United Kingdom	15,3	16,2	n.a.	19,3	20,7	n.a.
United States	15,8	17,4	19,6	19,5	22,2	23,1

Source: Oecd (2001), Health data

For purposes of this report, noteworthy among social changes is that concerning the structure of households, not only because of aging, but mostly because of the massive increase of women participating in the labour market.

ILO data on 11 advanced countries[3] show that between 1960 and 1996 participation rates in the labour market for women aged between 15 and 64 rose, on average, from 33 percent to slightly less than 62 percent, with significant differences among countries, and still growing at a significant pace. These trends have many mixed consequences for the welfare system. In fact, if on one side there is an increase in the sources of financing, thanks to the expansion of the taxable base, on the other there is the need to provide social services to fill the void determined in households by the absence of working women.

Another important change, namely the emergence of increasingly smaller households, contributes to worsen the problem, by boosting the demand,

(3) Canada, Denmark, Finland, France, Ireland, Italy, the Netherlands, Norway, Portugal, Spain and United States.

e.g., for assistance services.
A further change took place in the production structure, in particular the diminished role of manufacturing. This profound and in some ways rapid change seems on one hand to highlight the inadequacy of structures equipped to handle situations centred around large manufacturing companies and, on the other, may determine new problems and risks due from the need of workers to move not only from one company to another but also from one industry to another. This turn of events gives rise to new welfare demands which, in some countries in particular, might be particularly pressing.[4]
Other social and economic changes have a significant impact on welfare services. However, the elements considered seem to outline sufficiently the problems that characterize the issue of welfare adjustment to the demands of a modern economic system with strongly integrated markets. The reasons for the change add up to the demand for protection arisen from short- and long-term developments. The uncertain pattern of the reforms started over the past fifteen years – and their limited compliance with the laissez-faire recommendations that are prominent in the theoretical and policy debate – will have to be interpreted in light of this complex combination of social needs and new economic developments.
Recommendations will have to be made on the basis of the best theoretical and practical knowledge, avoiding suggestions that are too simple, too conservative or too unilateral.

1.4.4 From the 1980s to our days: trends in social spending
In the 1980s fiscal policies changed tack, compared with the preceding decade. This occurred in all the OECD countries, though to a varying degree. Budget deficits, which had grown to a significant extent in most countries, began falling; in the European member countries of the OECD, the share of the GDP declined from 5.2 percent in 1982 to 2.5 percent in 1989.
Italy's performance constituted a departure from this trend. Its government budget continued to show deficits in excess of 10 percent of the GDP throughout the decade. Excluding interest, the current deficit began declining also in Italy, until the gap was completely closed in the 1990s.
At the international level, overall public spending continued to rise, though at a slower rate, until the mid-1980s, and then stabilized in the second half of the decade; as a share of the GDP, it accounted for 48.6 percent in the European member countries of the OECD and for 40.7 percent in all the other OECD countries.
Against this background marked by the stabilization of public spending, the fall of deficits and the rise in interest expenditure, the pressures on welfare spending translated only into a reduction, marked though it might be, of the growth rates which, on average, remained positive and in line with, or faster than, the GDP's.
Interest expenditure was the fastest rising spending item in the 1980s; except for Great Britain, where it fell, in most countries interest expenditure as a share of the GDP doubled. This probably indicated that it is difficult to rein in the welfare state, owing to the central role that it

(4) On these issues, see Iversen (2001).

plays within advanced Western economies.
In different OECD countries, education spending as a share of the GDP fell. However, due to the lower number of students, spending in this area rose on average by 1.6 percent a year, which is more than half percentage point lower than the rate of increase in the second half of the 1970s, though it is basically in line with the growth of the per-capita GDP.
Spending for public healthcare systems rose from a yearly average of 5.3 percent in the 1970s to 1.9 percent in the 1980s. In the OECD countries, public pension transfers rose faster than the GDP, even though the average annual growth rate decreased from 5.6 percent in the 1970s to 2.2 percent in the 1980s. Household income support programs experienced the same trend, while unemployment, sickness and maternity benefits stabilized in real terms.
Great Britain seemed to travel on a different track compared with the other OECD countries; in fact, social spending in that country grew at a below-average rate (except in the area of family assistance), and in some sectors even dropped. In Great Britain, due to the significant ideological nature of the changes introduced by the Thatcher Government, the cut in public spending was much deeper than in other countries: between 1984 and 1989, public spending as a share of the GDP decreased from 47.2 percent to 40.9 percent in Great Britain, from 49.6 percent to 47.6 percent in the European member countries of the OECD and from 41.2 percent to 40 percent in all the OECD countries.
In Italy, throughout the 1980s, public spending for healthcare and education posted slightly lower increases than those achieved in the preceding years, even though such increases were slightly higher than the average for the other countries; transfer expenditure rose faster than any other item. A breakdown of transfers reveals that their increase was due solely to pension benefits, which rose more than abroad; on the other hand, unemployment, sickness and maternity benefits and family allowances even declined in some years, posting rates of change lower than those achieved on average in the other countries. In assessing the trend of pension spending in Italy, emphasis should be placed on two aspects in particular. First of all, due to statistical problems, international comparisons in the pension area are often related only to public sectors, whose share of the total vary considerably within their overall social security systems. In Italy the private pension system is limited, thereby rendering almost meaningless the comparison with other countries – particularly Anglo-Saxon countries – where such system is rather extensive. Second, until 1988 the accounts of INPS, the national social security institute, did not break down expenditures by type (pension, assistance and related to industrial policy), making such reports meaningless. In 1988, for instance, while the consolidated results of the different pension schemes showed a substantial negative balance (minus Lit. 12,775 billion), inflows and outflows related to pension activities were basically equivalent. Taking into account that – contrary to other countries – the remaining channels of pension transfers in Italy stabilized or decreased, it can be inferred that pensions were (and have continued to be) utilized to achieve other social policy goals, as well as industrial policy objectives.
Table 1.4 provides an overall picture of the development of total social spending over the last twenty years of the past century.

Table 1.4 - Total social expenditure as a percentage of Gdp in Oecd countries, 1980-1999

	1980	1990	1998	Variation 1980-1998	Variation 1990-1998	Variation 1990-1980
Australia (1)	11.32	14.36	16.75	5.43	2.39	3.04
Austria	23.33	25.00	26.80	3.47	1.80	1.67
Belgium	24.18	24.60	24.54	0.36	-0.06	0.42
Canada (1)	13.26	18.25	17.31	4.05	-0.94	4.99
Korea	-	3.16	5.94	-	2.78	-
Denmark	29.06	29.32	29.81	0.75	0.49	0.26
Finland	18.51	24.78	26.54	8.03	1.76	6.27
France	21.14	26.45	28.82	7.68	2.37	5.31
Germany	20.28	20.29	27.29	7.01	7.00	0.01
Japan	10.12	10.80	14.66	4.54	3.86	0.68
Greece	11.48	21.64	22.73	11.25	1.09	10.16
Ireland	16.92	19.02	15.77	-1.15	-3.25	2.10
Italy	18.42	23.87	25.07	6.65	1.20	5.45
Luxembourg	23.28	21.74	22.09	4.54	0.35	-1.54
Mexico (1)	-	3.23	8.23	-	5.00	-
Norway	18.55	26.00	26.97	8.42	0.97	7.45
New Zeland (1)	19.15	22.53	19.97	0.82	-2.56	3.38
Netherlands	27.26	27.92	23.90	-3.36	-4.02	0.66
Poland (1)	-	16.19	23.27	-	7.08	-
Portugal	11.63	13.80	18.21	6.58	4.41	2.17
United Kingdom	18.19	21.62	24.70	6.51	3.08	3.43
Czech Republic	-	16.81	20.34	-	3.53	-
Spain	15.78	19.29	19.71	3.93	0.42	3.51
United States (1)	13.13	13.36	14.33	1.20	0.97	0.23
Sweden	29.00	31.02	30.98	1.98	-0.04	2.02
Switzerland	15.17	19.80	28.28	13.11	8.48	4.63
Turkey (1)	4.33	6.44	14.31	9.98	7.87	2.11

(1) The latest figures refer to 1999.

Source: Oecd (2001), *Social Expenditure*

During the entire period, spending as a share of the GDP rose in most countries, except Luxembourg, Ireland and the Netherlands.
This item experienced very little growth in Belgium, Denmark and New Zealand, increased by slightly more than 1 percent in the United States and rose at a much higher rate in the 4 main European countries, ranging from 6.5 percent in Great Britain to 7.7 percent in France. In Italy this went up by approximately 6.7 percentage points, with the increase in the first decade markedly higher than that in the second decade.
A closer analysis of the two sub-periods 1980-1990 and 1990-1998 (or, in the cases in which data are available, 1999) shows that only in 9 countries did social spending as a share of GDP rose in the second period at a faster rate than in the first. In some cases changes were very small (Denmark, United States, Austria) while increases in Portugal, Japan, Switzerland, Turkey and, most of all in Germany, due to the re-unification, were higher. Thus, in most European countries there was a further slowdown in spending growth in the 1990s, and in some cases there was an actual reduction.
It is worthwhile to dwell on some characteristics of such an important component of social spending as healthcare (see table 1.5). It is a well-known fact that overall healthcare spending in the United Stated is much higher. In the 1960-1999 period this item showed a clear rising trend in all the OECD countries. However, growth was higher, often to a significant extent, in the first twenty-year period in all countries, with the exception of Canada and the United States. Thus, throughout Europe, the latter

twenty-year period witnessed a slowdown trend in healthcare spending, and even an actual reduction in some instances (Denmark, Ireland, and Sweden).

Table 1.5 - Total expenditure on health as a percentage of Gdp in Oecd countries, 1960-1999

	1960	1970	1980	1990	1999	Variation 1960-1999	Variation 1960-1980	Variation 1980-1999
Australia (1)	4.3	-	7.0	7.9	8.6	4.3	2.7	1.6
Austria	4.3	5.3	7.6	7.1	8.2	3.9	3.3	0.6
Belgium	3.4	4.0	6.4	7.4	8.8	5.4	3.0	2.4
Canada	5.4	7.0	7.1	9.0	9.3	3.9	1.7	2.2
Denmark	-	-	9.1	8.5	8.4	-	9.1	-0.7
Finland	3.9	5.6	6.4	7.9	6.8	2.9	2.5	0.4
France	4.1	5.7	7.4	8.6	9.4	5.3	3.3	2.0
Germany (1)	-	6.3	8.8	8.7	10.3	-	8.8	1.5
Greece (1)	3.1	5.6	6.5	7.5	8.4	5.3	3.4	1.9
Ireland (1)	3.6	5.1	8.4	6.7	6.8	3.2	4.8	-1.6
Italy (1)	3.6	5.1	7.0	8.1	8.2	4.6	3.4	1.2
Japan (1)	3.0	4.6	6.5	6.1	7.4	4.4	3.5	0.9
Luxembourg	-	3.5	5.9	6.1	6.1	-	5.9	0.2
Netherlands	-	-	8.0	8.5	8.7	-	8.0	0.7
Norway	2.9	4.4	7.0	7.8	9.3	6.4	4.1	2.3
Portugal (1)	-	2.7	5.6	6.2	7.7	-	5.6	2.1
Spain (1)	1.5	3.6	5.4	6.6	7.0	5.5	3.9	1.6
Sweden (1)	4.5	6.9	9.1	8.5	7.9	3.4	4.6	-1.2
United Kingdom	3.9	4.5	5.6	6.0	6.9	3.0	1.7	1.3
United States	5.1	6.9	8.7	11.9	12.9	7.8	3.6	4.2

(1) The latest figures refer to 1998.

Source: Oecd (2001), *Health data*

As a share of total healthcare spending, public healthcare expenditure (see table 1.6) was significantly lower in the United States than in all the European countries; within Europe, however, there were significant differences, also in terms of trends under way. In particular, in Italy the share of public healthcare expenditure was the third lowest, after Greece and Portugal's.

An examination of such share vis-à-vis the same item in countries where complete data are available shows that during the 40 years under review there was a general increase, with three exceptions: United Kingdom and Norway, with a low decline, and Italy, with a notable 15.8 percentage contraction.

While the base figure for Italy was the second highest, after Britain's, this change was remarkable and unequalled among Western countries.

All countries showed a general declining trend during the last few years; in fact most countries reached a peak between 1985 and 1990. This pattern emerged also from the review of the two twenty-year parts into which the time period considered is broken down. With the only exception of United States and Austria, the share of public healthcare expenditure in the second twenty-year period showed either a lower rate of growth or a greater reduction than in the first twenty-year period. Among the countries where such share actually declined in the second twenty-year period, Italy experienced the steepest decrease, followed by Norway and Sweden. The contraction of the Italian share occurred mostly during the final ten-year stretch.

Table 1.6 - Public expenditure on health as a percentage of total expenditure on health in Oecd countries, 1960-1999

	1960	1970	1980	1990	1999	Variation 1960-1999	Variation 1960-1980	Variation 1980-1999
Australia (1)	51.7	-	62.8	67.4	70.0	18.3	11.1	7.2
Austria	69.4	63.0	68.8	73.5	72.1	2.7	-0.6	3.3
Canada	42.6	69.9	75.6	74.6	70.6	28.0	33.0	-5.0
Denmark	-	-	87.8	82.7	82.2	-	-	-5.6
Finland	54.1	73.8	79.0	80.9	75.7	21.6	24.9	-3.3
France	57.8	74.7	78.8	78.2	78.1	20.3	21.0	-0.7
Germany (1)	-	72.8	78.7	76.2	75.8	-	-	-2.9
Greece (1)	48.8	42.6	55.6	62.7	56.3	7.5	6.8	0.7
Ireland (1)	76.0	81.7	81.6	71.7	76.8	0.8	5.6	-4.8
Italy (1)	83.1	86.9	80.5	78.1	67.3	-15.8	-2.6	-13.2
Japan (1)	60.4	69.8	71.3	77.6	78.5	18.1	10.9	7.2
Luxembourg	-	88.9	92.8	93.1	92.9	-	-	0.1
Netherlands	-	-	69.2	67.7	68.5	-	-	-0.7
Norway (1)	77.8	91.6	85.1	82.8	75.8	-2.0	7.3	-9.3
Portugal	-	59.0	64.3	65.5	66.9	-	-	2.6
Spain	58.7	65.4	79.9	78.7	76.4	17.7	21.2	-3.5
Sweden (1)	72.6	86.0	92.5	89.9	83.8	11.2	19.9	-8.7
United Kingdom	85.2	87.0	89.4	84.3	83.3	-1.9	4.2	-6.1
United States	23.3	36.3	41.5	39.6	44.5	21.2	18.2	3.0

(1) The latest figures refer to 1998.

Source: Oecd (2001), *Health data*

In conclusion, public social spending – particularly such an important component as healthcare expenditure – shows a less sustained growth rate in the 1990s, suggesting that the changes started in the previous decade might have gathered steam as years went by.

1.5 Reform paths: the difficult quest for new equilibria

The impetus for change that began taking shape in the 1980s did not, overall, determine a downsizing of social spending to the extent hoped for by the staunchest advocates of a hard-line approach.[5] Social spending in general did not fall, though its growth rate did. If, however, account is taken of the developments that, as indicated above, should have caused spending to increase, the conclusion is that there was a restrictive trend. While there has not been a clear rush toward the liberal welfare model, change did occur, giving rise to many attempts to reform both the mechanisms to finance the system and the ways services were provided, to affect those aspects not deemed in keeping with a market-oriented rationale and with the pursuit of efficiency. However, it should be emphasized – confirming the complexity of the problems – that sometimes in the countries where a liberal type of welfare is predominant, steps have been taken, or at least are being considered, in the opposite direction. The variety of the reforms adopted, or merely attempted, on welfare systems in the different Western countries does not make it possible to conduct a systematic analysis. However, common trends can be identified for some countries with similar starting conditions with respect to the financing and provision of services.

In general, on the financing side, changes were attempted or made to ease

(5) The slow pace at which the *Welfare State* was downsized has been the focus of specific research.

the impact of welfare on the cost of labour. The problem came into sharper focus where social contributions payable by both employers and workers constituted the main sources of funds for the system. Germany is a case in point as it tried, though with little success, to reduce healthcare financing as a share of labour costs. Also in Italy, change was implemented in the way the healthcare system was financed in order to achieve the same objective.

Market-oriented changes have taken place more deeply and extensively on the provision than on the funding side. First of all, an attempt was made to introduce market-based solutions and to encourage competition in hopes that efficiency in the provision of services would improve (benefiting also the public coffers) and that citizens would have more choice, thus addressing one of the main concerns arisen in this debate. These attempts involved mainly the healthcare and education systems: measures were implemented (such as the issuance of vouchers) with the stated intention to increase competition between public and private schools (mainly in the United States, but also in other countries). In the healthcare area, the creation of internal markets or quasi-markets was pursued (a pioneer in this respect was the United Kingdom under the second Thatcher government).

Still on the provision side, numerous and often successful attempts were made to make access to social services or transfers more difficult, also with a view to mitigating one of the most serious risks in a universal welfare system, namely moral hazard, where beneficiaries abuse the generosity of the system. The irresponsible use of pharmaceutical drugs, the all-too-easy availability of medical care, the utilization of unemployment benefits beyond acceptable levels and other forms of income supplements are some of the most glaring examples. The prevailing opinion is that at least some of these behaviours distort the working of markets to such an extent as to hamper the growth process; this would be the case, in particular, with excessively generous and largely unchecked unemployment benefit plans.

To this end, some countries decided to clamp down on abuses and welfare-to-work policies were adopted. The most significant example is the reform introduced by President Clinton in the United States in 1996, but worthy of note are also some experiences in other countries, particularly the United Kingdom.

The efforts intended to determine in advance the services to be provided, particularly in the healthcare area, should be regarded in light of the goal to prevent opportunistic behaviours, which are harmful to economic growth and to the public coffers: in this way, an attempt was made in particular to prevent moral hazard, which often results from the collusion with public providers of these services.

In general, the attention paid to the risk of moral hazard has given rise to a number of recommendations calling for a closer link between services and contributions, in accordance with an individual more than a social insurance rationale. Thus, it is not by accident that these recommendations are called for in the unemployment, healthcare and pension areas.

Our attention will focus now on some reforms – whether implemented or merely attempted – in the different welfare areas, which are very important to understand the workings of these systems. Such reforms were carried

out mainly in the United States, the country unanimously considered as a proxy for the liberal welfare model.

1.5.1 Vouchers and school competition: the U.S. experience

Vouchers make it possible to draw a line between the financing of the service (which remains within the government's realm) and the choice of the service provider (which is freely made by voucher holders). By making a payment to the service provider against presentation of vouchers, the state lets demand and supply for a service find their own equilibrium in the open market, while shifting all or part of the cost for such service to the collectivity.

The debate on the introduction of publicly funded school vouchers gained prominence mostly in the United States where, by many an account, public secondary education had widespread quality problems; such problems became increasingly unacceptable, given the growing international competition and the progressive transition from a manufacturing to a service economy. As measures introduced in the 1970s and in the 1980s failed to correct these problems and, more generally, in absence of specific actions, demand for private schools –typically the choice of the richer segments of the population – rose. Consequently, resorting to a voucher system was tantamount to giving the poor the opportunity to avoid a deteriorating public school system. It came as no surprise, then, that the most ardent advocates of that system, in addition to the Republicans, were the local leaders of the African-American community.

In theory, the introduction of a voucher system provides a greater freedom of choice, and is regarded as an opportunity to access better services. On the other hand, this very opportunity should foster, in the long run, the improvement of the education system as a whole, as suggested by the traditional textbook argument on the working of competition. In conclusion, as a tool that expands freedom of choice, the voucher system encourages efficiency and, as an instrument that places the poor on an equal footing with the rich in terms of choice, it fosters equity as well. Obviously, as will be seen, the way the voucher system is implemented has a significant bearing on the foundations upon which these arguments rest. However, even without considering these details, critics of the voucher systems think that there are many good reasons for not resorting to it. There are some concerns. First of all, some commentators fear that public schools will progressively deteriorate, thus rejecting the notion that competition will improve them. As a rule, these fears go hand in hand with the idea that the introduction of the voucher system will be followed not only by a lower availability of funds for public schools but will hush up the "voices" of protests, which can play an important role in improving the public school system. Obviously, in more general terms, the terms of reference should not be public schools alone, but the entire educational system.

To this end, critics underscore the various shortcomings of the competition process in relation to such a peculiar good as education. In particular, the service users' lack of information, the barriers to entry in the market and the risk of segmentation are of special importance. Segmentation, in particular, might make for a deeper divide not only between rich and poor, but among advocates of different cultural and religious views, leading to

the establishment of schools to meet such varied educational and cultural demands. Besides, this kind of outlook is in marked contrast with the trend toward integration that characterizes the globalisation process under way. Against a background marked by such fears and expectations, it is worthwhile to briefly review what has emerged from the experiments conducted in the United States.[6] The three main school voucher programs were introduced in Cleveland (Ohio), Milwaukee (Wisconsin) and in Florida. The first was launched in Milwaukee in 1990 and was extended to religious schools in 1995. Cleveland's program has been active since 1996 while that in Florida since 1999. In general the voucher system was introduced in an effort to contain the progressive decay of public schools, in absence of effective reform. However, these programs differ from one another in many respects and, in this as in many other cases, details are very important. Such differences concern the conditions for accessing the program and the schools concerned, the comprehensiveness of the programs, the size of the transfers and so on.
Table 1.7 sums up the main features of the two longest-running programs.

Table 1.7 – Comparison of Milwaukee and Cleveland Programs

Milwaukee, initial	Milwaukee, current	Cleveland
Low-income only	Low-income only	Low-income given preference
Secular schools only	Sectorian included	Sectorian included
Limited to approximately 1,000 students	Limited to approximately 15,000 students	Limited by funds (amount increases annually)
Max amount = state per-pupil aid to MPS ($ 2,400 in 1990)	Max amount = state per-pupil aid to MPS (currently $ 4,600)	Max amount = $ 2,250

Source: Benefield, 2001, p. 33

The Milwaukee and Cleveland experiences, in particular, have been studied by many research centres, even though the only indicators available to date are of a subjective nature, i.e. the perceptions of voucher beneficiaries.[7]
After two years from the introduction of vouchers, students' involvement in the education process increased and families paid more attention to their children's education. Also because of this, students' academic achievements seemed to have improved while public schools reacted by expanding their educational offering. This appears to apply to both the experiences considered.

(6) Similar attemps have been made also in many other countries. Different regions in Italy started a similar experiment, often surrounded by controversy. Lombardy was the first to implement such a program on the basis of a law enacted in 2000, which called for a refund of school tuitions to households with a total income below Lit. 60 million per member. The maximum eligible refund was Lit. 2 million, with a deductible of Lit. 400,000. Data are available on the overall expenditure (ca. Lit. 58 billion) and on the beneficiaries (the great majority of them were households with children in private school, since the amount of the deductible often exceeds the tuition of pubblic schools); however the short period reviewed does not make it possible to determine the effects of the measure on the school system, if any.
(7) For more details see Benefield (2001).

In assessing these results, it should be borne in mind that voucher beneficiaries are mostly the children of poor families, coming from strongly deteriorating schools. In other words, action was taken on the weakest segment, and this may help in evaluating the mentioned results. More generally, it should be noted that – also due to mere financial reasons – in practice the competitive conditions posited by the theory never occur. In Florida, at least at the beginning, only the students coming from the worst schools were admitted, thus limiting competition to a significant extent. Worthy of note is also that the schools included in the program can only be the existing ones, as vouchers cannot cover the cost of establishing new schools. Thus, there is a risk that this might strengthen the position of many of the existing schools, which might not even be the best, given the inability of many beneficiaries to evaluate thoroughly the quality of the product. In addition, there might be some bottlenecks in the production process (excess demand for some schools and excess supply for others), whose effects might continue also in the medium term, since it is not easy to set up new schools.

Considering the matter in a different, albeit equally important, respect, education is peculiar due to the delicate balance between the state and religion. Also in the United States there is this kind of problem, as the Constitution forbids the use of public funds to support religious education. Overall, these considerations show the difficulties that need to be overcome to create a truly competitive market in the education field, sounding a note of caution in expecting an outcome based on free market forces. The truth is that economic theory has long clarified the difficulties in market operations when it comes to goods, such as education, whose users are not in a position to ascertain their quality in all main respects. The main obstacle to the proper evaluation of the voucher programs is a lack of sufficiently reliable data and, more generally, the absence of an approach that might compare (taking into account also the resources deployed) what vouchers can achieve not vis-à-vis the inertia of the *status quo* but against practicable alternative solutions. Actually, accurate institutional analyses would be needed not only for vouchers but also for general welfare issues.

1.5.2 Welfare-to-work: the U.S. reform in 1996

Among the various themes covered by the debate on the reform of the welfare state, special emphasis is placed on the protection against the risk of unemployment. Traditional passive labour market policies, which basically involve the granting of benefits without paying much attention to their effects on the possibility for unemployed workers to find a gainful occupation again, have long been strongly criticized for their possible negative impact on the search for work. The emergence of research centred on the notion of natural employment rate and on the effect that the institutions governing the labour market have in determining this rate caused a shift toward a different labour policy design, increasing the pressures for a set of so-called structural reforms.

In the labour market a reduction of the legal protection afforded to workers in maintaining their jobs, flexibility in the use of the labour force and variability in wages, to allow the mechanism of income re-equilibrium to work perfectly after a negative shock, are considered necessary.

Moreover, there is a call for a tax reform to lower social charges for companies, not only to abate the cost of labour but also to reduce the risk related to new investment projects in terms of expected profits and to introduce lower taxes for companies. Often a tax reform is advocated, to decrease tax rates for households, thus contributing to raise consumer demand to a permanently higher level.

These reforms should also be such that the pursuit of equity should take place not through the redistribution policies that are in contrast with a market incentive system but on the basis of the greater efficiency of market coordination. In fact, reforms are expected to increase significantly the profitability of private investments, which should in turn trigger higher growth rates.

With a specific reference to the labour market, provisional income support programs for unemployed workers, provided that these engage in active job searching, play a significant role. These would stress personal responsibility and reduce the potential abuses of the welfare state or, as economists have it, moral hazard. The distorsive consequences for the working of the labour market would be mitigated. This concept is based on the assumption that unemployment is not independent of the conduct of individuals, actually it is almost determined by it.

The various measures adopted (or that might be adopted) to implement these principles are normally given the general definition of welfare-to-work policies. Actually the differences among the various types of action can be quite significant for the unemployed.

The roads taken by Western countries to reform the systems for the protection against the risk of unemployment vary significantly. The United States were the first to implement such programs.

In August 1996, President Clinton signed into law the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA); this program has been operational since 1997 and, since it had funding for six years, it has to be re-authorised in Congress at the end of 2002. PRWORA, which introduced radical changes in the U.S welfare system, was approved by a wide majority (nearly all republicans and about half the democrats), even though it met with the fierce opposition of some of President Clinton's own party members and some public officials, who resigned in disagreement.

The vast popularity of this reform was due to different factors. One of the most significant was the perception that the previous system tolerated, or even encouraged, the breach of two principles that are the mainstay of national culture: making a living by working and raising children in a traditional family. In fact, it is not by accident that the reform affected mostly the situation of women-headed households with dependent children. Doubtlessly, these cultural aspects contributed to increase pressures by taxpayers, the ultimate funders, to scale back the system, thus putting a stop on the practice of providing income support to non-workers who raised children born out of wedlock.

The reform introduced several innovations, ranging from child protection and care to assistance to poor families with dependent children, to help to immigrants, to the provision of food stamps to the poor. In general, these include not only welfare-to-work measures but also programs known as "make work pay" whereby, as the expression implies, workers who accepted

a job would have additional benefits, in terms of enjoying a favourable tax treatment and other public transfers.[8]

BOX 1 – The U.S. Welfare Reform: Temporary Assistance for Needy Families (TANF)

The main features of TANF are as follows:

- A significant State autonomy in defining the conditions of eligibility for benefits and the generosity of such benefits in accordance, however, with some requirements set at federal level;
  The introduction as eligibility requirements of a significant number of hours worked and other behavioural obligations. In general benefits are conditional on attempts to prepare for self support;
- The funding mechanism of open-ended federal matching payments for state welfare expenditures was replaced by a block grant to each State. Funds are made available to each State on the basis of the expenditures incurred in the previous program. Furthermore, the States have available the funds assigned to them. Thus, there is an incentive for States to limit the disbursement of funds and, as a result, to endeavour to help beneficiaries to find employment;
- In any case, each State had to ensure that by 2002 half the recipients would work at least 30 hours a week. Failure to comply with this requirement would trigger penalties by way of a reduction in federal funding;
- Finally, States are required to discontinue aid to persons who have received welfare payments for five years or more. Departure from this is acceptable for 20 percent of the beneficiaries. Thus, a time limit is introduced – though not a very strict one – to the ability to collect welfare payments throughout a lifetime.

The substantial data available make it possible to draw a clear picture of the effects of the reform, particularly of the introduction of TANF, though some doubts remain.[9]

Today this reform is regarded in a positive light. First of all, it should be noted that the number of aid recipients more than halved in the five years following its coming into force, falling from approximately 12 million in 1996 to 5.8 million in mid-2001. In addition, positive results of this program includes the high number of those who left the welfare rolls and the adequacy of their income. This concerned in particular single mothers. Results are positive also with respect to poverty, especially in terms of the lower number of poor children. These had swelled between the 1970s and the early 1990s, reaching nearly 20 percent, but their number has been going down since 1993, prior to the reform (Haskins-Primus, 2002); in particular the number of poor black children has never been so small. In order to understand the trend under way, it is worthwhile to remember

(8) In some cases the innovations introduced were considered little satisfactory by President Clinton himself. This applies in particular to the treatment of immigrants, who were basically denied access to any type of *welfare* aid. While in 1997 Clinton requested and obtained the repeal of the most severe measures, the little inclination of this law to encourage inclusion is still the subject of heated debates.

(9) There are many studies on the effects of the reform. See, among others: Blank-Haskins (2001), Sawhill et al. (2002).

that households headed by a woman, especially a black woman, had the largest concentration of poor children.
A thorough review, however, cannot focus solely on these aspects, positive though they may be; nor can the improvement be attributed entirely to the 1996 reform.
The reduction of the number of welfare recipients - which is in itself a goal that cannot be avoided given the mechanisms introduced – may be due not only to the ability of the program to find employment but also to a lower access to welfare rolls, a matter for which different explanations have been offered.[10]
The criteria adopted to measure the reduction of poverty raises a number of questions also following the changes introduced. In particular, considering income as the sole assessment factor causes, for instance, the underestimation of the greater (transportation or assistance) costs incurred by the newly-employed single mothers. Overall, there is the widespread perception that the poverty line has been set too low, that is why change has been called for in the way data are collected (Haskins-Primus, 2002). Moreover, according to some observers, poverty reduction seems disappointing, given the strong economic growth during the period under review.
Regardless of these considerations, it is appropriate to refer to another poverty indicator, the so-called poverty gap. This reflects the amount of money necessary to raise every poor family up to the poverty line, thus capturing not only the frequency of poverty situations by also their severity.
The trends under way are far from reassuring (see table 1.8).

Table 1.8 - Impact of Government Programs on Children's Poverty Gap

	1979	1983	1989	1993	1995	1999
Poverty gap based on:						
Cash income Before Transfers	33.9	45	41.2	51.7	46.1	34.8
Plus Social Insurance	28.5	37.9	35.8	44.7	39.9	29.5
Plus Means-Tested and Non-Cash	12.7	18.8	17.2	21.3	19.9	17.6
Plus Federal taxes	12.8	19.4	17.2	21.3	19.9	17.6
Total Reduction (%)	62.4	56.9	58.4	59.8	62.7	56.3

Note: Figures in billions of 1999 dollars. Povertry gap is the amount of money that would be required in a given year to bring all children to the povertry line.
Source: Haskins-Primus (2002)

Between 1993 and 1998, the sums necessary to eliminate poverty as determined by the market – that is before any redistribution – fell. However, during the same period, also the action of welfare programs in reducing the poverty gap became less effective. In 1993, all welfare programs combined to abate the poverty gap by 59.8 percent as opposed to 56.3 percent in 1999 (after rising in 1995).
To this end, social insurance and, most of all, in-kind means-tested transfers proved particularly ineffective. On the tax front (as a result mainly of the negative income tax) the effects were positive. Thus, the

(10) Actually, Schram and Soss (2002) think that the little data available would support the argument that the reduction in the *welfare* caseloads is due more to a decline in *welfare* enrolments than to the greater ability of recipients to find gainful employment.

reform seems to have contributed to reduce the welfare's ability to fight poverty.
Data are mixed also with reference to those who found a job. For instance, it was estimated that between 1990 and 1999, the poorest 40 percent of the single mothers saw its income increase by approximately 2,300 dollars, while the available income – due to the loss of welfare benefits – was a mere 292 dollars.
Actually, one of the most significant problems with the reform was to prevent that participation in the labour market would result in scant progress for welfare recipients, if not in their actual being worse off (taking into account also the higher costs) as a result of the loss of the benefits collected before. In fact, a substantial decline in assistance spending was noted, for instance in the areas of food stamps or Medicaid (the public healthcare assistance program for the poor) as, even if this was not provided for by the law, upon finding employment these benefits would be discontinued. In general, there is a widespread opinion in the United States that having a job is not sufficient to escape poverty and to secure decent living conditions (Sawhill – Haskins, 2002, p. 108).
Finally, worthy of note is that in the second half of the 1990s the U.S. economy grew at a very fast rate. This contributed to increase employment and reduce poverty, even though the extent of this contribution cannot be easily measured against that of the reform. The awareness of the importance of this aspect led many observers to be concerned about the effects which the reform may have, in its current state, in a recessionary context, such as that which the economy is undergoing at present.
All in all, the reform certainly made it possible to overcome some resistance to find work, which might be categorized as a kind of moral hazard. Moreover, it is also highly likely that it did not bring about any improvement in the life of those – for different reasons, other than opportunistic behaviour – cannot find in the marketplace the right conditions to secure better living conditions. This twofold and contradictory consequence leads to the conclusion that compliance with even the most basic of equity principles suggests that, while it might be structured in a different way to protect the unemployed (and the working poor), social spending can hardly be reduced, or even dispensed with.

1.5.3 Voluntary health insurance: the failed reform in the United States

In the healthcare field, almost all countries have been engaged for many years in a permanent reform action, showing difficulty in achieving objectives that perhaps are either too hard or not completely well defined. In European countries – whose healthcare systems do have some elements in common that set them apart from their American counterpart – the innovative roles played by the market and private operators involve mainly the provision rather than the funding of services. In fact, starting from England's experience under the second Thatcher government, steps were taken to create internal markets or quasi-markets in order to introduce a measure of competition among service providers and in the difficult attempt to find a balance between the protection of rights and the benefits of competition.
On the funding side, instead, the principles of compulsory social insurance

resist the pressures to change, probably demonstrating that also in this area roads travelled in the past do count. This does not mean that the overhaul of the current system is not regarded favourably in some quarters, leading eventually to the introduction of a more comprehensive type of individual insurance, similar to that President Clinton unsuccessfully tried to have in the mid-1990s.

The reason that placed healthcare reform high on Clinton's agenda help to understand the shortcomings of voluntary insurance as a system to cope not only with health risks but also with other significant social risks. On the other hand, a review of the reasons that caused that reform to abort helps to identify the impediments that stand in the way of a process, even when this is driven by the need to improve efficiency and equity.

The U.S. healthcare system is a voluntary system where insurance is freely chosen by employers and provided to employees as a fringe benefit. Thus, it is a voluntary insurance system, though not on an individual basis.[11] A marginal position is occupied by such public programs as Medicare (for the elderly) and Medicaid (for the poor and the disabled) which are financed with state and federal funding; these programs were set up in the 1960s to try to provide healthcare coverage to those who were excluded from the insurance system. Currently, these programs have a limited importance.

Due to adverse selection, voluntary insurance systems translate into higher costs. Moreover, these systems tend to reject higher-risk individuals, exactly because they are the ones who need these services most. While account should be taken of its specific set of peculiarities, in particular those concerning the role of companies as insurers of their employees, the U.S experience confirms the existence of these problems. Moreover, the absence of pre-set spending limits, which is typical of a system similar to that in the U.S., fosters opportunism by users and providers of services, which can further contribute to the rise in healthcare costs.

It has already been mentioned that healthcare spending as a percentage of the GDP has been systematically higher in the United States than in any other Western country. These differences can be explained neither with the country's higher per capita income (healthcare spending tends to rise at a faster pace than income) nor with the different age structure of the populations. On top of that, several indicators suggest that such higher spending does not translate into a greater effectiveness. As already indicated, for instance, life expectancy at birth in the United States is lower than the average for the European Union, as a result of a significantly higher infant mortality (see table 1.9).[12]

The two built-in features of voluntary insurance systems, unfair exclusions and rising costs, can reinforce each other. Data show the growing number of individuals not covered by insurance. In 1999 their number amounted to approximately 43 million. Among individuals 65 and older, more than 18 percent had no insurance.

According to reliable estimates (Fronstin and Helman, 2001), a large

(11) Technically speaking, insurance policies have a hybrid nature, to limit moral hazard and adverse selection, on both the demand and supply sides. In terms of the demand profile, the insured partakes in the use risk by bearing some of the costs while on the supply side the risk is allocated between the insurance company and the service provider, on the basis of negotiated rates.

(12) More generally, according to recent data on the effectiveness of healthcare spending by the World Health Organization the United States ranks 37th in the world.

Table 1.9 - Infant mortality, number of deaths per 1,000 live

	1960	1970	1980	1990	1999
Australia	20.2	17.9	10.7	8.2	5.7
Austria	37.5	25.9	14.3	7.8	4.4
Belgium	31.2	21.1	12.1	8.0	5.3
Canada	27.3	18.8	10.4	6.8	-
Denmark	21.5	14.2	8.4	7.5	4.2
Finland	21.0	13.2	7.6	5.6	3.6
France	27.5	18.2	10.0	7.3	4.3
Germany	33.8	23.6	12.6	7.0	4.6
Greece	40.1	29.6	17.9	9.7	5.9
Ireland	29.3	19.5	11.1	8.2	5.5
Italy	43.9	29.6	14.6	8.2	5.1
Japan	30.7	13.1	7.5	4.6	3.4
Luxembourg	31.5	24.9	11.5	7.3	4.7
Netherlands	17.9	12.7	8.6	7.1	5.2
Norway	18.9	12.7	8.1	7.0	3.9
Portugal	77.5	55.5	24.3	11.0	5.5
Spain	43.7	28.1	12.3	7.6	4.9
Sweden	16.6	11.0	6.9	6.0	3.4
United Kingdom	22.5	18.5	12.1	7.9	5.8
United States	26.0	20.0	12.6	9.2	-

Source: Oecd (2001), *Health data*

number of uninsured individuals is in households with at least one employed worker, and this is certainly of great significance in a system based on employer-sponsored insurance.[13] This aspect of the U.S. healthcare system gives rise to another kind of inequity: insurance coverage varies to a large extent with the size of companies.

From the point of view of social efficiency, the uninsured inevitably end up representing a cost for society as a whole. For instance, in case of need they are entitled to emergency aid in hospitals; hospitals in turn recoup their costs by raising insurance rates (Reinhardt, 1992; Giaimo, 2001). The inability for the uninsured to resort to preventive care perpetuates these mechanisms.

Thus, the system's operating costs and exclusions tend to feed each other: as exclusions rise so do insurance costs, leading many companies, especially small companies, not to provide coverage for their employees. Moreover, the absence of pre-set spending limits encourages waste and abuse also within public programs. Before the introduction of the DRG system (of which more later), the lack of financial limits and other kinds of control led scholars to consider Medicare and Medicaid as the main culprits for the rise in healthcare costs due to opportunistic behaviour.

The awareness of these problems prompted the Clinton reform to introduce some of the elements typical of a compulsory insurance system, whose main strength is the ability to leverage a large base of beneficiaries in terms of risk aggregation and allocation. Clinton's plan called for public subsidies to smaller companies with financial difficulties and included many important innovations – not so different from those introduced also in many European countries – which were designed to control costs and keep moral hazard at bay. All in all, the reform envisioned the construction of a system along the lines of the European model, resulting in the

(13) Foe this reason, some called for the transition to individual insurance (not employer sponsored), but the main problem is due to the voluntary nature of the insurance coverage.

increased possibility to implement a redistribution process among diverse individuals by income, age or health.
The failure of Clinton's Health security plan was largely due to the opposition of small companies, as compulsoriness would have deprived them of their prerogative not to provide insurance coverage to their employees. Fearing that compulsoriness could limit their substantial role within the economic system, large companies too opposed the plan. These were the reasons that led to the failure of a plan capable of improving the efficiency and equity of the healthcare system.
With the failure of a radical reform, the U.S. healthcare system adopted or strengthened partial measures intended to tackle mainly the tendency of costs to rise because of the opportunism determined by the lack of competition and controls, both in the private and the public sectors. Health Maintenance Organizations, Diagnostic Related Groups (DRGs) and managed care were intended, each in its own way and context, to remedy those problems.
In general, the attempts to regulate and to introduce competition can reduce costs in the provision of services but, as will be seen in the next chapter where European healthcare systems are analysed in depth, they give rise to new costs, essentially of an administrative nature. Also for this reason, if they are not accompanied by more radical reform measures, there is not much such attempts can do to achieve a steadier balance among freedom of choice, economic efficiency, and extension of coverage of the services offered.[14]

BOX 2 – Actions to improve the efficiency of the U.S. healthcare system

Health Maintenance Organizations (HMOs) are physician organizations that provide specific healthcare services to their enrolees for a fixed fee. They provide both services (directly by the HMO's physicians or by third parties) and insurance coverage, with the cost benefits that might be expected by this combination.
In particular, competition among the different organizations, in terms of fees for specific services and/or in the definition of a mix of services for a given fee, is encouraged. Given these benefits, however, there are two problems: (i) a limited choice in the freedom of the consumer to select a physician, turning the traditional patient-doctor bond into a relationship between the user and the organization; this, however, can be overcome since the consumer can easily leave the organization, thanks to the competition among different organizations and (ii) the undermining of the equity principle in that the HMOs select risk bearers, leaving without coverage individuals who most need assistance.
The first of these two problems is mitigated by an alternative insurance

(14) According to recent surveys, Americans do not have much confidence in their healthcare system. In particular, there is widespread concern about rising costs, especially among women and individuals whose health conditions are less than perfect. It appears also that many would not know how to choose an insurance policy, in case they were to do it instead of their employer. A large number of them feels the system is not meeting their needs; see Fronstin and Helman (2001). Similar surveys in Europe do not show better results. In particular, in many European countries, queues are a source of discomfort. In a recent survey in Great Britain, many respondents stated they would rather be rteated abroad than to go through the long time the National Health Service requires them to wait.

known as Preferred Provider Insurance (PPI), whereby the insurers enters into a number of agreements with several physicians and healthcare facilities at the best possible price. The insured can then select one of these providers (whose services are fully covered by the insurance company) or select other providers and obtain only a partial refund.
Thus, HMOs – which are in essence mutual organizations – do not make it possible to reconcile freedom of choice with the need to reduce costs and provide extensive insurance coverage. Actually, this problem did not arise with the HMOs, as it is quite common and structural in nature, something that should always be kept in mind when evaluating the different welfare models.
DRGs (Diagnostic Related Groups) were implemented in the public sector to keep costs from rapidly escalating due to a lack of adequate controls on the care provided, one of the sources of moral hazard. They involve the introduction of a funding system whereby the services rendered by the different providers are priced on the basis of fees established in advance, in accordance with the relevant production costs. In particular, Diagnostic Related Groups are a system of categorizing patients based on diagnoses and on the cost to provide the relevant services. DRGs set the maximum amount that would be paid for the care of patients. Hospitals and healthcare providers were given a real incentive to keep health care costs down since they would experience a profit only if their costs are less than the amount indicated by the DRG. It is clear that this system involves new planning methods and new forms of control, without remedying the moral hazard problem, as more expensive services may be rendered if the corresponding fees are more lucrative. DRGs have been used also in Europe, particularly in Italy. These aspects will be discussed in the following chapters.
Among the innovations introduced in the 1990s, worthy of note is also the so-called managed care system, whereby healthcare activities (especially by private practitioners, though also by public facilities, particularly in relation with Medicaid) were subjected to extensive regulations and management. In particular, more stringent controls were implemented with respect to the conduct of physicians and delays in payments can be used as an incentive to reduce abuses. Managed care is thought to have caused healthcare spending to slow down.

1.5.4 The market and social security: the pension funds

Social security and income insurance requirements can be satisfied by public or private organizations, through individual or collective schemes, which may be optional or mandatory, and on the basis of funded or pay-as-you-go systems.
In terms of the need to provide a satisfactory social security system to the entire population of a country, public pay-as-you-go systems have characteristics that make them particularly attractive. Contrary to private pension insurance – which must be of necessity based on a funded system and has to be offered by different competing entities – public pension systems can afford – or even mandate by law – the same type of insurance coverage to a much larger number of members, which can include the entire population, and can spread risk to the maximum extent possible, thereby reducing the consequences of negative outcomes for individuals. The absence of actual individual reserves and the need to invest them in financial markets, the possibility to allocate fixed administrative costs, the

lack of advertising expenses related to the need to protect and expand market share, are all aspects that contribute to keep down the operating costs of public pension systems. For purposes of the actuarial calculation of the pension credits each member has accrued, the ability of pay-as-you-go systems to rely on the gross national product, instead of the performance of equity markets as funded systems do, makes pension coverage by public systems much more stable and safe. Besides, there is no theoretical or empirical evidence to support the notion that, in the long run, the greater instability of equity markets is rewarded with financial returns higher than the GDP's growth rate.

Moreover, actuarial equity between contributions and benefits is set against the solidarity-oriented and economic transfers of the public pension systems; in any case, public systems are capable of meeting the goals set by the institutions of a community.

Pay-as-you-go systems are more transparent for the intergenerational distribution of current income by the social security system. In these systems, favourable or unfavourable developments in the rules that govern the way pension rights accrue are utilized at parliament level and express in an understandable manner any change in the willingness of the active population to transfer resources to the elderly.

In Italy, for instance, with the pension reform in the 1990s, after a twenty-year debate that variously took notice of the changes in the economic and demographic situation, the mandatory social security system partially repudiated the pension debt it had contracted with its members. During the 1960s, the public pension system had acted in a completely different way, creating pension credits as if by the stroke of a magic wand; a particularly favourable treatment was that afforded to the members of the newly-established funds for the self-employed, who were able to retire and partake in the redistribution of current income without having made the correspondent actuarial contributions.

Similar changes in so-called vested rights (actually when it comes to future developments nothing is vested; there are agreements whose ability to be honoured in the future can only be reasonably estimated) are implemented also in funded schemes, though based on less clear decision-making procedures and perceptions which depend – and are less subject to control and have varying effects on participants in the different pension funds – on such developments as rates of returns, market performances, possible bankruptcy of insurance funds, changes in inflation rates.

Concerning inflation rates, after WWII the transition of all pension systems from funded to pay-as-you-go, due to the drastic loss in value of reserves determined by war inflation, constitutes an example of the greater difficulties market mechanisms may have to cope with in meeting such social need as the transfer of income from the active part of the population to the elderly.

The creation of funded schemes implies, for the insured, new saving flows or the reallocation of existing resources invested elsewhere for pension purposes. At microeconomic level, these are choices that can fill some specific need to supplement basic pension arrangements; at macroeconomic level, their effects on the allocation between consumption and savings, and then the breakdown of such savings by type of investment in domestic and international financial markets vary on the

basis of the peculiar situations of each economic system.
Public pay-as-you-go pension systems have been criticized for many years in nearly every country that has adopted them. These criticisms concern several aspects, from financial sustainability to inefficiency in the way funds are managed, to different types of inequity. In many cases criticisms do not involve marginal and reformable aspects of the system but its very foundations. In fact, some observers maintain that a funded system would deliver better results in all material respects.
In the majority of cases in which criticisms translated into actual reforms, the stated goals were to provide higher returns on pension contributions set aside, to establish more defensible systems in terms of equity, to relieve once for all the public budget from financial unsustainability also with respect to demographic patterns, and to protect individual freedom of choice, something which is attributed increasing importance compared with other values. Demographic problems are often identified as the reason for the difficulties experienced by pay-as-you-go pension systems. Actually, by altering the balance between the active population (the producers) and the passive population (the segment that consumes without producing), population aging is a problem for any pension system, even if the ways these problems surface can differ significantly.
Often, the preference accorded to funded systems rests on the idea that individuals can make the best decisions with respect to their savings and that the creation of a competitive environment can, on one hand, achieve that freedom and, on the other, give rise to the efficient results that normally are attributed to the market. Subscribing to this view means that limited account has been taken of the problems related to the peculiarity of retirement savings, in terms of both efficiency and equity.
Funded systems have been embraced for many types of supplementary pension schemes and one of the main aspects that set funds apart from one another is the degree of freedom workers enjoy in defining their own retirement saving plans.
The experiences of United Kingdom, Chile, Sweden and United States bear this out. These are reviewed in the Appendix, which should be consulted for a more in-depth assessment.
The significant freedom of choice that characterizes the United Kingdom and, particularly for self-employed workers, Chile is set against Sweden's effort to find a different balance between the centralization of pension decision-making, including with respect to funded systems, and individual choice.
In addition to this, the four systems examined differ from one another for the variety of the pillars on which they rest, for the way in which these are integrated and for the different degree of confidence they place in competition mechanisms.
The reform of the Chilean pension system, which was introduced in 1981 and has long been indicated as an example to follow, determined the radical transition from a state-managed pay-as-you-go system to a funded system administered by private pension funds. In Chile, as elsewhere, in addition to the private funded component, there is a public pillar financed through general taxation and a third pillar based on voluntary saving, which is supported by tax incentives.
This system grants a wide freedom of choice to the selected fund manager,

and is based on the principle that competition can generate high returns and low management costs.

With the reforms enacted in the 1990s, Sweden tried to reconcile the introduction of a funded pension system with the preservation of a significant public compulsory component.

The new pension system is made up of a public pay-as-you-go pillar, whose performance is tied to the growth rate of the economy, and of a defined-contribution scheme, which is further broken down in a compulsory part (public) and a quasi-compulsory one (group pensions), whose returns are related to the performance of financial markets.

In the United Kingdom, the reforms started by the conservative government, and continued by Labour governments to this date, led to an extremely complicated system where, in addition to the basic public pension scheme and a second pillar for low-income workers, there are defined-contribution schemes for all earners above a set income level, for which substantial tax incentives are provided.

The U.S. system consists of a private and a public component, which in turn is composed of a social security system, the predominant system, and government-funded benefits.

Private pension funds include defined-benefit funds (where benefits paid are commensurate with the final salary and seniority of employment with the same firm) and defined-contribution funds (where benefits depend on the returns on the investments made with paid contributions). Among the latter, the so-called 401(k) has gained prominence lately; this is a fund where workers make payments on a voluntary basis. The factors that affect the performances of the different systems do include the institutional characteristics illustrated in brief. As to the financial performances, funded systems are very sensitive to trends in financial markets. In particular, stock prices tend to rise when retirement savings are accumulated, while the opposite is true when benefits and contributions are roughly equivalent. Moreover, normal equity-market fluctuations cause the average annual performance of funds to vary to a significant extent, depending on the selected time horizon. For instance, between 1981 and 2000 the real average annual rate of return on equity investments was 10.6 percent, which was markedly higher than the GDP growth rate, the rate of return for pay-as-you-go systems. Changing the reference period, in particular taking a year after 1995 as a base line, the results are completely different.

In the United States, funds returned on average more than 12 percent in the 1985-1998 period. Following the decline of stock prices, the return on assets invested in U.S. stocks between 1990 and 2002 was around 5 percent. Also worthy of note is that workers bear all risks related to stock-price fluctuations, with extremely serious consequences, especially when retirement cannot be postponed.

The recent events in the U.S. also highlighted the risks arising from unethical conduct. To this end, it is worth bearing in mind that in the United States a large number of 401(k)s invested significant sums in their sponsoring companies' stocks.

The rates of return indicated above are in nominal terms and do not take into account possible inflation in the period after retirement or management fees. These costs cause effective returns to be much lower than nominal returns for investors. For instance, in Chile in 2000, given an average nominal return of

4.4 percent, lower-income earners obtained a 1.4 percent return while higher-income earners received 2.3 percent. This difference is due to the fact that fees are set in accordance with strongly regressive criteria. High management costs are one of the sorest point in the Chilean system. The United Kingdom to has similar problems, where fees lop 25 percent off nominal returns. The reason or such high management fees cannot be attributed to the lack of competition among fund managers; in fact, in this case, even though it reduces funds' margins, competition drives up the price of the service.
In fact, in Sweden, where the funded pillar has been centralized, the collection of contributions, the payment of benefits and relations with financial intermediaries are not a problem. In this country there is a sort of clearing house that tries to reconcile the discipline of centralized administration with the freedom of choice of individuals in channelling investments.
The degree of coverage and the distribution effects constitute other important factors to evaluate supplementary pension schemes.
In the United Kingdom, voluntary pension schemes are not very common and are available mainly to workers in large firms and in unionised industries. Furthermore, since the system is strongly dependent on the individuals' ability to save, higher-income earners tend to receive a more favourable treatment. Also in Chile, despite the significant enrolment increase, the ratio of enrolled members to total workers is rather low, and it is actually lower than that prior to the reform.
Limited availability and the risk to receive a small pension are causes of concern for the future of the system, suggesting a greater involvement of the public system, which still plays a significant role in nearly all the cases considered. For instance, the income of elderly people in the United States reflects approximately 38 percent in public pensions or transfers and only 18percent in private pensions.
Concerning the attempt to relieve the public budget of the pension burden, Sweden – which was never keen on supplementary pension schemes – completed the transition from an earnings-related to a contribution-based system, with a minimum retirement age of 61 years and incentives to postpone the exit from the labour market. Moreover, it drew a sharp distinction between social security and assistance, so as to separate insurance spending from assistance expenditures.
In conclusion, if implemented on a basically voluntary basis (as in the United States, in the United Kingdom and in Chile for self-employed workers), participation in supplementary pension schemes is relatively limited and available mostly to higher-income earners. Supplementary pension schemes, however, show high volatility and risk levels, suggesting that predicting future developments by extrapolating data from bull market years can be misleading. Supplementary pension schemes require in any case effective regulations to prevent burdensome management costs from substantially curtailing effective returns. The Swedish model indicates how the presence of a sound public system and a labour market, where contribution obligations are met, are conditions conducive to the implementation of an effective and balanced multi-pillar scheme.

1.6 Competition among welfare states? Problems for Europe

Among the issues related to welfare reform and the role of both public and

private sectors there is a particularly important one rooted in the institutional changes under way in Europe, namely government levels and the role to be assigned to competition, or to the harmonization of social policies. The problem is even more complex due to other institutional characteristics, in particular the co-existence of a centralized monetary policy and largely autonomous tax policies at national level.
Decentralization may be risky. According to the policy stance that, one way or another, informs the strategies of nearly all European governments, integration should take place in accordance with the principle that welfare policies – as all policies designed to close the per capita income gap – do not have to interfere with the free interplay of market forces.
On the other hand, in welfare matters it may easily happen that the decisions made in one country affect other countries, making it necessary to establish some rules, possibly in a not-too-distant future. In fact, the co-existence in Europe of profoundly different welfare systems, based on different levels of tax pressures and risk coverage, means that – in case the current independent systems were to be maintained unaltered – the countries of the European Union might face the risk of having their social protection institutions downsized and/or of running a deficit. The complete mobility of capital and the partial mobility of labour (at least of skilled workers) might in fact generate a trend for these two factors to leave (enter) high-tax (low-tax) countries with high (low) social protection transfers. An institutional reform that would encourage coordination among European governments – instead of a close cooperation that would start a progressive centralization of social protection in Europe – would not have enough teeth to create a sufficient disincentive for opportunistic behaviours.
The trend in some countries (Germany, Spain, Italy, Belgium) for high-income regions, with an advanced socio-economic context (by number of infrastructures, public goods, etc.), and low-income backward regions to polarize has already created distributive conflicts and an increasingly lower consensus around the equalization stance of public policy.
If the "exit" strategy – from the public social protection system and the standardization of the financing and production of public goods at national level – were to guide the behaviour of people and communities, a club of rich individuals and jurisdictions might be established in Europe, with the risk of a significant decline in social cohesion and a tendency for nations to secede.
If a country were to decide to strengthen its social safety net, it might encourage the immigration of poor people and the flight of capital and high-income people; funding welfare institutions would become a mere re-distributive exercise. This would give rise to an incentive for all the other European countries to obtain a benefit without incurring the relevant costs, so-called free riding, in re-distributive and convergence policies. These countries would enjoy a reduction of the income gap at no cost. On the other hand, the country that were to undertake a policy to strengthen its welfare system would experience a relative loss of well-being. This should be considered together with the problem of the foregoing administrative and political devolution processes which have been initiated or completed in many countries. Inasmuch as these events are part of the very European integration process, whereby the subsidiarity principle takes

precedence over the solidarity principle, there is no doubt that the fragmentation of welfare regulations and cost-benefit ratios within the different Member States boosts propagation effects.
While there are some who disagree, there are reasons to believe that starting in 1991, a year in which the European integration process received a significant impulse, reforms designed to reduce the generosity of the Member States' social protection system gathered speed (Fitoussi and Le Cacheux, 2002, pp. 108-9).
A tax union in addition to the monetary union would imply the creation not only of benefits but of costs as well.[15] The costs more often referred to depend on the strong differences among the European welfare systems – from the point of view of the type of risks covered by the public sector, of the role attributed to the private sector in managing the pension and healthcare systems, of the ways to finance social protection and so on. Such diversities would make the centralization of welfare an ill-advised move, as they would give rise to severe conflicts of interest within the EU around the distribution of costs and benefits in this tax union.
Against this pessimistic background on the possibility to reconcile the different interests of the citizens of Europe, recently an agreement among the countries of the European Union was proposed to introduce a measure of coordination in their policies. This proposal can be summarized as follows: 1) a level of social protection for all EU citizens linked to a minimum threshold, so as to discourage so-called welfare shopping; 2) the switch to national welfare systems founded on actuarial equity; 3) a minimum taxation level, so as to ensure the necessary resources to meet the re-distributive goals of local communities (Bertola et al., 2000).
Such proposal does raise eyebrows, both for the doubts on its ability to achieve the stated objectives and for its underlying rationale. The creation of a Europe-wide safety net to combat social exclusion and poverty by instituting a small tax and a limited amount of benefits not only is not a guarantee of success in the fight against poverty but seems to cut a role for European states as relief providers of last resort for the poor. As to immigration, an improbable idea is emerging, that of immigrants as rentiers (seeking benefits for which they did not incur any cost) rather than individuals who do not have the means to make a decent living. More generally, adopting this kind of view is tantamount to considering efficiency and equity absolutely incompatible. To this end, two more points are worthy of note.
Adherence to the actuarial equity principle by social insurance institutions would mean the actual elimination of any re-distributive function of the welfare system. In fact, each local community would be free to establish its own taxes for re-distributive purposes at the regional level, with the result that there would be no policy designed to transfer resources from advanced to less advanced areas within the European Union.
Finally, this program may not be enough to prevent tax competition among European countries. Even though it should not be determined for internal reasons, tax competition among European countries would be the natural reaction of governments to the ballooning of social spending that might

(15) For a theoretical and empirical assessment of a hypothetical tax policy centralization in Europe, see Farina and Tamborini (2002).

occur in the next few years, for instance, following the impact on the labour market (from wage bargaining to the law on hiring and dismissing workers) and on welfare institutions by the immigration of skilled and unskilled workers from Eastern Europe.

1.7 Some conclusions

Theory and experience suggest, though with great cautiousness, a conclusion of a general nature. A market-based system, relying on private voluntary insurance, would run into many moral hazard problems (which generate abuses and, as a result, rising costs) as serious as those that characterize compulsory insurance systems. Furthermore such a system is much less effective in providing risk coverage – and this is not only less equitable but, as has been seen in the healthcare case, also less efficient. On the other hand, freedom of choice seems to be greater in market-based systems. Theory and experience seem to agree that this is all.

Thus, the recognition of government failures, to be considered avoidable, is not enough to indicate the path to follow; for their part, market failures are not an indication of the proper course of action either.

The discussion has so far centred on the three essential values of efficiency, equity and freedom, which normally find their place in the microeconomic sphere. It was noted that arguments in favour of a downsizing of the welfare state rest also on macroeconomic considerations (financial sustainability in particular). While the urgency of these considerations is subject to the uncertainties of economic trends on the one hand, on the other it should be assessed in light of the idea that a welfare state capable of utilizing in the best possible way the positive peculiarities of the public sector can contribute to economic growth by providing essential inputs, such as human capital, and achieving the best possible reconciliation between the need to innovate and that to provide security.

In fact, in terms of security needs, innovation generates problems similar to those that arise as a result of the opening of the world economy.

Reform processes seem to move slowly in most Western countries. Inertia is not always a bad word, however it is an undeniable fact that sometimes resistance to change has to be regarded as an impediment to achieve more equitable and efficient solutions. As demonstrated by the U.S. experience in healthcare, this can take place also when the way to go is an expanding not a shrinking government role.

However, simply stating that reform processes are moving slowly may be misleading. Attempts have been made so far to illustrate that many reforms have been completed and the fact that the goal to reduce costs in countries with a long tradition of universalistic welfare has been in general pursued with a greater attention to equity (Giaimo, 2001) is of special significance. This makes it possible to provide a less negative explanation for the remaining inertia. The difficulty to find solutions that achieve a greater degree of efficiency, equity and freedom may represent an obstacle to a rapid change and may breed some dissent.

These considerations apply also to some characteristics of the advanced economies and to some institutional innovations that might constitute important aspects of future scenarios.

For instance, the informal economy seems to be spreading in many

advanced and less advanced countries, owing also to the progressive consolidation of the post-industrial economy. If it continues to avoid state's control, this phenomenon will not be devoid of consequences for a better design of welfare institutions, especially for that which involves protection against unemployment risks.
In addition, the increasing migration flows – which are still very low compared with those in other globalisation periods - will draw increasing attention to the problem related to the treatment of immigrants. Achieving a more virtuous public/private balance, with the correction of some asymmetries born with the globalisation process, is paramount to prevent the risk of a dangerous race to the bottom in the area of social protection.

appendixes

Appendixes

Appendix A1.1 – Supplementary pension systems: some case studies

A supplementary pension system consists of many parts that, in their interaction, define the characteristics of the whole and determine the effects in terms of income distribution and macroeconomic functionality.

The **existing relationship between public and private components** within the pension system as a whole is the main building block. In some cases the role of the private component can be secondary in what is principally a public system, while in others it provides benefits instead of the public system (contracting out); finally there are instances in which it is the dominant force. The size of the private system often depends on the nature of the participation in it, which can be mandatory or voluntary.

Pension schemes differ in the way benefits are calculated. Basically, there is a distinction between **defined-contribution** schemes (under which benefits depend on the returns on the investments made in financial markets with the contributions paid) and **defined-benefit** schemes (under which benefits are related to the final salary and the length of service). These two types of pension fund are associated with different risk allocations between beneficiary and scheme operator. The risks related to a pension system are many and of a varying degree, ranging from the inadequacy of returns to inflation, in addition to the demographic risk.

Managers operate pension funds subject to more or less stringent constraints for their **investment choices**, which may be more or less risky.

Retirement benefits can be collected in different ways: credited funds might be withdrawn in advance, they might be paid in a lump-sum or may be converted, in whole or in part, into an annuity.

Funding may be provided by either the employer or the employee, and may be either voluntary or mandatory; however, these pension schemes always enjoy a favourable tax treatment, typically in the way of tax deductions for contributions and returns on investments during the accumulation phase; taxes are then paid at the time workers retire, when they are in a lower tax bracket.

The **administration** of the funds received and the annuities paid might be organized on a **centralized** or on a **decentralized** basis. The maximum degree of centralization is when contributions are collected by an entity delegated for this purpose, which then invests them on the basis of considerations independent of the enrolee's preferences. Sometimes, in a centralized operation, enrolees have the option to choose the investment manager.

A fully decentralized system involves the collection of contributions, generally from employers, and the transfer directly to an investment manager chosen by the enrolee. The different administrative procedures have a strong impact on costs and, consequently, on the effective **returns on investments** generated for enrolees.

Finally, private systems have to be analysed in light of their availability, returns on investments and distributive results. In this context, special emphasis is placed on population coverage, especially if account is taken of the fact that supplementary systems are supported by strong tax breaks and, in some cases, by contribution reductions. An important role is the weight of private sources on the **income** of the elderly.

United Kingdom

The pension system in the United Kingdom is very complex. It is still founded on Beveridge's idea that it is the duty of the state to provide a

basic income to its citizens; however, the need to have pension benefits commensurate with the income earned by workers during their active years determined, in the 1950s, the development of defined-benefit corporate or industry pension funds (occupational pension funds). In 1978 a second public pension pillar was introduced, where benefits are tied to salaries, to provide all workers (not only the enrolees in occupational pension funds) with a higher pension than the basic one.
The introduction in 1988 of defined-contribution personal pensions, to replace both the second public pillar (the scope of which was further limited) and the defined-benefit occupational pensions, was the choice of the Tory government that had come into office in 1979 to leave up to the individual the responsibility to make provisions for an adequate income for the old age. The positive performance of financial markets during the 1990s validated this choice, leading the successive Labour governments to enact a reform in 2002 which follows in the same footsteps. The public pillar tied to salaries was repealed in favour of a second public pillar designed for lower-income earners (up to 10,800 pounds); new and simpler mechanisms were introduced to build up defined-contribution pensions above that income level.

The public system
The cornerstone of the public component is the **basic state pension** which, after 44 years of contributions and upon reaching 65 years of age for men, amounts to 75 pounds per week (in 2001). This sum is indexed to prices and currently represents approximately 15 percent of the average wage of a male worker. To supplement the basic state pension, a minimum income guarantee was instituted some years ago, this being the minimum income level for a senior citizen with personal savings up to 12,000 pounds; the minimum threshold is adjusted every year in accordance with any income increase. The fact that the minimum income guarantee exceeds the basic state pension implies that a worker entitled to receive the maximum amount under this arrangement is subject to a means test to obtain a pension supplement, which will allow him to collect 95 pounds per week. It is estimated that 37 percent of English pensioners receives means-tested benefits.
It should be underscored that the indexation of the basic state pension to prices and of the minimum income guarantee to income will determine, in case salaries were to increase by 1.5 percent a year, a fall of the basic state pension to 8 percent of the average salary within a few decades. The choice of this dual indexation mechanism is related to the objective of the English government to limit the charges incurred out of general taxation, so as to fund the part included between the basic pension and the minimum income guarantee for those who have no other means of support. In 1998, basic state pensions and other income supplements for the elderly accounted for 4.9 percent of the GDP.
Between 1978 and the reform in 2002, the basic system was supplemented with a component that linked benefits with an individual's salary history. Currently, **state earnings related pensions** may reach 20 percent of the average salary, as adjusted upward on the basis of salary increases computed on the entire working career. The mechanism was supplemented in 2002 and re-christened **second state pension**; this scheme doubles the

level of state earnings related pensions up to a maximum yearly income of 10,800 pounds, increasing it at declining rates from 10,800 pounds up to 24,600 pounds, and leaving it unaltered once that level has been reached. In order to assess the effects of the reform it is necessary to evaluate the implied replacement rates. Before the reform a person with an average-wage history received a pension in an amount equal to 34 percent of such a wage; this figure fell to 25 percent for incomes equivalent to half the average wage. With a minimum income guarantee equivalent to 18 percent of the average wage, the old system provided a pension below this level to anybody who earned an amount representing less than 70 percent of the average wage.

Once the reform currently being implemented is fully operational in 2050, it should be able to do away with the means test for wages exceeding the average by 20 percent, even though the maximum replacement rate for a salary level slightly above the average throughout one's working life should be around 30 percent (due to an average wage growth rate of 1.5 percent and a lower incidence of the basic pension, which is indexed to prices).

The payment of contributions for state earnings related pensions or the second state pension is mandatory for employed workers. However contracting out is allowed, that is when employed workers contribute to an occupational pension or to a personal pension fund. In this case, part of the contributions (for state earnings related pensions, 4.6 percent out of a total of 10) can be allocated to supplementary substitute pensions.

The redemption amount should be equivalent to the present value of the state earnings related pension the worker would have been entitled to receive, had he elected to remain with the public system. This actuarial-neutrality stance was abandoned with the introduction of the second state pension. In the new version of the second public pillar there is an actuarial benefit for all earners with an income below 10,800 pounds who stay with the public system; moving up the income ladder, workers are increasingly encouraged to enrol either in occupational or in personal pension plans. The evaluation of an actuarial gain is based on the assumptions on investment trends and returns utilized by government actuaries for their long-term projections. The government seems to be inclined to limit the public system to low-income recipients, still providing a limited coverage.

In 1996, out of a total of 28.5 million employed workers, 7.5 million were enrolled in the second public pillar as against 9.3 million enrolled in occupational schemes and 5.5 million enrolled in personal pension plans. In 1998, payments related to the state earnings related pension system accounted for 0.4 percent of the GDP.

Supplementary pension schemes

There are two kinds of **occupational pensions** (without considering hybrid pensions or pensions that supplement public benefits): contracted-out salary related schemes and contracted-out money purchase schemes. Both are a replacement of the second public pension; in fact a pension position is funded by the contributions payable by all workers (4.6 percent of the reference salary), in addition to any voluntary contributions by employer and employee and the tax deductions provided for by tax laws. Contracted-out salary related schemes are defined-benefit plans. The

amount of the pension is set in advance on the basis of an annuity rate (generally equal to 1/60) and length of service. The English law, however, calls for pension benefits not to exceed 2/3 of the last salary (up to a maximum of 92,000 pounds in 2001). With a coefficient of 1/60, maximum benefits can be obtained with 40 years of service.

Contracted-out money purchase schemes instead are defined-contribution plans, where the final result depends on the return on the investments made with the contributions paid. Also in this case, benefits cannot exceed 2/3 of the last salary.

Defined-benefit funds are currently the dominant component, even though over the past few years the vast majority of newly-established funds have been based on defined-contribution systems. In 1996 9.3 million employed workers were enrolled in contracted out pension schemes, as against 7.5 million enrolled in the second public pillar. The number of occupational funds was particularly high (as of 31 March 2001, there were 110,000 such funds, according to the Occupational Pension Regulatory Authority). Enrolments are strongly concentrated: funds with at least 100 enrolees represent 6 percent of the total but account for 95 percent of all enrolees. Larger funds are typically based on a defined-benefit system, even though over the past few years many of them turned themselves into defined-contribution schemes.

Defined-benefit funds may be contributory (when workers are required to contribute) or non-contributory (when contributions are paid by employers). Workers' contributions cannot exceed 15 percent of their salaries, while there are no limits on employers' contributions (other than those established on the basis of the fact that pension benefits cannot exceed 2/3 of the last salary). The key aspect of this type of fund is a minimum funding requirement by employers. Firms, which are required to pay a sum for a specified amount upon termination of employment, in fact have to adjust their contributions periodically in order to make up for any shortfall in the balance of a fund vis-à-vis accrued benefits.

On the other hand, in presence of particularly favourable market performances, pension schemes might show a surplus (a fund balance might exceed accrued benefits). In the latter case, tax laws require that firms take steps to eliminate such excess balance, so as to prevent them from taking advantage of unjustified tax benefits. Typically, the method adopted to eliminate a surplus involves the reduction or the suspension of the contributions payable by the employer (so-called contribution holiday).

Occupational funds are subject to a particularly favourable tax regime:

- Employers' contributions are tax deductible; employees' contributions are tax-deductible within the limits indicated above;
- Investment income and capital gains are not taxed during the accumulation phase;
- Possibility to receive tax free, upon termination of employment, a lump sum representing 25 percent of the accrued benefits.

The other main characteristics of these funds, positive and negative for beneficiaries, include a protection against inflation up to a maximum of 5 percent and, possibly, survivorship clauses. Fund managers have to invest in the interest of beneficiaries, as no more than 5 percent of total assets under management can be invested in shares of the sponsoring company. On the other hand, in case of job changes, the portability of pension

rights is quite expensive, while maintaining the position with the original firm involves a freeze of the accrued benefits.
There is a widespread belief that defined-benefit pension funds guarantee the best pension treatment in England, due both to the replacement rates obtainable and the protection typically provided against inflation, as well as for the survivorship clauses generally adopted. The complexity of this scheme makes it particularly suitable for large companies.
Moreover, in defined-benefit funds financial market risks are borne solely by the promoting firms. Suffice it to say that in the three-year period 1988-90 the FTSE 100 Index rose from an average of 2000 to more than 6000 at the beginning of 2000, and then fell back to 4000. At the end of 1999, when stock indices were near their peak occupational funds had total assets under management in the amount of 780 million pounds, 68 percent of which invested in stocks (Covip 2001, p. 227).
The extraordinary climb of financial markets in the 1990s allowed English firms to reduce many of the contributions to defined-benefit pension funds; the negative performance over the past few years did and will force those companies to make substantial adjustments, unless a decision is made to wind up the fund and adopt different schemes (as has actually happened).
Workers (or at least a significant part of them) migrated from defined-benefit funds to funded pension schemes or to personal pensions, probably attracted by the spectacular performance of equity markets, raising strong concerns for the resulting reduction of pension benefits. In July 2002, in a context of low interest rates and returns on stock investments, thus suspending the partial or total contribution holidays firms had been enjoying, the report of a government commission chaired by Alan Pickering was published: according to this report, defined-benefit funds could survive only with the repeal of both indexation and spousal benefits.
Since 1987, the opportunity of contracting out of the second public pillar was extended from occupational pensions (which are typically defined-benefit schemes) to personal pensions (defined-contribution schemes). Introduced by a conservative government, this type of pension is founded on the idea that setting up a pension position is a matter of personal choice. Regardless of any mandatory contribution, the individual is in control of his retirement savings and how these should be invested, assuming all risks arising from a manager's decisions (any financial intermediary) and investment policies.
In addition to a basic pension, the state is responsible for providing significant tax incentives to encourage the formation of retirement savings, for supporting the accumulation process and for fostering the exit from the public system.
A personal pension consists of two parts. One is linked to the pension contributions designed to fund the state earning related pension scheme (4.6 percent of gross salary, as well as other incentives introduced in the initial phase) and must necessarily be transformed into an annuity. The second part instead is funded by the worker's voluntary contributions and, possibly, by the employer.
Limits on voluntary contributions, inclusive of those by the employer, are set according to income and age, ranging from 20 percent of gross salary for people below 35 years of age to 40 percent for those older than 61.

Contributions up to 3600 pounds can be made regardless of individual income.
Under this scheme, the procedure for collecting the benefits linked to contracting out is different from that related to the voluntary part. In fact, the former are transformed into an annuity paid between 60 and 75 years of age, while the latter can be paid partly in a lump sum (up to 25 percent of the credits) and partly as an annuity. Annuities can vary, as they can be paid to individuals or to couples, can be expressed in nominal terms or indexed, even though the nominal form seems predominant. In determining the annuity deriving from social contributions, firms cannot discriminate on the basis of the differences in life expectancy between men and women; actuarial tables can be applied only for the voluntary part.

An assessment of personal pensions
While a full assessment would not be possible, since the scheme is relatively new, the first decade personal pensions have been in place has unearthed some problems, concerning principally the coverage of the working population and the actual returns on the invested contributions.
At the end of 1996, there were 5.5 million employed workers who had chosen to set up personal pensions, in addition to 1.5 million self-employed workers. Employed workers represented 15 percent of the population of reference. Considering that in the previous fiscal year, 1988-89, enrolments represented 13 percent of the total and that an 18 percent high was reached in 1991-92, one gets the impression that the intent of the English government to shift a large part of the working population to this scheme failed; during the same period, the percentage of participants in occupational schemes fell from 41 percent to 35 percent (Department of Social Security, Social Security Statistics, 1999, p. 320). These data seem to indicate that there was a shift, either voluntary or compulsory, back to public pensions.
This was due also to the decision by the Thatcher government to do away with compulsoriness for all employed workers to join corporate pension plans. There is also widespread concern for the low saving level of the English population, which seems to not set aside sufficient resources to enjoy adequate living standards in the old age. To this end, the fact that one-third of those who make voluntary contributions to their personal pensions suspend payment after four years is rather telling (Blake, 2002, p. 332).
The returns on the investment made with the contributions to personal pensions depend in the first place on how the supplementary pension system is organized. In addition to being voluntary, the English system is private and strongly decentralized.
The system is private because the scope of state intervention is limited to the supervision activities of the Occupational Pensions Regulatory Board and the Financial Services Authority, two operator-financed organizations. These authorities are responsible for controlling the supplementary pension system. The system is decentralized on the demand side, as participants in the scheme are totally free to select the manager and the investment style, and the associated risks. The system is decentralized also on the supply side, as all financial operators can offer retirement products.
The assumption underlying the choice of this model is clear: a large number of competing operators should allow English workers to select the best manager in terms of results and costs.

The performance of pension funds may be affected by various types of expense during the accumulation period (selling commissions and advertising), and by administrative and operating costs. According to a recent estimate (Murthi et al. 2001), these costs might have reduced the value of the fund by 25 percent. On a 25-year time horizon, the average reduction is 19 percent (Blake, 2002, p. 331). Switching costs, which are incurred when a worker changes manager, apparently reduced the fund's value by 15 percent (Murthi et al., 2001).

Finally, there is a cost related to the transformation, upon retirement, of the accrued benefits into an annuity; this cost is incurred every time insurers, to protect themselves against longevity risks apply coefficients that overestimate the probability of survival. There are numerous studies that set this cost at 10 percent of the fund's value.

This list of costs unveils a rather worrying picture for future retirees, if it is true that costs during the accumulation phase and those at the time the annuity is defined use up at least 35 percent of the value of the fund, without considering any switching cost.

Obviously, the amount of a pension depends on the gross return on the invested contributions, Over the past few years, returns experienced a sharp drop. A sum invested in the FTSE 100 index at the end of 1988 would have generated at its peak (at the beginning of 2000) a nominal return of 11.1 percent. As at mid-2002, the same investment would have returned 4.5 percent.

Stakeholder pensions

The creation of stakeholder pensions, and the intention to further reduce the number of public pension recipients, was due to the high cost of personal pensions. This scheme was introduced together with the second state pension and was intended for workers with an income between 10,800 and 24,000 pounds who could not join any other private, occupational or personal pension plan.

As illustrated above, the second state pension was designed to make it actuarially beneficial for those with a minimum annual income of 10,800 pounds to enrol in contracted-out scheme and leave the second public pillar. The selfsame costly structure of personal pensions led to the establishment, and commencement of operations in the second half of 2002, of the stakeholder pension scheme, whose low pre-set level of management costs indicated that it had been intended specifically for medium-to-low income earners.

Stakeholder pensions are based on a defined-contribution system. Employers have to arrange for an intermediary to set up a pension scheme for its employees, who then join on a voluntary basis. Under this scheme, the fund's management costs cannot exceed 1 percent of the assets managed, an amount substantially lower than that paid to personal pensions managers. The lower cost entails a more limited choice for enrolees. Contribution limits and the conditions for the collection of benefits are the same as those applicable to other defined contribution plans.

Closing remarks

In the United Kingdom the public component plays a limited role in the pension system, certainly more limited than in Continental Europe and the United States.

Actually, the goal of the English reform was to keep public spending in check. Following the latest reforms, the public sector is responsible for providing a pension of up to 30 percent of the average salary and, through a means test, a minimum income guarantee equivalent to 18 percent of the average salary. Public outlays should be reduced by having those with an income greater than 10,800 pounds resort to contracting out schemes. Given the limits set for public pensions, higher replacement rates can be achieved only with an increase in voluntary contributions by employers - in presence of a current declining trend for contributions from this source - or by employees, who are *de facto* given full responsibility for setting up pension arrangements consistent with the desired standard of living. The implied assumption is that saving is not tied to income or to specific personal family or working conditions.

Public regulation translates mainly into a massive use of tax incentives. While employer contributions are tax-deductible during the accumulation phase, their tax benefits are limited in essence by the maximum that can be reached with an occupational pension. When pension formation depends on individual saving decisions, tax deductibility for pension contributions plays a crucial role. Thus, the trend would be toward a model of taxation of consumption , with the resulting distributive consequences.

In distribution terms, it seems that voluntary private pensions are limited mostly to workers employed by large companies or in unionised industries. Furthermore, a supplementary pension system strongly dependent on the ability of individuals to save seems to favour higher-income earners, as evidenced by the data on the composition of transfers to English pensioners.

Finally, in international comparisons attention is drawn to the extremely low level of pension spending in England. This is true, if reference is made strictly to public pensions, without considering rather substantial assistance benefits and the private components. As was already shown in the previous edition of this Report, leaving aside institutional differences, in the largest European countries

Table A1.1-1 - Components of mean gross income of pensioner units by quintile of net income distribution, 1990-2000

	Quintiles of the Income Distribution					
	Bottom fifth	Next fifth	Middle fifth	Next fifth	Top fifth	Overall Mean
Gross income	82	115	139	178	338	171
Of which						
Benefit income	74	95	111	121	129	106
Occupational pension	4	13	20	42	110	38
Investment income	4	6	5	11	63	18
Earnings		1	2	3	31	7
Other income		1		1	5	1

Source: Department for Work and Pensions (2000), *The Pensioner's Income Series 1999/00*, p. 55.

the overall size of transfers to the elderly classes are similar. On the other hand, there is a diversity in the distribution of benefits: the share of transfers to the highest income quintile is particularly pronounced in countries where diffusion is not evenly spread throughout the population. There is also a different allocation of risk due to the fluctuations of equity

markets, whose negative performance may adversely affect intergenerational transfers, with potentially disruptive economic and social consequences.
Concerning the redistribution effects of the pension reform, table A1.1-1 shows the composition of the average income of a single elderly person in the United Kingdom.
The average weekly income is 171 pounds, 62 percent of which (or 106 pounds) coming from the public system (basic pension, state earning related pension and means tested supplements to achieve the minimum income guarantee). The role of occupational pensions is definitely more limited (38 pounds, representing 22 percent of the total), as is the investment income component, which includes personal pensions and other income from investments. A review of income by quintile provides a more meaningful overview. The average income for the top quintile is approximately four times as high as that in the bottom quintile, due mostly to the effects of much more substantial occupational pensions and investment income.
The Pensioner's Income Series provides further useful information. In the 1979-1997 period, the average income of pensioners rose by 64 percent in real terms as against an average 36 percent wage increase. However, income rose at much faster rates in the highest income bracket; in fact, the median income of an unmarried pensioner (though the same applies to married couples too)grew by 28 percent in the bottom quintile and by 76 percent in the top quintile, inclusive of rental expenses. Net of these charges, the distributive effects are more marked, as both figures rose by 22 percent and 85 percent, respectively.

Chile
Pension reform in Chile was introduced in 1981 and has long been praised as an example to follow. It completed a process begun in the 1960s and 1970s that had led, in 1979, to important legislative innovations. It was a radical reform and crossed the final bridge in the transformation of a defined-benefit pay-as-you-go system, managed almost exclusively by the State, into a funded defined-contribution system administered by private pension funds.
The commission chaired by the minister of labour, Josè Piñera, had in essence five objectives:

1. to put an end to seniority pensions;
2. to define benefits on the basis of contributions paid during one's working life;
3. to set up mechanisms that would automatically adjust the standards of the pension system to demographic and economic changes, so as to achieve actuarial balance;
4. to reduce possible political pressures on the use of the funds;
5. to cut the administrative burden.

The system devised to achieve these goals is described below.

The public component
Contrary to a widely-held belief, in Chile the public component plays a very important role, which is likely to increase even further as the system

reaches maturity.
Compared with other models founded on three pillars, the Chilean system does not contemplate specific contributions for the public pillar or taxes earmarked to finance it.
The purposes of the public components can be summarized as follows:

1. to meet the costs associated with a transition from pay-as-you-go to a funded system;
2. to manage the pension system of the Armed Forces;
3. to manage a basic pension program for the disadvantaged segments of the population that, traditionally, do not have pension coverage;
4. to operate a minimum-pension program; this was introduced in 1981 to provide protection to workers who, after paying contributions for 20 years or more in the funded system, did not accumulate enough credits to qualify for the minimum pension set by law.

The 1980 reform, which came into force in May 1981, mandated for new workers to switch to the new system, while employed workers had a choice on whether to join the new system or not. Pension obligations under the old system were paid off through the issuance of *bonos de reconocimiento* (recognition bonds), which pay a 4 percent annual interest until retirement. Thus, the debt stock related to the transition was equal to the present value of the total pensions paid at the time the reform came into force, the present value of the net benefits of those who remained under the old pay-as-you-go system and the present value of the *bonos de reconocimiento*, minus technical reserves and the contributions of those who remained in the old system.
At the end of the 1980s, the deficit attributable to these expenses seemed to be under control (it represented 2.9 percent of the GDP in 1989) but it began to grow again in the 1990s, reaching 4.2 percent in 1999, its peak (Uthoff, 2001). If account is taken of the Armed Forces, which continued to be tied to the old system, the deficit associated with the transition in 1999 represented 5.5 percent of the GDP. Some authors (Arellano, 1980; Diamond, 1994) rightly noted that the transition costs had been held in check by two types of measure, which had been adopted before the funded system was implemented: the creation of a significant surplus and the postponement of the retirement age (which reached 65 years for men and 60 for women) as a result of the 1979 law.
In 1999, the assistance pension program known as Pasis, provided 350,000 pensions every month. From a legal point of view, assistance pensions are given to two categories:

1. people 65 years or older who, in absence of other pension benefits, have a personal income or an income per member of their households in an amount up to 50 percent of the minimum pension the State guarantees to enrolees in the public pension plan;
2. people 18 years or older with a disability who are in the same conditions as those indicated above.

Over the years, this program witnessed a constant increase, not only of the number of recipients, but also the amount per pension, resulting in a 0.4 percent ratio of total spending to GDP in 1999.
Over the years, also the total expenditure for minimum pension has been progressively increasing. In fact, with the 1981 reform the State was

required to guarantee a minimum income to all workers who, with at least 20 years in contributions paid, failed to reach a credit level that would provide them with a pension at least equal to the minimum set by the State. The importance of this program is tied to the performance of the funded component. It is commonly held by scholars of the Chilean system that a growing number of enrolees in the funded system will not accumulate enough credits to qualify for the minimum pension.[1]
The amount of the minimum pension will be periodically adjusted by the authorities on the basis of the rate of inflation for the preceding year. Between 1981 and 1989 this fell, on average, by 1.3 percent a year, whilst between 1981 and 1998 it rose on average by 4.1 percent a year. A significant part of this change was due to the transition from dictatorship to democracy.
Currently, spending for minimum pensions is rather modest (in 1999 it accounted for 0.03 percent of the GDP), though it could rise rapidly as the system approaches maturity.

The private component
The private component, introduced by law in 1981, is the most important part of the Chilean system. This is a defined-contribution scheme that calls for the enrolment of participants in pension funds invested in financial instruments. Participation is mandatory only for employed workers. Enrolees pay 10 percent of their wages in individual accounts, where contributions are recorded together with accrued income but net of the commissions paid to the fund managers, known as AFP (Administradoras de Fondos de Pensiones). The AFP are required by law to have a capital base, proportional to the number of enrolees, completely isolated from the pension fund. Funds must ensure an average return equal to 90 percent of the returns of all funds. The AFPs service their enrolees by collecting the contributions, investing them and handling all information.
Pensions depend on the contributions made, on the returns achieved by the fund and on the life expectancy of individuals. Benefits for individuals are computed by dividing the amount of the credits accrued by their life expectancy (which differs according to the sex).
At the time of retirement, enrolees can choose either to make periodic withdrawals of the accumulated credits from their accounts or to annuitize the sum by transferring the accumulated credits to an insurance company. Moreover, there is the possibility to combine both alternatives.
The AFPs are required to guarantee a disability pension to their enrolees and a survivor's pension to spouses, hedging this risk by buying insurance from specialized companies.
AFPs are supervised by a Supeintendencia, which is responsible for evaluating financial performance and compliance with rules and regulations.

Assessing the supplementary pension system
Pension funds have been generating high average real returns, though volatility has been significant as well, ranging from – 2.5 percent in 1995

(1) According to Mesa-Lago (2000) within a few years 30 percent of the population will not reach such minimum level.

to 29.7 percent in 1991. Except for 1995 and 1998, returns have always been positive. Volatility can be explained with the high exposure to shares and securities issued by Banco Centrale, which have been characterized by wide fluctuations.

The average real return per annum of the system between 1981 and 2000 was 10.6 percent, much higher than the return implied in the growth rate of the GDP which, over the same period, grew on average by 5.6 percent. This performance can be explained by looking at the change in the composition of portfolios, both in reaction to regulations and due to the AFPs' inclination to maximize short-term returns to improve their ranking in the list compiled periodically by the Superintendencia.

In the early stages, during the debt crisis, fund portfolios were made up exclusively of inflation-indexed securities (bonds issued by the central bank, mortgage debentures, deposits). It was precisely the high demand by pension funds that jacked up the prices of these assets. In 1985, thanks to a massive privatisation of state-owned companies, pension funds were allowed to buy and hold shares for up to 30 percent of total assets under management; however, the actual boom for these securities came in 1989, when the limits on allowable holdings were raised. Only over the past few years was the maximum allowable foreign-investment amount raised, from 3 percent to 9 percent of total assets in 1994 and from 9 percent to 11.3 percent in 2001.

Table A1.1-2 - Real annual rate of pension plans return, 1995-2000
(per cent)

	Return of pension fund share	Return of individual plan with a 10 UF income	Return of individual plan with a 30 UF income
1995	-2.5	-4.4	-4.1
1996	3.5	1	1.7
1997	4.7	1.7	2.6
1998	-1.1	-3.5	-3
1999	16.3	15	15.1
2000	4.4	1.4	2.3

Source: A. Uthoff (2001)

A glance at the choices made by the different AFPs reveals that, at least so far, there has been little or no differentiation among the different portfolios; the need to obtain a minimum return (set with respect to the average return achieved by all *Administradoras*) fostered the herd instinct. Besides, performance cannot be computed only in terms of the returns generated by the funds; in fact a distinction should be made between the performance of each fund unit and the income accruing to each enrolees, as the amount flowing to individual accounts is to be computed net of the expenses incurred. The above table not only shows that net returns are lower than the returns generated by the funds, but also its strongly regressive character. The commission structure, which consists of a fixed and a variable part, constitutes a penalty on the lower-income workers. The high volatility and the differences in the returns accruing to the various income levels gives the opportunity to cover two very important issues: the differences among financial instruments, depending on degree of risk aversion among individuals and high commissions. Until 2000, AFPs

were prevented from operating more than one fund; thus, enrolees did not have much of a choice, since they had no say in the management of the fund.

In 2000 a new fund was introduced, called *Fondo 2*, which could invest only in fixed-income securities. This fund provides a lower expected income, though short-term fluctuations are less pronounced. Also this innovation came to be considered obsolete and, starting in February 2002, government authorities further expanded the range of choices available to enrolees, increasing to five the number of funds each *Administradora* could offer, the main difference among one another being in the share of floating-rate securities that can be held. It will take a few more years before determining whether this diversification strategy will incentivise more people to participate, even though early data do not seem to corroborate this notion: as of December 2001, total enrolees in Fondo 2 (that with floating-rate securities) amounted to 265, compared with 6,400,000 enrolees in Fondo 1.

The introduction of funds with different degrees of risk might help to solve one of the most serious problems of the Chilean system: high management costs, which have translated into high commissions debited to participants. The system calls for a fixed commission, which is deducted from the contribution and varies according to the AFP, and an additional fee to cover administrative expenses. In 1982, the average amount of this payment represented 3.57 percent of the eligible salary, reaching a peak of 4.87 percent in 1983 and then falling to 2.31 percent in 2001.

Commissions cannot be easily lowered owing to the little competitive nature of a market structure that, on one side, allows AFPs to enter freely and on the other forces them to operate within strict constraints.

In a recent study, Mastrangelo (1999) identified two factors that restrain competition in the AFP market, at least until the introduction of the reforms in 2000 and 2002. The strict regulation in the area of investment differentiation and the scant elasticity of the demand (for years the most successful AFP was that with the highest commissions) led the AFPs to develop a strategy to increase market penetration. The sector is characterized by significant economies of scale, which reduced the number of AFPs from 17 to 7 in a few years. This very consolidation process, together with the stricter rules introduced in 1998 to reduce the all-too-frequent switches from one AFP to another, determined a drop in the number of sales employees and the associated marketing costs.

The other factor that, according to Mastrangelo, contributes to raise management costs is the commission structure; since commissions are paid as a percentage of a worker's income, and since the average cost for the service is very high, the AFPs target mostly high-salary earners.

Thus, in the opinion of this writer, the competition to obtain a higher number of enrolees resulted in a tendency to increase prices instead of lowering them. In light of this analysis, the greater differentiation among funds, introduced with the reforms of 2000 and 2002, should have improved the market's competitive structure.

After having discussed at length how the commission structure creates a regressive effect on the returns earned by people in different income brackets, it is worthwhile to dwell on another distortion: the different rates of replacement for men and women. Since they can contribute for a

number of years lower than that of men (the retirement age for women is 60 while that for men is 65) and since they have a longer lifespan than men's, women get much lower replacement rates compared with men. Assuming that wage increases at a rate of 5 percent and a density of contribution of 70 percent, Mesa-Lago and Arenas (1998)[2] estimate a replacement rate between 58 percent and 83 percent for men and 32 percent and 46 percent for women. What has been said so far can help to explain, according to many observers, one of the most worrying aspects of the Chilean system: the limited diffusion among the population.

A cursory review of the data on the number of individuals enrolled in the AFP system might give the impression that Chile was a success story, since total enrolees rose from 1.4 million in 1982 to 6.44 million in December 2001. It is important to consider, however, that the system is mandatory for all salaried workers, including farm workers, domestics and micro-firm's employees, while
participation for the self-employed is voluntary.

Actually, looking at the coverage of employed workers (ratio of contributors to employed population) and the effective coverage (ratio of system contributors to labour force) leads to quite different conclusions. In 1979, the coverage of employed workers was 59.4 percent, as compared with 55.2 percent in 1999 (adding both private and public coverage). Shifting the focus to effective coverage, the picture is the same, as this ratio went from 51.3 percent in 1979 to 50.3 percent in 1999. Equally worrying is the ratio of active contributors and enrolees in the AFP system, which fell from 75 percent in 1983 to 44 percent in December 2001.

The fact that enrolees have access to pension funds only in case of disability, retirement or death is one of the reasons that helps to explain the very low rate of participation by self-employed workers who, in general, are always subject to liquidity constraints. After reaching 4.8 percent in 1986, this rate fell to 3.8 percent in 1998 (Bustamante 1998).

These serious coverage problems might swell the ranks of individuals eligible for a minimum or assistance pension. This problem might become even more serious, considering that the amount of the minimum pension rises constantly, while the lower returns discussed above might reduce pension credits. Furthermore, a growing number of low-to-medium-income enrolees might have an incentive to contribute only for twenty years, so as to meet minimum eligibility criteria for the minimum pension.

The voluntary component

The third component calls for two forms of voluntary savings, which would be encouraged by relying on tax incentives. The first form involves additional voluntary contributions paid together with the mandatory ones. In this case, the initial payment and the returns are tax-deductible and tax-exempt, respectively, while pension benefits are treated as taxable income. The second form of voluntary saving contemplates a contribution flowing into an account different from that devoted to mandatory contributions. In this case the initial payment is not tax-deductible while returns are tax-exempt. Contrary to the mandatory pillar, voluntary contributions can be withdrawn at any

(2) Mesa-Lago and Arenas de Mesa (1998). The Chilean pension system, in Do option exist?, University of Pittsburgh Press.

time. Even though the number of individuals went from 189,948 in 1989 to 1,061,185 in 2001, it is worthy of note that so far only very-high-income individuals have opened voluntary accounts.

Closing remarks

The reform of the Chilean system passed in 1980 was designed to improve the benefits of the enrolees by correcting the shortcomings of the old pay-as-you-go system; this was to be accomplished by adopting a fully funded system of individual retirement accounts.

The freedom to be able to choose from among different pension fund managers (AFPs) was understood to be, at least initially, the primary engine of efficiency in a market were competition was supposed to generate high returns and low management costs. The benefits of individuals are positively correlated to the density of their contributions and their rates of return and negatively correlated to commissions.

At the age of twenty the system features three big problems, in addition to the volatility of the returns, which should be addressed by lawmakers soon: the substantial fiscal impact related to the transition, very high commission costs due to an imperfect market and little diffusion among the population, which gives rise to a number of uncertainties from both a fairness and a fiscal standpoint.

Sweden

The Swedish pension system is part and parcel of the long universalistic tradition of that country's social protection arrangements. Against this backdrop, the reforms implemented in the 1990s aimed mainly to introduce a closer relationship between the contributions paid and the benefits received, in order to remove possible elements of financial instability, while safeguarding the universalistic and mandatory nature of the social security system.

The pay-as-you-go system in place in Sweden until the early 1990s had been built during the 1960s. This consisted of a flat-rate part (folkpension) and an earnings-related part (allmän tilläggspension, Atp); the maximum *folkpension* amount could be obtained with 30 contribution years and pensionable earnings equal to the average income for the best 15 working years; it represented a higher percentage of the last salary for lower-income workers and its importance diminished gradually (Palmer 2002). Generally, the Atp guaranteed a replacement rate of 60 percent and was indexed to the Consumer Price Index (CPI). In addition to these, there were group pensions, which could add 10 percent. All in all, the replacement rates, including a *folskpension*, hovered around 65 percent - 75 percent.

The proposed reforms of this system originated from both demographic concerns and the low-growth prospects for the economy, which threatened to increase the contributions paid by the active classes to unsustainable levels. The old system had been particularly generous with the initial pensioner cohorts in the 1960s, fulfilling immediately the need to provide adequate benefits to the generation of WWII veterans. For the following generations returns dropped significantly.[3] The reform, however, was opposed, mainly on

(3) Stahlberg A.C. (1990), The Atp system viewed in a redistributive perspective, published in Swedish in Sweden official publications, as quoted by Palmer (2002).

equity grounds. Also from a redistributive point of view, however, the old system was not totally faultless. For instance, Stählberg showed that the mechanisms of the old system benefited higher-income classes, whose members typically have shorter (due to longer education periods) and more dynamic professional histories, versus the normally long and task-repetitive careers of blue-collar workers.
The reforms introduced in the 1990s were supported by the five largest political parties, which accounted for more than 80 percent of the votes; such reforms produced a mixed system, made up of a pay-as-you-go component, whose performance is tied to the rate of growth of the economy, and a funded part, whose returns depend on the performance of financial markets. Concerning the funded part, Sweden tried to reconcile the freedom of individuals to choose where to allocate their retirement savings with a greater centralization of the system.
The new pension system consists of a public pillar, a Notional Defined Benefit Paygo, and a Funded Defined Contribution part which, in turn, breaks down into a mandatory (public) part and a quasi-mandatory part (group pensions). Obviously, anybody is free to set up a private pension plan, though few do so, given the size of the mandatory and quasi-mandatory systems.
It should be noted that the reforms implemented the complete separation between assistance and pensions, drawing a clear line between social and insurance policies.

The public system
The public system that took shape after the 1994 reform is composed of a pay-as-you-go part and a funded component.
According to Palmer, the pension system reform was designed to achieve four purposes:

1. to provide the same benefits to workers with the same contribution histories and who retire at the same age;
2. to improve the transparency of the redistributive elements, clearly separating assistance from social security;
3. to obtain financial stability with respect to demographic and economic trends;
4. to create a pool of retirement savings to be entrusted to financial intermediaries.

Under this new public system, contributions represent 18.5 percent of earned income, and are equally split between the employer and the employee. For a worker entirely covered by the new system, 16 percentage points go to the paygo component while the remaining 2.5 percent is allocated to the funded part.
The transition to the new regime will be gradual; at any rate, it will be faster than the achievement of steady state contemplated, e.g., for the Dini reform in Italy. People born before 1938 are the first cohort affected by the reform, with 20 percent of the individual pension calculated with the new formula. Benefits computed with the new system will increase by 5 percent a year. People born after 1954 will have their full pensions calculated on the basis of the new system.

The NDC paygo system

The public pay-as-you-go system calls for the payment of contributions equivalent to 16 percent of a worker's salary. Participation in the system is mandatory for all earnings above which (€ 900 per annum) an income tax return has to be filed. Under this system, future benefits are commensurate with the contributions paid and these, in turn, are indexed to the rate of growth of per-capita wages; in this case, however, financial stability is not fully accomplished, especially if the workforce shrinks, unless contribution rates are adjusted (the demographic risk will be borne by the active generations). Noteworthy is that the pension agency holds reserves that will be utilized after the baby boomers reach retirement.

The minimum retirement age is 61 and there is no age where full benefits are attained. Pensions are calculated by dividing the credits accumulated by the unisex life expectancy at the time of retirement.[4] Pensions are indexed to the CPI, including a 1.6 percent yearly adjustment applied to the accumulated credits. In other words accumulated credits rise at a rate of 1.6 percent for each year of the expected lifespan at the time of retirement. However, in order to match payments with collections, pensions are raised or lowered at the rate resulting from the difference (positive or negative) between 1.6 percent and the real long-term growth rate.

Thus, indexation depends on both inflation (through the adjustment based on the CPI) and the real growth of salaries. Overall, yearly indexation may be higher or lower than price changes, depending on the trend of real salaries.

Table A1.1-3 - Indexation of pension benefits (assuming 1% inflation)

	(1)	(2)	(3)
Nominal wage growth	1.6%	3.6	2.6
Real wage growth	0.6%	2.6	1.6
Price increase	1%	1%	1%
Pensions changed by	0%	2%	1%
Indexation >,< or = inflation	<	>	=

Source: Sundén (1998)

Any change in life expectancy should be incorporated in the calculation of unisex life expectancy. Such change, however, is long-term in nature and should not determine any sudden imbalance. It should be noted that the system incentivises the postponement of retirement, as the indexation of the early payments and the shorter pension period raise the level of benefits for those who retire later. There is no age at which full benefits can be obtained and workers have a choice between partial retirement (collecting 25 percent, 50 percent or 75 percent of the pension) and continuing to work and set contributions aside. From a tax standpoint, pensions are now the same as salaries, as they are no longer tax free.

Even though the system is based on individual contribution histories, there is a minimum pension for citizens older than 65 who fail to reach a

(4) Since the accumulated credits are equal to the present value of future benefits, then $AC = \sum_{j=1}^{e(L)} P \frac{1}{(1+0,016)^{j-1}}$. Holding the annual pension constant then $P = \frac{AC}{\sum_{j=1}^{e(L)} \frac{1}{(1+0,016)^{j-1}}}$

sufficient level of credits. This minimum pension was structured so as to replicate the benefits previously offered by the *folkpension*, including the adjustment up to the minimum level for means-tested cases. In 1995, basic pensions provided underprivileged old people with a minimum income equivalent to 28 percent of the average salary (Palmer-Svesson, 2002). Since minimum pensions were indexed to inflation and not to salaries, their value was bound to decline as a wage percentage.
Minimum pensions are financed through general taxation, so as to leave the determination of social policies free of the financial constraints set for the pension system (provided that the necessary resources are injected in the pension system to finance this type of transfer).
Moreover, nominal contributions are paid to enhance pension benefits, including for instance health care for dependent children and other social purposes (such as mandatory military service, university education, unemployment or disability periods).
Also in this case, financing flows from general taxation or from the competent assistance bodies.
The NDC Paygo is a defined-contribution system based on a relatively low contribution rate, considering a person who retires at 61 with 40 contribution years and a residual lifespan of 24 years. These elements have a bearing on replacement rates, if these are computed only with reference to the Paygo system. For instance[5], considering the situation of an individual that starts his/her working career at the age of 22, with a wage that increases at the same rate as the average salary's (say 2 percent), if this individual decides to retire before reaching 61 years of age, the pension amount provided under the first pillar would represent 32 percent of the last wage. Such percentage would increase to 46 percent at 65 and to 53 percent at 70, with 49 contribution years. The rest of the pension would be paid under the second pillar, the funded one, and under group pension arrangements (as well as private schemes, if any).

The funded DC system
Mandatory funded schemes are financed with a contribution equal to 2.5 percent of a worker's wage. This was the outcome of a political compromise between the social democratic party, which called for a the entire public system to operate on pay-as-you-go basis, and the government coalition, which advocated a larger role for the funded system (Palmer 2002).
Besides, since 80 percent of the Swedish workforce has also group pension coverage, a decision was made to limit the size of the public system.
Workers are required to contribute 2.5 percent of their wages to a pension fund; these pension funds invest the contributions they receive during the accumulation period in financial assets, returning upon retirement the accumulated credits in a lump sum or annuitizing them.
In Sweden, in contrast to other mixed systems, also the funded system is strongly centralized, while granting individual workers the freedom to invest their contributions in one of the approximately 600 funds accredited with the Premium Pension Authority (PPA).
The PPA acts as a clearing house during the accumulation phase by collecting the contributions and investing them in the various funds, as

(5) Based on Palmer, 2000.

directed by the contributors, and pays the pensions retirees are entitled to receive based on their contributions.
Each worker can choose the pension funds in which he want to invest, up to five. Switches can be made in 24 hours at no cost, since accredited financial intermediaries are not allowed to charge for withdrawals from the funds. Moreover, to keep management costs from significantly affecting net returns[6], the PPA mandates that pension funds apply management costs lower than those normally charged by other mutual funds. The centralization of investment activities in the PPA on the one hand reduces management costs and on the other, by combining individual contributions, prevents companies from pinpointing personal preferences, an activity that might be utilized for marketing purposes.
In Sweden, all funds authorized to operate as pension funds can participate in the system, provided that they comply with the rules laid down by the authority:

1. to register and sign an agreement with the PPA;
2. to provide information to individual investors upon request;
3. not to charge for withdrawals;
4. to provide a detailed report on management costs.

For workers who do not select a fund in which to invest their contributions, a separate public fund was established, which invests in accordance with the guidelines of the Board of Directors.
The National Social Insurance Board records the individual contributions in a log, according to the information supplied by the National Tax Authority, which it then submits to the PPA. Furthermore, at the end of each year this body forwards an account statement with all the investment details to the individual workers, who may then confirm or change their investment instructions. If a worker gives no indications, the accumulated credits continue to be invested in the original funds.
Upon retirement, a person can choose to receive either a fixed-rate or a floating-rate annuity. In the case of a fixed-rate annuity, the units held in the fund are sold and reinvested by the PPA to generate an income stream calculated in accordance with the expected lifespan. The PPA pays a 3 percent interest rate. Profits accrued to the PPA are distributed to fund-unit holders and pensioners. In case a floating-rate annuity is chosen, the capital continues to be held by the fund and the annuity is calculated on the basis of the net asset value of the fund, net of any withdrawal, which then accrues interest at a rate of 4 percent a year. In this case, retirees take a greater risk, as they roll over a substantial part of their pension contributions.
Since the second pillar of the public system is a funded scheme, the returns generated by it depend essentially on the performance of financial markets. In principle there are no restrictions on the types of asset that can be acquired, even though no fund invests in high-risk assets.
The pensions paid under this pillar are not indexed - neither to inflation nor to salaries – and retirees bear all risks. In addition to keeping costs in check and to prohibiting switch charges, the system's centralization and transparency makes it possible to control some of the causes that typically curtail returns.

(6) This is a significant issue in other systems, such as England's.

Group pensions

A significant part of the pensions collected in Sweden is tied to group or occupational schemes. Sweden's labour market is highly structured and more than 80 percent of total workers is subject to collective agreements involving group pensions. There are four main agreements: one for private-sector blue-collar workers, one for private-sector clerical workers, one for state employees, and one for local-authority employees.

Until the 1990s, these agreements envisaged mostly defined-benefit pensions. Typically, the private sector had funded schemes while the public sector had pay-as-you-go arrangements.

During the 1990s, the pensions fund for private-sector blue-collar workers changed to a defined-contribution system; the other schemes will probably follow suit as agreements are renegotiated.

Occupational schemes too provide for some type of individual investment choices.

The pension scheme for private-sector blue-collar workers

This scheme changed from a defined-benefit to a defined-contribution system in 1996. Between 1996 and 2000 contribution rates were 2 percent of gross income, and 3.5 percent hereafter. Each worker can choose from among 12 companies. There is a transitions phase from the old to the new system.

The pension scheme for private-sector clerical workers

Private-sector clerical workers are covered by three systems, ITP, ITPK and ITPG. The first is a defined-benefit scheme, the second is fully funded and the third guarantees that workers covered by the ITP receive a pension equal at least to that which they would have received under the STP system. The ITP system calls for pensions to be computed on the basis of the last salary, namely that pensions be equal to 10 percent of the salaries up to 7.5 BA (basic amount[7]), 65 percent of the salaries between 7.5 and 20 BAs, 32.5 percent of the salaries between 20 and 30 BAs. Contributions to the system represent approximately 4.5 percent of a worker salary. Contributions to the ITPK account instead for 2 percent of a worker salary, though these start at the age of 30.

Thus, for these workers there are still supplementary defined-benefit schemes, even though in the future there will likely be a transition to a defined-contribution system, as has happened with private-sector blue-collar workers.

The pension scheme for state employees

Before 1992 state employees had a distinct pension scheme. Pensions amounted to 65 percent of the last wage. Maximum benefits could be obtained after thirty years of service, though a worker could retire earlier (in this case benefits were reduced accordingly).

In 1992 two supplementary schemes were introduced for state employees, involving defined-benefit and funded arrangements. The funded system provides for the payment of contributions equal to 1.7 percent of a worker wage while the defined-benefit system works in a similar fashion as the ITP. Pensionable earnings, however, are equivalent to the average for the last five

(7) The basic amount is set every year by parliament, which makes at least one adjustment to the CPI. In 1995, the BA was SEK 34,986 as against an average salary of SEK 189,488.

years. Pensions are reduce for workers with less than 30 contribution years since the age of 28.

The pension scheme for local-authority employees
This is a defined-benefit system which calls for pensions to be equivalent to 96 percent of the average salary for the last 7 years up to 1 BA, to 78 percent between 1 and 2.5 Bas, 60 percent between 7.5 and 20 Bas, and 32.5 percent between 20 and 30 Bas. Maximum benefits are obtained after 30 years of service, otherwise the amount is reduced accordingly. This system interacts with the public system, in the sense that the pension authority pays only the portion of the vested benefits that exceeds the public pension.

The overall replacement rate
Based on the above, the theoretical replacement rate can now be calculated for different worker categories. As mentioned, the public pay-as-you-go system alone does not guarantee significantly high replacement rates anymore. It should be kept in mind, however, that in Sweden more than 80 percent of the total workers is covered by an occupational scheme, based on collective bargaining agreements (labour agreements normally require coverage for enrolled and non-enrolled workers belonging to the same category).
Repeating Palmer's exercise (2002), replacement rates can be calculated under different assumptions. As indicated above, a worker with a salary that increases at the same rate as the average salary and who starts working at 22 will obtain a 32 percent replacement rate at 61 under the public first-pillar system alone. The return on the contributions paid under the second pillar, public and occupational, depend on the performance of financial markets. The table summarizes the replacement rates in accordance with the different rates of return achieved on investments in financial markets.

Table A1.1-4 - Replacement Rates. Annuity as a per cent of last earnings

Age	Payg contribution rate of 16%	Public second pillar (2.5%) + group occupational (2%)			Total (pubblic first and second pillar + group occupational)		
		2%	5%	8%	2%	5%	8%
61	0.32	0.09	0.16	0.32	0.41	0.48	0.64
62	0.33	0.09	0.17	0.35	0.42	0.50	0.68
63	0.35	0.10	0.19	0.39	0.45	0.54	0.74
64	0.37	0.10	0.20	0.43	0.47	0.57	0.80
65	0.39	0.11	0.22	0.47	0.50	0.61	0.86
66	0.42	0.12	0.23	0.52	0.54	0.65	0.94
67	0.44	0.12	0.25	0.57	0.56	0.69	1.01
68	0.47	1.13	0.27	0.63	0.60	0.74	1.10
69	0.50	0.14	0.29	0.69	0.64	0.79	1.19
70	0.53	0.15	0.32	0.76	0.68	0.85	1.29

Note. The individual's earnings are assumed to grow at a real rate of 2% per year throughout the earnings career. The rate of growth for indexation of capital in the PAYG system is 2%. The pay-as-you-go, second pillar and occupational annuities are all based on unisex life expectancy and a real rate of return on capital from retirement of 1,6%.

Source: Palmer (2000)

As can be seen, the replacement rate for a typical worker is 41 percent at 61 years of age, if the return on investments in financial markets is the same as the growth rate of the average wage (which is the yearly indexation rate for the Paygo system). Such replacement rate rises to 50 percent at 65.
Replacement rates increase if the returns on the funded part are assumed to

be higher than the return paid by the pay-as-you-go system (that is, if the returns on the investments made in financial markets are greater than the growth rate of the average wage). If this return is assumed to be 5 percent per year, the replacement rate at 65 increases to 61 percent. A return of 8 percent under the funded system would result in over-insurance for the worker who continues to work beyond the age of 67, as replacement rates would exceed 100 percent. Obviously the results in the table depend crucially on the assumptions made. In fact, benefits would depend not only on the rate of growth of the average wage and on the returns on investments assumed, but also on the rate of growth of the individual wage. It is a fact that contribution-based systems are less generous with dynamic careers, compared with pay-as-you-go systems, which are based on the average of the last (or the best) salaries, as was the case with the Swedish system before the reform.

Table A1.1-5 - Replacement rates assuming a rate of return on capital from retirement of 2%

Earnings rate of growth = 1%			Earnings rate of growth = 2% (Palmer, 2000)			Earnings rate of growth = 4%		
Paygo	Ff	Total	Paygo	Ff	Total	Paygo	Ff	Total
49%	14%	63%	39%	11%	50%	27%	7%	34%

Note: replacement rates for a worker beginning to work at age 22 and retired at age 65. The individual's earnings are assumed to grow at a real rate of 2% per year throughout the earnings career and the rate of return on capital from retirement is of 2%.

If replacement rates are recalculated by assuming different career tracks, different situations emerge. For instance, considering two workers whose wage growth rates are double and one-half the growth rate of the average wage, respectively, the replacement rates are indicated in the table below (assuming 2 percent and 5 percent returns under a funded system).

Table A1.1-6 - Replacement rates assuming a rate of return of 5% on capital from retirement

Earnings rate of growth = 1%			Earnings rate of growth = 2% (Palmer, 2000)			Earnings rate of growth = 4%		
Paygo	Ff	Total	Paygo	Ff	Total	Paygo	Ff	Total
49%	14%	78%	39%	22%	61%	27%	14%	41%

Note: replacement rates for a worker beginning to work at age 22 and retired at age 65. The individual's earnings are assumed to grow at a real rate of 2% per year throughout the earnings career and the rate of return on capital from retirement is 5%.

The differences in the replacement rates of workers with different growth rates for their wages are significant. This is an important aspect, as fluctuations in individual salaries can be due, for instance, to unemployment periods where contributions are nominal, as they are proportional to unemployment benefits; this can determine fluctuations in the amount of the contributions paid during the working career. The simple calculation of the replacement rate, on the assumption that salaries would increase every year between 22 and 65 at the average growth rate for wages is only a standard, within a wide range of possible individual situations.

The composition of the pensioners' income

In Sweden the pension system is universalistic and mandatory. As repeatedly mentioned, the great majority of Swedish workers is covered by both the mandatory public system and occupational schemes. It is exactly because of

the size of the mandatory and quasi-mandatory systems that supplementary private pension plans have not experienced a significant development. These plans are adopted only by a limited number of people, characterized either by a high income level or by their exclusion from the public system due to special working conditions.

According to the data quoted by Klevmarken (2002), the relative importance of the different sources of income changed during the 1990s. In 1992, public pensions represented 75 percent of the income for people 70 years or older and approximately 67 percent for retirees aged between 65 and 69. In 1999 this share fell to approximately 65 percent and 55 percent, respectively, while the incidence of group pensions doubled, from 6-8 percent to 12-16 percent. Also the share of private pensions increased, from 3 percent to 5 percent. In the meantime, investment income rose from 9-11 percent to 14-15 percent, for citizens above 65 years of age. Worthy of note is that the increase of the investment-income share was due to the exceptional performance of financial markets in the 1990s (probably benefiting also medium-to-high-income earners).

These figures indicate that the old pay-as-you-go system was the main source of income for the generations that survived WWII, providing them with a pension, against a backdrop of high economic growth and low dependency ratios.

The weight of public pensions diminished as more and more people qualified for full benefits, a level beyond which they cannot rise. Concerns on the sustainability of the system led to the reforms in the 1990s which, however, will be fully operational in a few years.

Future developments will depend on the performance of the new mixed system.

As was already noted when the replacement rates were computed for the different returns on investments, the weight of the funded pillar may vary. In general, the mandatory public system (Paygo + DC) should still be the most important source of income, also considering that contributions flowing to it account for 18.5 percent of a worker's income.

Closing remarks

The review of the Swedish system showed how that country tried to introduce a funded pillar while preserving a significant public mandatory component.

As to the first public pillar, the goal to achieve the financial stability of the system was pursued principally through the transition from a pay-as-you-go system to a contribution-based one, with the minimum retirement age set at 61 and incentives to postpone the exit from the labour market. The separation between assistance and social security, moreover, plays a key role, in that it combines a balance in the financial flows in and out of the pension system with a certain scope for manoeuvre in the area of social policy, provided that the external funding through general taxation or the transfer of nominal contributions remains in place.

The new public system rests on two pillars, one organized on the basis of pay-as-you-go arrangements and the other as a funded system. Contributions to the public system are mandatory and represent 18.5 percent of a worker's salary. No voluntary additional contributions are allowed; any such contributions should go to private plans. Thus, the central idea is still that

which considers retirement savings not a matter of individual choice but something that falls within the province of public interest.
The decision to centralize both the collection of contributions and the payment of benefits, as well as relationships with fund managers, also for the funded system is intended to prevent some of the recurring problems in funded decentralized private systems, such as the increase in management expenses. The clearing house mechanism operated by the PPA seems capable of reconciling a high level of administrative centralization with the freedom workers have in allocating their investments. Also the occupational component, in so structured a labour market as Sweden's, features a measure of centralization, as it breaks down into four different types, according to the category covered.
Naturally, the presence of a funded system creates a link between the generosity of pensions and the performance of equity markets, raising the risk level for retirement savings. The main idea, however, is that a well-regulated market, under the supervision of the PPA, together with the prohibition for managers to increase management costs and to charge for switching from one fund to another, will result in a positive outcome, given that the time horizon of investments for retirement purposes spans decades.

The United States

The U.S. pension system consists of a public and a private part.
In 2000, total benefits paid by private plans amounted to 274 billion dollars, approximately one-third of the total. Social Security payments amounted to 401 billion dollars, while other federal benefits, the third significant component, totalled 184 billion dollars.
In 2000, pension payments accounted for 9.4 percent of the GDP.
Considering other welfare payments, over the past four years the income maintenance system for old people hovered around 12 percent of the GDP, four percentage points below the European average.

The Social Security system

All employed and self-employed workers are subject to a payroll tax. The contribution rate for old age, disability and survivorship is 12.4 percent. Employed workers pay half this rate while the other half is paid by their employers.
Benefits are indexed and are paid in full upon reaching 65 years of age (the

Table A1.1-7 - Monthly benefit amount for selected beneficiary families with first elegibility in 2000, by average indexed monthly earnings for selected wage levels effective, December 2000 (assumes the worker began to work at age 22 and retired at age 62) (1)

	Worker with monthly earnings equal to			
	Federal minimum wage	75% of average wage	Average wage	Maximum taxable earnings
retired worker alone	554	725	883	1285
retired worker with spouse	813	1065	1296	1886

(1) In 2000 annual average wage is $ 32,515 ($ 2,679 monthly). Maximum taxable earnings are $ 76,200 (94% workers receive earnings lower than this amount). Federal minimum wage is $ 5.15 per hour.

Source: *Annual Statistical Supplement to the Social Security Bullettin* (2001)

retirement age will be progressively raised to 67 in 2022). Early retirements, for which the minimum age is 62, carry a penalty, currently up to 20 percent (the maximum penalty will rise to 30 percent in 2022).
Benefits are computed according to a formula which calls for the calculation of an individual average wage indexed to wage changes and the application of decreasing rates as the individual wage goes up. Benefits are higher for retirees with dependents.
Social security benefits are summarized in tables A1.1-7 and A1.1-8. These tables show the maximum amounts receivable at 62 with different wage histories, as well as the average benefits paid.

Table A1.1-8 - Social Security: average monthly amounts in 2000

	Total	White people	Black people	Others
Total	844	860	726	697
Men	955	971	795	753
Women	730	739	659	629

Source: *Annual Statistical Supplement to the Social Security Bullettin* (2001)

Table A1.1-9 - Hypothetical earnings replacement rates under social security, 2000

Worker	Age 62 - Replacement rate (percent)	Age 65 - Replacement rate (percent)
Low earner (45% of the average wage)	45.6	52.6
Average earner	33.8	39.1
Maximum earner (maximum taxable wage)	20.5	23.7

Source: Munnell, A. H. e A. Sunden (2001)

Table A1.1-9 shows some typical replacement rates.
The low level of contributions and the fact that a substantial share of contributions flows to reserves (benefits paid in 2000 amounted to 73 percent of total contributions) explain the relatively low level of actual benefits (in addition to diversities between men and women and among different ethnic groups). In absolute terms, the amounts are not very different from those disbursed in Italy, even though per capita income is much higher in the United States. Also in light of the limited coverage of private pension plans, some observers think that, overall, pensions are inadequate.
The low share of public benefits as a percentage of gross domestic product can be explained with the old age at which full social security benefits are available.

Private retirement plans
The private retirement system consists of defined-contribution and defined-benefit plans.
Defined-benefit plans tend to be alike: in fact, benefits are commensurate with the final wage and the length of employment with the firm.
There is a wide variety of defined-contribution plans, even though 401 (k) plans and the like have been playing an increasingly prominent role over the past few years; these plans are voluntary and both employees and employers can make tax-free contributions to the plan. Thus, workers are responsible

for building up their own retirement savings; in fact, they decide whether to join the plan or not, how much they want to contribute and how to invest the balance. Funds can be withdrawn also before retirement.
Table A1.1-10 shows some basic details about supplementary pensions in the United States as of 1998.

Table A1.1-10 - Number of pension plans, assets, contributions and benefits by type of plan, 1998

Type of plan	Number of plans	Assets	Contributions	Benefits
Defined-benefit plans	56	$1,937,000	$35,000	$111,000
Defined-contribution plans	674	$2,085,000	$167,000	$162,000
of which 401(k) plans and similar	*543*	*$1,764,000*	*$147,000*	*$137,000*
Total	730	$4,022,000	$202,000	$273,000

Source: Department of Labor (2002), *Private Pension Plan Bullettin, Highlights from the 1998 Form 5500 Reports*

It can be seen that the number of defined-contribution plans is much higher than the number of defined-benefit plans; in fact, defined-benefit plans are mostly made available by larger companies.
However, over the past few years there has been a trend to replace defined-benefit plans with defined-contribution plans.
Evidence to the significant size, on average, of the defined-contribution plans is that, at the end of 1998, both types had substantially the same amount of assets under management.
Finally, benefits paid by defined-contribution plans were definitely higher than those provided by defined-benefit plans (162 billion dollars versus 111 billion dollars). By contrast, defined-benefit plans has a strong cash outflow, since the 111 billion disbursed were matched by inflows in the amount of 35 billion dollars.
This gap was due to the brilliant performance of financial markets in the 1990s; in fact, the rise in share prices made it possible to curtail effective contributions sharply, while preserving the actuarial solvency of funds.
This phenomenon, the result of tax laws that prevent the payment of contributions in excess of fund liabilities, does represent a major problem as companies would have to make up for any drop in share prices through supplementary contributions.
Details of the participation of workers are shown in tables A1.1-11 and A1.1-12.

Table A1.1-11 - Estimated private wage and salary worker participation rates per primary and supplemental pension plans, 1979-1988 (workers in thousands)

	Workers	Workers covered by a primary defined benefit plan		Workers covered by a primary defined contribution plan		Workers covered by a supplemental defined contribution plan(s)	
		Number	Percent	Number	Percent	Number	Percent
1980	78,349	29,736	38	6,203	8	10,134	13
1990	94,772	26,323	28	16,116	17	15,671	17
1998	108,340	22,972	21	29,139	27	18,526	17

Source: Department of Labor (2002), *Private Pension Plan Bullettin, Highlights from the 1998 Form 5500 Reports*

Table A1.1-12 - Estimated private wage and salary worker participation rates under defined benefit and defined contribution plans, 1979-1988 (workers in thousands)

	Number of private wage and salary workers	Workers covered by a defined benefit plan only		Workers covered by a defined contribution plan(s) only		Workers covered by both a defined benefit and a defined contribution plan	
		Number	Percent	Number	Percent	Number	Percent
1980	78,349	21,889	28	6,203	8	8,244	11
1990	94,772	12,381	13	16,116	17	13,963	15
1998	108,34	7,181	7	29,139	27	15,813	15

Source: Department of Labor (2002), *Private Pension Plan Bullettin, Highlights from the 1998 Form 5500 Reports*

In 1998, out of a total of 108 million workers, pension coverage, as measured by the sum of a primary plan, either as a defined-benefit plan or a defined-contribution plan, was 48 percent; moreover, 18 million workers had additional coverage, in the shape of a defined-contribution plan to supplement the primary plan.
This coverage ratio, close to 50 percent, did not change much from the comparable figures in 1980 and in 1990. Constant participation in supplementary plans and the low level of benefits provided by the Social Security system raise some doubts on the adequacy of retirement savings over future decades.
The United Kingdom too is faced with similar problems, despite the impressive performance of stock markets in the 1990s. Average returns posted by funds were very high until 2000, exceeding 12 percent in the 1985-98 period. The fall of stock prices drastically impaired the performance of funds. It can be reasonably inferred that the return on the contributions paid to defined-benefit funds, and invested in the U.S. stock market since 1990, amounts today to around 5 percent.
In nominal terms, this return does not reflect management costs and is not adjusted for inflation during the retirement period.
Recent events highlighted the risk in stock investments, which is not related solely to price volatility but also to the investment policies adopted by many 401 (k) plans, which invested heavily in the shares of the sponsoring companies. For instance, 91 percent of the assets held by the defined-contribution fund sponsored by Procter & Gamble represented this company's shares. Many U.S. firms showed a similar behaviour (table A1.1-13).

Table A1.1-13 - Employer stock in selected retirement plans

Company name	Company stock as a percentage of defined contribution plan's assets:
Procter & Gamble	91.5%
Anheuser-Busch	81.6%
Coca-Cola	81.0%
Abbott Laboratoires	80.0%
General Electric	77.4%

Source: CRS Report for Congress (2002), *The Enron Bankrupty and Employer Stock in Retirement Plans*

Worthy of note is that defined-benefit funds can hold shares in the sponsoring company for up to 10 percent of total assets.

Income distribution

The U.S. pension system can be assessed in light of its distributive effects.

Table A1.1-14 - Shares of aggregate income, by source, 2000

Social Security	38%
Pensions	18%
Asset income	18%
Earnings	23%
Other	3%

Source: *Annual Statistical Supplement to the Social Security Bullettin* (2001)

Table A1.1-14 shows a breakdown of the income of elderly households. The Social Security system provides 38 percent of the total, as against 18 percent originating from private pension plans and equivalent amounts deriving from investment income and wages. Even if the share coming from supplementary pension plans increases in the future, it is clear that the public component, limited though it may be, will continue to play an important role. Obviously, the importance of the two types of pension varies according to the income level. Social Security payments account for more than 90 percent of the total income for 31 percent of the households with an elderly member, while they represent more than half the total income for another 33 percent. Only half of the elderly households have income from other sources greater than that deriving from Social Security.

Table A1.1-15 - Relative importance of Social Security income for aged units, 2000

Social Security income importance	Beneficiaries as a percentage of total
100% of income	20%
90%-99% of income	11%
50%-89% of income	33%
Less than 50% of income	36%

Source: *Annual Statistical Supplement to the Social Security Bullettin* (2001)

Private pensions represented 29 percent of total income (net of wages) for the first two quintiles, falling rapidly as a percentage of the total for lower incomes (Table A1.1-6).

Table A1.1-16 - Importance of pensions by income quintile

Top	29.8
Second	28.1
Third	16.1
Fourth	6.8
Bottom	3.3

Source: Munnell, A. H. e A. Sunden (2001)

chapter 2

The welfare state in Europe

Synopsis

This chapter is devoted to a comparative analysis of the welfare systems in Europe. In addition to providing an updated picture of the trends in overall social spending, it focuses on the healthcare system, on the procedures for exiting the labour market, on the cost of labour and the tax wedge in the countries of the European Union.

In 1999 total resources earmarked for social purposes in European countries represented, on average, 26.4 percent of GDP, confirming the ongoing stabilisation process that began in the mid-1990s. Social spending in Italy is lower than the European average and has been rising at a slower rate, with the result that the gap between the two has widened from 0.4 to 2 percentage points since the 1990s. Resources are mostly allocated to old age and healthcare, which combine to account for 68 percent of total benefits for social protection purposes – with old age alone using up 40 percent.

Amounts vary widely among the different countries. This depends not only on the diversity of the welfare models but also on the lack of consistency in the collection and classification of national statistics. Data compiled on the basis of more consistent criteria show that pension spending as a Percentage of GDP in Italy is in line with the European average and lower than the corresponding item in France and Germany. Also on a medium-to-long-term basis, pension spending in Italy is expected to rise at a slower pace. In 2050 pension expenditure should increase, as a share of GDP, by 2.9 percent in Europe and by only 0.3 percent in Italy, where a significant stabilisation trend should set in.

An examination of the procedures for exiting the labour market indicates, first, that unemployment among workers over fifty is significant in all countries and, second, that Europe has a wide and varied range of protection measures for older unemployed workers. While seniority pensions are the main route out of the labour market in Italy, elsewhere extensive use is made of unemployment benefits or disability pensions, granted on a discretionary basis for socio-economic reasons, to ensure coverage for older workers until they reach retirement.

Also the analysis of the data on the income composition of individuals and households according to age shows that differences in pension transfers tend to be made up with other transfers. While on one side all this does not imply that the different systems are equivalent, on the other it suggests that, in order to reduce the cost borne by society to support the early retirement of older workers, there is no other solution than to extend the stay of these older members of society in the labour market.

The welfare state in Europe:

Attention is then paid to the ways the welfare state is financed, due to their implications for the competitiveness of the productive system and for their impact on the cost of labour. Social contributions are only a part of the burden wages and salaries are saddled with to fund social protection, as all countries resort to general taxation, albeit to a varying degree. Computing the combined incidence of contributions and taxes on the cost of labour – the so-called tax wedge – it emerges that, from this standpoint, Italy is in line with France and Germany, two countries with systems similar to its own. The tax wedge is lower in the United Kingdom. In terms of labour costs, of which the tax wedge is a significant component, the Unites Kingdom stands at the same level as Italy which, thanks to low labour costs and high productivity, has the lowest labour cost per unit in Europe, albeit higher than the United States'.

The comparative analysis of the healthcare systems is carried out with reference both to the expenditure incurred to provide services and to the ways these are financed.

On the provision side, overall spending trends are reviewed, drawing a distinction between public and private sources. It appears that, as the private component becomes increasingly important, overall spending tends to stabilise. In Italy, during the 1990s private spending showed significant changes. On the financing side, countries that resort to general taxation are set against countries that rely mostly on contributions. Some common patterns are identified, such as the growing trend towards out-of-pocket financing. The reasons why firms should partake in the financing of the healthcare system are examined and, finally, some of the problems are identified which might arise in national healthcare systems as a result of measures (such as the "portability" of health rights) designed to achieve greater European integration.

The analysis shows that there is no such thing as a single and well-defined healthcare model in Europe. However, European healthcare systems do have something in common that sets them apart from the U.S. model. The main elements they share is the pivotal role played by the state – both in the provision and management of services and their financing – the large size of the public component as a share of total healthcare spending, the predominance of the universalistic approach compared with the selective one, as well as the presence of a national healthcare system, or a national set of rules and regulations, that defines minimum health-protection and system-access standards.

2.1 General features

2.1.1 Developments in spending for social purposes

In 1999, overall social spending in the European Union (EU) represented, on average, 26.4 percent of GDP[1]. This figure confirms the stabilisation trend under way (table 2.1).

Countries with a spending level above the average were Sweden (32.3 percent), Denmark, France and Germany (with shares slightly below 29 percent) and Austria (27.7 percent).

Countries whose levels of welfare expenditure stood below 20 percent of GDP were Ireland (14 percent), Spain and Portugal.

Italy is part of the group of countries whose spending level ranked below the European average throughout the 1990s, falling progressively from 0.4 percent below in 1990 to 2 percent below in 1999.

Table 2.1 - Social protection expenditure in EU countries
(as a % of GDP)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Belgium	25.1	25.8	26.1	27.7	27.0	26.7	27.1	26.4	26.4	26.3
Denmark	27.9	28.9	29.5	31.1	31.9	31.3	30.6	29.6	29.1	28.6
France	26.5	27.0	27.8	29.1	28.9	29.0	29.4	29.3	28.9	28.8
Germany	24.4	25.2	26.6	27.3	27.2	27.8	28.8	28.5	28.3	28.6
Greece	21.5	20.5	20.6	21.2	21.2	21.5	22.0	22.5	23.5	24.7
Ireland	17.6	18.7	19.4	19.3	18.9	18.1	17.1	15.9	14.8	14.1
Italy	23.7	24.1	25.1	25.2	24.8	23.9	23.9	24.6	24.1	24.4
Luxembourg	21.2	22.3	22.4	23.1	22.8	22.7	23.1	22.0	21.5	21.2
Holland	30.9	31.0	31.5	32.0	29.1	29.2	28.4	27.7	26.7	26.4
Portugal	13.3	14.6	16.1	18.0	18.7	18.5	19.1	19.0	19.5	19.9
UK	21.9	24.6	26.8	27.8	27.4	27.1	27.1	26.6	26.0	25.8
Spain	19.4	20.6	21.8	23.3	22.2	21.3	21.3	20.6	20.1	19.5
Austria	25.9	26.1	26.7	28.0	28.8	28.7	28.6	27.8	27.4	27.7
Finland	24.2	29.0	32.7	33.7	32.9	30.9	30.7	28.5	26.4	26.0
Sweden	n.a.	n.a.	n.a.	38.1	36.7	34.7	34.0	33.1	32.7	32.3
EU	24.1	25.1	26.3	27.5	27.2	27.1	27.3	26.9	26.5	26.4

Source: compiled on the basis of Eurostat data (2001)

The past decade can be broken down in two different periods: one (1990-93) that was marked by a general rising trend for social protection spending, and the other marked by a slower growth rate, generally lower than the GDP's.

In the 1990-93 period, all European countries experienced, on average, a 9.6 percent yearly increase in overall social spending, in terms of purchasing power standards (PPS)[2] ; in the following period that figure fell to 4.9 percent (Table 2.2). Social spending in the EU as a share of the GDP went from 24.1 percent in 1990 to 27.5 percent in 1993; in the subsequent period, instead, despite some year-on-year fluctuations, this ratio decreased gradually to 26.4 percent in 1999 (Table 2.1).

(1) The data utilised are from Eurostat. Based on the methodology adopted by that institute, social protection spending covers all areas; in fact, in addition to benefits from public sources, account is taken of those provided and managed within the private sector. Moreover, all benefits are considered, whether they are cash benefits or in-kind benefits provided as services. Another aspect worthy of note is that spending is considered gross, that is inclusive of any taxes or contributions payable on the benefits received.

(2) Amounts denominated in terms of purchasing power standards (PPS) allow for a meaningful comparison among countries, as they reflect, for each country, the units of national currency necessary to purchase the same "basket" of goods and services.

Table 2.2 - Trends in social spending - 1990-1999
(Annual average percentage change) (1)

	1990-93	1994-99	1990-99
Belgim	9.3	4.0	5.7
Denmark	8.6	5.7	6.6
France	6.4	3.8	4.6
Germany	15.0	4.7	8.0
Greece	4.3	9.4	7.6
Ireland	10.4	5.7	7.2
Italy	5.5	4.0	4.5
Luxembourg	13.4	4.7	7.5
Holland	5.9	4.0	4.6
Portugal	14.2	9.4	11.0
UK	10.0	4.7	6.5
Spain	11.0	2.3	5.1
Austria	9.5	4.8	6.4
Finland	10.4	3.8	6.0
Sweden	n.a.	3.0	3.0
EU (2)	9.6	4.9	6.3

(1) Figures calculated on social protection expenditure expressed in PPS (Purchasing Power Standard)
(2) Average based on EU member countries

Source: compiled on the basis of Eurostat data (2001)

This trend took shape, though in different forms, also in most European countries, except Greece, Portugal and Germany. In Greece and Portugal, whose ratios are constantly below the average, spending as a share of GDP rose throughout the period under review. In Germany, the trend began to stabilise in 1996. The costs incurred following the reunification had Germany's ratio rise from a value in line with the European average in the early 1990s to above the average at the end of the period examined.
During the entire 1990-99 period, however, social protection spending as a percentage of GDP in Europe increased, on average, by more than 2 percentage points (Table 2.1).
The only exceptions were Sweden, whose ratio was constantly higher than that in other European countries, and Ireland which, together with Portugal, showed the lowest incidence: in Sweden social spending as a percentage of GDP fell by 4.5 percentage points while in Ireland the same ratio decreased by 3.5 percentage points.
Also in the Netherlands spending as a percentage of GDP declined significantly, going from 30.9 percent in 1990 to 26.4 percent in 1999, namely from above to below the European average.
In 1999, Luxembourg and Spain settled at the same levels as that at the beginning of the period: in these countries, the increase in social spending until 1993 was basically offset by the decrease posted in the subsequent period.
Italy's increase in social spending was less pronounced than in the other European countries; in the 1990-99 period, the yearly growth rate in terms of PPS was 4.5 percent, vis-à-vis a 6.3 percent average for Europe (table 2.2). Over the same time span, Italy's social spending as a percentage of GDP rose by 0.7 percent, as against a more sizable average increase by the European Union as a whole of more than 2 percentage points (Table 2.1).
Table 2.3 shows the indices of per-capita social benefits, in terms of PPS, setting the average for the EU equal to 100. In table 2.4, instead, per-

capita benefits are calculated at constant prices, so that changes in each country might be calculated in real terms.
In 1999 the countries with the highest levels of per-capita social benefits were Luxembourg (147), Denmark (129) and Sweden (125). These were followed by Germany, the Netherlands and Austria, which stood at 15 percent above the European average; finally, Belgium and France ranked at a level slightly lower than 10 percent above the European average.

Table 2.3 - Social protection expenditure per capita in PPS (1)
(UE Index=100)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Belgium	113.5	112.7	112.7	112.8	109.3	110.3	111.0	109.6	110.8	109.9
Denmark	124.4	126.5	121.5	121.7	132.3	136.2	134.9	132.7	132.2	129.3
France	123.8	122.0	119.2	113.2	111.0	111.2	111.0	108.5	109.0	108.4
Germany	122.6	112.6	117.7	111.9	114.7	112.7	117.0	114.8	114.2	114.3
Greece	55.9	52.4	49.5	47.8	48.3	52.3	54.4	55.3	59.6	63.1
Ireland	56.6	58.9	59.3	57.6	59.2	62.3	59.4	61.7	59.6	59.9
Italy	108.1	107.5	106.4	97.1	95.8	90.9	91.4	93.8	95.0	95.0
Luxembourg	143.4	150.2	152.9	154.8	154.5	145.0	145.6	143.6	143.3	146.9
Holland	135.6	131.5	127.8	121.4	115.0	117.5	112.3	116.2	117.1	115.9
Portugal	36.6	39.3	40.8	42.2	45.3	48.2	49.8	52.9	54.2	55.9
UK	98.1	99.8	104.7	99.6	99.7	95.9	98.7	101.1	101.6	100.6
Spain	63.8	67.2	66.8	66.8	62.2	61.5	62.4	61.4	60.5	59.4
Austria	116.1	115.3	115.8	113.6	117.7	114.7	116.5	115.8	114.9	116.5
Finland	101.5	104.1	104.9	103.6	102.9	110.4	108.2	105.8	101.7	99.6
Sweden	n.a.	n.a.	n.a.	135.7	132.2	131.0	127.5	126.6	126.3	125.2
EU	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(1) Purchasing Power Standard.

Source: compiled on the basis of Eurostat data (2001)

In 1999, the countries with the highest shares had been constantly above the European average throughout the entire decade. Among these, France and the Netherlands saw their relative position deteriorate, even though they were still above the European average in 1999.
Concerning Italy, social benefits per capita were higher than the average for European countries; in the following years, Italy experienced a gradual decrease of its relative position, until it settled at 5 percent below the average.
Table 2.4 confirms that Italy is one of the countries with the lowest rates of increase in social spending, 17.5 percent throughout the period, as against 27.5 percent for the European countries.
The Netherlands showed the lowest increase (slightly above 3 percent), filling substantially the gap with the European average, even though it remained above it.
The other countries which, in addition to the Netherlands and Italy, had the lowest rates of increase, below 20 percent, were Germany and France (Table 2.4).
The analysis of social spending by function[3] shows that old age and healthcare are the most sizable items (Table 2.5): both functions combined to account, on average, for approximately 68 percent of the

(3) On the basis of the methodology adopted by Eurastat to compile the European System of Integrated Social Protection Statistics (ESSPROS), social protection benefits are classified on the basis of the following functions: healthcare, disability, survivorship, old age, family, unemployment, housing; measures to combat social exclusion not included in any other section.

Table 2.4 - Increases in social protection expenditure per capita at 1995 constant prices
(1990=100)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Belgium	100.0	104.0	107.8	113.2	112.9	114.4	116.4	116.6	119.5	122.4
Denmark	100.0	104.9	108.0	113.6	122.4	122.5	122.3	121.1	122.0	122.9
France	100.0	102.1	105.5	109.3	110.4	112.1	114.0	115.1	117.5	119.9
Germany	100.0	95.3	103.0	103.9	105.6	109.5	113.8	112.3	114.0	117.0
Greece	100.0	97.7	97.0	97.9	99.7	103.4	107.0	114.2	123.3	134.1
Ireland	100.0	106.0	112.3	118.7	121.4	128.3	130.0	136.6	141.5	149.5
Itay	100.0	104.3	108.6	107.5	107.3	105.7	108.4	113.7	114.3	117.2
Luxembourg	100.0	109.3	112.4	120.7	125.2	129.9	134.6	138.7	141.7	150.0
Holland	100.0	100.7	102.7	103.4	99.7	102.6	101.5	101.7	101.6	103.3
Portugal	100.0	113.6	129.9	143.1	152.6	156.3	166.7	175.3	188.5	200.2
UK	100.0	110.9	120.6	129.1	131.6	132.3	136.0	136.9	136.8	139.0
Spain	100.0	109.2	117.1	123.5	119.5	119.4	121.6	122.5	125.0	126.7
Austria	100.0	103.8	106.5	110.3	115.4	116.9	118.3	118.1	120.3	125.5
Finland	100.0	108.7	115.5	117.4	119.6	120.0	122.3	121.5	120.2	121.3
Sweden	n.a.	n.a.	n.a.	100.0	99.7	98.1	97.9	98.5	101.9	104.8
EU	**100.0**	**103.7**	**106.8**	**113.7**	**116.3**	**118.8**	**121.5**	**121.8**	**122.9**	**127.5**

Source: compiled on the basis of Eurostat data (2001)

resources earmarked for social purposes in Europe. In particular, the main item is old age, using up slightly more than 40 percent of total resources. Healthcare, for its part, is followed by disability spending and family aid (with more than 8 percent), unemployment benefits (approximately 7 percent) and survivor benefits (5 percent). Housing and other measures designed to mitigate social exclusion account for very little.
In Europe, old age accounts on average for slightly less than 11 percent of GDP, followed by healthcare (7 percent); disability, unemployment and family aid, for their part, represent approximately 2 percent of GDP (Table 2.6).
The data for the individual countries show widely varying situations. On one side, this is due to the fact that welfare systems developed in different periods and along different lines, and utilise different tools. On the other hand, the lack of consistency among data and classification

Table 2.5 - Social protection expenditure by function in EU countries - 1999
(As a % overall social expenditure)

	Sickness	Invalidity	Old age	Survivors	Family support	Unemp-loyment	Housing	Other	Total
Belgium	24.5	9.1	32.6	10.4	9.1	12.1	0.0	2.2	100.0
Denmark	19.6	12.1	38.0	0.0	13.0	11.2	2.4	3.7	100.0
France	28.2	5.9	38.2	6.0	9.8	7.4	3.2	1.4	100.0
Germany	28.2	7.8	40.5	1.6	10.5	8.8	0.6	2.0	100.0
Greece	24.6	6.3	41.6	9.1	7.6	5.7	3.1	1.9	100.0
Ireland	40.2	5.0	19.2	5.9	13.0	11.1	3.4	2.0	100.0
Italy	23.7	6.3	52.9	11.2	3.7	2.2	0.0	0.1	100.0
Luxembourg	25.1	14.3	38.1	3.2	15.5	2.5	0.3	0.9	100.0
Holland	28.9	11.8	36.2	5.3	4.3	6.2	1.6	5.8	100.0
Portugal	33.5	12.1	36.5	7.2	5.2	3.7	0.0	1.7	100.0
UK	24.8	10.0	42.2	3.9	8.8	3.2	6.1	0.9	100.0
Spain	29.1	7.8	41.9	4.3	2.1	12.9	1.2	0.7	100.0
Austria	26.6	8.7	37.4	9.9	10.3	5.4	0.3	1.2	100.0
Finland	23.0	14.2	31.1	4.0	12.8	11.3	1.6	2.1	100.0
Sweden	25.3	11.7	37.3	2.3	10.5	8.1	2.3	2.6	100.0
EU	**26.7**	**8.2**	**41.0**	**5.0**	**8.5**	**6.8**	**2.1**	**1.6**	**100.0**

Source: compiled on the basis of Eurostat data (2001)

criteria, which may make comparisons incorrect and meaningless, cannot be underestimated[4].

Table 2.6 - Social protection expenditure by function in EU countries - 1999
(Valori espressi in percentuale del Pil)

	Sickness	Invalidity	Old age	Survivors	Family support	Unemp-loyment	Housing	Other	Total
Belgium	6.4	2.4	8.6	2.7	2.4	3.2	0.0	0.6	26.3
Denmark	5.6	3.5	10.9	0.0	3.7	3.2	0.7	1.0	28.6
France	8.1	1.7	11.0	1.7	2.8	2.1	0.9	0.4	28.8
Germany	8.0	2.2	11.6	0.5	3.0	2.5	0.2	0.6	28.6
Greece	6.1	1.6	10.3	2.3	1.9	1.4	0.8	0.5	24.7
Ireland	5.7	0.7	2.7	0.8	1.8	1.6	0.5	0.3	14.1
Italy	5.8	1.5	12.9	2.7	0.9	0.5	0.0	0.0	24.4
Luxemburg	5.3	3.0	8.1	0.7	3.3	0.5	0.1	0.2	21.2
Holland	7.6	3.1	9.6	1.4	1.1	1.6	0.4	1.5	26.4
Portugal	6.7	2.4	7.3	1.4	1.0	0.7	0.0	0.3	19.9
UK	6.4	2.6	10.9	1.0	2.3	0.8	1.6	0.2	25.8
Spain	5.7	1.5	8.2	0.8	0.4	2.5	0.2	0.1	19.5
Austria	7.4	2.4	10.4	2.8	2.9	1.5	0.1	0.3	27.7
Finland	6.0	3.7	8.1	1.0	3.3	2.9	0.4	0.5	26.0
Sweden	8.2	3.8	12.1	0.7	3.4	2.6	0.8	0.8	32.3
EU	**7.1**	**2.2**	**10.8**	**1.3**	**2.2**	**1.8**	**0.6**	**0.4**	**26.4**

Source: compiled on the basis of Eurostat data (2001)

Concerning the two main spending items, healthcare as a share of GDP ranges from 19.6 percent in Denmark to 33.5 percent in Portugal, whilst old age varies from 31 percent in Finland to 52.9 percent in Italy. Similar differences can be found also in other spending areas.
According to Eurostat data, Italy spends for old age and survivor pensions more than the European average; as a share of GDP, these items exceed the European average by 2 percent and more than 1 percent, respectively.
A more comprehensive review of pension spending, conducted in the previous edition of this Report, shows that the so-called Italian "anomaly" is not so anomalous[5].
Quite apart from the fact that pension spending in Italy is computed by including the TFR (i.e. employee severance payments), there are comparability problems as a result of some inconsistencies in the way Eurostat statistics are compiled. In fact, accounting methods and some omissions tend to overestimate Italy's figure. For instance, even though it considers private spending, Eurostat does not account for individual pension plans, with the result that it underestimates the figures for Anglo-Saxon countries, where such schemes are widespread. Another inconsistency is related to early retirements, namely pensions granted in case of corporate crises and/or restructurings; sometimes these are classified as pensions, as in Italy, and sometimes as unemployment benefits, as in Germany. More generally, there is a high degree of substitutability between old age and survivor benefits, on one side, and disability and unemployment, on the other.
Combining these areas of social spending in Italy and adjusting for the TFR, it emerges that this country's spending level is aligned with the

(4) On the comparability of data, see also section 2.2.1.
(5) For a more detailed and in-depth analysis of these issues, reference should be made to Chapter 2 of the 2001 Annual Report on the Welfare State.

average for Europe: a review of table 2.7 and chart 2.1 shows that Italy spends 16.3 percent of its GDP for old age, survivor, disability and unemployment benefits, a figure more or less equal to that for the EU as a whole (16.2 percent) and lower than France and Germany's.

Table 2.7 - Old age, survivors and invalidity pension expenditure and unemployment benefits - 1999 (1)

(as a % of of GDP)

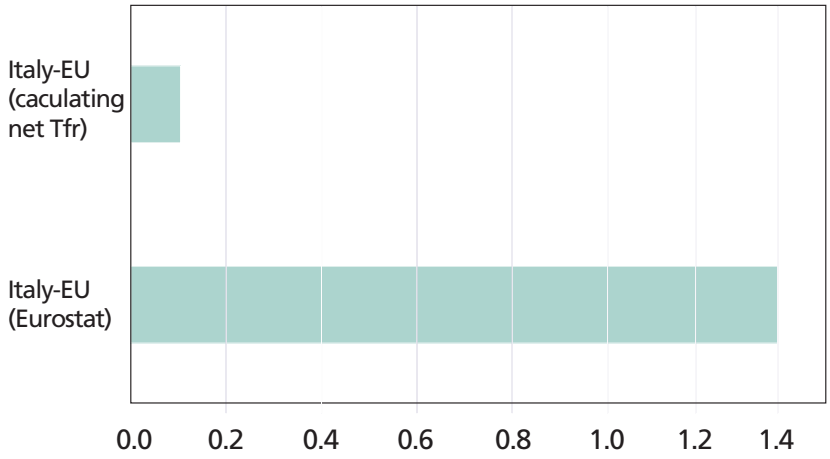
	Pension and unemployment (in % Pil)
Belgium	16.9
Denmark	17.5
France	16.5
Germany	16.8
Greece	15.5
Ireland	5.8
Italy	16.3
Luxembourg	12.4
Holland	15.7
Portugal	11.9
UK	15.3
Spain	13.0
Austria	17.0
Finland	15.8
Sweden	19.2
EU	16.2

(1) A comparison between countries is difficult due to differences both in accounting methods and institutional structures. This table intends to provide a more meaningful overview. In Italy early retirement benefit are considered as a pension expenditure, whereas in other countries they are included in unemployment benefit. There is significant interchangeability among different fuctions of social protection. The problem is overcome by considering old-age, survivor, invalidity pensions and unemployment benefit as a unified whole. Moreover, in this table the Italian figure is net of the TFR, an item which Eurostat accounts as part of Italy's old age pensions, regardless of the age of recipient.

Source: compiled on the basis of Eurostat data (2001)

Chart 2.1 - Old age, survivors and invalidity pension expenditure and unemployment benefits: gap between Italy and EU countries, before and after Tfr

(Figures as a % GDP)



Another significant inconsistency that leads to overestimate the Italian figure involves the amount of taxes paid on benefits, which varies widely

among countries.
For instance, pensions in Germany are tax free while pensions in Italy are gross of taxes, which account for approximately 2 percent of GDP.
For social spending functions other than old age and survivors, Italy ranks very low in Europe. In particular, spending for each of the healthcare, family aid and unemployment functions in Italy represents 1.3 percent of GDP, while disability spending is equivalent to 1.5 percent of GDP, vis-à-vis an average of 2.2 percent for the EU as a whole; for the other two functions, housing and social exclusion, Italy spends almost nothing, whereby the EU's outlays on average represent 0.6 percent and 0.4 percent of GDP, respectively.
However, even including the effects arising from different accounting methods, Italy's spending for pure assistance measures, namely devoted to citizens in a recognised state of need, is very low.

Box 1 – The ESSPROS 1996 Social Protection Functions

Social protection function	Short description of corresponding cash benefits
1. Sickness/ Healthcare	Income maintenance and monetary support to reinstate in full any loss of income due to a temporary disability determined by sickness or an injury.
2. Disability	Monetary income support for people who do not qualify as of yet for a pension under the applicable regime and whose ability to be gainfully employed is below the minimum level set by law due to physical or mental illness
3. Old age	Monetary support for people that retire from the labour market; periodic cash payments for income maintenance purposes for the benefit of people of a certain age.
4. Survivors	Periodic cash payments to people who have not reached the retirement age yet and who have lost the spouse or a close relative who provided them with financial support; one-off payments for the funeral expenses incurred by survivors and for the financial hardship resulting from the death of a family member.
5 Family/Dependent children	Cash benefits to families to raise or support dependents. These include periodic or lump-sum payments to support children, to make up for income shortfalls due to a leave of absence from work as a result of a pregnancy or an adoption throughout the relevant period.
6. Unemployment	Cash benefits for workers who lose their jobs; cash benefits as a form of minimum income for

	people entering or re-entering the labour market; cash benefits to replace, in whole or in part, the loss of income by older workers who lose their jobs before reaching the age of retirement; cash benefits to make up for the loss of income due to partial unemployment. Training incentives; unemployment benefits.
7. Housing	Aid to help to meet the costs incurred by families to pay rent, after such families have been means-tested; transfers in the shape of low-interest mortgage loans to purchase a house, based on a means test.
8. Social exclusion	Income supplements up to subsistence minimum; cash benefits designed to relieve families from the burden of poverty or social exclusion

2.1.2 Sources of financing

Concerning the resources to fund social protection spending, Tables 2.8 and 2.9 illustrate the different sources of financing; basically, these consist of social contributions and state transfers.

Social contributions are the main source of financing; in 1999, social contributions in the EU countries – by both employers and employees – represented on average slightly less than 61 percent of total resources, while general taxation accounted instead for 36 percent of the total (Table 2.8).

As a share of the GDP, social and state contributions represented 17.4 percent and 10.2 percent, respectively (Table 2.9).

While there are significant differences among the various countries, the data under review highlight some common traits: in insurance-oriented systems, social contributions prevail; in countries with a universalistic system the state's contributions, i.e. contributions out of general taxation, is paramount.

In Denmark, for instance, a country that has adopted a pure universalistic model, with flat-rate benefits financed through general taxation, social contributions account for the lowest share of total resources (28.5 percent), compared with the other European countries; on the other hand, the state provides approximately 65 percent of total resources, or 21 percent of the GDP, a figure higher than the European average.

The countries where financing through social contributions is highest are Belgium, with a share of approximately 72 percent of total resources, followed by Spain, France, the Netherlands and Germany with a share between 65 and 70 percent.

In Italy the balance of the composition is tilted toward social contributions, even though, at 58 percent, these stand below the European average.

Social contributions in turn are paid by employees and by employers.

Table 2.8 - Sources of financing for social expenditure
(breakdown in % terms)

	Social contributions			State subsidy	Other receipts	Total
	Employer	Worker	Total			
1990						
Belgium	41.5	25.5	67.0	23.8	9.2	100.0
Danmark	7.8	5.3	13.1	80.1	6.8	100.0
France	51.0	28.5	79.5	17.0	3.5	100.0
Germany	43.7	28.4	72.1	25.2	2.7	100.0
Greece	39.4	19.6	59.0	33.0	8.0	100.0
Ireland	24.5	15.6	40.0	58.9	1.0	100.0
Italy	54.9	15.5	70.3	27.2	2.5	100.0
Luxembourg	29.5	21.0	50.5	41.4	8.0	100.0
Holland	20.0	39.1	59.0	25.0	15.9	100.0
Portugal	36.9	20.1	57.0	33.8	9.2	100.0
UK	28.1	26.9	55.0	42.6	2.4	100.0
Spain	54.4	16.9	71.3	26.2	2.5	100.0
Austria	38.1	25.1	63.1	35.9	0.9	100.0
Finland	44.1	8.0	52.1	40.6	7.3	100.0
Sweden (1)	38.7	2.0	40.7	50.7	8.6	100.0
EU	**42.3**	**23.5**	**65.8**	**29.9**	**4.3**	**100.0**
1999						
Belgium	49.4	22.4	71.8	25.7	2.5	100.0
Denmark	9.2	19.2	28.5	65.2	6.4	100.0
France	46.5	20.3	66.8	30.4	2.8	100.0
Germany	36.9	28.1	65.0	32.8	2.3	100.0
Greece	37.7	23.4	61.1	28.6	10.3	100.0
Ireland	24.2	14.8	39.0	59.8	1.2	100.0
Italy	43.6	14.4	58.0	38.9	3.1	100.0
Luxemburg	24.7	24.4	49.1	46.9	4.0	100.0
Holland	28.4	37.4	65.8	15.3	18.9	100.0
Portugal	27.6	16.8	44.4	40.9	14.7	100.0
UK	27.7	24.0	51.8	47.3	0.9	100.0
Spain	52.2	17.0	69.2	26.8	4.0	100.0
Austria	37.4	26.9	64.3	35.0	0.7	100.0
Finland	37.2	12.8	50.0	43.4	6.6	100.0
Sweden	36.3	9.6	45.9	48.9	5.2	100.0
EU	**37.9**	**22.7**	**60.6**	**35.7**	**3.7**	**100.0**

(1) For Sweden, figures refer to 1993.

Source: compiled on the basis of Eurostat data (2001)

A feature common to almost all European countries is that the component paid for by employers is greater than that paid by workers: on average for the EU, the former exceeds the latter by 60 percent.
The only two countries in which the workers' share is greater are Denmark and the Netherlands, while in Luxembourg and the United Kingdom the two contributions are equivalent.
In Spain, Finland, Sweden, and Italy employers' contributions are more than triple the share attributable to employees.
In the 1990-99 period, the share of social contributions tended to decline, as the average for the European countries went from 65.8 percent in 1990 to 60.6 percent in 1999, while state contributions during the same period rose from 29.9 percent to 35.7 percent.

Table 2.9 - Sources of financing for social expenditure
(as a % of GDP)

	Social contributions			State subsidy	Other receipts	Total
	Employer	Protected person	Total			
1990						
Belgium	11.8	7.3	19.1	6.8	2.6	28.5
Danimark	2.5	1.7	4.2	25.4	2.1	31.7
France	14.5	8.1	22.5	4.8	1.0	28.3
Germany	11.8	7.7	19.5	6.8	0.7	27.1
Greece	9.1	4.5	13.6	7.6	1.8	23.1
Ireland	4.5	2.8	7.3	10.8	0.2	18.3
Italy	13.5	3.8	17.3	6.7	0.6	24.6
Luxemburg	7.5	5.3	12.8	10.5	2.0	25.4
Holland	7.4	14.5	21.9	9.3	5.9	37.0
Portugal	5.9	3.2	9.1	5.4	1.5	16.0
UK	7.2	6.9	14.1	10.9	0.6	25.7
Spain	10.9	3.4	14.2	5.2	0.5	20.0
Austria	10.1	6.7	16.8	9.6	0.2	26.6
Finland	13.0	2.4	15.3	11.9	2.1	29.4
Sweden (1)	13.6	0.7	14.3	17.8	3.0	35.1
EU	**11.3**	**6.3**	**17.6**	**8.0**	**1.2**	**26.8**
1999						
Belgium	14.8	6.7	21.6	7.7	0.7	30.0
Danmark	3.0	6.3	9.3	21.3	2.1	32.7
France	14.3	6.3	20.6	9.4	0.9	30.8
Germany	11.3	8.6	19.9	10.0	0.7	30.6
Greece	9.9	6.1	16.0	7.5	2.7	26.2
Ireland	3.8	2.3	6.1	9.3	0.2	15.5
Italy	11.4	3.7	15.1	10.1	0.8	26.0
Luxemburg	5.9	5.8	11.7	11.1	0.9	23.7
Holland	9.6	12.7	22.4	5.2	6.4	34.0
Portugal	6.4	3.9	10.3	9.5	3.4	23.1
UK	7.6	6.6	14.1	12.9	0.3	27.3
Spain	11.0	3.6	14.6	5.7	0.8	21.1
Austria	10.7	7.7	18.4	10.0	0.2	28.6
Finland	11.2	3.8	15.0	13.0	2.0	30.0
Sweden	12.4	3.3	15.7	16.8	1.8	34.3
EU	**10.8**	**6.5**	**17.4**	**10.2**	**1.1**	**28.7**

(1) For Sweden, figures refer to 1993.

Source: compiled on the basis of Eurostat data (2001)

This phenomenon occurs to a varying degree in all European countries, except Denmark and the Netherlands.
The lower level of social contributions is due in general to the decrease of social charges paid by employers while the share borne by employees is unchanged. This seems to meet the need of firms to reduce their labour costs. The share attributable to employers went from 42.3 percent in 1990 to 37.9 percent in 1999 (from 11.3 percent to 10.8 percent of GDP).

2.1.3 Long-term forecasts for the pension systems in European Union countries

In order to evaluate the long-term sustainability of pension systems and compare changes in social spending amongst the different countries, table 2.10 shows the trends in the ratio of pension spending to GDP up to 2050

for the 15 EU countries, on the basis of forecasts drawn up by the ECOFIN's Economic Policy Committee.[6]
Said forecasts were made on the basis of consistent scenarios and assumptions agreed by all 15 EU countries and on some converging processes within the EU.
The reliability of such long-term forecasts depends heavily on the underlying hypotheses regarding demographic and macroeconomic variables and it is difficult to attribute a greater degree of certainty to some variables as opposed to others. Thus, the forecasts made by ECOFIN must not be viewed as either the only possible reference point to determine trends in the individual countries or even as the most likely scenario. Moreover, utilising official data regarding the ratio of pension spending to GDP in the various countries can also be misleading.
The usefulness of these forecasts lies above all in the fact that they made it possible to compare the different results of the various countries in terms of the ratio of pension spending to GDP. Indeed, comparisons of different growth levels in different countries are significant in that they reveal the diverse projected trends for the next 50 years for each of the countries.
Table 2.10 and chart 2.2, whose projections are based on specific assumptions regarding demographic and macroeconomic variables (see Box 2), show that Italy belongs to the group of countries in which pension spending is expected to grow at a somewhat slower rate.

Table2.10 - Public pension expenditures projections
(Figures as a % of GDP)

	2000	2010	2020	2030	2040	2050	Peak change	Increase between 2000 and 2050
Belgium	10.0	9.9	11.4	13.3	13.7	13.3	3.7	3.3
Denmark	10.5	12.5	13.8	14.5	14.0	13.3	4.1	2.8
Germany	11.8	11.2	12.6	15.5	16.6	16.9	5.0	5.1
Greece	12.6	12.6	15.4	19.6	23.8	24.8	12.2	12.2
Spain	9.4	8.9	9.9	12.6	16.0	17.3	7.9	7.9
France	12.1	13.1	15.0	16.0	15.8		4.0	3.7
Ireland	4.6	5.0	6.7	7.6	8.3	9.0	4.4	4.4
Italy	13.8	13.9	14.8	15.7	15.7	14.1	2.1	0.3
Luxemburg	7.4	7.5	8.2	9.2	9.5	9.3	2.2	1.9
Holland	7.9	9.1	11.1	13.1	14.1	13.6	6.2	5.7
Austria	14.5	14.9	16.0	18.1	18.3	17.0	4.2	2.5
Portugal	9.8	11.8	13.1	13.6	13.8	13.2	4.1	3.4
Finland	11.3	11.6	12.9	14.9	16.0	15.9	4.7	4.6
Sweden	9.0	9.6	10.7	11.4	11.4	10.7	2.6	1.7
UK	5.5	5.1	4.9	5.2	5.0	4.4	-1.1	-1.1
EU	**10.4**	**10.4**	**11.5**	**13.0**	**13.6**	**13.3**	**3.2**	**2.9**

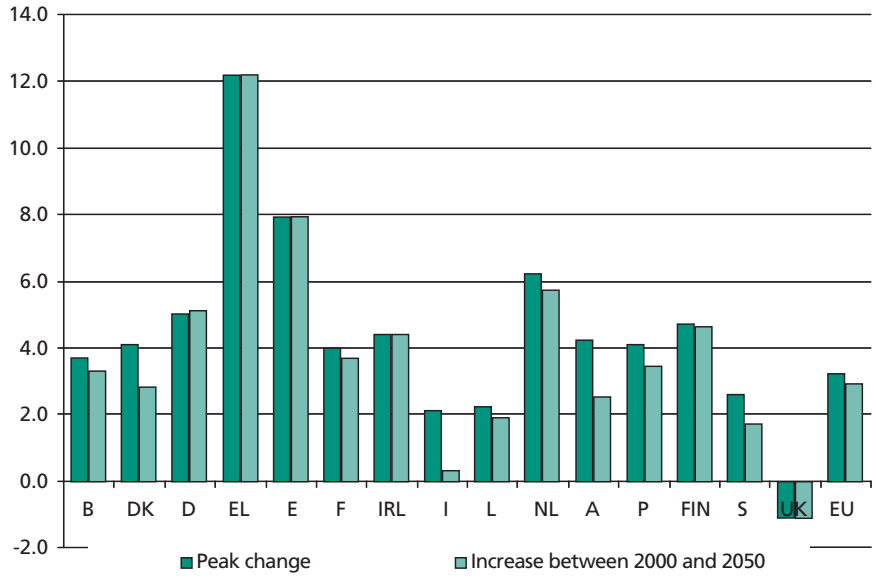
Source: Economic Policy Committee (2001)

Whereas average pension spending in the EU is expected to increase by a maximum of 3.2 points in terms of GDP, in Italy, the corresponding value is 1.2 points.

(6) The results of the forecasts, prepared by a Group of experts (Working Group on Ageing) were published in 2001 in a Report by the Economic Policy Committee.

At the end of the period under consideration, the gap appears even more favourable for Italy. By 2050, the overall average ratio of pension spending to GDP for EU countries is expected to have increased by 2.9 percent compared with today's figure, whilst this same figure is expected to rise by only 0.3 points in Italy, where spending is expected to stabilise.
Given that the demographic forecasts for Italy are amongst the worst, with a marked absolute and relative ageing of the society, such positive outlooks can be attributed to the reforms carried out in the 1990s including the introduction of a contribution-based pension system.

Chart 2.2 - Growth in pension expenditure as a percentage of GDP - 2000-2050
(Percentage values)



Only two other countries, Luxembourg and Sweden, expect to see pension spending fall below the European average.
Greece and Spain are expected to witness the greatest increases, corresponding to 12 and 8 percentage points of GDP, respectively.

Countries with above average forecasts include France and Germany which, at the peak, should report an increase in spending to GDP ranging somewhere between 4 and 5 percentage points.

Box 2 – Demographic and macroeconomic assumptions

The demographic scenario used is that provided by Eurostat (based on 1999) which simulates population trends up to 2050 for the fifteen EU Member States, on the basis of fertility rates, life expectancy and migration flows.
The results can be summed up by the dependency ratio of the elderly, based on the ratio of the population over 65 years of age to the population comprising individuals ranging in age from 15 to 64, which

rises notably in all European countries.
Amongst European countries, Italy belongs to a group of countries which is expected to witness the sharpest rises in this index, jumping from 27 percent in 2000 to 61 percent in 2050, compared with an average European value during the same period which is expected to increases from 24 percent to 49 percent. The overall average absolute increase for European countries is 26 percentage points, compared with 35 percentage points for Italy. In terms of change in percentage, the figure for Europe reports an increase of 100 percent whilst the same figure for Italy stands at 131 percent.
The above is a direct consequence of a decrease in both the working age population and the under fourteen population and the concomitant rise in the number of elderly. This overall European trend is even more marked in Italy.

Dependency ratio of the elderly (1)
(in % terms)

	2000	2050	Absolute change	Change in percent
Italy	27	61	35	131
EU	24	49	26	100

(1) Ratio between those 65 or older and those between the ages of 15-64.

As concerns the macroeconomic scenario, growth in productivity is expected to reach around 1.75 percent for all EU countries starting from 2030. Economic forecasts on trends in productivity and employment result in average real GDP growth for European countries standing at 1.6 percent throughout the entire period under consideration.

In order to better evaluate expected trends, table 2.11 shows the change in pension spending as a ratio of GDP between 2000 and 2050 broken down into four factors. The first reflects the effect of an ageing population (dependency factor); the second regards changes in the number of employed out of the working age population (employment factor); the third element, connected to the number of pension funds, refers to the requirements, the age and years of service needed to retire (eligibility factor); finally, the fourth reports the change in the average pension compared with productivity in order to measure the generosity of the pensions in the different countries (benefit factor).
Table 2.11 reveals some common trends which, it should be noted, have widely varying impacts from one country to another.
In all countries, the process of an ageing population contributes considerably to the increase in the ratio of pension spending to GDP, to the tune of around 6.4 points of GDP, on average, for European countries. In almost all of the countries considered, this effect is offset by a decrease in average pension amounts and, to a lesser extent, by improvements in employment. The latter is due to an expected increase in the number of women who join the workforce, a decrease in the unemployment rate and an increase in actual retirement age.
Against this backdrop, Italy stands out for having both the highest "dependency factor", due to an accelerated ageing of the population, and the lowest "amount factor", due to the growing effects of the method of

Table 2.11 - Impact of main factors on the increase in pension expenditure between 2000 and 2050

(Figures as a % of GDP)

	Depen-dency	Employment	Eligibility	Benefit	Total	Risidual	**Increase between 2000 and 2050**
Belgium	5.2	-0.9	0.9	-2.0	3.3	0.0	3.3
Denmark	4.1	-0.2	0.5	-1.7	2.7	0.1	2.8
Germany	6.2	-0.7	2.0	-2.7	4.8	0.2	5.1
Greece	9.9	-3.6	1.4	4.0	11.7	0.5	12.2
Spain	8.2	-2.4	2.0	-0.3	7.5	0.5	7.9
France	7.7	-0.9	0.7	-3.6	3.9	-0.1	3.7
Ireland	4.5	-0.9	1.4	-0.7	4.3	0.1	4.4
Italy	9.5	-3.1	-1.4	-4.9	0.2	0.0	0.3
Luxembourg							
Holland	5.4	-0.6	0.5	0.2	5.5	0.2	5.7
Austria	10.5	-2.2	-3.0	-2.9	2.4	0.1	2.5
Portugal	6.7	-1.1	-2.4	0.1	3.3	0.1	3.4
Finland	6.6	-0.1	-1.3	-0.1	5.0	-0.3	4.6
Sweden	3.9	-0.5	0.8	-2.6	1.6	0.0	1.7
UK	2.4	0.0	-0.1	-3.4	-1.1	-0.1	-1.1
EU	**6.4**	**-1.1**	**0.6**	**-2.8**	**3.1**	**-0.2**	**2.9**

Source: Economic Policy Committee (2001)

pension calculation. Though to a somewhat lesser extent, Italy also stands out for two other factors. Firstly, compared with other European countries, expected trends in Italy's "employment factor" are more favourable compared with other European countries. Secondly, forecasts also call for improvements in the "requirement" factor due to reforms carried out in the 1990s.

These positive trends will more than compensate for growth in the ratio of pension spending to GDP, and, compared with the situation in 2000, will ultimately stabilise this ratio by 2050.

2.2 Cash transfers and income support schemes for older workers

2.2.1 Impact of cash transfers on social protection spending

The classification criteria for social protection spending in EU Member States raise numerous problems when trying to draw comparisons (box 3). Such difficulties are largely due to the different institutional set-up of the welfare systems in the various countries, which makes any comparison rather complicated. Moreover, there are some uncertainties as to the methodology adopted as it is based on a formal definition of where spending is allocated, rather than on the actual economic use of the different instruments utilised.

Box 3 – Problems in comparing SESPROS data

Data regarding social protection spending in EU countries are collected to form a database called SESPROS (European system of integrated statistics on social protection) managed by Eurostat. As of 1997, these data are compiled in accordance with a new classification system. The revised series are available for all EU countries from 1990 to 1999, with the exception of

Sweden, whose series start from 1992[1]. Notably, those values relating to the last two-year period (1998-1990) may still be subject to correction.
From the point of view of contents, the database covers all functions traditionally attributed to social protection, that is "all measures and steps carried out by public and private authorities to protect families and individuals from a defined set of risks or to meet a defined set of social needs, excluding situations which involve forms of loan or individual contracts." This classification thus takes account of both the financing and the provision of services (cash transfers and benefits in kind which include not only the supply of goods and services but also reimbursements for personal expenditures for the purchase of specific goods and services) and the related administrative costs. At least in line of principle, account is also taken of cash transfers which firms make to their own employees when such issues have nothing to do with remuneration for work (ex. wages during sick leave and maternity leave, occupational pension funds).
As previously stated[2], the data are affected by notable differences in the social protection systems of the different countries. Thus, although the revision has helped to make comparisons more effective, some problems remain, especially with regard to divisions based on spending functions. Specifically, with regard to pension benefits, the values relating to survivor pensions are, in many cases, not distinguishable from old-age pensions. This is also the case with regard to disability benefits as some countries group these together with social security spending after a person has reached retirement age (old-age pension) whilst other countries keep them separate. Similar discrepancies exist with regard to early-retirement pensions. In some cases, these are included in old-age pensions. In other cases, they are included among unemployment expenditure, even if the benefits last until the time the person reaches retirement age[3]. Finally, data relating to unemployment benefits create a series of comparison problems as it is difficult to distinguish between cash transfers provided to the unemployed and other forms of support, as, by way of example, the subsidies paid in Germany to firms in the form of incentives to employ workers having a high risk of unemployment.

[1] The data relating to 1999 have been calculated in accordance with the new methodology of national accounts (ESA95) in all countries, except for Austria, which still adopts the previous system (ESA79).

[2] See paragraph 2.1.1

[3] One example is provided by the Netherlands where, people aged 57 ½ or over, who lose their jobs receive benefits which last up to retirement age , and are exempt from job requirements.

The previous INPDAP Report paid ample attention to these problems. By reprocessing the final data in order to have a more homogeneous comparison, it was possible to verify that the differences in impact on GDP in the four countries considered (France, Germany, Italy, the UK) are actually significantly less than that indicated by the figures provided by Eurostat. Classification by spending functions of the new SESPROS data relating to 1999 give rise to similar interpretation problems.
At first glance, the percentage of pension spending out of the total of social protection spending appears much higher in Italy than in the other countries. As clearly shown below in table 2.12, which reports a breakdown of the four spending functions essentially involving cash transfers expressed as a percentage of GDP, the figure regarding pension spending in Italy stands at 15.6 percent, accounting for 61.7 percent of all social protection spending. In

contrast, comparable European averages stand at 12.1 percent and at 44 percent, respectively.

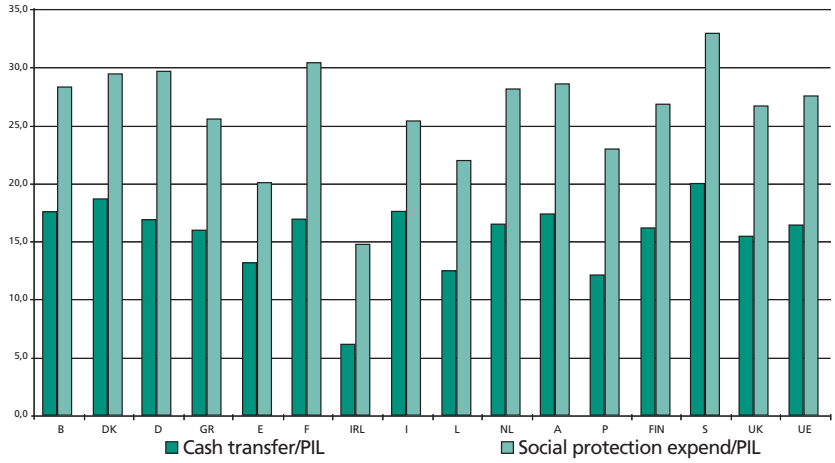
Table 2.12 – Cash trasfers in social protection expenditure (as a % of Gdp 1999)

	B	DK	D	GR	E	F	IRL	I	L	NL	A	P	FIN	S	UK	UE
a) Disability	2.4	3.5	2.2	1.6	1.5	1.7	0.7	1.5	3	3.1	2.4	2.4	3.7	3.8	2.6	2.2
b) Pensions	11.3	10.9	12	12.5	9	12.7	3.5	15.6	8.8	10.3	13.1	8.7	9.1	12.8	11.7	12.1
c) Unemployment	3.2	3.2	2.1	1.4	2.5	2.1	1.6	0.5	0.5	1.6	1.5	0.7	2.9	2.6	0.8	1.7
d) Social exclusion	0.6	1	0.6	0.5	0.1	0.4	0.3	0	0.2	1.5	0.3	0.3	0.5	0.8	0.2	0.4
e) Cash transfer	17.5	18.6	16.9	16	13.1	16.9	6.1	17.6	12.5	16.5	17.3	12.1	16.2	20	15.3	16.4
f) Total welfare expenditures	28.2	29.4	29.6	25.5	20	30.3	14.7	25.3	21.9	28.1	28.6	22.9	26.7	32.9	26.6	27.5
(a)/(f) %	8.5	11.9	7.4	6.3	7.5	5.6	4.8	5.9	13.7	11	8.4	10.5	13.9	11.6	9.8	8
(b)/(f) %	40.1	37.1	40.5	49	45	41.9	23.8	61.7	40.2	36.7	45.8	38	34.1	38.9	44	44
(c)/(f) %	11.3	10.9	7.1	5.5	12.5	6.9	10.9	2	2.3	5.7	5.2	3.1	10.9	7.9	3	6.2
(d)/(f) %	2.1	3.4	2	2	0.5	1.3	2	0	0.9	5.3	1	1.3	1.9	2.4	0.8	1.5
(e)/(f) %	62.1	63.3	57.1	62.7	65.5	55.8	41.5	69.6	57.1	58.7	60.5	52.8	60.7	60.8	57.5	59.6

Source: Eurostat (2001)

However, consideration must be given to other important aspects of the spending structure, and, more specifically, to the role played by functions carried out primarily via "cash transfers".[7]
From this perspective, chart 2.3 shows quite clearly that cash transfers and overall social protection spending are closely linked.[8] Thus, the percentage of GDP which countries allocate to social protection spending is largely conditioned by the volume of cash transfers.
However, if consideration is given to key spending aggregates, then the situation become more complex. On the one hand, the ratio of cash transfers to overall spending differs noticeably (chart 2.4). On the other hand, in each country, the weight of transfers is determined by different spending components.[9]

Chart 2.3 - Structure of social protection expenditures as a percentage of GDP in EU countries (Eurostat - 1999)



(7) Here a "broad" definition of cash transfer is adopted in that it includes pensions, disability benefits, unemploymlent benefits and social inclusion. According to the methodology of classification adopted by Eurostat, some of these items include benefits in kind which are difficult to quantify, even if the monetary benefits is the main component of these four spending functions.
(8) The value of the R index of linear correlation totals 0.94.
(9) For more complete understanding, it should also be noted that there is a very weak positive correlation (R=0.22) between social protection spending expressed as a percentage of GDP and the share of cash transfers spending.

Chart 2.4 - Share of cash transfers as a percentage of total social protection expenditures in the EU countries

More specifically, of the eight countries in which the amount of cash transfers exceeds 60 percent of all social protection expenditure, three are in the Mediterranean area (Greece, Italy and Spain), three are Scandinavian (Denmark, Finland, Sweden) and two are located in Central Europe (Austria, Belgium). Thus, it is not possible to explain this spending pattern by referring to traditional geographical splits in welfare models as, except for Anglo-Saxon countries, all areas of Europe are included in the above list. However, it should be noted that, whilst there does not seem to be any link between the weight of the different spending functions and overall spending for social protection, cash transfers as a part of spending refer to apparently very different structures. As a consequence of each country's different institutional framework, different categories in different countries seem to take on more weight. This is true of disability benefits in Scandinavian countries, pensions in Italy and Greece and unemployment benefits in Spain, Belgium and Denmark.
Finally, it should be noted that some countries report a very concentrated expenditure on a single function, whilst others seem to distribute monetary benefits more evenly and to utilise a greater number of spending functions. Table 2.13 below shows the correlation between the amount reserved to the different spending functions and the ratio between social protection spending and GDP.

Table 2.13 - Correlation between expenditure functions and expenditure/Gdp

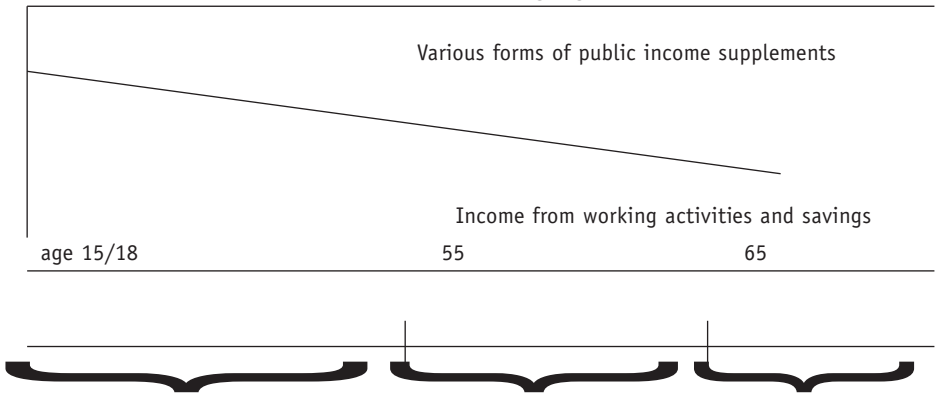
Expenditure Function	R-correl
Disability	0.26
Pensions	0.26
Unemployment	-0.08
Social exclusion	0.28
Different *welfare expenditure*	0.77

2.2.2 Forms of income support along the life cycle

One of the reasons for which cash transfers in social protection systems carry considerable weight, and their compositions vary on the basis of the functions involved, is the model adopted in different countries to face

problems of income support along people's life cycle. Income supports in presence of events that prevent an individual from earning his livelihood directly from a market activity is one of the main objectives of welfare systems.
From this perspective, it is possible to "stylise" the composition of individual incomes on the basis of the importance of main revenue sources, during the various stages of an individual's life cycle.
Moreover, people are likely to be inclined to maintain relatively consistent spending and consumption habits throughout their lives.
For this reason, they protect themselves from possible interruptions in income flow and from expected reductions in income during old age by accumulating financial assets or social security credits as well as contributing to insurance schemes during their working career.
There are different factors (social risks) which can interrupt revenue flows and impede obtainment of desired spending capacity: compensating for the most significant reductions is one of the main objectives of a welfare system.
On the basis of these hypotheses, it is reasonable to presume that up to 50-55 years of age, or throughout the time a person is normally expected to have the characteristics needed to fit into the labour force, there is a tendency to rely on one's ability to earn a living via a market activity, either as a company employee or as a self-employed worker. After normal retirement age, usually around 65, with the exception of specific situations in which a person has built up exceptional personal savings, retirement benefits are key to maintaining spending capacity.
Thus, although it is relatively easy to divide a person's income earning capacity into two clearly separate phases, working life and old age, there is a period in a person's working life that is less clearly defined. These are the

Chart 2.5 - Composition of income throughout lifetime, starting from the minimum working age



Primary sources:
-Income available from working activities and personal or family savings
-Share of income available as a member of a family

Secondary source:
-Social-protection supports related to the risk of interruption of work activities (unemployment, maternity, sickness, disability, invalidity, ecc.)

Composite sources:
-Income available from working activities and personal or family saving
-Share of income available as a member of family
- Income from subsidised working activity and other income supports related to *welfare* schemes
-Different early retirement schemes

Primary resources:
-Public pensions
-Pensions from occupational funds
-Income from personal or family savings
Secondary sources:
-Additional income from minor working activities (*part-time* o or other occasional activities)

working years right before retirement (after age fifty), at times lasting over ten years, when the labour market is not very receptive and the possibility of maintaining one's primary source of income is strongly linked to the ability of maintaining one's existing job. If a person loses his job or part of his earning capacity after a certain age, it is extremely difficult to re-enter the labour force and the individual often falls into the mechanisms of long-term unemployment.[10]

Albeit in various forms, this situation is universally present in all European States. Although "active" instruments designed to reinsert an individual into the labour market are utilised, given the overall difficulties involved in achieving satisfactory results, almost all Member States rely on passive measures to supplement the individual's income. The joint, but not necessarily co-ordinated use of such schemes is reflected in the various types of monetary instruments wielded by welfare systems. The result is that such a person's income comprises both autonomous and public sector sources. In order to analysis the effects of the life cycle (summarised in graph 2.5) on social protection expenditure, it is necessary to better understand why more people over 50 are leaving the labour force and to have access to a detailed framework of the different forms of income support available during this part of the cycle. Unfortunately, such analyses, backed by quantitative data regarding both spending and the number and characteristics of the beneficiaries, are not currently available. If they were, such information would allow for a much clearer view of the social protection expenditure structure and the correction of many incoherent elements which, as stated, greatly limit the significance of the Eurostat statistics and hinder an evaluation of the real level of efficiency of a significant amount of public spending.

2.2.3 The over-50s labour market and early exit from the workforce

The problem of early exit from the labour force

For some time now, early exit from the labour force has been a recurring topic in analysing the future of social protection systems. The reasons are well known and can be summed up in two opposing trends: on the one hand, the longer average life span, and, on the other, the recent market tendency to promote early retirement. With regard to the latter, the difficulties of European labour markets to increase the rate of employment of those over fifty and the need to keep the public deficit within the limits imposed by the single currency agreement have ensured that legislation regarding retirement age has become a central topic of debate regarding economic and social policies.

In recent years, while many social security reforms in Europe have aimed to raise retirement age, other contrasting steps have been taken to handle the employment problems of older workers.

This underlying contradiction in policy most clearly indicates that the topic of retirement is not merely a problem for social security legislation. Rather, it is a key issue and account must be taken of both public spending objectives and social needs. In other words, fixing retirement age has contrasting effects on the short-term objective to provide a "soft" solution to a surplus

(10) This important topic of relations with the labour market during the period between one's career job and the moment of actual retirement was dealt with in a systematic way for the first time in a work by Doeringer, P.B. (1990), Bridges to Retirement, Older Workers in a Changing Labour Market, Ithaca, N.Y. ILR Press.

workforce and on the medium- and long-term objectives to contain public deficit and sustain social security systems.
Until now, the efforts put forward by all countries to manage this trade-off have shown the typical shortcoming of decisions of a political nature. The measures adopted have changed over time. They are not homogeneous and are decidedly "national" with regard to the instruments selected.
Obviously, individual behaviours have contributed to this variability. However, such behaviours are largely conditioned by institutional aspects, such as career mechanisms and the incentive structure created by public and private pension calculation systems. However, generally speaking, the most important empirical research regarding reasons for retirement has shown the great importance of factors directly linked to the labour market situation. Specifically, these relate to the growing problems faced by workers between the ages of 50-55 and 65, a period of time corresponding to around 40 percent of an average career and a third of one's working life.[11]
The difficulties faced by older workers wishing to improve their job prospects remains a topic of great importance and has been spotlighted in the European Commission's most recent papers regarding a "European strategy for employment". In such papers, the most discussed potential factor of exclusion is the reorganisation of production systems based on the diffusion of information and communication technologies. In short, the ever widening digital divide can cause older workers, especially those with medium-to-low-level skills, to be progressively detached from the central and more stable employment structure.[12]

Activity and unemployment rates for workers over the age of 50
A quick glance at European activity rates, as provided by Eurostat Labour Force Survey publications, shows that, despite the efforts of European governments to extend the working life, the level of activity rates for people over fifty remains decidedly low. Moreover, even the actual age of retirement remains below the legally established age.

Box 4 – Estimate of actual retirement age

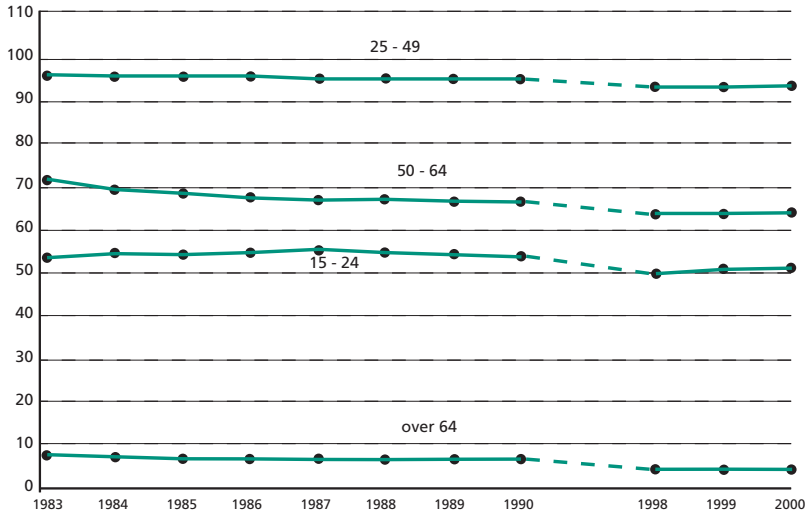
Directly determining the actual age of retirement has proven quite complicated, given that the variety of existing schemes in different countries fails to provide a common definition of "retired". Additionally, the lack of consistency and the little aggregation of statistical data at international level do not allow for reliable estimates. For these reasons, in order to estimate actual retirement age, most studies avail themselves of a proxy utilising a method developed by the International Labour Office (see: Latulippe D., Effective retirement age and duration of retirement in the industrial countries between 1950 and 1990, Discussion Paper 2, Issues in Social Protection, ILO Geneva 1996). Based on ILO surveys on the labour force, this method calculates the average age of retirement based on differences in the activity rates for two successive groups (usually five-year

(11) For example, a series of works have been published by OECD (1998). These include: Maintaining Prosperity in an Ageing Society, the OECD study on the policy implication of ageing.
(12) On this point and for a broader treatment of significant factor concerning participation in the labour force, reference should be made to the following: European Community Committees, Increasing activity rates activity and extending the active life, Com (2002) 9, Brussels 24 January 2002.

age classes) in a given year. However, even this type of estimate has its limits as participation is not directly linked to the right to a pension or to other allowances or emoluments. Thus, in addition to not saying anything about the receipt of a pension or other kinds of benefit, it also contains a percentage of hidden unemployment. Additionally, given that ILO defines a working person as someone who carries out at least one hour a week of paid work either as an employee or a self-employed worker, part-time working pensioners are also included in the labour force.

With regard to male workers in the labour force (graphic 2.6), one notes that all age groups during the two decades under consideration posted a downward trend in the average activity rates of the ten European countries under examination.[13]
For the youngest, this reduction should not be seen in a negative light, as it depends on an increase in the years of schooling. Importantly, the same trend is also true of women.
In contrast, the drop in older age groups (from around 72 percent to 64 percent) is worrying as it is higher than that of central age groups despite the noticeably lower starting figures.

Chart 2.6 - EU 10: Male activity rates by age group (1983-2000)

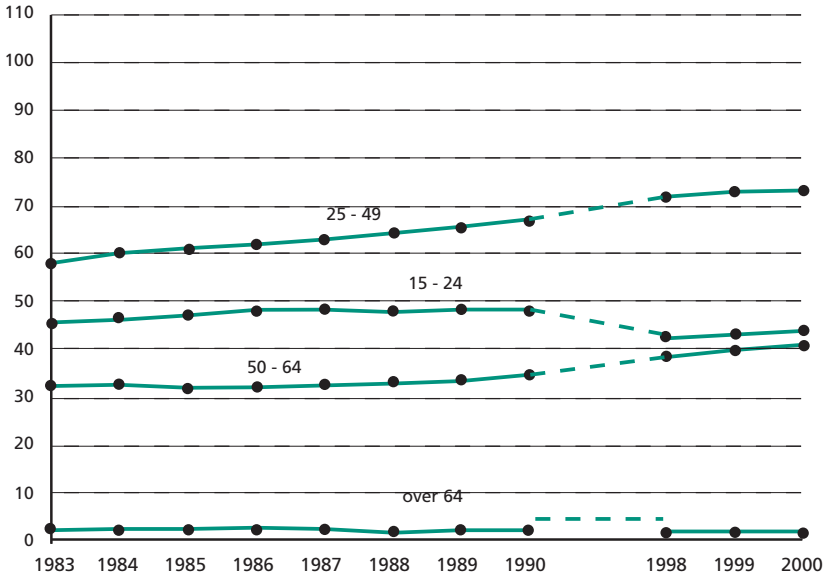


The trend in early exit from the labour market appears to post a slowdown only during the last three years under consideration. Even if the brevity of the period together with ongoing changes in the regulatory, social security and labour market framework do not allow for evaluations on the future outlook. The female component of the labour force reports an entirely different situation. The overall increase in women in the labour market, especially

(13) In order to be homogeneous for the entire period under consideration, the comparison involves the original 10 EU countries, excluding Austria, Finland, Portugal, Spain and Sweden as these countries became members after 1983. Furthermore, the average activity rates in the years in which a comparison between the 10 EU and 15 EU is possible, that is with all current Member States, the results are very similar.

noticeable and still underway for women between the ages of 25 and 49, also seems to comprise women between the ages of 50 and 65. In truth, this trend is not surprising. When it is possible to establish a more structured career during the first part of one's working life – the increase in the number of working women has helped to balance their career prospects with respect to those of men – one is more motivated to continue working, at least up to retirement age.

Chart 2.7 - EU 10: Female activity rates 1983-2000



As stated earlier, it is not easy to determine the importance of different factors which, during the last part of the period considered, seemed to have slowed the drop in participation in the workplace of men over fifty. Presumably, the measures implemented to raise retirement age have played a role.[14] Indeed, an increase in retirement age acts as a hindrance to the participation of older people in the workforce. If this hindrance is not accompanied by measures which make it easier to maintain one's job or to find a new job, the result can be a greater gap between activity rates and employment rates, with a consequent increase in unemployment.

Box 5 – Activity and employment rates

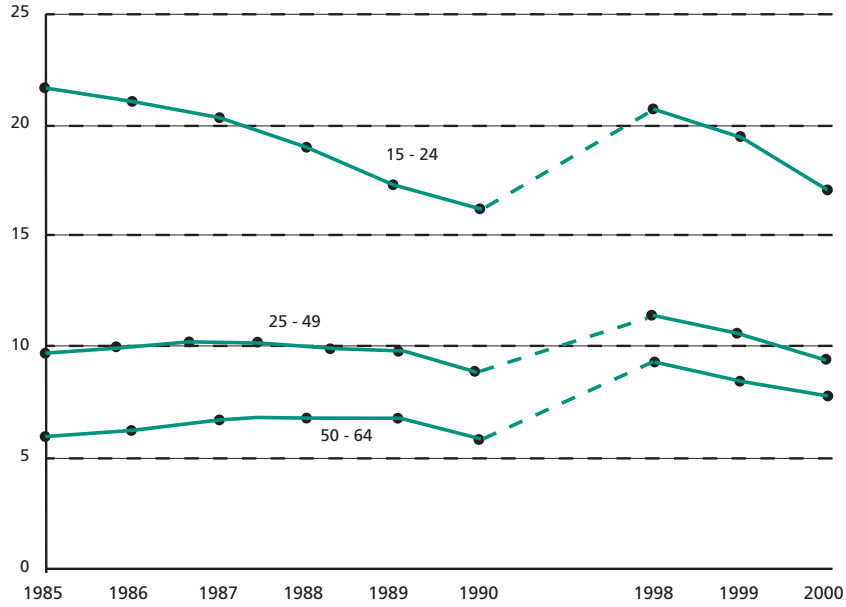
The relationship between activity and unemployment rates can be defined as follows:
P = population of working age
E = employed

(14) With regard to Italy, in the 2001 "National action plan for employment", draw up by the Ministry of Labour, the paragraph regarding "Active ageing policies" indicates that between 1995 and 2001, the effective age of retirement for both old-age and seniority pensions, for employees of both the State and private companies, rose an average of around 2 years. One positive change in the trend of age of withdrawal from the labour force is provided by a recent OECD survey relative to 9 countries, including six EU countries, See OECD (2001), Ageing and Income: Financial Resources and Retirement in 9 OECD countries, chapter 5.

U = unemployed
By definition, the labour force WF = E +U , whilst AR = WF/P is the activity rate; ER= E/P is the employment rate and UR = U/WF is the unemployment rate. Hence:
AR = E/P + U/P or AR = ER + UR . AR and thus AR = ER/(1-UR)

From this perspective, the average trend in unemployment rates of the ten EU countries considered seems to corroborate the above hypothesis. During the last three years, thanks to more stable growth, unemployment rates by type and age class have all decreased, in contrast to the negative trend posted during the first part of the 1990s.
Nevertheless, the rates of unemployment of workers over 50 years of age have, in relative terms, increased and, for men, even overtaken those of central ages.
Also with regard to women, the improved trend in unemployment rates during the last three years reveals a closing divide between workers of an intermediate age and older workers. For both women and men, young workers (those under 25) – due to the length of time required to find a first job – report the greatest rise in unemployment levels.

Chart 2.8 - EU 10: unemployment rates by age group (women)



2.2.4 Income support programmes before legal retirement age in force in European countries: early retirement schemes in Europe

As stated earlier, since the 1970s, an increasing number of people over 50 have stopped working, often definitively, before normal retirement age. Despite a slowdown in this phenomenon over the last three years, this trend has been favoured not only by an increase in eligibility criteria and the generosity of pre-existing social protection institutions, but also by the mushrooming of schemes, public and private, designed to integrate the income of workers who leave the labour force without having met the

requirements to access a normal pension. In other words, these schemes, intended to support income during the period ranging from the exit from the labour force and legal retirement age, have contributed to creating different forms of early retirement.
Although not strictly the same by definition, but often serving the same purpose, are pension schemes with eligibility criteria which leave age out of consideration, either in whole or in part. As is true of the Italian seniority pension, these schemes offer workers with more continuous careers the possibility to access a pension much earlier with respect to an old-age pension.[15]
As previously noted, with regard to income composition during an individual's life cycle, the considerable number of income-support schemes for the pre-retirement age class, often seen as a response to an emergency situation, makes it rather difficult to identify all-comprehensive models. At any rate, it is still useful to try to give an overall breakdown of the cash transfer instruments present in different national welfare systems. In order to get a better understanding of the phenomenon, a classification based on three basic criteria can be used: 1) the rules of operations and conditions of eligibility; 2) the source of the financial resources; 3) the degree of supplementation compared with income.

- By looking at the rules of operation and the conditions of eligibility it is possible to distinguish between "optional" schemes and "conditional" schemes. The first terms refers to those schemes which allow people to retire based on their own personal preferences. Thus, at least theoretically speaking, these schemes give individuals the freedom to choose when they want to retire. In reality, pressure from employers may be present.
  In contrast, in "conditional" schemes, the right to benefits is subject to the recognition of a status (for example, the status of being unemployed, invalid or disabled) which must be ascertained by a third party, normally a public authority.
- With respect to financial sources, a distinction can be made between schemes based on public transfers and those utilising transfers from private funds. The latter can be further classified into collective schemes, such as supplementary pensions (complementary and occupational) which usually cover an entire sector and can be either voluntary or mandatory, and individual schemes, that is, individual pension funds or life insurance.
- With regard to the services provided, we can distinguish between schemes which allow for a total or partial supplementation of income and which can require the total or partial termination of work activities.

The schemes are rarely uniform in nature. Thus, classification has been based on the dominant characteristic. The "optional" schemes are generally early pension plans allowing for a departure from the legal age of retirement and activated on the basis of an individual's free choice, although , in some cases, permission from one's employer is required.

(15) Those schemes, which are present in all countries and allow workers involved in so-called "arduous work" to retire at a younger age compared with the regular one, are not discussed.

Usually, they allow for retirement five years earlier than normally permitted for an old-age pension and are available in various countries including Spain, Finland, Austria[16], Norway, Sweden[17], Belgium and Denmark.
The methods of calculating pensions can include an actuarial penalty (Great Britain, Spain, Finland) which is normally permanent and ranges from an annual rate of 4.8 percent in Finland to an annual rate of 8 percent in Spain. On the other hand, some schemes allow for early retirement by altering the rules of calculation applied to the general system. However, these require a certain number of years of enrolment. The minimum is 20 years, requested in Austria and Denmark. In other countries, such as France and Spain, it is possible to retire early as long as the individual in question is replaced by another worker.
Optional schemes can also be broken down to distinguish between those based on private financing (Great Britain, The Netherlands, Norway) and those based on public financing (Sweden, Finland, Span, Austria, Denmark, France, Italy and Belgium). Those with private financing are usually based on collective agreements (Great Britain, The Netherlands) and at times receive contributions from the State (Norway).
In contrast, conditional schemes require that individuals be recognised as disabled or unemployed. At times, as in the case of unemployment, they are activated by the employer, based on an agreement with the state.

Schemes linked to disability

The disability scheme is widely used[18] as, not being linked to age, it is a more flexible exit route and generally offers higher coverage rates. The disabled requirement has been transformed from a purely medical status to a relative socio-economic prerequisite.
Indeed, labour market conditions are increasingly important in determining the supply of the benefit, with focus on what is known as the "employability" factor.
Apart from Great Britain and Ireland, which grant access to disability benefits only to individuals who are disabled for any type of work (even if, on the basis of collective agreements, health reasons allow access to occupational pensions before the official age), the other countries grant such benefits for impairment ratings starting from minimum values, such as 15 percent in the Netherlands and 25 percent in Sweden. In most cases, an impairment rating of at least 50 percent is required (Denmark, Norway, Greece, Austria). Some countries differentiate the benefits into two (Germany) or three (Spain, Finland) parts, subordinating the first to strictly medical criteria and the second or third to socio-economic criteria.
In contrast, conditional schemes require that individuals be recognised as disabled or unemployed.
Disability, normally subject to medical certification, can be understood in an absolute sense, such as an incapacity to carry out any type of work (Spain, France, Ireland, Austria, the United Kingdom) or in a relative sense, such as the inability to carry out usual work (Belgium, Greece, The

(16) Until 30.09.2000.
(17) Until 1998.
(18) In the Netherlands, it is the first exit channel for elderly workers. In 1998, around one third of the male population between the ages of 55 and 64 received invalid benefits. Netherlands Bureau for Economic Policy Analysis (2000), *Ageing in the Netherlands*, The Hague.

Netherlands). Some countries also require future controls (Austria, Greece). Sometimes (Belgium, Denmark, Germany, France, Norway, Finland, Sweden) the disability pension is replaced with an old-age pension as soon as the individual reaches the legal retirement age.

Schemes linked to unemployment

Even if unemployment allowances are not meant to act as early retirement benefits, there are various schemes for long-term unemployment which can be accessed by a worker up to normal or early retirement age. Thus, in actual fact, they serve just that purpose. Often, in cases of unemployment, ordinary insurance schemes have special rules for unemployed, older workers. Specifically, they allow benefits to be received for a longer period of time and call for lower job search commitments. Other schemes provide specific benefits for the unemployed over fifty years of age.

Moreover, the status of unemployed can lower the legal retirement age in the general system when it does not grant the right to a so-called unemployment pension, to be substituted by an ordinary pension as soon as the person reaches legal retirement age.

Normally, the replacement rates are not very high, even if, at times (the Netherlands), collective contracts raise the amount of the benefit.

In general, duration is correlated to age. In Denmark, Finland, France, the Netherlands and Spain unemployment benefits for the older workers (between 50 and 59) are extended, usually until early retirement age. In Finland, starting from the age of 60, it is possible to take advantage of an unemployment pension which is eventually replaced by the ordinary pension.

Finally, in Denmark, France and the United Kingdom, older unemployed individuals are not obliged to actively seek work and can even refuse possible offers.

Schemes of partial retirement

Early, partial pension schemes came into being in the 1980s, although most European countries did not introduce and render them operative until the end of the 1990s. Primarily meant to act as an alternative to early retirement schemes and designed to prolong work activity, at times, they are used as a substitute for unemployment benefits. Progressive retirement schemes are usually subject to two requirements: reduction of actual working hours and income supplementation via a partial pension or another type of support, such as unemployment benefits or income supplement. Workers who are able to take advantage of such opportunities are usually just a few years away from legal retirement age, normally less than five (six in Austria). It is common practice to set minimum contributions. At times, beneficiaries are required to have given a certain number of years of service to the company where they are employed at the time of the request. The reduction in working hours varies greatly and generally ranges between 25 percent and 75 percent of the normal timetable. Only Germany and Belgium have schemes requiring a reduction of 50 percent.

Lately, numerous partial retirement schemes have been developed with measures to support employment. Schemes have been introduced in Belgium, Spain, Italy and France which oblige the employer to replace the

worker. This obligation was eliminated in Austria in 2000. In Germany it is optional, although in the case of replacement, the employer receives subsidies.
Table 2.14 provides a summary of the different income supplements programmes designed for older workers in EU countries. As can be seen, many countries utilise more than one instrument to encourage older workers who have not yet reached retirement age to exit the labour market.

Table 2.14 - Schemes lowering retirement age in EU countries

Country	Schemes
Belgium	ER; PP
Denmark	ER; DP; UB; PP
Germany	ER; DP; PP
Greece	ER; DP; UB
Spain	ER; DP; UB; PP
France	ER; UB; PP
Ireland	UB
Italy	ER; UB; PP
Netherlands	ER; DP; UB; PP
Norwey	ER; DP; UB; PP
Austria	ER; DP; UB; PP
Portugal	ER
Finland	ER; DP; UB; PP
Sweden	ER; DP; UB; PP
UK	ER

Legenda: ER = dedicated early retirement schemes
DP = disability pensions granted on the basis of socio-economic criteria and/or with a level of inability to work below 66,66%
UB = special unemployment benefits older unemployed workers
PP = partial pensions

The appendix provides a description of the main institutions existing in countries belonging to the European Union.

2.2.5 Sources of income of households with elderly workers

Currently available statistics regarding income composition are not suited to age-based comparisons either amongst countries or within a single country. There are some exceptions relating to specific, national research, such as in the case of the Netherlands, which will be reviewed later on given its special pertinence to our discussion. Otherwise, there are no specific surveys devoted to the condition of people prior to retirement age or to their families. Thus, we must avail ourselves of indirect information in order to get an idea, albeit incomplete, of the situation.
Regarding the question of income and, more generally, of the well-being of the elderly, a significant amount of information is contained in a recent OECD report focusing on nine countries: six European countries (Finland, Germany, Italy, the Netherlands, Sweden and the United Kingdom) as well as Canada, Japan and the United States.[19]
The report shows that in most countries, around $^{3}/_{4}$ of the population close

(19) OECD (2001) Ageing and Income, Financial Resources and Retirement in 9 OECD countries, Paris. This report is the first to provide a comparison between the material well-being of older people, spotlighting how their standard of life is influenced by public policy and specifically by cash transfers. Moreover, the data show that the incomes of people near retirement age are much more composite than normally assumed in analyses regarding the effects of pubblic policies.

to retirement age (between the ages of 60-64) live inside a household with other people, usually numbering one or two, as in many cases, the children have already left home.[20]

With regard to income composition, different combinations and various forms of income are considered, such as salaries and wages, pension, social transfers and private income. Within households, a distinction must also made between older people who still work and those who have stopped working altogether. The category of older men who work can be further broken down as follows:

- Workers without a pension. Their number generally tends to decrease after the age of 50. The biggest downturn occurs after the age bracket 50-54;
- Retirees who continue to work after the age of 65. Japan is the country with the largest number of males who work and, at the same time, receive a pension. But significant numbers are also reported in the US, Sweden and Canada;
- Retirees who work before the age of 65. This group is very large in Japan and in Sweden. There is also a large number of men who, before the age of 60, work and receive a pension also in the United States, the United Kingdom and Canada.

In contrast, the category of older men who do not work can be further broken down as follows:

- Retirees who do not work after the age of 65. These represent the largest group in the population comprising men over 65 years of age;
- Retirees between the ages of 60 and 64 who do not work.
  There is a vast number of men between the ages of 60 and 65 who have stopped working and are waiting to receive a pension. In some countries, they can receive disability benefits. In Germany, Finland and the Netherlands disability pensions form a very important part of the countries' social protection systems. In Canada, the US and the UK, there are private companies which allow their insured individuals to take part in partial pension programmes before reaching legal retirement age;
- Retirees under the age of 60 who do not work. Especially in Italy, where it is possible to obtain a seniority pension, the number of men who are not yet 60 and have already withdrawn from the labour market is rather high.
  Thanks to the early retirement granted to unemployed elderly workers, Finland also has many individuals who fall within this category. Other countries have many private pension schemes for those who stop working before legal retirement age.
- Non-workers who receive unemployment benefits. Around half of the men who do not work and who do not receive a pension belong to the category of those who receive unemployment benefits. The number is relatively high in the Netherlands, where such benefits are given to individuals starting from the age of 57

(20) Italy is an exception as adult children often continue to live with their parents. It should be noted that the report attributes this situation to the high unemployment rates for young people and to the absence of other social benefits apart from pensions.

$^{1}/_{2}$ up to the age of 65, the legal retirement age. On the other hand, Finland grants unemployment benefits which can be transformed into an unemployment pension for those over 50. Some of these individuals re-enter the workforce, but for many, such benefits provide a sort of early-retirement pension.

- Finally, there is a large number of people who do not work and who do not receive either a pension or unemployment benefits. Amongst the benefits given to members of this category until retirement age are disability allowances. In countries such as Canada, Japan, the Netherlands and the United States sources of private income, such as property, are very important for men between the ages of 55 and 59.

In Canada, Germany, the UK, Japan and the US, those who benefit from early retirement programmes are less well off than those who continue to work. In contrast, in Italy, Finland and Sweden, given the possible ways to access a pension before legal retirement age, the income levels for these groups are not lower than those who leave the labour market later on in life.

In the best economic circumstances, individuals over the age of 65 continue to work, even though they already receive a pension.

In many countries, after withdrawal from the labour market, total income availability amongst the elderly increases thanks to social transfers issued by the welfare state, the reduction of direct taxes and to private income. However, as can be seen in many countries, the effect of income redistribution effected by cash transfers is the exact opposite of that produced by taxation, in that they reflect the nature of earnings during an individual's working career.

Another interesting series of indications is provided by an ECHP report[21], even if it does not provide specific information based on groups close to retirement age, but rather for entire families. This publication reports the role of various components comprising total available income. They include:

a) income from work (wages, salaries and self-employment income)
b) private income (from assets such as property)
c) social security transfers (such as old age and survivor pensions)
d) other types of social transfers, such as unemployment benefits, disability benefits and sickness allowances, social assistance, family support, those related to education and to housing as well as other benefits.

The countries where the ratio of social transfers to GDP is greatest are Sweden and Denmark, followed by Italy, Belgium and Austria, followed, in turn, by Germany, France, The Netherlands, Finland and the UK, reporting slightly lower figures. Portugal, Greece and Luxembourg are next on the list

(21) European Community Household Panel (1999), Selected Indicators from the 1995 Wave, European Commission – Eurostat, Luxembourg. The information provided by this source, based on, surveys beginning in 1991, is the most organised system of statistical data collection on the social situation in Europe, including aspects such as cash transfers relating to welfare, work, housing, health, family, poverty and other indicators on the conditions of life in Europe. The survey is long-term and uses a panel method, making it possible to interview and follow the same families and individuals for a certain number of consecutive years.

whilst Ireland, with a much lower ratio compared with the other countries, is last on the list. All of the welfare systems, with the partial exception of Denmark, sustain the income of individuals mostly via old-age and survivor pensions, rather than other types of transfers (unemployment or disability benefits, etc.).

Amongst the types of social transfers used, Denmark and the Netherlands favour unemployment benefits, Belgium, Luxembourg and Austria favour family benefits, the Netherlands prefers disability and sickness benefits and the remaining countries use, more or less equally, all of the various types of above benefits. The only exceptions are Spain, Greece, and Italy which do not utilise any type of allowance linked to family benefits. Benefits relating to housing and education and other types of social assistance are minimal, if not absent, in all of the countries analysed.

A breakdown of the situation on a country by country basis is provided below.

- **Belgium**: 52 percent of all families live primarily on wages and salaries, whilst 45 percent depend primarily on social transfers. Those families whose primary source of income is represented by social benefits receive, in order of importance, old-age or survivor pensions, unemployment benefits, disability or sickness benefits, followed by other types. However, almost all families benefit from wages and salaries combined with some type of social benefit. Only 8 per cent live exclusively on wages and salaries and only 24 per cent live exclusively on social transfers. In the latter group, 77 per cent receive old-age or survivor pensions, 9 per cent receive unemployment benefits, 9 per cent receive disability or sickness benefits and the remaining 4 per cent receive other types of transfers.
- **Denmark**: 60 per cent of all families live primarily on wages and salaries, 2 per cent on private income and the remaining 38 per cent live primarily on social transfers. Of these, 59 percent receive old-age or survivor pensions, 13 percent unemployment benefits, 13 percent disability or sickness benefits and the remaining 15 percent other types of benefits. Only 9 per cent live exclusively on wages and salaries and only 13 per cent live exclusively on social transfers. This means that the vast majority of families live on both wages and salaries and social benefits. In those families where the only source of income is represented by social benefits, 59 percent live on old-age or survivor pensions, 12 percent on unemployment benefits, 17 percent on disability or sickness benefits and the remaining 12 percent on other types of benefits.
- **Germany**: 60 percent of families live primarily on their own wages and salaries, 3 percent on private income and 37 percent on social transfers. Amongst those families which depend primarily on social benefits, 82 percent receive old-age or survivor pensions, 9 percent receive unemployment benefits, 4 percent receive disability or sickness benefits and 6 percent receive other types of benefits. In households where the only source of income is represented by social transfers (19 percent) 85 percent live on an old-age or survivor pensions, 6 percent on unemployment benefits, 3 percent on disability or sickness benefits and 6 percent on other

types of benefits. Only 15 percent live exclusively on wages and salaries and 1 percent on private income. These figures confirm the important role that the welfare state plays in household income in Germany.

- **Greece**: 59 percent of households live primarily on wages and salaries, 5 percent on private income and 36 percent on social transfers. In families depending mostly on social benefits, 95 percent receive old-age or survivor pensions, 3 percent receive disability or sickness benefits and 1 percent receive other types of benefits. Notably, there are no unemployment benefits. Available figures confirm the important role that the welfare state plays in household income also in Greece. Indeed, only 29 percent of families live solely on wages and salaries and 2 percent on private income. The remaining families also depend on social benefits. A total of 22 percent of all families live solely on social transfers. Amongst these, 96 percent receive old-age or survivor pensions, 3 percent receive disability or sickness benefits and 1 percent receive other benefits.
- **Spain**: 59 percent of families live primarily on wages and salaries, 2 percent on private income and 39 percent on social transfers. Amongst the last group, 76 percent receive old-age or survivor pensions, 9 percent receive unemployment benefits, 13 percent receive disability or sickness benefits and 1 percent receive other forms of social benefits.
  Only 30 percent of all families have a single source of income, of which 15 percent is wages and salaries, 1 percent is private income and the remaining 15 percent derives from social transfers. Amongst those families living exclusively on social benefits, 79 percent depend on old-age or survivor pensions, 6 percent on unemployment benefits, 14 percent on disability or sickness benefits and 1 percent on other types of benefits.
- **France**: For this country, only data relating to families having a single source of income are known and this category represents only 11 percent of all households. Again, this single figure illustrates the importance of the welfare state in France. Specifically, of this group, 5 percent live on wages and salaries alone and 6 percent live exclusively on social transfers, whilst no one lives solely on private income. Amongst those families living exclusively on social benefits, 75 percent receive old-age or survivor pensions, 4 percent receive unemployment benefits, 7 percent receive disability or sickness benefits and the remaining 14 percent receive some other form of social transfer
- **Ireland**: In this country, 60 percent of all families live above all on wages and salaries, 1 percent on private income and 39 percent on income coming from the welfare state. A breakdown of this last category shows that 62 percent receive old age or survivor pensions, 23 percent receive unemployment benefits, 7 percent receive disability or sickness benefits and 9 percent receive other types of benefits. Only 32 percent of families have a single source of income. Of these, 9 percent rely on wages and salaries and 22 percent depend on social benefits. Of the latter group, 63 percent

receive old age or survivor pensions, 19 percent receive unemployment benefits, 7 percent receive disability or sickness benefits and 10 percent receive other types of benefits.

- **Italy**: In this country, 62 percent of all households live above all on wages and salaries, 2 percent on private income and 36 percent on income coming from the welfare state. A breakdown of this last category shows that 92 percent receive old-age or survivor pensions, 1 percent receive unemployment benefits, 5 percent receive disability or sickness benefits and 1 percent receive other types of benefits. However, 25 percent of all families rely entirely on the social welfare system and, within this group, the vast majority still rely on an old-age or survivor pensions, 1 percent on unemployment benefits, 5 percent on disability or sickness benefits and 1 percent on other types of benefits.
  On the whole, in Europe, Italy appears to be the country with the highest percentage of households living exclusively on wages and salaries, specifically 35 percent of the total. Pensions account for the overwhelming majority of social benefits received by families and only 1 percent of families are able to depend entirely on private income.
- **Luxembourg**: 65 percent of families live primarily on wages and salaries, 2 percent on private income and 33 percent on transfers from the welfare system. Amongst the last group, 92 percent receive old age or survivor pensions, 1 percent receive unemployment benefits, 5 percent receive disability or sickness benefits and 1 percent receive other forms of social benefits.
  Only 12 percent depend entirely on wages and salaries and 16 percent on social transfers. Amongst those families living exclusively on social benefits, 83 percent depend on old-age or survivor pensions, 2 percent on unemployment benefits, 8 percent on disability or sickness benefits and 7 percent on other types of benefits.
- **The Netherlands**: Amongst those families having a single source of income, 60 percent live primarily on wages and salaries, 2 percent on private income and 33 percent on welfare state benefits.
  In this last group, 64 percent receive old-age or survivor pensions, 10 percent receive unemployment benefits, 14 percent receive disability or sickness benefits and 12 percent receive other types of benefits. Only 33 percent of all families have a single source of income with 13 percent of these depending solely on wages and salaries and 20 percent on social benefits. Amongst the second group, 65 percent receive old age or survivor pensions, 10 percent receive unemployment benefits, a high 14 percent receive disability or sickness benefits and 11 percent receive other benefits.
- **Austria**: 62 percent of households live primarily on their own wages and salaries, 2 percent on private income and 36 percent on transfers from the social welfare system. Amongst those families which depend primarily on social benefits, 85 percent receive old-age or survivor pensions, 3 percent receive unemployment

benefits, 4 percent receive disability or sickness benefits and 9 percent receive other types of benefits. A good 25 percent of all families depend on a single source of income. Of these, 11 percent depend on wages and salaries, 14 percent on social security and 1 percent on private income. In nuclear families where the only source of income is represented by social transfers, 90 percent live on old age or survivor pensions, 3 percent on unemployment benefits, 3 percent on disability or sickness benefits and 3 percent on other types of benefits.

- **Portugal**: In this country, 66 percent of families live primarily on wages and salaries, 1 percent on private income and 33 percent on transfers from the social welfare system. Amongst those families which depend primarily on social benefits, 86 percent receive old-age or survivor pensions, 5 percent receive unemployment benefits, 7 percent receive disability or sickness benefits and 2 percent receive other types of benefits.
  A large percentage of families, 33 percent, depend on a single source of income. Of these, 13 percent depend on wages and salaries, no one on private income alone and 19 percent on social security benefits. In this last group, 90 percent live on old-age or survivor pensions, 3 percent on unemployment benefits, 6 percent on disability or sickness benefits and the remaining 2 percent on other types of social benefits.
- **United Kingdom**: In the UK, 56 percent of households live primarily on their own wages and salaries, 2 percent on private income and 42 percent on transfers from the welfare state. Amongst those families depending primarily on social benefits, 64 percent receive old age or survivor pensions, 1 percent receive unemployment benefits, 10 percent receive disability or sickness benefits and 25 percent receive other types of benefits. Only 9 percent live exclusively on wages and salaries and 19 percent on social benefits. Amongst the latter, 58 percent live on old-age or survivor pensions, 1 percent on unemployment benefits, 11 percent on disability or sickness benefits and 30 percent on other types of available social benefits.

The above shows that, on the whole, in Europe, 59 percent of households live primarily on wages and salaries, especially as salaried employees, 38 percent on social transfers and a mere 2 percent on private income. Amongst those families which depend primarily on the welfare state, 78 percent receive old-age or survivor pensions, 6 percent receive unemployment benefits, 7 percent receive disability or sickness benefits and 9 percent receive other types of benefits.
Finally, 33 percent depend on a single source of income. Specifically, of these, 15 percent depend on wages and salaries, 1 percent on private income and 18 percent on social security benefits. In this last group, 78 percent live on old-age or survivor pensions, 4 percent on unemployment benefits, 7 percent on disability benefits and 10 percent on other types of social benefits.
These data indicate that in all European countries, the social security system is a very important component of income. Indeed, the low

percentage of families (15 percent) which live exclusively on wages and salaries testifies to the fact that at least one of the income components in 85 percent of all cases relates to social security. The two extremes are represented by Italy, with the highest number of families living solely on wages and salaries, and France, where only 5 percent of families live solely on wages and salaries. In all countries, pensions account for the majority of cash transfers whilst unemployment benefits are the least important.

Table 2.15 – Breakdown of household income/resources in 13 EU countries

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	UK	UE
Households whose main source of income are...(%)														
Salaries and wages	52	60	60	59	59	...	60	62	65	60	62	66	56	59
Private income	4	2	3	5	2	...	1	2	2	2	2	1	2	2
Social transfers	45	38	37	36	39	...	39	36	33	39	36	33	42	38
Total	100	100	100	100	100	...	100	100	100	100	100	100	100	100
Households whose main source of income are social transfers (%)														
Retirement and survivor benefits	74	59	82	95	76	...	62	92	83	64	85	86	64	78
Unemployment benefits	12	13	9	0	9	...	23	1	1	10	3	5	1	6
Sick leave/disability benefits	8	13	4	3	13		7	5	7	14	4	7	10	7
Other benefits	6	15	6	1	1	...	9	1	9	12	9	2	25	9
Total	100	100	100	100	100	...	100	100	100	100	100	100	100	100
Households whose only source of income is...(%)														
Salaries and wages	8	9	15	29	15	5	9	35	12	13	11	13	9	15
Private income	1	0	1	2	1	0	0	1	0	0	1	0	0	1
Social tranfers	24	13	19	22	15	6	22	25	16	20	14	19	19	18
Total	33	22	35	53	30	11	32	61	28	33	25	33	29	33
Breakdown of earning of households whose only source of income are social transfers (%)														
Retirement and survivor benefits	77	59	85	96	79	75	63	94	83	65	90	90	58	78
Unemployment benefits	9	12	6	0	6	4	19	1	2	10	3	3	1	4
Sick leave/disability benefits	9	17	3	3	14	7	7	5	8	14	3	6	11	7
Other benefits	4	12	6	1	1	14	10	1	7	11	3	2	30	10
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: European Community Household Panel (1999), *Selected Indicators from the 1995 Wave*, Luxemburg.

2.2.6 Forms of income support before retirement age: the case of the Netherlands

The welfare system in the Netherlands is an emblematic case of how, in different countries, income support for elderly people is achieved via schemes which, although nominally different from classic pensions, actually fulfil the same purpose and in a rather obvious way.[22] In an analysis based on this perspective, the data are quite different from those shown in official reports and the Italian case actually proves to be less exceptional than initially thought. Specifically, it is clear that if one stops working at an age which is considerably below the recognised retirement age as established by public legislation, this is thanks to the possibility to access, in the years immediately prior to reaching legal retirement age, different forms of income support, only in part relating to social security. The Dutch social security system is based on three pillars: a flat rate state

(22) As will be shown, the Netherlands utilises disability benefits essentially for this purpose. The country's own institutions are well aware of this anomaly and, to this end, refer ironically to the what is known as the *Dutch disease*. See Netherlands Bureau for Economic Policy Analysis (2000), Ageing in the Netherlands, The Hague, p. 89.

pension for all residents, additional occupational pensions and individual pensions.

The legal retirement age for a state pension is set at 65 and the amount received is based on both one's family situation and on years of residency in the country (There is a reduction of 2 percent for every year of non-residency between the ages of 15 and 65). The maximum amount for a couple is 1,145 euros per month (as of January 1, 2001), equal to the minimum net wage (basic income), whilst a pensioner living alone receives 70 percent of this amount and a single parent with an unmarried child under the age of 18 is entitled to 90 percent of said amount. Such benefits are indexed twice a year to the average growth of salaries as established in collective agreements. The system is financed with contributions, totalling 17.9 percent of gross income up to 27,009 euros per year (the lowest income tax bracket is exempt) taken from the incomes reported by both salaried and self-employed workers.

Around 90 percent of workers and 98 percent of companies adhere to the occupational pension funds which normally set the legal retirement age at 65.[23]

The majority of schemes have a set pension and offer a replacement rate which, also taking account of the base pension, reach around 70 percent of an individual's final salary with 40 years of enrolment. In contrast, other schemes, in which around 31 percent of workers take part, the pension represents around 70 percent of the average salary of one's entire working life.

Pensions being paid out are currently indexed to wages (60 percent), to prices (20 percent) and to other mechanisms (20 percent) without a maximum income threshold. The agreements are subject to safeguards, including mandatory investment outside the company. In 2000, pension fund assets amounted to 115 percent of GDP, and of these, around 40 percent were invested in shares.

The amount of occupational pensions being paid totals 4 percent of GDP, slightly less than state pensions (4.3 percent). Finally, there are individual pensions which are taxed in exactly the same manner as occupational pensions, though with some limits.

In principle, the Dutch system does not allow for the possibility of early retirement, but there are some schemes which offer income coverage before the age of 65, when they are replaced with state and supplementary pensions. Such schemes may be categorised as follows:

1) Early retirement supplementary pensions
2) Unemployment benefits
3) Invalidity allowance.

- The early retirement supplementary pensions (vervroegd uittreden, Vut) were first included in collective contracts in 1970. They are based on a pay-as-you go system and, depending on the category, generally allow for retirement between the ages of 58 and 63, with a minimum of ten years of contributions. They offer gross (net) benefits which can reach 80 percent (90 percent) of an individual's last earnings. Around 70 percent of private workers and all public

(23) 2 percent of workers are enrolled in schemes with a retirement age of 63 or 64, 1 percent in schemes with a lower retirement age.

employees are covered by such schemes, which are becoming the main instrument of retirement for workers who are at least 59 years old. A debate is currently underway regarding the possibility of introducing a funding mechanism with a method of calculating benefits that has age-linked penalties. The government supports such a reform via the gradual elimination of tax deductions for schemes not utilising an actuarially fair method for retirement before or after 65 years of age.

- Unemployment benefits provide amounts totalling up to 70 percent of the last wage (up to a maximum benefit of 40 thousand euros) and are generally topped up to 85 percent under collective agreements. The benefits are given for a period of time which is inversely correlated to age, from a minimum of 26 weeks with 4 years of employment to a maximum of 5 years with 40 years of employment, or up to the age of 65 if the unemployed individual is older than 57 $^{1}/_{2}$. In this last case, the individual is not obliged to actively seek employment and is not even officially listed as unemployed. In all cases, when a worker reaches the end of the time period for unemployment benefits without a job and without income, he has the right to receive a flat rate social assistance cheque, of an amount fixed independently of the person's previous earnings.
- Disability allowance provides benefits linked to a person's residual capacity to work (most elderly are declared fully disabled), reaching up to 70 percent of the last wage (up to a maximum of 35 thousand euros). Generally, collective agreements raise the benefit to 85 percent of the last wage.

The right to benefits does not distinguish between disability which occur at the workplace (*risque professionel*) and that which occurs elsewhere (*risque social*) and the threshold of eligibility is an impairment rating of 15 percent based on a medical examination and a socio-economic valuation of the work position.

In reality, with the aforementioned schemes, the average age of exit [24] for men dropped from 64.7 in the period 1966-71 to 60.3 in the period 1994-99 whilst the average age for women dropped from 62.3 to 56.7.

Starting in the mid-1960s, in the Netherlands, as in most other European countries, there was a considerable increase in the unemployment rate. In order to encourage older workers to retire so as to make way for young workers, there was a noticeable increase in the use of these schemes. They became more flexible with both an increase in the replacement rate and a reduction in the eligibility criteria. The replacement rate was increased to 80-90 percent of previous earnings and, with the exception of the Vuts, the possibility to continue accruing nominal contributions was granted. The duration of benefits was positively correlated with age.[25] Moreover, in

(24) Scherer P. (2001), " Withdrawal from the Labour Fource in OECD Countries", OECD Occasional Papers, No. 49.

(25) Moreover, in the past, benficiaries of 2) and 3) were penalised if they returned to the workforce by accepting a less well-paid job, as this would have reduced their old-age pension. This problem was resolved for beneficiaries of unemployment benefits thanks to the new law regarding pensions, which includes a safeguard measure for those who accept a job with lower pay.

the case of disability, the need for subsequent medical examinations to determine the actual state of the individual receiving the allowance was eliminated and unemployed aged 57 1/2 or over were exempted from the job-search requirements.
Thus the disability scheme is unquestionably the most used as there are no imposed time limits, unlike the unemployment scheme. Its use as a substitute for early retirement or more especially for unemployment schemes was encouraged more or less openly. A typical example of this overall trend is the mechanism defined as "the internalisation of unemployment in disability", that is, the possibility for partially disabled workers (with a rate of impairment greater than 15 percent) to receive full disability benefits, based on the assumption that they will, at any rate, remain unemployed.
However, between the end of the 1980s and the start of the 1990s, the rules became stiffer. The benefit was reduced from 80 percent to 70 percent of the last wage. The mechanism defined as "the "internalisation of unemployment in disability" was abolished and a new and more stringent notion of disability was introduced, requiring all beneficiaries to have follow up medical examinations. Nonetheless, after an initial slight drop, the number of beneficiaries has started to grow again. One study estimates that, over the past years, the percentage of unemployment hidden into disability has reached 50 percent.[26]
On the whole, between 1970 and 2000, the number of people receiving disability benefits rose from 196,000 to 794,000 and it is estimated that this number will soon exceed one million.[27] The cost of disability amounts to around 11.25 billion euros, totalling 2.5 percent of GDP.
In 2000, the number of individuals receiving unemployment benefits was 187,000, whilst social assistance services provided benefits to 348,000 people.
These workers, for all intents and purposes deemed retired, are not calculated as part of the labour force. The result is a significant reduction in the unemployment rate, corresponding to the increase in the number of "inactive" workers. The percentage of the population receiving such benefits as a ratio of the so-called "adjusted" labour force (labour force plus inactive workers) is clearly much higher than the standard rate of unemployment, having reached 25 percent at the start of the 1990s.

Table 2.16 - Participation rates by age group

	Men			Women			Total
Age	15-24	25-54	55-64	15-24	25-54	55-64	
1970-74	61	95	78	51	25	15	58
1975-79	51	94	70	47	31	14	57
1980-84	52	92	56	50	40	14	59
1985-89	57	93	46	54	55	14	62
1990-94	62	93	43	62	62	17	68
1995-97	67	91	43	66	67	20	72

Fonte: Oecd, *Labour Force Statistics* 1969-89 e 1977-97

(26) Hassink W.H.J., van Ours J.C., Ridder G. (1997), Dismissal through disability, in De Economist, volume 145 (April), pages 29-46.
(27) For some estimate already regarding 2003, reference should be made to LISV (1999), Kroniek van de Sociale Verzekeringen 1999, Landelijk Instituut Sociale Verzekeringen.

Table 2.17 - Disability rates by age and sex (per cent)

	Men			Women			Total
Year	25-54	55-64	Total	25-54	55-64	total	
1970	3	15	4	1	4	1	3
1975	5	21	6	2	5	2	4
1980	9	35	10	4	9	4	7
1985	9	37	11	4	11	4	8
1990	10	36	11	6	13	6	9
1995	8	33	10	6	14	6	8
1997	8	31	10	6	14	6	8

Note: Partial/total disability benefit recipients as a % of total population in the same age group

Source: Lisv *(1998), Kroniek van de Sociale Verzekeringen 1998: Wetgeving en Volume-Ontwikkeling in Historisch Perspectief, Landelijk Instituut Sociale Verzekeringen*, pp 36, 38, 104, 110, 112, 116.

The activity rates by age classes indicate that, starting from the 1970s, there has been a net decrease of older people in the labour force, as this figure dropped from 78 percent in 1970 to 43 percent at the start of the 1990s. This trend was coupled with a considerable increase in the rate of disability for men between the ages of 55 and 64, with the figure initially rising from 15 percent to 37 percent before falling slightly to 31 percent, due to the stricter measures introduced in 1987.
The significant role played by measures designed for older workers who have not yet reached retirement age becomes clear during an analysis of the sources of income for people over the age of 55 (table 2.18). As clearly shown, in the 55-59 age class, the percentage of men whose principal source of income is a scheme that allows for early exit from the labour market (also taking account of less important schemes[28]) equals that of men with an income from work or from investment. For the group of men aged 60-64, the same percentage reaches almost 85 percent, especially due to the noticeable increase of those receiving benefits based on the Vut scheme. For women in the same age classes, the role of these two sources of income is similar, even if the last column in the table shows that, for women, more than 40 percent of income derives from the household.

Table 2.18 - Population aged 55-64 by sources of income (per cent of total)

	UNemployment and disability	Early retirement schemes	Wages/profit	Other income	No income
Men					
55-59	39	9	48	2	1
60-64	46	38	12	1	2
Women					
55-59	25	4	25	6	41
60-64	27	15	6	9	42

Source: Woningbehoefte onderzoek, *bewerking SZW*

(28) Specifically, social assistance (ABW), income support for the elderly, partial disability benefits (IOAW), unemployment benefits for state employees (ABP watchgeld), disability benefits for state employees.

Chart 2.9 - Population 55-64 by source of income

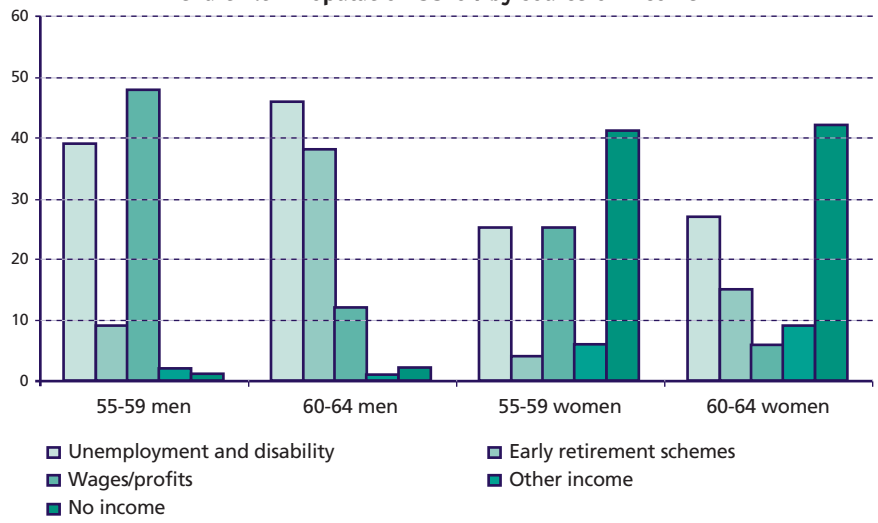


Table 2.19 - Overview of the labour market in the Netherlands (in full-time equivalents, thousands)

	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000
Working-age population, of which	8,156	8,728	9,262	9,922	10,305	10,569	10,604	10,642	10,687	10,740	10,798
Employment	6,058	5,009	5,174	4,978	5,203	5,663	5,808	5,991	6,173	6,352	6,509
Subsidised employment schemes	44	56	74	80	93	132	151	165	169	173	176
As a percentage of working-age population (employment)	62	57	55	50	50	54	55	56	58	59	60
Benefit recipients not in employment(1) of which:	468	774	1,123	1,701	1,692	1,800	1,758	1,698	1,595	1,513	1,468
Unemployment schemes	58	197	235	652	539	693	347	311	261	217	187
Social assistance	63	105	112	180	176	164	484	463	424	381	348
Early retirement			11	21	39	51	51	52	53	53	53
Disability	196	310	608	698	790	752	740	742	763	772	794
Surviving relatives insurance	151	162	168	171	187	191	187	182	147	143	139
As a percentage of adjusted labur force (2)	8	13	148	25	25	24	23	22	21	19	18
Unemployment rate(3)	1	4	4	9	6	7	7	6	4	3	3

(1) Benefit recipients not in employment are people of working age receive social security benefit.
(2) Adjusted labour force is employment plus benefit recipients not in employment.
(3) National definition: it includes only registered unemployed who are seeking a job, it doesn't include benefit recipients and unemployment schemes benefit recipients older than 57 $^{1}/_{2}$.

Source: Oecd (2002): *Economic Surveys: Netherlands*; Ministry of Social Affairs and Employment.

Within the combined grouping "unemployment and disability" it is clear the disability benefits are the most important source of income. Indeed, those receiving such benefits account for 60 percent of the population between 55 and 64.

According to a recent estimate[29], the number of people classed as unemployed and partially disabled who could start working again within a year via adequate training and employment programmes stands at 375,000, representing around 5 percent of the labour force. Recently, the government has sought to modify incentives relating to early retirement. On the one hand, it is committed to eliminating, between 2009 and 2022, tax deductions for pay-as-you-go Vut schemes and, on the other hand, it wants to introduce tax deductions for funded Vut schemes which call for a fair actuarial adjustment for early or late retirement.

(29) OECD (2002), Economic Survey of the Netherlands, p. 16.

Another possibility currently under debate is a reform designed to boost the rate of employment of older workers by making it possible for such individuals to take advantage of an occupational pension whilst continuing to work.

The effectiveness of such reforms depends on how the government tries to modify public behaviour so as to ensure that disability and unemployment are utilised for their original, intended purposes and not, to the contrary, increasingly used as forms of early retirement. With regard to disability, this implies tougher and more frequent medical checks. With regard to unemployment, this implies an end to exemption from active job seeking for those over 57 $^{1}/_{2}$.
If the recommendations proposed by the Donner Committee report are accepted, only those deemed to be totally disabled[30] on the basis of purely medical criteria will receive disability benefits and the benefits will be the same for all age classes.
In order to increase the employment of older workers, reforms have also been put forward to impact on the demand side. These include modifications to the current career system, in order to break away from the use of above schemes, such as correlating the reduction in social contributions to the age of the worker and introducing a specific tax credit for older workers as well as the possibility of authorising local authorities to grant such workers tax-exempt bonuses of up to a maximum of € 815 a year.

2.2.7 The role of the incentives to lengthen work activity
Even if complete information such as the above is not available for all European countries, data analyses and comparative studies of European regulatory frameworks clearly show the enormous importance of cash transfers both in the overall spending structure of welfare systems and as a source of income for households and individuals.
Specifically, and contrary to a widely held belief, cash transfers are not a primary component of disposable income only after retirement age. The different forms of state support also have an important role in the years preceding legal retirement age as there are many, different schemes other than those relating to pensions which are meant to aid individuals who lose all or a part of their wages and salaries and, at times, all contacts with the labour market.
These elements lead to two considerations. First of all, a comparison of the different solutions adopted by European countries shows the Italian case to be less anomalous than is normally assumed. As borne out by the data, the possibility offered by Italian legislation to vest pension rights, at a rather early age, by reason of seniority contributes to making the percentage of pension spending compared with the European average quite high. However, use of this measure, presently requiring a minimum age of 57, partly substitutes other forms of cash transfers largely and explicitly used in other countries to support the incomes of people below the legal retirement age who risk being progressively excluded from the labour market.

(30) For those deemed partially invalid, coverage would be provided by mandatory insurance.

Obviously, the characteristics of legislative frameworks lead to significant differences in how each system works. In particular, it should be noted that eligibility requirements and conditions for a seniority pension are different from those characterising other forms of income support. In the case of seniority pensions, eligibility depends on the number of years of contribution and not on one's current employment status. It is the stability of one's work career, a characteristic defending less fragile segments of the working population, which is the decisive factor to access a pension upon reaching the minimum required age. The use of other forms of income support for people close to retirement age, generally including early retirement schemes, presumes the presence of some difficulty in the job market and a reduced chance of finding new employment. These differences obviously impact on the different categories of beneficiaries. The first comprises workers with stronger careers and who thus enjoy higher pension levels compared with the average. In contrast, the second category comprises workers with more fragile careers and fewer job prospects.

An evaluation of alternative policy instruments shows that seniority pensions allow for a reduction in occupational risks which arise after a certain age. On the downside, they tend to provide such protection without taking account of different needs, with the risk of redistributing resources to individuals who do not necessarily risk being unemployed. Thus, regulation which provides support based on a status of unemployment and/or on the relative need of the beneficiaries may be seen as more coherent in terms of the principles of redistribution and solidarity attributed to welfare systems. They may also be somewhat less costly as related benefits are granted more strictly on the basis of need. Additionally, their use is limited as the cash transfers are meant to support and not to replace one's income.[31]
The two formulations are also diverse from the point of view of social consensus. It seems that seniority pensions are viewed by the public as a type of insurance, the result of what they have legitimately become entitled to with their contributions (or taxes) throughout their work lives. This helps to explain why any proposed modifications are difficult to sustain politically and why any changes tend to be very gradual.
The forms of income support based on factors which identify situations of economic need and social difficulty can elicit cries of "welfarism" and be seen as a way of inhibiting the work incentive. For this reason, over the last years, many countries where such schemes are widely utilised, have witnessed a growing lack of support on the part of the public and governments have had to continuously rein in their application.

The other highly important question regards the efficiency of the different forms of policy tools allowed by the regulatory framework in each country with respect to the problems concerning the sustainability of welfare systems.
This is a key and perhaps even decisive element in evaluating the

(31) Obviously, in order to determine the overall costs of the different systems, it is necessary to more or less closely define who the potential beneficiaries are and the average level of the allowance: two distinguishing features in the welfare models adopted by different countries.

efficiency of resources allocated to social protection. Such an evaluation cannot be limited to the matching of the funding and of expense mechanisms needed to ensure that the schemes balance their inflows and outflows. Instead, account must also be taken of the results provided by alternative solutions, which may possibly be adopted to handle those problems faced by older workers.
As known, the slowdown in economic growth and the decrease in employment rates have shed light on the growing structural difficulty of the welfare models most widely diffused in Europe. Both passive instruments to support the unemployed and the mechanisms governing pension systems have come under fire. With regard to the latter, discussion has turned to the validity of the pay-as-you go system, currently the one most widely applied in public systems as a method of calculating and financing pensions.
The underlying criticism is that this model of social security works as long as the coverage of benefits enjoys a favourable ratio between contributors and beneficiaries. However, with the worsening of this ratio, the system has become increasingly unbalanced. This is especially due to the lack of incentives to continue working, or worse still, to the incentives to actually withdraw from the labour force. Such imbalances have pushed governments to introduce measures to both limit expenditure by reworking pension calculation formulas, and, to an even greater extent, to increase taxes and contributions paid by workers, with possible negative effects on economic growth.

In reality, as often stated, expenditure for social protection in all countries is fed by the need to provide instruments capable of absorbing excess labour and, to a considerable extent, to help ease the difficulties caused by low employment levels for older workers. In most countries, the number of people who continue to work after 65 is rather limited. However, with increasing average life spans, expected to reach 80 for men and 85 for women within the next fifty years, it appears necessary to raise the actual age of retirement, currently still under 60. Even if an increase in the legal retirement age is the main step towards reaching this objective and limiting the resources destined to finance welfare systems, such a step does not appear easy to take.
Raising the legal retirement age not only provokes public disapproval, but it must also take place alongside a complex group of reforms aimed at co-ordinating all instruments acting as alternatives to pensions, starting with disability and unemployment benefits. Additionally, the efficacy of this measure directly depends on the system's capacity to effectively employ older workers. Otherwise, as clearly demonstrated by the experience gained in European countries, simply raising the legal retirement age produces a continuous proliferation of alternative forms of early retirement, sustained by primarily publicly funded cash transfers.
Nevertheless, thus far, governments have proven rather unable to influence the factors which impact on the employment levels of older workers, even if the difficulties encountered by this category of worker in the labour market are well known and despite the fact that the percentage of workers over 55 is expected to grow enormously and form

an ever more significant part of the labour force.[32]
Updating the incentive structure which emerges from the calculation criteria and regulations governing the pension systems can modify people's behaviours, prompting them to remain in the labour force for a longer period of time. The systems in many countries actually encourage early exit from the labour market. Accessing one's pension as soon as possible makes sense economically as prolonging one's career and contributions to the system can even penalise a worker in terms of the net value of pension credits.
In order to eliminate this type of disincentive from pension calculation methods, some countries, including Italy, have already adopted formulas which ensure a substantial actuarial equivalence of the value of pension credits, regardless of the chosen age of retirement. Nevertheless, it should be noted that early retirement incentives are also present in personal pension schemes, which often allow for retirement before the standard age. Such incentives largely depend on how such supplementary schemes work and on how they are integrated into the public system. For example, in some cases, the benefits granted by occupational funds can be used to finance a period starting from the moment of early retirement until the time of access to the state pension.
As stated earlier, merely reducing early retirement incentives or imposing rigid age limits is not very effective and may not help to limit the proliferation and improper use of instruments acting as alternatives to pensions. As clearly shown by the policies implemented within the EU and in other leading countries (United States, Canada, Japan), the objective to prolong work activity cannot be reached only, or perhaps even principally, by merely raising the retirement age. Other instruments able to condition both the choice of workers and the decisions taken by companies are needed. Such instruments include modifications to the work organisation and to working hours so as to better adapt them to workers' physical and mental capabilities and to more easily reconcile work activities and family needs. They also include the granting of tax benefits to those who hire older workers or who make the necessary adjustments needed to permit such employees to continue working after the legal retirement age and, more generally speaking, the implementation of initiatives of the type outlined in the Active Ageing Policy.[33]
As noted, implementing active ageing policies is especially important in order to prevent the exclusion of certain categories from a knowledge-based society. Even if this society is able to overcome obstacles thrown up by distance and to offer many new work opportunities, it creates problems of social marginalisation due to a lack of knowledge regarding Information Technology and the disparity of access to such knowledge. Clearly, this situation impacts most heavily upon older workers.
The underlying foundations of the European Union's employment strategy reflect the need to address such problems. This is especially true of the

(32) In 2000, within the Eu, the percentage of the population between the ages of 55 and 64 out of the total of the population of working age (15-64) was 16 percent. However, according to Eurostat's most recent forecasts, this figure is destined to triple in the next fifty years, reaching 49 percent in 2050.
(33) See ILO, Encouraging the Employment of Older People, Conference of the Ministers of Labour of G.8 Countries, Turin, 10-11 November 2000.

strategy to enhance ongoing education and training opportunities and that relating to life-long learning, an indispensable tool for older workers who wish to remain actively involved and up-to-date in an ever-changing work environment. Even the strategy of so-called adaptability, comprising actions agreed between various workers' representative groups and unions to ease adjustment to internal and external changes in the business world, respond to the need to modernise the organisation of work via the reduction and enhanced flexibility of working hours to better suit older workers' needs. Finally, additional, individually tailored actions specifically designed to empower and boost the self-esteem of each person are needed. The overriding objective of such steps is not to facilitate the unilateral adaptation of older workers to the new conditions characterising the labour market, but rather, to help society adjust to the reality of an ageing population and to enhance the overall role older people have in society.

2.3 Financing welfare state systems, the tax wedge and the cost of labour

In addition to impacting on the social protection system's functioning and characteristics, the methods used to finance the welfare state also affect the competitiveness of the production system, especially in relation to cost of labour. Indeed, overall withholdings from wages and salaries are the main source of financing welfare systems, either in the form of social security contributions or direct taxation.

The methods of financing state welfare systems and, in particular, pension systems, varies in relation to the models adopted in different countries. Pension systems can be based on either an insurance type pension with benefits correlated to the duration of the period of contribution and to the level of wages and salaries, primarily financed by means of social security contributions, or on a flat rate pension, not proportionate to either the level of wages and salaries earned throughout one's working life or to the years of service, primarily financed out of general taxation.

Based on the above classification, three of the four countries discussed in this chapter, that is France, Germany and Italy have adopted the first model. In the forth country, the United Kingdom, the second model is the most diffused, although it has incorporated elements of the insurance-type model.

The first measure of the weight which financing social protection benefits can have on wages and salaries is the social contribution destined to this specific purpose. As seen, in many countries, this is the primary source of financing social expenditure. The contribution tax is higher in countries having an insurance type welfare state compared with that in countries favouring a universalistic pension. Indeed, the levels adopted in France, Germany and Italy are similar to one another and are all higher than the related contribution tax level in the UK. However, the contribution deducted from wages and salaries is not sufficient and indeed, all of the countries examined cover various amounts of social expenditure via funding from general taxation.

It was also decided to jointly assess the weight of contributions and taxes and to examine the structure of overall labour costs so as to measure such taxes and contributions as a percentage of wages and salaries and to

determine the difference in terms of overall cost of labour. High contribution and tax levels do not necessarily correspond to higher labour costs. Thus the impact of taxes and contributions on wages and salaries was analysed via the tax wedge, the ratio between overall withholdings (contributions and taxes) and the total cost of labour.
An examination of the OECD-compiled data regarding an "average" production worker shows Italy's tax wedge to be lower than those of France and Germany. In Italy, overall tax withholdings represent 47.2 percent of the cost of labour, compared with 48.1 percent and 51.9 percent in France and Germany, respectively. In the United Kingdom, the percentage of social contributions out of the total cost of labour is significantly lower. The negative differential compared with the other countries remains constant even if consideration is also given to both social security contributions and personal income tax.
With regard to the cost of labour, of which tax withholdings represent one aspect, it can be seen that the levels in the United Kingdom and in Italy are very similar. Moreover, considering that the country's GDP per labour unit and productivity levels are not significantly higher than in other countries, it seems that British workers cover risks connected to old age and health also by acquiring products available on the market.
Against this backdrop and at international level, Italy, which boasts some of the lowest labour costs and some of the highest productivity levels, is one of the countries with the lowest cost of labour per unit.

2.3.1 The methods and characteristics of financing welfare state systems: the legal and institutional framework

The welfare systems and, within this context, the public social security systems of the countries examined are based on a pay-as-you-go system. To varying degrees, they are all financed by a combination of contributions and general taxation.
In the United Kingdom, which has adopted universalistic system, social expenditure is primarily financed via taxation. Contributions cover that part of social spending which is more insurance-type in nature.
Table 2.20 shows the established legal rates of contribution, as determined within the regulatory framework of each country, so as to finance all of the functions of social spending. Comparing the same functions, the table also shows the rates for each sector in the various countries, distinguishing between the rate to be borne by the employer and that to be paid by the employee.
In order to take account of the overall withholdings from wages and salaries and so as to provide an effective comparison amongst the various countries, consideration was given not only to contributions destined to cover public social spending[34] but, where existing, also those contributions aimed at covering private social spending. The latter specifically refer to contributions to supplementary pension schemes. In Italy, even if supplementary pensions have reached some significant levels, if evaluated in the light of the limited period of operations of pension funds, this system is not yet widespread. Thus the figure given refers to the annual

(34) Consideration was not given to the rates aimed at covering benefits conncted to accidents at the workplace and occupational illnesses, given the high variability reported within each country, depending on the level of risk present in different sectors and types of work.

allowances allocated to the employee severance fund (totalling 7.41 percent of gross remuneration), which is comparable to the contributions paid in other countries for supplementary pensions. On the basis of the existing regulatory framework, the allowance for employee severance payments is a fundamental component used to finance pension funds and in future should flow entirely into them.

Table 2.20 - Social protection financing
(situation at 1st January 2001)

France

	Contribution rates %		Ceiling (annual income)	State subsidy (c)
Sickness and maternity	Employee:	0.75%	no ceiling	
	Employer:	12.80%	no ceiling	Yes
	Total:	13.55%		
Pensions	Employee:	6.65%	27,349 euro	
(Old age, Invalidity, Survivors)	Employer:	8.20%	27,349 euro	Yes
		1.60%	no ceiling	
	Total:	16.45%		
Unemployment (a)	Employee:	2.10%	27,349 euro	
	Employer:	3.70%	27,349 euro	Yes
	Total:	5.80%		
Family allowances	Employee:	-		
	Employer:	5.40%	no ceiling	Yes
	Total:	5.40%		
TOTAL (public social protection expenditure)	**Employee:**	**9.50%**		
	Employer:	**31.70%**		
	Total:	**41.20%**		
Supplementary pensions (b)	Employee:	3.00%	26,892 euro	
	Employer:	4.50%	80,676 euro	
	Total:	7.50%		
TOTAL	**Employee:**	**12.50%**		
	Employer:	**36.20%**		
	Total:	**48.70%**		

Other special contribution:
General social contribution (Csg) — 7.50% on 95% of gross salary, of which 5.10% tax-deductible from income subject to personal taxation.

(a) Employee contribution rate paid for unemployment benefit increase to 2.60% for incomes between 1 and 4 times the ceiling indicated in the table:
(b) For middle management and supervisor, employee contribution rate increase to 7.50% for incomes between 1 and 8 times the ceiling indicated in the table (26.892 euro), whereas employer contribution rate is 4.50% up to 26,892 euro and 12.50% for incomesbetween 1 and 8 times the celiling.
(c) State partecipation covers a share of unemployment benefits; moreover State subsidy involves covering the shortfall in contributions determined from contribution holidays to stimulate employment.

Germany (a)

	Contribution rates %		Ceiling (annual income)	State subsidy
Sickness and maternity (b)	Employee:	7.62%	40,034 euro	
	Employer:	7.62%	40,034 euro	Yes
	Total:	15.24%		
Pensions	Employee:	9.55%	53,379 euro	
(Old age, Invalidity, Survivors)	Employer:	9.55%	53,379 euro	(c) Yes
	Total:	19.10%		
Unemployment	Employee:	3.25%	53,379 euro	
	Employer:	3.25%	53,379 euro	Yes
	Total:	6.50%		
Family allowances	Family allowances are financed by taxes			Yes
TOTAL (public social protection expenditure)	**Employee:**	**20.42%**		
	Employer:	**20.42%**		
	Total:	**40.84%**		
Supplementary pensions	Employee:	2.30%		
	Employer:	4.70%		
	Total:	7.00%		

TOTAL	**Employee:**	**22.72%**		
	Employer:	**25.12%**		
	Total:	**47.84%**		

(a) For East Germany the maximum earning limit is lower (44,789 euro).
(b) Contribution rate for sickness and maternity includes the contribution for long-term care, equivalent to 1.7% divided in two equal parts between employee and employer.
(c) For pensions, the size of State contribution is fixed annually according to wage growth and the levels assumed by the social contribution rate. >Moreover, other subsidies are provided to finance pension deficit.

Italy (a)

	Contribution rates %		Ceiling (annual income)	State subsidy
Sickness and maternity (b)	Employee:	-		
	Employer:	1.57%	no ceiling	Yes
	Total:	1.57%		
Pensions (c)	Employee:	8.89%	73,332 euro	
(Old age, Invalidity, Survivors)	Employer:	23.81%	73,332 euro	Yes
	Totale:	32.70%		
Unemployment	Employee:	0.30%	no ceiling	
	Employer:	4.71%	no ceiling	Yes
	Total:	5.01%		
Family allowances	Employee:	-		
	Employer:	1.68%	no ceiling	Yes
	Total:	1.68%		
TOTAL (public social protection expenditure)	**Employee:**	**9.19%**		
	Employer:	**31.77%**		
	Total:	**40.96%**		
Trattamento fine rapporto (Tfr)	Employee:	-		
Severace pay	Employer:	7.41%		
	Total:	7.41%		
TOTAL	**Employee:**	**9.19%**		
	Employer:	**39.18%**		
	Total:	**48.37%**		

(a) Data refer to firms with over 50 employees.
(b) The contribution rate indicated in the table is the average of contributions paid by clerical and blue-collar workers. Sickness contributions repealed after introduction of new regional tax (Irap).
(c) The upper earning limit applies to people first insured from 1996 whose pensions will be paid in accordance with the contribution-based system.

UK

	Contribution rates %		Ceiling (annual income)	State subsidy
Sickness and maternity **Pensions** (Vecchiaia, Invalidità e Reversibilità) **Unemployment**	**Employee**: pays no contributions if weekly salary is < 120 euro; 10% (8.4% if member of approved occupational pension scheme) of salary between 120 and 847 euro. **Employer**: pays no contributions if weekly salary is < 133 euro; 12.2% of salary > 133 euro. If worker is a member of approved occupational pension scheme, the rates are reduced by 3% on incomes between 133 and 847 euro.			Yes
Family allowances	Family allowances are financed by taxes			Yes
TOTAL (public social protection expenditure)	**Employee:**	**10.00%**		
	Employer:	**12.20%**		
	Total:	**22.20%**		
Supplementary pension	Variable according to pension schemes			
TOTAL	**Employee:**	**-**		
	Employer:	**-**		
	Total:	**-**		

Source: EU (2001), *Mutual Information System on Social Protection in the Member States of the European Union*

In reference to the amount of the overall withholdings, the legal rates of contribution entirely allocated to social spending are very similar in France, Germany and Italy. Specifically, if we consider the functions relative to public social spending, the overall legal rate settles at 40.96 percent in Italy, at 41.20 percent in France and at 40.84 percent in Germany.

If account is also taken of supplementary pension plans, the level of contribution increases, but the relative position of the various countries remains essentially unchanged (table 2.20).
In the United Kingdom, the fact that the majority of social protection spending is financed via a general taxation system ensures that the overall legal rate does not prove to be a significant percentage of the weight borne by wages and salaries to finance social spending. In the United Kingdom, there is a single contribution which covers more than one function of public social spending and the rate is around 22 percent. Should the worker decide to opt out and enrol in a private pension fund, the rate deducted for public social spending falls to 17.60 percent, with a savings of 1.6 percent for the worker and of 3 percent for the firm.
As shown in table 2.20, there are contribution thresholds in all of the countries examined. In general, Germany and France apply proportional rates which are eliminated after reaching a certain level of income. A maximum level for social security contributions has also been introduced in Italy, although it is limited to workers employed after 1996. In the United Kingdom, the worker and the firm are not obliged to pay contributions for weekly pay under a certain amount. For higher incomes, payments are made on the basis of fixed rates which are eliminated after a certain income threshold.
With regard to the allocation of contributions to various social functions, in all of the countries considered, the majority is allocated to pensions. In Italy, the legal rate is 32.7 percent, whilst France and Germany report lower rates totalling 16.45 percent and 19.10 percent, respectively. In the last two countries, even if healthcare impacts on overall contributions with rates that are only slightly lower than those of pensions (13.55 percent and 15.24 percent, respectively), in Italy, following the introduction of a regional tax on productive activities (IRAP), the health tax was abolished.
The composition of the total contribution deduction in France and Italy appears to fall more heavily on the employer. The amount borne by the employee is slightly less than 1/3 and $^{1}/_{4}$ of the total, respectively. In Germany, the amounts relating to all social spending functions are equally divided between the employer and the employee.
Precisely because the financing of the welfare state has a specific impact on the cost of labour, European countries have explored different contribution sources apart from wages and salaries and the possibility of setting up new types of contribution systems. For example, in France, contributions destined to pensions have been partially substituted with the introduction of other forms of taxation, such as the General Social Contribution. This new instrument is applied not only to personal income but also to investment income, subject to separate taxation.
In recent years, the countries examined have shown a tendency to decrease the overall level of contributions, so as to reduce the tax wedge.

In Germany, the percentage of contributions allotted to pension funds has been gradually reduced, falling from 20.3 percent in 1999 to 19.1 percent in 2001 and further reduction have been planned.
Italy has recently implemented numerous and repeated steps aimed at reducing overall withholdings from wages and salaries. In addition to structural measures involving permanent and general reductions in contributions, both state subsidies for social security contributions as well as temporary tax breaks have been introduced for companies hiring new employees and for those located in Italy's southern regions.
Numerous changes have been introduced by means of measures related to the formation of the government budget. The "work package" measures contained in the 1999 Budget Law (Law 448/99) permanently abolished the so-called "non-statutory burdens" (oneri impropri) paid by employers (at a rate of 0.47 percent). Specifically, ENAOLI, TBC and those contributions destined to finance infant nurseries were abolished. The 2000 Budget Law (Law 488/1999) reduced INAIL premiums and decreased the rate paid for maternity leave by 0.2 percent. The 2001 Budget Law (Law 388/2000) family allowances were granted contribution-exempt, for a total of 0.8 percent.

Italy is also making ample use of incentives and reductions in contributions based on the 1999 and 2000 Budget Laws. For companies located in Italy's southern regions, there was an extension to 2001 for the contribution reductions introduced with the 1998 Budget Law.[35]
Furthermore, a total contribution reduction lasting three years for each newly hired person during the period 1999-2001 was granted to the same companies.
The 2001 Budget Law (Law 388/2000) introduced additional incentives for firms hiring new employees. In this case, the incentive applied to companies located throughout Italy and regarded a tax break, in the form of tax credits, rather than a reduction in contributions. Specifically, employers which hired new employees during the period between October 2000 and December 2003, thereby producing an increase in the number of total company employees, received a tax credit for each individual hired.
Other temporary contribution reductions regard work training and apprenticeship contracts, viewed as measures in favour of young workers.
Moreover, in more recent years, new professional figures and special types of work contracts have come into being for which there are permanent reductions in social contributions, as in the case of "co-ordinated and continuous" collaborators.
Also in France, Germany and Italy, where insurance-type systems prevail, the State is expected to help finance pension spending, as determined on the basis of each country's parameters.
For this reason, in order to evaluate all of the components of labour costs and to carry out correct and meaningful comparisons of the countries examined, both contributions and taxes must be taken into consideration.

(35) This relates to the per capita contribution introduced by Law 449/97 or the two-year period 1998-1999 and designed to cover workers forming part of the workforce as of December 1, 1997. the 1999 Budget Law increased the contribution and extended it for the following two-year period (at a rate of 1 million and 150 thousand lire in 2000 and of 1 million and 50 thousand lire in 2001).

2.3.2 Trends in and composition of sources of financing social expenditure: quantitative aspects

Whereas the resources provided by social contributions can be easily identified on the basis of the contribution rates set by each country's regulatory framework, the amount of transfers coming from general taxation is more difficult to determine and compare. The underlying criteria for this type of financing vary from one country to the next. In some cases, state transfers follow well-defined rules. This is the case in Germany where they are correlated to work pay trends. In other cases, the contribution coming from the State is linked to the assistance portion of expenditure. In yet other countries, the contribution is aimed at covering the pension deficit.

Table 2.21 illustrates the percentage breakdown of total resources earmarked to financing social spending. The data provided confirm the results of the analyses of the regulatory and institutional framework of each country.

For France, Germany and Italy, which have adopted insurance-type systems, the contribution component is higher than that relating to transfers from the State. Specifically, in France and Germany, social

Table 2.21 - Social protection receipts

A. Percentage breakdown

	Social contributions			State subsidy	Other receipts	TOTAL
	Employer	Protected person	Total			
1990						
France	51.0	28.5	79.5	17.0	3.5	100.0
Germany	43.7	28.4	72.1	25.2	2.7	100.0
Italy	54.9	15.5	70.3	27.2	2.5	100.0
UK	28.1	26.9	55.0	42.6	2.4	100.0
EU	**42.3**	**23.5**	**65.8**	**29.9**	**4.3**	**100.0**
Anno 1999						
France	46.5	20.3	66.8	30.4	2.8	100.0
Germany	36.9	28.1	65.0	32.8	2.3	100.0
Italy	43.6	14.4	58.0	38.9	3.1	100.0
UK	27.7	24.0	51.8	47.3	0.9	100.0
EU	**37.9**	**22.7**	**60.6**	**35.7**	**3.7**	**100.0**

B. Figures as a percentage of GDP

	Social contributions			State subsidy	Other receipts	TOTAL
	Employer	Protected	Total			
1990						
France	14.5	8.1	22.5	4.8	1.0	28.3
Germany	11.8	7.7	19.5	6.8	0.7	27.1
Italy	13.5	3.8	17.3	6.7	0.6	24.6
UK	7.2	6.9	14.1	10.9	0.6	25.7
EU	**11.3**	**6.3**	**17.6**	**8.0**	**1.2**	**26.8**
Anno 1999						
France	14.3	6.3	20.6	9.4	0.9	30.8
Germany	11.3	8.6	19.9	10.0	0.7	30.6
Italy	11.4	3.7	15.1	10.1	0.8	26.0
UK	7.6	6.6	14.1	12.9	0.3	27.3
EU	**10.8**	**6.5**	**17.4**	**10.2**	**1.1**	**28.7**

Source: compiled on the basis of Eurostat data (2001)

contributions in 1999 accounted for 65 percent of total resources, a figure higher than the European average. Also in Italy, this component was the more significant even if, at 58 percent in 1999, it fell below the European average.
In contrast, in the United Kingdom, social contribution represents less than 52 percent of total resources and the two components take on more or less equal weight.
In France and Italy the contributions paid by firms exceed the European average and represent a much higher percentage than that paid by workers. On the other hand, in Germany and the United Kingdom the contributions are more equally distributed between workers and the firm. The actual percentages borne by firms and their workers depend, of course, on national and local labour agreements. Such agreements can have a significant impact on the distribution of social contributions deriving from the application of formal rates.
Over the past decade, the percentage of transfers from the State rose from an EU average of 30 percent in 1990 to around 36 percent in 1999.This trend reflects recent changes in the regulatory framework and is in line with measures adopted in many countries in order to contain the contributions deducted from workers' income.
In Italy, for example, reductions in the weight of social contributions have been substantial. Their percentage dropped from 70 percent in 1990 to 58 percent in 1999 and especially regarded the contributions paid by firms. Such cuts were largely due to the abolition of the health tax and the introduction of IRAP.
Also in France and Germany, the percentage of resources represented by the social contributions has decreased noticeably, whilst reductions in the UK have been less significant.
In terms of GDP, state transfers in Italy are similar to those in France and Germany, whilst they are lower with respect to the United Kingdom. The ratio of social contributions to GDP in Italy (around 15 percent in 1999) is significantly lower than in France and Germany (20.6 percent and 20 percent, respectively), but slightly higher than in the United Kingdom.
In the 1990s, although the ratio of state transfers to GDP rose considerably in all of the countries examined, the percentage of social contributions decreased in France and Italy (around 2 percentage points) and remained essentially unchanged in Germany and the UK.

2.3.3 A measure of the tax and contribution wedge on labour

In order to compare the different structures of wage and salary withholdings, we first need to examine the weight of the different elements comprising the cost of labour in each country. To this end, different categories of workers can be identified and distinguished on the basis of the weight of contributions and taxes deducted. An indicator utilised for this purpose is the so-called tax-wedge, defined as the difference between contribution and tax charges and the overall cost of labour for a firm. Another indicator is the ratio between the cost of labour and workers' net wages.
The data reported in table 2.22 shows, for each country, a breakdown of

the cost of labour for an average industrial worker. Starting from the total cost of labour, the sum of gross income and social contributions paid by the employer, one can calculate net wages (or disposable income) by subtracting the contributions deducted from workers' pay and income taxes (including tax credits) from the gross income and adding any possible transfers.
The information provided by the OECD is rather complete in terms of describing the tax obligations and contributions borne by the worker. However, with regard to the social security contributions paid by the firm, the calculations are not sufficiently precise to ensure a valid and worthwhile comparison.
In the first place, account is not taken of contributions in favour of benefits relating to accidents at work and occupational illnesses. Given that such contributions vary greatly within a single country, depending on the level of risk involved in a particular type of work, the problem can be resolved by not considering such contributions.
A second and more significant problem relates to the fact that the OECD statistics do not take account of direct contributions for supplementary pensions, as the annual allowance for employee severance payments can be included amongst these. Nevertheless, as the weight of employee severance payments and contributions paid into pension funds in the countries examined is very similar (table 2.20), their exclusion does not alter the results of the analyses to any considerable degree.
A third aspect to be considered is that the OECD data do not take account of IRAP, introduced in Italy following abolition of the health tax and deducted and withdrawn from an income base which also includes labour costs. Thus, the information provided by OECD has been adjusted to include this charge.
Section A of table 2.22 illustrates the situation of an unmarried worker without dependents with pay equal to an average salary earned in the manufacturing sector.
The tax wedge, i.e. taxes and social contributions as a share of total pay, stands at around 51.9 percent in Germany, 48.1 percent in France and 47.2 percent in Italy (this figure rises to 48.8 percent if IRAP is considered). At 30.8 percent, this figure is lower in the United Kingdom. With regard to the single components used to calculate the tax wedge, contributions represent the highest percentage in France, Germany and Italy (standing at 37.8 percent, 34.4 percent and 32.3 percent of labour costs, respectively), whilst direct taxes on income as a percentage of the cost of labour stand at 17.5 percent in Germany, 10.2 percent in France and 14.9 percent in Italy.
In the United Kingdom's universalistic system, the tax and contribution wedge is lower. The tax wedge depends equally on the two components, contributions and taxes, accounting for 15.8 percent and 14.9 percent, of the total cost of labour, respectively. In this case, the level of income tax is similar to that in France, Germany and Italy, whilst the weight of contributions is lower compared with the other countries examined. Should the worker be the sole breadwinner in a family with two children (table 2.22, section B), the tax wedge is reduced.

Table 2.22 - Tax and social contribution wedge in the manufacturing sector - 1999 (a)
(income taxes and social security contributions as a % of cost of labour) (amounts in euros)

A. Single individual (b)

	Italy (d)	France	Germany	United Kingdom
A. Annual salary net	14,238	15,028	18,068	20,416
B. Income taxes	4,009	2,965	6,591	4,398
C. Employee contributions	1,847	2,786	6,457	2,179
D. Gross annual salary (A+B+C)	20,093	20,779	31,115	26,993
E. Employer contributions	6,848	8,151	6,457	2,494
F. Per capita cost of labour (D+E)	26,941	28,930	37,572	29,487
% share of gross salary of:	**63.2**	**66.9**	**62.7**	**33.6**
- employee contributions	9.2	13.4	20.8	8.1
- employer contributions	34.1	39.2	20.8	9.2
- taxes	20.0	14.3	21.2	16.3
% share of labour cost of:	**(48.8) 47.2**	**48.1**	**51.9**	**30.8**
- employee contributions	6.9	9.6	17.2	7.4
- employer contributions	25.4	28.2	17.2	8.5
- taxes	14.9	10.2	17.5	14.9
Cost of labour to net salary	**1.89**	**1.93**	**2.08**	**1.44**

B. Single-income household with 2 children (c)

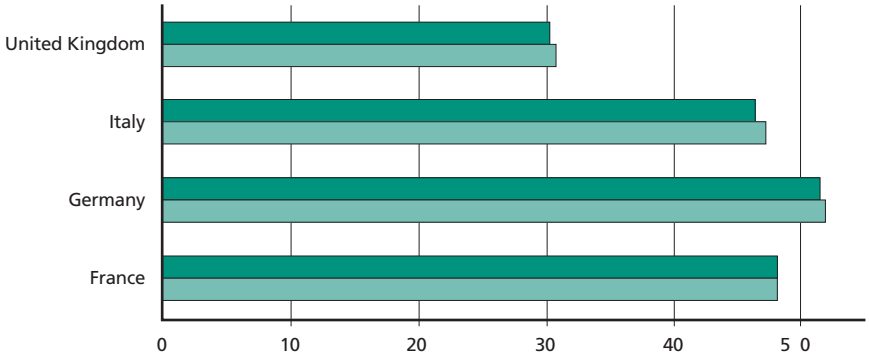
	Italia	Francia	Germania	Regno Unito
A. Annual salary net	16,978	17,664	24,663	22,610
B. Income taxes	3,165	1,579	-4	4,099
C. Employee contributions	1,847	2,786	6,457	2,179
D. Gross annual salary	20,093	20,779	31,115	26,993
E. Employer contributions	6,848	8,151	6,457	2,494
F. Per capita cost of labour (D+E)	26,941	28,930	37,572	29,487
% share of gross salary of:	**59.0**	**60.2**	**41.5**	**32.5**
- employee contributions	9.2	13.4	20.8	8.1
- employer contributions	34.1	39.2	20.8	9.2
- taxes	15.8	7.6	0.0	15.2
% share of labour cost of:	**(38.9) 37.0**	**38.9**	**34.4**	**23.3**
- employee contributions	6.9	9.6	17.2	7.4
- employer contributions	25.4	28.2	17.2	8.5
- taxes	11.7	5.5	0.0	13.9
- cash transfers for children	7.0	4.3	0.0	6.4
Cost of labour to net salary	**1.59**	**1.64**	**1.52**	**1.30**

(a) The above table reflects the conditions of an average worker in the manufacturing sector (*Average production Worker*, Apw).
(b) Data refer to an individual without children and with a salary equivalent to the average for the manufacturing sector.
(c) Data refer to a married couple with 2 children and with a salary equivalent to the average for the manufacturing sector.
(d) For Italy, figures in brackets include Irap.

Source: Oecd (2001), *Taxing wages 1999-2000*

Indeed, the amount of social contributions paid by the firm and by the worker do not change, but income tax is reduced due the presence of a dependent spouse and children. The overall level of the cost of labour remains unchanged, as the gross pay and contributions to be paid by the firm remain unchanged, whilst the worker's net disposable income is higher. The situation for the company remains the same, whilst there is a redistribution of resources in favour of the worker, due to greater intervention on the part of the State.
Graphic 2.10, regarding the position of a single worker in 1999 and 2000, shows a decrease in the last year of the tax wedge, although there are no changes in the relative positions of the different countries.

Chart 2.10 - Tax and social contribution wedge 1999-2000 (a)
(income taxes and social security contributions as a % of cost of labour)

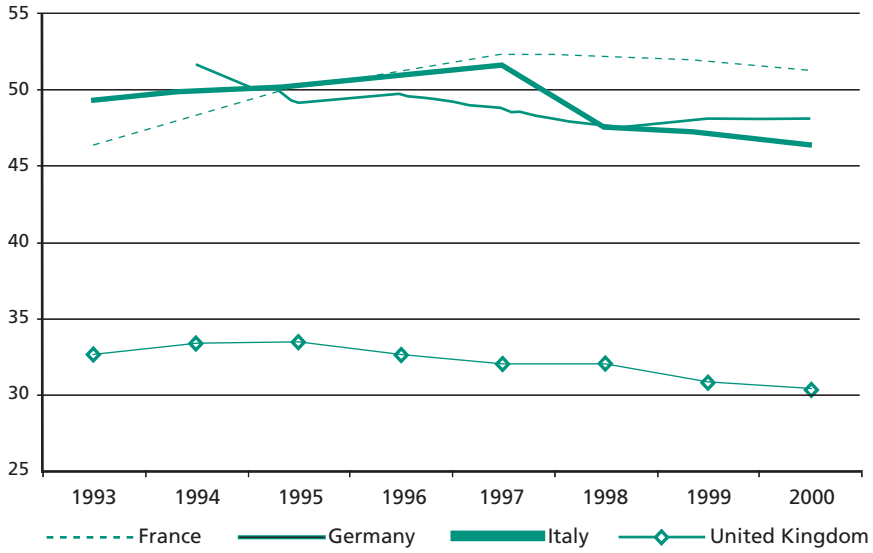


	France	Germany	Italy	United Kingdom
2000 (b)	48.1	51.3	46.4	30.3
1999	48.1	51.9	47.2	30.8

(a) Data refer to an individual without children and with a salary equivalent to the average for themanufacturing sector.
(b) For 2000, estimated value.

Source: Taxing wages 1999-2000, Oecd (2001)

Chart 2.11 - Tax and social contribution wedge 1993-2000 (a)
(income taxes and social security contributions as a % of cost of labour)



(a) For 2000, estimated value.

Source: *Taxing wages 1999-2000,* Oecd (2001)

An analysis based on a longer period of time (graphic 2.11) shows how there is a downward trend in the tax wedge in all of the countries examined, whilst taxation remains stable or falls slightly. Only in Germany, probably due to the unification of former East and West Germany, was there an increase in the tax wedge limited to the first part of the period examined.

2.3.4 Cost of labour, productivity and competitiveness of the system

A country's competitive position can be defined on the basis of many indicators. One of the most cited is the overall cost incurred by the firm for each unit of labour, which is affected by the tax and contribution wedge. Table 2.23 shows the hourly cost of labour in the manufacturing and services sector in some leading industrialised countries. In Italy, this cost is very low. Specifically, it is lower than that reported by France and Germany and is essentially in line with the figure posted by the United Kingdom.

As seen earlier, in the United Kingdom, the tax wedge is lower and the ratio of contributions to the cost of labour totals around half that reported in the other countries under consideration. Nevertheless, the cost of labour is more or less the same as that posted in Italy.

Tabella 2.23 - Labour cost and productivity - 2000
Italy Indices = 1,00

	Hourly labour cost (a)	GDP per worker (b)	Labour cost per unit of output	GDP per capita (b)
Belgium	1.37	1.14	1.36	1.23
France	1.29	0.99	1.42	1.10
Germany	1.44	0.90	1.74	1.18
Greece (c)	0.61	0.71	1.18	0.75
Holland	1.19	0.88	1.05	1.27
Spain	0.82	0.83	1.13	0.92
UK	1.05	0.88	1.33	1.15
Italy	1.00	1.00	1.00	1.00
Japan (c)	1.14	0.80	1.72	1.19
United States (c)	0.93		0.97	1.73

(a) Manufacturing and service sector.
(b) Computed on the basis of the PPP.
(c) The hourly labour cost and the cost of labour per unit of output in Greece, Japan and United States refer to 1999.

Source: compiled on the basis of Oecd and Eurostat data

The productivity and competitiveness indicators, also reflected in table 2.23, show that Italy ranks near the top at international level.

Joint analyses of the different indicators illustrated in table 2.23 show that the cost of labour in Italy is amongst the lowest and an output per unit of labour which is among the highest. Italy thus posts an index of the cost of labour per unit produced, defined on the basis of the ratio between the two quantities, which is higher than that of the United States but lower than those of other European countries.

With reference to the United Kingdom, the fact that GDP per unit of labour and productivity are no higher than those reported for the other countries examined, suggests that the role assigned to individual responsibility in hedging risks is considerable. In other words, via a selection of products available on the market, the individual is responsible for financing benefits which are guaranteed by the public system in other countries.

2.4 European healthcare systems at the crossroads between reform and convergence

European healthcare systems are rather complex and considerably different from one another with regard to both the methods used to supply services

and the composition of the sources of financing. As it is not easy to a define a single, comprehensive European model of healthcare, the elements common to the different countries are summarised below:

- Centralisation with regard to both the management and supply of services and to their financing;
- High ratio of pubic spending to the total of healthcare expenditure;
- Prevalence of a universalistic over selective systems;
- Presence of a national healthcare service or of national regulation which determine the minimum levels of guaranteed health protection for citizens and the means of accessing the system in terms of both demand and supply.

These elements, absent in alternative models and most notably in the US system, can be seen as the defining features of the European healthcare system despite the varied approaches therein comprised. Moreover, such features seem to withstand reforms which have been underway in numerous European countries for some years now. A comparison will thus be made with reference to both spending and forms of financing, with consideration being given to both quantitative and institutional aspects. Appendix A2.2 provides a brief examination of other aspects of healthcare systems.

2.4.1 Trends in healthcare spending in Europe

In Europe, at the end of the 1990s, overall healthcare spending as a ratio of GDP varied between 6.1 percent in Luxembourg and 10.3 percent in Germany. In a significant number of countries (France, the Netherlands, Belgium, Austria, Greece, Italy and Germany), all with very different systems, healthcare spending exceeded 8 percent of GDP. The more parsimonious countries included the United Kingdom, Spain, Finland and Ireland (see table 2.24).

Table 2.24 - Totale expenditure on health as a % of GDP. EU countries, 1990-1999

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Austria	7.1	7.1	7.5	7.9	7.9	8.5	8.7	7.9	8	8.2
Belgium	7.4	7.8	7.9	8.1	7.9	8.7	9	8.6	8.6	8.8
Denmark	8.5	8.4	8.5	8.8	8.5	8.2	8.3	8.2	8.3	8.4
Finland	7.9	9	9.1	8.3	7.8	7.5	7.7	7.3	6.9	6.8
France	8.6	8.9	9.1	9.5	9.4	9.6	9.6	9.4	9.4	9.4
Germany	8.7	9.1	9.7	9.7	9.8	10.2	10.6	10.5	10.3	
Greece	7.5	7.8	7.2	8.1	8.9	8.9	8.9	8.7	8.4	
Ireland	6.7	7.1	7.6	7.6	7.7	7.3	7.1	6.9	6.8	
Italy	8.1	8.3	8.4	8.5	8.3	7.9	8	8.3	8.2	8.2
Luxembourg	6.1	5.9	6.1	6.3	6	6.3	6.4	5.9	6	6.1
Netherlands	8.5	8.7	8.9	9	8.8	8.9	8.8	8.7	8.7	8.7
Portugal	6.2	6.8	7	7.3	7.3	7.6	7.6	7.5	7.7	
Spain	6.6	6.7	7.1	7.3	7.1	7	7.1	7	7	
Sweden	8.5	8.4	8.5	8.6	8.2	8.1	8.4	8.1	7.9	
United Kingdom	6	6.4	6.9	6.9	7	6.9	7	6.7	6.8	6.9

Source: Oecd (2001), *Health data.*

In the decade considered (1990-1999) there was a clear growth trend almost across the board. The exceptions were Denmark (where the reduction is barely perceptible) Finland and Sweden, that is, in countries

where the starting levels were rather high. It should be pointed out that in the middle of the 1990s, in almost all countries, the values were greater than those posted at the end of the ten-year period. This indicates that, in more recent times, there have not only been slowdowns in growth but actual reversals. Tables 2.25 and 2.26 show how both the private and public components contribute to the development of overall healthcare spending. In 1999, countries where public healthcare spending as a ratio of GDP reached the highest levels were Germany and France, at 7.8 and 7.3 percent, respectively. Greece reported the lowest level. At 5.5 percent, Italy is sixth to the last in this classification, followed by the other three lower Mediterranean countries and Finland and Ireland.

Public healthcare spending as a ratio of GDP shows that there was an upward trend in the majority of countries in the decade under consideration. Only Denmark (also imperceptible in this case), Finland, Sweden and Italy (from 6.3 to 5.5 percent) reported a drop. Thus, in addition to Italy, three other countries posted a reduction in overall public healthcare spending (see table 2.25).

Table 2.25 - Public expenditure on health as a % of GDP. EU countries, 1990-1999

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Austria	5.2	5.2	5.5	5.9	5.9	6.2	6.2	5.7	5.8	5.9
Belgium						6.1	6.4	6.1	6.1	6.3
Denmark	7	7	7	7.2	7	6.8	6.8	6.8	6.8	6.9
Finland	6.4	7.3	7.3	6.3	5.9	5.7	5.8	5.6	5.3	5.2
France	6.7	6.9	7.1	7.4	7.3	7.5	7.4	7.3	7.3	7.3
Germany	6.7	7.1	7.6	7.5	7.6	8	8.3	8	7.8	7.8
Greece	4.7	4.7	4.2	4.7	4.7	4.8	4.9	4.8	4.7	4.7
Ireland	4.8	5.2	5.5	5.5	5.5	5.3	5.1	5.3	5.2	5.2
Italy	6.3	6.5	6.4	6.2	5.8	5.3	5.4	5.6	5.5	5.5
Luxembourg	5.7	5.5	5.7	5.8	5.5	5.8	5.9	5.5	5.5	5.7
Netherlands	5.7	6.1	6.5	6.7	6.5	6.4	5.9	6	6	6
Portugal	4.1	4.3	4.2	4.6	4.6	5	5.1	5	5.1	5.1
Spain	5.2	5.3	5.6	5.5	5.6	5.5	5.5	5.4	5.4	5.4
Sweden	7.6	7.4	7.4	7.4	7	6.9	7.1	6.8	6.6	6.6
United Kingdom	5.1	5.4	5.9	6	5.9	5.9	5.9	5.6	5.7	5.7

Source: Oecd (2001), *Health data*.

Table 2.26 - Private expenditure on healt as a % of GDP: EU countries, 1990-1999

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Austria	1.9	1.9	2	2	2	2.4	2.5	2.3	2.3	2.3
Belgium						2.6	2.6	2.5	2.5	2.5
Denmark	1.5	1.4	1.4	1.5	1.5	1.4	1.5	1.5	1.5	1.5
Finland	1.5	1.7	1.9	2	1.9	1.8	1.9	1.7	1.6	1.7
France	1.9	2	2	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Germany	2.1	2	2.1	2.2	2.2	2.2	2.3	2.5	2.5	
Greece	2.8	3	3	3.4	4.2	4	4	3.9	3.6	
Ireland	1.9	1.9	2.2	2.1	2.2	2	1.9	1.7	1.6	1.6
Italy	1.8	1.8	2	2.3	2.4	2.6	2.6	2.7	2.7	
Luxembourg	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.4
Netherlands	2.7	2.6	2.4	2.3	2.3	2.5	2.9	2.7	2.7	2.8
Portugal	2.1	2.5	2.8	2.7	2.7	2.7	2.5	2.5	2.5	
Spain	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.7	1.6	
Sweden	0.9	1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	
United Kindom	0.9	1	1	1	1.1	1.1	1.1	1.1	1.1	1.2

Source: Oecd (2001), *Health data*.

Throughout the 1990s, private spending also grew in most countries. The exceptions were Denmark and Luxembourg, where spending remained stable, and Ireland, where there was a slight drop (see table 2.26). Italy and Greece saw the largest rise in this component. As a result of these trends, Italy was the only country where overall healthcare spending did not fall, as the reduction in public expenditure was more than offset by private spending.
It should also be noted that the most significant changes in both components occurred during the first half of the decade considered. Conditions remained essentially stable from 1995 to 1999. Table 2.27 summarises some key data relating to public spending as a ratio of overall healthcare spending, even if reference is limited to three years (1990,1995 and 1999, or 1998, when indicated).

Table 2.27 - Pubblic expenditure on health as a % of total expenditure on health

	1990	1995	1999	Change 1999-1990	Change 1999-1995
Austria	73.20%	72.90%	72.00%	-1.30%	-1.00%
Belgium	nd	70.10%	71.60%	nd	1.50%
Denmark	82.40%	82.90%	82.10%	-0.20%	-0.80%
Finland	81.00%	76.00%	76.50%	-4.50%	0.50%
France	77.90%	78.10%	77.70%	-0.20%	-0.50%
Germany*	77.00%	78.40%	75.70%	-1.30%	-2.70%
Greece*	62.70%	53.90%	56.00%	-6.70%	2.00%
Ireland*	71.60%	72.60%	76.50%	4.80%	3.90%
Italy	77.80%	67.10%	67.10%	-10.70%	0.00%
Luxembourg	93.40%	92.10%	93.40%	0.00%	1.40%
Netherlands	67.10%	71.90%	69.00%	1.90%	-2.90%
Portugal*	66.10%	65.80%	66.20%	0.10%	0.40%
Spain*	78.80%	78.60%	77.10%	-1.60%	-1.40%
Sweden*	89.40%	85.20%	83.50%	-5.90%	-1.60%
United Kingdom	85.00%	85.50%	82.60%	-2.40%	-2.90%

Source: Processing on Oecd (2001), *Health data.*
*The latest figures refer to 1998

What stands out most is the variability of the data: in 1999 data ranged from 93.4 percent in Luxembourg to 56 percent in Greece. Denmark, Sweden and the United Kingdom topped 80 percent. Only four countries posted figures below 70 percent. They were the Netherlands, Italy, Portugal and Greece, listed in descending order. Italy was thus the only large European countries to report such low percentages of public spending.
Over the ten-year period and in line with the trends described above, the ratio of public spending to overall spending fell almost everywhere in favour of private spending. There were only three exceptions, Ireland, the Netherlands, and, to a barely perceptible degree, Portugal.
In Italy, the percentage of public spending fell drastically due to both growth in the private component and a reduction in public expenditure, which dropped from 77.8 percent in 1990 to 67.1 percent in 1999. However, this change took place only during the first half of the decade when the percentage fell from 76.2 to 67.1 percent between 1992 and 1995. A variable trend prevailed during the two sub-periods. For 5 countries (Denmark, France, Germany, the Netherlands and the United Kingdom) initial growth in the percentage of public spending was followed by an increasingly pronounced downward trend in spending, except in the case of the Netherlands. As can be seen, Europe's three leading countries

fall into this group. In four other countries, Finland, Greece, Luxembourg and Portugal, this variable trend followed an opposite path. In Austria, Spain and Sweden, there was a drop during both periods. Ireland was the only country to witness ongoing growth.
It is interesting to note that during the second half of the decade, growth in private spending outstripped that in public spending (with a consequent drop in the latter as a ratio of total spending) in all countries with the exception of Ireland, Greece, Luxembourg, and Portugal. Notably, Italy's position remained unchanged. Thus the trend in leading European countries was rather clear and homogeneous.
In conclusion, taking due account of all of the problems characterising a comparison of the available data, it can be stated that:
Overall healthcare spending in European countries – and especially in larger countries – grew as a ratio to GDP in the 1990s.

- During the second half of the decade, there was a trend towards stability, if not downright reduction;
- The ratio of public spending out of the total of healthcare spending was decidedly prevalent in almost all countries;
- The growing importance of the private component was, however, rather widespread and evident, especially during the second half of the decade. Some smaller countries proved to be exceptions;
- Italy was the only country in which, throughout the decade, growth in the private component was sustained enough to more than compensate for the drop in public spending. However, this phenomenon was mostly and especially noticeable during the first half of the 1990s.
- The specific characteristics of the countries' healthcare systems do not always explain these trends: countries with different models of supply and financing posted analogous percentages for private spending (for example, Italy and the Netherlands) or for public spending (for example, the Netherlands and Sweden).

2.4.2 Reasons for and characteristics of the reforms carried out in the 1990s. Quasi-markets in the new supply mechanisms

Most European countries saw significant reforms in their healthcare systems throughout the 1990s.
Such reform arose from the need to contain public spending and from widespread dissatisfaction regarding the levels of efficiency and effectiveness of the existing structures.
The majority of European healthcare systems were highly centralised in terms of supply of services and suffered from a lack of adequate incentives to keep costs down. This lack regarded both the demand side (represented above all by general practitioners) as well as supply side (hospitals).
The command and control mechanism in place in many countries set current expenditure on the basis of historical spending, regardless of the level of effectiveness of healthcare and the efficiency of past economic choices. This system fuelled a sort of supply-push effect whereby, given the vast information asymmetry between physicians and their patients, healthcare supply ends up generating demand. The lower the costs and risks shared amongst providers, payers and the assisted, the greater the effect.

At the end of the 1980s, there was a growing awareness in European countries that this type of system ended up promoting opportunistic behaviours. The result was what is known as the ratchet effect, meaning that, each year, providers at different levels (general practitioners, specialists, hospital structures) tend to reproduce at least the same levels of service and costs as those posted the previous year. Another negative consequence was the growth in demand for assistance. Indeed, the lower the level of cost-sharing for the services provided, the greater the demand. Such inefficiency, ultimately translating into growing public spending, was coupled with widespread dissatisfaction on the part of citizens due to long waiting lists. Such unsatisfactory levels of service were in part due to the absence of proper forms of incentives for healthcare workers operating at different levels, to the inexistence of efficient mechanisms to monitor, control and sanction inefficient and opportunistic behaviours and the to absence of significant forms of competition amongst different healthcare providers.

The pillars of reform

Reforms concerning healthcare supply sought to introduce ways of using and provide services designed to reinstate the correct functioning of incentives for patients, doctors and hospital facilities[36].

The introduction of appropriate incentives to control supply was an effective regulatory instrument to reduce excess demand and, thus, healthcare expenditure. Essentially, they were regulations which impacted on the micro-economic level and intervened to modify centralised supply systems where mechanisms supporting the continuation of past expenditure levels prevailed.

The main pillars upon which most of the reforms in the 1990s in Europe were founded can be summarised as follows:

- A move away from the highly centralised regulation of demand and supply of services to system based on negotiation, understood as an alternative mechanism to the integrated management of healthcare systems, in order to contain costs, to improve the quality of services and to foster competition between systems offering alternative forms of treatment;
- The introduction of managed competition mechanisms among service providers;
- The definition of a system to remunerate hospital healthcare services by type of diagnosis;
- The establishment of virtual cost constraints for general practitioners so as to encourage planning in relation to patient-induced expenditures;
- The introduction of greater freedom of choice regarding alternative service structures for both doctors and patients.

The separation between supplier and buyer of services was essential to reducing ineffectiveness. With the contract between supplier and buyer of services, the buyer or paying party (meaning the State in the United Kingdom, Finland, Sweden and Italy) orders a series of services from the

(36) For more information regarding these topics and others, reference should be made to Chernichovsky (2000), Evans (2001), Hurst (2000), Jee and Or (1999) and Koen (2000).

supplier, specifying, in many cases, the prices to be reimbursed, the supply volumes and the average expected quality. Generally speaking, the contract is not legally binding, but is seen more as a master agreement.
Accordingly, the buyer can refuse to pay more than agreed or choose not to renew an agreement with a given structure or doctor. In order to ensure that the threat of non-renewal is effective, the contract must at least be viewed as valid by the supplier. Nonetheless, such validity depends heavily on the cost buyer has to incur to switch suppliers. (Enthoven, 1985).
The separation between buyer-payer and supplier was accompanied by the introduction of mechanisms to foster competition among suppliers based on a system called quasi-market, internal market or managed competition.

One the one hand, competition among supply structures resulted in the duplication of a vast number of costs, especially those of an administrative nature. On the other hand, it allowed for the introduction of incentive systems aimed at improving standards of quality and at lowering supply costs.
The introduction of service fees was the biggest change of the decade. This system of financing, based on the remuneration of services, based on fees commensurate to the related cost of production involved more planning responsibilities and new forms of control. Specifically, the DRG (Diagnostic Related Groups) system identified groups of homogeneous diagnoses, based on the economic resources needed for their supply, and assigned a fee to each. The contracts between suppliers and buyers thus pre-determined the spending budget on the basis of the fees identified and the expected volume of services in a given period of time. With the introduction of a fee-based system, suppliers were motivated to reduce supply costs and to rationalise organisational costs, based on the fact that any savings with respect to the pre-established fee represented a net gain.
The introduction of hypothetical budgetary constraints for family physicians followed along the same lines. The idea was to encourage physicians to control total healthcare expenditure generated by their patients by selecting the type and number of services based on real need and the level of urgency and efficiency.
Finally, the last pillar of reform regarded patients' freedom of choice in relation to healthcare structures. In some cases this choice regarded both the family physician and the structure. In other cases, such choice was limited to hospitals, even if, in actual fact this decision taken by the family physician. Within this context, freedom of choice is viewed as both an objective in and of itself and as a healthcare policy aimed at fostering competition to increase the quality of services provided.

Implementation of supply-side reforms in some European countries
The first country to begin reforming the supply systems of healthcare expenditure was the United Kingdom. The financial crisis of 1987 presented an opportunity for reform, even if financial problems were not the underlying basis for the changes. Indeed, British healthcare expenditure had continued to remain constantly below the European average. On the other hand, the rationing of treatment, a phenomenon certainly not independent of cost containment measures, had increased significantly. Thus the existence of long waiting periods was the most

important factor to spark the reforms.
The underlying idea was to govern supply and align the incentives of all interested players via the separation of the supplier and buyer of healthcare services and the use of contracts which included pre-established spending budgets based on the volume of expected services. Such reforms also included the introduction of mechanisms to enhance competition amongst suppliers as they vied for supply contracts.
Many European countries quickly copied, more or less faithfully, the reforms implemented in Britain. This occurred before any valuations, even partial ones, could be carried out with regard to the efficiency and effectiveness of the changes. The reason for such (later regretted) haste was the conviction that the measures introduced were able to provide the correct incentives to the different players involved. And yet, in countries such as Sweden where the past fixing of budgets had already allowed for cost containments, the purpose of adopting British-style reforms was to grant users freedom of choice, seen as the driving force of the entire system.
Italy, too, introduced reforms in 1992. Such changes were aimed at creating a system of internal markets characterised by competition between public structures and those private structures allowed to provide services in the name and on behalf of the national healthcare service. The 1992 reforms were characterised by: a marked tendency towards deregulation, to adapt the supply of goods and services to the changing needs of demand; the adoption of a decentralised system, whose purpose was to provide a detailed diagram of specific local needs and differentiated solutions, where necessary; to turn leading local health authorities and hospitals into company-like structures by assigning them the status of public body and requiring that their activities be carried out based on the principles of autonomy and cost-effectiveness. Regional authorities acted as external controllers, responsible for checking the results and for not taking any sort of preventive action, in line with the principle of autonomy. The task assigned to local health authorities was to satisfy the health needs of the local community by ensuring uniform levels of assistance. This job was fulfilled both directly, via the production and supply of services, and indirectly, via their acquisition from a group of accredited external subjects, remunerated by means of a fee-based system. Hospitals were responsible for meeting people's specific health needs by providing diagnostic services and treatment, adequately responding to demand in terms of quality and quantity. Individual regional authorities were responsible for setting unit fees to be applied to services provided by the single public and private operating units Finally, each local health authority worked with the operating units (previously authorised and credited by said authority) to draw up a yearly plan to divide up the funds made available by the region.
Some countries, such as Sweden and Germany, later introduced reforms more or less based on the British model. Other countries, such as France and Spain, resisted such changes (See Appendix A.2.3 for a description of changes in the healthcare systems of some of these countries).
On the whole, the first part of the 1990s saw the height of changes based on a market model of competition while the end of the 1990s and the start of the new century saw a return to models based less on competition and

free choice. This was due to three basic reasons: First of all, the more competition-based model apparently did not reduce public spending. Indeed, in some cases, expenditure actually rose. Secondly, at least in some cases, the reforms generated new problems relating to motivation and inefficiency. Finally, citizens were dissatisfied, especially with the long waiting lists and bad quality of some services and treatments. Apparently, the reforms introduced did not resolve such problems.

2.4.3 Old problems resolved and new difficulties to face following experiments with a "quasi-market" system

The reforms carried out in the 1990s in some European countries led to new problems regarding motivation and cost containment and, especially, there were numerous stumbling blocks to meeting all of the fixed objectives.[37]

In some cases, competition for service supply contracts led suppliers to duplicate the provision of services, leading to an excess of supply. Specifically, the fixing of fees produced an excess of supply in some areas and an excess of demand in others, leading to the waste of economic resources, waiting lists and the rationing of services. This prompted the need (in the United Kingdom, Sweden, Italy and Germany) to decrease the level of direct competition amongst supply structures and to encourage their co-operation so as to cover all fields of supply.

The freedom of choice ensured by a quasi-market system can, at times, end up increasing the costs incurred in maintaining a pluralistic system of supply. An analogous problem arises when each regional public authority is allowed to autonomously fix payment and reimbursement systems for the different services. In this case, the inefficiencies, the attempts to hoard the best services and limited freedom of choice were manifested differently in different regions. The result was uneven service for citizens residing in different areas of the country. Freedom of choice among different regional supply structures can end up reducing the competitiveness of some regions and the supply structures therein located. This seems to have happened in Sweden, for example.

The introduction of a fee system leads suppliers to reduce supply costs and to rationalise organisational costs, based on the fact that any savings compared with the fixed fee represents a net gain. However, new forms of opportunism can arise. For example, the temptation to declare, in the absence specific checks, only the supply of high-cost services. In the first case, there is the real risk that, given the fixed fees for homogeneous groups of diagnosis, some suppliers could be motivated to concentrate on offering those services with a higher average yield in relation to average costs, to requested volumes and to the fees reimbursed, thereby leaving other needs unmet.

Moreover, the introduction of a reference budget could lead a physician, in his dual role as both buyer and suppler of (basic) healthcare services, to ration even necessary services once the amount of overall spending or related spending reaches the fixed limit. The mechanisms introduced to provide an incentive to general practitioners can have other negative

(37) These topics are analysed from different points of view and with a different slant in McPake and Mills (2000), Palmer (2000), Preker, Harding and Travis (2000), Satlman and Figuera (1997).

effects. They can even increase suppliers' and buyers' transaction and control costs to such an extent as to offset any gains in efficiency. Therefore, this model poses a dilemma. The creation of a quasi-market system requires a greater degree of regulation in terms of defining jobs and duties and monitoring activities to be carried out, with the related considerable costs. Failure to cover such costs inhibits the creation of a quasi-market system and can even encourage opportunistic behaviours at different levels.

Thus, the creation of a quasi-market system does not necessarily lead to a reduced presence of the State. In countries where this model has included a significant participation of private, accredited subjects, the competition mechanism has indeed reduced the presence of the State with regard to the supply of services. However, it has increased the State's role as a controller, both during the selection of subjects certified to provide services on behalf of the national healthcare system and during the verification of the contracted commitments.

Naturally, the size of costs deriving from possible inefficiencies due to the quasi-market system depends on the ability of the regulator to fix appropriate criteria to determine the fees and, in general, the form of contracts for the purchase of services.

One of the most critical points reported by different countries which have experimented with this model is the fact that, in order for negotiations between suppliers and purchasers to be effective, the contract must last for a sufficiently long period of time. Indeed, the signing of medium- to long-term contracts would allow for:

- a reduction of transaction costs connected to periodic checks of the terms of the contract
- a reduction of transaction costs connected to the renewal and/or signing of contracts with other counterparties;
- the creation of economies of scale, density and scope on the part of suppliers;
- the acquisition of important information on the part of the supplier.

The efficiency gained with medium- to long-term contracts compared with short-term, annual contracts caused this model to shift away from competition in a market, where all supply structures compete in the same market every year to capture an annual supply contract, to competition for the market. In the latter, supply structures compete in calls for bids to win long-term supply contracts thereby allowing for a monopoly on the supply of a given set of healthcare services.

Naturally, competition for the market decreases those aspects disciplined by market competition in that it reduces the possibility to break with and replace a counterparty who commits breach of contract or fails to refrain from opportunism. In contrast, medium-term relationship-oriented contracts lower transaction costs connected to a lack of trust or information, but they also eliminate potential competition for a considerable period of time in that they can discourage the entrance of new market players, especially when large, unrecoverable investment is required.

The best choice regarding the form and duration of contracts depends on the type of service to be supplied, on the level of technology and on the

volumes involved. At present, available studies regarding the reform of healthcare systems with a view to creating a quasi-market system do not allow for a full valuation of costs and opportunities in terms of overall efficiency of alternative forms of contracts (Le Grand, 2000; Mys, Mulligan, Goodwin, 2000). Also with regard to the reforms carried out in England regarding the introduction of a quasi-market system, for which data covering more than a decade are available, the studies which have tried to isolate and evaluate some effects of the reform have not reached any conclusive results. Nevertheless, high transaction costs have convinced some countries to adopt long-term contracts and to define the perimeter within which competing structures have to provide their services.
In Sweden, however, this strategy has been thwarted by the limited availability of financial resources on the part of different local authorities caused, in turn, by decreasing demand of the services provided. An analogous problem also arose in Germany. In this case, the presence of a high number of competing suppliers and insurers helped to extend the possibility of free choice to paying parties and, in part, limited the free choice of patients in terms of recourse to the diagnostic and therapeutic services contracted and the different supply structures or physicians' associations. The mix of free choice, a quasi-market system and regionalisation of services is particularly interesting in Spain where, despite the considerable delay compared with other countries, the State is trying to introduce reforms to spark competition on the supply side.
Finally, in Italy, reforms to boost competition in the healthcare system failed to take place due to delays and to the great similarity of the models adopted in different regions.
The experience of some European countries demonstrates how some of these "fine-tuning" measures eventually modified the model originally introduced. In England, for example, the changes implemented by the Blair government originally shifted emphasis from competition to co-operation among supply structures, by favouring models of competition for the market (in order to obtain long-term supply contracts) to models of competition in the market. Afterwards, the Blair Government announced its intention to increase the financial resources available for healthcare in order to reduce waiting times and ensure more rapid access to healthcare services.
The British case also seems to suggest how objectives to increase the efficiency of healthcare can require not only cost rationalisation measures but also increased financing of some areas.
In other words, there can be specific areas of expenditure characterised by a minimum threshold under which no incentive system can guarantee effective healthcare. Similarly, the Swedish experience seems to show how the objective of guaranteeing citizens' free choice of supply structures can be subordinated to spending limits in instances where citizens' freedom of choice generates various types of inefficiency (for example, reducing the minimum levels of efficient supply of some supply structures).

2.4.4 Trends and reforms characterising the financing systems of leading European countries

There are four main methods of financing overall healthcare spending: general taxation, social contributions, direct consumption or "out of pocket" expenditure and private insurance. The first two are public in

nature and presume State intervention whilst the second two are typically private. The distinct characteristics of each of these alternatives, together with a concise list of their main advantages and disadvantages are provided in boxes 6, 7, 8 and 9.
In order to compare European countries from this point of view we utilised OECD data which, though very incomplete, illustrate the variety of experiences on the European continent. The first group of countries relies primarily on the general taxation system. As shown in table 2.28, which does not take account of all European countries and is admittedly incomplete with many empty spaces, in the six countries considered (Denmark, the United Kingdom, Italy, Ireland, Finland and Spain, here listed in decreasing order) more than 50 percent of healthcare spending is financed by general taxation. Specifically, according to the most recent data, Denmark and the United Kingdom cover more than _ of healthcare spending via general taxation.

Table 2.28 - Share of healtlhcare expenditure financed out of general taxation. Selected European countries

	1960	1965	1970	1975	1980	1985	1990	1995	1999
Austria								22.9	28.4
Denmark				85.4	87.8	85.6	82.7	82.5	82.2
Finland	54.1	59.9	63.2	66.1	66.6	68.4	70.3	62.2	60.7
France							2.3	2.3	2.5
Germany			14.5	12.4	11.7	11.2	10.8	10.1	
Ireland							64.4	65.4	
Italy							79.1	71.9	72.2
Luxembourg						21.5	20.9	15.4	10.7
Spain								59.5	
Switzerland						17.8	18.8	15.8	
United kingdom	82	84	86	89	89	86	71.5	75.3	

Source: Oecd (2001), *Health data.*

Box 6 – General Taxation

The general taxation system includes income tax, property tax, sales tax, value added tax and other forms of taxation. The advantages are a) it is possible to fix low, average rates of financing, thanks to the broad and varied tax base; b) with income tax, thanks to the progressive rate, there is a high correlation between financing and contribution capacity, although possible horizontal inequities cannot be excluded due to exemptions and deductions of some expenditures. The disadvantages are a) with income taxes, the risk of tax evasion and "free riding" is high; b) there may not be a connection between spending and benefits, giving rise to possible "moral hazard" due to the irresponsibility induced by the presence of a third paying party; c) with indirect taxes there is the probable risk of tax shifting and price increases; d) as revenues are collected out in an indistinct manner, it is necessary to adopt criteria to allocate the funds to the various uses; e) the taxes can produce distorted effects; f) the tax revenues can vary greatly depending on the economic cycle.

Other countries primarily finance healthcare expenditure by means of social contributions and, for this reason, it can be said that they adopt social

protection systems. Table 2.29 shows that, according to the most recent data, in Luxembourg, France, Germany and Switzerland, social contributions cover more than 50 percent of healthcare spending, with the first three countries posting especially high levels of coverage. Austria also makes considerable use of this form of financing.

Table 2.29 - Share of total healthcare ependiture financed with social contributions: Selected European countries

	1960	1965	1970	1975	1980	1985	1990	1995	1999
Austria								49.4	43.6
Finland		6.1	10.6	12.6	12.5	10.2	10.6	13.3	14.9
France							74.3	73.7	73.7
Germany			58.3	66.6	67.0	66.1	65.4	68.0	
Ireland							7.3	7.0	
Italy							0.3	0.3	0.1
Luxembourg								77.1	82.3
Spain								18.6	
Switzerland						48.3	49.6	56.5	
United Kingdom							12.3	9.5	

Source: Oecd (2001), *Health data.*

Box 7 – Social contributions

Social contributions are mandatory and are generally calculated on the basis of earnings reported by salaried and self-employed workers, sometimes with minimum (for exemption) and maximum thresholds. It is a type of social welfare tax. The advantages are a) such contributions are transparent and sustainable and, thanks to the financial illusion, can be determined without too much conflict; b) they are easily collected, the tax base is wide and the rates are bearable; c) if they are not calculated centrally, they are less subject to political decisions compared with taxes; d) in the case of occupational mobility and changes, they can easily "follow" a worker. The disadvantages are: a) they impact on the cost of labour and reduce a nation's competitiveness; b) the component paid by the employer can be passed on to the consumer and the percentage is often not proportional to real contribution capacity; c) there can be a disparity in the treatment of different categories of workers, wages and salaries and returns on investment with different degrees of possible evasion. Moreover, if there is a minimum threshold of exemption, this fact could encourage precarious forms of work; d) the system could give rise to the phenomenon of "moral hazard" due to the presence of a third paying party; e) tax revenues can vary cyclically and feel the effects of an ageing population and a reduction in the working population; f) the system needs criteria to determine the allocation of the collected funds; g) only workers and their families can utilise the benefits; h) there can be a reduction in work mobility if the social contributions are not wholly "portable".

Although private financing is less significant in all European countries, its role is not without significance and, at least in some cases, it has tended to grow in recent years. The first component to be considered is that of out-of-pocket payments, including the payment of reduced service fees (hereafter "tickets") and cost-sharing.

Although also incomplete due to the aforementioned reasons, table 2.30 shows that out-of-pocket payments reached values ranging between 15 percent and 20 percent of overall healthcare expenditure at the end of the 1990s in Austria, Denmark, Finland and Ireland. In 1999, Italy posted the highest value: almost _ of total spending. However, this is the only figure available for Italy and thus, no definitive conclusions can be drawn.

Table 2.30 -Out-of-pocket payments as a % of total expenditure on healt. Selected European countries

	1960	1965	1970	1975	1980	1985	1990	1995	1999
Austria								14.1	16.6
Denmark				13.7	11.4	13.6	16.0	16.3	16.2
Finland	43.6	31.3	23.8	18.7	18.4	18.3	15.5	20.5	20.0
France								11.1	10.1
Germany			13.9	9.6	10.3	11.2	11.1	10.9	
Ireland						14.4	17.7	15.6	
Italy									24.1
Luxembourg					7.2	9.2	5.5	6.2	7.1
United Kingdom					8.6		10.6	11.0	11.2

Source: Oecd (2001), *Health data.*

Box 8 – Direct or out-of-pocket consumption

In the case of direct or out-of-pocket consumption, the beneficiary directly pays the price of the healthcare services as a consumer pays for any other type of good or service. In reality, healthcare services cannot be compared with private goods because: 1) give rise to widespread externalities 2) health is considered to be a merit good and thus, socially speaking, under-consumption in not acceptable; 3) an individual is not the best judge of his own health needs, due to uncertainty, a lack of information and limited knowledge, all of which a physician can take advantage of; 4) health is also a productive investment requiring a certain amount of liquidity which single individuals may not possess. The disadvantages of this method arise from the temptation to make the individual responsible for all healthcare decisions. An individual can take incorrect decisions or not have the financial means available to take the right action. Even if the financial problem can be resolved with subsidies, there are no solutions for problems related to a lack of knowledge and information. The principal advantages regard the apparent greater freedom enjoyed by individuals (including the freedom to make mistakes). This type of financing can be coupled with cost-sharing or "tickets", to be paid upon receipt of service. The main advantage consists in containing the demand of healthcare services via the reduction of "moral hazard" due to the participation of beneficiaries in covering the costs of the services utilised. The most obvious disadvantages involve the possibility that such a reduction in demand also involves necessary healthcare services and that such disadvantages impact most heavily on the poor.

The fourth component of private spending, and the last to be considered, is private insurance. Given the characteristics of European healthcare systems, this component is rather modest. A partial exception is France, where the related percentage is more consistent (see table 2.31). The reason is that this instrument is widely used to reimburse "tickets" and cost-sharing.

Table 2.31 - Private insurances as a % total expenditure on health: Selected European countries

	1960	1965	1970	1975	1980	1985	1990	1995	1999
Austria	6.8	7.8	8.1	7.2	7.6	9.8	9.0	7.9	7.1
Denmark				0.9	0.8	0.8	1.3	1.2	1.6
Finland	2.4	1.8	1.7	1.3	1.4	1.8	2.1	2.4	2.6
France								11.9	12.6
Germany			7.5	5.8	5.9	6.5	7.2	6.7	
Ireland							8.3	8.4	
Portugal						0.2	0.8	1.4	
United Kingdom		0.7	0.9	1.1	1.3	2.5	3.3	3.2	3.4

Source: Oecd (2001), *Health data.*

Box 9 – Private insurance

The basic principle of private insurance is that the healthcare services utilised are paid by the insurance companies while the individual must pay the insurance premium. Studies have shown that if individuals do not like risk, it is expedient for them to sign an insurance contract in which the claim settlement in case of accident is proportional to the premium paid. Moreover, if the insurance companies fixed a fair premium, that is equal to the present value of the healthcare expenses expected to be incurred, it would be advisable for individuals who are risk-avert to take out an insurance policy which covers all risks. The two main disadvantages are: a) the absence of correlation between expense and benefit which, generating "moral hazard", can induce excess total spending with a consequent increase in the cost of healthcare services. A partial solution consists in the introduction of forms of cost-sharing for costs relating to services as they are requested; b) the possibility that only high-risk individuals would decide to insure themselves, with the likelihood that a specific service would, indeed, be needed. A corrective measure could be the use of initial, medical check-ups.

There are different types of insurance. Substitute insurance policies provide the coverage of services which can substitute public services and are prevalently directed to individuals with high income levels. The negative correlation between income and morbidity ensures that insurance companies capture low risk individuals leaving all those at high risk to the public sector.

Complementary insurance policies provide services not guaranteed by the public insurer. In general, their presence gives rise to a system of double coverage of health risks but it is also possible that the insurance policies supplement services which are not completely free-of-charge in the public system. For example, they can cover remaining expenses for services partially covered by governmental cost-sharing policies or tickets. However, this last case could give rise to the phenomenon of "moral hazard" and there could be negative consequences if poor people are not able to pay the cost of insurance. Finally, supplemental insurance policies provide the same services as the public sector, but often ensure quicker access (shorter waiting lists) or better hospital stay services. The presence of these types of insurance makes it more difficult to programme activities and increases the risk of duplicating expenses.

Even with the limited data available, it is possible to identify some trends in the methods of financing common to most European countries.
First of all, there is a certain extension of the percentages of cost-sharing

on the part of users of the public healthcare services, due above all to an attempt to contain both demand and costs. Table 2.32 provides an approximate summary of the most recent trends in each country. The only country which reports a reduction is Switzerland.
It also seems that the trend in growth is most evident in countries where financing is based on social protection. This probably indicates that these countries feel the greatest need to contain costs.

Table 2.32 - Cost-sharing trends in healthcare financing

Austria	>
Belgium	>
Denmark	=
Finland	>
France	>
Germany	>
Greece	=
Italy	>
Holland	?>
Portugal	=
Spain	=
Sweden	=
Switzerland	<
United Kingdom	=

N.B.: > increase, = unchanged, < decrease.

Another relevant trend regards the equity of healthcare systems. Everywhere in Europe there is a progressive increase in the percentage of the population covered by healthcare assistance (see table 2.33). Many countries, beginning with those which favour general taxation, have achieved or are achieving universal coverage. Nevertheless, there is cause for concern regarding the equity of different systems. Such worries largely regard the strategies adopted to contain costs. Specifically, inequities can increase due to the replacement of regressive sources (cost-sharing) with proportional or progressive sources (general taxation or social contributions) or to the inability of exemption systems to protect weaker

Table 2.33 - Percentage of population covered by public healthcare: Selected European countries and years (1960-1999)

	1960	1965	1970	1975	1980	1985	1990	1995	1999
Austria	78.0	92.0	91.0	96.0	99.0	99.0	99.0	99.0	99.0
Belgium	58.0	68.5	97.8	99.0	99.0	98.0	97.3	99.0	
Denmark	95.0	95.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Finland	55.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
France	76.3	85.0	95.7	96.0	99.3	99.0	99.5	99.5	
Germany	85.0	85.8	88.0	90.3	91.0	92.2	92.2	92.2	
Greece	30.0	44.0	55.0	75.0	88.0	100.0	100.0	100.0	
Ireland	85.0	85.0	85.0	85.0	100.0	100.0	100.0	100.0	100.0
Italy	87.0	91.0	93.0	95.0	100.0	100.0	100.0	100.0	
Luxembourg	90.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Netherlands	71.0	71.0		75.0	74.6	73.4	73.9	79.2	74.2
Portugal	18.0	32.0	40.0	60.0	100.0	100.0	100.0	100.0	
Spain	54.0	55.0	61.0	81.0	83.0	90.0	99.0	99.5	
Sweden	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Switzerland	74.0	82.0	89.0	94.0	96.5	98.0	99.5	99.5	100.0
United kingdom	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Oecd (2001), *Health data.*

subjects with the introduction of maximum thresholds of expenditure for cost-sharing, such as in Finland and Sweden. Nevertheless, given that expenditure for cost-sharing is only a small part of overall financing , the related impact of such a policy might be relatively minor.

According to a recent study (Wagstaff and others, 1999), in some countries such as France, Sweden and Switzerland, there seemed to be an overall regression in the system of financing in the 1980s and 1990s. The opposite was true in other countries, in particular Denmark, the Netherlands and Spain.

The growing diffusion of different types of healthcare federalism raises some important problems with regard to fairness and access to equal service. All forms of federalism inexorably present a greater or lesser degree of horizontal inequalities. In other words, individuals with similar needs receive different levels of treatment. To this end, models have been developed to compensate for regional difference.[38]

In Finland, town authorities can decide whether or not to request payment for some types of medical services and even determine the means of payment, via annual enrolments or upon each visit. In Germany, there were large discrepancies in the different rates of contribution to the different healthcare sources. The introduction of a risk compensation fund decreased these differences.[39] There are also differences in cost-sharing amongst the different counties in Sweden. Yet, despite these concerns, the federalist systems are widely accepted and sufficiently stable with regard to financing mechanisms.

Indeed, according to rather recent surveys, the level of satisfaction on the part of citizens in these countries is amongst the highest: 47 percent in Denmark, 44 percent in Germany, 78 percent in Finland and 46 percent in Sweden.[40]

On the other hand, the generalised increase in long-term patients poses specific problems with regard to financing. Currently, despite the high levels of growth, the very limited component of healthcare spending (on average around 2 percent of GDP[41]) ensured that needs could be met. In future, however, the problem could become more serious. At the moment, there is a partial convergence of organisational methods. The percentage of elderly treated in hospitals and institutions is generally around 5 percent, whilst the percentage of those who prefer home treatment generally ranges between 5 percent and 20 percent. In contrast, very different solutions are adopted from the point of view of financing. These range from purely private financing (savings or insurance), to partially private (state subsidies to private insurance policies) to social or public (social security or general taxation).

(38) The two main models are the orizontal fund, in which the equalisation comes with the direct transfer of resources between regions or funds, and the vertical model, where region which are disadvantaged in terms of high healtcare risks or lower contribution capacity are compensated via centralised transfers.

(39) Insured individuals who pay at least one percentage point above or below the average fell from 27 percent in 1994 to 7 percent in 1999.

(40) See the graph, taken from the 1998 Euro-barometer in Prometeo (2001). Our percentages are approximate. In these surveys, citizens who declare themselves to be very or quite satisfied with their healtcare service are considered to be satisfied.

(41) See OECD (1996).

Table 2.34 is based on the work carried out by Wittenberg-Sandhu-Knapp (2001) and provides a brief summary of the solutions adopted in some countries.

Table 2.34 – Approach of five western European countries to funding long-term care

Denmark	Financing: general taxation (mostly local taxation) Cost-sharing: a) almost no nursing home and home care services, b) institutional care, rent and basic care are subject to user charges related to pension level The public sector provides most services
France	Financing: social insurance contribution Cost-sharing: a) nursing services, even at home, are not subject to user charges, b) hotel costs in hospital and care facilities are subject to user charges, c) home care services are subject to user charges based on income (excluding nursing services).
Germany	Financing: new statutory insurance scheme for long term care, social contributions, three levels of benefit (cash or services) Cost-sharing: not specified The voluntary sector provides a significant service level
The Netherlands	Financing: social and private health insurance funds, contributions by employers and employees and general taxation for nursing homes and community assistance; local authorities finance residential and home care and apply a means test; cash benefits in the form of a "personal budget" to less than 5% of poor older people) Cost-sharing: institutional and home care The private sector provides many services
United Kingdom	Financing: general taxation, means test by local authority Cost-sharing: home care is subject to user charges by local authorities Services are mixed, involving public, voluntary and private services

A less than recent survey carried out in European countries (Walker, 1993) showed that almost 70 percent of those interviewed thought that long-term patients should be covered by the public sector. The general systems used to finance healthcare spending adopted in the different countries greatly affects the choice between social contributions and general taxation.

2.4.5 The mix of financing at European level: some convergences

It is very difficult to chart developments over time in the individual components of financing in each country. This is true with regard to both corrective measures implemented at local level and radical changes in the models.

On the other hand, a look at changes in financing from the point of view of the overall public-private mix, reveals some significant trends.

In 1998 the total public component ranged from 83.8 percent in Sweden to around 56.3 percent in Greece (see table 2.35[42]). This ample range prevents us from speaking of any real convergence.

However, a look at graph 2.12 allows for some important observations. Apart from the United Kingdom, whose mix remained essentially stable, countries where public financing was initially low reported growth in this

(42) Luxembourg and Greece have been eliminated from the table as this first posted a very high value and the second a very low value. These figures would have significantly altered the comparison.

component (Austria, Finland, Germany, Switzerland) whilst the opposite was true for countries where public financing was initially high (Denmark, France, Sweden).

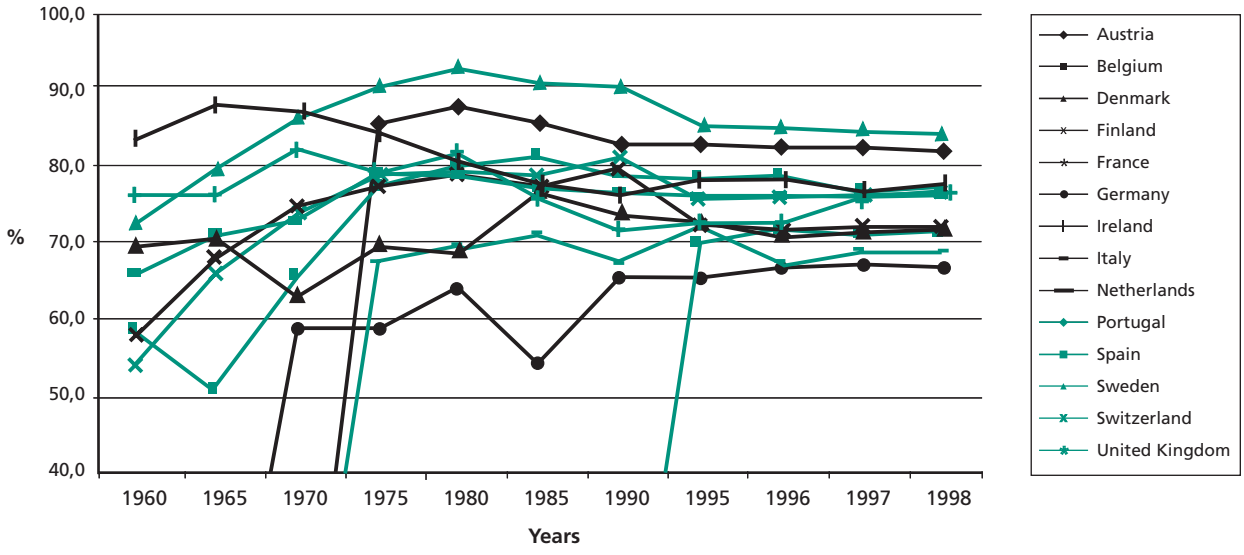
Table 2.35 - Public financing as a % of total health expenditure: Selected European countries and years (1960-1998)

	1960	1965	1970	1975	1980	1985	1990	1995	1996	1997	1998
Austria	69.4	70.3	63.0	69.6	68.8	76.1	73.5	72.3	70.9	71.4	71.8
Belgium								69.9	71.6	71.0	71.2
Denmark				85.4	87.8	85.6	82.7	82.5	82.4	82.3	81.9
Finland	54.1	66.0	73.8	78.6	79.0	78.6	80.9	75.5	75.8	76.1	76.3
France	57.8	68.1	74.7	77.2	78.8	76.9	76.6	76.0	76.0	76.1	76.1
Germany	66.1	70.8	72.8	79.0	78.7	77.4	76.2	78.1	78.3	76.6	75.8
Ireland	76.0	76.2	81.7	79.0	81.6	75.7	71.7	72.5	72.5	75.6	76.8
Italy	83.1	87.8	86.9	84.5	80.5	77.2	79.4	72.2	71.8	72.2	71.9
Netherlands				67.7	69.2	71.0	67.7	72.0	67.3	68.9	68.6
Portugal			59.0	58.9	64.3	54.6	65.5	65.3	66.7	67.1	66.9
Spain	58.7	50.8	65.4	77.4	79.9	81.1	78.7	78.2	78.5	76.6	76.8
Sweden	72.6	79.5	86.0	90.2	92.5	90.4	89.9	85.2	84.8	84.3	83.8
Switzerland	50.7	57.6	61.8	63.3	65.1	66.1	68.4	72.3	74.5	74.1	73.2
United Kingdom	85.2	85.8	87.0	91.1	89.4	85.8	84.3	84.9	83.7	83.7	83.3

Source: Oecd (2001), *Health data.*

Moreover, an analysis based on the type of model shows that in almost all countries where healthcare is primarily financed via general taxation (that is, Denmark, Sweden and the United Kingdom and with the exception of Finland) total public financing was relatively high (around 83 percent) compared with countries where the use of social security contributions are favoured (Austria, France, Germany) and where the related percentage ranged between 70 and 75 percent. Spain held an intermediate position, as a mix of the two models. In contrast, in the Netherlands and Portugal, which favour social security contributions and general taxation, respectively, the private component was high due to the importance of private insurance and cost-sharing.

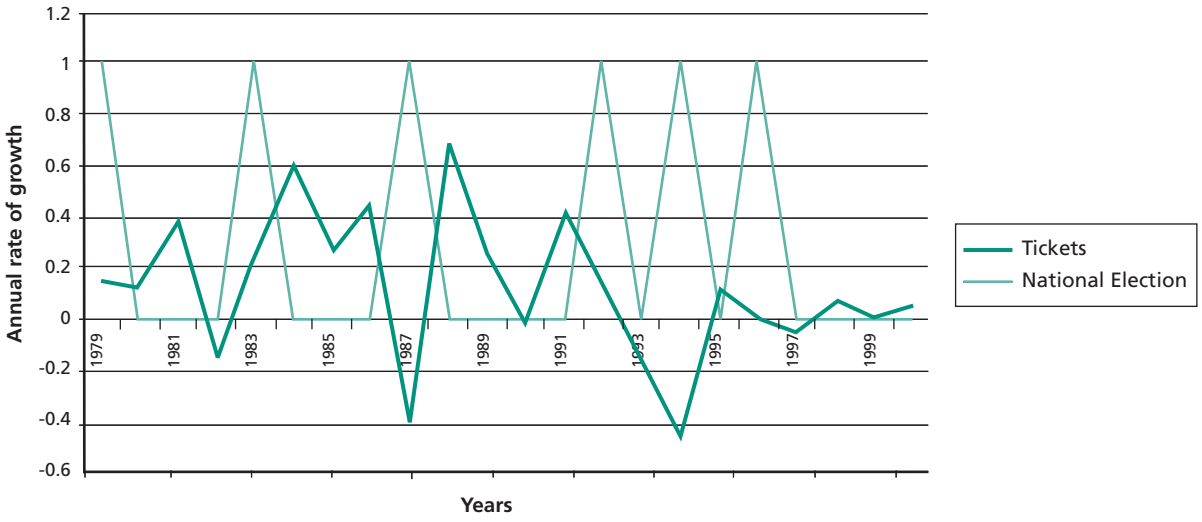
Chart 2.12 - Public financing as a percentage of total expenditure on health



There are numerous reasons for the above. In the first place, the greater weight of overall public financing in general taxation systems compared with social security-based systems can be explained with the fact that, in the latter, the State has never been viewed as a supplier of services, but only as a guarantor in cases where contributions are not sufficient or where such financing is completely impossible. Based on the principle of subsidiarity, the State is the financing entity of last resort. Specifically, it seems that cost-sharing for hospitals and/or general medical checkups can help explain the differences observed. This is because, in contrast to what happens in social contribution systems, this component is completely absent in countries favouring a general taxation system where the hospital are public and physicians are paid by the State. The impact of the large-scale financial crisis which struck welfare systems during the 1980s has also been significant. The cost containment measures adopted and tightened even further in the 1990s, due to the need to comply with the Maastrict parameters, favoured the expansion of the private financing of healthcare expenditure, especially in the form of significant increases in cost-sharing for the expenses incurred by patients who utilise public services. Exceptions were countries like Greece, Spain and Ireland where an economic upturn was reported.

The extent of cost-sharing can be easily modified by public authorities. In truth, cost-sharing is utilised as an instrument to win over the public. In Italy, for example, political elections seem to have played a very important role to this regard. Graph 2.13 charts the growth of "tickets" for pharmaceuticals and clearly shows that during the election years 1987, 1992, 1994, 1996 and 2001, the weight of expense borne by citizens almost inevitably fell.

Chart 2.13 - Trends in pharmaceutical expenditure



Another possible explanation for the increase in the private component of financing is the phenomenon known as "supply induced demand". Numerous studies have shown that spending increases the ratio of doctors

with respect to the population. Table 2.36 illustrates the presence of this phenomenon in Italy.

Table 2.36 – Practising physicians per 1,000 inhabitants and out-of pocket payments as a % of total healt expenditure, Italy 1960-1999

	1960	1965	1970	1975	1980	1985	1990	1995	1999
Practising physicians per 1,000 population	0.7	0.9	1.1	1.5	2.6	3.8	4.7	5.4	5.9
Public healthcare spending as a % of total healt expenditure	83.1	87.8	86.9	84.5	80.5	77.2	79.4	72.2	72.3

Source: Oecd (2001), *Health data.*

In the public sector, the method of per capita or salary remuneration excludes any incentive to induce demand on the part of physicians. In contrast, this phenomenon does occur in the private, fee-based sector. This helps to explain the correlation observed between the number of physicians and the private component in the mix of financing, even if other elements may have played an important role.
Finally, it must be noted that some countries have carried out structural modifications moving away from non-structured systems to real and actual national healthcare systems. This unquestionably contributed to the increase in public financing.

2.4.6 Firms and the financing of healthcare systems

The contribution made by firms to financing the healthcare system varies in relation to the model adopted. In general, this role is greater in systems based on social contributions compared with those based on general taxation systems. This also depends on the fact that the adoption of one system of financing over another springs from an overall way of seeing companies and their role in society.
For example, by simplifying a rather complex question, it can be said that the in welfare-based systems, the firm is normally seen as a community of people who work together for a common social purpose. In contrast, where financing via general taxation prevails, as in the case of the UK, the general view is that a company serves the interests of shareholders and its social role is primarily to contribute to their prosperity in the conviction that this will translate into more benefits for the economy in general.[43]
Numerous factors seem to indicate that, at least in the short-term, the more appreciated and popular model is that of general taxation. Proof of the weakening social role of companies can be seen in their ever more openly displayed dissatisfaction with a system which, from their perspective, obliges them to finance services which benefit individuals and not the company itself. The idea that companies take on a role which is not theirs if they help finance healthcare systems is flawed.
In the first place, due to well-known differences between impact and rate, the tax burden actually borne by companies, namely that which is not passed along to consumers, needs to be established.

(43) On these aspects see, for istance, Albert (1993).

In the second place, healthcare expenditure is also an investment whose yield is not entirely and exclusively enjoyed by individuals. In other words, the company can also benefit from investment in healthcare. A reduction in lost hours due to absence from work is but one example of such benefits.
Finally, part of the need for healthcare expenditure can, directly or indirectly, be attributed to the firms themselves. For example, this is the case with regard to illnesses generated by unhealthy work environments. Appendix A.2.5 provides an, albeit incomplete, estimate of the costs and benefits of the healthcare system for companies. The main conclusion which can be drawn from this assessment is the following: healthcare systems provide companies with benefits. Thus, if some forms of financing contribute to reinforcing their sense of social responsibility, as seems to be the case with social insurance or taxes such as IRAP, this aspect should be seen as an advantage.
Italy partially shifted away from a centralised contribution system (health insurance fund up to 1978) to a generalised taxation system (after 1978) and, dissatisfied, eventually adopted a new type of social security system essentially based on regional health insurance funds. In adopting this new model, it must not be forgotten that if federalism requires equalisation amongst regions, the joint responsibility of companies to finance healthcare might need a mechanism to ensure equal distribution of healthcare liabilities amongst different companies.
This aspect requires further discussion and debate. Importantly, the refusal of many companies to finance the healthcare system could depend not on an inadequate sense of social responsibility but on the perceived inequities of a system which does not take account of the different tax shifts imposed by a tax such as IRAP or of the unequal negative contribution which different companies make to the deteriorating health of citizens.

2.4.7 Financing healthcare expenditure in the European Union: an outlook

Creating a European Union united not only by a single currency means that many important topics, such as that of healthcare, must be dealt with. One key question regards the so-called "portability" of healthcare rights. This concerns the possibility to keep and not lose, wholly or in part, healthcare rights when moving from one country to another within the Union.
Until now, the European Union has not developed its own, well-defined social policy. However, some decisions handed down by the European Court of Justice, such as the Decker and Kohll judgements (28/4/1998) and the Geracts-Smits and Peerboms judgements (12/7/2001), have strongly weakened national sovereignty in the field of healthcare. The first two recognised the right of two Luxembourg citizens to receive non-urgent care (eye glasses and dental care) outside of Luxembourg, whilst the second two allowed two Dutch citizens to receive hospital care outside of their own country.
These judgements sanction the application of the principle of mutual recognition also of healthcare, thereby weakening national accreditation policies for healthcare workers. The rulings also recognised the right to reimbursement of expenditure made abroad even without previous authorisation on the part of their own insurer, on the condition that the

number of instances remains low and does not threaten the functioning of national healthcare services, whose efficient treatment is recognised and finally, that it is not possible to treatment in one's own country without an undue waiting period.
These judgements also have relevant implications on how healthcare systems are managed. First and foremost, such decisions can noticeably reduce the efficiency of cost containment strategies based on the rationing of services and the lengthening of waiting times.
Secondly, the supply of quality services could attract foreign patients and indirectly produce an increase in costs, presuming there is a correlation between costs and quality.
Thirdly, a sort of "healthcare dumping" strategy could arise involving the sale of services at a low cost provided that they are accompanied by unutilised production capacity (i.e. no waiting lists) in the countries of destination. This could have an effect on efficiency and costs in the countries involved. The countries of destination could benefit if the use involves fixed-cost resources, otherwise wasted. On the other hand, the countries of origin would benefit if the fee to be reimbursed were lower than that applied internally. Cases of a similar nature have already occurred between regions (in the case of Italy) or between bordering countries (in the case of Germany and Switzerland).
It might also be increasingly difficult to implement an internal strategy of rationing which excludes effective but not strictly necessary services from the possibility of reimbursement. Essential levels of assistance and closed lists of services, such as that of Oregon, could disappear.
Finally, the system of healthcare opting could become diffused. This involves the choice, especially on the part of elderly people, to enjoy healthcare services in a different and more salubrious country from the one where their contributions were paid. This would produce a reallocation of demand in the countries involved and probably an increase in overall demand.
The strength and magnitude of such possible trends also depends on the models of financing adopted in different European countries. For example, the reimbursement of services obtained abroad might be easier in countries which adopt social insurance models and especially in those such as France, Belgium and Luxembourg, with systems based on the "reimbursement" model. However, it can not be presumed with any certainty that countries favouring financing based on social contributions will reap disadvantages from the above judgements. Indeed, countries employing a general taxation system have the longest waiting lists, whilst countries favouring social insurance often have high quality healthcare services.
Moreover, let us not forget that the possibility of accessing other countries' healthcare services could have a beneficial effect on all countries involved. This could increase competition and, given that such competition would involve entire healthcare systems, its effects could be no less significant than those which many expect from the introduction of forms of competition within a single country.

appendixes

Appendixes

Appendix A2.1 – Profiles of income support schemes for workers over fifty

This appendix is intended to provide an institutional overview of the main income support schemes for workers over fifty in the EU countries.

Belgium

The legal retirement age is 65 (62 for women, but will reach 65 in 2009). Early retirement is possible starting at 60 years of age with 28 working years (which will be raised to 35 between 1997 and 2005).

Disability. Disability benefits are paid in case the ability to work is reduced by at least 66.6percent compared with a worker in the same category with the same educational level. Upon reaching the retirement age, these benefits are replaced with an old-age pension.

Unemployment. Collective labour agreements call for the possibility to obtain an early supplementary pension starting from 58 years (52 if employed by a company in distress or undergoing restructuring or 50, based on the favourable opinion of a consultative commission) in case of dismissal.

Partial retirement. A partial early pension is contemplated for 55-year-old workers who might otherwise be entitled to receive unemployment benefits.

Denmark

The legal retirement age in Denmark is 67 (65 starting in 2004). In general anybody who turned 60 after 1 July 1999 can apply for a supplementary pension between 65 and 67 with a 10 percent reduction per year. Starting from 60 years of age (50 until 1996 for workers with demonstrable permanent health problems) a person may qualify for an early pension, which includes a base pension plus an earnings-related supplement; upon reaching 67 (65) years of age, this is replaced by an ordinary old-age pension; 20 years of enrolment in the voluntary unemployment insurance scheme is required, even though the benefits are related to the basic state scheme and the choice is on a voluntary basis (it is not related in any way to any labour market criteria).

Disability. In order to qualify for a disability pension, the ability to work must be reduced by at least 50 percent. The Danish system provides different kinds of benefits; these are based, among other things, on age, on the level of disability and on the role of socio-economic factors, separating between benefits related to medical criteria, which require a total or nearly-total incapacity for work, and benefits related to socio-economic criteria, which require a reduction of the ability to work by at least 50 percent.

Unemployed. Unemployed persons who are older than 50 when their unemployment benefits expire (a period which was reduced from 7 years at the end of 1994 to 4 years in 2000) may obtain an allowance until they reach 60 years, when they would qualify for early retirement. There is no obligation to participate in job scheme programmes or to search actively for work, but job offers must be accepted.

Partial retirement. There are two rather similar schemes open to workers between 60 and 66 years of age; the number of hours worked must be reduced by at least 25 percent but cannot fall below 12 per week: 1) for

those who have been enrolled for more than 20 years in the unemployment insurance scheme; 2) for those who have been enrolled for less than 20 years but more than 10.

Germany

The legal retirement age in Germany is 65, but workers may retire at 63 (60 if disabled) with at least 35 contribution years; workers who have been unemployed for 52 weeks after the age of 58, or who have participated in part-time programmes for older workers for at least 24 months, qualify for pension at 60 with 180 contribution months and with 8 contribution years out of the preceding 10. Moreover, workers may retire from 60 to 63 years of age, with actuarial penalties equivalent to 0.3 percent per month.

Disability. There are two types of disability pensions: a) total disability pensions, in case of complete inability to work; b) partial disability pension, in case of a reduction of the ability to work by at least 50percent. At 65, this is replaced by an old-age pension.

Partial retirement. Old-age pensions can be obtained also as partial pensions in an amount equivalent to one-third, one-half and two-thirds of the full pension amount. Unemployed workers with at least 36 contribution months over the preceding five years, who are not eligible to receive a full pension, can qualify for a partial pension to be paid between the ages of 55 and 65.[1] The number of hours worked has to be reduced by 50percent, while earnings are equivalent to 70 percent of the last full-time salary. Employers who hire new workers receive a grant equal to the difference between the number of actual hours worked and the salary paid. Incentives can last up to 6 years.

Greece

The legal retirement age is 65 (60 for women who began working before 31 December 1992). Workers may qualify for early retirement starting at 55 years of age, based on employment seniority, type of work and family situation.

Disability. In order to qualify for disability benefits, the ability to work must be reduced by at least 50 percent; annual or bi-annual check-ups are carried out.

Unemployment. Unemployed workers over 49 are entitled to a slightly better treatment, compared with the others, as they receive extended unemployment benefits for a year, if they worked for at least 210 days during the preceding 14 months.

Spain

The legal retirement age in Spain is 65; however, those who started working before 1 January 1967 can retire at the age of 60 with a permanent 8 percent reduction for every year missing until 65 (7 percent if they have 40 contribution years). Work activities can continue, without any age limit, with a 2 percent yearly increase up to a maximum of 100 percent. If early retirement takes place at 64 years of age, and the retiree is replaced with another worker, no penalties are incurred.

(1) This scheme will be open until 2009.

Disability. There are three types of disability pension: a) a disability pension if the worker is permanently unable to perform his usual work; b) full disability pension in case the worker is unable to perform any kind of work; c) major disability pension, in case the disabled needs a carer on a daily basis. The amount of the pension varies in accordance with the recognized degree of disability, which must be at least 33 percent. The coverage rate is 55 percent for type a), as in this case the worker may perform other kinds of activities; at any rate, upon reaching 55 years of age, unemployed beneficiaries receive a 75 percent replacement rate. In case of permanent disability the replacement rate is 100 percent, while in case of major disability the replacement rate can reach up to 150 percent.
Unemployment. There is an extended unemployment benefit programme for unemployed workers older than 52, when ordinary benefits run out; this may last until the legal retirement age, which in this case is reduced to 64. In principle there is an obligation to search actively for work, that is why the amount of the extended unemployment benefits is lower than that of the ordinary benefits. The law on corporate restructurings introduced some specific benefits in some sectors for workers older than 55, which last until they reach 65 years of age.
Partial retirement. There are 2 schemes: a) a scheme related to ordinary old-age arrangements open to people aged between 61 and 64: hours worked must be reduced by 50 percent and benefits can reach up to 50 percent of old-age pensions (depending on the contributions paid). Starting from 65 years of age the amount old-age pensions is calculated including the contributions paid during the part-time period; b) a scheme related to hand-over contracts (Type of employment contract provided for under Spanish law where a newly recruited employee replaces on a part-time basis another employee taking partial retirement), for workers between 60 and 65 years of age with at least 30 contribution years; the employer is required to find a replacement for the hours not worked.

France

The legal retirement age in France is 60, but there are some special provisional schemes that make it possible to retire earlier. One of these is ARPE (Accord préretraites contre embauche), a scheme established in 1995 as an experimental measure to encourage early retirements and fight unemployment. To be eligible, workers have to have 43 contribution years, or 40 if they were born between 1936 and 1938. The employer is required to hire a replacement. Benefits amount to approximately 65 percent of the last gross salary. The scheme has been extended from year to year.
Disability. In order to be eligible for disability benefits, the ability to work must be reduced by at least 66.66 percent. Upon reaching 60 years of age, these are replaced with an old-age pension.
Unemployment. Unemployed workers older than 56 years and three months may qualify for extended unemployment benefits until they are either eligible for an old-age pension or 65 years old, whichever is earlier. Benefits are the same as under the ordinary regime, but after reaching 59 years and three months reductions stop (normally benefits are reduced every four months). Moreover, these workers are not required to search actively for a job.
There are some special schemes that allow unemployed workers to qualify

for early retirement. One such scheme is ASFNE, which makes it possible to retire at 57: an employer enters into an agreement with the Ministry of Labour on redundancies; a worker can access the system if he worked for at least 10 years, including at least one in the company that signs the agreement. Benefits are equivalent to 65 percent of the last salary up to a certain amount and to 50 percent of the portion exceeding such amount.
Partial retirement. At 60, a worker can apply to receive an old-age pension as a partial pension. There is a scheme for workers older than 55 who have worked for at least 10 years, including one for the last employer. In case of an independent retirement decision (not due to staff redundancies or dismissal), the employer is required to replace the worker; the reduction of work hours for the period until The legal retirement age is reached must be on average 50 percent, thus it can be 60percent or the first half and 40 percent or the second half.

Ireland
The legal retirement age in Ireland is 65.
Disability. In order to qualify for a disability pension, the inability to work must be complete. Benefits are a flat rate and depend on age: they amount to € 103 per week up to 65 years of age, € 12 per week between 65 and 68, and € 128 after 80 years of age.
Unemployment. A pre-retirement benefit programme is in place between 55 and 66 years of age on the basis of a means test and the collection of unemployment benefits at least for the previous 15 months. Benefits depend on income and can amount to a maximum of € 98 per week.

Italy
The legal retirement age in Italy depends on the system: a) earnings-based system, 65 years for men and 60 for women; starting in 2002, workers are eligible to retire early under the seniority pension system at 57 with 35 contribution years (which will rise to 40 by 2008); b) contribution-based system between 57 and 65, without any possibility for early retirement.
Disability. The system calls for two different types of benefits: partial disability in case of reduction of the ability to work by at least 66.6 percent and full disability in case of total incapacity for work.
Unemployment. The availability-for-employment allowance (indennità di mobilità) is equivalent to extended unemployment benefits directly related to a worker's age at the time he is dismissed. Workers older than 50 are entitled to receive these benefits for 36 months, if the company is located in Central and Northern Italy, 48 months if the company is located in Southern Italy. Moreover, in presence of specific age and contribution requirements, this allowance is paid until the worker qualifies for a pension.
Workers entered in an availability-for-employment programme as a result of a collective labour agreement signed before 3 November 1997 may retire upon reaching 55 years of age with 35 contribution years. Age is not a factor for workers entered in an extended availability-for-employment programme by 30 June 1997 and for workers entered in an ordinary availability-for-employment programme who received these benefits on 18 August 1995.
Partial retirement. Workers who meet the age and contribution

requirements to qualify for a seniority pension may collect a partial pension and continue to work part time for not less than 18 hours per week; the amount of the pension is reduced in an inverse proportion to the reduction of working hours, which will under no circumstances fall below 50 percent. The employer is required to find a replacement.

The Netherlands

The legal retirement age in the Netherlands is 65. Most occupational pension schemes, based on collective labour agreements, make it possible to retire between the ages of 58 and 63; in most cases all is required are at least 10 working years and absence of the right to receive social assistance. Benefits are around 80 percent (90 percent on a net basis) of the last salary and are replaced, starting at the age of 65, with a state old-age pension and/or by supplementary old-age pensions. In 2001, approximately 70 percent of private-sector workers and all public-sector workers were covered by such schemes.[2]

Disability. Benefits are based on the residual ability of the disabled worker to be gainfully employed and depend on a medical check-up, which in turn constitutes the basis to determine what kind of work a person can carry out and the amount of the benefits this person is entitled to receive; the minimum disability required is 15 percent. Most of the elderly that receive disability benefits are declared totally disabled. Benefits can account for 70 percent of the last salary (up to a maximum of € 35,000) for a certain period,[3] after which the amounts fall until they reach a level related to the minimum wage, which is usually equivalent to 54 percent of the final salary. This second level is higher for older than for younger workers. Collective labour agreements in general call for the raising of the first level up to 85 percent of the final salary. To make up for the loss of income within the second level collective agreements usually provide for some top-ups from private insurance plans.

Unemployment. Unemployment benefits are paid for a period that stands in an inverse relationship to age; in addition, those who become unemployed starting at 40 continue to accumulate contributions throughout the period during which they receive benefits commensurate with earnings. Unemployed workers older than 57 $^{1}/_{2}$ are exempted from job-search requirements, though they are required to accept in case they receive a suitable job offer. Unemployment benefits represent approximately 70 percent of the last salary (with a maximum of € 40,000), topped up 85 percent under collective labour agreements. After unemployment benefits have been exhausted, unemployed persons may be eligible for social assistance.

(2) Carey D. (2002), p. 37.

(3) The duration of the first disability level depends on age as follows:

Age	duration of the first level in years
>32	0
33 – 37	0.5
38 – 42	1
43 – 47	1.5
48 – 52	2
53 – 57	3
58	6
59 – 65	Up to 65 years of age

Norway

The legal retirement age in Norway is 67, but the supplementary scheme, AFP, allows for retirement starting from 62 years of age without any actuarial reduction. This scheme, which covers all public-sector workers and about half the private-sector ones, is operated jointly by employers and trade unions and is also partially funded by the government. Benefits are computed on the basis of the pension that a worker would be entitled to collect at 67, and involve also an additional payment (in 2001 this amounted to € 1,500) which is provided until 67 years and then replaced with the state pension. The net replacement rate is inversely related to the earnings level and is around 90 percent for low-income recipients (up to € 18,000), 65 percent for medium-income levels (up to € 45,000) and 50 percent for high-income earners (up to € 75,000). Starting in 1997 this scheme has been utilised also for partial retirement.

Disability. Disability pensions are provided in presence of a 50 percent minimum level of incapacity for work. In addition to the disability pension, the system contemplates a carer allowance. Before being pronounced permanently disabled, people are required to attend a rehabilitation programme, during which they receive an allowance. Another requirement is that the person concerned must have been enrolled in the scheme during the preceding three years.

Unemployment. There are no special schemes for older unemployed workers. Unemployed workers older than 64 receive an allowance until they reach The legal retirement age and the basis for calculating the benefits is more favourable.

Austria

The legal retirement age in Austria is 65 (60 for women, but will be raised to 65 between 2024 and 2033). Early retirement is contemplated starting at 61 and 1/2 (56 and 1/2 for women), provided that the worker has been enrolled for 240 months out of the preceding 360 months, or in case of unemployment.

Disability. Disability pensions are provided in presence of a 50 percent minimum level of incapacity for work. There are three types of benefits: 1) at least a 50 percent inability to work for skilled blue-collar workers and clerks; 2) permanent disability for blue-collar workers who, as a result, lose their earnings power by at least 50 percent; 3) disability for both blue-collar workers and clerks.

Unemployment. There is a special scheme for mining industry workers older than 52.

Partial retirement. There are two progressive retirement schemes: a) part time work for older workers. This was introduced in 2000 and allows workers, starting from 55 years of age (50 for women), with at least 15 contribution years in unemployment insurance out of the preceding 25, to reduce their working hours to 28 (up to 70 percent of the previous working hours) and to receive an allowance equivalent to 50 percent of the salary reduction; b) partial retirement. This allows workers who are at least 61 and 1/2 years old (56 and 1/2 for women) with at least 450 contribution months to obtain a partial pension, with a reduction of working hours between 40 percent and 60 percent until they are 65.

Portugal

The legal retirement age in Portugal is 65, 55 for arduous work. Early retirement is contemplated starting from 55 years of age, with at least 30 contribution years, though some penalties apply.

Disability. Disability benefits are provided in presence of a percentage of impairment of at least 66.66 percent; upon reaching 65 years of age these are replaced with an old-age pension.

Unemployment. An unemployed worker can apply for early retirement at 60 without penalties, and at 55 with some penalties.

Finland

The legal retirement age in Finland is 65, though retirement at 60 is contemplated with a permanent actuarial reduction of 0.4 percent for each month missing until 65. Retirement can be postponed without limits, with a 0.6 percent increase for every month postponed.

Disability. There are three types of disability benefits: a) full disability pension; b) individual disability pension (early); c) partial disability pension. The only difference between a) and b) lies in the eligibility criteria; in fact, while a) depends exclusively on health criteria, requiring a 60 percent level of incapacity for work, b) is for workers who are at least 60 years old (58 if they were born before 1943) with a percentage of impairment between 40 percent and 60 percent. In addition, personal reasons are considered, so as to make this scheme similar to early retirement schemes. The level of benefits depends on the salary and the number of contribution years.

Unemployment. If an unemployed worker is at least 55 years old (57 starting from 1997), the normal 100-week period can be extended until 60, the age for the unemployment pension which at 65 is replaced with the old-age pension. A worker who is unemployed for at least 2 years, starting from the age of 60, can apply for an unemployment pension; this pension is calculated in accordance with the same rules as those for disability pensions, which rules are more generous than those for early retirement.

Partial retirement. Partial retirement is allowed with the supplementary pension, requiring enrolment for at least 5 years out of the last 15 and full-time employment for at least 12 out of the last 18 months. Partial retirement is open to people between the ages of 58 and 64. The number of weekly working hours must be between a minimum of 16 and a maximum of 28, while earnings must be between a minimum of 35 percent and a maximum of 70 percent of the previous earnings level. The amount of the pension is equivalent to 50 percent of the earnings reduction.

Sweden

The legal retirement age in Sweden is 65, but early retirement is contemplated starting from the age of 61,[5] with a permanent actuarial reduction equivalent to 0.5 percent for each missing month until 65. The supplementary pension too (which represents approximately 10 percent of the last salary) is reduced by the same percentage. Retirement can be postponed

(5) Beginning in 1998; before it was starting from the age of 60.

without limits, with a 0.6 percent increase for every month postponed. Full pensions show a replacement rate of approximately 67 percent.
Disability. Disability pensions may be either permanent or temporary and the amount paid may be 100 percent, 70 percent, 50 percent and 25 percent (minimum 25 percent), depending on the physician-certified disability level. A disability pension consists of a basic amount (maximum € 311 per month) and an additional amount (maximum € 1,349 per month). A supplementary pension is envisaged (linked in part to the salary, up to a pre-set ceiling) if the disabled is entitled to receive an occupational supplementary pension. In presence of little or no supplementary pension, the disabled worker may obtain a top-up pension, up to a maximum equivalent to 111.5 percent of the reduced basic amount. At 65, this pension is replaced with an old-age pension.
Unemployment. The rules on unemployment benefits are the same regardless of age; however, for unemployed workers older than 57 the unemployment insurance period is extended by 150 days, for a total of 450 days. At the end of 1997 a new possibility was introduced for long-term unemployed workers over 60; in fact, those who had exited the labour market after January 1996 can collect unemployment benefits until they are entitled to receive an old-age pension.
Partial retirement. Different types of partial retirement were tried: a) an ordinary scheme, part of a flexible retirement regime, normally used for early retirements. Early retirement benefits can be collected from 61 until 67 in amounts representing 25 percent, 50 percent and 75 percent, with a permanent actuarial reduction; b) a special scheme where participants are not really considered as retirees. Under this scheme, recipients have to fulfil the same requirements as those provided for unemployment benefits as well as that, starting at the time they turn 45, they earned enough to generate at least 10 years in points for the supplementary pension. Beneficiaries must be between 61 and 64 and the workweek must be reduced by 5 to 17 hours. The loss of income is compensated up to a maximum of 55percent, though only for 10 hours of reduction per week. This scheme was folded on 1 January 2001.

Great Britain
The legal retirement age in Great Britain is 65 (60 for women, but will increase between 2010 and 2020); a worker can qualify for an occupational pension after 50, with an actuarial reduction of 4 percent to 8 percent for each year missing until 65, with benefits accounting for 25 percent to 66 percent of the final salary. Many schemes (such as that for employees of local authorities) do not apply any penalty in case of dismissal or if the total between age and years of service is greater than 85. The occupational pension is provided throughout one's lifetime and, starting at 65 (60 for women), it is collected together with the public pension.
Disability. Disability pensions are provided only to fully impaired individuals, as determined on the basis of an all-work test, which measures the ability to perform a wide range of activities.
Unemployment. There are no special schemes for older unemployed workers. However, older workers who are 5 years away from retirement may apply for social assistance without being required to search actively for work, as younger workers are.

Table A2.1–1 – Early retirement schemes in European Union Countries

Country	Legal retirement age[1]	Effective retirement age (1999)[2]	Schemes	Age	Conditions for eligibility
Belgium	65 – 62 D	58.7 – 55.1 D[3]	Disability pension	<65	66.6%, minimum level of incapacity for work, inability to find similar work
			Early retirement pension (Pension de retraite/rustpensioen)	>60	28 years of professional activity (35 in 2005)
			Early retirement pension (Prépension conventionelle - conventioneel brugpension)	>58 >52 if company in difficult conditions >50 commission advise	Dismissed, entitled to unemployment benefits membership of the scheme, replacement
			Partial early retirement pension (Prepénsion conventionelle à mi-temps/halftijds brugpensioen)	>55 years	Reduction of working hours, entitlement to unemployment benefits, replacement
Denmark	65 – 67	62.8 – 60.4 D	Disability pension scheme (Førtidspension)	18 – 66	50% minimum level of incapacity for work, socio-economic criteria
			Part-time pension scheme (Delpension)	60 – 66	10 years membership of the ATP supplementary fund, reduction of working hours
			Post-work salary scheme (Efterløn)	60 – 66	20 years membership of the unemployment insurance scheme, entitlement to unemployment benefits
			Part-time post-work salary scheme (Delefterløn)	60 – 66	20 years membership of the unemployment insurance scheme, entitlement to unemployment benefits reduction of working hours
			Temporary early retirement scheme (Overgangsydelse)	50 – 59	20 years membership of the unemployment insurance plan, entitlement to unemployment benefits
			Long-term unemployment benefits	50 –59	50 years of age when unemployment benefits run out
Germany	65	61.1 – 59.0 D[4]	Disability pension	>65	50% minimum level of incapacity for work
			Early retirement pension	>60 >63	Membership in the scheme or unemployment
			Partial pension (Teilrente)	>60 >63	Eligibility for old-age pension
			Partial retirement (Altersteilzeit)	55 – 65	36 months of membership of the unemployment insurance scheme for the previous five years
Greece	65 – 60D	61.9 – 57.4 D[5]	Disability pension		50%, minimum level of incapacity for work, medical check-ups every 2-3 years
			Early retirement pension	>55	Long membership of the scheme, type of work and family situation
			Unemployment benefits	>49	Having worked 210 days in the last 14 months previous the unemployment
Spain	65	61.0 – 56.3 D	Disability pension	>16	33% minimum level of incapacity for work, reduced working ability for any job
			Early retirement pension	60 – 64	Membership in the scheme prior to 1.1.1967
			Special early retirement pension	>64	Replacement with another worker
			Long-term unemployment benefits	52 – 64	Eligibility for unemployment benefits
			Partial retirement pension (Jubilaciòn parcial)	62 – 64	Part-time work
			Hand-over contracts (Contrato de relevo)	60 – 65	30 years of membership of the scheme, replacement, reduction of working hours
France	60	59.4 – 58.8 D	Disability pension	>64	66.6 % minimum level of incapacity for work, medical certificate
			Allowance for job replacement (Allocation de replacement pour l'emploi, ARPE)	57,5 – 64	40 - 43 years of employment, 160 quarters of old age insurance, replacement
			Early retirement benefits (ASFNE)	>57	Reduction of workforce, 10 years of employment, including 1 in company that dismisses worker
			Allowance for older unemployed (Allocation chômeur âgé, ACA)	> 60	160 quarters of insurance
			special waiting allowance (Allocation spécifique d'attente, ASA)	60 – 64	160 quarters of paid contributions
			Progressive early retirement (Préretraite progressive)	55 – 64	10 years of employment, including 1 in company that dismisses worker, reduction of working hours by at least 50%
			Progressive retirement (Cessation Progressive d'Activité)	55 – 64	
Ireland	65 –66	63.4 – 60.1 D[6]	Disability pension	>15	100% incapable of work
			Pre-retirement allowance	55 – 66	collection of unemployment benefits for at least 15 months, means test

Country	Legal retirement age[1]	Effective retirement age (1999)[2]	Schemes	Age	Conditions for eligibility
Italy	65 - 60D	59.3 - 58.4D	Disability pension	<65	66.6% minimum level of incapacity for work
			Seniority pension	>57 >55 if dismissed	35 years of paid contributions
			Long term unemployment benefits	50 – 55	Eligibility for unemployment allowance, contribution requirements
			Partial retirement	>57	35 years of paid contributions, replacement
Netherlands	65	60.3 – 56.7 D	Disability pension (AAW/WAO)	15 – 64	15% minimum level of incapacity for work, socio-economic criteria
			Collective agreement on early retirement (Vervroegd uirittreden VUT)	58 – 64	Membership in the scheme, at least 10 years of employment
			Long term unemployment benefits (Werkloosheidswet WW)	57,5 – 64	Unemployment
Norway	67	64.1 – 62.6 D	Disability pension (uførepensjon)	18 – 67	50% minimum level of incapacity for work
			Early retirement supplementary pension (AFP)	>62	Membership of the scheme
			Partial early retirement supplementary pension (AFP)	>62	Membership of the scheme
			Long term unemployment benefits	64 – 67	Unemployment
Austria	65 – 60D	58.6 – 56.5 D[7]	Disability pension		50% minimum level of incapacity for work; every 2 years a new application has to be submitted
			Early retirement pension (Vorgezogene Rente)	>61 ½ - >56 ½ D	240 months of contributions or unemployment and 180 months of contribution
			Partial pension for older workers (Altersteilzeit)	55 – 50 D	15 years of membership of the unemployment insurance scheme
			Special allowance for older workers (Sonderunterstützung)	>52	For miners
			Partial pension (Gleitpension)	>61 ½ >56 ½ D	Reduction of working hours, 2 years of unemployment or sick leave benefits
Portugal	65	65.5 – 61.9 D	Disability pension	>65	66.6% minimum impairment rating
			Early retirement	>55	30 years of membership or 20 if unemployed
Finland	65	59.8 – 59.9 D	Disability pension	16 – 64	60% minimum level of incapacity for work
			Partial disability pension	16 – 64	Level of incapacity for work between 40% and 60%
			Early retirement pension	60 – 64	None
			Partial early retirement pension (Osa-aikaeläke)	58 – 64	Reduction of working hours to 16 – 28 hours per week
			Unemployment pension (Työttömyyseläke)	60 – 64	Unemployment
			Long-term unemployment benefits	55 – 64	Unemployed for more than 2 years
Sweden	65	63.3 – 62.1 D[8]	Disability pension (Förtidspension)	16 – 64	25% minimum level of incapacity for work medical certificate
			Early retirement pension	61 – 64	None
			Partial pension (Delpension[9])	61 – 64	Eligibility to unemployment benefits
			Long term unemployment benefits	>57	Eligibility to unemployment benefits
United Kingdom	65 – 60D	62.7 – 61.0 D	Long term incapacity benefits	>15	100% level of incapacity for any work
			Early retirement provisions within pension scheme	>49	Membership in the scheme

(1) Source: EU (2001), *Mutual Information System on Social Protection in the Member States of the European Union;*
European Economy (1998), *Income Benefit for Early Exit from the Labour Market in Eight European Countries: a Comparative Study*, n. 3.
(2) Scherer P. (2001), *Age of withdrawal from the labour force in Oecd Countries, Labour market and social policy – occasional papers* n. 49, Oecd.
(3) Data as of 1998.
(4) Data as of 1998.
(5) Data as of 1998.
(6) Data as of 1995, estimate in Blöndal, S. Scarpetta, S. (1999), *The retirement decision in Oecd Countries*, *Economics Department Working Paper*, n.202, Oecd.
(7) Data as of 1995, source Blöndal, S. Scarpetta, S. op. cit.
(8) Data as of 1995, source Blöndal, S. Scarpetta, S. op. cit.
(9) This scheme was abolished on 1.1.2001.

Appendix A2.2 – A comparative review of healthcare systems in Europe

The diversity of the European healthcare systems seems to reflect only in part the significant difference in some key variables, such as the number of general practitioners as a percentage of the total number of employees in the healthcare system, the density of practicing physicians, the number of beds, the average length of stay for non-acute and acute care, investment in medical facilities.

Even though significant discrepancies emerged in some cases, the OECD data utilised for this Appendix outline a picture which is uniform at times, with some exceptions that can hardly be explained with the differences in the systems to supply healthcare services. This because, in some cases, the countries that converge to, or deviate from, the European average are different in terms of organisation and provision of healthcare services. From this it follows that statistical surveys are clearly incomplete and that there is a need for more in-depth analyses designed to explain some of these paradoxes, in order to guide the reform and governance processes of the healthcare systems.

Looking at some data on healthcare employment it can be seen that the number of general practitioners as a percentage of total employees in the healthcare system (see table A.2.2-1) is very low (between 1.6 percent and 2 percent) in such countries as Sweden, United Kingdom and the Netherlands while it is very high in Italy (with the highest percentage, or 6.4 percent), Luxembourg and Portugal. In all the other countries for which these data are available this ratio varies between 2.4 percent and 3.7 percent.

Countries with the same percentage show a similarity in the way healthcare services are supplied: while the percentage is stable or declining in some countries, in other countries, such as Italy, there is a rising number of general practitioners as a percentage of total healthcare employees.

Table A.2.2-1 - General practitioners (% of total health employment)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Belgium	7.1	6.5	7						
Denmark	2.7	2.7	2.7	2.7	2.8	2.8			
Finland	4	3.9	3.9	3.8	3.8	3.7	3.7	3.8	3.7
France		5.3	5.4	5.3	5.3				
Germany	4.6	4.1	4.1	3.9	3.9	3.9		2.4	
Grece	11.1								
Ireland	2.6	2.6	2.7	2.6	2.6	2.5	2.5	2.4	2.3
Italy		5.9	5.9	5.9	5.4	6.2	6.3	6.3	6.4
Luxembourg	4.2	4.2				6.4	6.2	6.1	6.3
Netherlands	1.9	1.9	1.9	1.9	1.9	1.9			
Portugal	6.4	6.2	5.8	5.6	5.3	5.3	5.2	5	4.7
Sweden		0.8	1.1	1.2	1.3	1.4	1.5	1.6	1.6
United Kingdom	2.5	2.4	2.2	2.1	2.1	2.1	2	2	2

Source: Oecd (2001), *Health data.*

This particular trend, which may be due both to a growing percentage of general practitioners and to a reduction of other types of employee in the sector, given the same level of labour expenditure, can be better explained in light of the data on the density of practicing physicians per thousand inhabitants (see table A.2.2-2) .

Table A.2.2-2 - Health employment, practising physicians, density per 1,000 population

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	2.2	2.3	2.4	2.4	2.6	2.7	2.8	2.9	3	3	
Belgium	3.3	3.3	3.4	3.4	3.5	3.5	3.6	3.7	3.7	3.8	
Denmark	3.1	3.1	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	
Finland	2.4	2.5	2.6	2.6	2.7	2.8	2.8	3	3	3.1	
France	2.6	2.7	2.8	2.8	2.9	2.9	3	3	3		
Germany	3.1	3.1	3.1	3.2	3.3	3.4	3.4	3.4			
Greece	3.4	3.7	3.8	3.9	3.9	3.9	4	4.1			
Ireland	1.6	1.7	2	2	2	2.1	2.1	2.1	2.2	2.3	
Italy	4.7	4.9	5	5.1	5.3	5.4	5.5	5.8	5.8	5.9	
Luxembourg	2	2	2.1	2.1	2.1	2.8	2.9	3	3	3.1	
Netherlands	2.5	2.6							2.9	3.1	
Portugal	2.8	2.9	2.9	2.9	2.9	3	3	3.1	3.1	3.2	
Spain	3.8	3.9	4		2.6	2.5	2.9	2.9	2.9	3.1	3.3
Sweden	2.9	2.9	2.9	3	3	3.1	3.1	3.1	3.1	3.1	3.1
United Kingdom	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8	

Source: Oecd (2001), *Health data.*

These data reveal that, actually, all European countries have witnessed a marked increase in the density of practicing physicians, with an average of 3.2 physicians per thousand inhabitants, with the exception of Italy where, in 1999, there were almost 6 physicians per thousand inhabitants. This attests to the fact that Italy shows a higher number of employed physicians, compared with the European average. Furthermore, looking at total employees in hospitals as a percentage of total employees in the healthcare sector (see table A.2.2-3), it appears that in some countries hospitals account for 60 percent to 80 percent of total sector employment (these include Italy, United Kingdom, Ireland, Denmark, France, Portugal, and Spain).

Table A.2.2-3 - Hospital employment as a % total health employment

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Belgium	56.2										
Denmark	69.8	70	69	68.9	68.7	68.6					
France		67.5	67.5	67.2	67.1						
Germany		44.2	44.3	42.4	42.5	42.5		24.8			
Greece		61.3		61.9	61.3	60.8	60				
Ireland	66.9	67.2	67.1	66.8	66.3	65.9	65.4	65.7	64.4	64.1	
Italy	61.4	70.8	70.7	70.8	71	71	70	68.8	69	68.5	
Luxembourg										85.6	
Netherlands	41.4	41.1	40.1	39.1	38.1	37.5					
Portugal	73.2	73.9	74.5	74.6	76.3	76	78.3	78.2	78.5		
Spain	81.4	77.6	79.1		72.6	68	62.4				
Sweden	46.4										
United Kingdom	73.6	75.4	74.5	74.1	74.5	73.7	74.3	75	73.4	74.2	72.8

Source: Oecd (2001), *Health data.*

The number and composition (general practitioners, practicing physicians and hospital workers) of healthcare employment, however, has no proportional impact on the level of ambulatory consultations (see table A.2.2-4): while Italy, with a high number of hospital employees and a high percentage of general practitioners and practicing physicians, had 6 per capita ambulatory consultations in 1999, countries like Austria, Belgium, Denmark, the Netherlands and United Kingdom showed the same level as,

or higher than, Italy's, despite the lower percentage of general practitioners and practicing physicians.

Table A.2.2-4 - Ambulatory doctor's consultation per capita

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Austria	5.9	5.9	6	6.1	6.2	6.3	6.3	6.2	6.5	6.7
Belgium	7.7	7.9	8	8	7.8	8	8	7.9	7.9	7.9
Denmark	5.7	5.8	5.6	5.4	5.5	5.7	5.7	5.9	6	5.8
Finland	3.9	4	3.9	3.9	4	4.1	4.3	4.2	4.2	4.3
France	5.8	6	6.1	6.3	6.3	6.4	6.5			
Germany		5.3	5.7	5.9	6.1	6.4	6.5			
Greece										
Ireland										
Italy		6.8			6.6					6
Luxembourg							2.9	2.9	2.8	
Netherlands	5.5	5.4	5.9	5.7	5.7	5.7	5.4	5.9	5.7	5.8
Portugal	3	3.1	3.1	3.1	3.2	3.2	3.2	3.4	3.4	
Spain										
Sweden	2.8	2.7	2.9	2.9	3	3	2.9	2.8		
United kingdom	6.1	5.6	6.1	6.6	6.1	6.1	6.1		5.4	

Source: Oecd (2001), *Health data.*

Looking at the percentage of in patient acute care beds per thousand inhabitants (see table A.e.2-5) Italy stands out for the low number of in-patient acute care beds relative to the number of general practitioners and practicing physicians.

Table A.2.2-5 - In patient acute care beds per 1,000 population

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Austria	10.2	9.9	9.8	9.5	9.4	9.3	9.2	9.1	8.9	8.7
Belgium	8	7.9	7.7	7.7	7.6	7.4	7.3	7.3		
Denmark	5.6	5.4	5.1	5	5	4.9	4.7	4.6	4.5	
Finland	12.5	11.2	11	10	10	9.3	9.2	7.9	7.8	7.5
France	9.7	9.6	9.4	9.3	9.1	8.9	8.8	8.6	8.5	
Germany	10.4	10.1	9.9	9.7	9.7	9.7	9.6	9.4	9.3	
Greece	5.1	5	5	5	5	5	5	5		
Ireland	10.5				10.2	10.1	10.1			
Italy	7.2	6.8	6.8	6.7	6.5	6.2	6.5	5.8	5.5	
Luxembourg	11.7	11.4	11.2	11.4	9	8.2	8.2	8.1	8	
Netherlands	11.5	11.4	11.4	11.3	11.3	11.3	11.2	11.3	11.3	11.3
Portugal	4.6	4.5	4.5	4.4	4.3	4.1	4.1	4.1	4	
Spain	4.3	4.2	4.1	4.1	4	3.9	3.9			
Sweden	12.4	11.9	7.6	7	6.5	4.9	4.4	4	3.8	3.7
United Kingdom	5.9	5.6	5.4	5.1	4.8	4.7	4.5	4.4	4.2	4.1

Source: Oecd (2001), *Health data.*

In fact, Italy seems to settle below the European average and shows a figure that is almost half that of France, Germany, the Netherlands and Austria, but higher than Sweden and the United Kingdom.
This difference in the availability of in patient acute care beds does not make Italy any different from the European average in terms of length of acute in patient care (see table A2.2-6) and hospital in patient care days (see table A.2.2-7); on the other hand, it should be noted that Italy's elderly population grows at a significantly faster rate (see table A.2.2-8). Concerning the average length of stay in hospitals, the 33.7 days for the Netherlands is approximately three times the European average. This is so unusual as to lead one to wonder whether there is a clear distortion at work in the provision and financing system.

Table A.2.2-6 - Acute in patient care - average number of days

	1990	1992	1994	1996	1998
Austria	9.3	8.5	8	7.6	6.8
Belgium	8.7		9.6	9.2	
Denmark	6.4	6.1	5.8	5.6	5.3
Finland	7	6.1	5.6	5.3	4.7
France	7	6.5	6.4	5.8	5.6
Germany	14.1	12.9	11.9	11.4	10.7
Ireland	6.7	6.8	6.7	6.5	6.6
Italy		9.3	9	8	7.2
Luxembourg	11	10.3	9.9	9.8	7.7
Netherlands	11.2	10.6	10.1	9.8	9.5
Portugal	8.4	7.9	7.7	7.9	7.3
Spain	9.6	9.2	9	8	
Sweden	6.5	5.8	5.3	5	6
United Kingdom	5.7	5.5	5.2	5	

Source: Oecd (2001), *Health data.*

Table A.2.2-7 - Hospital in patient care - average number of days

	1990	1992	1994	1996	1998
Austria	13	12	11.2	10.5	9.3
Belgium	13.8	12.3	11.7	11.1	
Denmark	8.2	7.8	7.5	7.2	6.9
Finland	18.2	16.6	13.1	11.6	10.9
France	13.3	11.7	11.7	11.2	10.7
Germany	17.2	15.6	14.7	13.5	12.3
Greece	9.9	9.2	8.5	8.2	
Ireland	7.9	8	7.7	7.5	7.6
Italy	11.7	11.2	10.8	9.4	8
Luxembourg	17.6	16.5	15.5	15.3	
Netherlands	34.1	33.5	32.7	32.5	33.7
Portugal	10.8	10.1	9.5	9.8	9
Spain	12.2	11.5	11.3	10	
Sweden	18	10.1	8.1	7.5	6.6
United Kingdom	15.6	12.4	10	9.8	

Source: Oecd (2001), *Health data.*

Table A.2.2-8 - Elderly population (65 years old and over)

	1990	1992	1994	1996	1998
Austria	15.1	15.2	15	15.3	15.4
Belgium	14.9	15.3	15.7	16.1	16.5
Denmark	15.6	15.5	15.4	15.1	14.9
Finland	13.4	13.7	14	14.4	14.7
France	14.1	14.5	14.9	15.4	15.8
Germany	15.3	15.3	15.8	16.3	16.6
Greece	14	14.4	15.2	15.8	16.6
Irleand	11.4	11.4	11.4	11.4	11.4
Italy	14.9	15.6	16.3	17	17.6
Luxembourg	13.4	13.6	13.9	14.2	14.3
Netherlands	12.8	13	13.1	13.3	13.5
Portugal	13.4	13.9	14.3	14.8	15.1
Spain	13.6	14.3	14.9	15.6	16.3
Sweden	17.8	17.7	17.5	17.5	17.4
United Kingdom	15.7	15.8	15.7	15.7	15.7

Source: Oecd (2001), *Health data.*

Finally, moving on to medical facilities, total investments in this area as a percentage of healthcare expenditure (see table A.2.2-9) are rising everywhere (except in the United Kingdom, Finland and Greece). They are

higher in Ireland, Austria and Belgium but are limited in such countries as Denmark, Finland, France and Germany; in Italy, Sweden and United Kingdom they are in line with the European average. However, an analysis of this figure by source shows that in some countries, such as the Netherlands, Italy, Ireland, Austria and the United Kingdom, private investments (see table A.2.2-10) are rather pronounced while public expenditure on medical facilities as a percentage of total public healthcare spending (see table A.2.2-11) is everywhere below 4 percent, except in Ireland.

Table A.2.2-9 - Total investment in medical facilities as a % total expenditure on health

	1990	1992	1994	1996	1998
Austria	5.1	5.4	4.8	6.9	6.5
Belgium				5.7	5.8
Denmark	2	2.2	2.6	2.9	3
Finland	4.6	3.2	2.6	2.7	2.7
France	2.5	2.7	2.7	2.6	2.4
Germany	3.1	3.4	3.2	3.2	2.6
Greece		4.9	4.2	3.9	
Ireland	4.1	6	5.7	7.2	7.6
Italy	7	6.7	3.3	4.2	4.4
Netherlands	5.5	4.4	4.4	5	4.2
Portugal	1.7	2.3	3.3	2.5	2.6
Spain	4	3.2	2.3		
Sweden	4.3	3.6	3.7	3.9	
United Kingdom	6.6	5.6	5.2	5.7	4.8

Source: Oecd (2001), *Health data.*

Table A.2.2-10 - Private investment in medical facilities as a % total investment on health

	1990	1992	1994	1996	1998
Austria				49	64.6
Greece		67.8	79.3	78.9	
Ireland	56.4	69.4	64.4	62.5	46.9
Italy	64.6	72.9	61.5	63.4	54
Netherlands	100	100	100	100	100
Spain	12.2	12	11.7		
Sweden	11.7	13.3	20.8	25.3	
United Kingdom	27	2.2	11.2	33.1	42.5

Source: Oecd (2001), *Health data.*

Table A.2.2-11 - Total investment in medical facilities as a % total public expenditure on health

	1990	1992	1994	1996	1998	2000
Austria	7	7.3	6.5	5	3.2	
Denmark	2.4	2.6	3.2	3.5	3.6	3.6
Finland	5.6	4	3.5	3.6	3.6	
France	3.2	3.5	3.5	3.3	3	
Germany	4.1	4.3	4.1	4	3.5	
Greece	2	2.7	1.7	1.5		
Ireland	2.5	2.5	2.8	3.7	5.2	
Italy	3.2	2.4	1.8	2.3	3	
Portugal	2.7	3.9	5.2	3.8	3.8	
Spain	4.5	3.5	2.6	2.7	3.1	
Sweden	4.3	3.6	3.5	3.4		
United Kingdom	5.8	6.5	5.4	4.6	3.3	

Source: Oecd (2001), *Health data.*

Appendix A2.3 – The reforms of the systems to supply healthcare services in some European countries[6]

United Kingdom

The English healthcare system as we know it today is Europe's most advanced experiment in so-called quasi-markets. Started at the end of the 1980s, this model was modified in part at the end of the 1990s, as the Labour government replaced the more market-oriented features with a system centred on the cooperation between the different providers on one side and the different buyers on the other.

The introduction of quasi-markets or internal markets began at the end of the 1980s, following the White Book "Working for Patients". This issued the guidelines for setting up a new healthcare system, which marked a sharp reversal from the previous one. The cornerstones of the new system were: the creation of quasi-markets (or internal markets), the separation between healthcare providers and buyers; the assignment, on a voluntary basis, of a budget to general practitioners so that these might allow their patients to access specialised care. The main reasons that prompted the reform of the national healthcare system in the United Kingdom included the growing dissatisfaction of patients with the long waiting time and the queues that they had to endure to access services. These malfunctions of the national healthcare system were attributed to the excessive bureaucracy of the command and control chain, to the absence of appropriate incentives to healthcare operators at the different levels, to the lack of effective mechanisms to monitor, control and punish inefficient and opportunistic behaviours.

In keeping with the deregulation stance adopted by the Tatcher government in public utilities, the reform of the healthcare system too was rooted in the principle that efficiency could improve only by liberalising and privatising sectors that had been heretofore the exclusive preserve of government. The challenge was such that the Prime Minister herself spearheaded the effort. The establishment of quasi-markets or internal markets was the medium through which the healthcare sector was to benefit from free trade and freedom of choice on both the demand and supply sides; any excess was to be tempered by significant restrictions, especially in terms of quality of the services provided. Thus, the healthcare reform did not focus on the funding side of the system but on the organisation and operation side. The previous system was strongly centralised, with the executive committee of the National Health Service (NHS) that implemented the guidelines set by the government, transmitting them down to the ranks and file through the line of command: regional offices, the 192 district health authorities, hospitals and finally the general practitioners (GP). The GPs acted as gatekeepers, introducing their patients to the next assistance levels.

The new healthcare system called instead for a more multifaceted approach, where a clear distinction was drawn between health-service providers and buyers. The providers were organised in 425 hospital trusts located throughout the national territory and were autonomous from an operational and organisational point of view; the buyers were represented

(6) The following material is based on reports by the European Observatory on Health Care.

by 100 health authorities located throughout the national territory, by the fundholders under the GP fundholding scheme, and by other general practitioners. On the supply side, the hospital trusts were to be managed by a board of directors and were to compete with one another to obtain healthcare service contracts from health authorities and GPs. A tax was introduced on capital assets utilised in order to encourage the trusts to use efficiently the equipment they had available. Initially, there were two types of health authority: district health authorities, for a total of about 200, which provided health services to a population of 250,000 people and obtained funding on a per person basis, and family health service authorities. Eventually, both types of organisation were merged. GPs were possible buyers of services, either directly or as gatekeepers. Direct buyers included GP funholders, who were given a health budget for their patients which was charged to the budget of the local health authorities. Thus, GPs represented not only an indirect demand for healthcare services but acted as actual agents, negotiating the best terms and conditions with service providers on behalf of their patients. General practitioners were not required to become fundholders; participation in this programme was on an entirely voluntary basis. During the 1990s, there was a mushrooming of GP fundholding (GPFH) organisations. These included the so-called multi-funds (physician consortia that aimed to expand economies of scale and minimise organisational costs) and total purchasing pilot sites (TPPS), or GP groups capable of serving between 12,000 and 80,000 patients, which would buy second-level services provided by hospitals to registered patients. In all these cases the GPs could keep any savings achieved, compared with budgeted amounts assigned to each patient, and spend them on services and/or facilities that might ultimately benefit the patients in any way. During the 1990s, only about half the GPs joined the fundholding scheme; the others, often in open contrast with the GPFHs, set up practitioner organisations, called also commissioning groups. While not acting as direct buyers of healthcare services on behalf of their patients, these did determine the priorities and strategies for using health services with local health authorities. Regardless of the specific status adopted by general practitioners, they were the cornerstone of the system in their role as gatekeepers: about 99 percent of the British population has always been registered in the rolls of general practitioners and approximately 90 percent of the contacts citizens have with the national service occurs through general practitioners. Furthermore the introduction of the GP fundholding scheme did not change the compensation system for GPs; this was mainly based on criteria established in national contracts signed with the NHS by the national associations of general practitioners (amount per patient, expense reimbursement, prevention rewards, etc.). The system so implemented aimed to transfer to the healthcare sector the benefits of market mechanisms, albeit with a measure of regulation (managed competition). On the demand side, patients could choose their general practitioner in a specific area, and the reference HA. GPs, for their part, acted as a buyer group which, thanks to a superior bargaining power obtained better services at a lower price. Likewise, on the supply side, the system made it possible to keep cost down thanks to the competition among providers to secure contracts with buyers and the transparency of costs, based on the application of a method similar to that of diagnosis

related groups (DRG) for some types of service, called health related groups. Under this method in particular, providers were forced to price their services on the basis of actual not historical costs. According to some scholars (Le Grand, 1999; Propper and Soderlund, 1998), this system had undoubtedly some positive effects during the 1990s: (a) the separation between service providers and users introduced into the system a proper alignment of incentives, allowing the competition among providers to reduce the opportunism risks related to persistent information asymmetry, prompting the emergence of transparent standards in terms of quality, prices and costs; (b) in the more competitive segments, the system implemented mechanisms to unveil costs and virtuous behaviour designed to maximise service efficiency; (c) cost control made for an effective rationing of lengths of hospital stays, as these were sharply reduced, specially for the older population, and a constant increase of same-day care.

Given these improvements, the system however generated new problems. The most significant is that of the transaction costs determined by the system's focus on the contractual relationship between providers and buyers: on the one hand, the competition among providers encouraged the stipulation of short-term contracts, fuelling the costs associated to the signing of new contracts with new operators; on the other hand, the role of GP funholders as brokers turned these into budget managers for their patients, thus curtailing the time practitioners could spend in their primary function. Transaction costs were linked to the particular types of contracts entered into by the concerned parties. There were three types of contract: block contracts, whereby the provider was given a fixed fee to ensure a minimal level of care for patients, cost-and-volume contracts, which were based on a specific volume of services provided at an agreed-upon sum, and cost-per-case contracts, which were based on the actual service provided to the patient. Actually, the system gave rise to sophisticated block contracts, which combined the features of the others, whereby the buyer undertook to pay the provider a specific sum in exchange for access to a pre-established set of services. Nevertheless, according to some estimates (Platon et al., 1997), total administrative and transaction costs arising from these contracts, as a share of total health service costs, rose from 8 percent in 1991/92 to 11percent in 1995/96, causing also an increase in the administrative staff devoted to this function.

Another system malfunction was the lower-than-expected competition level among providers. This was due to two reasons: the limited freedom of choice patients had with respect to health authorities and specialised assistance; the limited freedom of choice providers had with respect to health authorities. These two factors mitigated the discipline the system intended to impose on operators through competition, as many of the patients and their buyers' choices were limited to the local market, which was often dominated by large operators (suffice it to think that around 2/3 of the hospital trusts generated more than 2/3 of their revenues from local health authorities). Finally, the system was criticised for the distortions it could determine in terms of fairness of access to services by citizens. This had always been one of the pillars of the NHS; in particular, there was the actual risk that part of the resources would be assigned to GPs who had joined the fundholding scheme, thanks to the incentive these had to increase the budgets under their management, to the detriment of

patients of GPs who had not joined the scheme.
In addition to these, there were some disappointing results in terms of access to the NHS, such as the persistence of long waits for specialised visits, which continued to exceed the average for OECD countries (fuelled by the incentive to physicians to take maximum advantage of the law which allowed them to transfer hospital visits to private consultations in an amount equivalent to 10 percent of their income). In 1997, the Blair Government implemented its reform with the aim to reduce waiting lists (paradoxically, this had been one of the goals of the quasi-market system). In particular, this reform had two stated objectives: no citizen had to wait for more than eighteen months to be hospitalised; (b) by the subsequent elections, waiting lists would be 100,000 units shorter compared with the number of units reported in 1997.
The new government's policy was simple: keep the separation between providers and buyers of healthcare services, emphasising cooperation and partnership among the different providers on one side and the different buyers on the other, in order to avoid duplications in supplying healthcare services and to satisfy the maximum number of requests. In order to achieve this objective, the reform started in 1997 and 1998, with a report titled "Our Healthier Nation", aimed to reduce the transaction costs associated with short.-term contracts between buyers and providers through: (a) the promotion of contracts with at least three-year terms; (b) the elimination of the GP fundholders, and the establishment of Primary Care Groups (PCGs), mandating all GPs to enrol in them; (c) the creation of the National Institute for Clinical Excellence (NICE), whose purpose was to evaluate clinical practices and to disseminate information on the best medical treatments; (d) the creation of 26 Health Action Zones (HAZ); these are committees concentrated in particularly risky areas in epidemiological, economic and social terms, with the purpose of coordinating specific actions involving the different institutional players.
Each PCG may include on average 50 practitioners and cover a local population ranging from 30,000 to 250,000 units.
The main activity of the PCGs is to coordinate, together with HAs and hospitals, the delivery of healthcare services for their charges, planning standards and targets on a multi-year basis. To this end, in 1998 a system was introduced to evaluate healthcare performance on the basis of indicators that take into account the following six variables: health improvement, equitable access, effectiveness of service provided, efficiency, physician-patient relationship, results in terms of health.
Of special importance was an initiative involving the exploration of new avenues in public-private cooperation. In particular, in order to improve the quality of the capital assets invested in the National Health Service, the government launched a programme known as Private Finance Initiative (PFI), a partnership project devoted to private operators interested in investing in the public sector. In 1998 15 projects were started, for total capital investments in the amount of 1.2 billion pounds.
The early results on waiting lists seem to bear out the notion that the reform started in 1997 is positive, albeit the effects produced are nowhere near the expected results.

Table A.2.3-1 - Waiting list evolution, United Kingdom

Hospital Waiting List

	1997	1998	1999
First date			
< 4 weeks	40%	37%	35%
4-12 weeks	42%	41%	39%
13-25 weeks	15%	17%	19%
>26 weeks	4%	5%	7%
Internal waiting list			
< 3 months	42	43	43
3-5 months	24	24	24
6-11 months	27	26	25
> 12 months	7	7	7
Day Hospital			
< 3 months	52	56	58
3-5 months	23	22	22
6-11 months	21	19	17
> 12 months	4	3	3

Source: Nhs (2000), *Executive.*

Sweden

Sweden's healthcare system is almost entirely public, with respect to the demand and supply of health services. Moreover, it has strong regional connotations. It is a very interesting model, especially for its ability to deliver results efficiently. Under it, citizens enjoy some of Europe's longest life expectancies and lowest infant mortalities. The national healthcare system is managed by the Ministry of Health and Social Affairs. The Socialistyrelsen is a national committee whose tasks involve the setting of guidelines and the control over the implementation of the national plan by counties and towns. At the county or regional level, there are 20 county councils that control 9 regional hospitals, 70 district hospitals and around 950 health centres. At town level, there are 289 municipalities that provide mostly social assistance services for the elderly and the disabled. Sweden is one of Europe's biggest spenders for healthcare.

In 1998 healthcare spending represented approximately 8.4 percent of GDP; out of this sum, 83.8 percent was funded by the public sector; this in turn consisted of 62.3 percent for specialised assistance, 9.5 percent for psychiatric care, 5.8 percent for geriatric care and the balance for primary healthcare. General taxation funds 78 percent of public healthcare spending while for the balance there is a cost-sharing arrangement with patients, so-called ticket system, particularly for pharmaceutical products. Social insurance is mandatory; it provides assistance in case of illness and disability and covers pharmaceutical costs. As to out of pocket expenses, a consultation with a general practitioner requires a payment of about € 11 for a ticket; a consultation with a specialist costs twice as much. The national government sets a ceiling for out of pocket expenses (about € 99). Once this ceiling has been reached, citizens will receive free medical assistance for the following 12 months. People below 20 years of age are exempted from these costs. Moreover, if a patient has to wait for more than 30 minutes, he is entitled to obtain a refund for the ticket cost. The ticket on pharmaceutical products is inversely related to the costs incurred for such products (its cost being zero after a certain threshold) but access to primary healthcare is free of charge for students attending mandatory schools. Analyses and diagnoses for pregnant women are free of charge, as is

dental care up to the age of 19; people older than 30 are entitled to a partial reimbursement. In addition to these benefits, the Swedish system allows citizens to choose freely the health centre or the hospital departments for primary healthcare within their own regions. Furthermore, with the proper authorisation citizens can access healthcare services in other regions. In this case the cost of the service is charged to the county of origin. Still concerning primary healthcare, Sweden has a significant private healthcare sector, which provides approximately 25 percent of basic medical services but which is accredited with, and financed by, the public sector.
In terms of patient's freedom of choice, the separation between service provider and buyer, the budgets set for service providers and buyers and the potential competition among providers located in different regions, the Swedish system resembles in part the NHS. The financial resources obtained through taxes are injected into the system through general budgets or contracts, in case of public and private accredited hospitals, and general budgets per person, in the case of first level health centres. In particular, each county assigns a budget for healthcare services, and the associated financial responsibility, to local districts; within each district, users of healthcare services organised as groups establish contracts with service providers calling for a type of payment similar to that adopted by DRGs for some services.
Looking at the reforms that have characterised the Swedish system over the past fifteen years, four different trends can be identified:

- Special attention to fairness in the 1970s and 1980s;
- Special attention to measures intended to keep costs in check at the end of the 1980s;
- Special attention to measures intended to improve service efficiency in the early 1990s;
- Special attention to measures designed to implement structural changes in the organisation of healthcare services.

In 1982 an important reform process began; its aim was to decentralise healthcare policy by assigning a larger role to counties, whose main task was to organise a system capable of meeting residents' needs, especially those who are more subject to health risks as a result of their income, age, physical conditions or geographical location. The 1985 reform (Dagmar) completed this devolution by delegating to counties the responsibility of paying for health services, and transferring the necessary resources on a per person basis. The subsequent Adel reform, in 1992, accelerated this process of healthcare federalism by delegating to municipalities the responsibility for managing and planning long-term healthcare spending and social assistance. In that year, moreover, measures were implemented to increase patients' freedom of choice as a way to enhance competition among service providers, especially in terms of waiting lists. In particular, an agreement was entered into between the Ministry of health and the federation of counties whereby the Government provided additional funds to counties, granting patients who had not received any kind of treatment within three months from their request the freedom to obtain treatment elsewhere. The goal to reduce waiting lists was achieved in the following two years. The subsequent reforms made once again the family doctor the cornerstone of the system, granting patients the opportunity to choose their own general practitioner within the county of origin, extending this

possibility also to private physicians who had not signed any agreement with the county council (this possibility was eventually repealed in 1995). The reforms in the second half of the 1990s finally abandoned the emphasis placed on competition as an efficiency and cost-effectiveness tool of healthcare policy; this because on one side freedom of choice had been exercised in full only in a few areas and, on the other, in the areas where they had lost many patients, providers had significant financial difficulties to adjust their short-term offering, and they had to resort to costly financing arrangements with the public sector to set their operations back on track. As a result, in the second half of the 1990s, some county health units merged, to keep costs down, to reduce competition and to improve efficiency.

Germany

The German healthcare system is strongly affected by the complex political and administrative organisation of the country as a whole, which basically revolves around the relationship between the Länders and the federal government. This aspect could characterise Germany as a more suitable example of federal system, compared with Sweden, were it not for the fact that in that country healthcare policy is not designed at national level and then transmitted down to the Länders, but rather follows the opposite course where the Länders are the initiators and the federal government acts as a coordinator in terms of goals and guidelines. The bedrock of the German system is the mandatory healthcare insurance citizens buy from a sickness fund of their own choosing. At the end of 1999 there were 453 sickness funds providing coverage to about 72 million citizens and 52 private healthcare insurance companies that provided healthcare insurance to around 7 million people. Mandatory insurance accounts for approximately 70 percent of total healthcare spending and for approximately 87 percent of public healthcare expenditure, while the remaining 13 percent is financed through general taxation. Private insurance companies contribute approximately 6.6 percent to total healthcare spending, while out of pocket expenses represent approximately 11 percent. Sickness funds are autonomous non-profit organisations managed by member-elected governance bodies. In 1993, there were more than 1,200 such funds; their number fell to one-third of that after a sustained merger and acquisition activity. Some of these funds are local in nature, others are federal associations of local funds. Patients are free to choose the funds most suitable to their circumstances and the funds are required to enrol all applicants. Likewise, patients are free to choose their own general practitioner from the lists of the regional practitioner associations, and these GPs can in turn negotiate the levels of assistance and the associated costs with the sickness funds. Finally, even though the general practitioner acts as gatekeeper, patients are free to choose the hospital from among the relevant regional or federal associations; these hospitals, in turn, can negotiate a minimum level of services, a given cost-to-volume ratio and a set of procedures. Sickness funds are entitled to set the contribution percentage necessary to cover healthcare costs. This responsibility gives them the possibility to negotiate prices, quantities and quality of services members are entitled to receive. Once an agreement to that effect has been reached, these services can be accessed automatically

by all members (an authorisation is required, however, for some rehabilitation procedures). Hospitals negotiate individually with each sickness fund (as a rule funds that within a given hospital structure exceed 5 percent of the demand negotiate directly with the hospital), even though the terms and conditions agreed upon with one fund apply to all funds. Ambulatory and dental care , as well as drugs, are almost completely provided by private suppliers; there is also a large number of private firms that operate as non-profit organisations.

Table A.2.3-2 - Care beds distribution among supplying structures, Germany

	Pubblic		Non profit		Private		Total
	Care beds	%	Care beds	%	Care beds	%	Care beds
1990	387,207	62.8	206,936	33.5	22,779	3.7	616,922
1998	295,382	55.3	202,270	37.9	36,118	6.8	533,770
Variation	-24%		-2%		59%		-12%

Source: Observatory (2000), *Germany*

On the supply side Germany, unlike the United Kingdom for instance, does not have a gatekeeper that can help patients to obtain an optimal service level. This means that freedom of choice for patients is such only in name; in fact, they can only choose what has been agreed between funds, practitioner associations (at regional and federal level) and hospital associations (at regional and federal level). Whilst in the U.K. model the patient's freedom of choice was guaranteed by the greater discretionary power of the gatekeeper (the general practitioner), with positive effects for the level of competition among service providers, this is not the case in Germany. Nowadays, some reforms have been approved to have general practitioners play the role as gatekeeper. On the other hand, it should be noted that, compared with that in the U.K., the German system seems more effective in terms of waiting lists.
Finally, according to some scholars (Eohcs, 2000) the weakest point of the German system seems to be its excessive duplication of services, a problem noticed in U.K. too. However, unlike the U.K. experience, the presence of a large number of buyers-payers encourages an excess of supply by providers, resulting in the delivery of sub-standard services.

Appendix A2.4 – Healthcare financing in European countries: an overview

In every economic policy problem, the tool-objectives approach posits that multiple objectives cannot be met without an equal number of tools available. Healthcare is no exception; actually, because of the significant interrelations between objectives and tools, it probably requires a number of tools higher than that of the goals to be achieved.

To clarify this concept, a brief illustration is provided of what are considered in many quarters, albeit slightly differently, the objectives of healthcare policy:

- Freedom: this means both 1) citizens' freedom of choice regarding both service providers and insurance providers, 2) service suppliers' freedom to provide care and in the way services are rendered;
- Efficiency: this objective too has a twofold aspect: 1) macroeconomic efficiency, i.e. spending a limited amount of national resources in healthcare (as measured by the expenditure-to-GDP ratio) and that such amount reflect an adequate allocation by function (hospitals, ambulatories, etc.), 2) microeconomic efficiency, i.e. that production be technically efficient and cost-effective, that queues be reduced to a minimum and that citizens be satisfied with the service quantities and quality;
- Equity: this means: 1) equity on the funding side of the services, in the sense of protecting the weakest members of society from spending excessive amounts and as an equitable allocation of costs among citizens, 2) equity in terms of access to, or utilisation of, services.

The objectives so defined are intermediate at best, the final goal being the good health of citizens. This, in turn, is a frequency distribution scattered throughout the citizenry and is measured in terms of efficiency, as reflected by the average life expectancy at birth, possibly adjusted to take account of disabilities (Daly's or disability adjusted life years) or even, broad a concept though it may be, of quality of life (Qaly's or quality adjusted life years), and in terms of equity, i.e. a more or less uniform distribution of good health among the citizenry.

These intermediate objectives are interrelated via synergies and trade-offs, so that achieving one affects positively or negatively the achievement of another. For example, often efficiency and equity objectives are in conflict; in fact, building a hospital on a little populated island may be the equitable thing to do because local residents would have access to services they did not have before; however, this will inevitably have a cost because the island's small population does not make it possible for such hospital to achieve the scale required to be operated efficiently.

An example of synergy, instead, is that of possible efficiency improvements at the microeconomic level that might translate into savings at the macroeconomic level; the reverse would not be true, however, as aggregate expenditures can be reduced, for instance, by saddling citizens with longer waiting lists or queues.

In addition, it seems that the achievement of objectives depends also on whether funding comes from public or private source: in fact, public systems guarantee greater equity and macroeconomic efficiency, but lower freedom and probably lower microeconomic efficiency than private ones.

The last column of table A.2.4-1 shows the positive and negative aspects in

terms of funding for each objective.
On the whole, if objectives can be easily identified, the choice of the policy tool is not as easy, especially because it is hard to calibrate such a tool. In fact, action can only be taken on the financing side of the healthcare system, that is on the mix of the different methods to finance healthcare services, whether from public or private sources; public sources include social contributions, general taxation, among others, whilst private sources include cost-sharing arrangements, such as the so-called ticket system, or private insurance. However, on the other side of the spectrum, policy tools might include the individual types of financing or a private-public mix.
Furthermore, the peculiar aspect is that the tool may vary according to the objective. In fact, efficiency might be attained by concentrating on specific financing components, given that equity in financing system results from a careful mix of funding sources. This because sources of a progressive nature might need to be combined with others of a regressive nature, or sources that affect weaker groups might have to be neutralised via an exemption. The latter include the ticket, or cost-sharing, system which, however, could also be utilised, as everyone knows, to discourage moral hazard, excessive spending, and thus to prevent the resulting loss of macroeconomic efficiency.
In light of these methodological issues, it is likely that the individual healthcare systems might not have dealt with the financing issue within a rational tool-objective framework but on a stage-by-stage basis, namely following an evolutionary process, starting from the original model and making adjustments along the way as needed. Therefore, the model to finance healthcare systems is a typical second best process which, together with the other elements of the system, such as the provision of services, the method to pay suppliers etc., achieves a peculiar balance that varies from one country to another and is liable only to small changes in the short run.
The two columns on the financing details, public and private, summarise the differences in the financing systems among countries, that is the tools utilised to achieve healthcare policy goals.
The literature identified three typical financing models; these are never present in their purest form, with scant possibilities for a transition from one to the other:

- The private model, which has long been assumed, perhaps wrongly so, Switzerland's financing model, based on out-of-pocket payments by patients, which easily turns into a system dominated by private insurance;
- The continental model, typical of the central-continental countries of Europe, based on social protection, that is on company and professional funds financed mainly with mandatory contributions;
- The Nordic-Atlantic model, typical of Scandinavian countries and the United Kingdom, characterised by mainly centralised healthcare systems and financed through general taxation.

This Report does not discuss the origin of these models; it has been noted in part how these can be traced back to the different ideas on the role of the firm in society and in financing healthcare in particular.
These will be utilised in the first columns of the overview to classify the various European financing systems.

Table A.2.4–1

Country Financing model	Public financing system	Cost-sharing or private sources	Healthcare policy objectives
AUSTRIA Social protection (continental) with professional funds, without free access. Ca. 24 funds	**Mix** (1999): Public 72.1%, of which 43.6% social protection and 28.4% general taxations. **Contribution rates:** Clerical workers 6.9%, Blue-collar workers 7.9%, Other Employed workers: 9.1% Public employees: 7.1% Voluntary contracts ASVG 6.5%, Self-employed workers 9.1%, Agricultural workers 6.4%. Centrally determined	**Mix** (1999): Private 27.9%, of which 16.6% direct payments, 7.1% private insurance, 4.3% other. **Cost-sharing:** High, General Practitioners 20% or € 3.63, physicians of own choosing 20% not covered, Hospitals 20% or € 5.09, 10% family members, Drugs € 3.45 each product, Rehabilitation, € 5.67 per day, Therapeutic material 10%-20% **Private insurance** – supplementary, complementary and on cost-sharing basis; hotel hospital expenses, drugs, private ambulatory expenses.	**Freedom:** none in choosing insurers, better but expensive in choosing suppliers **Efficiency:** wide range of services, few insurance funds, sharp divide between public and private, little moral hazard due to cost-sharing, lack of competition among public funds. **Equity:** universalism (99%), disparity in contributions and cost-sharing, not fine-tuned ticket exemptions, regressive contributions.
BELGIUM Social protection (continental) with 6 health insurance plans (aggregate) that can be freely chosen and refunds, 1 public auxiliary fund	**Mix** (1994): Public 74%, of which 38% social protection and 38% general taxations. **Contribution rates:** Contributions are all concentrated among the social assistance sectors and then redistributed. Employed workers: 7.35% (3.55% worker, 3.8% employer) pensioners 3.55%, Self-employed workers 3.2%. Centrally determined	**Mix** (1994): Private 26%, of which 17% direct payments, 9% other. **Cost-sharing:** High, General Practitioners 30%, specialists 40%; Hospitals, fixed tickets per day hospitalised, drugs consumption; mutual institutions; small risks. Self-employed workers plus ambulance and home assistance; **Private** hotel and hospital expenses and cost-sharing.	**Freedom:** good in choosing insurers (possible change every three months), good but expensive in choosing suppliers **Efficiency:** wide range of services due also to strong competition among public funds, poor in terms of supplementary insurance (moral hazard in cost-sharing), and in terms of inefficient refund mechanisms from health insurance plans. **Equity:** universalism (99%), insufficient ticket exemptions, disparity in contributions between employed and self-employed workers.
DENMARK General taxation (Nordic-Atlantic) with a federalist **component**, local taxes and redistribution among local communities	**Mix** (1999) Public 82% (state taxes and duties 13%; regional and municipal taxes and duties 87%) **Average regional tax rates:** Personal income tax 11.5%	**Mix** (1999): Private 18%, of which 16.5% direct payments, 1.5% private insurance. **Cost-sharing:** only on some forms of specialised care (dental) and drugs, or also on some physician fees for individuals that choose Group 2 (total freedom of choosing physician). Individuals group 2: fixed amount for physician fee. Individual above 18 years of age: medical and dental checkups All: physiotherapy, eyeglasses 100%, home assistance 100% with exemptions, drugs with decreasing cost-sharing classes (50%-25%-15%). **Private insurance and non-profit**, supplementary and on cost-sharing: drugs, dentists, physiotherapy, eyeglasses, hearing devices, hotel hospital expenses. High, General Practitioners 30%, specialists 40%; Hospitals, fixed tickets per day hospitalised, drugs consumption; mutual institutions; small risks. Self-employed workers plus ambulance and home assistance; **Private** hotel and hospital expenses and cost-sharing.	**Freedom:** choice of suppliers, costly (Group 2) **Efficiency:** long waiting periods for services lead to private over-insurance, non tax-deductible direct payments, inefficient ticket for drugs (stimulates spending) **Equity:** Universalism (100%). Overall financing slightly regressive for direct payment component, access disparity due to different services and equipment available to regions, currently being mitigated by regulation on waiting time and therapy, exemptions not easy, disparity between group 1 and 2, development of supplementary insurance negatively affects the poor.
FINLAND **General taxation** (Nordic-Atlantic) with components of a social protection type with sickness allowance, occupational medicine, drugs and some ambulatory expenses	**Mix** (1999) Public 75.5%, of which taxes and duties 60.8% (state 18.2%; municipal taxes 42.6%). Social insurance (contributions) 14.9% **Average municipal tax rates:** Personal income tax 7.5%	**Mix** (1999): Private 24.3%, of which 20% in direct payments, 2.1% employer funds, 0.5% mutual provident funds (paid for by firms). **Cost-sharing:** high and often of a fixed amount. Municipal service, medical checkups (including examinations and x-rays) € 10 each or € 20 in yearly subscriptions, dentists (above 19 years) € 6-12 per visit, € 5-42 conservative. Hospitals: short stays € 23 per day, long € 25, visits € 20, psychiatry € 12, day surgery max € 67, long stays 80% income Social insurance: visits and dentists 40%, analyses and x-rays € 13 plus 25% of any excess, with a yearly maximum of € 580. No exemptions, unless means tested through social services, increase persons in difficulties, in 2000 maximum yearly ticket € 589 (excluding drugs) Private insurance of a supplementary type, individual or group (large companies) plans for drugs and rehabilitation expenses.	**Freedom:** choice of system possible (municipal healthcare service or social insurance) **Efficiency:** inefficiency in municipal financing mechanism (receive the same whether few or many opt for social insurance), imperfect specification of ambulatory responsibilities, with double financing or cost-deduction between municipality and social insurance **Equity:** Universalism (100%). Widely varying expenditures among municipalities (2-2.5 times) which cannot be explained with differences in population needs; in 1990s financing became more regressive due to increase in cost-sharing and the decrease of progressive taxes; social insurance has suppliers mainly in the south of the country and in large cities.

Country Financing model	Public financing system	Cost-sharing or private sources	Healthcare policy objectives
FRANCE **Social protection** (continental) professional funds, no freedom of choice.	**Mix** (1999) Public 76.2%, of which social protection 73.7% and general taxation 2.5%. Centrally determined.	**Mix** (1999): Private 23.8%, of which 10.1% in direct payments, private insurance 12.6%, other sources 1% . **Cost-sharing:** high and in a proportional share. General practitioner visits 30% + extra, specialist visits: 30% (25% in hospitals), Hospitals: 20% (1 month ceiling) + share of hotel costs, Dentists 30% for preventive care and conservation, up to 80% for protheses and orthodontics, Drugs: depending on therapeutic category: 0%, 35% and 65% Private insurance: supplementary and cost-sharing types	**Freedom:** no freedom in choosing insurer; better in choosing a supplier. **Efficiency:** insurance companies inefficient on cost sharing, good range of services **Equity:** Universalism (95%). Financing overall slightly progressive (regressive private component).
GERMANY **Social protection** (continental) professional funds, company or regional, partly with freedom of discretionary choice by company (regional), partly closed (farmers, miners, sailors).	**Mix** (1998) Public 75.8%, of which social protection 69.4% and general taxation 6.4%. Contribution rates: variable among funds, with average 13.5%, equally split between employees and employers. Determined by individual funds.	**Mix** (1998): Private 24.2%, of which 12.8% in direct payments, private insurance 7.15%, other sources 4.3% . **Cost-sharing:** Hospitals € 8.7 per day (max 14 days per year); Drugs: from € 4.1 € 5.1, depending on dose, and 100% beyond reference price. Dentists only for protheses and orthodontics (between 35% and 50%). Partial exemptions for poor, unemployed, young, chronically ill. **Private insurance:** For profit or regional funds, of a supplementary type; hotel expenses, physician of own choosing; substitutive as well (opting out) for high-income people.	**Freedom:** partial possibility to choose insurer; good for voluntary insured (change possible every 2 years). **Efficiency:** imperfect portability, work mobility partly hindered, adverse selection problems among funds (the more efficient and less costly are penalised) **Equity:** Universalism (88% from social protection, 9% from private substitutive insurance and 2% from state). Wide contribution gap among funds. Partial ticket exemptions.
GREECE **Mixed social protection system** (continental), with a great deal of financing out of general taxation	**Mix** (1998): Public 56.3%. **Contribution rates:** variable among funds, IKA fund 7.56%.	**Mix** (1998) Private 43.7%, mainly direct payments, informal as well. **Cost-sharing:** Average, ambulatory hospital expenses € 2.9, Drugs 25%, with rates also of 0%, 10% and 100%. Dentists, protheses 25%. Exemptions for ambulatory visits (agricultural workers and poor), for dentists 8young people). **Private insurance:** supplementary or complementary, not very important	**Freedom:** there is no freedom in the choice of insurance funds; **Efficiency:** Presence of informal financing to skip queues or obtain better quality services. Limited competition among insurance funds. **Equity:** Selective universalism (100%), meaning only for some services. Incomplete exemption system.
ITALY **General taxation** (Nordic-Atlantic) with a federalist component, involving regional taxes and redistribution among regions	**Mix** (1999): Public 72.3%, of which taxes and duties 72.2%. Social insurance (contributions) 0.1%. **Average regional tax rates**; regional tax on added value (IRAP) 4.25%, regional component of personal income tax 0.5%.	**Mix** (1998): Private 27.7%, of which direct payments 24.1%, private insurance 0.9%, other sources 2.7%. Cost-sharing: medium amount and with regional differences. Specialised medicine and diagnostics: maximum ceiling of € 36.2, Drugs: depending on categories (0%, 50%, 100%) and fixed amount for prescriptions (average € 1.5). Dentists: often 100% Exemption for chronically ill, poor and other disadvantaged groups. Private insurance: both individual and group (company), for-profit and non-profit companies, additional or supplementary services to public services. Supplementary funds available and with cost-sharing arrangements.	**Freedom:** here is no freedom in public sector (regions), choice of supplier possible at no additional costs. **Efficiency:** Little integration between public and private services. Cost-sharing supplementary funds are inefficient. **Equity:** universalism (100%), slightly progressive overall healthcare financing, public component more progressive, private component regressive. Horizontal iniquities (mainly regional). Sub-optimal cost-sharing exemptions.

Country Financing model	Public financing system	Cost-sharing or private sources	Healthcare policy objectives
THE NETHERLANDS **Social protection** (continental) occupational fund, with freedom of choice	**Mix** (1998): Public 68.6%, of which 64.5% social protection and 4.1% general taxation **Contribution rates:** fixed AWBZ fund (catastrophe expenses) 10.3%, contribution payable by employer 0%, ZFW fund (normal expenses) 8.1%, of which 6.3% payable by employer. Centrally determined.	**Mix** (1998): Private 31.4%, of which direct payments 8%, private insurance 17.5%, other sources 5.9%. **Cost-sharing:** not high and often for a fixed amount Hospitals: € 3.6 per day Drugs: selected fixed amounts Dentists: 100%, with exemptions for young people and preventive care **Private insurance:** substitutive for high-income people and normal risks, of a complementary or supplementary type for the entire population.	**Freedom:** freedom to choose insurer Efficiency: Limited competition among funds, good range of services offered **Equity:** AWBZ universalism 100%, ZFW 64%, overall regressive financing, on both public and private component.
PORTUGAL **General taxation** (Nordic-Atlantic) with strong private component (direct payments and cost-sharing)	**Mix** (1998) Public 66.9% (for 1996 taxes and duties 63%, Social insurance, or contributions, 4.8%)	**Mix** (1998) Private 33.1% (for 1995 direct payments 4.6%, private insurance 1.4%) **Cost-sharing:** High. General practitioners: € 1.5, plus expenses for house calls) Specialist hospital examinations: € 2-3 Drugs: different prices by product (from 40% to 100%) Dentists: often 100% Exemptions for young people, poor, chronically ill, maternity. **Private insurance:** mainly group and company, expiring in old-age, supplementary or complementary type.	**Freedom:** no freedom to choose insurer **Efficiency:** National health system saddled with costs to cure patients insured with another regime (residual insurance plans): **Equity:** Universalism (100%). Slightly regressive financing due mainly to direct payment component which overcomes the slight progressiveness of public financing. Unfair tax incentives.
SPAIN **General taxation** (Nordic-Atlantic) minor social protection components	**Mix** (1998) Public 76.8% of which taxes and duties 63%, Social insurance (contributions) 9%	**Mix** (1998): Private 23.2% (estimates: 16% direct payments and 7.2% private insurance). **Cost-sharing:** not high. Drugs 40%, with exemptions or reduced contributions for the chronically ill Dentists 100% for some services (exemptions for young people). **Social insurance:** supplementary or complementary type (dentists, gynaecologists) individual or group, with private plans involving freedom of choice for public employees	**Freedom:** possible choice between public or private insurance for public employees. **Efficiency:** additional insurance create duplications. Presence of moral hazard and strong growth of insurance premiums. **Equity:** Universalism (99.4%). Private insurance mainly concentrated in large cities. Financing almost proportional, with a progressive public component (mostly social contributions, though little important) on one side and regressive private component on the other.
SWEDEN **General taxation** (Nordic-Atlantic) with social protection component for sickness allowance, drugs and some ambulatory expenses above ceiling.	**Mix** (1998): Public 83.8% Average local tax rate: 8.5% Contribution rates for social protection: 8.5%	**Mix** (1998): Private 16.2% **Cost-sharing:** average and in a fixed amount General practitioner: SEK 100-140 Specialist hospital examinations: SEK 150-250 Hospitals: SEK 80 per day Drugs: up to SEK 900 100%, thereafter gradually declining percentages to 0%. Dentists: cost-sharing for adults Maximum yearly expenditure SEK 900 drugs SEK 900 other expenditures Some exemptions for poor and retirees. **Private insurance:** very little importance and supplementary (to avoid queues), mainly corporate plans.	**Freedom:** no freedom to choose insurer, partial freedom in choosing supplier **Efficiency:** problems not significant, moderate dissatisfaction due to quality and queues. **Equity:** Universalism (100%). Overall regressive financing due to direct payment components, which make up for slight progressive public financing. Differences in cost-sharing at the local level.

Country Financing model	Public financing system	Cost-sharing or private sources	Healthcare policy objectives
SWITZERLAND **Social protection** (continental) with a federal structure (cantons) and significant private component	**Mix** (1997): Public 59.1%, of which taxes and duties 24.9%. Social insurance (contributions) 34.2% **Contribution rates:** evenly distributed, based on average risk, but different for each canton and sub-regions in each canton.	**Mix** (1997): Private 40.9% of which direct payments 27.6%, private insurance 11.2%, other payments 2.1%. **Cost-sharing:** extensive but decreasing. Deductible (average SF 230, max. 1,500 per year) plus cost-sharing of 10% up to SF 600. Children pay less. Hospitals: SF 10 per day plus transportation; Family subsidies. **Private insurance:** of a supplementary nature, provided by companies in addition to basic package, for physician of own choosing, hotels expenses and complementary for dentists, drugs. Non-profit companies provide coverage also for basic package (statutory)	**Freedom:** freedom to choose insurance plan (possibility to switch twice a year); supplier's choice is expensive. **Efficiency:** Limited price and quality competition among plans, also due to cantonal barriers. **Equity:** universalism (100%). Regressive financing in private component, which overcomes slightly progressive part o n the public side. Substantial horizontal iniquities, especially at cantonal level.

Appendix A.2.5 – An attempt to determine the costs and benefits of the public healthcare system for firms: the Italian case

To determine the costs of the healthcare system borne by firms it is necessary to overcome the following methodological difficulties:

- When financing of the healthcare system occurs through general taxation, identifying the share attributable to firms is not easy, specially where there are several types of tax;
- In the contribution-based method, or through earmarked taxes (IRAP), the incidence is not known and, in any case, it is different from the impact.

The first can be solved by a pro-rata allocation, while for the second assumptions on the incidence have to be made. The following is a breakdown of the sources of financing of the public healthcare system in 2000:

Regional tax on productive activities (IRAP)	50 percent
Additional regional personal income tax (IRPEF)	3 percent
General taxation	38 percent
Revenues of local health companies (ASL)	4 percent
Contributions from special statute regions	5 percent

Within general taxation, the corporate income tax (IRPEG) accounts for approximately 9.2 percent. Adding a 0.8 percent deriving from registration fees, stamp duties and others, the total is 10 percent. By applying this percentage to the financing portion coming from general taxation, the resulting figure is 3.8 percent. Out of the 5 percentage points attributable to the special-statute regions, at most 1 percentage point can be attributed to firms.

Further, adopting the extremely generous assumption that IRAP affects only firms that cannot pass the cost on to customers due to their exposure to international trade (agriculture and manufacturing firms), representing 23.5 percent of the added value, or that cannot deduct it due to their larger size and to the presence of trade unions (companies with more than 15 employees), or 45.5 percent of employment, which is taken as a proxy for added value. Both conditions apply to approximately 15-25 percent of added value. Multiplying such figure for the 50 percent accounted for by IRAP for the share of financing attributable to firms because of their inability to pass the tax on to somebody else can be estimated to amount to 10 percent.

Firms, then, contribute approximately 14.8 percent to the financing of the public healthcare system in Italy.

The benefits and advantages accruing to firms via the healthcare system depend on several factors.

In the first place, by utilising ISTAT data on absence from work, whereby it emerges that the average absence lasts 7.1 days and the number of lost work days totals approximately 120,757,000, it appears that a reduction of the average absence by one day translates into a gain of 17,000 work

days per year; multiplying this figure by the per capita daily wage (€ 78.93) the result is € 1,341,810,000, representing approximately 1.96 percent of total healthcare expenditure per year (2000).
In the second place, an estimate by the World Health Organisation can give an idea of the environmental illnesses, due to pollution or to occupational reasons. According to these data, occupational-environmental reasons cause 7 percent of cancers, 1 percent of cardiovascular deaths, a great deal of respiratory ailments, especially those of an allergic or asthmatic nature. In addition, consideration should be given to illnesses determined by stress due to work dissatisfaction or to mobbing and also all those illnesses caused by lack of work, as it has been demonstrated that unemployed workers are more likely to get sick.
Only considering cancer and circulatory ailments, in 2000 there were 11,000 deaths due to cancer and 2,422 deaths due to circulatory ailments caused by an unhealthy natural or work environment, thus attributable to firms. Assigning to human life a value of € 100,000 (this value can be estimated in different ways, as a loss of discounted future streams of products, as the average compensation in court etc.) the total loss would amount to € 1,342,200,000; this figure too is equivalent to 1.96 percent of public healthcare expenditure (2000). This amount increases, if consideration is given to the medical costs incurred before such ailments lead to death; for cancers, for instance, hospitalisation due to neoplasy alone costs € 38,591,000. This estimate considered the average costs of hospitalisation for pulmonary neoplasy in 2000, without surgery (in case of unfeasible surgery), € 2,272,410 for neoplasy diagnostics and ambulatory therapy (all estimates are based on the fees applicable for a chest x-ray and a cycle of six cobalto-therapy sessions); all this accounts for around 6 percent of public healthcare spending.
Finally, it should be kept in mind that many economic and commercial activities carry a health risk: for instance trucking is one of the main causes of road accident mortality. Moreover, if out of the 24,677 accidental or violent deaths that occurred in Italy in 2000, 2,000 were to be attributed to firms, the cost attributable to them, at € 100,000 per life and not including medical expenses, would be € 200,000,000, an additional 0.3 percent of healthcare spending.
The exercise could go on and be more accurate, including all costs and valuing each item better. However, without going into further details, it can be seen that totalling all benefits due to a lower level of absence and assuming that medical care reduce work absence by 3 days, more than 8 percent of total healthcare spending should be paid by firms.

chapter 3

The welfare state in Italy

Synopsis

This chapter reviews the overall trends in social spending in Italy, the ongoing development of its various components and its geographical distribution. Specific, in-depth surveys will be devoted to the National Health System and to social assistance benefits.

For some years now overall social expenditure, gross of administrative costs and also including private institutions, has stabilised at around 25 percent of GDP. This figure does not, however, take into account the various taxes levied on benefits, which considerably mitigate the real impact of social spending on the Government budget, because they amount to about 2 percent of GDP.

Pension expenditure plays the chief role among the various typologies of social spending. In 2001 it accounted for over 60 percent of the benefits and more than 13 percent of GDP. Healthcare spending represented 5.5 percent of GDP, net of administrative costs – whereas social assistance, including the more typically assistance-related GIAS (Gestione Interventi Assistenziali, or assistance benefit fund) cash transfers absorbed less than 4 percent of GDP.

The considerable incidence of pension benefits is such that $^{3}/_{4}$ of total benefits are cash disbursements.

These figures confirm the fact that Italian welfare is characterised by limited assistance benefits and by substantial cash transfers for pensions. They imply, in particular, that the system is designed around the central figure of the worker, rather than the citizen. It must be emphasised, however, that the ratio of pension - spending-to-GDP showed a tendency towards greater stability. In 2001 it amounted to 13.5 percent of GDP. This share would have dropped to 11.3 percent had the GIAS assistance benefits been excluded. As to the financial sustainability of pensions costs, in 2001 the negative balance between total contributions and pension costs improved. This confirmed and strengthened the positive effects of the reforms brought about in the mid-1990s.

The analysis of the geographic data indicates that pension benefits – also taking account of the population - are chiefly distributed, by number and size, in the northern regions. The IVS (disability, old-age, survivor) pensions, including seniority pensions, most of them distributed in the more highly developed areas of the north, have a considerable impact on these figures.

In 2001 spending for the various forms of unemployment benefits, known locally as “social shock absorbers”, remained stable when compared to the

The welfare state in Italy

previous year. The most substantial item referred to unemployment benefits, which increased, and accounted for more than half the entire expenditure; it was followed by availability-for-employment allowances (indennità di mobilità) and early retirement pensions which accounted, respectively, for 16.3 and 12.1 percent, whereas the resources set aside for the ordinary and extraordinary CIG, or Redundancy fund, were practically the same, each of them amounting to 6 percent.

The in-depth survey of the healthcare system, referring to the entire period subsequent to the 1978 reform, reveals primarily that healthcare spending – gross of administrative costs - which amounted to less than 5 percent of GDP when the National Health System was introduced, reached its peak in 1991 (6.5 percent of GDP). Subsequently this value dropped to its low, 5.2 percent, in 1995. In very recent years there was an upswing: in 2001 the share amounted to 6.2 percent. Pharmaceutical costs - whose developments were largely responsible for the overall trends – accounted for the largest share of healthcare expenditure.

This survey also illustrates the institutional evolution of the National Health System, from the time it was set up until the recent reforms. The latter have been evaluated while bearing in mind their predictable effects on the efficiency, equity and suitability of the scheme. Federalism in particular, and the increasing recourse to competitiveness might well lead not only to favourable results, but also to difficulties with respect to re-distribution (to help the poorer regions), to incentives, to a greater involvement by the public and to higher transaction costs.

In conclusion, this analysis of social assistance spending chiefly illustrates its inadequacy – as regards amount and structural characteristics – to combat poverty. Therefore assistance payments, such as social pensions, civilian disability pensions and carers' allowances will be analysed in detail. Special attention is paid to unequal distribution over the various regions. Lastly, an assessment is given of the contribution supplied by town councils to social assistance activities, based on data relating to the social assistance services they offer. Interesting elements emerged concerning the size, breakdown and geographic distribution of the corresponding expenditure. There was also a significant difference in the degree of integration between municipalities and the other social operators that play a role in Italy.

3.1 General features

3.1.1 Expenditure for social protection

In 2001 overall social spending, inclusive of administrative costs, amounted to approximately 306.9 billion, registering an increase of 4.5 percent compared to 2000, and an average yearly increase of 5.1 percent from 1995 to 2001.

In terms of GDP, over the last few years the overall resources allocated to social purposes remained virtually stable, close to the values registered in the latest year, 25.2 percent. Compared to 1995, this aggregate increased by 0.6 percent (table 3.1).

Within the framework of overall social spending, the upward trend registered by public institutions, compared to the private institutions, was slightly more dynamic. The average annual growth rate posted by this second item during the period 1995-2001 was 4.5 percent, against the 5.2 percent accounted for by public spending: as to the GPD, the state component grew by 0.7 percent, whereas the private sector value remained substantially unchanged.

Table 3.1 - Social protection expenditure in Italy (1995-2001)
(in millions of euros)

	1995	1996	1997	1998	1999	2000	2001
Total social protection expenditure	**227,313**	**247,118**	**261,583**	**268,092**	**279,904**	**293,553**	**306,857**
of which:							
Benefits paid by State Institutions	201,538	216,768	232,818	238,915	249,823	261,442	273,272
Benefits paid by Private Institutions	17,082	21,323	19,497	20,047	20,379	21,471	22,272
Other cost	8,693	9,028	9,268	9,130	9,702	10,640	11,313
% of GDP:							
Total social protection expendiure	24.6	25.2	25.5	25.0	25.3	25.2	25.2
Benefits paid by State and Private Institutions	23.7	24.2	24.6	24.1	24.4	24.3	24.3
Benefits paid by State Institutions	21.8	22.1	22.7	22.3	22.5	22.4	22.5

Source: compiled on the basis of Istat data

The official social expenditure figures reflect also the benefits allocated to workers upon termination of their employment (i.e. the Employee Severance Fund - TFR – in the private sector, and the retirement allowance and end-of-service bonus in the public sector), despite the fact that these benefits were considered to be deferred remuneration and not social benefits.

Furthermore, social spending was also reported gross of personal income tax withholdings and, therefore, did not represent the real burden borne by the Government budget.

Tables 3.2 and 3.3 indicate that severance payments amounted to 1.3 percent of GDP as regards all the institutions and to 0.4 percent for state institutions only.

In 2001 the taxes levied on social benefits were evaluated at around € 27.3 billion for all institutions and at € 25.7 billion for state institutions only, representing 2.3 e 2.2 percent of GDP, respectively.[1] (table 3.3).

(1) The taxes levied on pension benefit were valued at slightly less than € 22 bilion. This sum must be added to the taxation on severance pay, estimated at about € 2.4 bilion. For benefits in kind, mainly health benefits, the tax levy can be quantified at about € 3.2 bilion.

Table 3.2 - Spending on social benefits before and after severance payments (1995-2001)
(in millions of euros)

	1995	1996	1997	1998	1999	2000	2001
Social benefit - All Institutions	218,620	238,091	252,315	258,962	270,202	282,913	295,544
- after Tfr and lump sums on retirement (1)	205,452	220,219	236,500	241,380	254,429	265,937	279,534
Social benefits - State Institutions	201,538	216,768	232,818	238,915	249,823	261,442	273,272
- after lump sums on retirement	197,163	212,227	228,276	232,538	244,621	255,907	269,108
% of GDP							
Social benefits by all Institutions after Tfr	22.3	22.4	23.0	22.5	23.0	22.8	23.0
Social benefits by State Institutions after lump sums on retirement	21.4	21.6	22.2	21.7	22.1	22.0	22.1

(1) They are severance payments: Tfr for private sector and lump sums on retirement for public sector.

Source: compiled on the the basis of Istat data

If account is taken only of cash transfers, net of benefits paid upon termination of employment, after taxation, social expenditure dropped to 20.9 percent, when referred to all the institutions, and to 20.1 percent as regards public institutions only.

3.1.2 Social benefits by function

Tables 3.4 – 3.6 illustrate the predominance of pension benefits among the various social protection benefits. It represented slightly less than 60 percent of the total benefits and 13 percent of GDP.

Table 3.3 - Social benefits before and after tax revenues (2001)
(in millions of euros)

	All Institutions		State Institutions	
	amount	as % of GDP	amount	as % of GDP
Social benefits calculated **gross of Tfr**	295,544	24.3	273,272	22.5
Tax revenues on cash benefits	-24,166	-2.0	-22,513	-1.9
Tax revenues on benefits in kind	-3,189	-0.3	-3,189	-0.3
Social benefits after tax	268,190	22.0	247,571	20.3
Social benefits calculated net **of Tfr**	279,534	23.0	269,108	22.1
Tax revenues on cash benefits	-21,790	-1.8	-21,790	-1.8
Tax revenues on benefits in kind	-3,189	-0.3	-3,189	-0.3
Social benefits after tax	254,556	20.9	244,130	20.1

Source: compiled on the basis of Istat data

Expenditure for healthcare represented around 24 percent of the overall resources available for social purposes (5.5 percent of GDP); lastly, social assistance accounted for about 17 percent of the entire social expenditure (slightly less than 4 percent of GDP).
In comparison to 2000, the breakdown of social expenditure remained substantially unchanged. The impact on the GDP on the three foregoing functions also remained stable.

Table 3.4 - Social benefits by funnction and type (2000-2001)[1]
(in millions of euros)

	Totale Istituzioni		I stituzioni pubbliche	
	2000	2001	2000	2001
Health	**62,586**	**66,805**	**62,586**	**66,805**
Pensions	**158,761**	**165,810**	**151,174**	**157,948**
Pensions and annuities net of Gias[2]	139,160	145,483	137,879	144,205
Sickness, injury, maternity allowances	9,629	9,980	3,653	3,750
Unemployment benefits	3,431	3,626	3,431	3,626
Income support benefits	445	527	445	527
Family allowances	5,260	5,327	5,260	5,327
Other allowances and subsidies[3]	836	867	506	513
Welfare assistance	**44,590**	**46,919**	**42,147**	**44,355**
Social benefits in cash	38,651	40,633	38,635	40,616
- Social pensions	2,407	2,519	2,407	2,519
- Pensions for war survivors	1,121	1,219	1,121	1,219
- Pensions for civil disability	7,750	7,978	7,750	7,978
- Pensions for the blind	748	851	748	851
- Pensions for deaf mutes	127	142	127	142
- Other allowances and subsidies	1,034	1,478	1,018	1,461
- Gias[2]	25,464	26,446	25,464	26,446
Social benefits in kind	5,939	6,286	3,512	3,739
- good and services from market producers[4]	2,917	3,061	1,178	1,232
- services from non-market producers[5]	3,022	3,225	2,334	2,507
TOTAL	**265,937**	**279,534**	**255,907**	**269,108**
Serverance pay	16,976	16,010	5,535	4,164
TOTAL SOCIAL BENEFITS	**282,913**	**295,544**	**261,442**	**273,272**

(1) Calculated as net severance pay according to the reclassification of spending on pensions and welfare.
(2) GIAS Pension transfers.
(3) Includes: fair indemnity, lump sum payments, cheques, allowances and subsidies according to income levels.
(4) Includes the distribution of food, clothing, medicines, specialised medical care etc.
(5) Includes hospitalisaion, nursery schools, homes, hospital care etc.

Source: compiled on the basis of Istat data

In table 3.4 an attempt was made to separate pension benefits from social assistance: from the charges relating to pensions we deducted the payments made by the State to cover the portion of expenditure allocated to assistance proper. In 2001 the benefits paid by INPS's social assistance fund (GIAS) amounted to about 26 billion.
Even after this reclassification, in Italy the share of expenditure set aside for social assistance programmes, i.e. means tested benefits linked to real need, remained insignificant.

Table 3.5 - Social benefits (2000-2001)[1]

	All Institutions		State Institutions	
	2000	2001	2000	2001
Breakdown %	100.0	100.0	100.0	100.0
- Pensions	59.7	59.3	59.1	58.7
- Health	23.5	23.9	24.5	24.8
- Welfare assistance	16.8	16.8	16.5	16.5
% of GDP	22.8	23.0	22.0	22.1
- Pensions	13.6	13.6	13.0	13.0
- Health	5.4	5.5	5.4	5.5
- Welfare assistance	3.8	3.9	3.6	3.6

(1) Net of severance pay and based on reclassification of spending on pensions and welfare. Net of administrative costs.

Source: compiled on the basis of Istat data

With respect to the typology of the benefits, the breakdown was disproportionately favourable to cash payments, which represented about 74 percent of total expenditure. The allowances paid in kind, and as services, accounted for about 11 and 15 percent, respectively, of the total social expenditure for healthcare and social assistance benefits (table 3.6). More specifically, almost all the benefits allocated, in kind and as services, belonged to the health sector. On the contrary, social assistance played a marginal role and accounted, as regards state institutions, for only 1.4 percent of the entire spectrum of social benefits.
A close study of the figures confirms one of the characteristic features of Italy's welfare system: social assistance benefits have very little significance, they are mostly monetary and are made up chiefly of pensions, i.e. benefits allocated to ex workers rather than to citizens.

Table 3.6 - Social benefits (2000-2001)[1]

	All Institutions		State Institutions	
	2000	2001	2000	2001
Breakdown %				
Cash benefits	**74.2**	**73.9**	**74.2**	**73.8**
- Pensions	59.7	59.3	59.1	58.7
- Welfare assistance	14.5	14.5	15.1	15.1
Benefits in kind	**10.4**	**10.8**	**10.1**	**10.6**
- Health	9.3	9.8	9.7	10.1
- Wealfare assistance	1.1	1.1	0.5	0.5
Social Service benefits	**15.4**	**15.3**	**15.7**	**15.6**
- Health	14.2	14.1	14.8	14.7
- Welfare assistance	1.1	1.2	0.9	0.9
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**

(1) Net of severance pay and based on reclassification of spending on pensions and welfare. Net of administrative costs.

Source: compiled on the basis of Istat data

3.1.3 The funding of social expenditure

In 2001 about 53 percent of total resources was provided by contributions, and 45 percent by cash transfers from the State and from local government authorities.[2] (table 3.7).
Before 1998, the funding was heavily disproportionate in favour of social contributions, (in 1997 these accounted for about 6 percent of the overall resources); subsequently, with the abolition of healthcare contributions and the introduction of IRAP, the various sources of funding were rebalanced.

As regards social contributions, the highest share concerned those paid in by firms. In 2001 these accounted for 70 percent of the whole. The contributions borne by the workers (30 percent of the whole) came from

(2) The contribution made by the State comprised funding for healthcare and for the more means-tested assistance benefits. It also included cash transfer to cover the reduced level of contributions as result of tax deductions and contribution holidays.

the payments made by subordinate and self-employed workers. These accounted for 19 and 11 percent, respectively, of the overall social contributions.
From 1997 through 2001, there was a slight reduction in the contributions borne by employers and a contextual increase in those borne by the workers. (table 3.7).

Table 3.7 - Social protection receipts by type (1995-2001)

	All Institutions					State Institutions				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Social contributions	180,459	162,242	167,554	176,117	183,773	157,329	137,712	141,129	148,074	154,519
Various contributions	80,018	106,543	116,459	123,464	131,796	79,892	106,396	116,404	123,367	131,686
- of which: by Central Administration (1)	73,657	75,570	89,672	93,398	97,213	73,657	75,570	89,672	93,398	97,213
- of which: by Local Authorities	4,103	28,130	22,096	26,741	30,938	4,103	28,130	22,096	26,741	30,938
Revenue from investiment and other income	4,140	3,635	4,763	3,507	3,595	3,284	3,179	3,121	3,153	3,268
TOTAL	**264,617**	**272,420**	**288,776**	**303,088**	**319,164**	**240,505**	**247,287**	**260,654**	**274,594**	**289,473**
breakdown %										
Social contributions	68.2	59.6	58.0	58.1	57.6	65.4	55.7	54.1	53.9	53.4
Various contributions	30.2	39.1	40.3	40.7	41.3	33.2	43.0	44.7	44.9	45.5
- of which: by Central Administration (1)	27.8	27.7	31.1	30.8	30.5	30.6	30.6	34.4	34.0	33.6
- of whic: by Local Authorities	1.6	10.3	7.7	8.8	9.7	1.7	11.4	8.5	9.7	10.7
Revenue from investiment and other income	1.6	1.3	1.6	1.2	1.1	1.4	1.3	1.2	1.1	1.1
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Social contributions - breakdown %										
From employers	75.0	75.1	74.7	74.4	74.3	71.6	71.0	70.5	70.3	70.2
Actual	69.0	68.2	67.8	67.7	67.7	69.0	68.1	67.8	67.7	67.7
Nominal	6.1	6.9	6.8	6.7	6.6	2.5	2.9	2.7	2.6	2.5
From workers	24.3	24.6	25.1	25.4	25.5	27.4	28.7	29.3	29.4	29.6
Employees	15.1	16.6	16.2	16.1	16.3	17.4	19.2	18.8	18.3	18.6
Self-employed	9.0	8.0	8.9	9.3	9.2	10.0	9.5	10.5	11.1	11.0
from non-workers	0.6	0.3	0.2	0.2	0.2	1.0	0.3	0.3	0.2	0.2
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(1) Mostly transfers from the State to the Pensions authority to make up for the lower contributions they collected as a result of tax relief measures and also the advances paid to them by the central office of the State Treasury to cover deficits.

Source: compiled on the basis of Istat data

3.1.4 Non-pension cash benefits

Non-pension cash benefits, paid out to families by both state and private institutions to cover the risks and needs that fall within the remit of social protection, were only part of the different income support programmes: these also included monetary pension allowances and the goods and services supplied both by the state and by non-profit entities. (see paragraph 3.6).

The conditions to be met in order to be eligible for non-pension cash benefits include the existence of the protected event (sick-leave,

accidents, unemployment, physical/mental disability, etc.) and possibly possession of the insurance or income requirements stipulated by the relevant law.
By using the SCPM classification guidelines, recently adopted by ISTAT[3], we were able to classify these non-pension cash benefits on a five-level basis:

1. social protection;
2. type of benefit;
3. macro-sector;
4. scheme;
5. institutional sector of the paying centre.

Box 1 – Classification guidelines

Point 1: the European system of integrated social protection statistics (ESSPROS) defines eight functions, i.e. categories relating to risks and needs.
Point 2: the conventional name given to the benefit.
Point 3: the macro-sector separates pension benefits from assistance on the basis of the relevant funding; the first sector comprises benefits entirely or partially financed by tax-like charges levied on the income of insured employees and/or of their respective employers (social insurance contributions); the second includes those benefits rendered exclusively with the participation of the State through general taxation.
Point 4: the scheme relates to the overall provisions governing the payment of benefits and their relevant funding: when the state controls the parameters directly, the benefit is listed as belonging to the state scheme; otherwise, wherever there is no state control, the benefit is classified as belonging to the private sector. The pension sector comprises both state schemes, exclusively operated by social security agencies and private schemes, chiefly governed by the CCNL (National collective labour contract). More specifically, private schemes are part of various institutional sectors: state institutions (in the capacity of public employers) and private institutions (private employers and pension funds).
Vice-versa, only state schemes operate assistance programmes and refer to the whole spectrum of state institutions: the central administration, territorial state agencies, social security and assistance agencies.

Tables 3.8 and 3.9 summarize the breakdown of the non-pension social benefits for 1999 and 2000.[4]

(3) The foregoing classification system led to the definition of 28 categories of benefits within the Italian istitutional framework. The various allowance typologies were divided into groups (components of the benefits) according to the characteristics of their respective paying agencies (name, institutuinal nature and relevant sub-sector), to the rules and regulations governing the distribution (scheme, sub-scheme, disbursement procedures), to the objectives and institutional characteristics of the operation (function, social-ecomic purposes, macro-sector and name of the benefit) and to the characteristics of the beneficiary of the allowance (section, position and sub-position). These classification levels allowed us to break up the financial figures of each aggregate into sub-groups. Each of thm highlighted one particular aspect of the institutional context which introduced the benefit. For the sake of of brevity this survey examine five levels only.
(4) The cash amounts reported in the table were derived on the basis of data drawn from the Satellite account on social protection, and from the Report on the final accounts of social security agencies as prepared by ISTAT and on the basis of the Annual Report prepared by the Ragioneria Generale dello Stato (State Accounting Office).

During this two-year period the total amount of these benefits rose, respectively, from about € 38.2 billion to € 40.1 billion. The increase was slightly lower than 5 percent.
In 1999, the most significant share of cash transfers referred to the old-age sector (42 percent), sick-leave and family allowances come second with, respectively, 25 and 19 percent. The operational structure of non-pension expenditure in 2000 was practically identical: both the old-age sector cash transfers and family allowances (20 percent) rose by one percentage point (43 percent).
The distribution of cash benefits connected with sickness, on the other hand, remained steady at 25 percent. Special attention should be paid to the cutback in expenditure for the struggle against unemployment, which dropped by 13.7 percent from € 4.5 billion in 1999 to € 3.9 billion in 2000.
The highest costs were represented by severance allowances, paid out chiefly by employers and by INPDAP, upon termination of employment: in 2000 these charges amounted to € 16.8 billion and accounted for 42 percent of the overall expenditure.

Table 3.8 - Social benefits in cash excluding pensions (1999)
(in millions of euros)

FUNCTION AND TYPE OF BENEFITS	Type SCPM	SOCIAL SECURITY				Total	WELFARE ASSISTANCE	TOTAL SOCIAL PROTECTION	%
		Public system	Private system						
			State Institutions	Private Institutions	All Institutions				
Sickness		**1,864**	**1,851**	**5,720**	**7,571**	**9,434**	**151**	**9,586**	**25.1**
Health benefits	1-2	1,334	1,851	5,720	7,571	8,905	-	8,905	23.3
Special health benefits TBC	3-4	-	-	-	-	-	62	62	0.2
Temporary industrial injury allowances	5-6	529	-	-	-	529	-	529	1.4
Other cash benefits	28	-	-	-	-	-	89	89	0.2
Invalidity		**290**	**125**	**-**	**125**	**416**	**103**	**519**	**1.4**
Fair compensations	7	-	125	-	125	125	-	125	0.3
Industrial injury lump sums	8	290	-	-	-	290	-	290	0.8
Other cash benefits	28	-	-	-	-	-	103	103	0.3
Old age		**5,229**	**171**	**10,671**	**10,842**	**16,071**	**79**	**16,150**	**42.3**
Severance payments	9	4,850	171	10,571	10,743	15,593	-	15,593	40.9
lumps sums for paid contributions	10	379	-	99	99	479	-	479	1.3
Other cash benefits	28	-	-	-	-	-	79	79	0.2
Survivors		**20**	**-**	**1**	**1**	**21**	**1**	**22**	**0.1**
Funerary and death allowances	11-13	20	-	1	1	21	-	21	0.1
Other cash benefits	28	-	-	-	-	-	1	1	0.0
Family		**5,478**	**1,156**	**0**	**1,156**	**6,633**	**523**	**7,156**	**18,7**
Maternity benefit and allowances (Law 488/98)	14-15	1,377	442	-	442	1,819	-	1,819	4.8
Family allowances	16	4,076	713	-	713	4,789	-	4,789	12.5
Family allowance "old type" (agriculture, artisans)	17	-	-	-	-	-	11	11	0.0
Allowances to households with 3 underage children	18	-	-	-	-	-	-	-	
Allowances to households paid by supplementary social security institutions	19	-	-	.	.	.	-	.	
Marriage leave	20	26	-	-	-	26	-	26	0.1
Other cash benefits	28	-	-	-	-	-	511	511	1.3
Unemployment		**4,491**	**-**	**-**	**-**	**4,491**	**31**	**4,523**	**11.8**
Unemployment benefits	21	3,028	-	-	-	3,028	-	3,028	7.9
Income support benefits	22	757	-	-	-	757	-	757	2.0
Availability-for-employment allowances (Indennità di mobilità)	23	706	-	-	-	706	-	706	1.9
Other cash benefits	28	-	-	-	-	-	31	31	0.1
Social exclusion	24-27	-	-	-	-	-	211	211	0.6
TOTAL SOCIAL BENEFITS		**17,372**	**3,303**	**16,392**	**19,695**	**37,067**	**1,100**	**38.167**	**100.0**

Sick-leave allowances, paid by private and state employers and by social security agencies, stood at € 9.4 billion (23.5 percent); the amount distributed by social security agencies for family allowances, about € 5. billion (13 percent), was lower.
Based on the classification guideline used, it appears that the non-pension share of social assistance expenditure was marginal, when compared to the pension component, and varied between 2.9 percent and 3.7 percent of the total sums paid out from 1999 through 2000. This increase, even though it was modest, was attributable to the benefits introduced by the 1999 budget (law 448/1998) and allocated in 2000, e.g. the maternity allowances paid to uninsured women and the allowances for families with at least three children under age.[5]
During 1999 and 2000, the macro-sector of social insurance seems to have been fairly equally distributed between benefits paid out by both state (46 percent) and private (54 percent) schemes.

Table 3.9 - Social benefits in cash excludind pensions (2000)
(in millions of euros)

FUNZIONE E TITOLO DELLE PRESTAZIONI	Type SCPM	SOCIAL SECURITY				Total	WELFARE ASSISTANCE	TOTAL SOCIAL PROTECION	%
		Public system	Private system						
			State Institutions	Private Institutions	All Institutions				
Sickness		**2,212**	**1,816**	**5,976**	**7,792**	**10,004**	**164**	**10,168**	**25.3**
Health benefits	*1-2*	1,625	1,816	5,976	7,792	9,416	-	9,416	23.5
Special health benefits TBC	*3-4*	-	-	-	-	-	61	61	0.2
Temporary industrial injury allowances	*5-6*	588	-	-	-	588	-	588	1.5
Other cash benefits	*28*	-	-	-	-	-	103	103	0.3
Invalidity		**219**	**44**	**-**	**44**	**264**	**216**	**480**	**1.2**
Fair compensations	*7*	-	44	-	44	44	-	44	0.1
Industrial injury lump sums	*8*	219	-	-	-	219	-	219	0.5
Other cash benefits	*28*	-	-	-	-	-	216	216	0.5
Old age		**5,314**	**353**	**11,646**	**11,999**	**17,313**	**-**	**17,313**	**43.1**
Severance payments	*9*	5,013	353	11,442	11,795	16,808	-	16,808	41.9
lumps sums for paid contributions	*10*	301	-	204	204	505	-	505	1.3
Other cash benefits	*28*	-	-	-	-	-	-	-	0.0
Survivors		**20**	**-**	**1**	**1**	**21**	**2**	**22**	**0.1**
Funerary and death allowances	*11-13*	20	-	1	1	21	-	21	0.1
Other cash benefits	*28*	-	-	-	-	-	2	2	0.0
Family		**6,050**	**1,122**	**.**	**1,122**	**7,173**	**819**	**7,992**	**19.9**
Maternity benefits and allowances (Law 488/98)	*14-15*	1,494	466	-	466	1,960	90	2,050	5.1
Family allowances	*16*	4,530	656	-	656	5,187	-	5,187	12.9
Family allowances "old type" (agriculture, artisans)	*17*	-	-	-	-	-	11	11	0.0
Allowances to households with 3 underage children	*18*	-	-	-	-	-	314	314	0.8
Allowances to households paid by supplementary social security institutions	*19*	-	-	.	.	.	-	.	
Marriage leave	*20*	26	-	-	-	26	-	26	0.1
Other cash benefits	*28*	-	-	-	-	-	403	403	1.0
Unemployment		**3,861**	**-**	**-**	**-**	**3,861**	**40**	**3,901**	**9.8**
Unemployment benefits	*21*	2,703	-	-	-	2,703	-	2,703	6.7
Income support benefits	*22*	430	-	-	-	430	-	430	1,1
Availability-for-employment allowances (Indennità di mobilità)	*23*	728	-	-	-	728	-	728	1.8
Other cash benefis	*28*	-	-	-	-	-	40	40	0.1
Social exclusion	*24-27*	**-**	**-**	**-**	**-**	**-**	**261**	**261**	**0.7**
TOTAL SOCIAL BENEFITS		**17,677**	**3,336**	**17,622**	**20,958**	**38,635**	**1,502**	**40,137**	**100.0**

(5) However, if the share comprising the portion paid by the state (INPDAP' GIAS) for the distribution of certain benefits (family allowances, availability-for-employment allowances, unemployment benefits and wage supplementation) is also included, the percent expenditure in 2000 amounted to 9 percent.

The sharing of expenditure between the two schemes varied, however, according to the function analysed: sick-leave and old-age benefits were chiefly distributed by the private sector, most of the other benefits by state schemes.
In 2000 the sums paid out in sick-leave benefits, by private employers to their human resources, amounted to € 6 billion (59 percent). The expenditure borne by private employers referred to: sick-leave allowances for the non-covered period (the first three days of sick-leave), financial supplements for the basic benefits foreseen by the CCNL (national collective labour agreement), and the sick-leave allowance proper, linked to specific professional profiles (e.g. apprentices, executive cadres and managers, belonging to the following sectors: industry, handicrafts, credit, insurance, out-sourced fiscal services and agriculture). On the other hand, the severance allowances paid by private employers represented the most substantial item as regards the old-age function. In 2000 it amounted to € 1.4 billion (66 percent of the old-age benefits expenditure).
In 1999 and 2000 the other items pertaining to social protection chiefly comprised state scheme benefits, mainly social assistance instruments; family allowances accounted for about 7 and 10 percent, respectively, of the overall social assistance spending and the corresponding figures relating to the disability sector stood, respectively, at 20 and 45 percent.

3.2 Pensions

3.2.1 Trends shown by expenditure and contributions

According to the figures reported by the Unit for the evaluation of social security expenditure (NVSP), in 2001 the overall spending for pensions amounted to € 164.3 billion, indicating a 4.3 percent increase compared to the previous year. In 2000 the growth rate, compared to 1999, amounted to 2.4 percent only, thanks to the saving deriving from the elevation of old-age pension eligibility requirements, for private-sector workers.[6]
With respect to the GPD, in 2001 the overall pension spending amounted to 13.5 percent; this figure confirmed the tendency towards stability registered over the last few years. (table 3.10).
Pension spending – i.e. the amount net of the assistance-oriented component, comprising the GIAS allowances funded by general taxation – dropped to 11.3 percent (table 3.10). If account is taken of the taxes levied on pension payments, the impact of pension spending on the GDP dropped by about 1 percent.
In 2001 the total contributions indicated a fairly significant upswing trend. The growth rate (6.5 percent) was higher than in 2000, and also greater than the expenditure.
As to the pension schemes taken as a whole, in 2001 the differential between contributions and benefits, calculated net of the GIAS share, was approximately minus € 9.7 billion with an improvement of about € 2,000,000.00 compared to the 2000 balance. There was also an ongoing positive trend, in terms of deficit-to-GDP ratio, which started with the mid-1990s peak.

(6) More specifically, from 1 January 2000, the stipulated age for old-age pension eligibility reached 60 and 65 years for men and women, respectively. The progressive elevation of the retirement age had been stipulad by the Amato reform (legislative decree 503/1992) and by the 1995 budget (law 724/1994).

Table 3.10 - Receipts and pension expenditure (1989-2001)
(amounts in millions of euros)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001[1]
Contributions	52,442	57,189	65,831	71,755	76,599	77,372	80,359	98,589	104,340	109,326	116,247	120,313	128,181
Benefits	58,862	66,252	74,112	84,270	94,038	98,886	103,480	112,653	122,944	122,815	128,440	132,022	137,865
Balance	-6,420	-9,063	-8,281	-12,515	-17,439	-21,514	-23,121	-14,064	-18,604	-13,489	-12,193	-11,709	-9,684
Amounts as a % of GDP													
Contributions	8.4	8.3	8.8	9.1	9.4	9	8.7	10.0	10.2	10.2	10.5	10.3	10.5
Benefits	9.5	9.7	9.9	10.7	11.6	11.5	11.2	11.5	12.0	11.4	11.6	11.3	11.3
Balance	1.1	1.4	1.1	1.6	2.2	2.5	2.5	1.4	1.8	1.3	1.1	1.0	0.8
GIAS share to support pension expenditure	12,493	14,288	15,662	16,451	13,382	16,115	18,692	19,711	20,617	25,645	25,362	25,464	26,446
Pension expenditure	71,355	80,540	89,774	100,721	107,420	115,001	122,172	132,364	143,561	148,460	153,802	157,486	164,311
Pension expenditure as a % of	11.5	11.8	12.1	12.9	13.3	13.5	13.2	13.5	14.0	13.8	13.9	13.5	13.5

(1) The figures for 2001 are provisional.

Source: Nvsp (2002)

The deficit gradually dropped until it reached 0.8 percent of GDP in 2001 – close the 1.1 percent registered at the beginning of the period. (table 3.10).
Pension spending in real terms and the proceeds from contributions help to explain this performance.
Throughout the period examined, 1999 – 2001, the average growth rate of the total contributions was higher than the pension costs. Before 1992, when compared to contributions, benefits had registered more vigorous growth rates; subsequently, as a result of the numerous measures introduced in the 1990s – the Amato and Dini reforms, together with the later Prodi reform – the trend reversed and indicated an ongoing, positive gap between the growth rates of both contributions and benefits (table 3.11).
More specifically, from 1993 to 1997 contributions increased by 3.8, percent against the 2.8 percent registered by benefits; in the following period, 1998 -2001, the growth rates were, respectively, 3.2 and 1.7 percent, with a differential of 0.5 percent.
In 2001, still in real terms, there was a 3.8 percent growth in total contributions and 1.8 percent in expenditure.

Table 3.11 - Receipts and pension expenditure at constant prices
(average % changes)

	1989-01	1989-92	1993-97	1998-01	2001
Contributions	3.5	4.0	3.8	3.2	3.8
Benefits	3.1	5.6	2.8	1.7	1.8
Pension expenditure including GIAS	3.0	5.1	3.3	1.3	1.7

Source: compiled on the basis of Nvsp data (2002)

These total contributions and pension spending trends were closely connected to the evolution of the 'demographic' variables (i.e. the number of pensions and of contributors) and also to the 'policy-institutional' variables (i.e. the average amount of both the pension and the contribution).
More specifically, in 2001 the number of the enrolees in the various pensions schemes registered an increase of 1.4 percent, in line with the rates reported during the 1999 – 2001 period (table 3.12). This growth was chiefly due to the contract workers' fund which, compared to 2000, increased by about 9 percent. If this category of workers had been excluded from the calculations, the contributors would have risen only by 0.8 percent.
In 2001, also thanks to the higher wage increase, the average contribution paid by each enrolee indicated a fairly-steady growth rate (2.9 percent).
On the expenditure side, the increase in the number of pensions, paid in the same year, was higher than in 2000: it rose, in fact, by 0.7 percent, against the 0.1 percent registered in 2000 (table 3.12).
This difference was chiefly due to the elevation of the retirement age for private sector subordinate workers which, in 2000, had significantly reduced the impact of the new old-age pensions. In 2001 the average sum paid out for each pension registered an increase of 1.8 percent.

Table 3.12 - Number of pensions, number of contributors, average pension, average wage

(average % changes)

	1989-01	1989-92	1993-97	1998-01	2001
Number of pensions	1.5	2.7	1.6	0.4	0.7
Number of contributors	0.8	0.2	0.6	1.7	1.4
Contributors excluding conctract workers	-0.02	0.2	-0.7	0.9	0.8
Average contribution at 1989 prices	3.3	5.2	4.2	1.0	2.9
Average pension at 1989 prices	2.0	2.9	2.2	1.1	1.8

Sources: compiled on the basis of Nvsp data (2002)

Box 2 – Defining pension expenditure

There are various sources for data relating to pension spending, and different definitions of this aggregate.
European Union statistics classify as pension related items: severance allowances, social pensions and war survivors' pensions .
ISTAT data, besides disability, old-age and survivors' pensions (IVS), also include compensation, assistance and merit pensions, but exclude the temporary pensions allocated to military personnel, those distributed by constitutional agencies and those paid by the Sicilian Region to its ex-employees.
On the contrary, in the General report on the economic conditions of the country, the item 'pensions and annuities' comprises IVS pensions, accident-related annuities, temporary pensions paid to military personnel, those distributed by constitutional agencies and those paid by the Sicilian Region to its ex-employees, but excludes war, assistance and merit pensions.
Also the General State Accounting Office, in its long-term forecasts on pension expenditure, takes account of IVS pensions, including the temporary pensions allocated to military personnel, those distributed by constitutional agencies, those paid by the Sicilian Region to its ex-employees, and social pensions.
In conclusion, the Unit for the evaluation of social security expenditure (NSVP) examines IVS pensions, including the temporary pensions allocated to military personnel, those distributed by constitutional agencies, and those paid by the Sicilian Region to its ex-employees and does not include social pensions.

Various definitions of pension spending

	1999	
	Billions of lire	as a % of GDP
Eurostat (1)	334,810	15.6
Istat	320,284	14.9
RGS	302,507	14.1
Unit	297,802	13.9
Unit (2)	248,695	11.6

(1) Updated GDP series.
(2) Net of GIAS share.

3.2.2 Performances of individual funds

Table 3.13 shows the flows of funds for the principal pension schemes by main worker category.

The improvement in the ratio between total contributions and pension expenditure in 2001 stemmed, for all the various funds, chiefly from the favourable performances of the INPDAP state employee schemes and of those run by INPS.

With respect to the latter schemes, which represent the larger funds – run by the Employed workers pension fund (FPLD) and comprising the majority of the subscribers and pension benefits,– and also other, minor, INPS employed workers funds, the ratio between total contributions and pension expenditure was close to achieving 100 percent, as it rose to 98.8 percent in 2002, from 98.4 percent of 2000. In terms of balance between total contributions and pension expenditure (table AS3-2), in 2001 the deficit stood at –€ 848 million compared with approximately –€ 1,1 billion in 2000, reflecting a higher increase in the total contributions growth rate (4.5 percent) than that of pension expenditure (4.1 percent).

The other category of workers is that of public employees, most of whom contribute to the INPDAP pension schemes. In 2001 these accounted for 28.8 percent of the overall pension expenditure and for 25 percent of total contributions. NVSP statistics indicated that in 2001 the ratio between total contributions and pension spending in the public sector stood at 80.6 percent, a considerable improvement compared with the 75.9 percent registered in 2000. The trend in the growth rate of total contributions was, in fact, far more dynamic than the increase in pension costs: this depended chiefly on the amount of the average contribution, which rose by about 10 percent compared with 2000. The number of enrolees, on the other hand, remained almost unvaried. However, the growth in average total contributions was affected, not only by the increase in the gross remuneration paid to state employees, but also by the decision, made chiefly by local agencies, to anticipate to 2001 the total contributions connected with the end-of-year salaries. This decision was taken to avoid the risks deriving from the introduction of the Euro. The data examined up to now and, in particular, the item relating to total contributions clearly indicate that the NVSP did not take account of the additional contribution made by the state to the benefit of the state employee fund (CTPS). If we include this component, in 2002 the ratio between contributions and benefits exceeded 100 percent, rising in 2001 to 102 percent, from the 98.8 percent reported in 2000. (table 3.13). See box 3 for the reconciliation between NVSP statistics and the INPDAP accounts.

As regards self-employment, the situations varied. In 2001 the craftsmen and shopkeepers' INPS funds, taken as a whole, registered a positive balance. The total contributions covered the pension costs by about 103 percent as against the 99 percent registered in 2000. When the two funds were considered separately however, the craftsmen's fund showed a deficit of – € 248 million, with a 95.6 percent ratio between contributions and benefits. The shopkeepers' fund, on the other hand, showed a positive balance in 2001, with the inflows representing about 112 percent of the expenditure.

Table 3.13 - Ratio of contribution receipts to pension expenditure (1989-2001) (1)
(percentage values)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	19 99	2000	2001[2]
Private employees Inps	91.0	89.7	91.0	88.0	85.8	82.4	80.7	93.4	88.8	93.2	94.2	98.4	98.8
Other private-sector funds	143.2	119.4	110.6	110.5	99.6	95.6	85.6	85.7	91.2	97.9	100.3	95.7	92.4
Public employees Inpdap													
- without State contribution													
to Ctps[3]	85.9	79.9	81.7	74.8	70.1	65.3	66.0	76.8	78.0	75.9	75.4	75.9	80.6
- with State contribution													
to Ctps[3]	85.9	79.9	81.7	74.8	70.1	65.3	66.0	92.1	94.5	95.2	97.7	98.8	102.0
Post Office and Railways	69.3	68.9	60.4	58.0	56.8	52.2	59.3	68.4	55.4	55.9	51.8	49.4	45.2
Craftsmen and shopkeepers	142.8	130.6	146.7	152.0	140.4	139.6	137.2	121.7	105.5	110.1	124.8	99.0	103.1
Direct growers, farms, share-croppers	18.9	20.0	33.8	33.0	28.0	27.4	28.7	23.9	24.1	45.6	43.1	44.4	41.4
Doctors and professions	163.0	161.0	168.1	147.8	109.5	124.9	121.6	119.1	127.4	142.1	137.3	144.6	143.1
Clergy	47.3	34.1	35.6	31.6	28.1	35.5	28.5	26.2	22.6	19.7	21.7	33.7	32.7
TOTAL	89.1	86.3	88.8	85.1	81.5	78.2	77.7	87.5	84.9	89.0	90.5	91.1	93.0

(1) Contribution receipts for pension funds include the nominal contributions transferred by the Regions. by other bodies and by other funds among them Gias and Gpt. Pension costs are considered net of payments made by the State (Gias) or other funds.
(2) The figures for 2001 are provisional.
(3) The ratio is calculated gross and net of State contribution to Ctps (State Employees fund)
Source: Nvsp (2002)

Table 3.14 - Ratio of number of pensions to number of contributors (1989-2001)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001[2]
Private employees	82.7	83.2	84.2	86.5	88.8	89.7	91.8	91.9	91.9	91.3	90.5	87.9	87.4
Inps	83.7	84.2	84.9	87.1	89.2	90.8	92.5	92.4	92.1	91.4	90.4	88.0	87.3
Other funds private-sector	39.9	39.8	42.2	44.1	48.1	47.2	47.4	49.8	52.2	53.9	53.4	47.7	47.6
Public employees Inpdap	45.0	46.5	48.4	49.7	50.6	54.2	57.7	59.0	67.4	68.8	69.6	70.3	72.1
Post Office and Railways	76.3	81.8	92.8	100.2	107.6	86.7	105.7	111.3	120.0	122.3	130.7	126.7	134.3
Craftsmen	37.3	38.6	40.0	42.6	45.4	48.6	50.6	55.6	60.1	60.5	61.8	63.4	64.1
Shopkeepers	41.4	42.4	43.0	45.0	47.1	48.3	49.4	52.8	54.8	54.9	56.2	58.0	59.4
Direct growers, farms, share-croppers	146.9	153.2	176.5	209.5	228.2	257.1	266.1	274.8	287.8	298.7	303.5	311.6	309.7
Professions	25.1	25.3	25.7	26.3	27.2	27.2	26.4	25.3	24.5	23.9	23.5	22.9	22.3
Doctors	28.9	29.9	30.8	31.3	34.1	35.3	35.8	35.8	35.0	37.1	38.2	40.1	40.6
Clergy	54.5	57.6	59.9	63.1	65.3	66.8	73.2	75.8	77.4	80.8	77.0	72.4	71.8
TOTAL	**71.0**	**71.9**	**74.0**	**76.5**	**79.0**	**81.0**	**83.1**	**80.9**	**82.2**	**80.3**	**79.6**	**77.8**	**77.3**

(1) The figures for 2001 are provisional.

Source: Nvsp (2002)

The owner farmers, sharecroppers and tenant farmers' fund was one of the least positive, slightly exceeding 40 percent in 2001; the deficit stood at € 1.5 billion.
The self-employed professional persons funds, by and large showed favourable results and positive balances. In 2001 the ratio between contributions and benefits achieved 143 percent, the highest level among the various funds. The explanation was that: a) they are 'young' funds, still a long way from paying pensions; b) they feature ample contributor bases made up of younger age groups with many contribution years ahead. This was confirmed by the ratio between the number of pensions and the number of contributors (table 3.14), which, in this specific case, indicated a different tendency to other funds: in 2001 the ratio registered a very modest value (22.3 percent), though it showed improvement during the last few years.
In the period examined, the average number of pensions distributed by all the other funds grew at a faster rate, compared with the number of enrolees (table AS3-1). This led to the favourable performance of the ratio between benefits and contributors. In recent years, however, this tendency has abated. In 2001 this ratio dropped to 77.3 percent, from 77.8 percent in 2000. There were considerable differences between the various schemes. Those where the number of pensions exceeded that of contributors were the ex –public service corporations, including the railways and the post-office and telecommunications services, together with the owner farmers, sharecroppers and tenant farmers' funds, managed by INPS. In 2001 the number of pensions paid by these funds represented, respectively, 134.3 and 309.7 percent of the enrolees, which explains, to a large extent, the significant negative balance between total contributions and pension spending.
The private firms' employees fund was the largest (table AS3-5), with a ratio of 87.4 percent in 2001, an improvement on the 87.9 percent of 2000. This positive trend was chiefly due to the INPS workers funds, which dropped from 88 percent in 2000 to 87.3 percent in 2001.
For the public employees category, insured by the INPDAP schemes, the ratio between the number of pensions and enrolees worsened, rising from 70.3 percent in 2000 to 72.1 percent in 2001. The state employment sector was influenced not only by the negative demographic trends – which also affected the entire social security system – but also by the privatisation programmes which are already affecting several parts of the sector. In future this might well cause the contributor base of INPDAP's schemes to shrink, and also accentuate the negative effects of an increasingly ageing population. Within the framework of the INPDAP schemes, the State employees fund (CTPS) showed a ratio between pensions and contributors amounting to 78.7 percent in 2001, compared to the 66.2 percent of the Local authorities employees fund (CPDEL); on the contrary, the ratio concerning the Healthcare workers' fund (CPS) was more favourable (40.7 percent).

Box 3 – An in-depth review of the INPDAP data relating to pension funds

In 2001 INPDAP's schemes reported an extremely significant, positive balance (app. € 1.98 billion) between the total contribution inflows and pension outflows.

However, according to the methodology adopted by the NVSP, which studies the performance of the entire social security system, and which differs from the way INPDAP prepares its accounts, not all contributions pertaining to the CTPS were considered, and pension spending included an item not attributable to INPDAP.
The breakdown of the CTPS financing was as follows: besides the inflows deriving from the 'ordinary' legal contribution (32.95 percent), the State was expected to guarantee, through cash transfers, the total coverage of pension costs. Additional state funding comprised chiefly cash transfers entered as total contributions ("additional contribution") and, to a lesser degree, cash transfers entered under the item current transfers. More specifically, in the NVSP aggregate the 'additional contribution' and the cash transfers from the State were not considered. In 2001 these amounted to about € 8.45 billion: if this component is excluded, INPDAP's funds decreased in 2001 from plus € 1,98 billion to minus € 6.47 billion. In addition, also those temporary pensions allocated by the Ministry of Defence to military personnel, roughly € 1.29 billion, were registered by the NVSP as CTPS pension spending.

Statement of flows of the INPDAP funds in 2001 (in millions of euros)

CPDEL	
Contribution inflows	11.484
Pension outflows	12,257
Balance	-773
CPS	
Contribution inflows	2,759
Pension outflows	1,467
Balance	1,292
CPUG	
Contribution inflows	36
Pension outflows	32
Balance	4
CPI	
Contribution inflows	167
Pension outflows	160
Balance	7
CTPS	
A. Contribution inflows	25,063
B. of which "additional contribution (1)	7,334
C. State transfer	1,112
D. Pension outflows	24,730
Balance (A+C+D)	1,446
Balance (A-B-D)	-7,000
Total INPDAP funds	
Balance	1,975
Balance (2)	-6,471

(1) Additional contribution from the State. (I.D. Labour-Treasury dated 12/7/2000)
(2) The total contributions were net of the State "additional contribution" and of the cash transfers borne by the State.
Source: INPDAP 2001 Annual Report.

3.3 Different pension typologies and geographical distribution of overall pension expenditure

3.3.1 Different pension typologies

The pensions examined by the Unit for the evaluation of pension spending

(NVSP) did not account for all the forms of pension distributed in Italy. Besides the IVS pensions (disability, old-age and survivors) and other pensions distributed by the various pension funds and institutions, there are also compensation pensions (injury related benefits), assistance payments (social pensions and civilian disability pensions), war and merit pensions (military valour and some benefits related to WWI). All these benefits are received, not on the basis of contributions paid, but in compliance with the laws of the State which protect from and/or compensate for specific situations.
The statistics relating to all these pensions are compiled by ISTAT.[7]
As of 2001, ISTAT used, for this series, the central Register held by INPS, which contains the data relating to the pension benefits distributed by all the state and private institutions.
The new series cannot be compared to the one before because of the different aggregation of the pension typologies and of the increase in the number of pensions accounted for in the Register. (see box 4).
In 2001, 22,210,241[8] pensions were distributed, amounting approximately to € 182.1 billion. The IVS pensions comprised by far the greater volume of the annuities, both with respect to their number, 82.03 percent of the total in 2001 and, to a greater degree, because the average value was higher, as regards the sums paid out, representing 91.4 percent (table 3.15).

Table 3.15 - Number of pensions and annual value by typology (2000-2001)

	2000			2001			Variations % 2001/2000		
Pensions by typology	Number	Overall value (millions of euros)	Average medio (euros)	Number	Overall value (millions of euros)	Average medio (euros)	Number	Overall value	Average value
Total	22,035,864	173,822	7,888	22,210,241	182,125	8,200	0.8	4.8	4.0
Ivs	18,070,233	158,230	8,756	18,218,673	166,467	9,137	0.8	5.2	4.4
Compensatory	1,241,726	4,270	3,438	1,213,563	4,312	3,553	-2.3	1.0	3.3
Welfare assistance	2,723,905	11,322	4,156	2,778,005	11,346	4,084	2.0	0.2	-1.7
Ivs	82.00%	91.03%		82.03%	91.40%				
Compensatory	5.64%	2.46%		5.46%	2.37%				
Welfare assistance	12.36%	6.51%		12.51%	6.23%				

Source: compiled on the basis of Istat data

Assistance pensions accounted for 12.51 percent of the whole, as regards number, and for 6.23 percent as to the amounts paid out. Compensation pensions equalled 5.46 percent of the number of annuities and 2.37 percent of the overall amount paid out. Compared to 2000 there was a significant increase in the average amount (4 percent), against a modest increase in the number of pensions (0.8 percent). The overall sum distributed rose, therefore, by 4.8 percent.
As mentioned above, the new series does not permit comparisons with the

(7) The ISTAT statistics, relating to IVS, cannot be compared with the NVSP data, because the sources were different. The NVSP takes its data from the agencies' accounts and therefore, the value of the pensions distributed annually is calculated on the basis of the sum of the instalments effectively paid out every year; for ISTAT, on the other hand, the annual amount derives from the pension instalments paid out in December multiplied by 13.
(8) The number of pesions did not correspond to the number of pensioners. In fact, there are persons who receive two or more pensions.

figures reported in the previous series. In table 3.16 however, the data relating to 1990 e 2000 were compared with the 2000 figures reported in the new series. To reduce discrepancies between the two series, the 1990 and 2000 disability pensions, did not include war pensions (incorporated, as in the new series, into the 1990 and 2000 social assistance sector). The number of pensions registered by ISTAT in the new series is higher, by about 400.000, than in the old series, because of the extension of the survey base permitted by the Register. The distribution of pensions according to typology was not, on the contrary, particularly dissimilar, either by number or by amount.
Compared to 1990, the increase in the impact of IVS pensions on the whole and the reduced role played by the assistance and compensation allowances was conspicuous.

Table 3.16 - Number of pensions and annual value by typology (1990-2000)

	1990			2000[1]			2000[2]		
Pensions by typology	Number	Overall value (millions of euros)	Average medio (euros)	Number	Overall value (millions of euros)	Average medio (euros)	Number	Overall value (millions of euros)	Average value (euros)
Total	19,948,348	90,297	4,526	21,628,910	170,792	7,896	22,035,864	173,822	7,888
Ivs	15,775,792	79,031	5,009	17,813,452	154,382	8,666	18,070,233	158,230	8,756
Compensatory (3)	1,393,518	3,124	2,242	1,236,193	4,385	3,547	1,241,726	4,270	3,438
Welfare assistance (4)	2,779,038	8,142	2,930	2,579,265	12,025	4,662	2,723,905	11,322	4,156
Ivs	79.1%	87.5%		82.4%	90.4%		82.0%	91.0%	
Compensatory	7.0%	3.5%		5.7%	2.6%		5.6%	2.5%	
Welfare assistance	13.9%	9.0%		11.9%	7.0%		12.4%	6.5%	

(1) Old series.
(2) New series.
(3) Excluded war pensions
(4) Inclusive war and merit pensions

Source: compiled on the basis of Istat data

Box 4 – The various pension typologies

In the statistical series completed in 2000, referring to the 80 most important funds, ISTAT sub-divided pensions by typology (IVS, compensation, assistance and merit), and by sector (public and private). The compensation pensions included war pensions, as well as the injury-related annuities distributed by INAIL and by IPSEMA.
This sectorial sub-division assigned to the private sector: IVS pensions, distributed by INPS and by other minor funds, compensation pensions distributed by INAIL and IPSEMA, social pensions and civilian disability pensions. The public sector, on the contrary, included IVS pensions distributed by INPDAP, by the railways and by the Post Office, INAIL-on State behalf fund compensation pensions, war pensions and merit pensions.
In the new series the transfer to the Register led, first of all, to the amplification of the survey base relating to IVS pensions, and funds previously un-reported by ISTAT, were included. Secondly, regarding survivors' pensions, the number of pensions was examined according to

the co-beneficiaries of the benefit, whereas in the previous series the number of indirect pensions had been calculated solely in relation to the chief beneficiary.
The typology of the pensions remained the same - IVS, compensation and assistance – but the war pensions, previously assigned to the compensation benefits item, were included in the assistance sector, which also comprised merit pensions.
In the analysis by sector, the benefits distributed to State railways employees and to the Post Office Corporation, were reported among the private allowances and no longer registered in the public sector.
The assistance benefits, previously considered private, in the new series became part of the public sector.

3.3.2 Geographical distribution of pension spending

The North accounted for 49.1 percent of the pensions and 51.8 percent of the overall amount, given a resident population amounting to 45 percent of the whole.
In the Centre pensions represented 20.7 percent of the whole and the sums paid out 21.5 percent, whereas the resident population was 19 percent; in the South, compared with a 36 percent population; pensions accounted for 30.2 percent and the sums distributed for 26.6 percent (tables 3.17 and 3.1).
The different percent impact of the number of pensions, and of their overall amount, derived from the higher average value of the pensions received in the northern regions compared to those enjoyed in the south. This type of distribution, chiefly determined by IVS pensions, as indicated above, amounted to 53 percent in the north, to 21.6 percent in the centre and to 25.4 percent in the south. Evidently the concentration of this type of annuity in the north was even more pronounced.

Table 3.17 - Number of pensions and annual value by typology and geographical area (1)
(millions of euros)

geografical area	Ivs		Compensatory		Welfare assistance		TOTAL	
	Number	Values	Number	Values	Number	Amount	Number	Amount
2000								
Italy	17,452,791	154,895	1,236,967	4,253	2,720,256	11,308	21,410,014	170,457
North-W	5,247,223	49,858	289,817	1,065	553,184	2,346	6,090,224	53,269
North-E	3,721,232	32,341	255,923	814	444,236	1,876	4,421,391	35,031
North	8,968,455	82,199	545,740	1,879	997,420	4,222	10,511,615	88,300
Central	3,559,990	33,467	303,959	1,001	581,629	2,400	4,445,578	36,867
South	4,924,346	39,230	387,268	1,374	1,141,207	4,685	6,452,821	45,288
2001								
Italy	17,544,109	161,997	1,208,913	4,295	2,774,097	11,334	21,527,119	177,627
North-W	5,274,696	52,054	283,244	1,076	571,358	2,401	6,129,298	55,531
North-E	3,740,661	33,868	250,129	822	441,516	1,830	4,432,306	36,520
North	9,015,357	85,922	533,373	1,898	1,012,874	4,231	10,561,604	92,051
Central	3,576,009	34,935	297,079	1,010	581,638	2,316	4,454,726	38,261
South	4,952,743	41,139	378,462	1,386	1,179,585	4,788	6,510,790	47,314

(1) Excluded: paid pensions abroad and pensions not divisible

Source: compiled on the basis of Istat data

The reasons underlying the different impact of IVS pension spending, with respect to the population, were, of course, to be sought in the different

degree both of economic development and of employment in the single areas, reflected by the volume of pensions and by their overall amount. The distribution of other typologies of pensions also differed, because they were not directly linked to employment levels.
Assistance pensions were distributed chiefly in the south, 42.2 percent of the overall amount, compared to the 37.3 percent in the north and the 20.4. in the centre.
With respect to the population, the distribution of compensation pensions was more balanced.

Table 3.18 - Number of pensions and annual value by typology and geographical area in 2001 (1)
(in % terms)

	Ivs		Compensatory		Welfare assistance		TOTAL		Resident population 2001
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	
Italy	100	100	100	100	100	100	100	100	100
North-W	30.1	32.1	23.4	25.1	20.6	21.2	28.5	31.3	26.2
North-E	21.3	20.9	20.7	19.1	15.9	16.1	20.6	20.6	18.8
North	51.4	53.0	44.1	44.2	36.5	37.3	49.1	51.8	45.0
Central	20.4	21.6	24.6	23.5	21.0	20.4	20.7	21.5	19.0
South	28.2	25.4	31.3	32.3	42.5	42.2	30.2	26.6	36.0

(1) Excluded: paid pensions abroad and pensions not divisible

Source: compiled on the basis of Istat data

The incidence of compensation and assistance pensions accounted, however, for about 18 percent of the total number of pensions paid out and for less than 9 percent of the overall amount. Therefore, territorial distribution was determined principally by IVS pensions.

Table 3.19 – Percentage distribution of pensions by typology and geographical area in 2001 (1)

	Ivs	Compensatory	Welfare assistance	
Italy	81.5	5.6	12.9	100
North-W	86.1	4.6	9.3	100
North-E	84.4	5.6	10.0	100
North	85.4	5.1	9.6	100
Central	80.3	6.7	13.1	100
South	76.1	5.8	18.1	100

(1) Excluded: paid pensions abroad and pensions not divisible
Source: compiled on the basis of Istat data

In the northern regions IVS pensions accounted for 85.4 percent of total annuities; in the centre the percentage dropped to 80.3 percent, and in the south to 76.1 percent (table 3.19).
The assistance pensions had a higher impact chiefly in the south: 18.1 percent of the whole, compared with the north's 9.6 percent. The burden of compensation pensions was more evenly distributed (see also table AS3-7).

The number of pensions with respect to the population
In 2001, for every 100 residents, 38.2 pensions of various types were distributed; to be more specific, the number of IVS pensions amounted to

31.2 every hundred residents (table 3.20).
Most of the pensions, with respect to the population, were paid out in the north, 41.7 every hundred residents, followed by the centre, 41.6, and, considerably farther off, by the south, 32.1.

Table 3.20 - Number of pensions every 100 residents by tipology and geographical area in 2001 (1)

	Total	Ivs	Compensatory	Welfare assistance
Italy	38.2	31.2	2.1	4.9
North-W	41.5	35.7	1.9	3.9
North-E	41.9	35.4	2.4	4.2
North	41.7	35.6	2.1	4.0
Central	41.6	33.4	2.8	5.4
South	32.1	24.5	1.9	5.8

(1) Excluded: paid pensions abroad and pensions not divisible

Source: compiled on the basis of Istat data

The IVS expenditure was directly correlated to territorial economic developments; it is not surprising therefore, that the northern areas and – to a lesser degree – the centre, benefited the most. However the regional figures illustrated a few peculiarities existing within the different areas (table AS3-8).
In the centre-north regions, the ratio between the number of pensions and the resident population was, in general, considerably higher than the average national figure. In Umbria, Liguria, Emilia Romagna, Tuscany, Friuli, Marche the values were over 45.
Lombardy was an exception, with a value approaching the national average, and Veneto, Trentino and Lazio reported values generally lower that the national average, in comparison with the high ratio, 41 and 43, respectively, for Abruzzo and Molise; in Campania, on the other hand, the ratio between pensions and population was very low, 28.3.

IVS spending in the public and private sectors

ISTAT sub-divided pensions according to whether the beneficiaries were ex-state employees or workers formerly employed by private firms and institutions. This sub-division comprised IVS and compensation pensions only, social pensions were illustrated separately.

Most pension benefits were distributed in the private sector, 87 percent, with 16.9 million pensions and an overall annual value of € 130.17 billion (table 3.21). In the public sector the pensions were 2,522,175 for a total of approximately € 40,61 billion.

Table 3.21 - Number of pensions and annual value by sector and typology - 2001

Typology/sector	Absolute terms			% of total sector		% of the typology of pension	
	Number	Overall value (millions of euros)	Average value (euros)	Number	Value	Number	Value
Private sector							
Total	16,910,061	130,170	7,698	100.0	100.0	87.0	76.2
IVS	15,712,812	125,933	8,015	92.9	96.7	86.2	75.7
Compensatory	1,197,249	4,237	3,539	7.1	3.3	98.7	98.3
Pubblic sector							
Total	2,522,175	40,609	16,101	100.0	100.0	13.0	23.8
IVS	2,505,861	40,534	16,176	99.4	99.8	13.8	24.3
Compensatory	16,314	75	4,608	0.6	0.2	1.3	1.7
Total							
Total	19,432,236	170,779	8,788	100.0	100.0	100.0	100.0
IVS	18,218,673	166,467	9,137	93.8	97.5	100.0	100.0
Compensatory	1,213,563	4,312	3,553	6.2	2.5	100.0	100.0
Assistance pensions	2,778,005	11,346	4,084				
TOTAL	22,210,241	182,125	8,200				

Source: compiled on the basis of Istat data

The public sector comprised, almost exclusively, IVS pensions; only 0.6 percent of the benefits were, in fact, compensation-based. In the private sector the latter accounted for 7.1 percent as regards number and only 3.3 percent as to amount.

In 2001, the number of IVS pensions distributed in the private and public sectors amounted to 15,712,812 and 2,505, 861, respectively.

This difference diminished when referred to the amounts paid out, due to the higher average value of the IVS annuities in the public sector. The ratio between amounts paid out and number of IVS annuities was, respectively, 24.3 and 13.8 percent.

3.3.3 Distribution of pension spending by economic function

In its latest series, ISTAT also sub-divided pension benefits according to the classification by economic function, in keeping with the ESSPROS methodology at European level.

Other distinctions include the one between social security and assistance. The first included benefits covered by previous contributions and the second comprised the benefits financed by general taxation.

There were no assistance-related pensions registered in the public sector; the number and overall amount of pensions were, therefore, the same as those obtained by the typology sub-division examined above. In the

private sector, on the other hand, the new classification assigned part of the pensions, previously considered IVS, to the assistance benefits, because they are borne by the support and assistance Fund for social security schemes (GIAS) and are therefore funded by general taxation.
The payments classified as support and not as social security benefits included the pre-1984 disability and invalidty pensions paid by INPS and the pre-1989 IVS benefits distributed by the INPS owner farmers, sharecroppers and tenant farmers' fund. ISTAT did not classify all the GIAS cash transfers as assistance-related, but only those pensions entirely, or mostly, financed by this fund.
Therefore those pensions partially covered by these cash transfers were excluded, including the share of each GIAS funded pension in compliance with Law 88/1989.

Table 3.22 - Number of pensions and annual value by sector and economic function

	2001			Percentage		% of GDP
Sector and economic function	Number	Overall value (millions euros)	Average value (euros)	Number	Value	Value
Pensions						
Private sector	14,080,263	115,548	8,206	63.4	63.4	9.5
Public sector	2,522,175	40,609	16,101	11.4	22.3	3.3
Total	16,602,438	156,157	9,406	74.8	85.7	12.8
Welfare Assistance						
Welfare assistance	5,607,803	25,968	4,631	25.2	14.3	2.1
Total						
Total	22,210,241	182,125	8,200	100.0	100.0	15.0

Source: compiled on the basis of Istat data

The weight of assistance was, therefore, underestimated. But it must be underlined that, for the first time, ISTAT had attempted to separate social security from assistance.
In this classification pensions accounted for 74.8 percent of the whole and 85.7 percent of the overall sums paid out.
Assistance pensions, which in the classification by typology accounted for 12.5 percent of the total number and for 6.2 of the overall amount, rose to 25.2 and 14.3 percent, respectively,.
With respect to GDP, the social security and assistance benefits accounted, respectively, for 12.8 and 2.1 percent (0.9 percent in the typology breakdown).

The various IVS benefits
An examination of the geographical distribution of the expenditure illustrates how this was determined, to a very large degree, by the allocation of the IVS spending, which accounted for 90 percent of the overall amount.
Within the framework of IVS expenditure, private sector spending amounted to 72.7 percent of the sums paid out, whereas the number of private sector pensions accounted for 84.7 percent of the whole.
ISTAT sub-divided private IVS pensions only into old-age, disability and survivor groups. It was therefore impossible to examine the differences

within the old-age and disability sections, although these differences are important as regards an accurate interpretation both of the type of expenditure and of the guidelines governing distribution.
The so-called old-age pensions also included seniority pensions, actual old-age pensions (those received when the stipulated age requirements are reached), and those deriving from early retirement. Disability pensions were sub-divided into pre law 222/1984 pensions, allocated chiefly for socio-economic reasons, disability pensions (temporary benefits) and inability pensions.
This in-depth review, however, can be carried out on INPS data, which represent 96 percent of the number of pensions distributed in the private sector and a slightly lower percentage of the overall amount paid out.
The INPS data considered are those related to all the pension funds, excluding voluntary pension plans and social pensions.

Table 3.23 - Number of pensions by category (1)
(Overall value in millions of euros. average value in euros)

	Old age	Disability	Survivors	Total	Old age %	Disability%	Survivors%
1/1/2001							
Number	7,877,812	2,792,409	3,795,244	14,465,465	54.5	19.3	26.2
Value	72,055.62	15,970.64	19,564.58	107,590.85	67	14.8	18.2
Average value	9,147.00	5,719.00	5,155.00	7,438.00	123	76.9	69.3
1/1/1996							
Number	7,145,874	3,607,134	3,667,246	14,420,254	49.6	25	25.4
Value	54,365.77	18,125.72	15,296.09	87,787.57	61.9	20.6	17.4
Average value	7,608.00	5,025.00	4,171.00	6,088.00	125	82.5	68.5

(1) excluded: voluntary insurance and social pensions and allowances

Source: compiled on the basis of Inps data

As of 1 January 2001 INPS distributed 14,465,465 IVS pensions for an overall annual € 107.59 billion. The average annual value of the pensions paid out amounted to € 7,438. (table 3.23).
General old-age benefits represented 54.5 percent of the total, while disability and survivor pensions accounted for 19.3 percent and 26 percent, respectively. The distribution of the overall amount among the various categories was considerably different, due to the significant disparity between the average values of the pensions allocated: € 9,147 for old-age pensions, € 5,719 for disability and € 5,155 for survivors.
The overall amount distributed for old-age pensions was evidently much higher, with respect to the volume of pensions, with 67 percent of the total.
Compared to 1996, the percentage of old-age pensions considerably increased in relation to the total number, chiefly because of the drop of disability pensions, in both absolute and percentage terms.
Moreover, within the three IVS categories there were many differences, already underlined, which reflected the diversity present in the working world, in the production system and in the relevant laws.

Table 3.24 - Number of INPS pensions by category (1)
(Overall value in millions of euros, average value in euros)

	Seniority	Old age	Early retirement	Disability funds	Ordinary payments	Inability	Disability before L. 222
1/1/2001							
Number	2,447,932	5,026,457	403,423	2,253	335,082	59,813	2,395,261
Value	33,040.77	33,086.13	5,928.72	20.764	2,047.74	578.281	13,323.86
Total Ivs=100	13,497.00	6,582.00	14,696.00	9,216.00	6,111.00	9,668.00	5,563.00
Total Ivs =100							
Number	16.9	34.7	2.8	0.02	2.3	0.4	16.6
Value	30.7	30.8	5.5	0.02	1.9	0.5	12.4
Average value	181.5	88.5	197.6	123.9	82.2	130	74.8
1/1/1996							
Number	1,650,251	5,114,811	380,812	2,923	339,597	45,629	3,218,985
Value	19,200.41	30,353.24	4,812.12	22.492	1,626.02	374.261	16,102.94
Total Ivs=100	11,635.00	5,934.00	12,636.00	7,695.00	4,788.00	8,202.00	5,002.00
Total Ivs =100							
Number	11.4	35.5	2.6	0.02	2.4	0.3	22.3
Value	21.9	34.6	5.5	0.03	1.9	0.4	18.3
Average value	191.1	97.5	207.6	126.4	78.7	134.7	82.2

(1) Excluded: voluntary insurance and social pensions and allowances

Source: compiled on the basis of Inps data

Private sector employees have three possibilities for retirement eligibility. The old-age pension, which entails minimum contributions and actual old age: the workers who chiefly benefit by this type of pension are the 'weaker' ones, with intermittent careers (they were unable to accumulate 35 years of contributions), and often very low wages. Seniority pensions entail at least 35 years of effective or nominal contributions and, as a result of Law 335/1995, also a stipulated age. In general, the 'stronger' workers are the relevant beneficiaries. The early retirement benefits, which occur in specific industry slump situations are similar to the seniority pensions, because retirement is accompanied by imputed seniority contributions.

In this respect, early retirement and seniority pensions indicated higher average values, € 14,696 and € 13,497, respectively, slightly less than double the overall average amount (table 3.24). The old age pensions, on the other hand, registered a mean value of only € 6,582, even lower than the overall average.

Old-age pensions predominated, 34,7 percent of the whole, compared to the 16.9 percent of seniority benefits and the 2.8 percent of early retirement pensions.

In terms of overall amount, the burden of seniority pensions is, of course, greater, due to the high mean value. Noteworthy is that the percent distribution of seniority pensions equalled the old-age pensions, despite the fact that the latter were twice as numerous.

There was a significant increase, compared to 1996, in seniority pensions, both in absolute and in percent terms. This was due to the progressive retirement of workers who had become part of the working world during the economic boom, and also to the 'flight' caused by the predicted, and feared, pension reform.

The various disability categories changed considerably. This pension group registered, in the period examined, a downswing of more than 800.000

units, relating chiefly to the disability pensions allocated before the reform introduced by Law 222/1994.
Previously, disability pensions had been governed more by social-economic guidelines than by medical criteria, and had replaced, especially in the south, those anti-poverty instruments which in Italy have never existed. The 1994 reform brought disability protection back to its rightful home. Evidently the reform did not affect the pensions already allocated. The latter, however, gradually diminished as beneficiaries and their survivors deceased.

Table 3.25 - Number of pensions by category and geographical area - 1/1/2001 (1)
(millions of euros)

Pension categories	Italy	North-W	North-E	North	Central	South
- Seniority	2,447,932	1,043,282	658,041	1,701,323	403,344	343,265
- Old age	5,026,457	1,585,720	1,183,237	2,768,957	978,890	1,278,610
- Early retirements	403,423	191,748	66,970	258,718	62,401	82,304
Total old age	*7,877,812*	*2,820,750*	*1,908,248*	*4,728,998*	*1,444,635*	*1,704,179*
- Disability funds	2,253	474	390	864	626	763
- Ordinary payments	335,082	55,600	43,561	99,161	63,504	172,417
- Inability	59,813	16,133	11,994	28,127	13,500	18,186
- Disability before L, 222	2,395,261	398,652	353,303	751,955	541,995	1,101,311
Total disability	*2,792,409*	*470,859*	*409,248*	*880,107*	*619,625*	*1,292,677*
Survivors	*3,795,244*	*1,131,466*	*813,631*	*1,945,097*	*719,148*	*1,130,999*
Total	*14,465,465*	*4,423,075*	*3,131,127*	*7,554,202*	*2,783,408*	*4,127,855*

(1) Excluded: voluntary insurance and social pensions and allowances
Source: Inps

The pre-law-222 disability pensions dropped from 22.3 percent to 16,6 percent of the whole, whereas the other forms of disability and invalidity/inability represented an overall 2.7 percent of the number of IVS pensions allocated, and 2.4 percent of the overall amount, showing no significant changes from 1996. In conclusion, the principal changes in the distribution of the various categories of IVS pensions involved the seniority pensions, which registered a considerable upswing, together with the pre law 222 disability pensions, which dropped substantially.

3.3.4 Geographical distribution of INPS' IVS expenditure

The IVS benefits distributed by INPS were chiefly focused in the north. In 2001, 52.2 percent of the total pensions were paid out in this area, populated by 44.6 of the overall population. The sums paid amounted to 57.3 percent. In central Italy the number of pensions allocated equalled 19.2 percent and accounted for 19.3 percent of the total amount paid out; in the south, the home of 36.2 percent of the population, the percents indicated were, 28.5 and 23.4, respectively (tables 3.2 and 3.29).
In the North the situation varied between the two areas; in the north-east the percent number of pensions was similar to that of the amount, whereas in the north-west the percent amount paid out was considerably higher than the number of pensions, 30.6 percent.

Table 3.26 - Overall amount of pensions by category and geographical area - 1/1/2001 (1)
(Millions of euros)

Pension categories	Italy	North-W	North-E	North	Center	South
- Seniority	33,040.77	15,156.20	8,254.23	23,410.43	5,612.65	4,017.70
- Old age	33,086.13	10,868.53	7,585.83	18,454.36	6,953.48	7,678.29
- Early retirements	5,928.72	2,827.17	951.55	3,778.72	950,642	1,199.36
Total old age	72,055.62	28,851.90	16,791.61	45,643.51	13,516.77	12,895.35
- Disability funds	20,764	4,236	3,097	7,333	5,677	7,753
- Ordinary payments	2,047.74	396,483	293,373	689,857	402,584	955,297
- Inability	578,281	174.76	115,409	290,169	130,667	157,445
- Disability before L. 222	13,323.86	2,413.14	1,959.61	4,372.75	2,993.57	5,957.54
Total disability	15,970.64	2,988.62	2,371.48	5,360.11	3,532.50	7,078.04
Survivors	19,564.58	6,638.69	4,057.43	10,696.12	3,678.32	5,190.15
Total	107,590.85	38,479.20	23,220.53	61,699.73	20,727.59	25,163.53

(1) Excluded: voluntary insurance and social pensions and allowances

Source: Inps

Table 3.27 - Average amount of pensions by category and geographical area 1/1/2001 (1)
(euros)

Pension categories	Italy	North-W	North-E	North	Central	South
- Seniority	13,497.00	14,527.00	12,544.00	13,760.00	13,915.00	11,704.00
- Old age	6,582.00	6,854.00	6,411.00	6,665.00	7,103.00	6,005.00
- Early retirements	14,696.00	14,744.00	14,209.00	14,606.00	15,234.00	14,572.00
Total old age	9,147.00	10,228.00	8,799.00	9,652.00	9,357.00	7,567.00
Disability funds	9,216.00	8,937.00	7,942.00	8,488.00	9,069.00	10,161.00
- Ordinary payments	6,111.00	7,131.00	6,735.00	6,957.00	6,340.00	5,541.00
- Inability	9,668.00	10,832.00	9,622.00	10,316.00	9,679.00	8,657.00
- Disability before L. 222	5,563.00	6,053.00	5,547.00	5,815.00	5,523.00	5,409.00
Total disability	5,719.00	6,347.00	5,795.00	6,090.00	5,701.00	5,475.00
Survivors	5,155.00	5,867.00	4,987.00	5,499.00	5,115.00	4,589.00
Total	7,438.00	8,700.00	7,416.00	8,168.00	7,447.00	6,096.00

(1) Excluded: voluntary insurance and social pensions and allowances

Source: Inps

Table 3.28 - Number of pensions by category and geographical area 1/1/2001 (1)
(in %)

Pension categories	Italy	North-W	North-E	North	Central	South
- Seniority	100.0	42.6	26.9	69.5	16.5	14.0
- Old Age	100.0	31.5	23.5	55.1	19.5	25.4
- Early retirements	100.0	47.5	16.6	64.1	15.5	20.4
Total old age	100.0	35.8	24.2	60.0	18.3	21.6
- Disability funds	100.0	21.0	17.3	38.3	27.8	33.9
- Ordinary payments	100.0	16.6	13.0	29.6	19.0	51.5
- Inability	100.0	27.0	20.1	47.0	22.6	30.4
- Disability before L. 222	100.0	16.6	14.8	31.4	22.6	46.0
Total disability	100.0	16.9	14.7	31.5	22.2	46.3
Survivors	100.0	29.8	21.4	51.3	18.9	29.8
Total	100.0	30.6	21.6	52.2	19.2	28.5

(1) Excluded: voluntary insurance and social pensions and allowances

Source: compiled on the basis of Inps figures

Table 3.29 - Overall amount of pensions by category and geographical area - 1/1/2001 (1)

(in %)

Pension categories	Italy	North-W	North-E	North	Central	South
- Seniority	100.0	45.9	25.0	70.9	17.0	12.2
- Old age	100.0	32.8	22.9	55.8	21.0	23.2
- Early retirements	100.0	47.7	16.0	63.7	16.0	20.2
Total old age	100.0	40.0	23.3	63.3	18.8	17.9
- Disability funds	100.0	20.4	14.9	35.3	27.3	37.3
- Ordinary payments	100.0	19.4	14.3	33.7	19.7	46.7
- Inability	100.0	30.2	20.0	50.2	22.6	27.2
- Disability before L. 222	100.0	18.1	14.7	32.8	22.5	44.7
Total disability	100.0	18.7	14.8	33.6	22.1	44.3
Survivors	100.0	33.9	20.7	54.7	18.8	26.5
Total	100.0	35.8	21.6	57.3	19.3	23.4

(1) Excluded: voluntary insurance and social pensions and allowances

Source: compiled on the basis of Inps figures

The difference between the two percentages can be explained by the high mean value of the pensions in the north-west, € 8,700 compared to the € 7,483.00 at national level and, vice-versa, by the low mean value, € 6,096, in the south. (Table 3.27).
The geographical distribution of pensions was considerably dissimilar according to the category. The northern regions distributed 69.5 percent of the seniority pensions (70.9 percent of the total number) and 64.1 percent of the early retirement pensions (63.7 percent of the total number). The percentage of old-age pensions dropped to 55.1 percent (55.8 percent of the total number).
The first two pension typologies, as indicated above, are usually paid to the strong and/or protected groups, stemming from long and stable work periods (also with nominal coverage), typical of the more highly developed areas. The percentage of these pensions was lower in the centre of Italy and, above all, in the south, which accounted for 14 percent of the seniority benefits (12.2 percent of the total number) and for 20.4 percent of the retirement pensions (20.2 percent of the total number).
For the disability and inability pensions the overall situation was entirely different. Most of the benefits was distributed in the south, 46.3 percent of the whole, 22.2 and 31.5 percent in the centre and the north, respectively. However, the disability and inability pensions only accounted for 14.8

Table 3.30 - Number of pensions by category and geographical area - 1/1/2001 (1)

(in %)

Pension categories	Italy	North-W	North-E	North	Central	South
- Seniority	16.9	23.6	21.0	22.5	14.5	8.3
- Old age	34.7	35.9	37.8	36.7	35.2	31.0
- Early retirements	2.8	4.3	2.1	3.4	2.2	2.0
Total old age	54.5	63.8	60.9	62.6	51.9	41.3
- Disability funds	0.0	0.0	0.0	0.0	0.0	0.0
- Ordinary payments	2.3	1.3	1.4	1.3	2.3	4.2
- Inability	0.4	0.4	0.4	0.4	0.5	0.4
- Disability before L.222	16.6	9.0	11.3	10.0	19.5	26.7
Total disability	19.3	10.6	13.1	11.7	22.3	31.3
Survivors	26.2	25.6	26.0	25.7	25.8	27.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

(1) Excluded: voluntary insurance and social pensions and allowances

Source: compiled on the basis of Inps figures

percent of the overall amount paid out for benefits, against the 67.2 percent distributed for old-age, seniority and early retirement (table 3.31).

Table 3.31 - Overall value of pensions by category and geographical area - 1/1/2001 (1)

(in %)

Pension categories	Italy	North-W	North-E	North	Central	South
- Seniority	30.7	39.4	35.5	37.9	27.1	16
- Old age	30.8	28.2	32.7	29.9	33.5	30.5
- Early retirements	5.5	7.3	4.1	6.1	4.6	4.8
Total old age	67.0	75.0	72.3	74.0	65.2	51.2
- Disability funds	0	0	0	0	0	0
- Ordinary payments	1.9	1	1.3	1.1	1.9	3.8
- Inability	0.5	0.5	0.5	0.5	0.6	0.6
- Disability before L. 222	12.4	6.3	8.4	7.1	14.4	23.7
Total disability	14.8	7.8	10.2	8.7	17.0	28.1
Survivors	18.2	17.3	17.5	17.3	17.7	20.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

(1) Excluded: voluntary insurance and social pensions and allowances

Source: compiled on the basis of Inps figures

Another important point is that, in the south, the pre Law 222 disability pensions had a very strong impact, although, as we have already mentioned, they are gradually disappearing. The south predominated also as regards disability and inability pensions, even though the overall ratio registered 191,366 pensions as against 1,101,311 before the enactment of law 222.
If the latter were excluded, the impact of the north would rise to 56.4 percent and that of the south would fall to 25.1.
In the future, therefore, pensions in the north are likely to increase.[9]
Even among the northern regions there were considerable differences. Though it is true that most of the seniority pensions (and their amount) were distributed in the north, it is also true that 42.6 percent was allocated to the north-west and only 26.9 percent to the north-east. At the same time, 47.5 percent of the early retirement pensions was paid out in the north-west and only 16.6 percent in the north-east.
The north-west was, therefore, the area of the country with the highest number of seniority and early retirement pensions. For every 100 old-age pensions distributed in these areas, there were 65 related to seniority and 12.1 for early retirement.; in the north-east, on the other hand, for every 100 old-age pensions 55.6 were for seniority and 5.7 for early retirement; in the central regions for every 100 old-age pensions the percents were, respectively, 41.2 and 6.4; in the south the seniority pensions dropped to 26.8 and to 6.4 early retirement pensions for every 100 old-age pensions. (table 3.32).
Reforms aimed at raising the age-related eligibility for seniority pensions, even to abolish it entirely, would therefore chiefly damage the north, and above all the north-west.

(9) ISTAT examined the age distribution of these pensioners in 1994. The average age was 71.5 years; 75 percent of the pensioners was over 65 and only 3.4 percent had less than 50 years of age.

Table 3.32 - Number of pensions by category and geographical area - 1/1/2001(1)
(old age=100)

Pension categories	Italy	North-W	North-E	North	Central	South
Old age	100	100	100	100	100	100
Seniority	48.7	65.8	55.6	61.4	41.2	26.8
Early retirements	8.0	12.1	5.7	9.3	6.4	6.4
Disability/Inability	7.9	4.6	4.7	4.6	7.9	15.0
Disability before L. 222	47.7	25.1	29.9	27.2	55.4	86.1
Survivors	75.5	71.4	68.8	70.2	73.5	88.5

(1) Excluded: voluntary insurance and social pensions and allowances

Source: compiled on the basis of Inps figures

The mean values for all IVS pensions were higher in the north-west than in other geographical areas of the country (table 3.33), except as regards the early retirement figures. These showed, in the various regions, more homogenous mean values:

Table 3.33 - Average value of pensions by category and geographical area - 1/1/2001 (1)
(Italy= 100)

Pension categories	Italy	North-W	North-E	North	Central	South
Seniority	100.0	107.6	92.9	101.9	103.1	86.7
Old age	100.0	104.1	97.4	101.3	107.9	91.2
Early retirements	100.0	100.3	96.7	99.4	103.7	99.2
Disability/Inability	100.0	119.6	110.5	115.6	104.2	87.9
Disability before L.222	100.0	108.8	99.7	104.5	99.3	97.2
Survivors	100.0	113.8	96.7	106.7	99.2	89.0
Total	100.0	117.0	99.7	109.8	100.1	82.0

(1) Excluded: voluntary insurance and social pensions and allowances

Source: compiled on the basis of Inps figures

the pensions were, in fact, allocated as a result of slumps and of the restructuring of large corporations, often state-owned and with similar salaries, located all over the national territory.

3.4 Forms of unemployment insurance

3.4.1 Changes in unemployment insurance expenditure

In 2001 total spending for unemployment insurance, locally known as "social shock absorbers", was fairly similar to that of the previous year: the total cost rose, in fact, from approximately € 7.67 billion to € 7.73 billion, an increase of slightly less than 11 percent (table 3.34).[10]

(10) The statistics commentend in this paragraph were drawn from INPS sources and reflect budget figures determined on an accrual basis. As illustrated below, the data include both the benefits paid direcly to the beneficiaries and the resources allocated to the insurance coverage of the unemployment periods covered by the Redundancy fund, to the availability-for-employment benefits.

Table 3.34 - Benefits and coverage of "social shock absorbers"
(in millions of euros)

	1990	1995	1996	1997	1998	1999	2000	2001
Ordinary Cig	350	597	567	495	466	483	388	458
- construction industry	149	236	242	224	197	175	164	201
- masonry industrial	8	14	13	12	10	10	8	10
- masonry craftork	2	2	3	2	2	2	2	2
- industry	191	344	309	257	257	297	215	246
Cisoa (Agricolture)	**11**	**9**	**8**	**9**	**7**	**8**	**9**	**6**
Extraordinary Cig	**926**	**904**	**659**	**586**	**459**	**350**	**471**	**467**
- of which: job-creation agreements (contratti di solidarietà)		8	20	21	10	5	5	2
Availability-for-employment allowances (Indennità di mobilità)	**0**	**1,412**	**1,426**	**1,350**	**1,151**	**1,195**	**1,243**	**1,264**
Unemployment benefits	2,474	3,418	3,987	3,941	4,236	4,132	3,936	4,281
- agricultural	1,420	1,370	1,453	1,464	1,102	1,533	1,842	1,559
- non agricultural	761	1,700	2,277	2,267	2,992	2,311	1,917	2,546
- special construction industry	293	349	256	210	143	288	177	177
Financial assistance to the unemployed	**-**	**135**	**427**	**569**	**859**	**871**	**642**	**325**
- Workfare programmes	-	135	427	569	652	741	284	1
- Public utility jobs	-	-	-	-	17	55	72	11
- Socially useful activities	-	-	-	-	-	-	246	270
- Training programmes	-	-	-	-	-	32	40	44
- Work grants	-	-	-	-	190	43	-	-
Early retiremets	**2,002**	**1,777**	**1,962**	**1,631**	**1,262**	**958**	**981**	**934**
Total	**5,762**	**8,251**	**9,035**	**8,580**	**8,441**	**7,996**	**7,670**	**7,737**

Source: Inps

The most substantial spending item was unemployment benefits which, in 2001, amounted to more than half the total expenditure. The availability-for-employment allowance and the early retirement pensions accounted, respectively, for 16.3 and 12.1 percent. The respective shares of the resources allocated to the ordinary and extraordinary redundancy fund (CIG) were virtually equivalent, each accounting for about 6 percent of the entire expenditure for "social shock absorbers" (table 3.35).
Nor did the breakdown of the spending figures for 2001 indicate any significant change. The ordinary CIG rose from the 5.1 reported in 2000 to 5.9 percent in 2001, hovering around 6 percent of overall spending throughout the 1990s.
The expenditure for the extraordinary CIG and for early retirement pensions also remained stable, after the gradual drop registered by these two items during the same decade.

Unemployment benefits confirmed the last decade's upswing trend, rising,

Table 3.35 - Breakdown of unemployment insurance expenditures
(in %)

	1990	1995	1996	1997	1998	1999	2000	2001
Ordinary Cig	6.1	7.2	6.3	5.8	5.5	6.0	5.1	5.9
Cisoa (Agricultural)	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Extraordinary Cig	16.1	11.0	7.3	6.8	5.4	4.4	6.1	6.0
Availability -for-employment allowances (Indennità di mobilità)	0.0	17.1	15.8	15.7	13.6	14.9	16.2	16.3
Unemployment benefits	42.9	41.4	44.1	45.9	50.2	51.7	51.3	55.3
Financial assistance to the unemployed	-	1.6	4.7	6.6	10.2	10.9	8.4	4.2
Early retirements	34.7	21.5	21.7	19.0	15.0	12.0	12.8	12.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Inps

between 2000 and 2001, from 51 to 55 percent of the overall cost of unemployment insurance.
Financial assistance to unemployed workers, on the other hand, decreased from € 870 million in 1999 to € 640 million and € 320 million, respectively, in 2000 and 2001. In terms of total expenditure, up to 1998 these benefits increased (10 percent of the entire costs), whereas immediately after this period they dropped to 4.2 percent of the total in 2001. This trend was determined by the reduced expenditure for workfare programmes.

Chart 3.2 - Spending on unemployment insurance
(in % terms)

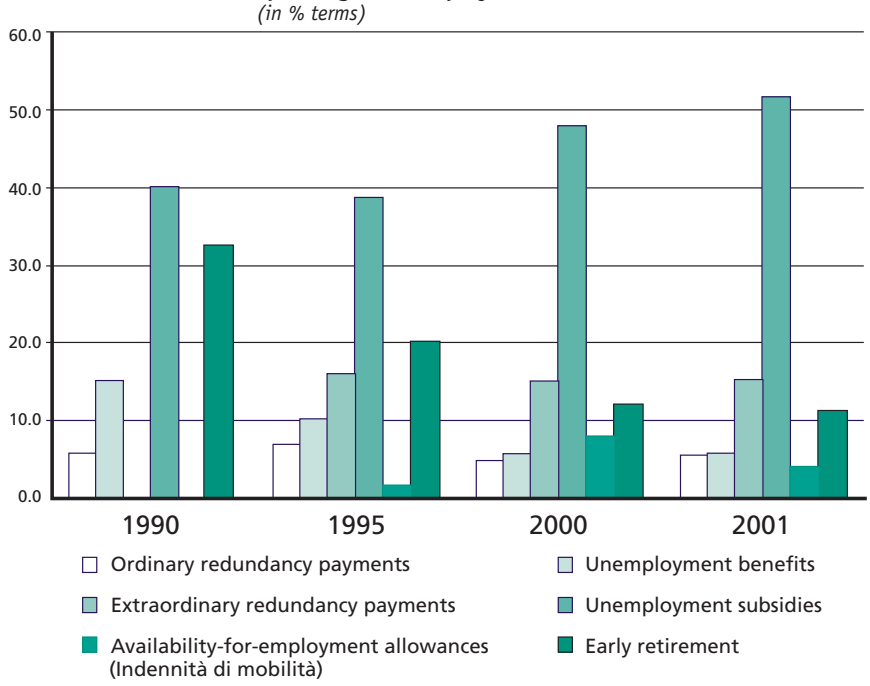


Table 3.36 reports the breakdown of the overall spending for each instrument examined and draws a distinction between the real benefits paid out to beneficiaries and the insurance coverage for unemployed periods covered by the CIG, the availability-for-employment and unemployment benefits. When examining this table, an important consideration to be borne in mind is that the employer does not pay pension-related insurance contributions when the worker is absent. The worker, however still has the right to coverage for these periods; therefore, the contributions to be paid into the pension fund were calculated nominally on the basis of a conventional remuneration, and were financed by general taxation.

Table 3.36 - Breakdown of "social shock absorbers" costs: benefits and insurances coverage (1)
(amounts in millions of euros)

	1999			2000			2001		
	Benefits	Insurance cover	Total	Benefits	Insurance cover	Total	Benefits	Insurance cover	Total
Ordinary Cig	**335**	**149**	**483**	**247**	**141**	**388**	**293**	**165**	**458**
- construction industry	121	54	175	113	51	164	139	62	201
- masonry industrial	7	3	10	5	3	8	7	3	10
- masonry craftwork	1	1	2	1	1	2	1	1	2
- industry	206	91	297	128	87	215	146	100	246
Cisoa (Agriculture)	**8**	**-**	**8**	**9**	**-**	**9**	**6**	**-**	**6**
Extraordinary Cgi	**251**	**99**	**350**	**295**	**176**	**471**	**285**	**183**	**467**
- of which: job-creation agreements	5	-	5	5	-	5	2	-	2
Availability-for-employment allowances (Indennità di mobilità)	**736**	**459**	**1,195**	**762**	**481**	**1,243**	**776**	**489**	**1,264**
Unemployment benefits	2,299	1,832	4,132	2,317	1,619	3,936	2,389	1,893	4,281
- agricultural	1,120	414	1,533	1,365	477	1,842	1,136	422	1,559
- non agricultural	1,073	1,238	2,311	849	1,069	1,917	1,146	1,401	2,546
- special construction industry	107	181	288	104	73	177	107	70	177
Financial assistance to the unemployed	**871**	**0**	**871**	**642**	**0**	**642**	**325**	**0**	**325**
- Workfare programmes	741		741	284		284	1		1
- Public utility jobs	55		55	72		72	11		11
- Socially useful activities	-		-	246		246	270		270
- Training programmes	32		32	40		40	44		44
- Work grants	43		43	-		-	-		-
Early retirements	**914**	**44**	**958**	**873**	**108**	**981**	**856**	**78**	**934**
Total	**5,413**	**2,583**	**7,996**	**5,146**	**2,524**	**7,670**	**4,929**	**2,807**	**7,737**

(1) Total unemployment insurance costs include benefit and transfers from Gpt and Giass to Private Employees Pension Fund (Fpld) to cover the nominal pension contributions.
Source: Inps

The most substantial portion of the overall resources allocated to the "social shock absorbers" was accounted for by the benefits paid directly to the beneficiaries: in 2001 these amounted to slightly less than 65 percent of the whole. The total contributions allocated to the nominal payments related to periods covered amounted to € 2.8 billion in 2001; the share rose from 32 percent in 1999 to 36 percent in 2001.
Coverage by means of insurance contributions was envisaged for the CIG and availability-for-employment periods, and for those covered by unemployment benefits: when these instruments only were considered, the burden of insurance coverage increased to 3 percent of the overall charges set aside for CIG and availability-for-employment benefits, and to 44 percent of the total resources allocated to unemployment benefits.

Box 5 – Unemployment benefits, availability-for-employment allowance and CIG

Unemployment benefits are a replacement allowance to make up for the income lost by workers following both termination and involuntary unemployment.
All workers covered by the general mandatory pension insurance scheme (AGO), or by substitute or exclusive AGO funds, are insured against

unemployment risks. State workers with stable employment, theatre and cinema artists, workers paid exclusively through profit-sharing, under-six-month seasonal workers, or under-78-days temporary workers, priests, apprentices and workers with collective agreements represent an exception to this rule.
All workers seeking first employment are also excluded because they have not yet started any insurance coverage.
The organisations which distribute resources to cover the foregoing allowances are: INPS for almost all employed workers and INPGI, which is restricted to the professional journalists (self-employed and employed) listed in the professional roll.
INPS pays the benefits directly to the beneficiaries under five different forms: ordinary (non-agricultural) benefits; special unemployment benefits (construction and non-construction industry); reduced-requirement unemployment benefits; agricultural unemployment benefits (all requirements); financial assistance under different workfare programmes.
Only the first four typologies listed above were examined. This led to a restriction of the survey field amounting to about € 650 million (financial assistance under different workfare programmes).
The availability-for-employment benefits were more generous, if compared to the unemployment benefit, and was allocated only to workers dismissed collectively by firms of a certain size, belonging to specific, socially relevant, production sectors (laws 223/1991 and 236/1993). The workers protected by this instrument are, therefore, workers employed in the types of firms foreseen by the law, which comply with the following requirements: i) enrolment in the local employment office within 68 days of dismissal, ii) at least 12 months seniority of employment; iii) ongoing and, in any case, not short-term employment. This benefit is distributed exclusively by INPS through direct payments. It is equivalent to the CIG benefit (80 percent of wage) in the first 12 months with an 80 percent reduction in the following months. The ordinary unemployment allowance is 40 percent of wage amounts.
The wage supplementation benefit is a different form of protection from the unemployment benefits, because it does not protect the individual worker as such, but covers all the workers in a firm, thus permitting the latter to avoid dismissals while awaiting resumption of activities. It is a form of protection aimed at covering the so-called "partial unemployment" (suspension from work without termination of contract), i.e. it covers the reduction of working hours and the suspension of working activities resulting from two types of events: (events subject to supplementation): 1) transitory events and temporary market situations not chargeable to the employer; 2) industrial re-structuring, organisation or re-conversion, distress or bankruptcy proceedings. The first type of event is covered under the ordinary CIG, whereas the second is covered under the extraordinary CIG. In both cases the benefit are paid, for all the hours not worked, which may vary from zero to the number set through labour agreements, at a rate equivalent to 80 percent of the wage. The ordinary and extraordinary wage supplements are paid out exclusively by INPS in two ways: direct and indirect (employers' advances on behalf of INPS). Indirect payment is chiefly used for ordinary supplementation benefits, and is (as regards expenditure) the same as the direct distribution of extraordinary wage supplementation benefits.
To give an idea of the extent of this phenomenon, we underline the fact that in 2000 the wage supplementations paid directly by INPS amounted to € 129 million.

3.5 Changes and trends in the healthcare system

In Italy many people are convinced that expenditure for the National Health System is out of control, and that the government budget is quite unable to sustain it. They are also convinced that a centralised public system is quite incapable of bringing about the changes needed to guarantee the desired objective. This opinion is emphasised by the widespread consent to the changeover to federalism.
Differences of opinion as to values are, of course, inevitable. The problem is that the aforesaid opinions often reflect judgements, or even biases, unsupported by an adequate grasp of the relevant facts. This paragraph hopes to contribute to the development of this knowledge. More specifically, our purpose is to analyse the National Health System as it is today, bearing in mind the overall developments achieved in the past.
The paragraph is divided into four parts. The first offers a summary of the developments in National Health System spending; the second illustrates the chief institutional changes in the healthcare scheme, since its introduction in 1997, till today, excluding federalism; the third outlines several urgent issues still to be faced; the fourth, in conclusion, underlines some of the opportunities and the risks linked to the introduction of federalism as regards healthcare.

3.5.1 Evolution of expenditure and funding in the National Health System

When the NHS was introduced it accounted for less than 5 percent of GDP, yet in 2001 it appeared to have risen to about 6.2 percent of GPD. This was the result of varying performances: an increase to the 6.5 percent peak in 1991, a drop to its minimum value, 5,2 percent in 1995 – the year when expenditure, also as regards absolute values, was lower than the previous year, followed by an upswing.
The 6.2 percent of GDP estimated for 2001 already exceeded the objective established by law 405/2001, though only as of 2005, i.e. 6 percent of GDP.
Tables 3.37 and graph 3.3 describe the trend in spending from the 1991 peak till today.[11]

Table 3.37 - NHS expenditure (1991-2001)
(bilions of euros, current values)

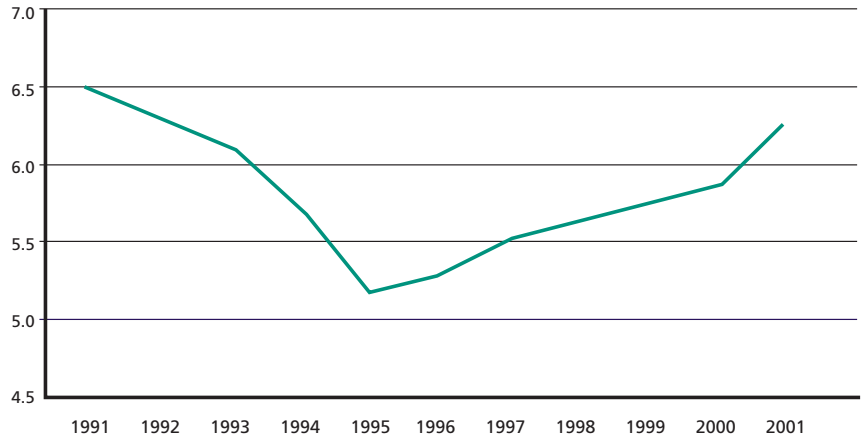
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 (estimate value)	2001 (estimate value)
Nominal Expenditure	48.49	49.32	49.07	49.04	48.44	52.59	57.01	60.25	63.08	67.75	75.66
GDP, current values	744.03	783.77	807.36	853.91	923.05	982.44	1,026.28	1,073.02	1,108.77	1,164.77	1,216.58
Expwenditure as a share of GDP(%)	6.5	6.3	6.1	5.7	5.2	5.3	5.5	5.6	5.7	5.8	6,2

Source: compiled on the basis of the General report on economic situation (source Ministry of Health) data till 1999 and of State-Regions Conference and Ministy of Economy and Finance from 1999 onwards.

(11) These figures differed only slightly from those used by the OECD, illustrated in the second chapter. In addition, they were higher than those shown in paragraph 3.1, because they were gross of administrative costs.

Tables 3.3 and 3.39 draw attention to the 1991-1999 period, for which consistent series are available. The expenditure for out-sourced services was the key determinant with respect both to the drop in 1991-1995 spending, and to the subsequent upswing over the next five years. More specifically (table 3.3), in the five years from 1991 to 1995 the impact of this item on overall healthcare spending (i.e. to the total expenditure on health) dropped from 41.5 percent to 37.8 percent. In absolute terms, the downswing amounted to 7.5 percent – even pharmaceutical costs dropped by 32 percent.[12] On the contrary (table 3.39), in the subsequent five year period, the incidence rose to a level only 0.3 points below the 1991 peak.

Chart 3.3 - NHS expenditure as a share of GDP



In absolute terms, the growth rate was 41.2 percent – pharmaceutical costs actually increased by 44.2 percent -.

Table 3.38 - NHS expenditure 1991-1995
(as a percentage of total expenditure on health)

	1991	1992	1993	1994	1995
Directly managed services	58.5	59.6	60.9	61.9	62.4
- Staff	40.9	40.8	41.8	41.9	42.9
- Goods are services	17.6	18.8	19. 1	20.0	19.5
Outsourced services	41.5	40.4	39.1	38.1	37.6
- Basic medical care	6.2	5.8	5.8	6.0	6.0
- Pharmaceutical	16.2	15.1	13.5	11.8	10.8
- Care homes and hospitals	9.9	10.6	11.0	11.3	11.6
- Specialistic	4.2	3.4	2.8	2.7	2.6
- Other medical care activity	5.0	5.5	6.0	6.3	6.6

Source: General Report on Country economic situation (various years)

(12) On the contrary, the expenditure for private clinics and hospitals, and for social assistance (including supplementary benefits, prostheses, thermal baths therapy, aid for the elderly, transport) rose by 19.3 and 34 percent, respectively.

Table 3.39 - NHS expenditure 1995-1999
(as a percentage of total expenditure on health)

	1995	1996	1997	1998	1999
Directly managed services	62.4	61.5	61	60.1	58.8
- Staff	42.9	42.7	43.4	41.7	40.3
- Goods are services	19.5	18.8	17.6	18.4	18.5
Outsourced services	37.6	38.5	39	39.9	41.2
- Basic medical care	6.0	6.2	6.2	6.1	5.7
- Pharmaceutical	10.8	10.9	11.2	12	12.1
- Care homes and hospitals	11.6	11.9	11.9	11.4	12.4
- Specialistic	2.6	2.7	2.8	2.8	3.2
- Other medical care activity	6.6	6.8	6.9	7.6	7.8

Source: General Report on Country economic situation (various years)

There are still no figures available for 2000 and 2001 relating to all the expenditure items; the upswing trend in pharmaceutical spending was, however, confirmed. It rose by 15 percent in 2000 and by 32 percent in 2001. This figure, the most significant since the introduction of the NHS, brought pharmaceutical costs up to slightly under 16 percent of overall healthcare spending. About 1/3 of this increase was accounted for by the lack of revenues resulting from the abolition of tickets. The rest was chargeable to two unchanging tendencies registered over the last two years: increasing quantities, which explained about 50 percent of the spending hike, and the mix effect – i.e., the consumer shift towards new and more costly drugs – which explained about 20 percent. Prices registered, on the whole, a negative performance, whereas the abolition of tickets did not seem to have led to widespread over-consumption trends (Ministry of Health, 2002).[13]
As a result of new labour agreements - they had expired in 1998 - , also spending for human resources seemed to be on the increase. In 2000 it rose by about 8 percent compared to the previous year.
Does the totality of these figures prove that expenditure is out of control? Of course it does, there was not a single year in which the NHS did not report a deficit. (table 3.40).

To be more specific, the size of the deficits ascertained for the 1991-1999 period amounted to € 32.76 billion, whereas the deficits estimated for 2000 and 2001 amounts to € 8.05 billion.[14]

(13) The drugs in the B list, those with a higher ticket (50 of the price plus € 1,55 per prescription) increased more than the a list drugs (only one fixed ticket per prescription). The higher quantities, hower, were compensated by an equivalent drop in private spending. For more in-depth analysis of the effects of the abolition of the tickets, see Traversa, Magrini, Brunetti, 2002, soon to be published.
(14) The € 4.39 bilion deficit was contested by the regions, which support the possibility of using the portions of funding relating to the pre-2001 period to finance the overall deficit. In this perspective, the 2001 deficit would drop to € 2.84 bilion.

Table 3.40 - Ssn financing (1991-2001)
(bilions of euros, current value)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 estimate value	2001 estimate value
Financing	45.55	45.66	45.4	45.2	47.77	50.53	51.64	54.44	58.34	64.09	71.27
Nominal expend	48.49	49.32	49.07	49.04	48.44	52.59	57.01	60.25	63.08	67.75	75.66
Gap	2.94	3.66	3.67	3.84	0.67	2.06	5.37	5.81	4.74	3.66	4.39

Source: compiled on the basis of the General report on economic situation (source Ministry of Health) data till 1999 and of State-Regions Conference and Ministy of Economy and Finance from 1999 onwards.

Some data, however, should be highlighted. First of all the current impact on the GDP of NHS spending, even though higher than expected, was 0.3 percent of GDP lower than the 6.5 percent peak in 1991. Over the decade, therefore, healthcare spending grew less than the GDP. It is even more significant that, at constant prices, the funding allocated in 1991 would have been enough to cover healthcare spending up to the end of 1997.[15] The conclusion is, that, without underestimating the impact of isolated cases of financial foolishness, the deficit, in the aggregate, appeared to be due to under-funding rather than to reckless spending.[16]

3.5.2 From law 833 to the reform of Title V of the Constitution

After drawing attention to the essential information needed for a real grasp of financial flows, we think it would be a good idea to examine the chief institutional modifications brought about in the NHS. As we have said before, this part of our report does not take account of the federalist transformation outlined in the fourth section.

From equal health protection to essential assistance levels (LEA) and supplementation funds.

Law 833 appeared to be substantially uninterested in the limitation of resources and in the resulting need to choose priorities. Its objective was the equal protection of the physical and mental health of the entire population. This includes the "prevention of disease and accidents in every environment where people live and work"; "the diagnosis and the treatment of diseases, whatever their causes, phenomenology and duration"; "the rehabilitation of somatic and mental disability and impairment, the protection of the health of the elderly, also in order to prevent and remove conditions which might lead to their becoming outsiders"; "the protection of mental health, favouring prevention in order to eliminate all forms of discrimination and segregation"; together with the identification and elimination of the causes of air, water and soil pollution. The National health plan was entrusted with the institutional responsibility of determining the resources to be allocated to healthcare. Subscription to voluntary forms of mutual assistance was permitted, but public agencies, firms and companies were forbidden to contribute, in any way whatever, to supplementary mutual assistance schemes.

(15) In this respect and for a more in-depth analysis of the 1990-1999 period, see Caruso, cit.
(16) Undecontributions, in turn, give rise to interest on bank loans.

Nowadays, the NHS's stated objective is to guarantee the indispensable levels of healthcare, and to respect the budget limitations stipulated by the economic-financial programme. The effects on health continue to influence the choice of benefits: legislative decree 229/1999 – the so-called ter (third) reform, which gave the final impetus to the pinpointing of the various levels, began by re-confirming the fundamental aim of protecting health. This objective, however, within the framework of healthcare, is considered essential and the linking to the observance of macro-economic compatibility is explicit.
Tax deductions, to encourage enrolment in supplementary funds, were also envisaged in order to ensure a list of services in addition to those offered by LEA. Legislative decree 502/1992 also provided for the possibility of granting concessions for replacement funds, thus permitting subscribers to withdraw from the NHS. This option was, however, immediately abolished by legislative decree 517 the following year.

Box 6 – Essential levels of assistance: an in-depth analysis

The transfer to the essential levels of assistance was established not only by law 412/1991, but also by law 421 approved the year after and which led to the so-called 'bis-reform' (second-reform) – which had been initiated by the already mentioned legislative decrees 502 and 517. As indicated above, it was, however, decree law 229/1999 that gave them impetus. The first LEA list was drawn up by Decree of the President of the Council of Ministers (DPCM) dated 29 November 2001.
The LEAs featured two main characteristics:
- a negative list, i.e. a list which excluded benefits not permitted, instead of including those to be guaranteed. This appears to be perfectly justifiable if we consider not only the selective incompleteness of the effectiveness tests but also the limitations of the distribution guidelines, when there are many different considerations concerning the quality of life;[17]
- clinical suitability (hereinafter, suitability) was to be sought for, i.e. to the need to avoid the possibility that benefits, even though effective, be distributed to patients for whom the risks exceed the advantages.

As a result, the search for suitability would, in its turn, have positive effects also on the struggle against waste, because badly allocated benefits lead to the inevitable squandering of resources. The result would be a clear example of harmony rather than of conflict between the aims of healthcare and economic limitations.
More specifically:
a) In the macro-areas LEA included:
- collective health assistance in living and working environments;
- territorial assistance (including home aid);
- hospital care.

As of 2002, 5 percent, 49.5 percent and 45.5 percent, respectively, of NHS healthcare expenditure was to be allocated to these areas.
b) LEA totally excluded:
- aesthetic surgery not connected with accidents/malformations/disease;
- non-conventional drugs;

(17) For the problems linked to the drawing up of a positive list, see the Oregon experience. On the latter and more on assistance levels as a whole see Bariletti et al., 1999 e Taroni, 2000.

- medical certification (with the exception of certification required by institutions) needed by students' for non-competitive sports;
- non-obligatory vaccinations for foreign stays;
- dental care, except for dental health protection programmes for particularly vulnerable cases in growing children;
- bone densitometry, except for those cases where clinical effectiveness is demonstrated;
- day hospital physical, rehabilitative therapy, subject to certain conditions, both as regards pathology and/or modes of allocation;
- refractive surgery, also for specific pathologies.

In order to promote suitability, the following points were determined:
- 43 DRG judged to be unsuitable – comprising operations relating to the crystalline lens, to aesophagitis and other diseases of the digestive tract (with no complications) and to medical afflictions of the spine, if they are subject to ordinary hospitalisation or even to day-hospital treatment - which in 1999 accounted for more than 1/4 of the overall cases hospitalised;[18]
- a set of indicators focused on hospital activities aimed at pinpointing unsuitability factors, including the percent of short hospital stays, the discharges from surgical wards with medical DRG, the average impact of admissions relating to the elderly, the average pre-operation hospital stay;
- a first group of guidelines.

The updating of LEAs, based on the model by the single commission on pharmaceutical products (CUF), was entrusted to a national Committee.

Box 7 – Supplementation funds: an in-depth analysis

The second reform set out the guidelines for supplementation funds and the third reform applied them, precisely as they did for LEA. More specifically, supplementation funds comprised: hospital benefits distributed within the framework of internal self-employment; social healthcare benefits distributed in residential and semi-residential structures and at home; non-conventional medicine benefits; thermal treatment and dental care, for the non-NHS quota. Whatever the benefit, the provider had to be a licensed entity.[19] As to the relevant funding, the contributions, besides decreasing according to the number of household members, had to exclude any form whatever of risk selection.

The funds could be created from scratch, or by collective agreements and trade associations, by local agencies and mutual aid societies. They could also stem from the transformation of already existing funds and be self-managed, or might be entrusted to public or private institutions, as long as the latter had been operating on the market for at least 5 years. The tax relief, stipulated by legislative decree 41/2000, allowed for € 2,066 maximum deductibility, whereas the contributions to existing funds – which did not comply with the foregoing requirements (e.g. which also provided substitute services), - decreased from € 3,615 to € 1,808. The maximum cumulative relief amounted to € 3,357.00.

(18) More specifically, this figure amounted to 3,282,884 compared to the 12,715,589 admissions. (for more information see: www.sanita.it/sdo/ and www.assr.it.
(19) Concerning accreditation, see comments below.

Table 3.41 - Care homes operating within the NHS compared to pubblic hospitals

	1980	2000
Care homes accredited/total public hospital	574/1,150	535/737
In-patients beds of accredited care homes/total in-patients care beds of public hospitals	98,000/435,000	49,850/221,193

Source: Ministry of Health, SIS

From being an alternative to the market, to the introduction of market features into the NHS

The main features of Law 833 were the centrality which it attributed to the influence of policy, and to administrative guidelines which were not market friendly. This does not mean that law 833 denied the role played by private organisations. Far from it. Law 833 envisaged agreements with a large number of private bodies: ranging from general practitioners to the paediatricians who operate within the NHS - with whom agreements were compulsory - to specialists, diagnostic centres and the private clinics subject to optional agreements. In actual fact, since the very creation of the NHS, over 90 percent of the clinics have been operating within the framework of the NHS, and their impact, both as regards structures (table 3.41) and in terms of the associated expenditure as a share of total expenditure on health, has continued to grow. From 1991 to 1999 this figure increased from 9.9 to 12.4 percent (tables 3.38 and 3.39).

This is not the only thing: law 833 explicitly acknowledged the role played by voluntary workers in the NHS and well before legislative decree 229, the Presidential decree 761 of December 1979 stipulated the need, later reiterated by law 595/1985, to permit doctors, who choose full-time, to carry out their professional activities in state hospitals. Up to legislative decree 229, the possibility of resorting to indirect assistance was also allowed, though subject to regulation. This does not mean, however, that general policies have now ceased to influence the NHS. In any public scheme this would be implausible.

Once this factor had been acknowledged, there were numerous changes of direction as regards the introduction of market friendly features. Law 833 stated that:

- the USLs, or local health units, were to be administrated by a managerial committee elected by a general assembly (meaning, the town council or the association of municipalities/mountain communities);
- hospital structures belonged to the USLs;
- the legal status of the USL human resources was to be regulated by the principles which govern the civil service;
- accounts had to be drawn up in accordance with the accounting guidelines adopted by state organisations;
- the control over USL activities was to be exercised by the Regional control committees;
- not only relations with private institutions were to be regulated by the conventions, but the reform law in question also stipulated that it was obligatory to give priority consideration to already

signed conventions;
- one of the main features was the rationalised programming model, based on approval by Parliament of a national health plan and on the substantial disregard for the logic of incentives and disincentives.

Even though the lawmaking process has been accompanied by ongoing repetitions, and the provisions stipulated have, in many cases, been disregarded, from the 1990s on, there have been many radical innovations leading, on the one hand, to the transformation of NHS structures into business-type organisations, and on the other, though the impact is lighter and varies according to time and territory, to the start-up of competitive mechanisms between providers of services.[20]
The result has been an institutional set-up which has incorporated many of those instruments regularly used in the other European states. (see chapter two).
The foregoing transformation materialised with the introduction, on the one hand, of norms based on private law and the administrative methodologies typical of private firms (e.g. wage schemes linked to the benefits distributed); and on the other, of forms of partnership between the state and the private enterprises (box 8). Although this transformation has gradually expanded, the situation as regards competition is, on the contrary, very different. A hard-core of competitive features, ongoing since 1990s, was the result of the abolition of the conventions with private structures. Apart from this, however, a distinction must be made between the provisions approved by the second reform, the third reform and legislative decree 347/2001.
It has frequently been acknowledged that the second reform[21] did not specify which type of model was to be adopted – a model focusing on users' freedom of choice, or one based on that of the acquirer, i.e. the negotiation-based perspective pertaining to contracting out or, in other terms, to external producers.
The decision to favour the separation between the users and the producers of services, the increased focus on the role played by the demand-side, and the substantial equalisation between state and private producers was, however, unequivocal. To sum up, the path indicated by this reform was to remove the integration between the funding and production functions, and to emphasise co-ordination and overall planning.
The third reform, on the other hand, emphasised again the integration, co-ordination and overall planning programme. The competitive aspect was relegated to the contractual agreements to be negotiated by the regions, and to the subsequent contracts between the private structures and the ASLs, or the local healthcare companies (box 9). The transformation was, of course, more policy-related than based on real changes. A good example of this is that, in 2000, a good two thirds of the state hospitals, comprising about half the state hospitals' patient capacity were still administered directly.[22]
That being stated, certain changes have definitely taken place. One

(20) For an accurate documentation of the current differences between the normative and the operational plan see: Mapelli, 2001 a.
(21) See, among other, Mapelli, 1996
(22) Also the 26 June 1999 Recommendation by the Antitrust Authority, which required the spin-off of all hospital from the USLs, to aviod distortion of compoetition.

example is the fact that Lombardy, the chief region to proceed along one of the second reform guidelines, i.e. freedom of choice for users, would otherwise have been obliged to call a halt, and to reinstate many of the hospitals which had broken away.[23]
The recent decree law 347/2001, on the contrary, by cancelling the norms relating to the spin-off introduced by the third reform and by deregulating operations, introduced total freedom for the regions to choose which model to apply. This law permitted Lombardy to continue along the same route.
Box 10 supplies a more detailed description of the Lombardy model.
This analysis however, calls attention to the distinctive features which, over and above the said freedom of user choice, can be summed up as follows. On the one hand, by the total de-regulation of the private supply and by the active commitment to gradually increase their participation and on the other, by the commitment in favour of the contribution by private concerns within the framework of the state firms themselves – thanks, for example, to project financing arrangements, to the formation of mixed shareholding companies and to leasing contracts for the management of services. These outlines, when taken as a whole, imply the relinquishing of needs-based programming and the consequent delegation of all allocation choices to users and to their agents, i.e., the doctors.
The chief characteristics of the so-called alternative model, i.e. the system adopted by Emilia Romagna, can, on the contrary, be summed up by the "clinical management" of demand, by the prior fixing, in the contractual agreement, of the production shares to be assigned to each provider, by the network integration among the various organisations and by the resistance to extended forms of privatisations, because of the risks of opportunism which might occur in a network system.[24]
On the other hand the current number of private hospitals in Lombardy does not, of itself, represent a distinctive feature of this model. This value has, of course, increased in the north and the centre-north, with the exception of Lazio. As indicated above however, the recourse to private providers is a common occurrence within the NHS. Even in Emilia Romagna, more than 20 percent of the patient space is made up of authorised beds – compared to the 27 percent reported in Lombardy – and a good 41 of the 43 private clinics operating in the territory is accredited.

Box 8 – The NHS as a business-oriented system

The turning point came with the new second reform. It stipulated that the USL were to become infra-regional state companies, subject to profit and loss-based accounting systems, run by managing directors appointed by the regions, but subject to private law contracts. These managing directors were to nominate the healthcare directors, both administrative and social-healthcare. These directors, together with the NHS management, were to be subject to contracts governed by private law. The same set-up was to

(23) The third reform, form, for instance, tied the spin-off possibility to the existence of a series of retirements comprising: the departments and the existence of an accounting system by cost centre.
(24) On this point, in particular, see: www.regione.emilia-romagna.sanita.it Also Tuscany is moving along the same lines. For evaluation purposes see the following comments on suitability.

be extended to the scientific in-patient care and therapy institutions (IRCS), and to the USL hospitals. The latter received permission to break away from the USLs in order to become Hospital firms. (AO).
Currently, as a result of the changes brought about by the third reform, the USLs have become ASLs and have been reduced from 657 to 197. They are state-owned firms with 'autonomous governance', and 'whose organisation and functionality are governed by private law'. This implies, among other things, that they are free to sub-contract, subject to private law provisions, supply contracts and services not exceeding the values stipulated by the relevant EU norms – currently € 200,000. Furthermore, the usual rules applying to private property govern the right to make use of their assets.
The status of state-owned company applies also as regards hospital firms, university firms and state IRCS. The managing directors are nominated by the regions, without the need for comparative evaluations, for a minimum 3 years to a maximum, renewable, 5 years. The only requirement is participation in a 120 hour training course. The incentives can reach up to 20 percent of the annual remuneration. Also as a result of the second reform, a tariff scheme to be applied to hospital treatments for chronic cases under diagnosis-related group (DRG) arrangements, known locally as ROD (raggruppamenti omogenei di diagnosi), was introduced experimentally as of 1995 and definitely as from 1997. The extension of these tariffs to specialist, day hospital treatment was also envisaged. The Ministry fixes the maximum fees, which the regions are then free to lower.[25] Moreover, the second reform also comprised the possibility of operational experimentation, particularly with respect to forms of co-operation with private agencies, e.g. for project funding.
In conclusion, the laws linked to the 2002 government budget relating to State administration delegate the Government to transform the IRCS into nationwide foundations open to partnerships with private entities even if these are profit-based. As to the state IRCS, the majority of the Board of Directors is to remain public – with members nominated by the Ministry for Health, by the regions and by the municipality where the foundation is located. The participation of private organisations, not only as regards research, can, however, be carried out also within framework of healthcare programmes. Furthermore, the same document envisages, in order to achieve operational savings, that all state administrations are to be permitted to purchase originally produced services on the market, also notwithstanding the provisions currently in force.

Box 9 – Contractual agreement

The contractual agreement not only defines more exhaustively the responsibilities pertaining to the region and to the ASLs in determining the agreement itself, and the general guidelines underlying healthcare policy, but also pinpoints the operational plans to be assigned to the individual structures – i.e. the maximum production volumes for each provider – and the salary guidelines to be adopted. These can vary also according to whether the structures are public or private. For the assistance functions, salaries are based on standard costs, whereas, in other sectors, a tariff

(25) On ROD based payments see: Taroni, 1996.

system is used. Within the framework fixed by the contractual agreements, also cost and quality based contracts are then signed with private enterprises and authorised professional persons, together with agreements with state structures and those with equal status. Patients are permitted freedom of choice.[26]
Institutional accreditation, which also owes its beginnings to law 577/1993, is a central feature of this process. This type of accreditation differs from mere authorisation because further qualifications are required in order to satisfy the regional programming guidelines (besides those needed for simple authorisation only).
Availability both to create internal auditing schemes and to accept external controls as to suitability, and more in general to the results achieved is also obligatory. The accreditation however, is granted by the regions, and is not binding for the ASLs, because the decisions relating to the prospective utilisation are stipulated by the foregoing contractual agreement.
There is competition when the contracts and agreements require, in any case, a comparative evaluation of the benefits.

Box 10 – An in-depth analysis of the Lombardy model

The Lombardy model was preceded in 1996 by a regional resolution. It was born with regional law 31/1997 and was further consolidated by the regional healthcare plan 2002-2004. The underlying principle is based on horizontal subsidizing, with a clear commitment to favour the recourse to private entities for many of the functions previously performed by the state sector. This framework chiefly features the following characteristics:
- the relinquishing by the regions of managerial activities. The region is still responsible for the strategic and financial planning of the scheme and still arbitrates between the different components. It also retains the responsibility of nominating the managing directors;
- the separation of beneficiaries from distributors, through the spin-off from the ASLs of the hospital structures, previously ASL owned, which are transformed into hospital companies;
- the start-up of a competitive system between public and private providers;
- the overall promotion of the involvement of private agencies in the management and funding of the health scheme.

In particular, as far as competition between hospitals is concerned, all distributors are to be subject to:
- the same accreditation procedures;
- the same tariffs;
- the same demand conditions – the only variable is the capacity to attract clients, because there is no public commitment whatever as to the government of the demand;
- the same controls, based on a monitoring system.

After 2002 (when the scheme was calibrated), whoever reports performances below expectations is obliged to leave the regional

(26) It might be worthwhile to recall how the 1995 budget too, moved towards contractual agreements, expecting the USL to negotiate with its own organisations and with hospitals firms - and from 1996 on, also with private clinics and private professional persons - an annual estimate of the number of benefits presumably needed.

healthcare service, if private, or else must submit to controlled administration or to re-convert under a commissioner, if public. In order to avoid the risk of increased expenditure – following a rise in the volumes offered -, a cutback in patient capacity is foreseen – the 2002-2004 plan envisages a reduction of around 5,400 beds, 1,500 of them to be re-converted for long-term patients so as to achieve a ratio of 4/1000 beds for acute patients. On the other side a common ceiling system is to be adopted - including proceeds from both public and private structures, according to ASL - with connected tariff reduction for everyone should these ceilings be exceeded. To be more specific in this respect, every three months the previous quarter's expenditure is to be controlled, and eventual cutbacks are to be borne by all the providers, should the ceilings be exceeded.[27] The cutback is to be proportionate to the excess amount and reductions vary according to the DRG; – more substantial for the less complex DRG (see below), and linked to the higher unsuitability risk for the others -.

A basically similar scheme is to be extended to out-patient services. On the other hand, the following steps have been planned to promote the involvement of private agencies in the running and funding of the health scheme:

- the transformation of the AO into entities governed by private law, along the lines of the shareholding foundations. The first project of this kind was launched in February 2002 and concerns the IRCS Ospedale Maggiore together with the clinical institutions for specialisation (ICP). The characteristics of the new Foundation follow the example of those indicated in the laws linked to the 2003 budget examined above;
- the option for ASLs to change into joint-stock companies;
- the experimentation of new purchasers, to work alongside the ASLs. The plan to incentivise the grouping together of general practitioners into primary treatment groups is also taking this direction. In future these groups will also be entrusted with managerial activities;
- the distribution of vouchers for the elderly, non-self-sufficient poor, to be spent in the purchase of services from authorised operators – the so-called professional care givers -;
- the planning of regional supplementation funds.

Alongside this basic set-up there are more specific provisions aimed at favouring private providers. To mention just a few: the cutback in beds was planned only as regards public hospitals and was offset by the inclusion of 2,425 private beds in from 1996 to 2000. In addition, to cope with the high growth-rate of the deficit – which rose, from the mean values of, respectively, € 118.75 and € 155.97 million of the 1994 and 1995 budgets, to the mean value of € 516 million in the 1996-2000 period, up to the more than € 1 billion expected for 2001, notwithstanding the significant NHS upswing – restrictions to expenditure were approved, once again, only for state hospitals. The private clinics, on the contrary, seem to be opposing ongoing resistance, through appeals to the judiciary, to the predicted subsequent tariff cutback.[28]

Moreover, the decision not to differentiate the DRG tariffs according to the degree of specialisation of the centre, in actual fact entails the penalizing

(27) Alongside a single ceiling divided according to the ASL, there is also a regional ceiling, for particularly aexpert specialisation, with a generalised reduction for all ASLs, should there be excessive spending.

(28) In only 6 months, after the approval of l.r. 31, thre was an 8 percent spending increase.

of the state structures, usually with better technology. The latter are also obliged to accept all patients, including the very seriously ill and more expensive cases. Other costs must be added to this form of unfair competition: e.g. the transparency costs for competitions and tenders are a substantial item in the AO and ASL balance sheets, but not for private clinics. Nor are the ASL and AO permitted to choose their own managers, whereas the private structures may.[29]
Lastly, there is also the possibility that specialists are likely to be offered the chance to replace general practitioners when prescribing admission to authorised structures – though this is restricted to certain pathologies and has to respect pre-established therapeutic methods.
The data relating to funding DRG in the 1995-1999 period reported a 2.5 percent increase for state hospitals, whereas for private clinics the increment was 110 percent, with relatively higher gains for profit-based providers, compared to non-profit ones.
The explanation is to be found not only in the different rate of admission growth – respectively 58 percent and 3.6 percent – but also in their different configuration. Private clinics specialise in offering more highly profitable DRG packages. In this respect, it is worthwhile to remember how, in 1999, the profits connected with almost 1.5 million admissions to the public structures amounted to € 2.75 billion, whereas those linked to the 300,000 private admissions amounted to € 790 million. The overall result for this period showed a 9 percent rise in the resources allocated to funding for the private centres - from 20 to 29 percent. A similar situation was reported for the out-patient centres, where patients treated, from 1996 to 1999, increased from 74 to 109 million, with an increase in revenues of 8 percent for the public sector and 78 percent for the private structures.[30]

3.5.3 Critical issues to be faced

Despite the institutional changes adopted, there are still several emergencies to be faced. Waste and indifference towards users' needs are only two of the more frequent complaints levelled against the NHS. Both problems are undeniable, even though it is worthwhile remembering how, according to ISTAT (2000), 86 percent of the patients admitted was very, or sufficiently, satisfied with the medical care, whereas for food and hygiene the satisfied percents were, respectively 67 and 74 percent. This section, however, only examines the less discussed emergencies relating to unsuitability, equity and the coverage of a few, currently unprotected, needs.
Unsuitability, as indicated in the comments on essential levels, means the distribution of effective services where the risks exceed the benefits. This is an important variable, because it focuses on the product which should be ensured by the healthcare schemes, i.e. an improvement in the patient's general health. It does not apply, however, to other variables such as allocation efficiency. At the same time, suitability can take credit for

(29) For the cost impact connected with trasparency see: Mapelli, 2001 b.
(30) The data relating to DRG and out-patient expenditure are to be found in CGIL Lombardy, 2001. The data on the increase in admissions and the various profitability are from Carra and Padovan, 2002 For confirmation also see: the data supplied by the Lombardy healthcare departement (Assessorato alla sanità della Lombardia), in Mapelli, 2001 b.

exposing possible waste of resources, i.e. when an unsuitable activity does not improve health and therefore represents a waste of community resources. Defining equity is far more complex. Without going into detail, an adequate explanation is that equity is connected with the distribution, both inter-individual and inter-territorial, of benefits and costs. The pertinent assumption is that that discrepancies in this distribution are legitimate only if they can be defended impartially (i.e. whoever may have to be defended) and/or there is no possible way of contrasting them.
That being understood, this analysis will concentrate on the inter-individual and inter-territorial sharing of the two advantages linked to the distribution of healthcare services. The first, as regards results, concerns the reduction of mortality and morbidity. The second, in terms of procedure, concerns the access to healthcare services.

Suitability. In 1998 – the closest year with available data – according to the Healthcare Atlas (Atlante della Sanità), a good 79,000 deaths could have been avoided if suitable primary preventive measures, relating to early diagnosis and to appropriate therapy, hygiene and healthcare had been taken. At the same time, according to the agency for regional health services, in 1999 there may have been a good 1.6 million unsuitable admissions. Without these, moreover, there would have been a saving estimated at €1.03 billion.[31]
Unsuitability seems to be an important factor also as regards the variability of pharmaceutical expenditure, which is still high, even if weighted so as to neutralise the impact of the demographic structure on consumption (table 3.42). Nor do the differences in income distribution and /or in the breakdown of overall healthcare spending appear to play an important role.[32]

The same observations apply to the variability in the rate of in-patient admission which, in 2000, ranged from Piedmont's 135.7 to Abruzzo's 200.4. Furthermore, waiting lists are a widespread problem: according to ISTAT (2002), in 2000 half the Italians waited up to 60 days for a diagnostic test, and 32 for an appointment with a specialist.

Furthermore, only 34 percent of the hospitals is less than 30 years old; 30 percent is between 30 and 60 and the remaining 36 percent was built before 1940 – 6 percent in 1800 and 10 even earlier-.
In addition there are a few possibilities that some of the changes taking place may accentuate the risk of unsuitability. This study analyses two of them. The first is linked to the implementation of the Lombardy model. This has already been mentioned and is discussed more comprehensively in the chapter dedicated to comparisons with the rest of Europe. Competition based on freedom of choice tends to lead to an increase in quantity. In healthcare, however, in contrast with what is happening in many other sectors, the quantity increase does not necessarily represent an indicator of success. It might be so should the effect obtained lead to a reduction in waiting times for essential services. Due to information asymmetry, to the detriment of

(31) See: www.assr.it The estimate was performed by referring, for each in-patient, to the values relating to the most virtuos region, and then by apply the national DRG refund figures. The result was the transfer of about 20 percent of the ordinary admissions to day-hospitals.
(32) For a more detailed discussion see: Traversa, Magrini, Brunetti, cit.

Table 3.42 - Public pharmaceutical expenditure per capita (raw and weighted), 2000

	Gross public expenditure per capita	Gross public expenditure per capita (weighted)
Piedmont	169	159
Valle d'Aosta	150	147
Lombardy	158	157
Trentino AA	128	133
Veneto	151	150
Friuli VG	152	140
Liguria	199	172
Emilia Romagna	158	144
Tuscany	165	151
Umbria	184	168
Marche	174	163
Lazio	200	202
Abruzzo	188	183
Molise	168	162
Campania	194	219
Apulia	180	194
Basilicata	174	179
Calabria	179	190
Sicily	194	206
Sardinia	168	179
Italy	**174**	**174**
North	160	154
Central	184	177
South and Islands	186	200

Source: Ministry of Health, "National" report on the use of medicine, 2000

users, it might, however, reflect opportunistic behaviour by producers, whatever the suitability evaluation: the greater the deregulation of the supply, the greater the central role of the profit motive, the lower the average quality of the service, relating to the more technical-professional profile, the greater the risk.[33]

Among other things, this might lead to higher risks if this model were to be introduced in the poorer regions, characterised by an average quality supply – both public, and above all private – which is lower than in Lombardy (currently, only Calabria, Lazio and Sicily are copying the Lombardy scheme).

The second risk involves the recent proposals to abolish the exclusive relationship for employed physicians. Such proposals on the one hand favour the private sector by making available skilled labour at a lower cost that would be incurred under a regime of part-time employment, but on the other weaken the ability to improve public structures. This leads to moonlighting – even, as regards managerial activities - with competitors. No private enterprise would operate under these conditions. Once this has been acknowledged, however, other statistics too should be highlighted. According to table 3.43, between 1980 and 1997, the life-expectancy of Italians increased by 4.5 years, rising from 74 to 78.5 years, thus registering one of the highest growth rates in the EU.[34]

(33) In this respect it is interesting to note that, as in the Netherlands, the European state most committed to the promotion of competition between private providers, hospitals are forbidden to seek profit.

(34) All these comments must not, however, overshadow other possible benefits, such as the qualitative improvement of non-technical sectors, of hotel services and relations between opertors and patients.

The contrast with the United Kingdom is significant. Here life expectancy in 1997 was 1.3 years less that the Italian figure, even though in 1980 it was exactly the same (table 3.43). At the same time, maternal infancy mortality dropped from 14.6 to 5.6 for 1000 infants born alive (table 3.44). Avoidable deaths also dropped - 7 percent in the 1995- 996 period. Naturally, not all the progress can be attributed to the NHS, but its contribution is equally undeniable.
In this respect, on the basis of the data reported by the hospital discharge schedules (SDO), certain changes for the better as regards intermediate products are incontrovertible. Table 3.45 analyses, for example, the 1994-2000 period. There was an increment from 2.9 to 11.8 in the ratio between days of treatment in out-patient centres and days of treatment in the traditional system. Also the average load of DRG, i.e. the complexity of the services offered in hospitals, rose from 0.79 to 1.11.

Table 3.43 - Life expectancy at birth in EU countries

	1980			1997			% (average)
	Men	Women	Average	Men	Women	Average	
United Kingdom	71.0	77.0	74.0	74.6	79.7	77.2	4.32
Sweden	72.8	78.8	75.8	76.7	81.8	79.3	4.62
Spain	72.5	78.6	75.6	74.6	82.0	78.3	3.57
Nrtherlands	72.5	79.2	75.9	75.2	80.6	77.9	2.64
Portugal	67.7	n/d	n/d	71.4	n/d	75.0	n/d
Norway	n/d	n/d	75.8	n/d	n/d	78.2	3.17
Luxembourg	68.0	75.1	71.6	74.1	79.8	77.0	7.54
Finland	n/d	77.8	73.5	n/d	n/d	77.0	4.76
Greece	72.2	76.6	74.4	74.6	79.4	77.0	3.49
Italy	70.6	77.4	74.0	75.3	81.6	78.5	6.08
Germany	69.9	76.6	73.3	74.1	80.3	77.2	5.32
France	70.2	78.4	74.3	74.6	82.3	78.5	5.65
Denmark	71.2	77.3	74.3	73.3	78.4	75.8	2.02
Belgium	70.0	76.8	73.4	74.7	81.8	78.2	6.54
Austria	69.0	76.1	72.6	74.3	80.6	77.5	6.75

Source: Oecd (2002), *Health Data.*

Table 3.44 - Maternal and infant mortality - deats per 1,000 live births

	1980	1997	%
United Kingdom	12.1	5.9	-42.86
Sweden	6.9	3.6	-47.83
Spain	12.3	5.0	-59.35
Netherlands	8.6	5.0	-41.86
Portugal	24.3	6.4	-73.66
Norway	8.1	4.1	-49.38
Luxembourg	11.5	4.2	-63.48
Finland	7.6	3.9	-48.68
Greece	17.9	6.4	-64.25
Italy	14.6	5.6	-61.64
Germany	12.6	4.8	-61.90
France	10.0	4.7	-53.00
Denmark	8.4	5.2	-38.10
Belgium	12.1	6.1	-49.59
Austria	14.3	4.7	-67.13

Source: Oecd (2002), *Health Data.*

Admissions too, after the 1994-1998 boom – when the number of acute patients treated according to the traditional system rose to almost 9.5

million and the totality to over 12.5 million - now seem to be stabilising, with a slight drop in 2000.

Table 3.45 - Some indicators of HSN suitability

	1994	1995	1996	1997	1998	1999	2000
Average lenght of stay	8.9	8.1	7.6	7.2	7.1	7.0	6.9
Average weight	0.79	0.81	0.83	1.04	1.05	1.09	1.11
Day hospital and ordinary in-patient care beddays ratio	2.9	5.1	5.7	7.7	9.3	10.2	11.8
Ordinary in-patient acute care per 1,000 population	159.0	152.8	167.7	165.8	162.7	163.9	159.0

Source: Ministry of Health, SIS

Some of the suitability indicators chosen by the Ministry of Health, such as the performing of operations on the crystalline lens in an out-patient system, must also be studied.
The percentage of this type of admission, compared to admissions as a whole (given by the number of admissions in the ordinary system and the day-hospital patients) grew from 17.9 percent in 1998 to 37.7 percent in 2000. A similar trend occurred for the tying and stripping of veins which registered a growth, in the 1999-2000 period only, from 19.4 to 26 percent. To use another example: the admission rates per 100,000 inhabitants for diabetes and asthma should also be observed because they, too, are moving in the desired direction, i.e. they are decreasing. For example, between 1998 and 2000 the former dropped from 150.6 to 143.5, whereas the second, between 1999 and 2000, dropped from 64 to 57 percent. In addition, and more comprehensively, between 1998 and 2000, the number of discharges from surgical wards with medical in-patients (i.e. with a pathology not requiring surgery) compared to the total discharges dropped from 44,9 to 41.7.[35]
The same assessment seems to be applicable to other indirect suitability indicators relating to the use of input, and to the input values themselves, even though some of them need more in-depth evaluation.[36] For example, the average in-patient stay dropped from 8.9 to 6.9 (it was over 17 when the NHS was first introduced). In a similar manner, hospitals and clinics which operate within the NHS increased from more than 1.800 in 1979 to 1.316 in 2000, whereas the number of day hospital beds, in the ordinary system, dropped from over 500,000 in 1979 to 294,202 in 2000. At the same time, the number of day hospital beds increased from about 8,800 at the start of the 1990s to 23,000 at the end of the decade.
Therefore, unsuitability issues certainly exist.
Just as surely, however, there are signs that things are improving.

Iniquities. Beginning with the inter-individual distribution and with the performance indicators, a recent longitudinal study of the mortality rate in Tuscany – in particular in Leghorn and Florence -, highlighted the fact that

(35) All the above data derive from www.sanita.it/sdo.
(36) For example, the decrease in hospital stays, described in the following sentence, might also be connected with patient dumping.

from 1991 to 1997, the mortality rate due to all types of causes, in persons with only primary school diplomas, was 39 percent for men and 22-25 percent for women, higher than the rate for senior-school and university graduates. Unemployment had even more detrimental effects than lack of education: it caused increases in the mortality rate of 168-158 percent for men and of 82-88 percent for women. If the home is taken as a proxy for income, those who live in rented flats with less than 26 square meters per person showed a higher mortality rate (51-68 percent for men and 69-73 percent for women) than those who own larger homes. The disproportion seems to have grown, even though the mortality rate has diminished over time. From 1981-1987, for example, the education variable seemed to be the cause of a higher mortality rate of between 30 and 10 percent (instead of the 39 and 22 percent from 1991 to1997).[37]
To use the vibrant words used in another essay, "the total excess deaths in cities like Turin, put down to social differences in the 1990s roughly corresponds to the cumulative effect of a serious airplane accident every three weeks" (Costa, Perucci, Dirindin, 1999).

As to access indicators, a study performed in Lazio highlights how the probability of having to undergo a kidney transplant is lower in less educated patients. Access to anti-Aids drugs is also lower (demonstrated by the twice as high mortality rate among patients who belong to lower social-economic groups). The mortality at thirty days from aortic-coronary bypass operations is higher too. (Rapiti *et* al., 1999). Another Lazio analysis illustrates that persons belonging to lower social-economic groups run a higher risk of inappropriate therapy – e.g. too many admissions for operations which may prove to be unnecessary, i.e. appendicectomy, and too many ordinary scheme in-patients for services which could be carried out in day hospitals (Materia *et* al,. 1999).
Some of the foregoing institutional changes could also cause significant consequences as regards the access issue. The spending hike linked to the Lombardy model could, for example, lead to cutbacks in the services guaranteed by the NHS, with consequent penalising of the have-nots, who are obviously at a disadvantage as regards private insurance.
Similar considerations are valid for territorial inequalities. The results reported in Table 3-46 are astounding. In the south fewer people fall ill, yet more deaths occur for diseases of the circulatory system, and the values relating to cancer are very close to those of the Centre-North

Table 3.46 - Mortality and morbidity rates by geographical area (per 1,000 population)

	Mortality rate			Morbidity rate		
	North	Central	South	North	Central	South
Cancer	2.63	2.43	2.2	11.5	9.5	4.5
Circulatory system	3.32	3.46	4.01	12.5	15.0	11.5

Source: Assessorato alla Sanità della Regione Campania

(37) For more details, see www.regione.toscana.it

More specifically, in 1997 in Campania, life expectancy was shorter and the standardised mortality rates by age were higher than the Italian average, notwithstanding the relatively younger demographic structure of the region: 1,143/100,000 for men and 1,100/100,000 for women, compared with a nationwide average of, respectively 1,048/100,000 and 928/100,000. The gap is growing even wider: in the five year period 1970-74, it amounted to 4 percent, currently it has reached 14 percent. Infant mortality is, on the other hand, decreasing, but in this case too, not only the gap is evident – 8.9 per 1,000 for males and 5.7 for females in comparison with the average 6.9 and 5.3 percent - but the decrease rate is the lowest in Italy. In the plethora of variables to be examined, relating to access indicators, account should also be taken of inter-regional mobility. Table 3.47 indicates that the burden for the poorer regions is very high with additional, related costs for patients and the transfer of resources to the richer regions, which import in-patients. This phenomenon however, seems to have remained substantially stable over time.

Table 3.47 - The incidence of mobility, 2000

	Total hospitalization residents	Residents hospitalization "out of Region"	%	hospitalization balance
Piedmont	582,305	45,682	7.8	-7,447
Valle d'Aosta	18,108	3,376	18.6	-1,791
Lombardy	1,415,830	54,015	3.8	78,763
Bolzano	84,804	3,436	4.1	6,141
Trento	74,328	10,476	14.1	-2,686
Veneto	644,523	28,678	4.4	28,099
Friuli V,G,	171,902	10,207	5.9	5,936
Liguria	274,056	25,503	9.3	10,438
Emilia R,	584,827	33,980	5.8	44,612
Tuscany	504,991	25,650	5.1	32,152
Umbria	132,974	14,021	10.5	6,534
Marche	243,802	21,971	9	815
Lazio	809,531	50,549	6.2	25,664
Abruzzo	260,314	25,550	9.8	1,274
Molise	63,304	13,168	20.8	649
Campania	973,326	74,201	7.6	-51,368
Apulia	803,754	44,436	5.5	-5,528
Basilicata	109,297	26,516	24.3	-16,744
Calabria	362,498	46,231	12.8	-34,310
Sicily	767,219	55,773	7.3	-45,567
Sardinia	265,732	10,409	3.9	-5,506
Total	9,147,425			

Source: www.sanita.it/sdo

The distribution relevant to the foregoing suitability indicators should also be considered. All of them highlight the fact that the population of the poorer regions are more exposed to unsuitability risks. The population of the southern regions, for example, with the exception of Sicily and Sardinia, are subject to higher ordinary-scheme hospital in-patient rates (in 2000 the maximum peak reached 196.5 in Apulia). The fate of the Abruzzi and Molise population is no different: here the rates were, respectively, 204 and 191.9. The national average was, as indicated above, 15.9 – with a peak of 135.7 in Piedmont. The percent days spent in day hospitals in all the southern regions showed a similar value – with the

exception, once again, of Sicily – and remained lower than the national average (10.5 percent) – with minimum values (5.8 percent) in Apulia. In Molise it even dropped to 1.8. The same considerations apply to pharmaceutical expenditure, see Table 3.42.
In conclusion, when the already mentioned ISTAT figures on patient satisfaction with the NHS are disaggregated, it appears that in the south only 23.6 percent is very pleased with the medical care offered, compared to almost 45 percent in the north-west, 47 percent in the north-east and 37 percent in the centre.
Some comments must also be made concerning equity. On the one hand results have shown that healthcare services represent only one of the factors responsible for the morbidity and mortality rates. The outcome is that the injustices as regards life expectancies are only partially to be laid at the door of the NHS.

Another important factor to be borne in mind is that in Campania, for example, the unemployment rate is double the national figure, and chiefly concerns young people between 15 and 20 years of age. On the other hand, also as regards the injustices linked to unsuitability, there are signs of improvement. An analysis performed by the Technical commission for public expenditure (1998) underlined the fact that the NHS had, in any case, brought about a re-balancing over time of the regional healthcare spending, at least net of morbidity. From 1995 to 1997, Calabria, Basilicata, Campania and Sardinia managed, in fact, to attain the national average, even though they started out from lower values. Lastly, when evaluating a particular set-up, account must be taken of the so-called counter-factual, i.e.: would a different institutional organisation have led to greater equity? There is no analysis to support a positive answer. This does not, of course, mean that the NHS is not responsible at all. On the contrary it could, or should, have shown a greater commitment in the struggle against injustice.

Coverage. In the public debate on healthcare in Italy, there is a widespread feeling that the NHS is not able to supply many of the services desired by the population. This seems to be proved by, among other things, the growing burden of private expenditure. In this perspective, the solution seems to be a clear-cut opening up to insurance markets, because further taxes are impossible and because the public sector is unable to satisfy the new demand for customised treatment.
This type of pronouncement lends itself to a great deal of argument. On the one hand, in view of the latest ISTAT estimates (2002), private expenditure appears to have stabilised at around 1.9 and 2 percent of GDP. It does not, therefore seem to be rising.[38] On the other hand, the mere existence of private spending cannot automatically be a sign of the

(38) There was an increase, on the contrary, between the end of hthe 1970s and 1985 and between 1991 and 1995.
Estimates indicate an increase, respectively, from 0.8 to 1.3 and from 1.3 to 1.8 percent of GDP. Currently ISTAT (2002) pinpoints a value of 2 percent. The 1.9 percent value derives, on the other hand, from the division between the absolute values, reported by ISTAT and the GDP values indicated in table 3.37. The ISTAT data rapresent a revision, to a lower value, of the data reported over previous years, which indicated higher values. This helps to explain the discrepancy between the OECD values indicated in the second chapter on European comparisons.

inadequacy of public funding. On the contrary, in this case too, suitability has to be evaluated: and not only this: private spending includes over the counter drugs, an item which has intentionally been left to the private sector.
There are, however, two areas where the inadequacy of public coverage seems to be indisputable. The first is dental care: according to ISTAT (2002), the latter causes monthly spending per household to amount to around 300, although only 5 percent of all households actually makes use of it. The second concerns care for the those who are not self-sufficient. This type of expenditure is likely to grow, due to the increase in life expectancy – for 2003, the forecast is that there will be 14.4 million over sixty fives in Italy -, even though Italy allocates no more than 1.6 percent of GDP to this category against the 2.3 percent EU average. Another point to ponder is that the current separation between healthcare spending and social-healthcare expenditure seems to be totally inadequate.[39]

The point is that, for both types of spending, the market-based insurance system raises issues not only as regards efficiency but also as to equity. With respect to efficiency the accent is on the role played by uncertainty and information asymmetry, both of which might seriously restrict the ability of the insurance firms to supply the necessary protection (see chapter two). As to equity, there is a contrast between recourse to availability to pay and the protection of services considered essential. It is not by chance that the funds currently foreseen cover benefits that supplement, not replace, essential levels. Furthermore, there are problems, once again equity-related, raised by prospective tax relief granted in the form of deductions (i.e. in a progressive tax context they imply benefits which grow side by side with income), and of eventual contribution 'discounts' as regards plans that might potentially replace the state scheme. The motive underlying the latter point is that the state scheme might remain the provider of last resort and, as such, would not be able to refuse assistance to those who, even though they had previously left the scheme, might find themselves without adequate insurance protection.
To conclude, there are numerous issues. They do not, however, demonstrate the unequivocal failure of the NHS. In actual fact, as shown in the preceding chapters, the problems are common also in the healthcare services of other countries.

3.5.4 Federalism in healthcare: potential and risks

The NHS has never been a hierarchical organisation. On the contrary, law 833 even then assigned to the regions, in compliance with national laws, the legislative function governing healthcare, and the municipalities played a central role in the relevant administration. This is illustrated by the foregoing examination of the original set-up of the USLs. Furthermore, the second reform had not only already turned over to the regions the proceeds from contributions – later replaced in 1998 by the income from another regional tax, IRAP -, but had also allowed them ample margins for self-administration as regards self-funding. The regions were given the

(39) For the size of spending for the non-self-sufficient see: the report published by Sole 24 Ore Sanità, 2002.

option of integrating the cash transfers from the National healthcare fund, both with own taxes and an increase in total contribution rates, and also with an increment in ticket prices or with own revenues flowing to the ASLs.

When considering legislative and administrative functions, however, more relevance was given to the centralised management of health protection, governed by guidelines firmly defined by the national plan. In this respect, as far as funding was concerned, the proceeds turned over to the regions amounted to only slightly less than half of the total healthcare expenditure. The remainder was covered by tax-based cash transfers which, though on the one hand originated from the per-capita contribution, on the other also aimed at compensating for the differences in historical spending, so as to achieve a re-balancing from a geographical standpoint.[40] In this type of system, no region was financially independent. The situation was changed radically, however, by decree law 56/2000 and by the reform of Title V of the Constitution. More specifically, decree law 56 abolished all tax-based cash transfers from the State to the Regions governed by ordinary statutes: this entailed the abolition of the NHS.

The cash transfers are replaced: by an increase from 0.5 to 0.9 percent of the additional IRPEF rate (the reference revenue is calculated on the basis of the fiscal residence of the contributor and the increase is compensated by an equivalent decrease in the IRPEF or personal income tax rates), by an increase from € 0.12 to € 0.13 in the co-sharing of the excise tax on petrol and by the introduction of a new co-sharing in the VAT revenues, initially fixed at 25.7 percent and immediately raised to 38.5 percent (the revenue assigned to the single regions is allocated on the basis of the fluctuating, three-yearly average in regional consumption, i.e. those derived from ISTAT data). The regions also have the right to raise the additional IRPEF by 0.5 percent, without decreasing, in this case, the IRPEF rates. The IRAP tax is also assigned to the regions (this is increased, moreover, by the abolition of the co-sharing previously assigned to the municipalities and provinces) together with the road tax. In this context only Lombardy, Emilia Romagna, Veneto, Piedmont, Tuscany, Marche and Lazio are self-sufficient, though Liguria comes very close.

A national equalisation fund has also been introduced. Its objective, illustrated by Article 7, is to 'permit all the regions governed by ordinary statute, to perform the functions pertaining to their jurisdiction at essential and homogenous levels over the entire domestic territory.'

Equalisation should refer both to fiscal capacity – in order to reduce by 90 percent the differences in standardised revenue per inhabitant of each region with respect to the average standardised revenue of the ordinary statute regions – and to overall requirements.[41] Equalisation in terms of requirements is, in its turn, split between the equalisation of the healthcare needs and the equalisation, up to 70 percent, of the cost-related differentials of the non healthcare regional services – caused by the size variable, i.e. by the diseconomies of scale borne by the smaller regions. Equalisation with respect to healthcare needs is aimed at ensuring the

(40) To be more specific, the per-capita contribution was introduced in the mid 19802s, but has been subject to various modifications: i.e. first i depended on age, then this was repealed, only to be reinstated at a later date.

(41) The reference is to the revenue from own taxes, therefore co-sharing is excluded.

funding of essential and homogenous levels of healthcare assistance, on the basis of availability, for all citizens, of the same per-capita share weighted according to the principle of equivalent population stipulated by the National healthcare plan, i.e. according to age groups.
The co-sharing of VAT sustains this equalisation: the VAT co-sharing rate aims at guaranteeing the status quo of the first year of the new system (i.e. the same amount of the abolished cash transfers, net of the new income). The process entails, however, the progressive cancellation of compensation, which should cease by 2013 (with 5 percent annual reductions up to 2003 and of 9 percent as of 2004). The totality of the cash transfers remains substantially theoretical, meaning that, although the VAT co-sharing quotas in favour of the single regions are to be registered in an account item of the Treasury, the sums that the single regions effectively receive are defined on the basis of the balance between the amounts of the equalizing shares relating to fiscal capacity, and the amounts of equalising shares relating to needs.
A system of indicators should provide for verification and also guarantee that each region attain the essential levels.

The regions which do not implement the guarantee system are penalised by "the progressive reduction of equalising cash transfers and of co-sharing to a degree not exceeding 3 percent of the per-capita share stipulated by the National Healthcare plan and by their contextual replacement with tax-based cash transfers aimed at the start-up of a guarantee system".
Procedures to render more transparent the responsibilities of the various levels of government as regards the possible increase of expenditure for human resources, pharmaceutical spending and charges for the treatment of non-residents, should also be pinpointed. Should the centre be held responsible, there is to be a "corresponding adjustment to the VAT co-sharing quota".[42]
The new Title V accentuates the federal process, classifying, in Art.117, the protection of health among the subjects contemplated by the concurrent legislation. This means that, as regards healthcare, the legislative authority pertains to the regions, save for the definition of the fundamental principles which remains under the responsibility of the State. The normative provisions subsequent to legislative decree 56 were also drawn up in the same spirit, e.g. the abolition of the destination restriction for resources to be allocated to healthcare. Experiments apart, ample space has been opened up for different types of local organisational models.
The new Title V could, in fact, create new scenarios as regards funding. Article 119 as amended establishes that the equalisation, which remains under State responsibility, shall be implemented, without restrictions as to destination, to the benefit of territories with lower fiscal capacity per inhabitant. This provision, which abolishes the reference to needs included in the previous version of Article 119, might seem to anticipate the abandoning of the needs based equalisation provided for, on the contrary, by legislative decree 56. Contextually, however, the penultimate comma of the same article gives the State the opportunity to allocate ulterior resources "to promote economic development, cohesion and social solidarity, to remove

(42) For an accurate description of tha application of legislative decree 56 see: Giarda, 2000.

economic and social imbalances, to foster the effective exercising of the rights of the person…..". As highlighted by Giarda (2002), this might be the way to bring back a type of integration with the principle of need.
Will these modifications be able to ensure more immediate solutions to the emergencies to be faced? This analysis cannot offer an in-depth reply. Even though the possible advantages of federalism must be acknowledged – first of all as regards the conferring of responsibility -, the last section of this chapter will outline four possible risks; awareness of them should be helpful to the implementation of the federal project.

Risk 1: diminished commitment to redistribution in favour of the poorer regions

As indicated above, legislative decree 56, currently in force, stipulates the termination, by the end of 2013, of the compensations for current historical expenditure allocated in favour of the poorer regions. The increment of own tax rates, tickets and the reduction of other expenses remain the only viable methods to cope with any lack of funds. Thus, not only the fiscal burden for healthcare would depend on the place of residence but, because of the considerable disparity between regional GDPs - the highest of all among the federal states - resources might prove to be insufficient even when taxes are very high.

Table 3.48 gives a detailed outline of the differences in per-capita revenues in 2000, without equalisation. In this respect, a useful indicator is that the increase of the regional tax on productive activities (IRAP) in 2000, and that of the additional personal income tax (IRPEF) to maximum brackets, were probably the factors that gave Lombardy a higher revenue level, close to 23 percent of the total, compared to Calabria's 6 percent. Even greater problems are likely to occur if IRAP is abolished in favour of a devolution of the corporate income tax (IRPEG) and, as regards IRPEF, with the possible replacement of tax credits for tax deductions, which would lead to a reduction of the taxable base for the additional IRPEF.

Table 3.48 - Regional revenues per capita, 2000
(in euros)

	Regional tax on productives activities	Petrol excise	Personal income tax	Car tax	Vat	Total
Piedmont	598	57	96	93	604	1,446
Lombardy	766	55	103	97	646	1,668
Veneto	591	57	90	102	612	1,451
Liguria	455	50	91	80	658	1,334
Emilia R,	649	61	102	104	661	1,577
Tuscany	517	64	88	92	609	1,371
Marche	479	55	78	92	568	1,273
Umbria	428	58	75	103	544	1,209
Lazio	627	58	84	83	591	1,443
Abruzzo	375	50	62	84	493	1,064
Molise	301	39	54	71	446	910
Campania	267	34	46	48	402	797
Basilicata	273	26	48	69	392	808
Apulia	259	40	49	39	433	819
Calabria	261	41	42	57	426	828
Total	**525**	**52**	**80**	**82**	**563**	**1,302**

Source: compiled on the basis of the State-Regions coference

Equalisation would, of course, remain in force in relation to needs. However, not only does it ignore re-balancing (this would, on the contrary, be financed with own resources), but in its present form – i.e. in the per capita share weighted by age group – would further penalise the southern regions, which have a relatively younger demographic structure. Other parameters could be used, such as the relative poverty guideline adopted by Campania. This is opposed by the northern regions which also oppose the acknowledgement of a trade-off between re-distribution and the assigning of responsibility.[43]
Furthermore, the start-up of the funding system introduced by decree law 56 was strongly influenced by the past, i.e. the shares effectively made available to the regions compensate for the mobility registered during the previous year. This means that the regions with a negative balance of admissions have begun to tread the federal path already burdened by this outstanding factor. Lastly, there is the problem of the overall availability of the richer regions towards solidarity.[44]

Risk.2: Insufficient incentives for the acceptance of responsibility.
The incentives for the acceptance of responsibility are among the advantages of federalism, which seems to be increasingly gaining consensus. To allow these advantages to work fully however, at least two conditions are essential. The first entails a clear-cut division of tasks and, consequently, of the responsibilities to be assigned to the different participants. Otherwise, the risk of opportunism, stalling and/or cost-dumping behaviour is very high.[45]
The second concerns the development of a system of service indicators able to survey what is produced, at what cost and to the benefit of whom. The problem is that both of them are difficult to carry out.
The allocation of tasks is arduous, due both to political and technical reasons. Sharing out the tasks involves the division of powers, hence the political aspect, but in this case there is widespread dissent: even in Title V 'amended' the indications are unsatisfactory because they are compatible with different specifications, more or less federalist. Is a National healthcare plan, for example, still compatible with the federal set-up, and if so, what type should it be? What sanctions could be applied against the defaulting regions? These issues are still open.
As to the technical reasons, if the sharing-out guidelines were to be accepted, it might be complicated, in practice, to assign responsibilities because of the many variables connected with the healthcare sector. Eventual upswings in pharmaceutical spending might, for example, stem both from price policies and from the indications prepared on a national level, and also from the prescription signing behaviour of doctors controlled by the regions. The same type of consideration also concerns expenditure for human resources, determined both by the national collective labour agreements and by local policies governing the use of the

(43) For a breakdown of relative poverty see: Svimez, 2001. For the trade off mentioned see Isae, 2002
(44) For a more detailed examination of the possible effects of federalism on distribution see, among others, Arachi and Zanardi, 2000 and 2001 and Dirindin and Pagano (edited by), 2001.
(45) For the risk of an insufficient assigning of responsibility, with specific reference to the financial sector, see Balassone and Franco, 2000.

labour force, and many other measures too, such as the recent norms relating to the reduction of waiting lists.
The development of an adequate system of indicators must, on the other hand, be able to cope with problems connected with the considerable variability – not only as regards local situations and possession of resources, but also as to the gravity of the patient's clinical condition. If this is not neutralised, it could generate perverse effects, e.g. the production of successful services might reflect nothing but a less complex case mix.[46]

Risk 3: Higher transaction costs
Commenting this risk is not very difficult. In synthesis, the lack of a clear-cut allocation of tasks can only lead to an increase in the litigation stemming from the system.

Risk 4: The creation of a spoil system which penalises medical research and professional expertise
The danger is that the greater powers assigned to the role played by the regions might lead to the supremacy of politics, also in inappropriate fields such as medical research or, more comprehensively, professional expertise.

The risk is, to make a different approach, that there may be a return to one of the evils which at the start, invalidated the NHS, i.e. excessive political influence. What are the conclusions? Even after acknowledging the different opinions which might be expressed, two conclusions still seem to be indisputable. On the one hand, everything depends on how federalism is to be defined. In this respect, the federalist project still seems to be far from complete. On the other hand, when defining federalism, the contribution of the central State cannot be underestimated. There are still, of course, many urgent issues to be faced. The analysis performed illustrates, however, the groundlessness of many of the accusations levelled against the pre-federal NHS, both as regards expenditure control and as to the ability to adopt changes in order to achieve the desired objectives.

3.6 Social assistance benefits

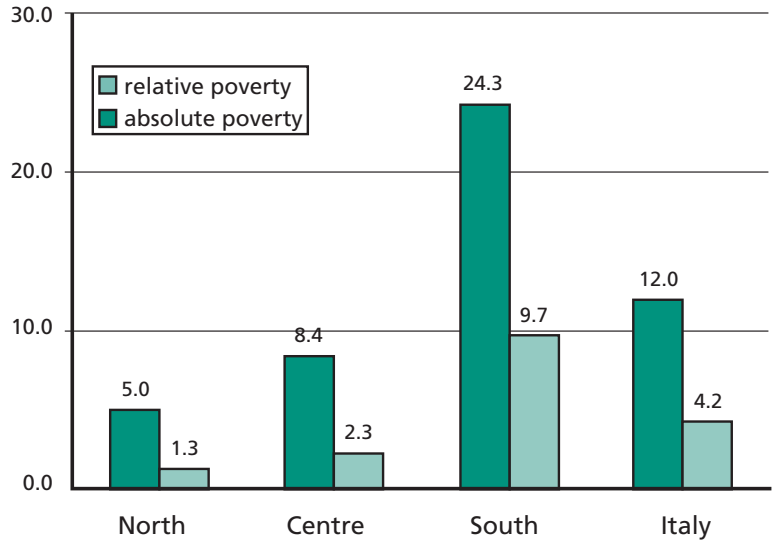
3.6.1 Expenditure for social assistance

According to official statistics, in Italy expenditure for social assistance is very limited and in any case, the GDP share is decidedly lower than in most of the other Members States of the European Union. Spending for social assistance is also characterised by its almost exclusive emphasis on certain categories of citizens and by the "residual" role assigned to anti-poverty measures.
These characteristics have persisted even after the re-classification of the social assistance and social security items (see: table 3.5): social assistance accounted for only 16.8 percent of the social benefits expenditure and for 3.9 percent of GDP.
In the re-classification, social insurance financed by the GIAS amounted to € 26.45 billion out of the total assistance expenditure of € 46.92 billion.

(46) For this and the following theme see the interesting on-line conference held from 17 to 21 June 2001 on websites www.epidemiologia.it, www.zadig.it and www.epicentro.it

More than half of the social assistance spending, 56.3 percent, was distributed, therefore, in accordance with social security criteria: particular significance was given to being part of the working world. A further share of social assistance spending, around € 12.7 billion (see: table 3.5), was linked to age or disability requirements (pensions and social allowances). Only the remaining € 7.7 billion were distributed without taking account of work- related, age or physical invalidity conditions. This share amounted to 2.8 percent of the social assistance spending and to 0.6 percent of GDP.
In Italy anti-poverty protection instruments are lacking. Family allowances and unemployment benefits (unemployment, availability for employment, wage supplementation allowances) are only distributed to those who are already part of the regular working world. All-inclusive forms of protection against poverty, i.e. minimum placement income (RMI) and allowances for families with at least 3 children, have only recently been, tentatively, introduced.
The RMI, which has still not emerged from the experimental stage, was recently moved back into the regional social assistance schemes by the recent Pact for Labour: it is easy to foresee that there are likely to be funding problems precisely in those southern regions where poverty is greater. (graph 3.4).

Chart 3.4 - Poverty in Italy by geographical area year 2001



3.6.2 Poverty in Italy

The latest ISTAT survey on poverty in Italy indicates that, over the last few years, poverty has remained stable.
In 2001, 12 percent of Italian households spent less for consumer goods

(47) The relative poverty threshold is determined annually in relation to the per capita average monthly expenditure as regards family consumption. If the average national spending drops this can determine a drop in relative poverty, even if income and consumption figures relating to poor families remain unvaried.

than the level attributed to the "relative" poverty threshold.[47] (€ 814.55 monthly for a two person family). 2,663,000 families out of a total 7,828,000 poor persons (13.6 percent of the resident population).
Poor households and persons live in various areas. 66.3 percent of the poor households, and 69.4 percent of the poor persons are to be found in the southern regions; in the centre the values amount, respectively, to 13.6 and 13.5 percent, in the north to 20.1 and 17.1 percent (table 3.49).

Table 3.49 - Relative poverty by geographical area in 2001

	North	Centre	South	Italy
In thousands				
poor families	534	363	1,766	2,663
resident households	10,634	4,304	7,254	22,192
poor persons	1,339	1,057	5,432	7,828
resident persons	25,593	11,061	20,746	57,400
% Breakdown				
poor families	20.1	13.6	66.3	100.0
resident households	47.9	19.4	32.7	100.0
poor persons	17.1	13.5	69.4	100.0
resident persons	44.6	19.3	36.1	100.0
Poverty incidence - %				
households	5.0	8.4	24.3	12.0
persons	5.2	9.6	26.2	13.6

Source: Istat

Therefore, the percent of poor households in the south is 24.3, twice as high as the national average, in the centre it accounts for 18.4 percent and in the north for 5 percent
"Absolute poverty" is the second indicator: in this case the consumer level of the poor household is lower than the monetary value of a given 'basket' of goods and services, amounting in 2001 to a monthly € 559.63 per two-person household. In 2002 the number of households under the absolute poverty line was 940,000, 4.2 percent of the whole, amounting to 3,028,000 persons, 5.3 percent of the resident population. (table 3.50).

Table 3.50 - Absolute poverty by geographical area in 2001

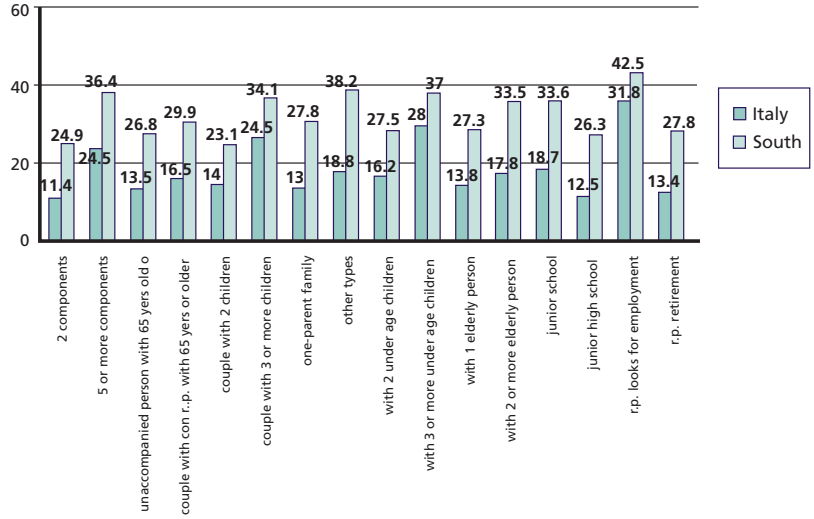
	North	Centre	South	Italy
In thousands				
poor families	135	99	706	940
resident households	10,634	4,304	7,254	22,192
poor persons	380	314	2,334	3,028
resident persons	25,593	11,061	20,746	57,400
% Breakdown				
poor families	14.4	10.5	75.1	100.0
resident households	47.9	19.4	32.7	100.0
poor persons	12.5	10.4	77.1	100.0
resident persons	44.6	19.3	36.1	100.0
Poverty incidence (%)				
households	1.3	2.3	9.7	4.2
persons	1.5	2.8	11.3	5.3

Source: Istat

In this case too the majority is to be found in the south, with 75.1 percent of the households and 77.1 percent poor persons. The percent of

poor households in the South is, therefore 9.7 percent, in comparison to the 2.3 percent in the centre and the 1.3 percent in the north.
Relative poverty status is connected chiefly to the characteristics of the household and of the reference person (r.p.). More specifically, poverty occurs far more in large families, in those with more children, chiefly under age, in families including elderly persons and in those where the reference person is out of work. (see: graph 3.5).

Chart 3.5 - Incidence of relative poverty by household or reference person characteristics (r.p.)



The latter feature characterises 31.8 percent of the poor households (in the south this percent rises to 42.5). At a national level poverty has the greatest impact in households with 3 or more under age children, 28 percent, and, in general, in households with 5 or more components, 24.5 percent. In the south the incidence of poor households reaches 37 percent, for households with 3 or more under age children, and 36.4 percent in those with 5 or more components.
The incidence of large households is particularly high when they include elderly persons and when the reference person is elderly. The percent values are high chiefly in the south, where 33.5 percent of the households with 2 or more elderly persons, and 29.9 percent of the households with a 65 year old, or older, r.p., is below the poverty threshold.
Households with 3 or more children are also those with the highest frequency of absolute poverty, 14.5 percent, compared to the average 4.3 percent. Consequently, the 2001 figures, which are not dissimilar to previous years, confirm that the conditions of poverty in our country are to be found chiefly in the south. Poverty is also caused by unemployment and by the large number of household members, particularly when there are under children under age.
This is not surprising if we consider that in the Italian social protection scheme there are no protection measures against this type of poverty. Family allowances, because the funding is contribution-based, are only given to subordinate workers, i.e. those paid out by institutions for

protection against unemployment (unemployment and availability-for-employment). Persons looking for work and large households without members who are employed are virtually without protection.

Box 11 – Family policies

Inside the EU, Italy stands out for the limited amount of resources, 0.9 percent of GDP, allocated to family services. Only Spain has a lower benefit level than Italy's; the European mean relating to family benefits amounts to 2.2 percent of GDP, with values higher than 3 percent in Denmark, Finland and Sweden, equal to 3 percent in Germany and 2.8 percent in France. (see: table 2.6).
There are, of course, numerous social-economic causes underlying the fall in the fertility rate, but it is symptomatic that two European Union countries, Spain and Italy, with the least expenditure for households, are those with the lowest fertility rate.
About half of the spending for families is made up of family allowances (ANF), almost exclusively reserved to employed workers, both public and private, and to pensioners. This situation stems from the "social security" nature of the ANF, funded by specific contributions borne by the employer; support for families, however, should not concern employed workers only, but the whole population.
Law 488/1998 introduced an allowance for families with at least three children and a maternity allowance, for poor families and unemployed women, but the benefits, for these allowances, distributed in 2000 and 2001 amounted, respectively, to € 315 and € 280 million. These sums were far less than those distributed for the ANFs and also from those needed to support families.
The family allowances (ANF) and the social assistance benefits are not the only type of financial initiatives for family support: there are, in fact, tax breaks such as deductions for dependent family members.
In this field too, international comparisons leave Italy the losers, especially with respect to France and Germany where tax relief, when there are dependent family member, is considerably higher.
Tax relief in Italy is also limited by the inability to carry tax credits forward; in fact, if a tax credit is applicable only up to the amount of the gross tax, it is clear that low-income taxpayers cannot make use, either totally or partially, of tax relief.
Nor can family support policies be restricted exclusively to cash benefits. Also legislative, and contractual, provisions, as regards working hours and services offered to persons are essential.
Part-time, sickness leave, family related leave in general are all instruments for regulating work time/family time necessary to meet the needs of the family. These are not only those required by the children but also by assistance to the elderly.
Re-entry into the employment market must be also facilitated for women who have been forced to leave it for family reasons.
Just as important are the social services offered in local sectors. In the 1990s, following the balancing of the state finances and the resulting cutback in cash transfers to the municipalities, nursery and infant school fees rose significantly. For young families, often with a precarious situation in the working world, this has determined a considerable, often unsustainable, increase in expenses for their children.

Social benefits for the family – Total types of benefit
(in millions of euros)

	1998	1999	2000	2001
Maternity allowances	1,275	1,376	1,380	1,396
Family allowances	4,634	4,716	5,260	5,327
Other benefits and allowances	201	514	406	771
Social assistance	3,302	3,474	3,794	3,993
Total	9,412	10,080	10,840	11,487
as a % of GDP	0.88	0.91	0.93	0.94

Compiled on the basis of ISTAT data

The Italian social protection system definitely needs new protection instruments designed for the family, whatever the activities of its components, and also for people who are searching for work.
The allowance for families with 3 or more children is a first step in this direction, but the € 280 million spent in 2001 can in no way alleviate the conditions of poverty-stricken persons, considering that family allowances for workers and pensioners amounted to around € 5 billion. There are no structured forms of wage protection for the unemployed either. The recent decision to assign responsibility for this protection to the regions, without providing for adequate funding, makes its survival very unlikely. There is, in particular, a risk of having funds available for areas with very little poverty, and none for those regions where protection is most needed, i.e. in the south.

3.6.3. Assistance pensions

An important role as regards social assistance benefits is played by pension allowances un-related to the previous employment of the beneficiaries. Normally financed by general taxation, these allowances aim at guaranteeing a minimum living wage to individuals without personal means or with insufficient family income, i.e. social pensions, or to provide an income for persons unable to be gainfully employed because of congenital disabilities or contracted infirmities, i.e. civilian disability pensions and war pensions.
The foregoing pensions differ, therefore, from the assistance related pensions that protect workers already insured against events causing disabilities leading to the reduction or loss of their capacity for work or, as regards survivors, in case of death.
These pension benefits comprise social pensions and allowances, pension and/or allowances for civilian disabled, the civilian blind and deaf-mutes, distributed by the National institution for social insurance (INPS), and war pensions, distributed by the Ministry of the economy and finance. In 2001 the total pensions were 2.7 million, out of a total 22 million pensions, for a total expenditure of € 11.3 billion, or 6.2 percent of the total pension spending.

Social pensions and allowances

INPS distributed 704,884 social pensions through 31/12/2000 for an overall € 2,31 billion annual amount, i.e.1.3 percent of total pension spending and 0.2 percent of GDP.

Box 12 – Social pensions and social assistance benefits: normative framework

Social pensions were introduced into the Italian system by law 153/69. Article 26 established the payment of a non-reversionary income for destitute, over sixty five year old persons, on the condition that they "have no income or social security benefits, excluding family or assistance-related allowances, as well as war pensions, with the exception of annuities for WWI and previous- war veterans distributed in an ongoing manner by the State, by other public agencies or by foreign countries and that, in any case, they are not beneficiaries for any reason whatsoever of sums equal to or in excess of" the limits stipulated by the law.
Social pensions are paid by INPS, which is responsible for determining eligibility. Eligible beneficiaries included those beneficiaries of civilian disability pensions, on attaining their 65th year, who meet the relevant income requirements.
Law 335/1995 (the Dini reform), as of 1 January 1996, replaced social pensions with social assistance benefits. A monthly amount, higher than that of the social pension, was stipulated, but the maximum income requirements were also higher. Social pensions are still paid, though only to those who achieved the relevant eligibility requirements before 1996. In 2002 the monthly amount of the social assistance benefits was fixed at € 350.57.
The right to a social pension is subject to the condition that the unmarried applicant does not possess personal income, or whose financial means are lower than the social assistance payment. In the latter case the benefits are reduced. Further reductions, up to a maximum 50 percent are foreseen for beneficiaries who are inmates of rest homes where expenses are borne by the State.
Should the beneficiary have very limited resources or no income at all, first-tier pensions and social pensions are higher. As of 1 January 2002 the amount has been increased, subject to various conditions, in order to guarantee a personal income amounting to € 516,56 per month.
The same benefits are due to the civilian disabled, the totally blind and the deaf and dumb.

47.8 percent of these benefits are distributed in southern Italy, 30.9 percent in the north and the remaining 21.3 percent in the centre (table 3.51).
In the south social pensions account for 5.2 percent of the benefits distributed in this area, 2.3 percent of the overall pension spending. In the central regions the percent number of pensions drops to 3.4 percent and to 1.3 percent in terms of amount distributed. In the north social pensions account for 2.1 percent of the total pension benefits and only for 0.8 percent of the overall spending.
The beneficiaries of social pensions are chiefly women (graph 3.6). The benefits distributed to men over fifty amount to only 22.5 percent of the whole, whereas the share allocated to women is much higher, 77.5 percent. Women predominate in all the geographical areas, though the groups which exceed the national average are to be found in the north and the centre (respectively, 79.6 and 78.8 percent).
An analysis of the data relating to the individual regions highlights the

Table 3.51 – Social pensions by gender and geograpfical area in 2000 (1)

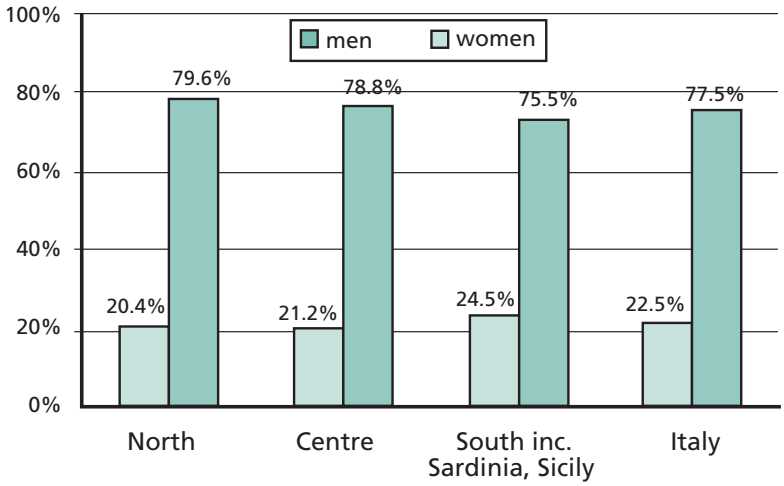
Geographical area	Men				Women				Total			
	Number	%	Amount (thousand of euros)	%	Number	%	Amount (thousand of euros)	%	Number	%	Amount (thousand of euros)	%
North	44,514	28.0	156,024	28.7	173,329	31.7	556,425	31.4	217,843	30.9	712,449	30.8
- *North-West*	25,863	16.3	92,346	17.0	102,056	18.7	330,939	18.7	127,919	18.1	423,285	18.3
- *North-East*	18,651	11.7	63,678	11.7	71,273	13.1	225,486	12.7	89,924	12.8	289,164	12.5
Centre	31,769	20.0	110,463	20.3	118,222	21.7	382,731	21.6	149,991	21.3	493,194	21.3
South Sardinia. Sicily	82,634	52.0	277,627	51.0	254,416	46.6	831,223	47.0	337,050	47.8	1,108,851	47.9
Italy	158,917	100.0	5440114	100.0	545,967	100.0	1,770,380	100.0	704,884	100.0	2,314,494	100.0

(1) Social pensions paid abroad or that could not be allocated are not included

Source: compiled on the basis of Istat and Inps data

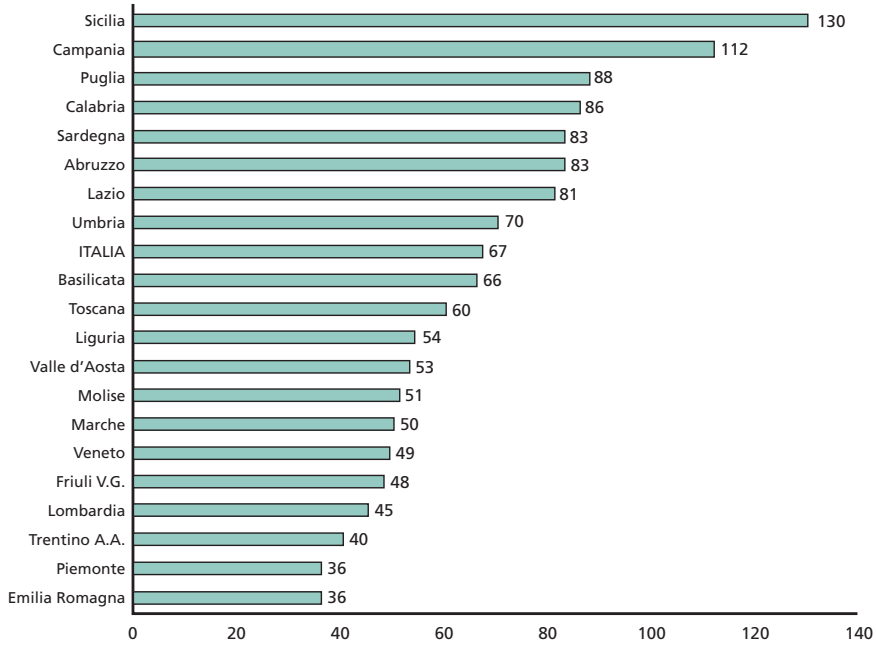
fact that the distribution of social pensions over the territory varies considerably (tables AS3-9 and AS3-10). The region with the highest number of benefits distributed is Sicily with 108,842 pensions, 15.4 percent of the total pensions, followed by Campania with 90,052 benefits (12.8 percent of the national total).

Chart 3.6 - Social pensions by gender and geografical area



Equally significant shares are to be found in Lazio (10.6 percent), Lombardy (10.3 percent), Apulia
(7.9 percent), Tuscany (6.6 percent) and Veneto (5.6 percent). All in all, these seven regions account for 69.2 percent of the number of social pensions and 69.6 percent of the overall expenditure. In the remaining regions the shares are lower than 5 percent, with the minimum share in Valle d'Aosta (0.2 percent of the whole).
This distribution also depends, however, on the size of the population residing in the various regions and on the age range. The retirement rate, calculated for social pensions, as the ratio between the number of benefits and the resident population of 65 year olds (or older), is the basis for standardised territorial comparisons, which are unaffected by the variations in resident population density of each region (graph 3.7).

Chart 3.7 - Social pensions: retirement rate by region. Year 2000 (1)



(1) The retirement rate is calculated as the ratio between the number of social pensions and resident population 65 and older

The analysis of the values derived from the indicator in question underlines some of the disparities relating to the territorial distribution illustrated by the absolute figures. Lombardy, for example, which used to be among the first four regions as regards the number of pensions distributed, has one of the lowest retirement rates (45 pensions every thousand residents compared to the over 67 percent average national rate). Sardinia and Calabria, on the other hand, where there are shares 5 percent below the national total, have a retirement rate, based on pensions distributed, (respectively 83 ‰ and 86‰). Only Sicily (130‰), Campania (112‰) and Apulia (88 ‰) have higher rates.

Disability pensions for civilians with impaired sight and hearing.
In 2000, 1,548,210 civil disability pensions were distributed in Italy, including those for the blind and the deaf and dumb. The overall amount paid out was approximately € 7.33 billion, (4.1 percent of the total pension spending and 0.6 percent of GDP).

Box 13 – Disability pensions for civilians with impaired sight and hearing: legal framework

Civil disability pensions were introduced in Italy by law 625/66 which provided for the payment by the State, through the Ministry for the Interior, of a monthly sum to disabled and maimed civilians, over the age of 18, with non-mental, certified, total and permanent incapacity for work, and un-provided with means, pensions or allowances of any kind whatever.
Subsequently, laws 743/1969 and 118/1971, specified the qualifications

required for the certification of the disability and the eligibility base for beneficiaries was extended.
According to law 118/1971 "citizens are considered disabled if they have congenital or acquired handicaps….if they have suffered a permanent reduction of no less than one third of their ability to work or if, being under 18 years of age, they have ongoing difficulty in performing the tasks and functions pertaining to their age. This category excludes persons disabled due to war, work or service causes, and the blind and deaf-mutes who are provided for by other laws".
The civilian disabled and maimed, between 18 and 65 years of age, with total incapacity for work, are entitled to disability pensions; cases with impaired working capacity (less than 74 percent) are entitled to a monthly allowance.
When the beneficiary, both of the monthly allowance and of the inability pension, reach 65 years of age, the benefits are suspended and transformed into social pensions.
Those civilian invalids who are totally disabled and "are unable to walk without the 'ongoing assistance of a carer" or who, "being unable to perform the daily actions of living, need ongoing assistance" are entitled to a non-reversionary carer's allowance (law 18/1980).
Blind, or deaf and dumb persons are entitled to specific pensions and/or allowances, governed by different provisions from those currently in force for civilian disability pensions. Article 1, law 381/1970 stipulates that " …….. deaf-mutes over 18 years of age are entitled to a monthly assistance allowance……." on the condition that their personal income does not exceed the limits stipulated by law. More specifically, "……a person is considered to be deaf-mute when his/her hearing is impaired by deafness, either congenital or acquired during the evolutionary age, which has prevented him/her from learning normal speech, provided that the deafness is not exclusively mental and does not stem from war, work or services causes."
In this case too, when the beneficiary reaches 65, the allowance is suspended and replaced by a social pension.
By virtue of art. 4 of law 508/1988, deaf-mutes are also entitled, on the sole basis of their disability and without restrictions as to age or income, to a non-reversionary communication allowance.
With respect to pensions for the blind, a distinction is made between absolute blindness, with no sight in either eye, and partial blindness, with no more than a twentieth residual sight in both eyes. The former are entitled, as of their eighteenth year and provided that their personal means do not exceed the limits stipulated by law, to an allowance whose amount is reduced if the person concerned is an in-mate of an assistance centre. Blind children under 18 years of age are entitled only to the carer's allowance (law 508/1988). The partially blind are, on the other hand, entitled to a pension whatever their ages, although the income limits, stipulated by the provisions in force, still remain valid.
The blind, like the totally disabled civilians, are also entitled, on the sole basis of their disability, to a non-reversionary carer's allowance.
Unlike the civilian disability pensions and the benefits distributed to the deaf and dumb, the pensions for the blind who attain 65 years of age, are not transformed into social pensions.
As of November 1998, as a result of the coming into force of legislative decree 112/1998, the payment in monthly instalments of pensions and allowances is carried out by INPS and no longer by the Ministry of the Interior.

Most of these benefits are distributed to persons living in the southern regions, with 655,587 pensions (42.4 percent of the whole) and overall spending in the amount of € 3.03 billion (41.5 percent of the national value). 38.3 percent of the benefits is absorbed by the north (39.1 percent as regards expenditure) and 19.3 percent by the centre (table 3.52).
In the southern regions, civilian disability pensions account for 10.1 percent of all pension benefits distributed in the geographical area, and 6.4 percent as regards expenditure. In the central regions the share of the total pensions distributed accounts for 6.7 percent and drops to 3.7 percent as regards expenditure. In the north these percent values stand at 5.6 percent of the number of pensions and 3.1 percent of the expenditure.
Civil disability pensions are mostly paid to women, who receive about 62 percent, both as regards the number of benefits and as to overall expenditure. This occurs chiefly in the north and centre (graph 3.8) where the share of pensions distributed to women exceeds the mean national value. (64.1 and 62.7 percent, respectively).

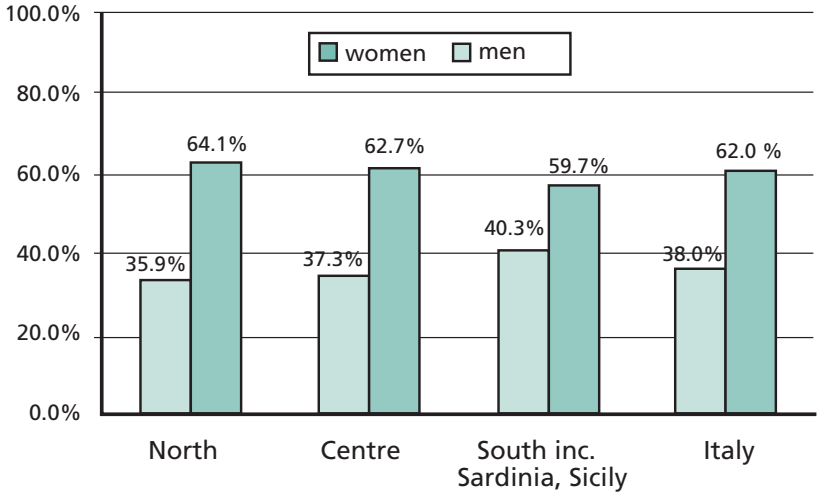
Table 3.52 – Civil disability pensions by gender and geograpfical area in 2000 (1)

Geographical area	Men				Women				Total			
	Number	%	Amount (thousand of euros)	%	Number	%	Amount (thousand of euros)	%	Number	%	amount (thousand of euros)	%
North	213,131	36.2	1,018,164	36.4	380,313	39.7	1,829,954	40.5	593,444	38.3	2,862,940	39.1
- *North West*	122,564	20.8	585,161	20.9	217,300	22.7	1,046,264	23.2	339,864	22.0	1,631,425	22.3
- *North East*	90,567	15.4	438,185	15.7	163,013	17.0	793,330	17.6	253,580	16.4	1,231,515	16.8
Centre	111,581	18.9	539,103	19.3	187,598	19.6	887,762	19.7	299,179	19.3	1,426,865	19.5
South Sardinia, Sicily	264,498	44.9	1,237,568	44.3	391,089	40.8	1,797,630	39.8	655,587	42.3	3,035,198	41.4
Italy	589,210	100.0	2,794,834	100.0	959,000	100.0	4,515,346	100.0	1,548,210	100.0	7,325,002	100.0

(1) Social pensions paid abroad or that could not be allocated are not included

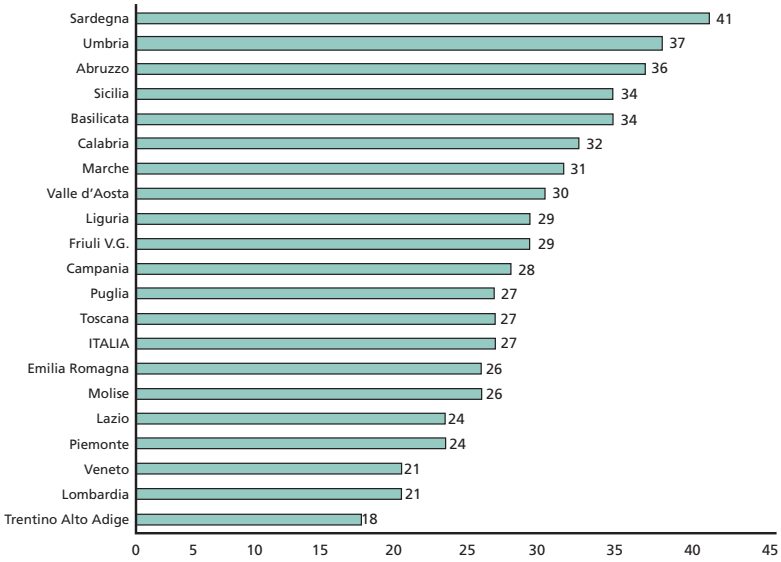
Source: compiled on the basis of Istat e Inps

Chart 3.8 - Civilian disability pensions: retirement rate by gender and geographical area - Year 2000



The analysis by region (tables AS3-11 and AS3-12) indicates that Lombardy is the region with the highest number of benefits distributed, 187,653 pensions (12.1 percent of the whole), amounting to € 905 million (12.4 percent of the whole), followed by Sicily with 174,558 pensions (11.3 percent of the whole) and a € 793 million expenditure (10.8 of the whole), and Campania with 10.4 percent of the number of pensions and 10.3 percent of the total expenditure. A significant number of pensions is also registered in Lazio, with 8.3 percent of the total, in Apulia (7.2 percent), in Emilia Romagna (6.8 percent) and in Piedmont (6.5 percent). The regional classification, by number of pensions, indicates that 62.6 percent of the civil disability pensions are distributed in seven regions, only three of them northern, even though the majority of these benefits are distributed in the north.
As with social pensions, the regional distribution is influenced by the density of the resident population in each region. In this case too, if reference is made to a standard measurement (retirement rate) the real scenario is considerably different.

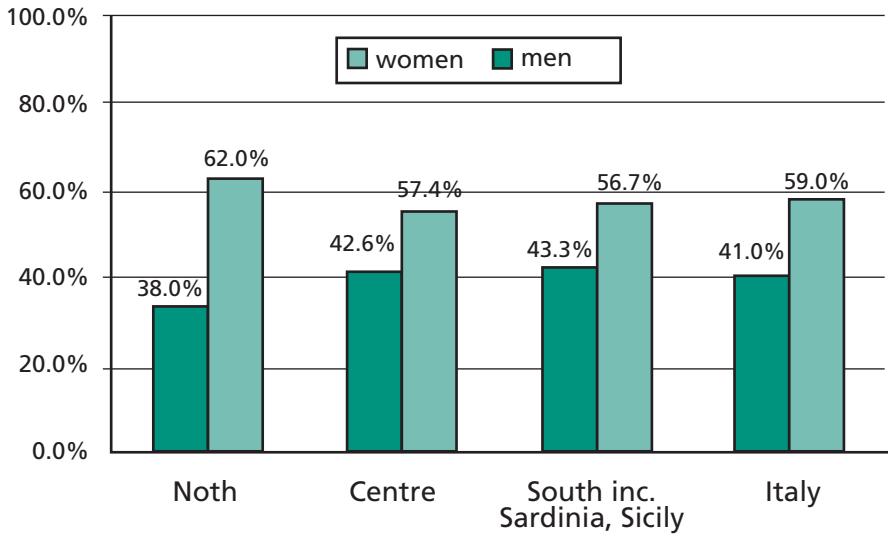
Chart 3.9 - Civilian disability pensions: retirement rate by region - Year 2000 (for 1.000 inhabitants)



This is confirmed by the standardised comparison (graph 3.9) which indicates that Lombardy, the region with the largest resident population, has the lowest retirement rate (21 pensions per thousand residents, against the 27‰ national value).
On the other end of the scale Sardinia, with only 4.4 percent disability pensions compared to the national total, has the highest retirement rate in Italy (41‰). The high values reported by this indicator are also registered in Umbria, (37‰), Abruzzo (36‰) and Basilicata (34‰) though the relative impact is irrelevant, 2.8, 3 and 1.3 percent of the whole.
Even if the impact of the resident population is taken into account, Sicily still remains one of the regions with the highest number of civil disability pensions.

War pensions
At 31 December 2000 there were 451,523 war pensions still being distributed in Italy (41 percent to men and 59 percent to women (graph 3.10), because there were more indirect and survivor benefits than direct allowances.

Chart 3.10 - War pensions by gender and geographical area - Year 2000



Box 14 – War pensions: legal framework

War pensions are regulated by Presidential Decree 915/1978.
Article 1 stipulates that these benefits represent "an act of compensation……with respect to those persons who, because of war, have suffered physical disability or the loss of a relative". The pension is distributed as a temporary allowance, if the infirmity is subject to improvement. There are in any case eight categories of benefits, with varying amounts according to the gravity of the handicap. The beneficiaries who belong to the first category, i.e. those who have very serious handicaps, are also entitled to a "super-disability benefit" and to "an assistance and carer allowance".
The beneficiaries of war pensions who, because of their infirmities are

unable to perform any work whatever, are also entitled to an "allowance for the unemployable" up to their 65th year and to a "compensation allowance" thereafter. The war pension may be paid to the surviving spouse or to the orphans (indirect payment) and is extended to spouses if the beneficiary, from the second to the eighth category, has died due to causes not chargeable to the infirmity in question.

The overall expenditure sustained for the foregoing benefits amounted to € 1.64 billion, representing 0.1 percent of GDP and 0.9 percent of total pension spending. The men's share, even though they are fewer than women, amounted to 57.1 percent of the whole.
Most of the war pensions were allocated to persons living in the north, 178.791 pensions (39.6 percent of the whole) for an overall expenditure of € 637 million (38.8 percent of the national total). 31.9 percent of the benefits were distributed in the northern regions (32.3 percent as regards expenditure) and 28.5 percent in the centre, where 28.8 percent of the total sums were distributed (table 3.53).
In the north, war pensions accounted for 1.7 percent of the total pension benefits of the area, and 0.7 percent of the expenditure.
In the central regions the share of total war pensions distributed was 2.9 percent and dropped to 1.2 percent with respect to the total sums paid out. Lastly, in the south war pensions accounted for 2.2 percent of the pensions and 1.1 percent of the expenditure.
An analysis of the data relating to the individual regions (tables AS3-13 and AS3-14) indicates that Lazio was the region with the highest number of pensions (60,954 pensions, equal to 13.5 percent of the national total). The relevant spending amounted to 14.8 of the total sums distributed in Italy. Lombardy followed with 42,527 pensions, (9.4 percent of the whole); the expenditure accounted for 9.3 percent of the whole, then Emilia Romagna, with 8.9 percent in pensions and 8.6 percent in spending. The shares registered in Veneto (8 percent both for number and spending) and in Tuscany (7.7 percent for numbers and 7.5 percent for spending) were also considerable.
A standardised territorial comparison based on the values derived from the retirement rate (graph 3.11) indicate that distribution varied considerably. The region with the highest number of war pensions for every thousand residents was Umbria (16‰ compared to the roughly 8 ‰ national average). High values relating to this indicator were also registered in (15‰), Marche (13‰), Abruzzo (13‰) and Friuli Venezia Giulia (12‰). These are all regions where there were few relative burdens, fluctuating from a maximum 4.3 percent in the Marche region, to a minimum 1.1 percent in Molise.
On the other hand, Lombardy and Campania, among the first four regions as regards number of benefits, showed a lower retirement rate than the national average, (4.7‰ and 6.5‰ respectively).

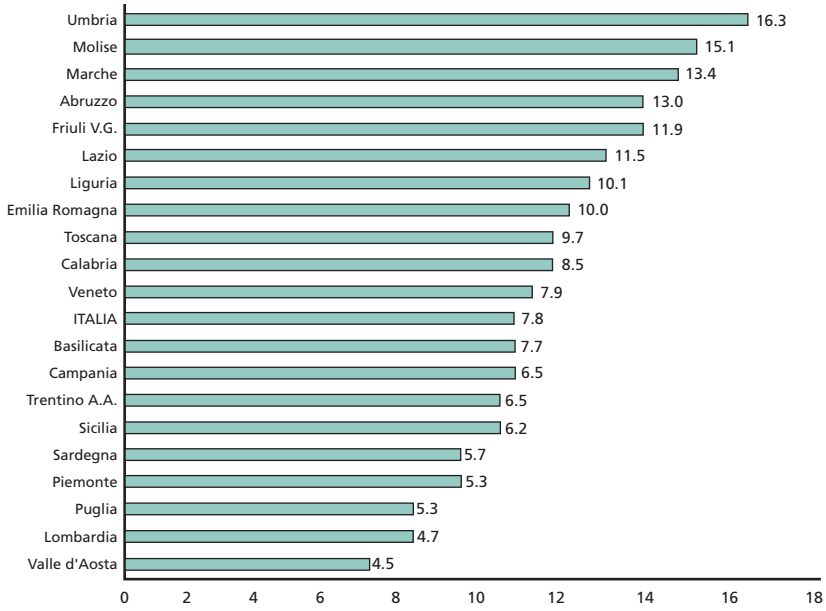
Table 3.53 – War pensions by gender and geographical area in 2000 (1)

Geographical area	Men				Women				Total			
	Number	%	Amount (thousand of euros)	%	Number	%	Amount (thousand of euros)	%	Number	%	Amount (thousand of euros)	%
North	68,028	36.7	343,497	36.7	110,763	41.6	293,246	41.7	178,791	39.6	636,743	38.8
- *North West*	31,393	16.9	158,891	17.0	51,033	19.2	132,342	18.8	82,426	18.3	291,233	17.8
- *North East*	36,635	19.8	184,605	19.7	59,730	22.4	160,904	22.9	96,365	21.3	345,510	21.1
Centre	54,876	29.6	275,762	29.5	73,997	27.8	196,669	28.0	128,873	28.5	472,431	28.8
South Sardinia, Sicily	62,342	33.7	316,436	33.8	81,517	30.6	213,373	30.3	143,859	31.9	529,809	32.3
Italy	185,246	100.0	935,695	100.0	266,277	100.0	703,288	100.0	451,523	100.0	1,638,983	100.0

(1) Social pensions paid abroad or that could not be allocated are not included

Source: compileted on the basis of Istat and Inps data

Chart 3.11 - War pensions: retirement rate by region - Year 2000
(for 1,000 inhabitants)



3.6.4 Size of the municipal social assistance expenditure

The analysis of the social assistance services provided in Italy has been characterised, for decades now, by a rather significant scarcity of information. This is due chiefly to two factors. The first, a problem experienced also in other countries, relates to the difficulty of defining, identifying and therefore measuring in an appropriate, systematic and comprehensive manner, that part of state spending which finances social assistance benefits. The second is the lack of an information framework concerning the social assistance and services offered by the regions and local authorities in general.

This political-administrative shortcoming should be filled by the recent general policy law relating to social policies (law 32 /2000), which assigns a central role to the creation, on the part of the State, the regions, the provinces and the municipalities, of a seamless information system. But as yet, apart from one or two local instances, the relevant institutions have not even started to prepare this fundamental tool.

The lack of an appropriate information system, up to the mid 1990s, also involved other participants which play an important role in this sector: the non-profit institutions (voluntary organisations, social consortia and co-operatives, foundations and other associations operating in the social assistance field).

This does not mean that an analysis of the social assistance activities in Italy is impossible, but that it is likely to be "open to criticism" as regards methodology; statistically "incomplete" as to the classification of the various social assistance measures; "partial or distorted" concerning the structural outline illustrated and the beneficiaries of the foregoing measure; "obsolete" as to the scenario itself.

Some ISTAT surveys help to re-construct the salient items in the social spending and social assistance services offered by municipalities. Over the last decade, the normative provisions for reform,[48] have brought about a

(48) Law 142/1990 as amended, law 59/1997, legislative decree 112/1998, 32/2000.

significant re-organisation of the assigning of duties and responsibilities among the various institutional levels.
An important feature has been the assignment of social-assistance functions to municipal administrations. This has ratified the centrality of local governments as to the management of social services and has given them a new role in the development of local welfare policies.

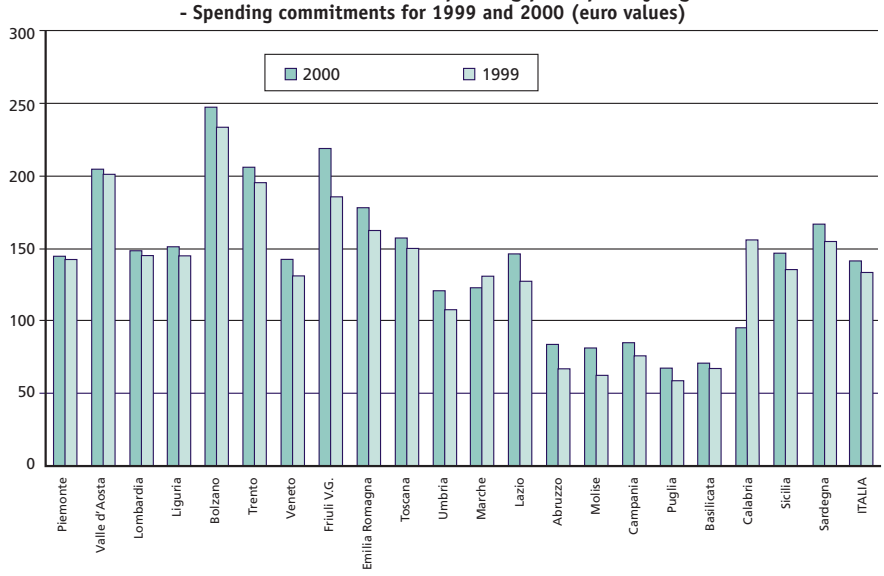
An analysis of municipalities' certified accounts (1999 and 2000)
To become familiar with municipal expenditure we refer to the ISTAT surveys relating to the 1999 and 2000 certified accounts.
The data derived are financial and illustrate the size of the expenditure approved by the municipal administrations for social assistance services. This spending can be taken as an indicator of the relative impact of the distribution of these services in relation to the total institutional activities carried out by the municipalities.[49] Such distribution, however, cannot be considered a gauge of the actual social assistance services offered by the municipalities.
The data relating to the spending commitments of the municipalities were examined as regards both current expenditures and investments. More specifically, we examined the final expenses of the municipalities i.e. the overall expenditure of Item 1 (current expenses) and of Item 2 (capital expenditures). The other cost items (repayment of loans and third party services) were excluded from the calculation of the total municipal outflows because they would have altered the real impact of the items considered.[50]
In 2000 the final total municipal expenditure for social-assistance services was estimated at approximately € 7.84 billion, a 5.5 percent increase compared to the previous year. This sum accounted for 11.8 percent of the total final municipal spending. Compared to 1999 it remained stable. On a national level, expenditure for social-assistance services comprised chiefly current expenses, around 90 percent over the two years examined (table AS3-15).
From the territorial viewpoint, from 1999 to 2000, the most significant increases were reported in the municipalities of Apulia, Abruzzo, Friuli Venezia Giulia, Lazio, Molise, Veneto and Umbria, whereas the only two regions that registered a drop in costs for social-assistance services were

(49) The analyses of the certified accounts were conducted on a test basis and involved samples of about 100 towns stratified by region and by category of resident population. All provincial capitals and towns with over 60,000 inhabitants were included. The population categories used were as follows: towns with a population of 1) - up to 5,000 2) - from 5,001 to 10,000 3) - from 10,001 to 20,000 4) - from 60,000 5) - over 60,000.
(50) The model adopted to survey the certified accounts permits the division of the final municipal spending by allocation, and the subsequent sub-division of the expenditure into services and investments, i.e. according to the economic nature of th expenditure. Among the twelve functions itemised in the accounts, we examined the "Social sector functions", with some changes depending on whether some actual social assistance services were included or not. The costs by town for "Necroscopic and cemetery services" were, in fact, excluded but, on the other hand, we included the spending for "School support services, transport, meals and others". The accounts, on the contrary, included the latter item in "Public Education functions". As regards this point, the accounts, provide a breakdown of the chief aservices for which expenditures were incerred. They supply, for example, the details relating to expenditure for social sector functions for "nursery school, services for infants and minors", "Residential buildings and rest homes for the elderly", "Public assistance and charity and various services for the citizen" and, as mentioned above, for "School support services, transport, meals and others".

Marche, 6.5 percent, and Calabria with 40.7 percent less than the previous year.

An important factor is that social assistance spending (with the exception of the two already mentioned regions) also grew in those regions where the total final expenditure was lower in 2000 than in the previous year.
It is interesting to note that, for towns in the southern regions of Italy the burden of social assistance spending, as regards the total final figure, was always lower than the average national level (11.8 percent), whereas the highest shares were to be found in the municipal administrations of the islands (Sicily with 15.3 percent and Sardinia 16.8 percent).
The north registered high values in the municipalities of Emilia Romagna (16.1 percent), Veneto (13.9 percent), Friuli Venezia Giulia (16.1 percent) and Piedmont (14.3 percent) (table AS3-16).
The analysis of the per capita spending commitments for 2000 indicates that the municipalities of all the southern regions, except the islands, report considerably lower values than the national average (€ 135 per inhabitant).
The lowest was registered in the Apulia towns (€ 69 per inhabitant). In the regions governed by ordinary statute, i.e. both in the centre and the north, the per capita values were generally close to the national average, with the exception of the Emilia Romagna towns which reported a considerably higher average (€ 178 per inhabitant). In the municipalities of all the regions governed by special statute, the per capita spending for social assistance services was decidedly higher. The same territorial trend, with a few exceptions, was found in the previous year even though the levels were generally lower than in 2000. In 1999 the national average was about € 129 per inhabitant.
In all the regions the per capita social assistance spending of the various towns showed a tendency to increase from one year to the next, except in the Marche and Calabria regions where, as already mentioned, from 1999 to 2000 there was a marked drop in social assistance spending per inhabitant.

Chart 3.12 - Social assistance spending per capita by region - Spending commitments for 1999 and 2000 (euro values)



Another significant factor is that, both in 2000 and in 1999, per capita social assistance spending was considerably higher (€ 191 in 2000 and € 176 in 1999) in towns with over 60,000 inhabitants, but it was below the national average for the lower population categories.
Bearing in mind the total outstanding spending commitments in 2000, the item that counted most, among the components itemised in the certified accounts, was "Assistance, charity and various services for the citizen", with a 41.4 percent national average. The spending for "Support for schools, transport, meals and other services" accounted for 27.9 percent in all the towns; followed by "Nursery schools, services for infants and minors" (18.0 percent) and "Residential structures and rest homes for the elderly" (8.1 percent). The ratio between the said items were the same in the various areas, although some of them varied among the towns located in different regions.
An examination of the importance of the single services with respect to social assistance as a whole indicates that the spending item "Assistance, charity and various services for the citizen" was similar in all the regions excepting Valle d'Aosta, Marche, Abruzzo and Basilicata, where the values were lower than the national average. In these regions the predominant item was "Support for schools, transport, meals and other services".
Spending for "Nursery schools, services for infants and minors" showed greater territorial variability and values considerably higher than the national average were registered in the towns of Umbria, Lazio and Liguria. The lowest values were in Calabria and Molise. Lastly, the share of spending for "Residential structures and rest homes for the elderly" was appreciably higher than the national mean in towns located in Veneto, Valle d'Aosta and Friuli Venezia Giulia; decidedly lower shares were found all over the south, with the exception of Abruzzo. An examination of the 'size of towns' variable reveals that "Nursery schools, services for infants and minors" showed a tendency to increase along with the size of the towns, whereas the "Support for schools, transport, meals and other services" diminished.
The analysis of the distribution of expenditure among the financial items shows that all the towns together allocated the highest share of the total social assistance spending to the purchase of services (41.5 percent in 2000 and 40.6 percent 1999); the other important items were expenditure for cash transfers and expenditure for human resources which in 2000 absorbed 24.2 percent and 25.6 percent, respectively (in 1999 it amounted to 23.0 percent and 27.0 percent) of the total social assistance spending of all the towns examined. (table AS3-17).
In this case too, with a few exceptions, the behaviour of the towns in the various regions appeared to be relatively homogenous. As regards the fiscal year 2000, in fact, the highest share of current expenses involved the purchase of services, except in Molise and, above all, in Calabria, where cash transfers were predominant. Current cash transfers for towns in Calabria, Apulia, Sardinia, Veneto and Friuli V.G. were relatively high, compared to the national average (24.2 percent). Expenditure for human resources, on the other hand, showed greater territorial uniformity: towns in Sardinia, Calabria, Basilicata, Campania and Friuli Venezia Giulia showed considerably lower values than the national average, and the highest shares for this item were registered in Emilia Romagna, Liguria and Valle d'Aosta.
As to the size of towns, the ratio between the chief items examined was

substantially the same: the share of current social-assistance spending allocated to services was always predominant, with values lower than the national average only in towns with intermediate population categories (from 5,.000 to 20,000 inhabitants). For the other important items (cash transfers and human resources expenditure) it is interesting to observe that spending for human resources was higher in larger towns than in small ones, whereas cash transfer costs were more contained.
The structure of expenditure illustrated by this report seems to indicate that, with respect to the overall distribution of social assistance services, towns tended to reduce those services run on a limited resources budget, or without outside help, by making greater use for the services they offer of private production mechanisms, with public and private firms and non-profit institutions playing an increasingly important role.

Social assistance services offered by towns and local networks
A considerable part of the social assistance-related benefits guaranteed to citizens derives from the social assistance services offered by towns. Only a few studies relating to the local sector have been implemented but currently there is no survey, specifically focused on local networks, which analyses this offer. An exhaustive survey, on a national level, of the real services offered by towns has been planned by the National Statistical Plan only as of 2003.
The only partial data available today derive from an experimental ISTAT survey relating to social assistance initiatives in Italian towns carried out from 1998 to 1999, where the reference year was 1997.[51]
This survey aims at evaluating the offer of services by acquiring information as to how the services are run, also with a view to the qualitative aspect connected with the distribution process.
The analysis of the social assistance services offered, according to the categories of beneficiaries, emphasised the attention devoted to minors by municipal social policies. They received more than a third of the total social assistance services distributed by the municipal administrations (36.2 percent). The services for the elderly and the disabled were more contained, though still considerable, both of them equalled 18.8 percent of the total services offered. The “other categories” of assisted citizens, including nomads, immigrant, ex-prisoners, prisoners etc., received less than 10 percent of the overall offer.
All general services, potentially offered to all types of persons in need, i.e. the social secretariat, social emergency assistance, rescue/assistance call centres, help lines and financial aid were assigned to a separate category, which accounted for 13.5 percent of the total offer.

The share of services offered by municipal administrations to drug addicts and/or alcoholics (2.9 percent of the total), because this is chiefly healthcare, was very low.

(51) The survey was conducted on a test basis and involved a statistical sample of 720 towns including all towns with at least 20,000 inhabitants. The sample design used permitted the production of level related estimates for the three main geographical areas (north, centre, south and the islands) and for two categories of towns (those with at least 20,000 inhabitants, those with less than 20,000 inhabitants), with a 5 percent error margin for the planned study areas.

The breakdown of the services offered in 1997, but started up before 1970, reveals how the orientation of local welfare policies for some categories of beneficiaries had been modified over the years. The increase in aid for the disabled (which was 2.1 percent before 1970 but rose to 18.8 percent in 1997) and for services for "other categories", was particularly significant. Also the assistance given to drug addicts and/or alcoholics rose from the 0.1 percent of the years before 1970, to 2.9 percent in 1997. The expenditure for minors and the elderly, on the other hand, diminished progressively. (table 3.54).

Table 3.54 - Social assistance services offered by towns in1997
(in % terms)

Services for categories of beneficiaries	Services offered in 1997	Services offered in 1997 but started up before 1970
Younger	36.2	57.4
Disabled	18.8	2.1
Drug addicts and/or alcoholics	2.9	0.1
Elderly	18.8	24.6
Other categories	9.5	0.4
General services	13.8	15.4
Total services offered	100.0	100.0

Sources: compiled on the basis of Istat data

In general, considering all categories of beneficiaries, the statistics show how the social assistance services offered by towns became strongly diversified as of the 1990s, and how 56.6 percent of the services offered in 1997 had been started up after 1990.
School transport and meals offered by 83.2 and 72.5 percent, respectively, of the towns, were in the forefront of the chief municipal services, together with home assistance for the elderly (73.2 percent of the towns). This was followed by the service offering periods for the elderly in spas and climatic localities (56.3 percent of the towns) and by the financial aid distributed by almost half the Italian towns (49.9 percent).
The values in central Italy, excepting the social secretariat services and rescue/assistance call centres, were always higher than the national average. The data on the distribution of the services in the northern towns registered the same tendency, though the values were lower, with the sole exception of school assistance, transport and meals to minors, support for the disabled and financial aid. In the southern regions and the islands, on the contrary, the potential values were lower than the national average; particularly with respect to home help for the disabled, which did not even achieve 20 percent (19.7 percent) compared to a mean national value of 40.2 percent, and to the rescue and/or assistance call centres which accounted for a paltry 2.6 percent.

Social assistance activities are, in general, more widespread in the larger towns. All the services for the elderly, for the disabled in particular, and services of a general nature registered far higher values than the national average, whereas the services for minors were not so different. This is not surprising because the latter are school related services, also

widespread in smaller and middle-sized towns.
Another three services are very widespread in the larger towns, but on a national plane they did not show particularly meaningful values: two of them are services for minors, family custody, offered in 78.8 percent of the larger towns (the national mean is 31.5 percent), and the nursery school service, in 78.2 percent of the large towns (the national mean is 22.8 percent); the third is for the elderly, with social centres in 64.4 percent of the town councils (the national mean is 2 8.5 percent).
Among the features identifying the social assistance services offered by towns, an important role is played by the modes of administration through out-sourcing, also in light of the innovations introduced by the recent legislative provisions relating to the type of entities entitled to compete in the tenders for local social assistance services and to the forms of agreement the town councils may stipulate with them. An analysis of the data indicates that the towns managed (or with limited resources) 50 percent of the social assistance activities directly, whereas 41.5 percent of the services offered was out-sourced totally, or was distributed by the town councils under various forms of indirect administration, e.g. delegation to other public agencies, the creation of consortia, the awarding of sub-contracts, concessions or conventions to private institutions or firms. The remaining 8.5 percent of the offer was produced by the town councils through a combination of direct administration with some form of out-sourcing.
Operational management represents a strategic feature to ensure both the supply of a wide range of services and, above all, the implementation of an integrated system of activities involving all the social resources available. In this respect, both legislative decree 112/1998 (Art. 131) and General policy law relating to assistance 328/2000 (Arts. 3 and 6) explicitly established the adoption of organisational modes aimed at encouraging the implementation of local social service networks involving all the public agencies and non-profit organisations operating in the country. The planning, implementation and co-ordination of the local networks were entrusted to the municipal councils.
Therefore account must also be taken, when evaluating municipal activities in the social assistance field, of their ability to organise the territorial resources into networks.
The results of the survey allowed us to evaluate the existence of networks offering municipal services and to collect concise information about the main subjects involved. By and large, the networks can be considered as the totality of the forms of co-operation with external agencies implemented by the town council for the supply of social assistance services; classifying co-operation as any form of formalised agreement, both onerous and gratuitous (conventions, concessions, agreements, mandates to other administrations, consortia, combinations of town councils, etc.)
The data indicated that 76.5 percent of the Italian towns collaborated with external providers of social assistance services.

Table 3.55 - Diffusion of the principal services offered by category of beneficiaries, by geographical area and towns with over 20,000 inhabitants, 1997

(in % terms)

Principal services offered by category of beneficiaries	North	Centre	South and Islands	Italy	Towns with at least 20,000 inhabitants
For minors					
School transport	83.4	90.3	79.9	83.2	83.3
School cafeterias	67.1	82.2	78	72.5	88.7
School assistence	42.8	81.6	46	48.9	68.8
For elderly					
Home assistance for the elderly	78.6	79.4	61.1	73.2	90.7
Thermal spas and climatic localities	62.9	81.5	34.4	56.3	73.1
Rest homes	41.5	39.5	26	36.3	70.7
For disabled					
Home assistance for the elderly	46.5	63.4	19.7	40.2	61.7
Support service /educational service	34.4	82.5	29.1	38.9	70
School transport	26.4	69.5	28.3	32.6	66.3
General services					
Financial aid (welfare payments, ecc.)	48.7	61.1	47.4	49.9	78.1
Assistance in dealing with authorities	51.9	36	33.5	44	74.2
Rescue and/or assistence call centres	52.7	28.9	2.6	33.7	39.5

Source: compiled on the basis of Istat data

Table 3.56 - Towns that cooperate with external service providers by class of population size and by geographical area(1997)

(in % terms)

Geographical location	Big towns (at least 20.000 inhabitants)	Small and medium towns (less than 20.000)	Total Towns
North	100.0	80.2	81.0
Centre	97.9	100.0	99.8
South and Sardinia, Sicily	87.9	57.0	59.5
Italy	94.3	75.4	76.5

Source: compiled on the basis of Istat data

With respect to geographical area, almost all the towns in central Italy had an organisational network (99.8 percent), the north reported 81.0 percent and the south and the islands together only 59.5 percent.
The low percent of southern towns co-operating with external service providers was also confirmed by the analysis of the data relating to inhabitants. In the south only 87.9 percent of the towns with at least 20,000 inhabitants had organised networks, compared with 100 percent in the north and 97.9 percent in the centre. In the medium to small towns (with less than 20,000 inhabitants) the share came to 57.0 percent in the south, compared to 0.2 percent in the north and 100 percent in the centre.

The main factor to become apparent when the analysis focused only on the towns that declared co-operation with outside agencies, was that 83 percent of them had formalised partnerships with public agencies, chiefly ASLs, provinces, regions, mountain communities and consortia of towns. Another important feature concerned the number of towns which had

implemented partnerships with private entities (67.1 percent): this included, more specifically, partnerships with social co-operatives, voluntary organisations, other types of co-operatives, private and ex- IPAB associations.

Table 3.57 - Towns that cooperate with external providers of services by type of entity in 1997

(in % terms)

	Total	with public Agencies	with private non-profit Agencies	with private commercial firms
Towns that cooperate with external service providers	6,200	5,155	4,149	948
Percentage		83.1	66.9	15.3

Source: compiled on the basis of Istat data

The fundamental function of the service sector in the production of social assistance services was explicitly defined by the framework law on assistance (law 32 /2000), which acknowledged and facilitated the role of non-profit organisations in the planning, organisation and administration of the integrated system of social activities. Finally, only 15.3 percent of the towns had drawn up agreements with private commercial enterprises.
The quantitative aspect of the number of partnerships implemented (2,000) should also be examined side by side with the analysis of the typology of the agencies belonging to the organisational network.
A comparison between the number of partnerships and the number of towns which have implemented them, indicated, on a national level, that the average number of partnerships per town with a network was 4.6 percent.
The breakdown of partnerships by type of entities (public agencies, private non-profit agencies and private commercial firms), associated with an analysis based on the geographical area of the towns highlights the diversity of the network structures among the northern, central and southern towns (together with the islands). In each of these areas the typologies of the beneficiaries of the partnerships had a different impact. In the north over 50 percent of the partnerships were set up with non-profit agencies (55.4 percent), 39.6 percent with public agencies and only 5.0 percent with private, commercial firms. In the centre the shares of partnerships with public and non-profit agencies were very close and amounted, respectively to 47.0 and 46.5 percent, whereas the percent towns co-operating with private enterprises was 6.5 percent. In conclusion, in the south and the islands, both the impact of the non-profit sector (69.1 percent), and that of the private agencies (9.9 percent) were decidedly higher, to the detriment of the partnerships with public agencies which accounted for only 21.9 percent of the total.
The structural breakdown of the networks appeared to be co-related to the size of the towns. In medium and small communities (less than 20,000 inhabitants), most of the partners belonged to the non-profit agency typology, but the corresponding share of active partnerships dropped to 52.6 percent.

Chart 3.13 - Percentage breakdown of partnerships by tipology of entity and by geographical location of towns - 1997

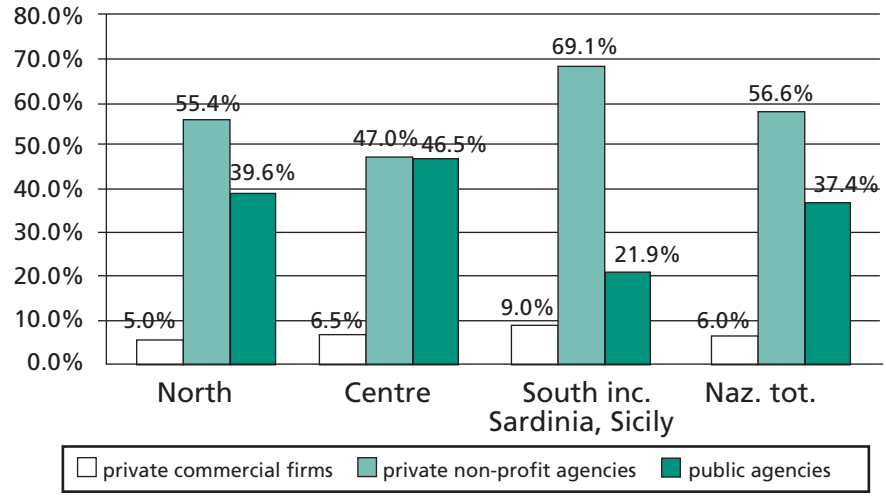
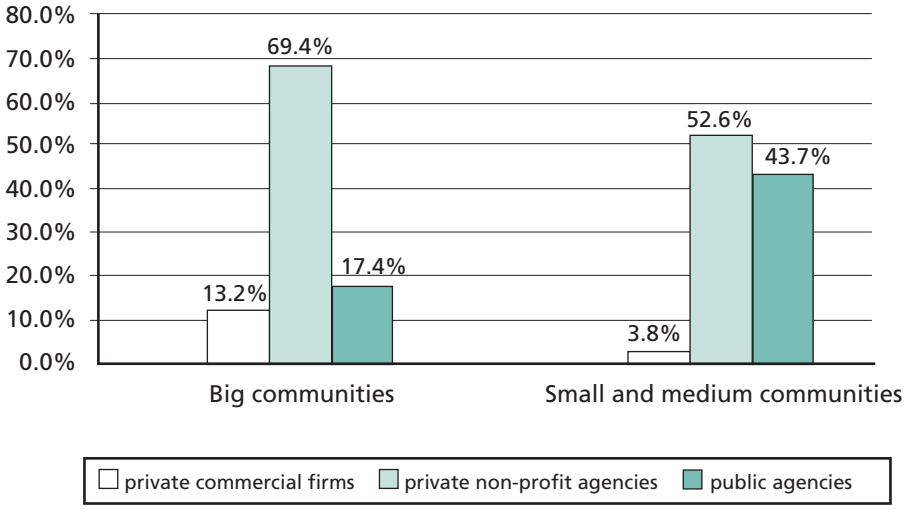


Chart 3.14 - Percentage breakdown of partnerships by tipology of entity and by geographical location of town - 2000



Partnerships with public agencies were far more numerous (43.7 percent), but the partnerships with private, commercial enterprises were few. (3,8 percent).

A further piece of information concerns the use of conscientious objectors and voluntary workers, which has had a growing impact, over the last few years, in the social assistance sector. An important factor relating to this phenomenon was that 25.9 percent of the Italian towns, made use of voluntary workers for an overall total of around 12,750 units. The analysis by geographical area, on the other hand, indicated that the highest number of towns using conscientious objectors in their social assistance activities were to be found in central Italy (44.7 percent), followed by the northern towns (33.5 percent) and by the south and the islands (4.9 percent). With respect to co-operation with voluntary workers, the north

and centre showed similar values (21 percent), whereas the towns in the south and the islands once again registered the lowest value, only 7.1 percent .

Another interesting fact was that, although in the northern towns most of the voluntary workers operated in an organised manner, i.e. within the framework of the activities carried out by associations of volunteers (83 percent of the volunteers active in the north), in the centre, the south and the islands, it was quite different. Most of the volunteers worked individually (about 70 percent of the voluntary workers used by the town councils in both geographical areas).

The dimensions and the diversification of the offer and the ever-growing recourse to forms of out-sourcing for social assistance services, are the factors which convinced the municipal authorities of the need for modern techniques in the management of information.

One of the most important priorities is the adoption of an informative system created from a structured scheme of information flows, to be organised organically and homogenously. This type of system would be responsible for the planning, implementation and control of the productive processes and would supply the elements for the evaluation of the operations undertaken, as regards management, efficiency and effectiveness. The results of the survey, however, indicate that only very few towns, 35.3 percent, have already adopted an information system relating to social assistance services. 61.8 percent of these are computerised, but the remaining 32.8 percent still use paper documentation. There are far more information systems in the large towns where 66.8 percent stated that they make use of an information system compared to the 3.4 percent in the small and medium communities.

appendixes

Statistical appendix
AS3

Table AS3-1 - Number of contributors and number of pensions (1989-2001)

(amounts in thousands)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 (1)
NUMBER OF CONTRIBUTORS													
Private employees	**11,894**	**11,978**	**12,083**	**12,057**	**11,924**	**11,757**	**11,642**	**11,654**	**11,655**	**11,706**	**11,843**	**12,052**	**12,188**
Inps	11,659	11,729	11,833	11,800	11,681	11,502	11,377	11,390	11,392	11,445	11,576	11,747	11,877
Other funds - private sector	235	248	250	258	244	255	265	264	263	261	268	305	311
Public employees - Inpdap	**3,409**	**3,441**	**3,482**	**3,579**	**3,607**	**3,586**	**3,453**	**3,507**	**3,242**	**3,242**	**3,265**	**3,289**	**3,283**
Post Office and Railways	**326**	**323**	**299**	**284**	**274**	**359**	**324**	**312**	**298**	**296**	**282**	**293**	**280**
Self-employd Inps	**4,698**	**4,650**	**4,629**	**4,477**	**4,346**	**4,314**	**4,294**	**4,272**	**4,246**	**4,257**	**4,267**	**4,271**	**4,296**
Craftsmen	1,867	1,856	1,859	1,848	1,798	1,813	1,807	1,809	1,791	1,803	1,817	1,833	1,850
Shopkeepers	1,625	1,645	1,670	1,677	1,655	1,694	1,708	1,704	1,719	1,753	1,769	1,785	1,800
Direct growers, farms, share-croppers	1,206	1,149	1,100	952	893	807	779	759	737	702	680	652	646
Professions	**283**	**291**	**302**	**306**	**309**	**318**	**338**	**362**	**382**	**400**	**417**	**436**	**455**
Doctors	**249**	**255**	**265**	**276**	**270**	**271**	**277**	**287**	**292**	**297**	**297**	**303**	**304**
Clergy	**26**	**25**	**24**	**24**	**23**	**23**	**21**	**21**	**20**	**19**	**20**	**21**	**21**
Contract workers								**823**	**1,080**	**1,516**	**1,686**	**1,897**	**2,070**
Other additional funds	**276**	**270**	**257**	**275**	**260**	**251**	**266**	**269**	**274**	**308**	**281**	**280**	**277**
Basic compulsory pension system	**21,160**	**21,232**	**21,340**	**21,277**	**21,013**	**20,879**	**20,616**	**21,507**	**21,489**	**22,040**	**22,358**	**22,842**	**23,172**
NUMBER OF PENSIONS													
Private employees	**9,854**	**9,970**	**10,147**	**10,391**	**10,536**	**10,561**	**10,646**	**10,656**	**10,632**	**10,600**	**10,606**	**10,480**	**10,516**
Inps	9,760	9,871	10,041	10,278	10,418	10,440	10,520	10,524	10,495	10,459	10,463	10,334	10,368
Other funds private-sector	94	99	106	114	118	121	126	132	137	141	143	145	148
Public employees- Inpdap	**1,533**	**1,601**	**1,685**	**1,778**	**1,826**	**1,944**	**1,994**	**2,068**	**2,184**	**2,230**	**2,274**	**2,313**	**2,366**
Post Office and Railways	**248**	**264**	**277**	**284**	**294**	**311**	**342**	**347**	**358**	**361**	**368**	**371**	**376**
Self-employed Inps	**3,142**	**3,174**	**3,404**	**3,536**	**3,634**	**3,775**	**3,832**	**3,991**	**4,139**	**4,148**	**4,182**	**4,230**	**4,255**
Craftsmen	697	717	744	787	816	881	915	1,006	1,076	1,091	1,123	1,162	1,186
Shopkeepers	673	697	718	755	780	819	844	900	942	963	995	1,035	1,068
Direct growers, farms, share-croppers	1,772	1,760	1,942	1,994	2,038	2,075	2,073	2,086	2,121	2,095	2,065	2,033	2,000
Professions	**71**	**74**	**78**	**81**	**84**	**87**	**89**	**92**	**94**	**96**	**98**	**100**	**102**
Doctors	**72**	**76**	**82**	**86**	**92**	**96**	**99**	**103**	**102**	**110**	**113**	**121**	**123**
Clergy	**14**	**14**	**15**	**15**	**15**	**15**	**16**	**16**	**16**	**16**	**16**	**15**	**15**
Contract workers												**5**	**9**
Other additional funds	**93**	**96**	**102**	**108**	**113**	**116**	**123**	**127**	**132**	**137**	**140**	**142**	**144**
Basic compulsory pension system	**15,028**	**15,270**	**15,789**	**16,279**	**16,595**	**16,905**	**17,141**	**17,400**	**17,656**	**17,699**	**17,796**	**17,777**	**17,905**

(1) The figures for 2001 are provisional

Source: Nvsp (2002)

Table AS3-2 - Contribution receipts and pension expenditure (1)
(amounts in millions of euros)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 (2)
Private employees													
Inps													
- contributions	31,967	34,833	38,887	42,528	45,768	45,389	46,037	57,141	59,679	61,537	65,150	69,247	72,384
- benefits	35,113	38,813	42,732	48,330	53,353	55,111	57,042	61,181	67,234	66,003	69,162	70,372	73,232
- balance	-3,146	-3,980	-3,845	-5,801	-7,584	-9,722	-11,005	-4,040	-7,555	-4,466	-4,012	-1,124	-848
Other funds private-sector													
- contributions	1,542	1,612	1,799	2,115	2,238	2,345	2,435	2,636	3,141	3,589	3,909	3,929	3,997
- benefits	1,077	1,350	1,626	1,913	2,247	2,451	2,845	3,077	3,443	3,664	3,896	4,107	4,326
- balance	465	262	174	202	-8	-106	-410	-441	-302	-75	13	-178	-329
Public employees - Inpdap													
- A, contributions (3)	11,993	13,137	15,407	16,424	16,738	17,118	18,747	23,799	26,059	26,909	27,760	29,006	31,988
- B, contributions (3)	11,993	13,137	15,407	16,424	16,738	17,118	18,747	28,518	31,597	33,785	35,987	37,728	40,467
- benefits	13,956	16,438	18,869	21,944	23,867	26,220	28,391	30,970	33,419	35,473	36,830	38,199	39,667
- A, balance (3)	-1,963	-3,302	-3,462	-5,519	-7,129	-9,102	-9,644	-7,171	-7,360	-8,564	-9,070	-9,194	-7,678
- B, balance (3)	-1,963	-3,302	-3,462	-5,519	-7,129	-9,102	-9,644	-2,452	-1,822	-1,688	-843	-472	801
Post Office and Railways													
- contributions	1,433	1,569	1,672	1,739	1,865	1,893	2,302	2,848	2,480	2,557	2,407	2,367	2,241
- benefits	2,068	2,277	2,768	2,998	3,285	3,627	3,882	4,165	4,474	4,573	4,646	4,789	4,956
- balance	-635	-707	-1,095	-1,259	-1,420	-1,734	-1,580	-1,317	-1,995	-2,017	-2,240	-2,422	-2,715
Self-employed													
Craftsmen and shopkeepers													
- contributions	3,602	3,830	5,101	5,892	6,820	7,459	7,740	8,214	8,290	9,273	11,207	9,490	10,800
- benefits	2,523	2,932	3,476	3,875	4,856	5,343	5,641	6,750	7,856	8,425	8,981	9,590	10,472
- balance	1,079	897	1,625	2,016	1,964	2,116	2,099	1,464	434	848	2,226	-100	328
Direct growers, farms, share-croppers													
- contributions	606	676	1,140	1,238	1,281	1,190	1,074	1,041	1,014	1,042	1,034	1,036	1,069
- benefits	3,201	3,373	3,372	3,750	4,541	4,338	3,737	4,358	4,199	2,284	2,398	2,335	2,580
- balance	-2,595	-2,697	-2,232	-2,512	-3,260	-3,148	-2,663	-3,317	-3,185	-1,242	-1,364	-1,299	-1,511
Professions Doctors													
- contributions	956	1,076	1,383	1,384	1,447	1,524	1,586	1,703	1,960	2,184	2,278	2,513	2,684
- benefits	587	668	822	936	1,321	1,220	1,304	1,431	1,539	1,537	1,659	1,738	1,875
- balance	370	408	560	448	126	304	283	273	421	647	619	775	809
Clergy													
- contributions	14	15	16	17	17	18	17	17	18	17	17	27	27
- benefits	30	44	44	52	61	51	58	64	75	83	78	81	83
- balance	-16	-29	-28	-36	-44	-33	-42	-48	-58	-67	-61	-54	-56
Contract workers													
- contributions								749	1,254	1,630	1,816	2,054	2,332
Other additional funds													
- contributions	329	440	428	419	434	437	467	439	446	588	669	642	660
- benefits	307	355	403	472	507	526	582	658	704	773	789	811	675
- balance	22	85	25	-53	-73	-89	-115	-219	-258	-185	-120	-169	-15
TOTAL													
- contributions (4)	52,443	57,189	65,832	71,756	76,610	77,373	80,404	98,588	104,340	109,325	116,246	120,311	128,181
- benefits	58,862	66,252	74,111	84,270	94,038	98,887	103,481	112,654	122,943	122,815	128,439	132,022	137,865
- balance	-6,419	-9,063	-8,279	-12,514	-17,429	-21,513	-23,077	-14,067	-18,603	-13,491	-12,193	-11,711	-9,683
Gias share to support pensions	12,493	14,288	15,662	16,451	13,382	16,115	18,692	19,711	20,617	25,645	25,362	25,464	26,446
Pension expenditure	71,355	80,540	89,774	100,721	107,420	115,002	122,173	132,365	143,560	148,460	153,802	157,486	164,311
Pension expenditure as % of GDP	11.5	11.8	12.1	12.9	13.3	13.5	13.2	13.5	14.0	13.8	13.9	13.5	13.5

(1) Contribution recepts for pension funds include the nominal contributions transferred by the Regions, by other bodies and by other funds, among them Gias and Gpt
(2)The figures for 2001 are provisional.
(3) The items "A. contributions" and "A. balance" are calculated axcluding the State contribution to Ctps (State Employees Funds); whereas the entries "B. contributions" and "B. balance" are calculated including the State contribution to Ctps (State Employees Fund);
(4) Figures are calculated excluding the State contribution ti Ctps (State Employees Fund).
Source: Nvsp (2002)

Table AS3-3 - Average contribution and average pension (1989-2001)
(amounts in thousands of euros)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001[1]
AVERAGE CONTRIBUTION													
Private employees	2.4	2.7	3.0	3.3	3.5	3.6	3.8	4.6	4.9	5.0	5.2	5.4	5.6
Inps	2.3	2.6	2.9	3.1	3.3	3.4	3.6	4.4	4.7	4.8	5.0	5.2	5.4
Other funds private-sector	6.0	5.8	6.5	7.2	7.8	7.5	7.3	8.0	9.6	11.0	12.4	10.5	11.2
Public employees - Inpdap	3.5	3.8	4.4	4.6	4.6	4.8	5.4	6.8	8.0	8.3	8.5	8.8	9.7
Post Office and Railways	4.4	4.9	5.6	6.1	6.8	5.3	7.1	9.1	8.3	8.7	8.6	8.1	8.0
Craftsmen	1.0	1.1	1.5	1.7	1.9	2.1	2.2	2.3	2.3	2.6	3.1	2.5	2.9
Shopkeepers	1.0	1.1	1.4	1.7	2.0	2.2	2.2	2.3	2.4	2.6	3.2	2.7	3.0
Direct growers, farms, share-croppers	0.4	0.5	0.8	1.2	1.3	1.3	1.2	1.2	1.2	1.3	1.4	1.4	1.5
Professions	1.7	1.9	2.1	2.2	2.5	2.6	2.6	2.7	2.8	3.0	3.0	3.3	3.4
Doctors	1.7	1.8	2.5	2.2	2.3	2.4	2.3	2.3	2.8	3.0	3.1	3.3	3.4
Clergy	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.3
Contract workers								0.9	1.2	1.1	1.1	1.1	1.1
Other additional funds	1.2	1.6	1.7	1.5	1.7	1.7	1.8	1.6	1.6	1.7	2.1	2.0	2.2
Basic compulsory pension system	**2.2**	**2.5**	**2.8**	**3.1**	**3.3**	**3.4**	**3.6**	**4.2**	**4.5**	**4.6**	**4.8**	**4.9**	**5.1**
AVERAGE PENSION[2]													
Private employees	4.6	5.1	5.6	5.8	6.1	6.7	6.9	7.4	7.9	8.2	8.4	8.7	9.1
Inps	4.5	4.9	5.4	5.7	6.0	6.4	6.6	7.0	7.7	7.7	8.0	8.2	8.6
Other funds private-sector	11.8	13.1	15.2	16.8	18.4	20.2	21.8	22.8	24.3	25.7	26.9	28.2	29.5
Public employees - Inpdap	8.6	9.8	10.8	11.7	12.2	13.0	13.4	13.9	14.6	15.2	15.6	15.9	16.5
Post Office and Railways	8.1	8.3	10.0	11.1	11.4	11.7	12.2	13.4	13.3	13.6	13.7	14.1	14.5
Craftsmen	2.8	3.1	3.5	3.7	3.9	4.4	4.6	5.3	5.6	5.8	6.1	6.3	6.7
Shopkeepers	2.7	2.9	3.3	3.4	3.6	3.9	4.0	4.6	4.9	5.1	5.3	5.6	5.9
Direct growers, farms, share-croppers	3.0	3.3	3.3	3.5	3.6	3.8	3.8	4.3	4.6	4.7	4.8	4.9	5.1
Professions	4.4	4.6	5.6	6.0	6.5	7.0	7.5	8.1	8.5	9.2	10.0	10.0	10.7
Doctors	2.6	2.8	3.1	3.5	3.9	4.4	4.6	5.1	5.4	5.5	5.8	5.7	5.9
Clergy	3.6	3.9	4.3	4.4	4.6	4.9	4.9	5.2	5.5	5.6	5.7	5.8	6.1
Other additional funds	3.2	3.5	3.8	4.1	4.3	4.4	4.6	5.0	5.1	5.5	5.7	5.6	5.7
Basic compulsory pension system	**4.6**	**5.1**	**5.7**	**6.0**	**6.3**	**6.8**	**7.0**	**7.5**	**8.0**	**8.3**	**8.6**	**8.8**	**9.2**

(1) The figures for 2001 are provisional.
(2) Sums paid as pensions at year's end.

Source: proccessed from Nvsp data (2002)

Table AS3-4 - Average contribution and average pension at 1989 prices
(amounts in thousands of euros)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001(1)
AVERAGE CONTRIBUTION													
Private employees	2.4	2.5	2.6	2.7	2.7	2.7	2.7	3.2	3.4	3.4	3.5	3.5	3.6
Inps	2.3	2.4	2.6	2.6	2.7	2.6	2.6	3.2	3.3	3.3	3.3	3.4	3.5
Other funds private-sector	6.0	5.5	5.8	6.1	6.3	5.8	5.4	5.7	6.7	7.5	8.4	6.9	7.2
Public employees - Inpdap	3.5	3.6	3.9	3.9	3.8	3.7	4.0	4.8	5.6	5.7	5.7	5.8	6.2
Post Office and Railways	4.4	4.6	5.0	5.2	5.5	4.1	5.3	6.5	5.8	5.9	5.8	5.3	5.1
Craftsmen	1.0	1.0	1.3	1.4	1.6	1.6	1.6	1.7	1.6	1.8	2.1	1.6	1.9
Shopkeepers	1.0	1.0	1.2	1.4	1.6	1.7	1.7	1.7	1.7	1.8	2.1	1.8	1.9
Direct growers, farms, share-croppers	0.4	0.4	0.7	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0
Professions	1.7	1.7	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.2	2.2
Doctors	1.7	1.7	2.2	1.9	1.8	1.9	1.7	1.7	1.9	2.1	2.1	2.2	2.2
Clergy	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.8
Contract workers								0.7	0.8	0.8	0.7	0.7	0.7
Other additional funds	1.2	1.5	1.5	1.3	1.4	1.3	1.3	1.1	1.1	1.2	1.4	1.3	1.4
Basic compulsory pension system	**2.2**	**2.3**	**2.5**	**2.6**	**2.7**	**2.6**	**2.7**	**3.0**	**3.2**	**3.2**	**3.2**	**3.2**	**3.3**
AVERAGE CONTRIBUTION (2)													
Private employees	4.5	4.6	4.9	4.9	5.0	5.1	5.0	5.1	5.5	5.6	5.7	5.7	5.8
Inps	4.4	4.6	4.8	4.8	4.9	5.0	4.9	5.0	5.4	5.3	5.4	5.4	5.5
Other funds private-sector	11.8	12.3	13.4	14.1	14.8	15.7	15.9	16.1	16.9	17.6	18.1	18.5	18.9
Public employees - Inpdap	8.6	9.2	9.5	9.9	9.8	10.1	9.9	9.9	10.2	10.4	10.5	10.4	10.6
Post Office and Railways	8.1	7.9	8.9	9.3	9.1	9.0	9.0	9.5	9.3	9.3	9.3	9.3	9.3
Craftsmen	2.8	2.9	3.0	3.2	3.2	3.4	3.4	3.7	3.9	4.0	4.1	4.1	4.3
Shopkeepers	2.7	2.7	2.9	2.8	2.9	3.0	2.9	3.2	3.4	3.5	3.6	3.7	3.8
Direct growers, farms, share-croppers	3.0	3.1	2.9	2.9	2.9	2.9	2.8	3.0	3.2	3.2	3.2	3.2	3.3
Professions	4.4	4.3	5.0	5.0	5.3	5.5	5.5	5.8	5.9	6.3	6.7	6.5	6.8
Doctors	2.6	2.6	2.7	2.9	3.1	3.4	3.4	3.6	3.8	3.8	3.9	3.7	3.8
Clergy	3.6	3.7	3.8	3.7	3.8	3.8	3.6	3.7	3.8	3.8	3.8	3.8	3.9
Other additional funds	3.2	3.3	3.4	3.4	3.5	3.4	3.4	3.5	3.6	3.8	3.8	3.7	3.6
Basic compulsory pension system	4.6	4.9	5.0	5.1	5.1	5.3	5.2	5.3	5.6	5.7	5.8	5.8	5.9

(1) The figures for 2001 are provisional.
(2) Sums paid as pensions at year's end

Source: processed from Nvsp data (2002)

Table AS3-5 – Pension funds as a share of the total in 2001
(in % terms)

	Contributions	Benefits	Number of contributors	Number of pensions	Benefits/ GDP
Private employees - INPS	56.5	53.1	51.3	57.9	6.0
Other funds private-sector	3.1	3.1	1.3	0.8	0.4
Public employees- INPDAP	25.0	28.8	14.2	13.2	3.3
Post Office and Railways	1.7	3.6	1.2	2.1	0.4
Craftsmen and shopkeepers	8.4	7.6	15.8	12.6	0.9
Direct growers, farms, share-croppers	0.8	1.9	2.8	11.2	0.2
Doctors and professions	2.1	1.4	3.3	1.3	0.2
Clergy	0.0	0.1	0.1	0.1	0.0
Contract workers	1.8	-	8.9	0.0	-
Other additional funds	0.5	0.5	1.2	0.8	0.1

Table AS3-6 - Benefits and contributions in the compulsory pension system in 2001

	Expenditure			Contributions		
	Number of pensions (thousands)	Average pension (thousands of euros)	Spending net of transfers(1) (millions of euros)	Numeber of contributors (thousands)	Average contribution (thousands of euros)	Contributions and transfer (2) (millions of euros)
Private employees	**10,515.5**	**9.1**	**77,557**	**12,188.2**	**5.6**	**76,380**
Private employees - Inps	***10,367.6***	***8.6***	***73,232***	***11,877.4***	***5.4***	***72,384***
Employed workers pension fund (Fpld)	10,046.9	8.2	67,140	11,520.0	5.1	67,541
Transport workers	121.3	16.3	1,899	114.9	8.7	1,178
Telephone workers	55.1	21.0	1,109	82.5	10.6	882
Elettrical workers	96.7	19.6	1,867	72.4	20.3	1,496
Airlines	4.5	32.2	139	12.2	14.9	182
Tax officials	10.6	13.0	130	1.7	7.1	12
Banking public sector	32.4	25.2	947	73.7	25.4	1,093
Other funds private-sector	***148.0***	***29.5***	***4,326***	***310.8***	***11.2***	***3,997***
Managers	87.2	40.0	3,416	82.0	30.8	2,881
Journalists	5.1	43.8	224	15.3	16.3	249
Entertainment sector	55.7	11.8	686	213.5	3.4	867
Public employees Inpdap	**2,366.2**	**16.5**	**39,667**	**3,283.0**	**9.7**	**40,467**
Local Authorities	894.1	13.8	12,203	1,350.0	8.2	11,134
Nursey school teachers	12.4	13.1	160	20.0	8.0	160
Health workers	45.9	33.1	1,465	113.0	23.8	2,691
Justice officials	2.3	14.1	32	6.0	7.1	43
State employees	1,411.6	17.7	25,806	1,794.0	10.0	26,438
Post Office and Railways	**375.5**	**14.5**	**4,956**	**279.5**	**8.0**	**2,241**
Rail staff FFSS	267.6	14.9	3,976	106.8	9.6	1.030
Postal and telecoms staff	107.9	13.6	979	172.7	7.0	1.211
Self-employed and the Professions	**4,479.7**	**5.9**	**14,927**	**5,053.9**	**2.8**	**14,552**
Self-employed Inps	***4,254.9***	***5.7***	***13,052***	***4,295.8***	***2.7***	***11,868***
Craftsmen	1,186.3	6.7	5,656	1,850.0	2.9	5,409
Shopkeepers	1,068.4	5.9	4,816	1,800.0	3.0	5,391
Direct growers, farms, share-croppers (CDCM fund)	2,000.2	5.1	2,580	645.8	1.5	1,069
Professions	***101.5***	***10.7***	***1,117***	***454.6***	***3.4***	***1,646***
Lawyers	20.6	15.7	324	94.1	4.5	420
Notaries	2.4	50.1	117	4.6	32.0	148
Engineers and Architects	14.0	11.0	156	93.0	3.6	337
Surveyors	18.5	8.9	181	95.7	2.0	194
Chatered accountants	3.5	19.0	67	35.0	4.5	158
Accountants and P. C.	3.6	16.6	62	31.1	3.3	102
Lobur consultants	4.8	5.8	29	19.4	3.0	57
Vets	6.2	3.3	21	18.8	1.7	33
Pharmacists	25.8	5.2	140	63.0	1.3	175
Shippers	2.1	9.6	21	-	-	21
Doctors	*123.4*	*5.9*	*758*	*303.5*	*3.4*	*1,038*
Clergy	**14.9**	**6.1**	**83**	**20.8**	**1.3**	**27**
Contract workers	**8.7**	**0.5**	**4**	**2,070.0**	**1.1**	**2,332**
Other additional funds	**144.2**	**5.7**	**676**	**276.8**	**2.2**	**660**
Basic compulsory pension system	**17,904.7**	**9.2**	**137,869**	**23,172.2**	**5.1**	**136,661**

(1) Paid for by the State or other funds (mainly Gias: € 17,936 milion for Fpld; 920 million for the Artisans's Fund; € 791 million for the Retailer's Fund; € 6,225 million for the CDCM Fund)
(2) Paid for by the State or other funds (undercontributions, tax-exemption of social burdens etc.).

Source: Nvsp (2002)

Table AS3.7 - Pensions by gender and geographical area. 2000 (1)
(millions of euros)

	Ivs		Compensatory		Welfare assistance		TOTAL	
	Number	Overall value	Number	Overall value	Number	Overall value	Number	Overall value
Piemonte	1,603,304	15,270	79,399	287	162,326	685	1,845,029	16,242
Valle d'Aosta	41,562	382	5,970	40	4,666	34	52,198	456
Lombardia	2,979,108	29,827	144,191	503	313,810	1,320	3,437,109	31,649
Liguria	650,722	6,575	53,684	246	90,556	362	794,962	7,184
Trentino-A.A.	298,223	2,616	20,927	82	26,112	127	345,262	2,825
Veneto	1,400,695	12,645	90,084	305	173,543	706	1,664,322	13,656
Friuli-V.G.,	447,621	4,234	29,120	95	61,360	250	538,101	4,579
Emilia- R.	1,594,122	14,373	109,998	340	180,501	747	1,884,621	15,460
Toscana	1,267,419	11,767	128,106	485	177,331	715	1,572,856	12,967
Umbria	311,611	2,650	41,974	121	60,412	241	413,997	3,011
Marche	540,085	4,291	57,321	163	81,929	324	679,335	4,779
Lazio	1,456,894	16,227	69,678	241	261,966	1,036	1,788,538	17,504
Abruzzo	403,090	3,102	41,447	161	88,181	352	532,718	3,616
Molise	105,414	721	8,436	25	16,397	60	130,247	806
Campania	1,204,221	10,298	80,184	248	313,171	1,290	1,597,576	11,837
Puglia	982,669	8,499	75,727	249	196,172	795	1,254,568	9,542
Basilicata	171,980	1,215	9,919	32	31,166	124	213,065	1,371
Calabria	514,952	3,944	34,691	128	112,556	467	662,199	4,539
Sicilia	1,152,668	9,718	90,151	366	322,386	1,283	1,565,205	11,367
Sardegna	417,749	3,642	37,907	177	99,556	417	555,212	4,236

(1) Excluded: pensions paid abroad and pensions not apportionable

Source: Istat and Inps

Table AS3-8 - Pensions by typology and geographical area: average values and pensions per inhabitant, 2001 (1)

	TOTAL		Ivs		Compensatory		Welfare assistance	
	Average value (euro)	Pensions per inhabitant %	Average value (euro)	Pensions per inhabitant %	Average value (euro)	Pensions per inhabitant %	Average value ((euro)	Pensions per inhabitant %
Piemonte	8,803	44.3	9,524	38.5	3,615	1.9	4,220	3.9
Valle d'Aosta	8,736	43.7	9,191	34.8	6,700	5.0	7,287	3.9
Lombardia	9,208	38.5	10,012	33.4	3,488	1.6	4,206	3.5
Liguria	9,037	50.9	10,104	41.7	4,582	3.4	3,998	5.8
Trentino - A, A,	8,182	36.8	8,772	31.8	3,918	2.2	4,864	2.8
Veneto	8,205	37.1	9,028	31.2	3,386	2.0	4,068	3.9
Friuli - V,G,	8,510	45.6	9,459	37.9	3,262	2.5	4,074	5.2
Emilia-R,	8,203	47.6	9,016	40.3	3,091	2.8	4,138	4.6
Toscana	8,244	45.4	9,284	36.6	3,786	3.7	4,032	5.1
Umbria	7,273	50.8	8,504	38.2	2,883	5.1	3,989	7.4
Marche	7,035	46.4	7,945	36.9	2,844	3.9	3,955	5.6
Lazio	9,787	35.9	11,138	29.3	3,459	1.4	3,955	5.3
Abruzzo	6,788	42.8	7,696	32.4	3,884	3.3	3,992	7.1
Molise	6,188	41.1	6,840	33.3	2,963	2.7	3,659	5.2
Campania	7,409	28.3	8,552	21.3	3,093	1.4	4,119	5.5
Puglia	7,606	31.5	8,649	24.7	3,288	1.9	4,053	4.9
Basilicata	6,435	35.8	7,065	28.9	3,226	1.7	3,979	5.2
Calabria	6,854	33.2	7,659	25.8	3,690	1.7	4,149	5.6
Sicilia	7,262	32.2	8,431	23.7	4,060	1.9	3,980	6.6
Sardegna	7,630	34.7	8,718	26.1	4,669	2.4	4,189	6.2

(1) Excluded: pensions paid abroad and pensions not apportionable

Source: compiled on the basis of Istat and Inps figures

Table AS3-9 - Social pensions by gender and geographical area. 2000 (1)
(in absolute terms)

Geographical area	Male		Female		Total	
	Number	Overall value	Number	Overall value	Number	Overall value
Piemonte	6,556	23,673	25,311	82,192	31,867	105,865
Valle d'Aosta	262	1,314	943	3,952	1,205	5,266
Lombardia	14,896	52,566	57,972	187,016	72,868	239,582
Liguria	4,149	14,793	17,830	57,779	21,979	72,572
Trentino-Alto Adige	1,559	5,286	4,771	14,699	6,330	19,985
Bolzano-Bozen	623	2,104	2,089	6,628	2,712	8,732
Trento	936	3,182	2,682	8,071	3,618	11,253
Veneto	7,664	26,572	31,950	101,296	39,614	127,869
Friuli-Venezia Giulia	2,459	8,339	9,618	29,706	12,077	38,045
Emilia-Romagna	6,969	23,481	24,934	79,785	31,903	103,266
Toscana	7,792	26,305	38,797	120,862	46,589	147,167
Umbria	3,005	9,494	10,185	31,315	13,190	40,809
Marche	3,960	12,708	11,877	36,782	15,837	49,489
Lazio	17,012	61,956	57,363	193,772	74,375	255,728
Abruzzo	5,072	16,803	16,203	51,710	21,275	68,514
Molise	901	3,057	2,561	8,287	3,462	11,344
Campania	23,234	83,691	66,818	229,582	90,052	313,273
Puglia	12,205	40,082	43,448	136,787	55,653	176,869
Basilicata	1,868	6,116	5,381	16,815	7,249	22,931
Calabria	7,734	26,265	21,489	70,954	29,223	97,220
Sicilia	26,825	85,970	82,017	264,801	108,842	350,771
Sardegna	4,795	15,642	16,499	52,287	21,294	67,929
Italy	**158,917**	**544,114**	**545,967**	**1,770,380**	**704,884**	**2,314,494**

(1) Excluded: pensions paid abroad and pensions not apportionable

Source: compiled on the basis of Istat and Inps figures

Table AS3-10 – Social pensions by gender and geographical area. 2000 (1)
(percentage distribution)

Geographical area	Male		Female		Total	
	Number	Overall value	Number	Overall value	Number	Overall value
Piemonte	4.1	4.4	4.6	4.6	4.5	4.6
Valle d'Aosta	0.2	0.2	0.2	0.2	0.2	0.2
Lombardia	9.4	9.7	10.6	10.6	10.3	10.4
Liguria	2.6	2.7	3.3	3.3	3.1	3.1
Trentino-Alto Adige	1.0	1.0	0.9	0.8	0.9	0.9
Bolzano-Bozen	0.4	0.4	0.4	0.4	0.4	0.4
Trento	0.6	0.6	0.5	0.5	0.5	0.5
Veneto	4.8	4.9	5.9	5.7	5.6	5.5
Friuli-Venezia Giulia	1.5	1.5	1.8	1.7	1.7	1.6
Emilia-Romagna	4.4	4.3	4.6	4.5	4.5	4.5
Toscana	4.9	4.8	7.1	6.8	6.6	6.4
Umbria	1.9	1.7	1.9	1.8	1.9	1.8
Marche	2.5	2.3	2.2	2.1	2.2	2.1
Lazio	10.7	11.4	10.5	10.9	10.6	11.0
Abruzzo	3.2	3.1	3.0	2.9	3.0	3.0
Molise	0.6	0.6	0.5	0.5	0.5	0.5
Campania	14.6	15.4	12.2	13.0	12.8	13.5
Puglia	7.7	7.4	8.0	7.7	7.9	7.6
Basilicata	1.2	1.1	1.0	0.9	1.0	1.0
Calabria	4.9	4.8	3.9	4.0	4.1	4.2
Sicilia	16.9	15.8	15.0	15.0	15.4	15.2
Sardegna	3.0	2.9	3.0	3.0	3.0	2.9
Italy	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(1) Excluded: pensions paid abroad pensions not apportionable

Source: compiled on the basis of Istat and Inps figures

Table AS3-11 - Civil disability pensions by gender and geographical area. 2000 (1)
(in absolute terms)

Geographical area	Male		Female		Total	
	Number	Overall value	Number	Overall value	Number	Overall value
Piemonte	36,181	172,935	64,826	312,615	101,007	485,550
Valle d'Aosta	1,219	5,291	2,355	9,769	3,574	15,060
Lombardia	68,981	330,409	118,672	574,951	187,653	905,360
Liguria	16,183	76,525	31,447	148,929	47,630	225,455
Trentino-Alto Adige	5,907	28,622	10,797	55,350	16,704	83,971
Bolzano-Bozen	3,787	19,852	6,022	32,305	9,809	52,157
Trento	2,120	8,769	4,775	23,045	6,895	31,814
Veneto	36,167	173,297	61,114	296,272	97,281	469,568
Friuli-Venezia Giulia	11,404	54,754	22,845	110,593	34,249	165,346
Emilia-Romagna	37,089	181,513	68,257	331,116	105,346	512,629
Toscana	33,119	163,090	62,046	298,136	95,165	461,226
Umbria	10,929	54,229	19,924	95,538	30,853	149,767
Marche	16,699	79,705	28,206	134,422	44,905	214,127
Lazio	50,834	242,078	77,422	359,666	128,256	601,744
Abruzzo	18,148	85,222	27,973	130,936	46,121	216,158
Molise	3,655	16,119	4,919	22,271	8,574	38,390
Campania	64,170	303,639	97,142	447,617	161,312	751,256
Puglia	44,991	208,387	65,740	304,185	110,731	512,573
Basilicata	8,892	40,034	11,726	53,741	20,618	93,775
Calabria	27,500	132,142	38,716	183,510	66,216	315,652
Sicilia	69,729	322,824	104,829	470,396	174,558	793,220
Sardegna	27,413	129,202	40,044	184,973	67,457	314,175
Italy	**589,210**	**2,800,016**	**959,000**	**4,524,986**	**1,548,210**	**7,325,002**

(1) Excluded: pensions paid abroad and pensions not apportionable

Source: compiled on the basis of Istat and Inps figures

Table AS3-12 – Civil disability pensions by gender and geographical area. 2000 (1)
(percentage distribution)

Geographical area	Male		Female		Total	
	Number	Overall value	Number	Overall value	Number	Overall value
Piemonte	6.1	6.2	6.8	6.9	6.5	6.6
Valle d'Aosta	0.2	0.2	0.2	0.2	0.2	0.2
Lombardia	11.7	11.8	12.4	12.7	12.1	12.4
Liguria	2.7	2.7	3.3	3.3	3.1	3.1
Trentino-Alto Adige	1.0	1.0	1.1	1.2	1.1	1.1
Bolzano-Bozen	0.6	0.7	0.6	0.7	0.6	0.7
Trento	0.4	0.3	0.5	0.5	0.4	0.4
Veneto	6.1	6.2	6.4	6.5	6.3	6.4
Friuli-Venezia Giulia	1.9	2.0	2.4	2.4	2.2	2.3
Emilia-Romagna	6.3	6.5	7.1	7.3	6.8	7.0
Toscana	5.6	5.8	6.5	6.6	6.1	6.3
Umbria	1.9	1.9	2.1	2.1	2.0	2.0
Marche	2.8	2.8	2.9	3.0	2.9	2.9
Lazio	8.6	8.6	8.1	7.9	8.3	8.2
Abruzzo	3.1	3.0	2.9	2.9	3.0	3.0
Molise	0.6	0.6	0.5	0.5	0.6	0.5
Campania	10.9	10.8	10.1	9.9	10.4	10.3
Puglia	7.6	7.4	6.9	6.7	7.2	7.0
Basilicata	1.5	1.4	1.2	1.2	1.3	1.3
Calabria	4.7	4.7	4.0	4.1	4.3	4.3
Sicilia	11.8	11.5	10.9	10.4	11.3	10.8
Sardegna	4.7	4.6	4.2	4.1	4.4	4.3
Italy	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(1) Excluded: pensions paid abroad and pensions not apportionable

Source: compiled on the basis of Istat and Inps figures

Table AS3-13 - War pensions by gender and geographical area. 2000 (1)
(in absolute terms)

Geographical area	Male		Female		Total	
	Number	Overall value	Number	Overall value	Number	Overall value
Piemonte	8,932	43,689	13,979	35,903	22,911	79,591
Valle d'Aosta	227	1,298	314	855	541	2,153
Lombardia	15,673	80,989	26,854	70,677	42,527	151,666
Liguria	6,561	32,916	9,886	24,907	16,447	57,823
Trentino-Alto Adige	2,441	11,995	3,678	8,737	6,119	20,732
Bolzano-Bozen	1,088	5,278	1,477	3,137	2,565	8,415
Trento	1,353	6,717	2,201	5,600	3,554	12,317
Veneto	13,751	71,036	22,284	59,620	36,035	130,655
Friuli-Venezia Giulia	5,023	27,528	9,089	26,310	14,112	53,839
Emilia-Romagna	15,420	74,047	24,679	66,237	40,099	140,284
Toscana	13,659	66,549	20,917	57,192	34,576	123,740
Umbria	5,901	23,457	7,804	18,320	13,705	41,777
Marche	8,320	36,157	11,318	27,573	19,638	63,729
Lazio	26,996	149,600	33,958	93,585	60,954	243,185
Abruzzo	6,838	30,997	9,778	25,371	16,616	56,368
Molise	1,971	7,620	2,982	7,346	4,953	14,966
Campania	16,025	79,744	21,536	54,679	37,561	134,422
Puglia	9,449	50,401	12,338	33,643	21,787	84,044
Basilicata	1,988	8,968	2,685	7,044	4,673	16,013
Calabria	7,176	34,874	10,143	26,762	17,319	61,636
Sicilia	14,457	79,549	17,027	46,151	31,484	125,699
Sardegna	4,438	24,284	5,028	12,377	9,466	36,662
Italy	**185,246**	**935,695**	**266,277**	**703,288**	**451,523**	**1,638,983**

(1) Excluded: pensions paid abroad and pensions not apportionable

Source: compiled on the basis of Istat and Inps figures

Table AS3-14 – War pensions by gender and geographical area. 2000 (1)
(percentage distribution)

Geographical area	Male		Female		Total	
	Number	Overall value	Number	Overall value	Number	Overall value
Piemonte	4.8	4.7	5.2	5.1	5.1	4.9
Valle d'Aosta	0.1	0.1	0.1	0.1	0.1	0.1
Lombardia	8.5	8.7	10.1	10.0	9.4	9.3
Liguria	3.5	3.5	3.7	3.5	3.6	3.5
Trentino-Alto Adige	1.3	1.3	1.4	1.2	1.4	1.3
Bolzano-Bozen	0.6	0.6	0.6	0.4	0.6	0.5
Trento	0.7	0.7	0.8	0.8	0.8	0.8
Veneto	7.4	7.6	8.4	8.5	8.0	8.0
Friuli-Venezia Giulia	2.7	2.9	3.4	3.7	3.1	3.3
Emilia-Romagna	8.3	7.9	9.3	9.4	8.9	8.6
Toscana	7.4	7.1	7.9	8.1	7.7	7.5
Umbria	3.2	2.5	2.9	2.6	3.0	2.5
Marche	4.5	3.9	4.3	3.9	4.3	3.9
Lazio	14.6	16.0	12.8	13.3	13.5	14.8
Abruzzo	3.7	3.3	3.7	3.6	3.7	3.4
Molise	1.1	0.8	1.1	1.0	1.1	0.9
Campania	8.7	8.5	8.1	7.8	8.3	8.2
Puglia	5.1	5.4	4.6	4.8	4.8	5.1
Basilicata	1.1	1.0	1.0	1.0	1.0	1.0
Calabria	3.9	3.7	3.8	3.8	3.8	3.8
Sicilia	7.8	8.5	6.4	6.6	7.0	7.7
Sardegna	2.4	2.6	1.9	1.8	2.1	2.2
Italy	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(1) Excluded. pensions paid abroad and pensions apportionable

Source: compiled on the basis of Istat and Inps figures

Table AS3-15 - Municipal social assistence spending and final municipal spending in 1999 and 2000

(values in millions euros)

Region	Social assistence spending year 2000 (A)	Total final spending year 2000 (B)	Social assistence spending year 2000 (A)	Total final spending year 2000 (B)	Social assistence spending Var. % 2000/1999	Total final spending Var. % 2000/1999
Piemonte	633	4,424	615	4,793	2,9	-7,7
Valle d'Aosta	25	246	24	241	4,3	2,1
Lombardia	1,353	13,607	1,298	11,703	4,3	16,3
Liguria	245	2,162	235	2,178	4,4	-0,7
Bolzano	115	1,025	106	1,069	8,3	-4,1
Trento	99	1,045	92	963	7,3	8,6
Veneto	641	4,609	579	4,292	10,8	7,4
Friuli V,G,	252	1,565	219	1,496	15,1	4,7
Emilia Romagna	714	4,465	656	4,271	8,8	4,5
Toscana	548	4,083	530	3,809	3,5	7,2
Umbria	104	1,247	95	1,743	9,8	-28,4
Marche	185	1,963	198	2,311	-6,5	-15,1
Lazio	777	6,520	679	6,668	14,4	-2,2
Abruzzo	106	1,131	90	1,041	18,4	8,6
Molise	25	293	22	354	14,0	-17,3
Campania	479	6,162	443	6,300	8,0	-2,2
Puglia	282	2,930	236	2,796	19,5	4,8
Basilicata	46	714	44	980	3,5	-27,1
Calabria	191	1,746	322	1,913	-40,7	-8,7
Sicilia	738	4,822	686	4,929	7,5	-2,2
Sardegna	277	1,647	255	1,948	8,7	-15,5
Italy	**7,836**	**66,407**	**7,425**	**65,796**	**5,5**	**0,9**

Source: Istat

Table AS3-16 - Municipial social assistence spending (A) and final municipal spending (B) in 1999 and 2000

(values in euros)

Region	2000		1999	
	% (A/B)	Social assistence spending for resident population	% (A/B)	Social assistence spending for resident population
Piemonte	14.3	148	12.8	143
Valle d'Aosta	10.3	210	10.1	202
Lombardia	9.9	148	11.1	144
Liguria	11.3	151	10.8	144
Bolzano	11.2	248	9.9	230
Trento	9.5	209	9.6	197
Veneto	13.9	141	13.5	129
Friuli V.G.	16.1	212	14.6	185
Emilia Romagna	16.0	178	15.4	166
Toscana	13.4	155	13.9	150
Umbria	8.3	124	5.4	114
Marche	9.4	126	8.6	136
Lazio	11.9	146	10.2	129
Abruzzo	9.4	83	8.6	70
Molise	8.6	77	6.3	68
Campania	7.8	83	7.0	76
Puglia	9.6	69	8.4	58
Basilicata	6.4	76	4.5	73
Calabria	10.9	94	16.8	156
Sicilia	15.3	145	13.9	135
Sardegna	16.8	168	13.1	154
Italy	**11.8**	**135**	**11.3**	**129**

Souce: compiled on the basis of Istat data

Table AS3-17 - Size of current municipal expenditure for social assistance in 2000
(in millions of euros)

Region	Total outstanding spending commitments	Expenditure for	%	of which: Supply of services	%	Cash transfers	%
Piemonte	573	167	29.2	247	43.0	120	20.9
Valle d'Aosta	20	6	30.4	9	44.6	3	13.4
Lombardia	1,256	336	26.7	527	42.0	295	23.5
Veneto	585	144	24.6	230	39.3	168	28.7
Friuli V.G.	225	47	20.8	98	43.8	65	28.9
Liguria	239	73	30.4	108	45.3	41	17.0
Emilia Romagna	643	196	30.5	256	39.8	129	20.0
Toscana	504	148	29.3	196	38.9	105	20.8
Umbria	94	28	29.3	36	38.3	21	22.8
Marche	175	52	29.6	65	36.9	29	16.8
Lazio	727	175	24.1	310	42.7	176	24.2
Abruzzo	99	26	26.2	37	37.7	20	20.6
Molise	21	5	23.6	6	28.8	7	30.8
Campania	392	75	19.2	173	44.0	102	26.0
Puglia	276	70	25.4	99	35.7	86	31.0
Basilicata	44	8	18.2	23	52.3	10	21.6
Calabria	161	27	16.9	33	20.2	81	50.4
Sicilia	659	179	27.2	314	47.7	126	19.1
Sardegna	256	31	12.0	126	49.1	80	31.3
Pr. aut.di Bolzano (1)	60	7	10.9	11	19.0	32	53.5
Pr. Aut. di Trento (1)	74	16	21.7	38	51.9	16	22.0
Italy	7,086	1,815	25.6	2,943	41.5	1,712	24.2

(1)Amounts for the municipalities of Trento and Bolzano are indicative, as they are based on accounts prepared in accordance with old standards

Source: compiled on the basis of Istat data

4

chapter

TRENDS IN THE ITALIAN PENSION SYSTEM

Synopsis

The fourth chapter is dedicated to the examination of the most recent pension legislation and the issues and prospects confronting the Italian pension system.

A review of Law 335's impact confirmed its efficiency in stabilising pension expenditure as a percentage of GDP, at least in the short period, but also uncovered some problems related mainly to the future. The regulations, both approved and proposed by the Government, examined in the first part of the chapter appear, nonetheless, to show a reluctance to intervene, at least for the time being. In particular, there is no intention to take action to reorganise seniority pensions or to expand the contribution-based system since it is hoped that incentives encouraging a postponement of the pensionable age will result in reduced expenditure.

In this chapter the individual measures contained in government legislation, increases in minimum pensions and the draft enabling law are examined and an attempt is made to "identify" the Government's envisaged pension model.

Some important issues relating to the pension system are then analysed: long term forecasts, the length of the transition period, its inter-relationship with the labour market, financing the system and pension coverage ratios, and pension indexation.

In particular the capacity of the Italian pension system, as established by Law 335 and Legislative Decree 124, to ensure adequate pension protection in the future is analysed. The analysis demonstrates how the combined effect of factors such as increased flexibility in the labour market, shorter and more irregular periods of contribution generating employment, the contribution-based system's lower replacement ratios, and different forms of pension indexation could result in problems related to the adequacy of state pensions. These are problems which cannot always be solved by raising the pensionable age and introducing supplementary pension schemes.

Two specific studies are dedicated to the microeconomic effects of transferring all workers, including the public sector, to a prorated contribution-based system and to the effects on pensions of the elimination of double indexation in 1992.

Examination of the proposed enabling legislation reveals Government

Trends in the Italian pension system

objectives with reference to supplementary pension schemes and underlines the sector's problems and prospects. The extent to which membership should be mandatory and pension benefits guaranteed, the inflow of funds and their application are the main issues to be confronted. The chapter is concluded by presenting the results of the revised pension expenditure projections on ISTAT's most recent population statistics taking 2000 as the base year.

The projections based on ISTAT's Modsim-P model are very sensitive to changes in a number of the assumptions used. These include, increased weight of contract workers as a percentage of total employment and a postponement of effective retirement ages following the introduction of contribution-based pensions. A factor common to all of the projections are the significant decreases in the ratio of average pension benefits to per employed worker productivity.

Finally, the forecasts relating to public sector employees are presented. These were based on INPDAP's MOPI model whose results were published for the first time in the last edition of this Report.

In addition to the assumptions underlying the projections of the entire pension system, decreasing public sector employment as a percentage of the total was included to forecast the trend in the numbers of public sector employees. This assumption was necessary to show the effects of deteriorating contributions caused by privatisation, which is already beginning to leave its mark on some parts of the public sector.

4.1 Analysis of the effects of Law 335 and the proposed enabling pension legislation

4.1.1 Analysis of the effects of Law 335/95

Results

The Italian pension system's need for further reform was debated at the end of the last session of the legislature partly in response to requests from many international organisations.

Although elections interrupted the debate, agreement was subsequently reached in the political confrontation with the unions to review the effects of the reforms introduced by Law 335 of 1995. Such a review was, in fact, required by that law.

In compliance with the budget law for 1995, the Dini reform fixed the saving goals to be achieved through 2005. The reform had, in fact, provided for a review of these results to evaluate any need for further action. In 2001, the new Government initiated the review by appointing a Commission whose duty was, firstly, to analyse results, both actual and projected up to 2005, and to compare them with the Law 335 forecasts. Secondly, to examine the pension system's medium-long term trends for any problems. The review of the effects of Law 335, and of subsequent measures, produced positive results both with respect to the actual performance for the period 1996/2000 and for the 2001/2005 period, for which the forecasts were revised.

The balance resulting from the difference between actual and projected results for the first period were positive, with the combined effects of decreases in outflows and or increases in inflows exceeding forecasts by more than € 2.87 billion.

The updated forecasts for 2001/2005 are just as favourable, with a positive expected balance exceeding earlier forecasted figures by more than € 7.92 billion.

Table 4.1 - Financial effects of the modifications introduced by Law no. 335/95 and subsequent initiatives
(billions of lire and millions of euros)

		Lire		Euro	
		1996/2000	2001/2005	1996/2000	2001/2005
Savings or greater revenues	(a) forecast	63,684	117,158	32,890.04	60,507.06
	(b) actual or updated	65,078	124,898	33,609.98	64,504.43
	(b-a)	1,394	7,740	719,94	3,997.38
Costs or lower tax revenues	(a) forecast	-10,756	-26,791	-5,555.01	-13,836.40
	(b) actual or updated	-6,585	-19,194	-3,400.87	-9,912.87
	(b-a)	4,171	7,597	2,154.14	3,923.52
Overall balance	(a) forecast	52,928	90,367	27,335.03	46,670.66
	((b) actual or updated	58,493	105,704	30,209.11	54,591.56
	(b-a)	5,565	15,337	2,874.08	7,920.90

Source: Ministerial Commission for Evaluation of the Effects of Law no. 335/95 and Subsequent Measures

These initial findings confirm the effectiveness of the reforms of the 1990s, at least in terms of reduced spending.[1]

(1) Commission for the Review of the Effects of Law 335/95 and Subsequent Measures, Final Report, September 2001.

Box 1 – Some aspects of the Law 335 review

Within the framework of its generally positive results, the review of Law 335 did reveal some negative factors. The improvement of € 2.87 billion compared to forecasts were to a great extent due to the failure of supplementary pension schemes to take hold. The number of contributors was lower than forecast and this resulted in cost reductions (tax relief lower than expected) of about € 2.08 billion. If supplementary pension schemes had developed in line with expectations, the favourable variation would have only been € 794 million (see table AS4-1 of the statistical appendix).
Analogously, for the period 2001/2005, forecast additional savings are influenced by the slower development of supplementary pensions, which cost approximately € 4.4 billion less than forecast. If, on the other hand, supplementary pensions had developed as anticipated, increased savings would have been € 3.52 billion.
While positive in terms of public finances, the delay in supplementary pensions is problematic in terms of the protection afforded by the pension system: the cut in replacement rates introduced by the reform of the compulsory system was not off-set by supplementary coverage, which was the purpose of supplementary pension schemes.
Results in line with or better than forecasts were achieved, and are forecast for the period to 2005, by implementing changes to seniority pensions which is one of the more important areas of the reform. € 12.67 billion in savings were achieved by 2000 while a further € 31.60 billion are forecast for the following five-year period: the improvements over forecast were € 202 and € 790 million, respectively.
The results of the provisions aimed at limiting survivor and/or disability benefits, when combined with other benefits or in relation to income, were adverse compared to expectations. Actual savings for this item were significantly below forecast. The provision, or its application, was clearly ineffective with reference to its objectives.
The measures designed to increase fund inflows were very effective: increased receipts were in line with or better than forecasts. In particular, it should be mentioned that the revised forecast for 2001/2005 with respect to contributions from contract workers shows an increase in revenue of € 3.9 billion over original forecasts.

Forecasts

At the end of the 1990s, growth in pension expenditure, in real terms, amounted to about 1.5 percent per annum, thus maintaining the ratio of expenditure to GDP unchanged. The Commission's forecasts relating to the review of Law 335 show an accelerating trend in expenditure for the period 2001-2010 to an average of 2.4 percent per annum.[2]

(2) According to the Commission, the acceleration in the growth of pension expenditure is attributable to the normalisation of the number of disability benefits, reduced indirect effects of the high number of early retirements, and an ending of the effect of tightening minimum eligibility requirement for old age pensions.

Table 4.2 - Average yearly percentage change in pension expenditure
(Net of indexation effects)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
TOTAL	2.2%	2.8%	2.5%	2.7%	2.0%	2.6%	2.1%	2.5%	2.2%	2.3%
Private employees	2.2%	3.5%	2.9%	3.1%	2.1%	2.7%	1.7%	2.4%	1.9%	2.2%
Public employees	1.8%	1.8%	1.7%	1.7%	1.6%	2.5%	2.6%	2.7%	2.6%	2.7%
Self employed	3.3%	2.1%	2.4%	2.7%	2.7%	2.5%	2.6%	2.4%	2.2%	2.1%
of which: Craftsmen and merchants	6.2%	4.2%	5.0%	5.3%	5.3%	5.0%	5.0%	4.6%	4.3%	3.9%
GDP trend growth rate (1)	1.8%	2.2%	2.2%	2.1%	2.1%	2.1%				
GDP trend growth rate (2)	1.8%	1.3%	2.7%	2.3%	2.3%	2.3%				
GDP targeted growth rate (3)	1.8%	1.3%	2.9%	2.9%	3.0%	3.0%				

Source: Ministerial Commission for Evaluation of the Effects of Law no. 335/95 and Subsequent Measures
(1) Economic and Financial Planning Document 2002-2006 ; actual rate for 2001 and trend rates for the other years
(2) Economic and Financial Planning Document 2003-2006; actual rate for 2001; forecast rate for 2002; trend rates for the other years;
(3) Economic and Financial Planning Document 2003-2006; actual rate for 2001, forecast rate for 2002; targeted rates for the other years.

In the most recent forecast of medium-long term trends for the compulsory pension system of May 2002, the State Accounting Office (Ragioneria Generale dello Stato – RGS) revised downward the rate of increase in expenditure for 2001-2010 as a result of INPS' revision to the insurance base. The rate of growth decreased from 2.38 to 2.12 percent for the full period. A decrease which is more accentuated during the first half of the decade.
If pension expenditure growth rates are those assumed by the RGS and if

Table 4.3 - Yearly percentage changes in pension expenditure (1)

	Tassi di variazione medi annui (1)		
	forecasts 2002 (a)	forecasts 2001 (b)	differences (a-b)
2201-2005	1.96%	2.45%	-0.49%
2006-2010	2.28%	2.31%	-0.03%
2001-2010	2.12%	2.38%	-0.26%

Source: Rgs "Le tendenze di medio-lungo periodo del sistema pensionistico italiano", May 2002

(1) Not including price-indexing adjustments and the increases in pensions below € 516

GDP is assumed to grow at the planned rates rather than forecast trend rates, the ratio of expenditure to GDP will decrease for the period to 2010, or at worst, remain constant.
For long term forecasts the Commission used the RGS's figures. The most recent revisions of these forecasts, May 2002, confirm the above noted trends without significant variation: in particular, from 2005 there should be a continual increase in the expenditure/GDP ratio from its current level of 13.8 percent to 16 percent in 2033, subsequently decreasing to 13.6 percent in 2050.

Proposals
The Commission's Final Report on the review of Law 335 underlines the pension system's problems, shows constraints which must be taken into

consideration and indicates the objectives of any future reform. Although the report does not expressly make concrete proposals, they can, nonetheless, readily be seen by "reading between the lines".
The objectives identified by the report are:

- financial stability and observance of budgetary constraints;
- intra- and inter-generational equity;
- neutrality of pension arrangements with reference to the choice of work and reduction of rates of contribution;
- diversification of pension arrangements.

The use of the RGS's long term forecasts focuses attention on the pensions system's financial sustainability. This objective can be seen in the discussion regarding the "economic sustainability" of the ratio of expenditure to GDP. Although there is no quantitative data, it is implied in the discussion about the so-called "lump" shown in the long term forecasts and the necessity to limit or eliminate it.
In the final report, the Commission shows the need to respect budgetary constraints as one of the objectives for the individual pension schemes. This requirement was also imposed by Law 335. As early as in 1994, however, the Castellino Commission noted that, in a system marked by a large number of schemes, it is impossible for each of them to achieve an inflow/outflow balance, given the effects on their performance of the dynamics of the labour market. As a result, it proposed the establishment of an inter-scheme equalization fund.
The obstacle to achieving financial sustainability is represented by the ratio of retired to working population, exacerbated by the low number of women and young people in the labour market, by a structurally weak official demand for labour, and a shortening working life due to late entry into the labour market combined with a low average pensionable age. This, on the one hand, implies the need for policies promoting the development of the labour market and, on the other, the need to increase the pensionable age particularly with regards to seniority pensions.
In several places the Report underlines the importance of intra- and inter-generational equity both from the point of view of fair treatment as well as financial sustainability. Equity is demonstrated by the principle of the actuarial balance embodied in the contribution-based system: it is clear that the intention of this affirmation is to re-propose a contributions-based system for all workers.
The report, however, underlines the need to mitigate the effect of proposed actuarial equity by resorting to general taxation to redistribute income in favour of those with less privileged and more discontinuous employment histories. This is the only place in the report that mentions the pension system's inability to guarantee adequate pension benefits for increasingly widespread atypical forms of employment.
According to the Report the effect of high contribution and tax rates on the cost of labour acts as a brake on the development of regular employment. At the same time wide differences between rates of contributions help to foster certain forms of employment over others with negative effects on first-time employment for the young and on continuing employment for older workers. To counter this it is suggested to make the contributions structure "neutral" with respect to different forms of

employment contracts, consequently reducing the rate of contributions for regular employment.
According to the Report, diversifying pensions arrangements is the first step in assuring "replacement rates that prevent a decline in living standards of the aged" Furthermore, the development of pension funds in this manner is seen as a necessary condition for capital formation capable of increasing productivity and economic growth, thus making pension expenditure more financially sustainable.
The Report identifies obstacles to the development of supplementary pensions such as scarce resources, a low level of competition among the various types of funds and the lack of a stable regulatory framework.

4.1.2 The Budget law for 2002 and proposed enabling legislation relating to pensions

After analysing the impact of Law 335, the Government took action in two areas relating to pensions: the increase in the minimum pension and a proposed enabling legislation.
The first was the increase of minimum pensions to € 516.46 per month by article 38 of the Budget law for 2002, by raising some social allowances. Eligibility for the allowances is subject to two conditions. One is related to the age of the pensioner and the other is connected to income levels. The increase is also applied to pensions drawn by the disabled, blind and deaf-mutes and to inability pensions (100 percent disabled).
It was initially estimated that there would be 2.2 million pensions eligible for the increase. The actual number is about 1,600,000 but the Government has shown its intention to ease the conditions in order to achieve its original target.[3]
The measure, costing a little more than two million euro a year, is clearly welfare in nature and, consequently, should not be included in the analysis of the future pension expenditure.
The other area is the Government's proposal of new enabling legislation relating to the pension system. Its purpose is to permit the issuance of legislative decrees relating to regulations concerning:

a) the certification of eligibility for seniority pensions as and when the conditions for the pension have been satisfied;
b) the introduction of a set of tax and contribution incentives aimed at making it economically advantageous for workers, who satisfy the conditions for seniority pensions, to continue in employment;
c) liberalisation of the pensionable age;
d) the progressive elimination of the prohibition against supplementing pensions with income from employment;
e) support and facilitation of the development of supplementary pension schemes.

The Government will limit any immediate action relating to the pension system, at least with reference to benefits, based on either explicit and

(3) There is a risk that the decision to increase minimum pensions by raising welfare allowances will, in the near future, reduce, and later, eliminate its effectiveness. Minimum pensions are increased annually based on the rate of inflation while welfare allowances are fixed. As a result, the increase in minimum pensions would progressively "gnaw" at the benefit given by the fixed amount increase in allowances. To avoid this effect, it would be necessary to index the minimum of € 516.

implicit contents of the Commission's Report on the review of Law 335. It will not, in fact, make any changes to seniority pensions, i.e., the pensionable age, except in the form of incentives. The choice is clear, especially in view of the requests for action made by various major international and domestic organisations, the European Commission, OECD, IMF, the Bank of Italy, and is confirmed by the Budget law for 2003.
In the same manner, the proposed enabling legislation makes no mention of extending the contribution-based system to all workers and/or of modifying that system by way of, for instance, a reduction in the period of time between adjustments to the rate of converting pension credits to annuities. Law 335 currently provides that the rate be adjusted every ten years.
The objective of the proposed enabling legislation is not to take direct action on the amount of or eligibility for pension benefits. This is because the Government prefers to limit itself to the introduction of adjustments, principally in the form of incentives, to current arrangements for state pensions.
The measures aimed at reducing pension expenditure are based on a set of contribution related incentives encouraging the continuation of employment after attaining pension eligibility. This should have an effect on the propensity to retire by keeping individuals in the active labour force for a longer period of time.
The incentive to postpone retirement is made to permit workers, who are eligible for seniority pensions, to continue in employment by opting for a special rate of contributions. That rate entails the full exemption of pension contributions equal to 32.7 percent of gross remuneration (of which 8.89 percent is paid by the worker and 23.81 percent by the employer). Not less than 50 percent of the reduction is to be passed on to the employee while the remainder is intended to reduce the firm's cost of labour.
The option may be exercised on condition that the worker undertakes to postpone his retirement by at least two years and that a fixed-term employment contract of equal duration is concluded.
This is a system similar in nature to the incentives introduced by the Budget law for 2001. Its formulation in the proposed enabling legislation, in fact, is identical to Law 388/2000: the difference is in the manner it allocates the reduction in contributions between employer and employee giving greater benefit to the latter. Law 338 provided that the employee and the employer both had the right to a reduction in their own respective share of the contribution (8.89 and 23.81 percent of gross remuneration, respectively) The proposed enabling legislation, on the other hand, provides that benefits allocated to the worker should be at least one half of the total reduction, i.e., not less than 16.35 percent of gross remuneration.
Since the worker also finds part of the employer's contributions in his wage, his take-home pay increases. For gross remuneration of € 23,241 the amount given to the employee increases from € 1,405 to € 2,584 per year (from 6 to 11.1 percent of gross remuneration).
As a result of this increased benefit, the Government hopes to achieve better results than previous legislation which, it appears, only incentivised a few hundred people to postpone their retirement.

Table 4.4 - Advantages for employee and employer of incentives to postpone retirement

(euros)

Savings for employee	Law 388/2000	Enabling law
A - Gross annual salary	23,240.56	23,240.56
B - Exemption for paying IVS contributions	8.89%	16.35%
C - Contribution saving (A*B)	2,066.09	3,799.83
D - Marginal personal income tax (IRPEF) rate (32%)	32.0%	32.0%
E - Increase in personal income taxes (C*D)	661.15	1.215.95
F - After-tax saving (C-E)	1,404.94	2,583.89
G - After-tax saving as a % of gross salary (F/A)	6.0%	11.1%

Saving for employer	Law 388/2000	Enabling law
A - Gross annual salary	23,240.56	23,240.56
B - Exemption for paying IVS contributions	23.81%	16.35%
C - Contribution saving (A*B)	5,533.58	3,799.83
D - IRAP Rate	4.25%	4.25%
E - Saving IRAP tax (C*D)	235.18	161.49
F - Corporate income tax (IRPEG) rate	36.00%	36.00%
G - Increased in corporate income taxes (C*F)	1,992.09	1,367.94
H - After-tax saving (C+E-G)	3,776.67	2,593.39
I - After-tax saving as a % of gross salary (H/A)	16.3%	11.2%

Although there is a definite increase in benefits to the employee, there are doubts as to the provision effectiveness on both employees and firms.
With respect to the worker, a comparison can be made with the "normal" incentive already in existence, i.e., the increase in pension benefits resulting from continuing in employment. Every year of paid employment equates to an increase in future pension payments of 2 percent. For two years, therefore, the increase would be 4 percent. In the example given above, the gross increase in pension benefits would be about € 930 per year. At a marginal tax rate of 32 percent, the net increase would be € 630 annually. It would take the individual eight years of pension drawings to equal the incentive proposed by the proposed enabling law. With life expectancy of at least 20 years, this difference should be extremely attractive.
But of course if the "normal" incentive had been sufficiently attractive to postpone retirement, then the objective would have been achieved and the comparison set out just above would not have been necessary. What should be considered is that if benefits derived from increased pension benefits for the rest of an individual's life is not sufficient to keep workers in paid employment, it would be difficult to imagine that a benefit of a lower value would be effective, at least in terms of economic rationality.
The decision to postpone retirement, moreover, requires satisfying two different sets of preferences: that of the worker and that of the employer. The increased value of the benefit to the worker introduced by the proposed enabling legislation translates into reduced benefits for the firm whose savings decrease from 16.3 percent to 11.2 percent of gross remuneration. It should also be remembered that the comparison made by the firm is between savings achieved through this mechanism and savings achieved through replacing an older employee with a younger one whose pay is lower and, in many cases, contributions reduced.
Incentives work if the benefit to parties concerned is higher, both absolutely and relative to what they had prior to opting for it. Yet this incentive implies a high cost for the entity paying the benefits. A positive effect on the pensionable age could be achieved, at least in the short term, by the so-called "certifications of eligibility" and liberalisation of the

pensionable age.
The first measure is aimed at providing a certain and guaranteed regulatory framework for the individual. This would avoid the "announcement" effect of reforms, which could give alarm and cause individuals to accelerate retirement. This phenomenon was repeatedly seen in the 1990s when each announcement relating to reforms resulted in an increase in the propensity to retire. A "guarantee" of the rights acquired, despite doubts as to its effectiveness following changes in legislation, could certainly have a positive effect.
The second measure permits a worker who has become eligible for an old age pension to continue paid employment, subject to the employer's agreement, giving the employee the option to receive the incentives described above. Another set of measures contained in the proposed enabling legislation is aimed at the progressive extension of the right to supplement seniority pension benefits with employment income (whether as employee or self-employed) and to the emergence of retired workers from undeclared employment. If the most favourable provisions regarding the restriction on supplementing pensions are not applied gradually, they can, at least until that restriction has been completely abolished, have a negative effect on raising the pensionable age. Immediate abolition of the restriction, for example, could only encourage retirement of those individuals who, being certain of other employment, would have the advantage of freely receiving both employment pay and pension.
A gradual reduction from the current minima of 40 years of contributions and/or 65 years of age – the current limits for the right to collect pensions and earn employment income - could, on the other hand, favour an increase in the effective age of retirement to obtain that right over the next few years. This, in practice, is a different kind of incentive.[4]
The provisions relating to combining income and pensions seem, moreover, to have been introduced also, or mainly, to discourage undeclared employment, which is made attractive by the current restrictions on such combination as documented by various studies. The proposed enabling legislation contains an express provision relating to this (article 1, sub-paragraph f) setting out specific measures to discourage the practice of undeclared employment by pensioners and thus facilitating compliance with "Law No. 383 of 18 October 2001, on the emergence from the underground economy, with reference to employment, business and self-employment incomes associated to it". This seems to imply tax and/or contributions reliefs, such as separate taxation of pensioners' income, in order to encourage the regularization of undeclared employment.
In this case as with other provisions regarding the discouragement of undeclared employment, it is the concrete results that count. The desire to emerge depends on the comparison of the burden of illegality and that of increased tax and contributions on leaving undeclared employment. This comparison is not always favourable to emergence unless supported by strong law enforcement and a favourable legal and economic environment.
A third area addressed by the draft enabling legislation relates to revenue from contributions and the cost of labour. The draft provisions relate to

(4) The Budget law 2003 extended the right to earn income, both as an amployee or as a self-employed, and collect senioritypensions simultaneously for individuals with at least 37 contribution years, on the condition that the individual had attained his 58th birthday.

increases in contributions for contract workers with "co-ordinated and continuous employment" contracts; to 3-5 contribution point reductions for first-time employees; and to the increase, of up to one percentage point, of the maximum exclusion of contributable income base for payments in accordance with collective employment or second tier contracts.
The gradual increase in the rate of contributions for contract workers to become equal with the rates applied in the merchants division, is to assure that pension payments are funded, which is certainly not the case at current rates. The immediate increase in the rate of contributions to 20%, would double contributions over the level initially envisaged by Law 335. This would certainly have positive effects on benefits, even if, as shown by the figures in table 4.5, it would not assure an adequate level of pension income considering that the annuitization of pension credits will tend to decrease over time as a consequence of periodic adjustments for increases in life expectancy.[5]

Table 4.5 - Replacement rates for contract workers (1)

	Contribution rate 10% Transformation coefficients 2035 (2)				Contribution rate 20% Transformation coefficients 2035 (2)			
Years of contribution	Retirement age 57	60	62	65	57	60	62	65
35	13.6%	14.7%	15.6%	17.2%	27.1%	29.4%	31.2%	34.3%
36	13.9%	15.1%	16.0%	17.6%	27.9%	30.2%	32.0%	35.2%
37	14.3%	15.5%	16.4%	18.1%	28.6%	30.9%	32.8%	36.1%
38	14.6%	15.9%	16.8%	18.5%	29.3%	31.7%	33.6%	37.0%
39	15.0%	16.2%	17.2%	19.0%	30.0%	32.5%	34.4%	37.9%
40	15.3%	16.6%	17.6%	19.4%	30.7%	33.2%	35.2%	38.8%

(1) Earnings growth rate 2%, capitalisation rate 1.5%.
(2) Coefficients to transform accumulated credits in annuities based on the ten-year adjustment provided for by law 335/95.

The increase in contribution rates would, furthermore, have two additional positive effects: an increase in revenue from contributions and a decrease in contribution differentials between different types of employment. The decrease in contributions for first-time employees, one of the measures included in the provisions regarding the development of supplementary pension schemes and the encouragement of hiring first-time employees, is intended to reduce the cost of labour by limiting the contribution wedge. The categories of workers to be affected by the reduction in contributions would be determined at the time the draft enabling legislation is implemented. The proposed enabling legislation rules out the reduction of the future pension benefits due to lower contributions.
From a technical point of view, the funding problem is solved as shown in a subsequently presented technical note. This is achieved by an amendment "whose purpose is to specify that the progressive reduction in tax and contribution rates and the definition of the generations concerned with respect to those criteria-objectives, will be established in the budget law which will assure the resources required for funding". This provision

(5) Law 335/95, article 1, sub-paragrph 11, provides that transformation coefficients be adjusted every ten years based on changes in life expectancy.

affects both the labour market and the pension system. For the labour market, it causes a difference in the employment cost for a first-time employee versus individuals who are already employed, above all older workers. This will accentuate the tendency to dismiss employees over fifty years of age and frustrate attempts to raise the effective retirement age. The advantage, in terms of costs, for the firm to "replace" employees with higher contributions, and generally higher pay, as quickly as possible, with those whose contributions are lower is obvious. This causes two problems for the pension system: one is a reduced revenue; and, the other is a mismatch between contributions and pension benefits, if, as set out in the enabling legislation, a short-fall in contributions will have no effect on the level of pensions. Reduced revenue is a result of reduced rates of contribution for first-time employees and would, therefore, become progressively more severe as the proportion of first-time employees increases over the years. When the new provisions are fully implemented, the cost to the system in terms of reduced contributions is estimated to be about 0.60/0.70 percent of GDP about € 7.5 billion in current terms. If the provisions had a positive effect on employment and/or if at least some contract workers converted to regular employment with higher contributions, the decrease in the contribution revenue would be less severe. In this case, however, the amount of eligible pension benefits and the so-called pension debt would increase.

The proposed amendment solved one problem by allocating the responsibility for annual funding to the Budget law. From a practical point of view, however, this implies that in every year the short-fall should be funded by general taxation or cuts in expenditure. The manner in which INPS' short-fall arising from a reduction in rates of contribution will be funded is not clear. Funding through loans from the Treasury to INPS would have an adverse effect on the Agency's pension budget, creating more direct pressure for measures to restrict benefits. Funding by transfers from the State would not change INPS' budgetary condition, but would result in an increase in the national debt due to reduced contributions with consequent problems for funding.

The pension system would witness programmed "mismatch" between contributions and benefits. This runs counter to the 1995 reform which is based on the principle that the two items should be balanced. There are currently still some sectors where the calculation or benefit accrual rates diverge significantly from financing rates, the self-employed, for example. Currently, however, a progressive alignment of calculation and financing rates is under way as provided by Law 335/95.[6]

The proposed enabling legislation would, therefore, introduce a profound change in the pension system, effectively replacing the method of financing based on employment relationship with a mixed system in which a part of pension expenditure is financed by taxation. The full package of

(6) There are some differences between rates of financing effectively paid and calculation or benefits accrual rates due to imputed contributions, with financial support given by the State. Apprenticeships, training contracts, availability for employment allowances, redundancy payments, maternity allowances, geographic location are all instances for which the rate of contribution actually paid is much lower that the corresponding pension credit earned. These are, however, all cases which are in response to specific events, albeit common, and tending to be for a fixed period of time. The first-time employees reduced contributions would be general and without expiry, and is intended to expand over time to cover all employed workers.

government measures including those relating to minimum pensions could, therefore, suggest that the future pension system will be significantly different from that of today.
Financing by the state through taxation will continue increasing, while a kind of "citizenship" pension will develop which will be assured partly by the minimum pension and partly by the funding of the short-fall in contributions.
The proposed enabling legislation contains a further item to facilitate the reform of current arrangements by strengthening supplementary pension schemes. This is a prerequisite for decreasing state pensions for which preparations have already started by reducing the rate of financing.
The framework of the proposed enabling legislation is completed by provisions relating to supplementary pension schemes and the TFR (employee severance fund). It is intended that the law should continue the objective of facilitating and supporting the development of these pensions primarily through the mandatory transfer of the TFR and secondly through increased competition between various supplementary pension schemes.
The enabling bill specifies that the allocation of the TFR to pension funds should not increase costs for firms.
Mandatory transfer of the TFR would fund the supplementary pensions to compensate further reductions in compulsory pensions. As a result of this the short-fall in contributions in relation to benefits would only have temporary effects, which would disappear once the supplementary pension schemes are introduced and take hold.
From the point of view of pension coverage, the worker could maintain his benefits unchanged, given "moderately positive" financial market yields (see table 4.6). Higher average yields are not credible considering that they are net of management fees both for the period of employment and during the period annuities are paid.

Table 4.6 - Replacement rates with lower contribution rates and supplementary pensions
Transformation coefficients 2035 (1)

Retirement age	Public mandatory system (2)				Supplementary pension schemes (3)			
	Contribution rate 33%		Contribution rate 28%		Return on investments = GDP+ 1		Return on investments = GDP	
	Years of contribution		Years of contribution		Years of contribution		Years of contribution	
	35	40	35	40	35	40	35	40
65	56.7%	63.99%	48.08%	54.30%	13.32%	16.22%	11.33%	13.40%
64	54.8%	61.87%	46.48%	52.50%	12.87%	15.68%	10.95%	12.96%
63	53.1%	59.93%	45.02%	50.85%	12.47%	15.19%	10.61%	12.55%
62	51.4%	58.10%	43.65%	49.30%	12.09%	14.73%	10.28%	12.17%
61	49.9%	56.38%	42.36%	47.84%	11.73%	14.29%	9.98%	11.81%
60	48.5%	54.80%	41.18%	46.50%	11.40%	13.89%	9.70%	11.48%
59	47.2%	53.25%	40.01%	45.18%	11.08%	13.50%	9.43%	11.15%
58	45.9%	51.86%	38.97%	44.01%	10.79%	13.15%	9.18%	10.86%
57	44.8%	50.58%	38.00%	42.91%	10.52%	12.82%	8.95%	10.59%

(1) Coefficients to transform accumulated credits in annuities based on the ten-year adjustment provided for by law 335/95.
(2) Capitalisation rate 1.5%.
(3) Contribution rate 6.91%.

The situation relating to income distribution will not, however, remain unchanged. The transformation of the TFR into a pension annuity to compensate reduced state pensions means that the worker would lose the

current benefit of the severance payment. The beneficiaries of the transformation would be firms as the recipients of a redistribution of national income in connection with reduced cost of labour.
The proposed enabling legislation and the order regarding minimum pensions appear to foreshadow a new and different pension system characterised by three important factors: a citizenship pension guaranteed to all from a certain age; a contributions-based public pension significantly more limited in comparison with the current system; a funded pension strengthened by the mandatory transfer TFR to new pension funds.

4.1.3 The proposed enabling legislation and public sector employment
The guidelines and directives set out in the proposed enabling law are, primarily, directed at the arrangements for private sector employees with no automatic application of the provisions to workers in the public sector. Although the enabling bill makes reference to workers in the public sector, this is limited to a statement of the principle of progressive application of the enabling bill's provisions to the public sector, with due consideration to the peculiarities of the individual sectors.
On the one hand, this statement clarifies that the provisions of the bill may also be extended to workers in the public sector "to the extent they are compatible". On the other, however, it does not make the application of its provisions to that sector automatic and does not clarify whether or not the special nature of public sector employment will limit the extension of the bill's area of application. If there should be a limitation, the uniformity of the Italian pension system introduced by recent reform laws would be compromised.

4.2 Problems and prospects of the pension system
Rejecting the idea of taking immediate action to reduce expenditure in favour of introducing incentives to postpone retirement, the Government does not appear to have concerns regarding the ratio of pension expenditure to GDP for the rest of this decade. In fact, the figures produced in the RGS's most recent revision to forecasts, May 2002, show the growth in pension expenditure, net of inflation, to be 2.12 percent per annum The ratio between expenditure and GDP will, therefore, be stable even if GDP growth is lower than the planned rate set out in the latest Economic and Financial Planning Document (DPEF). A stable pension expenditure/GDP ratio for this decade is considered realistic even by the latest Report of the Nucleo di Valutazione della Spesa Previdenziale (NVSP), a unit established to track and assess pension spending, which forecasts that pension expenditure will grow at the rate of 2/2.2 percent, in real terms, for the period 2002-2011. This is in line with the potential growth rate of GDP as estimated by the OECD for the same period.

4.2.1 Long term trends
In the medium to long term, on the other hand, the RGS forecasts growth of the pension expenditure/GDP ratio to a maximum of 16 percent by 2033. The accuracy of this forecast is linked to the macroeconomic assumptions used. Although the assumptions are certainly within the range of possible figures, they are also subject to certain observations.

The average GDP growth rate used in the assumptions adopted by the RGS is equal to 1.5 percent per annum beyond 2006. This rate of growth is significantly below the level planned by all recent governments and is certainly insufficient to attain the employment and activity rates targeted by the Lisbon summit, as subsequently confirmed at the Barcelona summit and adopted by the Government.
A second observation relates to the number of pensions and their average amount. In the RGS model the effect that a contributions-based pension system would have on the propensity to retire is not taken into account so that it is held constant over time. The stability of this factor is reasonably probable until 2013. Afterwards, those workers who will be eligible for pensions based on a mixture of contributions and earnings will begin to retire. These pensions contain significant penalties for individuals who retire at lower ages. In addition to the penalisation for early retirement, there will also be the effect of the ten year adjustment to the rate of transformation of pension credits into annuities as provided for by Law 335. As time passes the weight of contribution-based pensions will grow, thus increasing the penalties to persons who retire at the lower end of the permitted age range.

Table 4.7 - Replacemente rates: contribution period 35 years (1)

Salaried employees

	Years of contribution in 1995				
Retirement age	**18**	**14**	**10**	**6**	**0**
		Coeff. 2015	Coeff. 2015	Coeff. 2015	Coeff. 2025
57	67.1%	55.1%	52.5%	49.8%	44.8%
60	67.1%	57.6%	55.4%	53.2%	48.5%
62	67.1%	59.6%	57.8%	55.8%	51.4%
65	67.1%	63.1%	61.8%	60.5%	56.7%

Self-employed

	Years of contribution in 1995				
Retirement age	**18**	**14**	**10**	**6**	**0**
		Coeff. 2015	Coeff. 2015	Coeff. 2015	Coeff. 2025
58	64.8%	43.7%	39.6%	35.5%	27.1%
60	64.8%	44.8%	40.9%	37.0%	29.4%
62	64.8%	46.1%	42.4%	38.8%	31.2%
65	64.8%	48.3%	45.1%	41.8%	34.3%

(1) GDP +1.5%, earnings growth +2%, transformation coefficients in accordance with law 335/95.

It is reasonable to expect postponements of retirement to mitigate cuts in pension benefits. It was for this reason that it was necessary to choose a new model. This trend should be more accentuated for the self-employed, whose transformation coefficients are the most drastically affected by the change to the contribution-based method. It will certainly also be noted for private sector employees as a result of the spread of new forms of employment contracts which imply a reduction in pension benefits compared to current levels.
From 2013, therefore, it will not be possible for the rapid decrease in replacement rates, which are also forecast by the RGS, not to have an increasing effect on the pensionable age. This will initially result in a decrease in the number of pensioners and, therefore, a flattening of the

trend line showing the ratio of pension expenditure to GDP. A delay in retirements, also causes an increase in activity rates and, therefore, in employment and GDP with the effect of further reducing the expenditure/GDP ratio.
The RGS's forecasts treat contract work as if it were the initial phase of a process leading up to regular employment. As a result, the model does not forecast pensions being disbursed by that division not even in 20, 30 or 50 years. While it is certainly probable that contract work may only be an initial or, in any case, temporary phenomenon, it seems less certain that there will be no pensions disbursed by this division in the future. If the sectoral structure of pension payments is modified by replacing regular employees with a certain number of contract workers, pension expenditure decreases due to the lower amount of pension benefits payable to the latter.
The effects on pension expenditure and on the expenditure/GDP ratio of these assumptions will be analysed in greater detail in the long term forecast section of this Report.

4.2.2 The transition period

Under existing rules, ageing of the population results in an increase in the ratio of retirees to working population and, with average pension benefits held constant, an increase in the proportion of national income going to pensioners. In a closed system, this effect will occur regardless of the method by which the payment of pension benefits is financed. Their share in national income will necessarily increase whether the system is pay-as-you-go or funded.
To counter this effect, it is necessary either to reduce the average level of pension benefits or the number of pensioners. The reforms of the 1990s primarily affected the first variable. But introducing a penalty to the amount of pension benefits linked to the age of retirement will result in pushing back a certain number of pensioners, so that the number of pensions will be contained in the medium period.
In the short period, however, eligibility for pensions will still predominantly be determined by rules which are not influenced by retirement age. In fact, the Government did not take action to extend the prorated contribution-based system to the entire labour force or to reduce seniority pensions.
As time passes following the introduction of the contribution-based system, any extension of the system on a prorated basis to workers with at least 18 years of contributions in 1995 would naturally be less and less effective, since some of the individuals concerned will have already retired. Those who are still working, on the other hand, would have added a further seven years to their pension credits in the earnings-related system (those with 18 contribution years in 1995, today have 25 years in the earnings-related system)
Table 4.8 shows the replacement rates for private employees and the self-employed with 18 years of pension credits in 1995 who opt for prorated contribution-based pensions either from 1996 or 2003. The penalisation of those pensions most affected by the switch to a contribution-based system is reduced by more than 40 percent. Potential savings in expenditure are reduced by the same amount.

Table 4.8 - Pension decrease in percentage terms following transition to pro-rata contribution-based system in 1996 and 2003 (1)

Private employees with 18 years of contribution in 1995

Retirement age	contribution period 35 years (2)		contribution period 40 years (3)	
	1996	2003	1996	2003
57	-11.6%	-6.9%	-14.6%	-10.2%
58	-10.5%	-6.3%	-13.5%	-9.4%
59	-9.4%	-5.6%	-12.3%	-8.6%
60	-8.2%	-4.9%	-11.0%	-7.8%
61	-6.9%	-4.2%	-9.6%	-6.9%
62	-5.6%	-3.4%	-8.2%	-5.9%
63	-4.1%	-2.6%	-6.6%	-4.9%
64	-2.6%	-1.7%	-5.0%	-3.8%
65	-0.8%	-0.7%	-3.2%	-2.6%

Self-employed with 18 years of contribution in 1995

Retirement age	contribution period 35 years (2)		contribution period 40 years (3)	
	1996	2003	1996	2003
58	-25.1%	-14.8%	-29.4%	-20.2%
59	-24.4%	-14.4%	-28.7%	-19.7%
60	-23.7%	-14.0%	-27.9%	-19.2%
61	-22.8%	-13.5%	-27.0%	-18.6%
62	-22.0%	-13.0%	-26.1%	-18.0%
63	-21.1%	-12.5%	-25.1%	-17.4%
64	-20.1%	-11.9%	-24.1%	-16.7%
65	-19.0%	-11.3%	-22.9%	-16.0%

(1) GDP +1.5%, earnings growth +2%
(2) Retirement year 2017; transformation coefficient 2015 (in accordance with l. 335/95)
(2) Retirement year 2012; transformation coefficient 2005 (in accordance with l. 335/95)

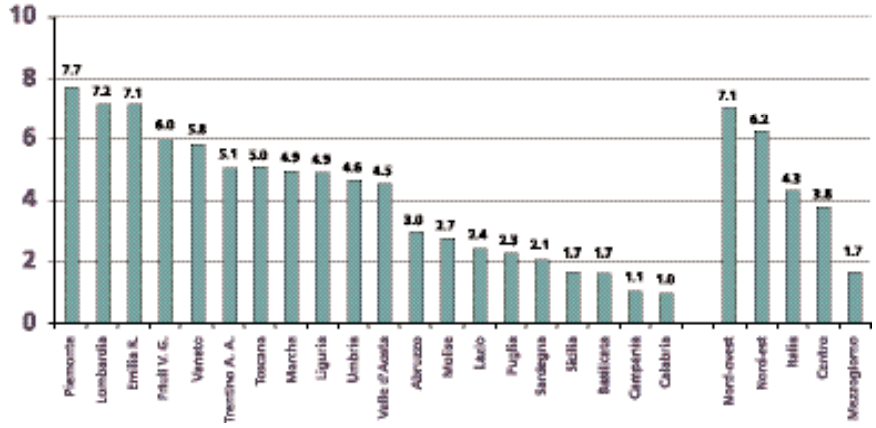
Appendix (A4.1) shows the effects on replacement rates for different contribution year levels for public and private sector employees as well as for the self-employed, if there is a switch to a prorated contribution-based system from 2003. Criticisms of the length of the transition period are primarily focused on seniority pensions. Despite the introduction of the age requirement, now formally instituted for private sector employees – from 2004 it will also apply to public sector employees – this kind of pension is considered an anomaly and cannot be supported by the pension system.

There is no doubt that seniority pensions are a privilege for those who are eligible and are the source of significant differences in the implied rates of return. Furthermore, they are paid to certain categories of workers, such as those in the public sector or private sector workers employed in geographic areas and industrial sectors considered "strong" from the point of view of diffusion and continuity of employment. In the private sector the number of seniority pensions as a percentage of population is, indeed, significantly higher, in the regions of the North, particularly, in the Northwest, than in the other regions of Italy.

According to INPS data for 2001, the retirement rate in the Northwest is 7.1 percent, 6.2 percent in the Northeast, while falling to 3.8 percent in the central regions and 1.7 percent in the South.

These pensions, however, are not always privileges. It is often forgotten that workers over fifty years of age lose active employment throughout the industrialised world no longer due exclusively to restructuring. In the last 20 years, it has been seen in almost all industrialised countries that the

Chart 4.1 - Retirement rate: number of seniority pensions per 100 inhabitants. Year 2001



effective age of retirement has fallen despite a general increase in the legal retirement age.

With the ending of early retirements, which transferred the cost of industrial restructuring in many sectors to the pension system, seniority pensions, often paid before time with the assistance of the redundancy fund (Cassa Integrazione Guadagni or CIG) during the years immediately preceding the accumulation of sufficient pension credits to retire, frequently represented for firms a means of "soft dismissal" for personnel considered "obsolete" and/or too expensive (but also a form of protection for these employees).

Bearing this in mind, seniority pensions are no more anomalous in Italy than in other countries. As seen in chapter 2, there are non-pension income support instruments in many countries of the European Union for workers over fifty years of age, the individuals most at risk in the current labour market, which reflect different conceptions of welfare.

The raising of the legal retirement age, one of the European Union's objectives fixed at the Lisbon and Barcelona summits, if implemented without taking action to prevent dismissal of senior employees, will certainly result in an increase in activity rates but also in the rate of unemployment and the maintenance of income levels for those age groups close to retirement will become significantly problematic.

The data on activity rates per age group for Europe show that Italy has the lowest activity rate for the age group 50 to 64 years, 40 percent, against a UE average of 53.1 percent. This figure, clearly unfavourable, should, however, be compared with the unemployment rate for the same age group, 4.6 percent, significantly lower than the average for the Union, 7 percent, and much lower than for countries like Germany 10.9 percent, Spain 9.4 percent, or France 7.6 percent.

High activity rates for the over fifties do not necessarily equate to high unemployment rates as shown by the Netherlands, Denmark, the United Kingdom and Sweden, but an increase in activity rates does not necessarily result in an increase in employment. In many countries, as seen, retirement at 65 years of age has resulted in high unemployment for the over 50 age group.

Social safety nets are not a proper use of seniority pensions. Their

Chart 4.2 - Activity rate for people age 50 - 64 in some countries of the EU - Year 2000

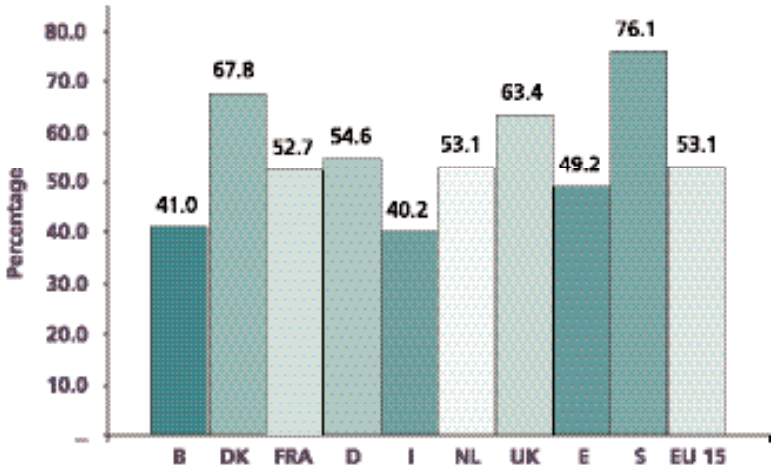
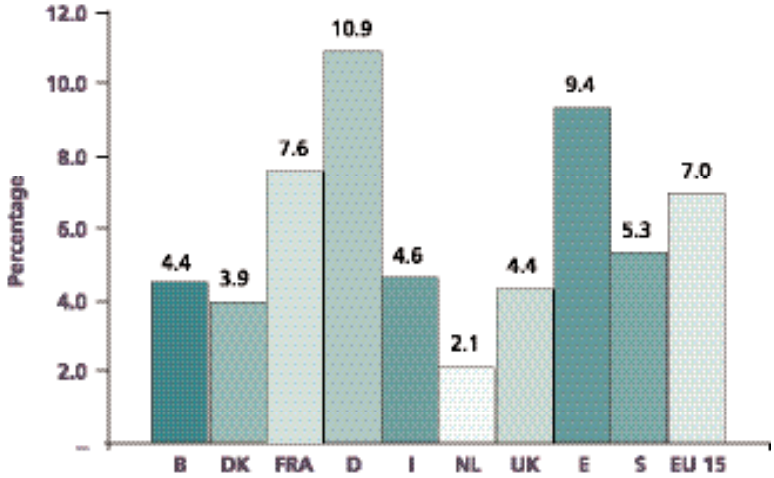


Chart 4.3 - Unemployment rate for people age 50 - 64 in some countries of the EU - Year 2000



reduction or elimination, however, although justifiable for various reasons, must be accompanied by the institution of alternative forms which effectively assure the welfare of workers who in any case would have been dismissed from active employment.

4.2.3 Pension indexation

A critical element for the future of the pension system is the current method of pension indexation.

There is widespread belief that pension reforms changed rules, eligibility and calculation of new pensions but did not "touch" those already in existence. This belief is not completely correct: it is certainly true that the starting amounts of pensions were outside the reforms. The actual amounts of pension benefits in subsequent periods, however, depend on the method of indexation. The form of pension indexation is a major problem. The elimination in 1992 of double indexation whereby pensions were linked to prices and wages was one of the main factors introduced to contain pension expenditure. The problem of the progressive

reduction in value of pensions compared to the growth in average income for the actively employed population will be significant with a risk of creating widespread "poverty" not only in relative but also in absolute terms.
Reference is made to appendix A4.2 for the quantitative effects of changing the method of indexation.

4.2.4 The labour market and the pension system
The pension system has been analysed, discussed and reformed from the beginning of the 1990s. Changes were made to pension calculation methods and eligibility requirements based on the State's financial needs, the pension system's need to balance inflows and outflows, its financial sustainability and the necessity for actuarial equity.
The current debate concerning any new reforms always starts with these requirements but, as in the past, tends to avoid problems posed by the new labour market. The existing interactions are numerous: new trends emerging in the labour market create effects relative to both the financing of the pension system as well as its ability to assure an adequate level of income. The application of specific pension policies, on the other hand, influences the labour market, particularly, activity and employment rates.
And yet, those effects, in many respects two manifestations of the same problem, are often acted on separately or partially.
The 1992 reform extended the pension calculation period to cover an individual's entire working life, although only for those workers who, as of that year, had not yet acquired 15 years of pension credits. The switch to the contribution-based system did not change this, but introduced a differential to the amount of the pension depending on an individual's age on retirement. The amount of new pension benefits, therefore, is calculated with reference to amount and duration of contributions made over the entire working life of the pensioner.
The benchmark for the 1995 reform was a "typical" employee with 37 years of regular and continuous contributions. The new pension system is able to provide this worker with full pension coverage, both compulsory and supplementary, similar to the benefits received by pensioners prior to the reform. Today's labour market, however, is characterised by the growing importance of "atypical" workers with reference both to their type of contract and their employment history.
During the 1980s and 1990s the economy was steered towards the target of reduced labour costs in two ways. One was with "traditional" statutory instruments such as the extension of the length of apprenticeship contracts, the development of occupational training contracts and the eligibility of first time employees in the South for contributions reliefs. These are all forms of employment which are entitled to reductions in the rate of contributions of a temporary (whether in the form of reduced contributions or tax allowances) and selective (geographical area, industrial sector, occupational category) nature.
The other was by the widespread avoidance/evasion of contributions. Sometimes this took the traditional form of undeclared wages. Alternatively new types of professions and employment contracts were created which, until

Table 4.9 - Workers members of INPS contract workers' fund

Type of membership	1996	1997	1998	1999	2000	2001
Contract workers	856,263	1,134,083	1,361,608	1,554,429	1,690,594	1,890,620
Independent Professionals	106,413	126,548	143,657	158,933	169,591	178,484
Contract workers/ professionals	11,411	16,109	25,564	32,503	37,163	44,376
TOTAL	974,087	1,276,740	1,530,829	1,745,865	1,897,348	2,113,480

Source: Inps

Table 4.10 - Workers members of INPS contract workers' fund - 2001

Age classes	Contract workers	%
<20	6,593	0.3%
20-24	126,121	6.7%
25-29	295,410	15.6%
30-39	587,800	31.1%
40-49	388,557	20.6%
50-59	296,215	15.7%
>60	189,924	10.0%
TOTAL	1.890,620	100.0%

Source: Inps

1995, at least, were not subject to contributions.
A third phenomenon which gradually spread is connected to the increased flexibility demanded by the economy. It manifests itself in fragmented and discontinuous employment histories characterised by periods of no work, part-time employment and/or low remuneration.

Table 4.11 - Part-time workers and temporary workers classified by economic activity. Years 1996-2001
(in % terms)

YEARS	Part-time workers				Temporary workers			
	Agriculture	Industry	Services	Total	Agriculture	Industry	Services	Total
1996	12.7	4.0	7.2	6.5	34.2	5.7	6.8	7.3
2001	13.3	4.6	10.0	8.4	38.4	7.3	9.8	9.8

Source: Quarterly survey on labour force

These new types of instruments, contracts and employment histories have significant implications on how the pension system works with regards to both replacement and financing rates.
For replacement rates, it is necessary to ascertain the extent to which today's pension model, developed for the "typical" worker, is able to assure that the new types of worker will have
adequate income levels once they retire.
As for financing, progressive impoverishment of the current financing base will become accentuated in the short to medium term. This financing base consists principally of income from "typical" employment thus amplifying the negative effects of demographic factors on the financial sustainability of the welfare system.

Table 4.12 - Workers classified by economic activity sector, by age class, by type of working hours and by type of activity

(in thousands)

		Economic sectors			Age group		
	TOTAL	Agricult.	Industry	Other activities	15-29	30-49	Over 50
TYPOLOGY OF WORKING HOURS							
Full time work	19,698	977	6,523	12,198	3,918	11,497	4,282
Part-time work	1,816	149	317	1,350	419	1,056	342
Worker does not want full time employment	467	30	85	352	72	278	117
Worker has been unable to find full time employment	606	58	75	473	203	328	75
Worker enrolled in training or educational programme	68	1	10	57	54	13	2
Illness or disability	33	3	10	20	4	18	10
Family or individual reasons	322	22	76	223	39	213	70
Other reasons	197	18	44	135	23	141	33
Reasons not specified	124	17	18	89	24	65	35
TOTAL	**21,514**	**1,126**	**6,841**	**13,548**	**4,337**	**12,553**	**4,624**
	EMPLOYEES						
TYPOLOGY OF ACTIVITY							
Permanent employment	14,002	286	4,925	8,791	2,825	8,527	2,650
Temporary occupation	1,514	178	386	950	665	689	160
Training period	442	12	152	278	314	111	17
Worker has been unable to find permanent employment	671	118	156	396	215	371	85
Worker does not want permanent employment	66	12	13	41	24	28	14
Trial period	63	2	23	38	36	24	3
Other reasons	273	34	41	197	76	156	41
TOTAL	**15,517**	**464**	**5,311**	**9,742**	**3,490**	**9,216**	**2,810**

Source: Quarterly survey on labour force

Box 2 – "Traditional" contracts

A first group of contract types consists of instruments designed to introduce incentives for the promotion of first-time employment by companies operating particularly, but not only, in the South. Reliefs relating to social charges were given, primarily to employers, to reduce the contribution wedge and, therefore, contain full employment cost for firms. These were, for the most part, temporary in nature so that their efficacy was limited in time. They were also selective in nature being based on activity, geographic area and occupational category.

This category includes: occupational training contracts, apprenticeship contracts, contribution reliefs and, in the South, for first-time employment in the South. Reliefs consist of reduced contributions: in particular, an all encompassing fixed amount contribution and/or a rate of contributions more favourable than ordinary rates which is differentiated depending on industrial sector and geographic location of the firm. The amount of the reduction for an occupational training contract, for instance, is 25 percent of current contribution rates. This percentage increases to 40 percent for commercial companies with at least 15 employees and to 50 percent for firms located in the South (see table 4.13).

In more recent years, furthermore, there have been numerous tax reliefs given to firms in the South for social charges in connection with first-time employees. The effect, always temporary in nature, was to reduce the

employer's share of contributions and, therefore, the cost of labour. Another form of assistance to employers and workers is the application of imputed contributions for periods during which redundancy and availability-for-employment allowances are paid. Firms, therefore, obtain a certain amount of flexibility in the manner they use the labour force and are provided with instruments of "soft" dismissal, insofar as they often facilitate the replacement of early retirees.

Table 4.13 - Atypical employment contract: contribution reductions and effects on pension coverage (1)

Typology	Contribution reductions	Effects on pension
Fixed-term employment	Ordinary rate Total contribution rate: 40.96% Pension rate: 32.7%	
Work-training contract	Cut rate Range of reduction between 25 - 50% (a)	Imputed contribution No effects on pension
Apprenticeship	Cut rate Employer: contribution amount fixed in 2,68 euro to week; Employee: 5.54%.	Imputed contribution No effects on pension
No contribution	No contribution for newly hired employees in Southern Italy (b)	Imputed contribution No effects on pension
Part-time work	Ordinary rate	There is not effects on pension (c)
Collaborazione coordinata e continuativa	Cut rate Total contribution rate: 14.0% Pension contribution rate: 13.5% (d)	The pension is fall short of workers with standard rate; the rate of imputed to calculate the pension is higher to effective tax rate of 2% rise to 20% on 2010

1) Additional information on these contracts is available in the appendix.

(a) Contribution reductions depend on labour category, economic sector and geographic location.
(b) Temporary measure.
(c) With respect to pension vesting rights, part-time employment is credited as full-time; in terms of pension amount, service years are computed in accordance with the number of hours worked.
(d) Pension contribution rate as of 1/1/2002 is 13.5%, in the following period, the contribution rate is set to increase by one percentage point every two years, up to 19% in 2014.

Box 3 – "Atypical" employment contracts

A second group of "atypical" contracts has been created whose differences to regular employment contracts are multifarious. Prior to 1995 there was no form of pension protection available for these types of employment contracts due to the fact that they were not subject to social security contributions.
Through the creation of pension fund for contracted self-employed worker (known also as para-salaried workers), however, Law 335 assured pension coverage for these workers as well, albeit at a lower benefit level than regularly employed individuals. In addition to lower rates of contribution,

co-ordinated and continuous collaboration contracts, in fact, do not assure entitlement to other kinds of protection, particularly unemployment. Only recently have forms of protection other than pensions, such as maternity, illness and family benefits been introduced.
Furthermore, there is no form of imputed contribution but the contribution rate is two percentage points higher than the financing rate.
The contribution rate was fixed at 10 percent by Law 335/95 gradually increasing by one percentage point every two years until it reaches 19 percent in 2014. As a result of the contribution rate's two point bonus, the rate used for pension calculations from 2012 will be 20 percent.

Box 4 – Discontinuous and fragmented employment histories

The increased labour mobility and flexibility required by the economy has resulted in discontinuous and fragmented employment histories which are characterised by periods of unemployment or part-time work and/or the accumulation of contribution credits in various pension funds. It is possible that these workers have shorter employment and contributions histories with pension credits calculated at different rates by various pension funds. There are numerous problems relating to linking contributions in various funds, making-up missed contributions, having contribution periods recognised and, in general, to the duration of the contribution period.
The current regulatory framework, as revised by Law 335/95 and subsequent legislative decrees, makes provisions for periods not eligible for pension coverage, which may or may not be a financial burden for the worker: for example imputed contributions are gratuitous, make-up and voluntary contributions, on the other hand, are onerous since they require the worker to make payments.
Imputed contributions, required to calculate both eligibility for pensionable retirement and amount of benefits, are limited to a maximum period of five years for individuals who commenced their active working life after 1992. They will be applied during periods in which the worker is available-for-employment, eligible for unemployment or redundancy allowances, periods of illness and maternity and during certain absences from work to give assistance to dependent children and/or handicapped persons, etc. This type of contribution, which is gratuitous for both the worker or the firm, is, however, restricted almost exclusively to regularly employed workers. In certain circumstances imputed contributions given by the various pension funds are available to all regularly employed and self-employed workers, e.g., for military service. Coverage for all other contribution free periods is only permitted to the extent that make-up and/or voluntary contributions are made. Coverage is regulated by Legislative Decree 564/1996: these are treated as interruptions to or suspension of work (limited to a maximum of three years); periods of professional training, study or research or search for employment; periods between jobs for discontinuous, seasonal or temporary employment; periods during which work is suspended for different types of part-time arrangements.
These provisions are certainly positive, albeit too limited with respect to the permitted contribution make-up period, but place a burden on the worker which is not always tenable.

Law 388/2000 took a step in the direction of guaranteeing pension benefits to discontinuous and "atypical" workers. A special purpose fund was created inside INPS to maintain pension coverage in the event that work is discontinued or for other situations defined by Legislative Decree 564/1996 as well as for the benefit of those individuals included in the contract worker division through their own payment of contributions as required for make-up or voluntary continuation. The solidarity contributions established by article 37, sub-paragraph 1 of Law 488/1999 is allocated to this fund in addition to the 70 billion lire in 2001, 50 billion in 2002, and 27 billion from 2003 paid directly by the State.
The provisions relative to the implementation of this regulation, methods and conditions for the collection of the charges payable by workers were delegated to an inter-ministerial decree. As a result they have not yet been implemented so that Law 338 has not been activated. Instead, a ministerial decree was issued to regulate the procedures for collecting payments with reference to the differences in contributions for periods in which workers with temporary contracts are remunerated at rates lower than collective rates or periods during which they are in receipt of availability allowances. A provision important for those with discontinuous employment histories is that concerning "totalisation", i.e., the right to have contributions paid to various pension funds recognised for pension purposes without the need for the costly "linking" of pension credits. This was introduced by Legislative Decree 184/1997 for workers who are a part of the contribution-based system and are members of two or more forms of compulsory disability, old-age or survivors insurance. The Law provides for the right to sum and use contribution periods for the purposes of determining old-age pension rights and entitlement to disability allowances in the event that contributions to any single division are not sufficient to qualify the individual to pension benefits.
Law 388/2000 also extended totalisation to workers who are members of the mixed and earnings-related systems. Again, in this case, however, the implementing inter-ministerial decree has not yet been issued and totalisation has, therefore, not been made available to workers who are not a part of the contribution-based system.

4.2.5 Financing the pension system

With reference to the financing of the pension system, the types of reduced rate contracts result in lower revenues from contributions. This is due to the difference between the effective forecast rate of financing and the ordinary contributions rate.
For contracts and instruments for which the reduction in contributions is in the form of relief and under-contributions, the fall in contributions is covered by transfers to the various pension funds by the State so that they are effectively funded by general taxation. This, therefore, passes benefits to firms. Since the positive effects relate to the whole economy, the costs are borne by the community at large.
The cost of these transfers can be quantified by referring to data made available by INPS. In particular, the extent of reduced contributions was ascertained with reference to the charges for the GIAS (Social Assistance Division). These charges are specifically allocated to cover the short-fall in contributions arising from measures to assist firms in the form of contribution reliefs and under-contributions. The total cost to INPS of these measures, as

shown in table 4.14, was € 9 billion (about 18,000 billion lire) in 2001 and 2002.[7]

Table 4.14 - Inps costs arising from contribution reliefs to firms
(millions of euros)

Typology of cost	1998	1999	2000	2001(*)	2002(**)
Adjustments to and offsets of current revenues (a)	**1,072**	**1,000**	**1,498**	**2,771**	**2,747**
of which:					
Contribution reduction in the South non-agricultural sectors	948	815	1,169	1,172	864
Undercontributions (b)	**5,184**	**5,726**	**6,298**	**6,441**	**6,429**
of which:					
Work-training contract	1,009	1,067	882	898	917
Apprentices	1,009	1,418	1,567	1,625	1,695
Agricultural workers	736	806	1,055	1,003	950
Total cost to Gias	**6,255**	**6,726**	**7,796**	**9,213**	**9,176**

Source: Inps accounts
(*) Updated budget
(*) Budget
(a) Adjustments to and offsets of current revenues concern, primarily, programmes to support enterprises (e.g. Contribution reductions for firms in the South, etc.)
(b) Undercontributions refer to the lower contribution inflows resulting from the reliefs provided by law to categories, sectors or territories (e.g. work-training contracts, apprenticeship, agriculture, hiring from the lists of long-term unemployed workers)

In those two years, contribution reliefs amounted to almost € 2.8 billion of which about € 1 billion related to reliefs granted to firms, other than agricultural undertakings, located in the South.

The cost of under-contributions amounted, on the other hand, to almost € 6,6 billion, of which about 900 for occupational training contracts, more than 1,600 for apprenticeships and about 1,000 for agricultural workers.

Table 4.15 shows that the total charges borne by the GIAS amounted to € 1.1 billion with reference to pension coverage by imputed contributions for those periods recognised by current legislation. The assistance made necessary by imputed contributions relate to periods of availability-for-employment as well as redundancy under the CIG and unemployment.

Table 4.15 - Costs to fund periods of imputed contributions
(millions of euros)

	2001	2002
Contribution reduction and relief	1.095	1.113
Redundancy fund (CIG)	159	189
Availability-for-employment benefits	501	501
Special unemployment benefits	116	102
Maternity benefits	117	122
Disabled benefits	30	29
Sickness	172	170

Source: Inps 2002 budget

(7) Only the private sector was examined with reference to the financial impact on public finances: firstly, the instruments examined relate particularly to this sector. Secondly, in the public sector revenues from contributions are offsetting: lower contributions result in lower employment remuneration from the point of view of expenditure which ie equal to the decrease in revenues as a result of reduced social contributions.

Loss of contributions due to changes in the composition of employment is different. If, in fact, an employee with ordinary contribution rates and a regular employment history is replaced by a worker with a lower contribution rate and/or periods of unemployment, contribution revenue is lower. In the long run, given the adoption of the contribution-based system, the fall in contributions does not present problems since future benefits are, in fact, linked to contributions. In the short run, however, there is an imbalance between revenue reduced by lower rates, and benefits payable to higher rate contributors.
The combination of the effects of increased imputed contributions, the increase in workers with reduced rates of contributions, the decrease in the length of contribution periods aggravated by demographic factors tend to progressively deteriorate the current financing base which primarily consists of income from regular employment. This amplifies the negative effects of demographic factors on the financial sustainability of the welfare system.
Some of these factors are covered by State intervention through making ever increasing levels of finance available to support the economy and levels of pension benefits. Since others are not funded, however, there is a negative effect on finances in the short term with long term negative effects for benefits.

4.2.6 Pension coverage

In defining the new system of contributions, the Dini reform fixed the replacement rate based on a "typical" worker who enters the labour market at about 25 years of age and who accumulates a high level of pension credits, 37 years, with a continuous employment history. These circumstances meant that the Dini reform was able to guarantee adequate coverage for persons who are aged over sixty at the time of retirement, even with a contribution-based system, while maintaining the downward revision of committed pension benefits introduced by the Amato reform.
The replacement rates shown in Table 4.16, in fact, relate to regular and continuous remuneration and contribution histories or, at least, covered by imputed contributions. Imputed contributions assure that the lower level of effective contributions have no effect on the level of future benefits, the computation of which is based on the ordinary rate of social security contributions. It is, in fact, general taxation which must cover both firms' and workers' contributions thus assuring that pension benefits are based on full contributions.
Unlike the "typical" employee, workers with reduced contributions and uninsured periods without the support of imputed contributions will have reduced pension benefits so that replacement rates will be lower.
Included among the Government's objectives we find the emergence from undeclared employment and, through reduction/ equalization of contribution rates, decreased attractiveness of atypical forms of work.
Even if these policies work, it is difficult to imagine regular remuneration and contributions histories in line with those envisaged by the Dini reform.
The effects on coverage vary depending on the characteristics of each individual worker's employment history.
The situation of the "typical" worker with a permanent employment contract, ordinary contribution rates and a long and continuous employment history is shown in the first part of Table 4.16. With 40 years of contribution credits, the replacement rate varies between 50.6 percent at age 57 and 64 percent at

65. With 35 years of employment, coverage drops to 56.7 percent and 44.8 percent for retirement at 65 and 57 years of age, respectively. If the contribution rate were to decrease to 28 percent, replacement rates would fall to: 54.3 percent with 40 contribution years and retirement at 65 and 42.9 percent at 57 years of age, while with 35 contribution years the rates would become 48.1 and 38 percent, respectively.

Table 4.16 - Replacement rates under different professional profile assumptions (1)
Transformation coefficients 2035 (2)

Salaried employee with regular contribution history

Retirement age	contribution period 40 years		contribution period 35 years	
	33%	**28%**	**33%**	**28%**
57	50.6%	42.9%	44.8%	38.0%
58	51.9%	44.0%	45.9%	39.0%
59	53.3%	45.2%	47.2%	40.0%
60	54.8%	46.5%	48.5%	41.2%
61	56.4%	47.8%	49.9%	42.4%
62	58.1%	49.3%	51.4%	43.7%
63	59.9%	50.8%	53.1%	45.0%
64	61.9%	52.5%	54.8%	46.5%
65	64.0%	54.3%	56.7%	48.1%

Salaried employee with irregular contribution history

Retirement age	contribution period 30 years		contribution period 25 years	
	33%	**28%**	**33%**	**28%**
57	38.6%	32.8%	33.4%	28.4%
58	39.6%	33.6%	34.3%	29.1%
59	40.7%	34.5%	35.2%	29.8%
60	41.8%	35.5%	36.2%	30.7%
61	43.0%	36.5%	37.2%	31.6%
62	44.4%	37.6%	38.4%	32.6%
63	45.7%	38.8%	39.6%	33.6%
64	47.2%	40.1%	40.9%	34.7%
65	48.9%	41.5%	42.3%	35.9%

(1) GDP +1.5%, capitalisation rate +2%
(2) Transformation coefficients in accordance with law 335/94

If benefits which could be obtained from supplementary pensions were added (see Table 4.6) the total replacement rate would be sufficient and,

Table 4.17 - Replacement rates under different professional profile assumptions (1)
Contract workers and self-employed. Contribution rate 20%
Transformation coefficients 2035 (2)

Retirement age	contribution period		contribution period	
	40 years	35 years	30 years	25 years
57	30.7%	27.1%	23.4%	20.3%
58	31.4%	27.8%	24.0%	20.8%
59	32.3%	28.6%	24.6%	21.3%
60	33.2%	29.4%	25.4%	21.9%
61	34.2%	30.3%	26.1%	22.6%
62	35.2%	31.2%	26.9%	23.3%
63	36.3%	32.2%	27.7%	24.0%
64	37.5%	33.2%	28.6%	24.8%
65	38.8%	34.3%	29.6%	25.6%

(1) GDP +1.5%, capitalisation rate +2%
(2) Transformation coefficients in accordance with law 335/94

in any case, always greater than 50 percent. The situation for contract workers is different as it is for the self-employed. The rate of 20 percent, which incidentally is currently not yet in force, for the first type, equates to very low replacement rates at 35 or 40 contribution years (see Table 4.17). For retirement at 65 years of age, the replacement rate is 38.8 percent with 40 contribution years, decreasing to 34.3 percent for contribution periods of 35 years. If retirement is at a lower age, the replacement rates drop to below 35 percent at 40 contribution years and below 30 percent with 35 years of contributions. In this case the amount of benefits to be provided by supplementary pensions should be quite high to assure sufficient pension coverage. It is essential that these workers have significant savings and hence income potential. This, however, is not easy for many contract workers or even for some self-employed.

Workers who are self-employed for part of their working lives and perform co-ordinated and continuous work to subsequently become regularly employed find themselves in a better position. Their initial contributions rate would be 20 percent to subsequently increase to the level for regularly employed workers. Replacement rates for this category of workers is shown in Table 4.18, assuming regular employment contribution rates of 33 and 28 percent. With 40 contribution years and a contribution rate of 33 percent, the replacement rate would be equal to or greater than 50 percent only for those individuals 64 years of age or more on retirement whereas it would always be lower for a rate of 28 percent.

Table 4.18 - Replacement rates under different professional profile assumptions (1)
Salaried employees and contract workers

Transformation coefficients 2035 (2)

Regular contribution histories

Retirement age	contribution period 40 years		contribution period 35 years	
	33/20%(3)	**28/20%**(3)	**33/20%**(4)	**28/20%**(4)
57	41.1%	37.1%	37.6%	33.6%
58	42.1%	38.0%	38.6%	34.4%
59	43.3%	39.0%	39.6%	35.3%
60	44.5%	40.2%	40.7%	36.4%
61	45.8%	41.3%	41.9%	37.4%
62	47.2%	42.6%	43.2%	38.6%
63	48.7%	43.9%	44.5%	39.8%
64	50.3%	45.4%	46.0%	41.1%
65	52.0%	46.9%	47.6%	42.5%

Irregular contribution histories

Retirement age	contribution period 30 years		contribution period 25 years	
	33/20%(4)	**28/20%**(4)	**33/20%**(5)	**28/20%**(5)
57	31.3%	28.3%	27.2%	24.5%
58	32.1%	29.0%	27.9%	25.1%
59	33.0%	29.8%	28.6%	25.8%
60	34.0%	30.6%	29.4%	26.6%
61	34.9%	31.5%	30.3%	27.3%
62	36.0%	32.5%	31.2%	28.1%
63	37.1%	33.5%	32.2%	29.0%
64	38.3%	34.6%	33.2%	30.0%
65	39.6%	35.8%	34.4%	31.0%

(1) GDP +1.5%, capitalisation rate +2%
(2) Transformation coefficients in accordance with law 335/94
(3) First 20 years, contribution rate 20%, after 33% or 28%
(4) First 15 years, contribution rate 20%, after 33% or 28%
(5) First 12 years, contribution rate 20%, after 33% or 28%

With 35 contribution years and a contributions rate of 28 percent, the replacement rate would be higher than 40 percent only for those individuals 64 years of age or more on retirement whereas at a contributions rate of 33 percent retirement at that age would equate to a replacement rate equal to or greater than 45 percent.
This level of pension coverage is based, moreover, on a continuous employment history not interrupted by periods of inactivity or short work. Replacement rates for contribution histories shorter than the normal assumptions of 35/40 years are shown in the second part of Tables 4.16, 4.17 and 4.18.
These assumptions are not "limits" considering delayed entry into the labour force, demand for labour mobility and the lack of any type of widespread safety net assuring income and pension contributions for all categories of workers.
If the compulsory pension contributions period of regularly employed workers is limited, replacement rates are extremely low, reaching 40 percent only at the age of 64 for a contributions period of 30 years at a rate of 28 percent. At a rate of 33 percent, the replacement rate only exceeds 45 percent at 63 years of age.
For employment histories consisting entirely of "atypical" or self-employed work, pension coverage decreases significantly in cases with reduced contribution periods and does not appear to be sufficient to assure the coverage required for a dignified retirement. With 30 years of pension credits, the rate of replacement is 29.6 percent at 65 years of age. With 25 years of contributions coverage is barely over 25 percent even at 65 years of age. Coverage for intermediate cases typified by a mix of regular employment and "atypical" work with reduced contribution periods is better than the preceding case but still appears modest. With 30 and 25 years of employment, maximum coverage at 65 years of age reaches 39.6 percent and 34.4 percent, respectively if the rate of contributions during periods of regular employment is 33 percent. The percentages ease back to 34.4 and 31 percent respectively at a contributions rate of 28 percent. These replacement rates would not be sufficient, in many cases, to assure sufficient level of income. It would, therefore, be necessary to arrange for a second pension with a significant level of benefits.
Law 335 allocated this responsibility to voluntary supplementary pension schemes. The Government's enabling law appears to reinforce this concept making it compulsory. Supplementary pension schemes, however, presuppose a propensity to save. Today they appear to be in a position to assure supplementary income only for those who have a sufficient level of public pension benefits and are eligible for employee severance payments. They do not, however, appear to be adequate for individuals with low and/or occasional salaries.
The two systems, compulsory and supplementary, are not capable of "replacing" each other: the method of pension calculation is common to both even though different contribution revaluation indices are applied. The method of financing is also similar being based on income earned. If there are periods with no or meagre income, benefits are not available or are reduced for both compulsory and supplementary pensions.
Trends on the financial markets underline the problem of risk and the methods the pension system can use to guarantee pensions which for most

workers is the only source of income after retirement. As a result, there is a general problem relating to the capacity of the Italian pension system to assure an adequate level of pension benefits in the future. This is a consequence of changes in the labour market and the progressive quantitative reduction in "typical" workers and an increase in "atypical" workers to whom the system affords less protection.
The RGS forecasts show a significant and progressive reduction in the average pension compared to employment income, paralleling the decrease in the ratio of pension expenditure to GDP after 2030. More optimistic assumptions regarding productivity would make this effect even worse. In the report on the current state and prospects of national pension systems requested by the European Commission of all member governments[8], the problem of adequate pension systems was placed at the forefront as a clear expression of the objective to assure that the aged are not exposed to the risk of poverty and will be able to enjoy a sufficient living standard.
Statistics on poverty in Italy were analysed in the third chapter. They show that old age is not currently the principal cause of poverty in Italy except in certain special circumstances. This, together with other factors, is a result of the high level of pension coverage provided by the public pension system.
The future appears to be less certain. Analyses show a high probability that, at least for some individuals, the level of pension benefits may not be adequate.
It might be necessary to revise the method of calculating pensions and the benchmark for their financing. The current system, based on the income generated over an entire working life, was developed in the context of a labour market significantly different from today's and suffers more and more from the contrasting goals of financial sustainability, requirements of pension protection and objectives for reduced cost of labour.

4.3 Supplementary pensions

Seven years have passed since the approval of Law 335 which, as amended by Legislative Decree 124, permitted the formation of pension funds. Six years, October 1996, have passed since Fonchim's first subscriptions. In subsequent years 41 occupational funds were licensed to accept subscriptions and by the end of June 2002, there were 34 occupational funds licensed for operations. At the same date, there were 105 open funds of which 95 were licensed for operations.[9]
It, therefore, appears as if the formation phase of pension funds is nearing completion. The most likely reason it took longer than envisaged was partly the complexity of the formation procedures required prior to their revision as adopted by COVIP (Commissione di vigilanza sui fondi pensioni - Pension Fund Supervisory Commission) (Regulation of 22 May 2001). By the end of June 2002, 1,361,241 workers were members of the 147 funds in existence while net assets under management had reached approximately € 3.8 billion. If funds in existence prior to Legislative Decree 124 were also included, total net assets of the pension funds would

(8) The Social Protection Committee: National Strategy Reports on the Future of Pension Systems.
(9) By the end of August 2002, 138 funds had been licensed of which 44 were occupational and 94 open. The decrease in the number of open funds is due to the revocation of licences and cancellation from the register by COVIP.

amount to a little less than € 33 billion by the end of 2001 (Table 4.19) with membership touching the two million mark.
At 105, there are more open funds in number than occupational funds, 42, although asset distribution and membership favours the latter.
Occupational funds, in fact, take 72.6 percent of financings allocated to various forms of supplementary pensions and their members are 77 percent of the total.

Table 4.19 – Pensions funds

	situation up to 30/6/2002			*situation up to 31/12/2001*				
	Funds	Members	Net assets (millions of euros 31/8/2002	Funds	Members	Net assets (millions of euros 31/12/2001	% change Members 2001/2000	% change assets 2001/2000
Occupational pension funds	**42**	**1,049,441**	**2,754**	**41**	**1,010,166**	**2,256**	**14.1**	**89.5**
- licensed to operate	34			27	913,202	2,256		
- licensed to accept members	8			14	96,964			
Open pension funds	**105**	**311,800**	**1,037**	**102**	**287,251**	**943**	**28.8**	**71**
Total of newly set-up funds	**147**	**1,361,241**	**3,791**	**143**	**1,297,417**	**3,199**	**17.0**	**83.6**
Pre-existing pension funds				**575**	**689,616**	**29,595**		
- subject to Covip's supervision				418	615,116	24,626		
- within banks and insurance cos.				157	74,500	4,969		
Grand total				**718**	**1,987,033**	**32,794**		

Source: Covip (2002)

During 2001, there were basically no changes made to regulations for supplementary pension schemes in the private sector. The one exception were the amendments enacted by Legislative Decree 47/2000 which, however, did not result in substantive changes to the regulatory framework. COVIP's Regulation on licensing and approval procedures for funds, on the other hand, should be noted. It significantly simplified procedures for the formation of funds. It also established limits, previously non-existent, for the maximum period of time between registration and the commencement of operations (12 months) and subscription of the minimum number of members (18 months).
Establishment of the minimum number of members, moreover, is left to the funds' or rather promoters' discretion. This is one of the factors responsible for the proliferation in the number of funds and the wide difference between the potential and minimum number of members.
The number of occupational funds which have either been licensed, or are in the process of being licensed, appears excessive and their structure does not respond to the criteria of representation and/or efficiency. It is desirable that COVIP issue guidelines or, better, precise instructions in this regard.

4.3.1. Occupational pension funds: membership

There were 42 licensed occupational funds at 30 June 2002. The number of funds that had been licensed to commence operations was 34. Of these 28, were for employees while the remaining 6 were for the self-employed.
There were 1,049,166 members at 30 June 2002, while at year end 2001 there had been an increase of 14.1 percent from the previous year, to 1,010,166. It appears self-evident that the slow-down in the number of new subscriptions might indicate increasing difficulties in attracting new

members following initial enthusiasm in a few sectors. The COVIP figures, moreover, seem more a reflection of the number of subscriptions received over a period of time rather than the current number of members. As a result they disregard redemptions which are particularly relevant for some funds. For a precise description of the current status it would be useful for the Committee to distinguish between the number of new subscriptions, effective membership at a certain date and the number of redemptions. Attracting new subscriptions is clearly difficult as shown by those funds, 7, needing a time extension for new subscriptions and the "limited" number of subscriptions, less than 5 percent of potential members, obtained by some domestic funds despite opening books to subscriptions in 1998 (Fundum, Fondapi, Fonte, Previdoc) and 1999 (Cooperlavoro, Fondartigiani).

For the 28 funds licensed to manage employees' savings, the rate of subscription in June 2002 was 16 percent compared to 15.4 percent at year-end 2001 and 32.2 percent at year-end 2000. In interpreting the data it should be borne in mind that during 2001 new funds were licensed for operations with fairly large membership potential. Putting year end 2001 data on a comparable basis with 2000, and, therefore, adjusting for the changes in the denominator following those licenses, the average subscription rate is about 34.3 percent at year-end 2001.

Table 4.20 - Occupational pension funds: membership

	situation as of 30/6/2002				*situation as of 31/12/2001*			
	Funds	Members	Potential members (1)	Subscription rate (2)	Funds	Members	Potential members (1)	Subscription rate (2)
Occupational pension funds licensed to operate	**34**	**1,019,468**	**10,162,340**		**27**	**913,202**	**9,692,491**	
- For salaried staff	28	1,003,356	6,290,340	16,0	22	898,981	5,852,491	15.4
Corporate and group funds (3)					5	162,748	207,491	78.4
Other funds					17	736233	5,645,000	13.0
- For self employed (4)	6	16,112	3,872,000		5	14,221	3,840,000	
Occupational pension funds licensed to accept members	**8**	**29,973**	**3,923,300**		**14**	**96,964**	**4,378,155**	
- For salaried staff	6	29,441	1,890,000		11	95,059	2,312,855	
- For self employed	2	532	2,033,000		3	1,905	2,065,300	
Total Funds	**42**	**1,049,441**	**11,285,640**		**41**	**1,010,166**	**11,270,646**	
- For salaried staff	34	1,032,797	7,380,340		33	994,040	7,365,346	
- For self employed (4)	8	16,644	3,905,300		8	16,126	3,905,300	

(1) The figures for regional funds have been excluded from the number potential members.
(2) Membership rate reflects the ratio of signed up members to potential members.
(3) Included Fondoenergia, Quadri e Capi Fiat, Fopen, Previvolo, Telemaco.
(4) The number of members includes Fondo Famiglia.

Source: Covip (2002)

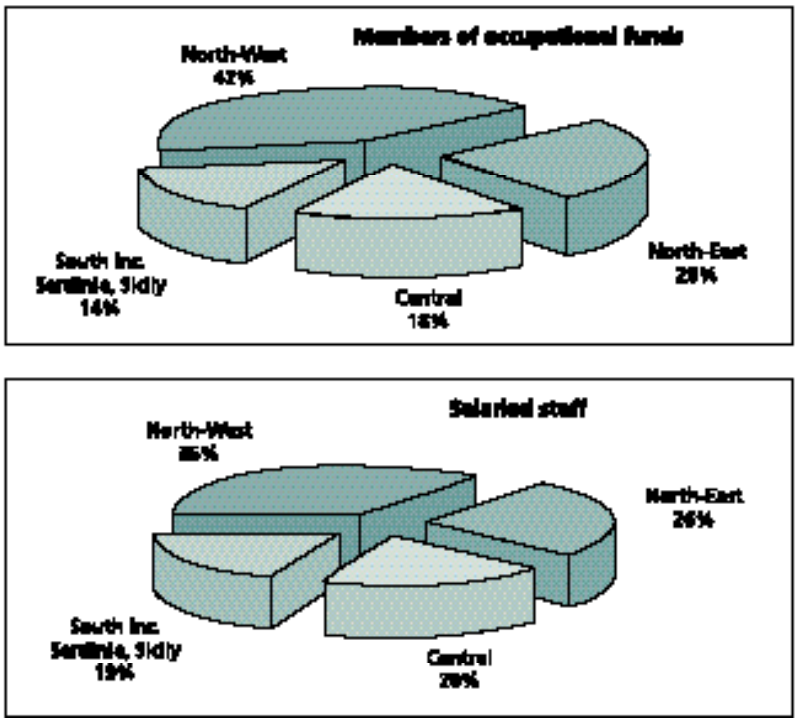
Even after this adjustment, however, the growth in the rate of subscriptions in 2001 and the first six months of 2002 appears extremely limited, especially considering that many of the funds were launched in 1998 and 1999. This confirms the problems demonstrated by other figures. Membership is very high (see Table AS4.2) in company and/group funds (Fondenergia, Fiat's Management Fund, Fopen, Previvolo, Telemaco) with average rates near 80 percent, ranging between Previvolo's 98.7 percent to

Fondoenergia's 63.8 percent. These high membership rates are principally due to the ready availability of information as is normally the case in companies belonging to the same group, to the ease of contacting potential members and, also, to the greater likelihood of joining a company fund often offered along side other corporate programs such as health insurance.
In the other employee funds, the subscription rates vary widely. Some are rather good, like Fonchim near 61 percent, Pegaso and Concreto 48 percent, and some above 35 percent like Cometa and Previambiente. Yet in other cases the subscription rate barely exceeds 15 percent, Foncer and Previcoper, 10 percent, Fonser and Alifond or even less than 5 percent, Cooperlavoro, Fondapi, Fonte.
Subscription rates for the self-employed occupational funds, on the other hand, are still very limited. Fondodentisti, licensed to manage assets, has a subscription rate of 7.5 percent, Previdoc, licensed to solicit membership, 4.3 percent. The other funds' subscription rates are even lower. It appears evident that these funds are under-sized compared to the self-employed category's obvious potential in terms of membership and available resources.

4.3.2 Occupational pension funds: the members

The highest number of members of occupational funds licensed for operations at year-end 2001 is in the Western District, 41.6 percent, compared to 39 percent in 2000. 25.7 percent are in Northeast Italy while membership in the central and southern regions are 18.3 and 14.4 percent, respectively. The weight of the North-western regions has, consequently, increased. They, alone, were able to increase membership in relative terms.

Chart 4.4 - Occupational pension funds: membership distribution by geographical area and comparison with salaried staff distribution



Occupational funds for employees licensed for operations increased membership of employees in associated companies with less than 50 employees in 2001 from 58.4 percent to 64.2 percent while membership from associated companies with more than 100 employees decreased from 24.4 percent to 19.1 percent. The reason is probably the establishment of some new funds, during 2001, in sectors typified by small and medium sized firms like Previmoda (textiles), Fondapi (companies associated with Confapi), Fonte (tourism, commerce and services) rather than existing funds increasing their subscriptions in small to medium sized firms.
Membership concentration, on the other hand, is inverse: 78.4 percent of all members are employed in companies with more than 100 employees, of which 54 percent with more than 1,000 employees. Only 12.6 percent of members, however, work in firms with less than 50 employees. Considering the weight, in terms of numbers of employees, of small Italian companies, it is obvious why the number of supplementary pensions is very limited.

Table 4.21 - Occupational pension funds licensed to operate: participating firms and subscribers by number of employees

(in % terms)

	31/12/2000		31/12/2001	
Classes of employees	Firms	Members	Firms	Members
1-19	27.2	4.5	30.7	4.4
20-49	31.2	7.8	33.5	8.2
50-99	17.2	8.8	16.6	9.0
100-249	12.7	12.5	12.1	13.6
250-499	4.9	9.8	3.9	10.8
500-999	2.9	11	1.7	11.0
over 1000	3.9	45.6	1.4	43.0
Total	**100**	**100**	**100.0**	**100.0**

Source: Covip (2002)

There does not appear to be significant changes compared to last year's age distribution of members for occupational funds licensed for operations. The phenomenon of low participation by the young (less than 29 years of age) persists, with subscriptions at 10.1 percent.

Table 4.22 - Occupational funds licensed to operate: membership by gender and by age-group

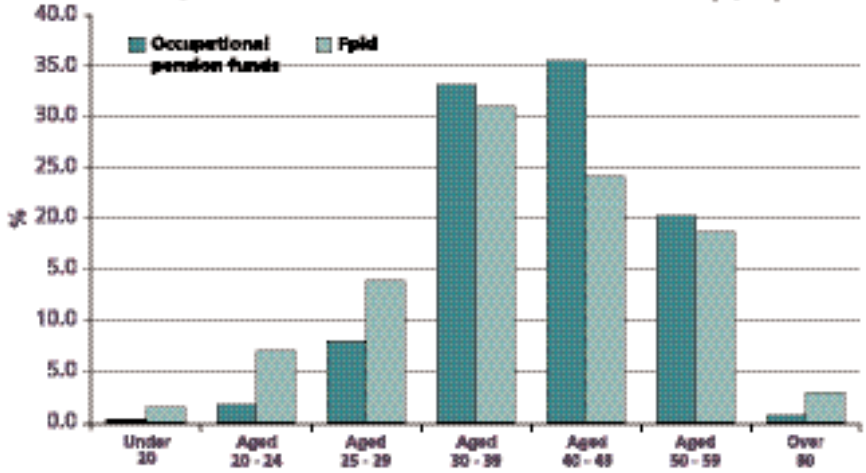
(situation at 31 december 2001 – in % terms)

Classes of age	Men	Women	Total
<20	0.4	0.3	0.3
20 – 24	1.7	2.3	1.8
25 – 29	7.4	9.7	8.0
30 – 39	32.2	36.8	33.2
40 – 49	35.8	34.9	35.6
50 – 59	21.8	15.5	20.3
60 – 64	0.7	0.5	0.7
0ver 65	0.1	0.1	0.1
Total	**100.0**	**100.0**	**100,0**

Source: Covip (2002)

This is further illustrated by the age distribution shown by INPS' FPLD unit. The total number of individuals aged less than 29 represent 22.8 percent of this age group of, more than double compared to supplementary pension.

Chart 4.5 - Occupational pension funds: membership by age-group and comparison with INPS fund for salaried staff (Fpld)



Box 5 – Cometa's membership

With 368,246 subscriptions, unadjusted for redemptions, at year-end 2001, Cometa is the largest Italian supplementary pension fund. 81.6 percent of its members are males and only 18.4 percent females. This break-down, however, reflects the average for the industrial category as shown in the 24th Federmeccanica Survey. Membership of the industrial category's fund, in terms of subscriber's sex, does not, therefore, appear to differ either overall or for specific occupational level.
Break-down of members by occupational level is partially distorted by the number of members, 12.1 percent, who were non-responsive. Workers make up 51 percent of total members, clerical workers 30.7 percent, special categories 3.3 percent and management 3 percent.

Table B5.1 – Distribution of Cometa members and Federmeccanica employees by rank and gender

Cometa's membership as at 31/12/01

Rank	Men	Women	Total	Men-%	Women-%	Total-%	% Men
Middle management	9,805	1,073	10,878	3.3	1.6	3.0	90.1
Clerical workers	81,354	31,538	112,892	27.1	46.4	30.7	72.1
Special categories	10,551	1,564	12,115	3.5	2.3	3.3	87.1
Blue-collar workers	162,630	25,218	187,848	54.1	37.1	51.0	86.6
Unknown	36,003	8,510	44,513	12.0	12.5	12.1	80.9
Total	300,343	67,903	368,246	100.0	100.0	100.0	81.6
Federmeccanica employees – 1999							
Rank	Men	Women	Total	Men-%	Women-%	Total-%	% Men
Middle management	12,540	1,095	13,635	4.5	1.8	4.0	92.0
Clerical workers	75,088	26,382	101,470	26.9	43.2	29.9	74.0
Special categories	3,812	38	3,850	1.4	0.1	1.1	99.0
Blue-collar workers	187,349	33,602	220,951	67.2	55.0	65.0	84.8
Total	278,789	61,117	339,906	100.0	100.0	100.0	82.0

Source: Cometa and 24th Federmeccanica Survey

Compared to Federmeccanica membership, blue-collar workers have a much lower weight than the 65 percent reflected in the relevant survey, while the clerical percentage is similar. The difference corresponds to the size of the non-responsive group. If the non-respondents were all blue-collar workers, there would be no substantial differences in their distribution by rank between the Cometa members and total number of blue-collar workers in the engineering industry, as surveyed by Federmeccanica. If, on the other hand, non-respondents were spread among various ranks, Cometa's membership rates would be higher for clericals than for blue-collar workers. For women, the subscription rate appears to be higher for clericals than for blue-collar workers.
The relatively lower rate of membership for middle management can be explained by the existence of Fiat's Management Fund which includes some of the individuals at this level.
Members' age statistics underline low participation by the young. The differences in the age structure of Cometa's members compared to the age structure shown by the INPS database for the same industrial sector is significant even after deducting the number of apprentices. The differences will most certainly be affected by the inclusion in the INPS data of employees in crafts with a lower average age and who are not members of Cometa.
Nonetheless this is indicative of the fact that membership does not address the problems created with the reform, with a substantial decrease in replacement rates for younger generations.

Table B5.2: Distribution of Cometa membership by age and by gender

(in % terms)

	Up to 24	25-29	30-39	40-49	>50
Cometa					
Women	2.2	9.8	33.5	35.1	18.8
Men	2.0	8.8	31.9	34.5	22.2
Total	2.0	9.0	32.2	34.6	21.6
INPS	15.3	18.3	29.6	27.1	9.8

Data relating to union membership is included in the Cometa survey. There was nearly an 80 percent response rate. The number of members and non-members in the fund is almost equal. Of the 368,000 Cometa members, 144,000 are also union members while 146,000 are not and about 80,000 were non-responsive.

Table B 5.3

	Number	%
Trade union members	143,671	39.0
Non-union members	145,769	39.6
Lack of response	74,969	21.4
Total fund membership	368,409	100.0

Source: Cometa

The Federmeccanica survey shows a unionisation rate in associated companies of 37.7 percent. Out of total employees of about 800,000 in associated companies, a little less than 400,000 workers are members of union organisations. Less than half the union members subscribed to Cometa.

On the other hand, a very high number of workers who are not union members joined the fund.
There does not, therefore, appear to be a link between union membership and subscription to an occupational fund, at least not in the engineering sector. There does, however appear to be a correlation, see Box 6, between the representation of a union in a company and subscription to occupational funds by that company's employees.

The extremely low membership level by the young is without a doubt a result of their lower degree of sensitivity to pension related issues. Youthful members of the labour force perceive them as decisions which can be postponed. The low rate, however, is also linked to other factors such as the growing importance for this age group of non-linear careers typified by a high degree of flexibility (atypical contracts, mixed contracts) and/or low remuneration, alternating periods of work and unemployment and by the lower importance of unions and employer associations among the young. Contract workers do not have TFR as a source of financing. And finally, not even the recent negative performance of the financial markets was of assistance even though, in the past, this would have served as an important stimulus to join funds.
Furthermore, tax policy also appears to have had little effect on promoting subscriptions by the young. Only salaries of at least € 43,000 per annum benefit from the maximum tax allowance of € 5,164 while the maximum for salaries of € 25,000 is € 3,000. For a low paid worker, e.g., € 10,000 per annum, only a maximum of € 1,200 is allowed.
This type of incentive favours medium to high income earners, who could already well be members of a supplementary pension scheme. Although it might encourage higher earning individuals to increase contributions or extend contributions to dependent family members, it is not beneficial to those whose income is too low to subscribe.

Box 6 – The role of the social partners in enrolling members

An important factor in pension fund membership was promotion by the social partners, unions and employer organisations or firms with company or group pension plans. This was possible in sectors where social partners were strong, well represented and co-operative or where, as in the case of the geographic fund Trentino Alto Adige, there were particularly favourable environmental factors.
This is true both for company as well as national industrial sector funds as shown by Fonchim, Cometa, Pegaso, Concreto subscriptions.
In other industrial sectors, union representation is weaker as are employers' associations and/or there is a lack of harmony between the social partners. As a result it was not possible to introduce the fund to workers which impacted negatively on membership.
Analytical insight into this was provided by the annual survey on the engineering industry conducted by Federmeccanica. According to the results of the latest available survey, 1999, 62 percent of associated companies had less than 50 employees amounting to 8.4 percent of total employees.

Firms with more than 500 employees are 3.9 percent of the total but have 61.2 percent of the total labour force. Compared to INPS data, there is a greater weight of small and medium size companies although average size is larger. This is due to the high number of small firms which are either not associated or associated with other organisations.

Table B6.1. Structure of Federmeccanica firms

Employee classes	Firms	%	Employees	%
Up to 50	1,439	62.1	30,770	8.4
51-100	365	15.7	25,891	7.0
101-500	424	18.3	86,266	23.4
501-1000	48	2.1	32,656	8.9
More than 1000	41	1.8	192,442	52.3
TOTAL	2,318	100	368,025	100

Among the associated firms, 66.7 percent have unionised workers while 33.3 percent do not.
These percentages vary greatly with firm size. While there are unionised workers in all companies with at least 500 employees and more than 90 percent of the firms with between 50 and 500 employees have unionised employees, this percentage drops to 49.8 percent of companies with less than 50 employees.

Table B6.2 Union membership in Federmeccanica firms by number of employees

	FIRMS			
	Without trade unions		With trade unions	
Employee classes	Number	%	Number	%
Up to 50	722	50.2	717	49.8
51-100	29	7.9	336	92.1
101-500	20	4.7	404	95.3
501-1000		0.0	48	100.0
More than 1000		0.0	42	100.0
TOTAL	771	33.3	1,547	66.7

If we shift focus from union membership and firms to factories and union representatives, as evidence of a stable presence of labour organisations, the percentage of firms with union representatives falls to 49.9 percent and 26.3 percent in companies with less than 50 employees.

Table B6.3 Plants with union representatives by number of employees in Federmeccanica firms

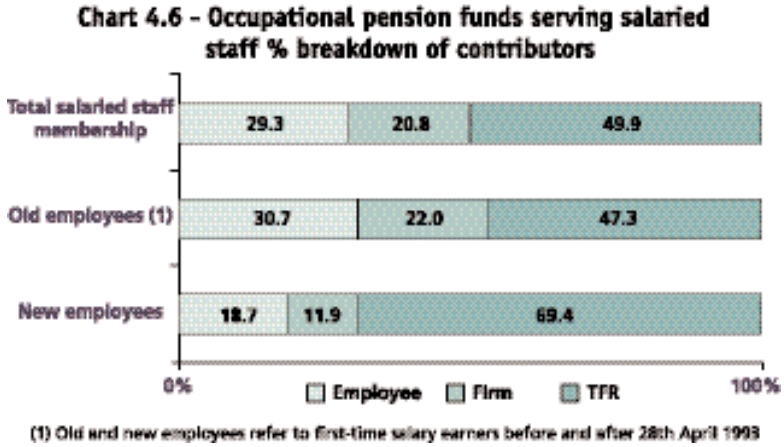
	FIRMS			
	Without trade unions		With trade unions	
Employee classes	Number	%	Number	%
Up to 50	1,116	73.7	399	26.3
51-100	100	24.9	302	75.1
101-500	49	10.3	428	89.7
501-1000		0.0	78	100.0
More than 1000		0.0	53	100.0
TOTAL	1,256	50.1	1,260	49.9

The engineering companies associated with Federmeccanica have a high rate of unionisation but their size, notwithstanding a number of small to

medium sized companies, is generally larger than either the average size of firms in the mechanical sector which includes companies associated with Confapi and handicraft businesses. Union representation is much more limited in these sectors, probably even less than in small Federmeccanica associated companies.
It can be concluded that in the greater part of these firms workers' subscriptions to the funds were not promoted by unions. This is common to all the industrial sectors where unions are weaker than in the engineering sector and/or an the average size of companies is even smaller such as textiles, commerce and crafts.
In these industries, the social partners do not appear able to encourage membership. Without external assistance there can be no increase in fund subscriptions. The employment of the young is, moreover, more prevalent in small firms where, as seen, the unions are not as strongly represented. The ability of union action with this group is, therefore, limited.
After an initial phase, recruitment efforts dropped off so that the institutions' attempts to recruit these workers for supplementary pension schemes is limited. The funds have not made up this loss in drive partly because of the impossibility to do so. They are, in fact, not capable of broad and continuous contact with the workers at the level of the individual company.
Active government support which could supplement and/or replace the social partners without concomitant high costs associated with large scale membership campaigns is not available to supplementary pension schemes.

4.3.3 Asset management in occupational funds

Total contributions flowing into occupational funds in 2001 amounted to approximately € 1.15 billion, of which € 1,14 billion related to employee funds. An analysis of this amount shows € 333 million were funded by employees' contributions, € 237 million by employers' contributions and € 568 million from the release of provisions to employee severance funds. The contribution to funds for the self-employed and professionals was € 7 million.
Employee severance funds, therefore, account for 50 percent of total contributions. This increases to 70 percent for those employed for the first time after 28/4/1993, for whom the full amount of TFR provisions is expected to be released to the pension funds.
The TFR is the most important component of the contributions to the pension funds. Members' and employers' contribution rates, however, remain low. The total figure reported by COVIP shows the contribution rate to be 1.17 percent on average for both workers and firms. No fund requires a rate over 1.5 percent even though some funds permit higher voluntary contributions by employees with no corresponding obligation for the employer. This is done to permit the employees to make better use of tax benefits.
The average amount of contribution per capita ranges between € 1,500 for workers in first-time employment and € 1,200 for those who entered the labour force prior to that date. The average contribution per capita employee members of open funds was higher at € 2,300 in 2001.



During 2001 about € 1,77 billion was entrusted to fund managers. 40 percent of this amount was invested in pure bond funds, 21 percent in mixed bond funds, 39 percent in balanced funds and so far only half a percent in equity balanced funds. The asset allocation strategy which emerges from these figures is one of great prudence with risk/return profiles that favour the limitation of risk.
There are various factors which are responsible for the selection of this kind of strategy: The absolute predominance of single sector funds which prevent differentiating risk with respect to members' ages; the presence of senior workers among fund investors; "novice" board directors and, for the more recently established funds, the crisis in the financial markets.
This is reflected in the composition of the assets under management. The bond component predominates at 73 percent of total assets while the equity component is 18.5 percent. The share of funds invested in repurchase agreements is on average of 6.1 percent, with high amounts for those funds or sectors that had not completed the transfer of funds to the managers by the end of 2001. The level of investments in UCITS

Table 4.23 – Occupational funds: breakdown of assets under management
(situation at 31 december 2001 – in % terms)

	Deposits	Debt securities	Equity securities	UCITS	Other	Total
Cometa	2.2	81.5	14.7	0.0	1.6	100.0
Solidarietà Veneto	5.9	48.7	6.6	38.0	0.8	100.0
Fonchim	6.3	69.7	22.5	0.0	1.5	100.0
Fondoenergia	4.5	64.4	28.7	0.0	2.4	100.0
Quadri e Capi Fiat	27.6	71.0	0.0	0.0	1.4	100.0
Laborfonds	27.4	49.0	10.8	12.1	0.7	100.0
Fondodentisti (comparto scudo)	28.9	18.2	24.6	27.5	0.8	100.0
Fondodentisti (comparto progressione)	51.7	32.9	14.9	0.0	0.5	100.0
Fondodentisti (comparto espansione)	6.8	64.4	26.8	0.4	1.6	100.0
Cooperlavoro	3.9	73.3	6.5	15.2	1.1	100.0
TOTAL	**6.1**	**73.0**	**18.5**	**0.8**	**1.6**	**100.0**

Source: Covip (2002)

is only significant in two funds so that they are irrelevant to the whole. The allocation of assets in newly established funds is, moreover, significantly different from asset distribution in countries with a longer tradition of funded pension systems. There the percentage of funds

invested in equities is greater than 50 percent, reaching 60 percent in the United States and 75 percent in the United Kingdom.
The geographic distribution of assets under management shows the clear predominance of the Euro zone for investment in debt securities, 91 percent of the total. Euro zone equity investments, on the other hand, represent 55 percent of the total albeit with significant amounts invested in stocks issued by companies quoted on US markets (25 percent).
52.3 percent of total funds are invested in Italy, 31.2 percent in other Euro zone countries and the remaining 16.5 percent in countries outside the EU.

Table 4.24 – Occupational pension funds: breakdown of assets under management by geografical area
(situation at 31 december 2001 – in % terms)

	Bond	Mixed bond	Balanced	Balanced equity	Total assets	Total for type
DEBT SECURITIES						
Italy	58.4	49.6	38.3	18.2	48.5	61.2
Others countries euro area	38.3	5.9	18.3	3.4	23.5	29.7
Other countries E.U.	2.1	21.0	2.3	4.5	6.1	7.7
United States	1.0	0.1	1.3	0.0	0.9	1.1
Japan	0.2	0.0	0.0	0.0	0.1	0.1
Other OECD member countries	0.0	0.0	0.0	0.0	0.0	0.0
Non-OECD countries	0.0	0.0	0.1	0.0	0.1	0.1
Total	**100.0**	**76.6**	**60.4**	**26.2**	**79.2**	**100.0**
EQUITY SECURITIES						
Italy	0.0	1.9	8.5	1.0	3.8	18.3
Others countries euro area	0.0	10.2	14.0	12.5	7.7	37.0
Other countries E.U.	0.0	4.6	3.2	10.7	2.3	11.1
United States	0.0	4.6	10.5	44.0	5.2	25.0
Japan	0.0	0.5	1.8	3.3	0.8	3.8
Other OECD member countries	0.0	1.6	1.5	2.1	1.0	4.8
Non-OECD countries	0.0	0.0	0.0	0.2	0.0	0.0
Total	**0.0**	**23.4**	**39.6**	**73.8**	**20.8**	**100.0**
Grand total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	

Source: Covip (2002)

If equity investments alone are considered, only 18.3 percent is allocated to Italy, 37 percent to other EU countries and 44.7 percent outside.
Negative performance of the financial markets weighed heavily on returns in 2001. The overall gross yield of the eight occupational funds was –0.8 percent with a net yield of –0.5 percent due to tax credits given as a result of the negative performance. This yield was lower than the benchmark of 0.2 percent.
The newly established funds were only able to benefit from the bull markets in the first year of operations, 1999. In subsequent years, performance was modest and/or negative, ironically, with better results for those funds that had not yet commenced operations.
In comparison, the TFR revaluation rate of 3.2 percent for 2001 was clearly better than the funds' performance. Comparison with the revaluation rate applied to accumulated contributions in the compulsory system of 4.78 percent is even more negative.
Disaggregating yields with reference to fund sector shows that it was only the pure bond funds' yield of 4.8 percent that could "beat" the TFR funds.

This yield, while equal to the compulsory system, was, nevertheless, below its 5.4 percent benchmark. All the other sectors fell below the 3.2 percent TFR level and the 4.78 percent for the compulsory system: 0.2 percent for the mixed bond fund (compared to a benchmark of 1.9 percent), -6.2 percent for balanced (benchmark –5.3 percent), and –8.8 percent for balanced equity (benchmark –8.5 percent).
It is certainly premature to draw negative conclusions about supplementary pension schemes based on a comparison of their yields in 2001 with those of the severance funds. It was just as wrong to make the same comparisons during the stock market boom. Performance should be evaluated over the long period excluding speculative bubbles with illusory and non-recurring exceptional performance.
An important element in the calculation of effective yields is the level of management fees. These consist of commissions for managing investments paid to investment managers and custodian banks in addition to administration costs whether internal or outsourced.
The incidence of management fees appears to be contained especially bearing the limited period of the funds' existence in mind. Expenses in relation to assets at the end of 2001 were 0.57 percent down from the 0.68 percent at year-end 2000 while compared with contributions they were 1.36 percent after 1.37 percent in 2000.
These results can be considered positive both, as seen above, in relation to the limited amount of capital contributed to date as well as in relation to open funds' level of management fees. It is, however, necessary to wait a few years before an accurate evaluation of these fees can be made. The COVIP data is, in fact, influenced by: the evaluation of fully operational funds which are large in size and, therefore, benefit from economies of scale; distortions arising from the fact that costs are contained by administrative and financial managers for reasons of competition; and, in a few cases, through the assumption of fees relating to certain services by promoters.

4.3.4 Open funds

By the end of June 2002, 95 open pension funds had been licensed for operations. If those funds whose establishment has been authorised but are not yet operational are included, then the total number becomes 105.
At year-end 2001 the open funds had more than 287 thousand members, an increase of 28 percent compared to last year. 86.5 percent of this number were self-employed. By June 2002, membership had reached 311,000.
Membership in relation to its potential among those self-employed, professionals and employees for whom there are no contractual funds, is extremely low. Potential members are confronted with the same problems as for occupational funds relating to information, economic advantage and income potential.
Examination of members' age distribution also shows a low rate of participation by the under thirty age group in these funds. Members' geographic distribution is 32 percent in the North-west, 50 percent for the North overall and 26 and 24 percent for the Centre and South, respectively.
Even though less pronounced then in 2000, subscribers' main preference is for equity sectors, 45 percent of total subscriptions. This is followed by balanced sectors, 39 percent, while bonds only attracted 16 percent of total members.
The contributions collected in 2001 amounted to € 340 million up 40 percent

over the previous year. Average contribution per subscriber was about € 1,200, significantly below the € 5,165 maximum tax deduction. Employees' contributions to open funds were significantly higher due to the release of TFRs: the average contribution for these subscribers was € 2,300.
Supplementary insurance products continues to be of little interest to open pension fund members: only 1.6 percent subscribed to this type of service.
COVIP estimates open pension fund management fees including sales commissions and administration expenses arising in connection with any switching between funds and sectors.
The average incidence of fees is closely related to the length in time in the fund: for switches after three years, the average commission is about 2.1 percent of assets per annum falling to 1.4 percent per annum after ten years
Analysis of the composition of assets under management at year-end 2001 shows a slight preponderance of equity related securities, 48.4 percent of portfolio, up slightly compared to the 47.7 percent at year-end 2000. Debt instruments represented 45.2 percent of the total portfolio (40.4 percent in 2000). Cash, on the other hand, was reduced by one half. There was a significant amount of funds managed by UCITS.

Table 4.25 – Open pension funds: breakdown of assets under management
(situation at 31 december 2001 - in % terms)

	Types of sector			
	Equity	Balanced	Bond	Total
Deposits	6.5	5.9	5.3	6.0
Investments in debt securities	18.9	54.0	84.1	45.2
Direct investments in debt securities	11.0	36.6	64.5	31.1
Investments in debt securities through UCITS	8.0	17.4	19.6	14.0
Investments in equity securities	73.8	39.7	10.4	48.4
Investments direct in capital securities	50.1	24.6	6.8	31.9
Investments in equity securities through UCITS	23.7	15.1	3.6	16.4
Other	0.8	0.4	0.2	0.5
TOTAL	**100.0**	**100.0**	**100.0**	**100.1**

Source: Covip (2002)

Table 4.26 – Open pension funds: breakdown of assets under management by geographical area
(situation at 31 december 2001 - in % temrs)

	Equity	Balanced	Bond	Total
DEBT SECURITIES				
Italy	16.8	40.3	64.9	35.4
Others countries euro area	2.7	11.9	17.0	9.1
United States	0.7	4.5	4.6	2.9
Japan	0.1	0.3	0.2	0.2
Other OECD member countries	0.1	0.4	2.2	0.6
Non-OECD countries	0.1	0.2	0.2	0.1
Total	**20.4**	**57.6**	**89.0**	**48.3**
EQUITY SECURITIES				
Italy	10.9	9.4	2.4	8.7
Others countries euro area	21.5	11.7	4.0	14.2
United States	36.7	15.5	3.1	21.9
Japan	5.4	2.9	0.7	3.5
Other OECD member countries	4.5	2.6	0.8	3.0
Non-OECD countries	0.7	0.3	0.1	0.4
Total	**79.6**	**42.4**	**11.0**	**51.7**
Grand total	**100.0**	**100.0**	**100.0**	**100.0**

Source: Covip (2002)

The geographic analysis of securities portfolios shows that 80 percent of debt securities were issued in Italy and 95 percent in other European Union countries. The distribution of equity instruments was more mixed with a preponderance of US securities, 42.4 percent of the total, while the share of Italian securities was 16.8 percent and those of other EU countries 27.5 percent, Japan 6.8 percent and other OECD 5.8 percent. Compared to 2000, there was a decrease in the proportion invested in Italian debt securities and equities in favour of other EU countries for debt securities and US stocks for equities.
The performance of open funds was also negative for 2001 with overall yield for the year of –5.6 percent. This is due to the greater weight of equities compared to contractual funds. Analysis of the individual sectors shows bonds produced positive results at 2.4 percent (benchmark 2.8 percent), while negative results were reported by balanced funds at –4.1 percent (better than the benchmark of –4.5 percent) and equities with a murderous –10 percent (also better than the benchmark of –10.8 percent). Aggregate data for the two year period 2000-2001 shows an overall negative yield of –2.8 percent better than the benchmark of –6.7 percent. Results for the three year period 1999-2001 are more comforting at 20.4 percent overall compared to the relevant benchmark of 11.1 percent.

4.3.5 Individual pension plans

In 2001, individual pension plans were launched in the form of insurance policies (Supplementary Pension Plans) in accordance with Legislative Decree 47/2000.
The 63 insurance companies that offered this product in 2001 wrote about 220,000 policies collecting € 335 million in premiums. In the first six months of 2002 a further 75,000 policies were written.
Even if the number of policies does not correspond to the number of insured persons, as a result, in many cases, to writing more than one policy for an individual, the number is certainly high especially if compared to the open funds contribution inflows, € 340 million, for the same period.
COVIP also estimated the average cost to the insured of supplementary pension plans despite the wide differences in types of insurance offered. The greatest cost is in the form of first premium loading which on average is about 23.5 percent of the premium. The high cost of entry is due to the need to remunerate the sales network to provide the incentive required to distribute the product. The result in terms of new business written is certainly positive, but high entry costs make it difficult to freely switch between different pension forms especially since there are also exit costs for switching in the majority of cases.
Summing annual management costs, entry and exit fees, COVIP estimates that an individual who switches after three years would pay annual fees of between 7.2 and 7.9 percent depending on the type of product. If the switch were made after ten years the annual fee would be between 2.4 and 3.2 percent.

4.3.6 Supplementary pensions in the public sector

One of the reasons for the slow development of supplementary pension schemes is the total absence of public sector employees.

The long legislative procedures necessary to permit pension funds in the public sector was finally completed in March 2001 through the issuance of a Decree of the President of the Council amending that of July 1999 implementing the accords between the unions and ARAN (Agenzia per la Rappresentaza Negoziale delle Pubbliche Amministrzioni - Bargaining Representational Agency for the Civil Service) as provided by Law 335/95 (see appendices A4.3, A4.4, A4.5). Consequently, everything is now ready for the introduction of pension funds to the public sector, as well. And yet, despite the agreement reached in February 2001 to establish the Esperia fund for the schools division, that fund has not yet been launched while agreements have not yet been signed by any of the other divisions.
It is ironical that public sector employees are prevented from joining occupational funds, especially those who are most affected by the reduction in compulsory state pension replacement rates.

4.3.7 The prospects for supplementary pensions: draft enabling legislation

The amendments made to the Constitution by Constitutional Law 3/2001 could have significant effects on supplementary pension schemes. The amendments distinguished between matters on which only the State can legislate, matters on which only the regions can legislate and matters with combined responsibilities for which the State is allocated principles and the regions concrete implementation.
"Supplementary" pensions have been included among the combined matters. It is not at all clear whether the legislation refers specifically to supplementary pension schemes or whether its intent is to extend to all regions the powers to provide regional public pensions supplementing state pensions, currently only permitted in those regions, regulated by a special statute.
It is clear that the second interpretation would have significant implications for future supplementary pension schemes.
The development of supplementary pension schemes in Italy is the subject of various differing considerations. A membership rate of 34.3 percent for employees in funds authorised to operate prior to 2001 cannot be ignored especially considering the limited amount of time since the date the funds effectively opened to membership. In countries with longer traditions in this area than Italy and where membership is voluntary, the rate is 50/60 percent decades after introducing the concept of accumulating capital to fund pension benefits.
Nevertheless, membership is significantly lower in broad areas of employment, minimal for the self-employed and rare amongst the young. In 2001, there was a notable slow down in subscriptions except for the introduction of the numerically important private pension plans.
The spread of pension funds and the level of membership indicate that development and participation is slower than expected even allowing for the initial excessive optimism of the first forecasts and the fact that supplementary pensions are still lacking in the public sector.
Furthermore, limited development not only manifests itself in a reduced number of members, but also in the inadequacy of contribution levels which are certainly too low to guarantee replacement rates near the levels prior to the reforms.

Draft enabling legislation

The Government took action by drafting enabling legislation designed to facilitate and sustain the development of supplementary pension schemes. To achieve this the proposed enabling law provides that:

1) pension fund contributions be increased through the compulsory release of TFR provisions (with exceptions relating to the years of contributions, age and certain special employee requirements);
2) there should be no additional costs for firms;
3) the employee's freedom of choice between various forms of supplementary pensions should be guaranteed on the condition that severance payment balances be transferred to occupational funds in the event that the employee does not exercise his right of choice and that the regulations regarding the freedom of movement between various supplementary pensions be revised;
4) tax incentives be increased by reducing the 11 percent rate of taxation on investment returns, fixing tax allowance maxima in absolute terms as well as a percentage of income and by setting aside the provision provides for separate taxation of lump-sum benefits of a maximum of 1/3 of accrued benefits
5) the supervisory authority's activities be reorganised to assure the system's uniformity and homogeneity with respect to all forms of pensions, group and private, and to simplify administrative procedures.

Mandatory membership

Legislative Decree 124 already provides for the allocation of the all TFR balances to pension funds for employees with first employment after 1993 who join a pension funds. Various rounds of contract negotiations, on the other hand, have caused the percentage of TFR balances allocated to funds to be progressively increased for other workers. Since the transfer of all balances to complementary schemes for "those who opt for it" is in line with existing legislation, its implementation is accelerated.

The difference, however, is mandatory subscription to pension funds for all workers which is implied by the compulsory transfer of severance fund balances to those funds. This completely overturns the "voluntary" nature of the membership provisions of Legislative Decree 124.

The discussion of whether membership should be voluntary or mandatory has been on going since the approval of Legislative Decree 124. It is, therefore, not a new issue.

Any adoption of binding requirements, however, poses problems which are only partially addressed by the draft enabling legislation. The draft law focuses on the cost of labour, employees' freedom of choice and tax incentives.

It excludes the possibility that the conferment of the TFR fund could increase costs for firms. The absence of increased costs is achievable through compensations consisting of eased availability of credit and an off-setting reduction in the cost of labour. The first item is a major problem for small to medium sized companies especially in some parts of the country. This, rather than the cost of the loss of the severance payment fund, appears to be the critical issue. Additional costs generated by the loss of the fund as a source of liquidity would not, in fact,

according to various estimates, be above 0.4/0.5 percent and about half would be compensated by eliminating the guarantee contributions of 0.2 percent as provided by the draft enabling law. Any action taken to compensate costs should, therefore, be limited.

Employee's freedom of choice

The proposed enabling legislation sets out the right for the employee to choose freely between different forms of supplementary pensions, occupational, open and individual pension plans with constructive subscription to an occupational fund in the event that no other choice is made.

The various systems must be comparable and the right to switch between systems assured for this freedom of choice to be effective. As a result there is a further issue which relates to control, guarantees for subscribers, and management and exit fees.

The COVIP report underlined two issues relating to open funds and individual pension plans: in the first case the role of the fund manager and in the second the level of entry and exit fees. The manager of an open fund is appointed by the financial group that sets up the fund. He is, therefore, an employee of that group and reports, primarily, to the individual who appointed him and not to the members of the fund. Furthermore there is no protection or direct representation of members in an open fund while the manager is an employee of a banking or insurance group with potential conflicts of interest.

These conflicts of interest will increase with the size of the fund and its increased importance in the shareholdings of firms in which it invests. There is, therefore, a governance problem for open funds with reference to the need to assure increased guarantees and protection for subscribers.

COVIP identified very high entry and exit fees for individual pension plans. Supplementary pensions are ideal instruments to assure sufficient pension cover with limited costs both for employees and firms. This, however, is open to discussion when there are high management costs that reduce net yields and, therefore, final benefits or which make high contributions necessary.

The existence of different types of supplementary pensions and freedom to switch between them are two elements which many consider to be necessary and sufficient to limit and reduce costs.

The experience in other countries with a multitude of funds does not confirm this hypothesis. Numerous studies[10] confirm that decentralised systems, whether from the supply or the demand side, have high costs both during the accumulation phase (acquisition, administration and management costs) as well as during the transformation of credits to annuity phase.

In any case, the cost of various types of supplementary pensions must be comparable: moreover, it should be required by regulation that information regarding the funds be true, clear and comparable.

One aspect to be confronted relates to the firms' contractual obligations. Contracts concluded to date require employers to pay both their own share

(10) Barr, N. (2002), Reforming Pensions: Myths, Truths and Policy Choices, GE-Diritto di Economia dello stato sociale, no. 2.

of the contribution as well as the TFR to occupational funds but not to other types of funds or pension systems. It is clear that if this wording or interpretation is maintained then switching from an occupational fund to other forms of pensions would be economically disadvantageous.

Taxation of pension investments
Although the use of the severance payment fund solves problems related to employees' contributions, it does not provide a solution to the problems of employees who do not have this benefit as for instance contract workers or low income self-employed.
A form of tax assistance would be useful for these individuals. The proposed enabling legislation provides for an increase in allowances for contributions to pension funds through the determination of maximum allowances either in absolute terms or as a percentage of taxable income. As a matter of fact, today the average contribution levels are significantly lower than the maximum tax allowance of € 5,165. Increased allowances in absolute terms would not, therefore, have an effect on the level of contributions but would favour high incomes. It would be of greater benefit to eliminate the percentage restriction which, in fact, prohibits the use of the full allowance.
There should, instead, be replacement or supplementary allowances for low incomes, for which the current allowance is ineffective. The proposed enabling law provides for the reduction of taxing investment returns. The providential nature of these investment certainly merits better tax treatment. It appears necessary, however, reconsider the current ETT (exemption of contributions and taxation of investment income and benefits) method of taxing of supplementary pensions. This should be done by examining the possibility of switching to a form of EET taxation (exemption of contributions and investment income and taxation of benefits) which is more widespread in other EU countries.

4.3.8 Guarantees for workers and asset allocation

Risk and guarantees
The mandatory use of the TFR fund creates problems that the proposed enabling legislation does not address such as employee guarantees and the allocation of the funds' assets.
The use of the TFR and the consequent increase of the weight of supplementary pension schemes in total pension coverage, especially for the young, creates a problem related to certainties and guarantees for workers.
The current system requires that risks inherent in the compulsory pension system, currently 100 percent of pension coverage, be covered by the entire community except for the "political" risk of a change in regulations. A change in regulations, however, requires decisions to be made by Parliament which in turn represents the entire community. The returns on the employee severance funds are, moreover, guaranteed by law.
The full transfer of the TFRs to pension funds and the increase in importance of supplementary pensions transfer the risk to workers for a part of their pension and would eliminate the guaranteed return of the TFR.

Table 4.27 – Pension funds. Yields. (1)
(in % terms)

	from 30.6.99 to 30.6.02	from 30.6.00 to 30.6.02	from 30.6.01 to 30.6.02	from 31.12.01 to 30.6.02	from 31.12.01 to 30.8.02
	(36 months)	(24 months)	(12 months)	(6 months)	(8 months)(2)
Occupational pension funds	7.8	-1.5	-2.2	-2.2	-3.4
Open pension funds					
General	3.2	-14.6	-11.2	-7.4	-10.5
Equity	1.4	-24.2	-17.5	-11.4	-17.0
Balanced	3.9	-11.5	-9.4	-6.3	-8.7
Bonds	10.5	4.8	0.5	-0.8	0.1

(1) Yields have been determined by measuring changes in net asset value.
(2) Data for July and August represent an estimate.

Source: Covip (2002)

When membership is voluntary, the worker is free to accept, or not, changes in risk and guarantee profiles. In a compulsory system the worker would be required to accept a change which could potentially worsen his circumstances.
In the United States and the United Kingdom company pension funds are being transformed from guaranteed benefit to funded schemes. The transformation is being accelerated by the current financial crisis, especially in the United Kingdom, where numerous company pension plans with benefits linked to final salaries are suffering serious financial problems. The boom in the financial markets during the 1990s permitted companies with defined benefit plan to reap the assured benefits of stock market performance through reduced employer contributions, for example. The collapse in equities means the companies now must bear the cost of the benefits which the funds are no longer in a position to guarantee. In consequence there was strong motivation to transform pension schemes for new hires and, in some cases, even for existing employees. The conclusions of the Pickering Commission, appointed by the British Government, on the state of pension funds, are that if defined benefit pension funds are to survive benefits indexation and the payment of survivors' benefits should be ceased. As a result, benefit levels become more uncertain and when yields turn negative as they are today, they can even reduce post retirement income.
For many, savings for a pension is their principal, if not only, form of savings and is the determinant factor of post retirement living standard. Funded schemes shift market risks to individual employees and expose them to the possibility of adequate income on retirement.
The advantages of funded pension schemes for employees lied always in the "certainty" that yields were higher than those under compulsory state pension schemes. The 1990s were characterised by a speculative bubble whose after effects are still felt today on stock exchanges around the world as well as on the economy. If the anomalous financial returns of this period are excluded, fully funded pension schemes' performance during the post-war period has been no higher than the growth in GDP. In making this comparison, it should be remembered that a pension fund's assets cannot normally be fully allocated to equities and also that pension funds' administration and management costs are for the account of the subscribers. As a result, the comparison of equity indices with GDP growth rates is irrelevant.
It is, therefore, mistaken to believe, as many do, that fully funded pension schemes offer miracle solutions to the problems faced by pension systems.

Diversifying pension schemes can help in improving the use of resources, both individual and group. If the weight of this, however, falls on the employee, then his disposable income decreases and the level of uncertainty regarding the future increases with negative effects for the economy.
Mandatory supplementary pensions and their increased importance for pension coverage reduces other welfare benefits administered by the public pension system such as maternity, sick-leave, unemployment, survivors' benefits, disability.
Ever increasing importance of supplementary schemes for total pension coverage will, therefore, result in reduced levels of protection and guarantees for workers unless compensating measures are introduced to shield against market risks and to introduce a measure of solidarity in supplementary system.

Asset allocation

The annual inflow from the severance payment funds for private sector employees has been estimated to be about € 14 billion. This is an impressive amount especially in comparison with the approximate € 1.15 billion in employees' contributions to occupational funds. The amount would certainly be noteworthy and would enable the accumulation of about € 100 billion in seven years of contributions from private sector employees alone.
The problem becomes how to use these resources. An objective, probably better described as a consequence, of the development of pension funds is the growth and modernisation of the Italian financial system. The inflow of such an enormous amount of capital to new funds acting as institutional investors is a necessary condition.
The problem, however, becomes the ability of private Italian companies to offer financial instruments adequate to satisfy a sudden and substantial increase in demand. Data relating to pension funds' asset allocation, whether between debt or equities, or geographic distribution, is not particularly encouraging. The funds appear to have a decidedly high preference, even disregarding current market conditions, to invest in government securities. Investment in equities is strongly focused on foreign stocks, particularly those issued in countries outside the European Union.
If these trends continue, the € 14 billion annual inflow from the severance payment funds, which today is a source of finance to companies, would to a large extent be lost to Italian companies in favour of government securities and international financial markets. Only those companies capable of issuing securities abroad would not suffer. This type of asset allocation is not only typical of supplementary pension funds. It is widespread throughout the Italian investment management industry.
If the larger part of severance payment fund balances placed with new supplementary pension funds are diverted from Italy and the European Union, as predicted, then the advantages for the Italian economy and for firms connected to the creation of these new institutional investors should be carefully re-examined.
Moreover, it is difficult to imagine constraints on allocation, either of a geographical nature or with reference to investment vehicle, being imposed on pension funds unless in combination with guaranteed returns. Fully funded pension schemes must optimise their investments within a given risk profile by freely operating on financial markets. It is the responsibility of the Boards of Directors and asset managers to assure this. The introduction of any

Table 4.28 – Investment funds: breakdown of assets under management by geographical area
(millions of euros)

	Government securities	Italian bonds	Italian equities	Foreign equities	Foreign capities	Other	Total
Total	121,895	14,276	26,938	100,355	91,688	39,870	395,022
%	30.9	3.7	6.8	23.2	25.4	10.1	100.1
of which:							
Equity	0.7	0	19.6	0.3	71.2	8.2	100
Balanced	22.6	1.9	9.9	25.9	32.5	7.2	100
Bonds	41.7	6.2	0.9	43	0.8	7.4	100

Source: Sole 24 ore

investment constraints would limit their capability in this respect and could cause returns to be lower than those obtainable on the market.
The situation would be different if some minimum return guarantees were combined with the constraints. Minimum returns could be guaranteed for all investments derived from the employee severance funds, e.g., higher than the severance payment funds, in compensation for the constraint imposed on their investment. This solution, however, would lead to the problem of who would guarantee the returns and, given the importance of the severance funds to supplementary pension schemes, would significantly erode the market character of funded schemes, thus creating a hybrid whose defects could be greater than its strengths.

4.4 Medium-long term trends in pension expenditure

Medium to long term forecasts of the trend in pension expenditure are very sensitive to assumptions relating to macroeconomic and demographic variables.
For such long time frames it is difficult to define one single reference scenario or to present a set of scenarios as more likely than others. There could be a set of assumptions, however, which are judged to be reasonable, given past developments and future trends, to define a possible range of future forecasts of pension system performance.
Already in the past edition of the INPDAP Report, ISTAT's Modsim-P model was used to present the medium to long term trends of the pension expenditure/GDP ratio for alternative scenarios.
In this edition of the report the projections were revised, by using the same ISTAT model after updating certain assumptions as well as the model itself.
First, new demographic forecasts made by ISTAT based on year 2000 were used to update the previous assumptions (based on 1996 data). The new demographic scenario is, on the one hand, characterised by a gradual increase in average life expectancy and, therefore, length of the retirement; and, on the other, by increased net annual immigration, 120,000 compared to 50,000 in the last forecasts. These two factors have opposite effects on the pension expenditure/GDP trend; if increased life expectancy leads to an increase in the cost of pensions, the increase in immigration leads to increased employment, at constant employment rates, thus improving GDP.
Secondly an updated version of the Modsim-P model[11] was used. Some of the technical bases were modified in the forecasts as were certain model function

(11) The reader is referred to the 2001 INPDAP Report for a detailed analysis of the technical and methodological aspects of the ISTAT model.

algorithms. In particular the base year information was updated by bringing it to 2000 for all variables used in the forecast.[12]
In addition, the dynamic relations between various parts of the model were refined and widened and greater flexibility for the construction of scenarios was introduced through endogenous activation of behavioural and legislative parameters.[13] In the context of the regulatory institutional framework used in the forecasts, the one currently in force, the ten year revision of the transformation coefficient, as provided by current legislation, was tested, to see the effect of increased average life expectancy and, therefore, longer retirement periods.

4.4.1 The scenarios tested

Pension expenditure/GDP projections were made based on the assumptions described in Table 4.29. To update the model for changes in macroeconomic and demographic variables, a scenario similar to the one used in the RGS's model and presented in the Economic-Financial Planning Document 2003-2006 was used as the base case (Case 1). Joint assumptions relating to productivity, activity and unemployment rates result, in the base case, in a real average growth of GDP of 1.5 percent per annum for the projected period.
The demographic data was updated by the new ISTAT population forecasts based on 1.1.2000.
Without reproducing all assumptions presented in depth in the previous INPDAP Report, subsequent scenarios concentrated on alternatives which appear to be more significant both with regards to the effects on the ratio between pension expenditure and GDP and to certain important changes in the manner in which the labour market works.
The second run (Case 2) used more favourable assumptions with respect to productivity growth rate and showed an additional increase of 0.5 percent over base case projections.
In the third run (Case 3) a different composition of employment is tested and the effect of increased atypical work and contract workers was analysed.
In the fourth scenario (Case 4) an increase in the effective age of retirement is assumed.
In the fifth and last run (Case 5) all alternative assumptions were combined with the base case.

4.4.2 Results of the projections

Base case

Chart 4.7 shows the trend in the base case ratio between pension expenditure and GDP (see Case 1 in Table 4.29).

---

(12) The update does not relate to retirement rates, calculated with reference to pension payments, given that the number of retirements in 2000 was influenced by a change in the age for old-age pensions.
(13) In particular, it is possible to assume an endogenous relationship between assumptions relating to employment levels and the propensity to retire where the extent of the relationship is derived by maintaining consistency and it is possible to activate a dynamic relationship between assumptions macroeconomic-income levels and the propensity to retire. In addition, the model permits the automatic adjustments of pension benefit ceilings and income groups to real growth so that purchasing power remains unchanged. Transformation coefficients can be automatically changed, either progressively or in steps, in light of changes in average life expectancy. In the forecasts presented, the endogenous features, briefly mentioned above, were deactivated and the sensitivity analysis was made with reference to isolated changes in assumptions. The only exception relates to the automatic revision of the transformation coefficients of pension credits.

Table 4.29 - Assumptions with respect to the legal, macroeconomic and demografic variables (1)

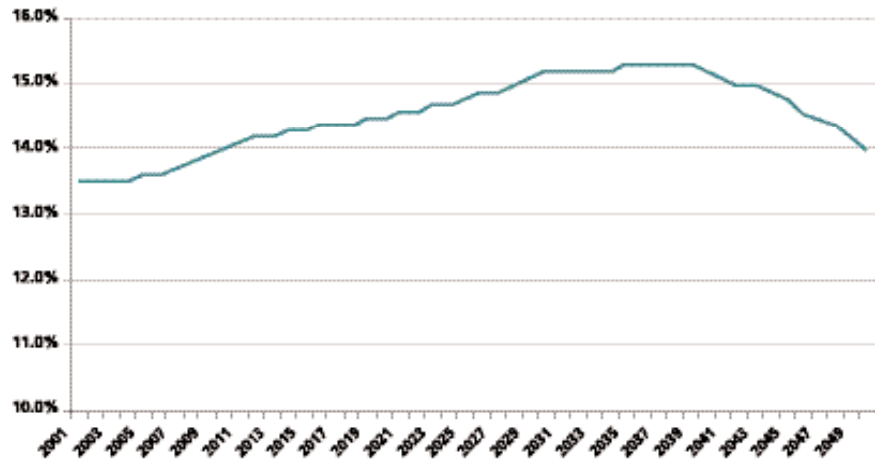
	Case 1 (Base Case)	Case 2	Case 3	Case 4	Case 5
Legal variable	current with ten-year adjustment to transformation coefficients	current with ten-year adjustment to transformation coefficients	current with ten-year adjustment to transformation coefficients	current with ten-year adjustment to transformation coefficients **> age to retirement**	current with ten-year adjustment to transformation coefficients **> age to retirement**
Demographic variable	Istat 2000 forecasts base 1.1.2000	Istat 2000 forecasts base 1.1.2000	Istat 2000 forecasts base 1.1.2000	Istat 2000 forecasts base 1.1.2000	Istat 2000 forecasts base 1.1.2000
Macroeconomic variable					
Productivity growth rate	endogenous up to 2004 external from 2005 1.4% up to 2011 from 1.4% up to 2% ('26) 2% up to 2030 from 2% up to 2.5% ('50)	**as in Case 1, with gradual increase from 2005 up to +0.5% per year**	endogenous up to 2004 external from 2005 1.4% up to 2011 from 1.4% up to 2% ('26) 2% up to 2030 from 2% up to 2.5% ('50)	endogenous up to 2004 external from 2005 1.4% up to 2011 from 1.4% up to 2% ('26) 2% up to 2030 from 2% up to 2.5% ('50)	**as in Case 1, with gradual increase from 2005 up to +0.5% per year**
GDP growth rate	actual for 2001 about 1.7% 2002-04 endogen. from 2005 average: 1.5%	**actual for 2001 about 1.7% 2002-04 endogenous from 2005 average: 2%**	actual for 2001 about 1.7% 2002-04 endogen. from 2005 average: 1.5%	actual for 2001 about 1.7% 2002-04 endogen. from 2005 average: 1.5%	**actual for 2001 about 1.7% 2002-04 endogenous from 2005 average: 2%**
Average activity rate					
2000 (15-64)	59.6	59.6	59.6	59.6	59.6
2050 (15-64)	68.1	68.1	68.1	68.1	68.1
Dynamic trajectory	"S"	"S"	"S"	"S"	"S"
Average unemp. Rate					
2000 (15-64)	10.6	10.6	10.6	10.6	10.6
2050 (15-64)	4.6	4.6	4.6	4.6	4.6
Dynamic trajectory	"S"	"S"	"S"	"S"	"S"
Alteration s.-employment	absent	absent	**present**	absent	**present**
(s.-em./employee 1998)	0.273	0.273	**0.273**	0.273	**0.273**
(s.-em./employee 2050)	0.273	0.273	**0.374**	0.273	**0.374**
Price changes	absent 0%	absent 0%	absent 0%	absent 0%	absent 0%

(1) Under each scenario, the parts shown in boldface indicate differences from base case.

In this scenario the ratio of pension expenditure to GDP, currently 13.5 percent, increases to 15.3 percent in the period 2035-2040, with a 1.8 point increase in GDP, to then decrease and return at the end of the projected period to values of the beginning years.
In the first phase of the projection period, with a practically flat ratio between average pensions and productivity, the number of pensioners progressively increases following the baby boom generations move from active employment to retirement. In the following period, the ratio between average pensions and productivity sharply decreases as a result of the introduction of the contributions-based system thereby causing a containment of the expenditure/GDP ratio (see Chart 4.12).

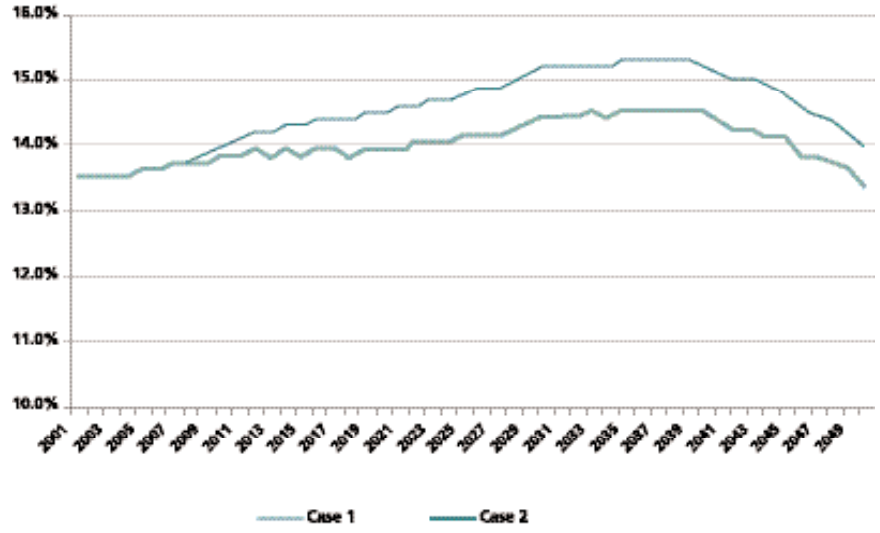
Increased productivity
The ratio between pension expenditure and GDP is very sensitive to changes in the trend in productivity growth.

Chart 4.7 - Trends in the expenditure/GDP ratio in Case 1 - Base Case



Changing to more favourable trends for this variable results in a significant improvement in the pension systems macroeconomic viability. The effect of a gradual increase in productivity growth up to one half a percentage point from 2010, compared to the base case, was tested. As shown in Chart 4.8 the ratio between pension expenditure and GDP decreases considerably (about 1 percentage point of GDP) throughout the whole projection period.
In this case, although the trend in GDP growth improves to the same extent as productivity increases, the numerator, represented by pension expenditure, is only partly influenced by the increased productivity due to the absence of indexation in real terms of current pensions. The changes in productivity and, hence, wages only affect pension expenditure in relation to new pensions and to the ratio between them and current pensions in preceding years.

Chart 4.8 - Trends in the expenditure/GDP ratio in cases 1 and 2
(assuming different productivity growth)

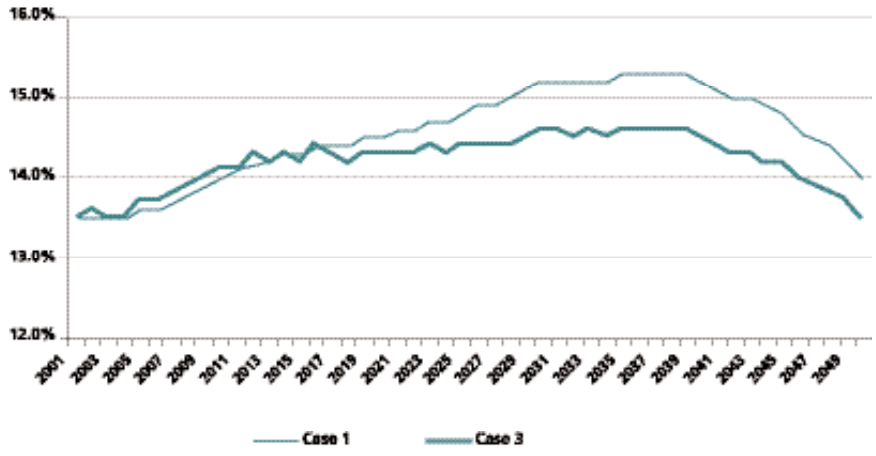


Increased growth in productivity, moreover, appears necessary for the Italian economy to maintain, if not to improve, its position in international trade which could not be defended if competitiveness was

only pursued in terms of wage costs. Limited growth in productivity would have negative effects not only on the financial sustainability of the pension system but also on the whole Italian economy.

Changes in the structure of employment
The assumption used in these projections was derived from recent trends in the labour market, characterised by increased flexibility and by the spread of new types of employment and atypical contracts.
In view of the fact that the model has no provisions for "atypical" workers, the effects of the changes were tested by increasing the weight of self-employed relative to regular employees, with total employment held with a change to the weights of 10 percentage points. The increase in the weight of the self-employed permitted the projection of the effect of increasing "atypical" work (contract workers) since the method of calculating pension benefits will be the same in coming years given that the contributions rate is expected to be 20 percent for both categories.
The contributions-based system means that the increase in the number of reduced contribution rate workers will cause pensions to fall compared to those obtainable, other things being equal, by workers with a regular permanent employment contract with ordinary contributions rates.
The change in this assumption has a significant effect on the trend of the pension system, causing a maximum decrease in the expenditure/GDP ratio of 0.7 percent.

Chart 4.9 - Trends in the expenditure/GDP ratio in cases 1 and 3
(assuming an increase in reduced-contribution workers)

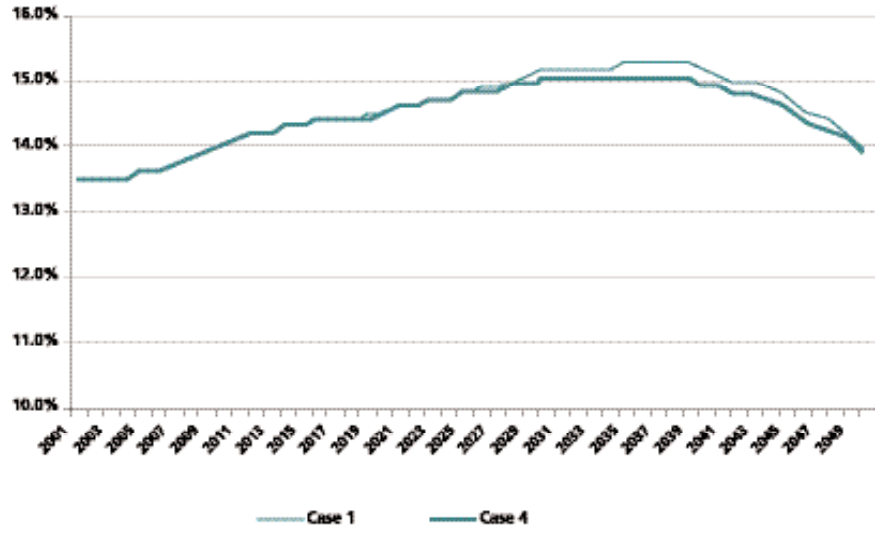


The decrease in expenditure is of course preceded by a decrease in contributions as a result of the greater number of workers with reduced contribution rates. Even though the macroeconomic viability of the system improves in the long term, in the short to medium term the deficit of the different pension divisions increases.

Increase in the retirement age
Lastly, the effect of the increase in the retirement age was projected. This assumption is plausible and consistent with the gradual and progressive application of the contributions-based system which introduces actuarial equivalence mechanisms into the formula used to calculate

benefits. The amounts of the pension benefits tend to progressively reduce unless retirement age is postponed.
Moreover, in comparison with the base case, there were changes in the current propensities to retire, assuming a postponement in retirement age to obtain higher benefits and, therefore, more similar to the guaranteed levels of the earnings based system. In particular, the propensity to retire was progressively increased starting from 2014, the year in which the first mixed system retirements occurs, as the contributions-based system gradually becomes fully operational, leading to an increase in the average retirement age from 60/61 to 63/64.[14]
As seen in Chart 4.10, there is an improvement in the pension expenditure/GDP ratio. The effect of the reduction in the expenditure becomes significant starting 2025 with a maximum savings of about 0.3 percent of GDP in the 2035-2040 five year period, due to a lower number of pensioners.
In the following period when individuals who have postponed their retirement commence obtaining pension benefits at older ages and, therefore, higher levels of pension benefits, savings as a percentage of GDP tend to reduce and finally completely disappear by the end of the projected period.

Chart 4.10 - Trends in the expenditure/GDP ratio in cases 1 and 4
(assuming the effective retirement age is raised)

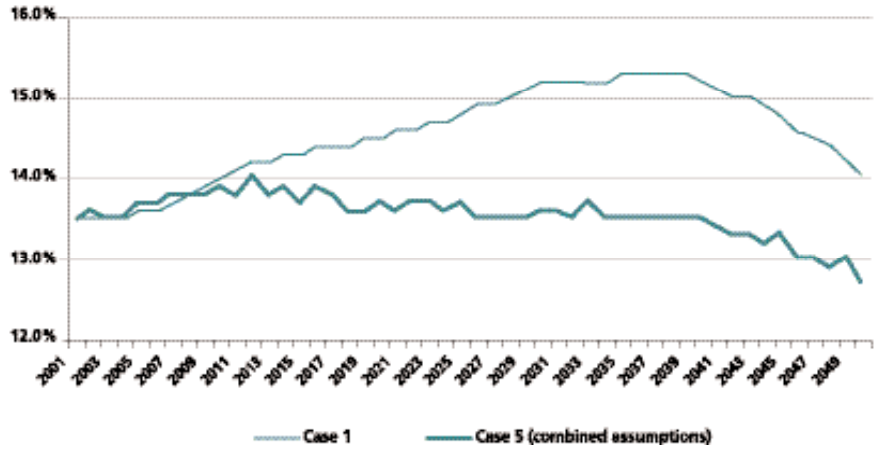


A combined scenario
Chart 4.11 shows the results of the combined testing all alternative assumptions. In addition the assumptions relating to increased productivity (Case 2), different composition of employment (Case 3), and increase in effective retirement age (Case 4), were tested on a combined basis.
The effects on the trend of the ratio between pension expenditure and GDP are obvious. The new curve, in fact, is flatter than the now well known

(14) The increase in the average age, from 2014, was generated by the model which replicates the decision proces as a function of biological life expectancy, current and expected income. The activation of the mechanism produced an increase in the average age of retirement of about three years for employees and about five years for the self-employed.

trend with the "lump" thus correcting the expenditure dynamics just at the time it peaks, in consequence of the retirement of the baby boom generations.
There is a significant improvement compared to the base case, with maximum savings of about 2 percent of GDP in the period 2035-2040 which tends to slightly ease back in the following period.

Chart 4.11 - Trends in the expenditure/GDP ratio in cases 1 and 5
(combines assumptions)

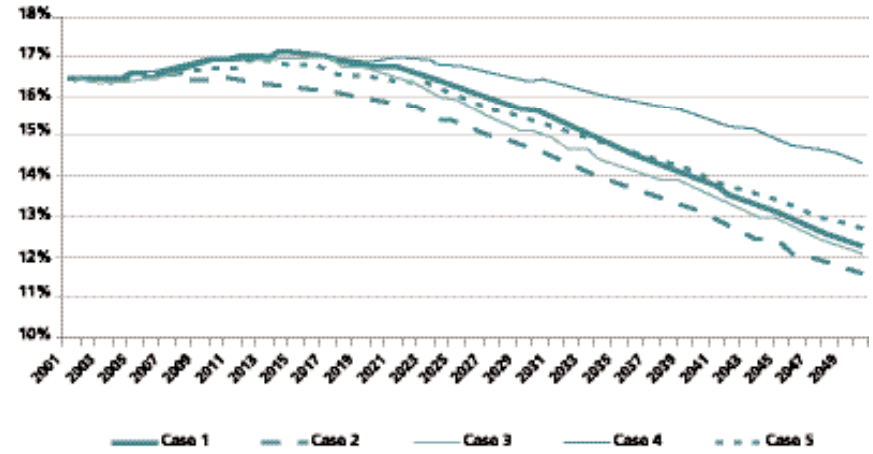


There is no reason to believe that the curve obtained in this manner is the most likely. It is, however, just as probable as the base case. The assumptions used to obtain it are "reasonable", some have already been projected (higher age of retirement), others are highly desirable for the economy as a whole (increased productivity). The scenario which will take shape depends on future economic policies, not only with respect to the pension system, but primarily with respect to the economy as a whole.

The relationship between average pensions and productivity
An important aspect underlying the evolution of the ratio between pension expenditure and GDP is the relationship between average pensions and productivity per employed person. The trend of the latter demonstrates important redistribution effects between the pensioners and the active population. This permits a few considerations on the capacity of the pension system to guarantee adequate income during retirement.
The partial indexation of pensions to prices alone causes the relationship between the average pension and productivity to show a decreasing trend during the entire projected period in all scenarios. During the last projected period, the reduction is even more marked partly as a result of a fully operational contributions-based system.
In the scenario projecting increased productivity, the decrease in the average pension compared to productivity per employee is even more accentuated as a result of the lack of a link to income growth of existing pensions. The price for increased financial sustainability of pensions, moreover, is a more negative social impact.

The projected increase in the retirement age in the fourth scenario, mitigates the effect of the progressive reduction in the ratio between average pensions and average wage. In this case, in fact, opting to postpone retirement means that higher pension benefits are paid. Even here, however, the phenomenon of the progressively deteriorating relationship is not eliminated. This is due to the contributions-based pension system and the absence of real pension indexation.

Chart 4.12 - Trends in the average pension amount/GDP per employed worker



4.5 Forecast public sector pension expenditure

The medium to long term trend in pension expenditure for public sector employees, presented in here, were developed by using the Forecast Model developed by INPDAP. Its results were released for the first time in the last edition of this report.

The Forecast Model is designed to project trends for all of INPDAP's pension divisions. It is part of the "Micro-Simulation" family of models. Its focus is regulatory aspects and it simulates individual characteristics and behaviour patterns. The macroeconomic variables used for the projections are, on the other hand, exogenous. Public sector employment, for example, is a percentage, constant or decreasing, of total employment as determined in accordance with macroeconomic assumptions.[15]

The model was updated to develop the forecasts presented in the 2001 INPDAP Report: in addition to adjusting demographic assumptions to incorporate ISTAT's most recent population forecasts, certain technical data was updated as a result of the shift of the first projected year from 1999 to 2001. In particular, new weights were assigned to the parameters regarding the propensity to retire based on actual observations of new pension disbursements during the last three years. The effect was to increase the number of retirements for the initial projected years.

4.5.1 Assumptions

The assumptions used for the projections are set out in Table 4.30. The assumptions for alternative scenarios are presented next to the base case

(15) The reader is referred to the 2001 INPDAP Report for a detailed analysis of the technical and methodological aspects of the ISTAT model.

assumptions.
The regulatory framework for the pensions used for all projections is the one currently in force: similar to the forecasts of the whole pension system set out above, the revision to the rate used to transform pension credits into annuity income every ten years was also projected.
The assumptions relating to base case macroeconomic and demographic variables (H1 of Table 4.30) are also the same as used in the preceding paragraph.
The other scenarios are based on different assumptions relating to certain variables.
These included testing the effects of changes in the assumptions set out below while holding all other base case assumptions constant: increase in the effective age of retirement (H2); increase in the growth rate of productivity by 0.5 percent per annum (H3), a change in the trend of public sector employment (H4).
The assumption relating to an increase in the retirement age, mentioned above, is a direct consequence of the progressive introduction of contributions-based pension calculations: the level of minimum pension benefits to retire was increased in the model to better approximate the pension coverage currently provided by the earnings related system.[16]
While the level of public sector employment as a percentage of total employment was held constant in the base case, other runs were made for which it was assumed that the percentage progressively reduced from 15.6 to 13.5 percent by the end of the projected period.
This assumption was necessary to reflect the effect of any impoverishment of the public sector contributions base as a result of privatisations which are, today, already beginning to have an effect on some areas of the public sector.
Base case real GDP growth averages about 1.5 percent per annum for the whole projected period. In scenarios H2 and H4 relating to increased effective retirement age and reduction in public sector employment, respectively, the growth in GDP is not altered. Testing the assumption relating to increased growth in productivity (H3), however, showed more dynamic GDP growth compared to base case.
With respect to the trend in INPDAP's contribution base, as shown in Chart 4.13, the number of members was the same for cases H1, 2 and 3: for these cases, public sector employment was, in fact, determined by a constant percentage of total employment over the whole projected period. Based on this assumption the number of insured employees decrease from 3.3 million at the beginning of the period to 2.9 million in 2050.
The trend in public sector employment in scenario H4 is different. Here it is assumed that it gradually reduces as a proportion of total employment: in this case the decrease in the number of insured employees is more accentuated, dropping to a level of 2.5 million members by the end of the projected period.

4.5.2 Results

The number of pensions tends to increase in each of the projections run

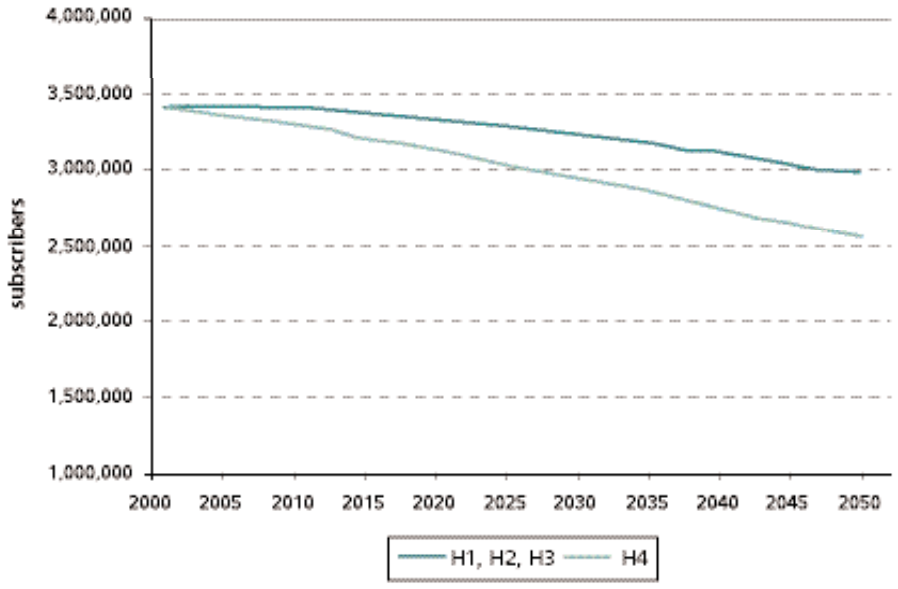
(16) The minimum requirements for pension eligibility as required by current regulatios were not increased for the projections.

Table 4.30 - Macroeconomic and Demografic Hypothesis (1)

	H 1	H 2	H 3	H 4 - Public employment reduction
Legal variable	current with ten-year adjustment to transformation coefficients	current with ten-year adjustment to transformation coefficients **> age to retirement**	current with ten-year adjustment to transformation coefficients	current with ten-year adjustment to transformation coefficients
Demographic variable	Istat 2000 forecasts basic 1.1.2000	Istat 2000 forecasts basic 1.1.2000	Istat 2000 forecasts basic 1.1.2000	Istat 2000 forecasts basic 1.1.2000
Macroeconomic variable				
Productivity growth rate	endogenous up to 2004 external from 2005 1.4% up to 2011 from 1.4% up to 2% ('26) 2% up to 2030 from 2% up to 2.5% ('50)	endogenous up to 2004 external from 2005 1.4% up to 2011 from 1.4% up to 2% ('26) 2% up to 2030 from 2% up to 2.5% ('50)	**as in H 1, with gradual increase from 2005, up to +0.5% per year**	endogenous up to 2004 external from 2005 1.4% up to 2011 from 1.4% up to 2% ('26) 2% up to 2030 from 2% up to 2.5% ('50)
GDP growth rate	actual for 2001 about 1.7% 2002-04 endogen. from 2005 average: 1.5%	actual for 2001 about 1.7% 2002-04 endogen. from 2005 average: 1.5%	**actul for 2001 about 1.7% 2002-04 endogen. from 2005 average: 2%**	actual for 2001 about 1.7% 2002-04 endogen. from 2005 average: 1.5%
Average activity rate				
2000 (15-64)	59.6	59.6	59.6	59.6
2050 (15-64)	68.1	68.1	68.1	68.1
Average unemp. Rate				
2000 (15-64)	10.6	10.6	10.6	10.6
2050 (15-64)	4.6	4.6	4.6	4.6

(1) Under each scenario, the parts shown in boldface indicate differences from base case.

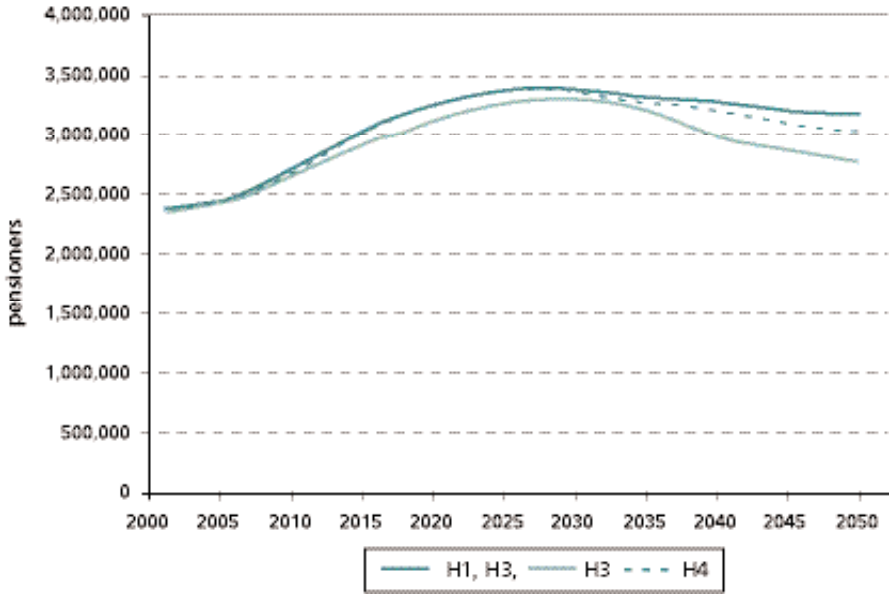
Chart 4.13 - Number of subscribers



(chart 4.14): this is due to the current composition of contributors which will lead to a progressively increasing number of pensioners because of the very high number of baby boom generation retirements.
The number of pensioners over the entire projected period is the same for

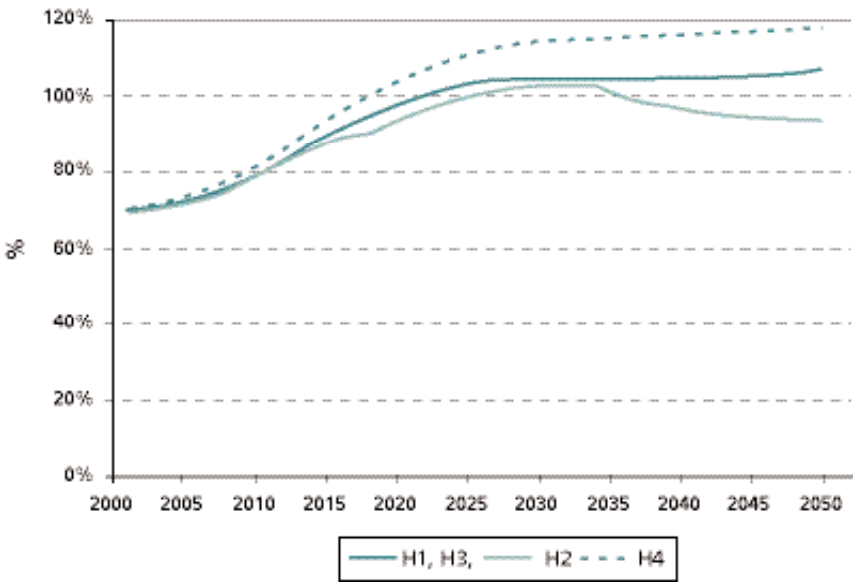
both the base case (H1) and the case showing increased productivity (H3): it increases from 2.2 million to 3.4 million in 2030 to subsequently slightly ease back to approximately 3.2 million in 2050.
ISTAT's new demographic projections forecast a significant increase in life expectancy which is reflected in the number of pensioners: towards the end of the projected period their number is higher, with a slightly declining trend, than in the forecasts in the last edition of the INPDAP report which showed a more marked decrease in the number of pensions. The number of pensioners was lower in the other two scenarios. H2, in particular, which tested the effects of postponing retirement age, projects a lower than base case (H1) number of pensioners as early as 2015. In scenario H4, which assumes a decreasing proportion of public sector employees, the number of pensioners, compared to base case, tends to decrease from 2030 due to the reduced number of potential pensioners.

Chart 4.14 - Number of pensioners in the different cases



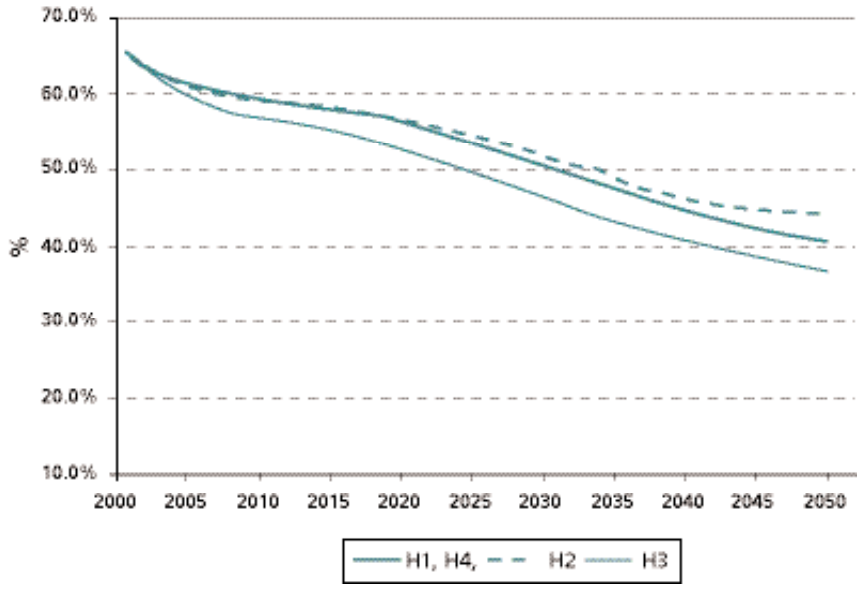
These trends have an effect on the development of the ratio between the number of pensioners and the number of contributors. That ratio increases in each of the cases until 2030 when the slope of the trend line becomes flatter (Chart 4.15). This is particularly true for both cases H1 and H3 in which the ratio between pensioners and contributors demonstrates the same trend increasing from 67 percent at the beginning of the projected period to about 105 percent in 2030. From the following period it grows very slightly to reach 107 percent in 2050.
In case H4, reduction of the proportion of public sector employees, the ratio is higher than base case and reaches approximately 119 percent by the end of the period.
In case H2, on the other hand, which projected increased retirement age, the ratio of pensioners to contributors is lower than base case especially towards the end of the projected period when it decreases to 94 percent by 2050. This is due to a lower number of pensioners following the increase in the effective age of retirement with employment numbers held constant.

Chart 4.15 - Number of pensioners / contributors



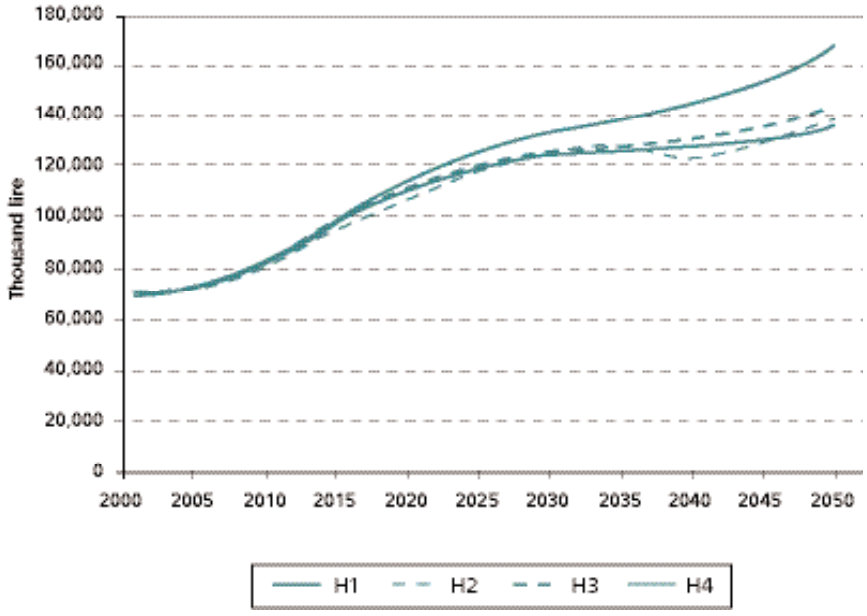
Given the growth in the ratio of number of pensioners to number of contributors, the ratio of average pension to average employment income is projected to decrease for the entire period in absence of indexation. This is because of lacking pension indexation in real terms (Chart 4.16).
The base case (H1) projects this ratio to decrease by slightly less than 30 percentage points, falling from the current 68 percent to 40 percent in 2050.
The decrease is more accentuated in scenario H3, which projects more dynamic growth in productivity: this case shows the average pension/average income ratio reaching 35 percent at the end of the projected period.
The projected increase in the retirement age in the scenario H2, mitigates the effect of the progressively reducing ratio of average pension to average income. This is because in the contributions-based system the postponement of retirement results in a higher level of pension benefits. Average pensions to average income, therefore, is higher and is projected to be 44 percent in 2050. The progressive impoverishment of pensions compared to salaries persists due to the lack of pension indexation in real terms: although the starting level of pensions is increased there is no adjustment to the level of benefits in line with the increases in earnings resulting from increased productivity.

Chart 4.16 - Average pension / Average pay



Pension expenditure is projected to increase in all cases up to 2015 when they begin to diverge.
The highest value is shown by the increased productivity case due to its greater increase in average pensions as a result of the GDP effect on new pensions. The lowest value is shown by the reduction in public sector employment case as a result of the lower number of pensioners (Chart 4.17).

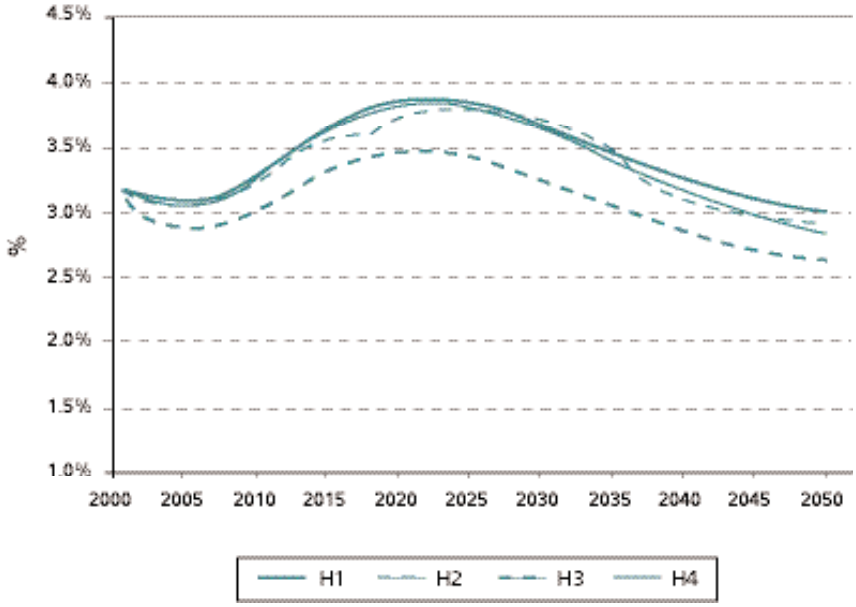
Chart 4.17 - Total pension costs *(constant prices)*



The trend in pension expenditure to GDP is shown in Chart 4.18. In the first half of the projected period, the increase in the ratio until 2025 is linked to the considerable increase in the number of pensions which pulls the ratio of

the number of pensioners to number of contributors up. Subsequently, the decrease in the average pension level, more significant due to the greater effect of contributions-based calculations, tends to off-set the increase in the ratio of number of pensioners to number of contributors. This ratio, as well, tends to flatten at the end of the projected period due to the ending of baby boom generation retirements.
In the base case H1, pension expenditure/GDP is projected to increase from 3.2 percent at the beginning of the period to around 3.9 percent in 2025. Thereafter it falls back to 3 percent in 2050.
The increased productivity case (H3) shows the most substantial improvements with savings in expenditure of about 0.5 percent of GDP throughout the entire projected period. In this case, however, as shown above, average pensions/average income is lower resulting in a significant redistribution of wealth from pensioners to employed persons.
Even though the two other cases, H2 and 4, show improvements in pension expenditure to GDP the amounts are not significant: at the end of the projected period the divergence from base case is on the order of –0.2 percent of GDP.
The increase in effective retirement age case (H2), therefore, has no important impact: it defers retirement and, therefore, reduces the number of pensioners but savings subsequently reduce due to higher pension benefits as a result of the higher age on retirement.
On the one hand, the reduction of percentage of public sector employment (H4) generates a slight improvement in macroeconomic sustainability, as shown by the ratio expenditure to GDP, while, on the other, it causes the progressive deterioration in the ratio between the number of pensioners and the number of contributors. The effect of this is to weaken financial sustainability and to cause an imbalance in the ratio between revenue and expenditure.

Chart 4.18 - Pension expenditure / GDP



(17) The constant trend in the ratio between expenditure and GDP, seen in the early years of the projctions, is explained by assuming GDP growth as that shown in the Economic and Financial Planning Document (DPEF).

appendixes

Appendixes

Appendix A4.1 – Extending the contributions-based system: effects on replacement rates

One possible change to the pension system consists in the extension of the prorated contributions-based system to include workers for whom Law 335 provides that earnings-related pension calculations still be applied. The effect of this change, increasing over time, would be to contain growth in pension expenditure because of a reduction in the amount of pension benefits. Nevertheless, its effect will become more diluted as the number of intervening years between the 1995 reform and the prorated extension increase. This is because the number of workers affected by the change decreases.

The implications for replacement rates due to the change to prorated contributions-based calculations are examined below.

The effects on various pensioner age groups (to examine the redistribution effects between generations) and various categories of public and private sector workers (to examine the redistribution effects within individual generation groups) were analysed. The analysis was based on a series of assumptions regarding the regulatory-institutional framework: these were salary growth of 2 percent, GDP growth of 1.5 percent, 35 or 40 contribution years and retirement between 57 and 65 years of age. Prorated contributions-based calculations were assumed from 2003. New pensions are calculated by applying the rules of the current mixed system.

The change to proration

Law 335/1995 introduced the full contributions-based calculation system for all new employees after 1/1/96. It, furthermore, provided that the effects would be prorated for all employees who at 31/12/1995 had less than 18 years of contributions. For all other workers the earnings-related system still be applied. This creates significant differences in replacement rates with a wide divergence between individuals who had 17 and those with 18 contribution years in 1995 which is the cut-off between the two calculation methods.

The proposal is that prorated benefits be extended to “older” workers form 1 January 2003. The new calculations would, moreover, affect workers with at least 25 years of contributions due to the passing of seven years since 1996 (except for those workers whose contributions were interrupted during those years). The effect of the proration is to gradually reduce replacement rates from earnings-related system. The amount of reduction will increase with the number of years of service under the contributions-based system but, on the other hand, will vary inversely with age on retirement due to the nature of the contributions-based system’s actuarial formulae which take account of life expectancy at the time of retirement. Another factor which contributes to the progressive decline in replacement rates is the revision of transformation coefficients every ten years. In fact, in the examples various coefficients were applied, depending upon the year of retirement. The coefficients were all lower than current levels except for those persons who retire prior to 2005.[1]

(1) For individuals with 33 years of contributions in 2002 and who retire with 35 contributio years i.e., in 2004, the 1995 coefficients would be applied. For retirement in subsequent years, the coefficients applied would be those of 2005. Year 2015 coefficients would be applied to individuals with 25 contribution years in 2002 and who retire with 40 contribution years, i.e., in 2017.

The results are closely correlated to assumptions, especially the differential between increases in remuneration and growth of GDP.
Real growth in earnings was assumed to be 2 percent per annum and in GDP 1.5 percent for these examples. Lower earnings increases at the same level of GDP growth, would result in increased pensions coverage while higher growth in remuneration would result in lower replacement rates.
The amount of reduction in pension benefits, moreover, differs depending on the pension division responsible for the individual worker. This is owing to the lack of uniformity in the methods of earnings-related calculations.

Private sector employees
The drop in pension benefits for these workers is relatively contained due to higher ages on retirement or limited periods in the contributions-based system. For workers who retire with 35 contribution years, the highest percentage reduction is –6.9 percent which is the same reduction as for those who retire at 57 years of age and had 25 contribution years in 2002 (Table A4.1-1). The amount of the loss reduces progressively to –1 percent for workers who retire at 57 and had 33 years of contributions in 2002.

Table A4.1-1 - Effects on replacement rates determined by the transition to the prorated contribution-based system starting 2003 Private employees

	Replacement rates: contribution period 35 years					Replacement rates: contribution period 40 years				
	Years of contribution in 2002					Years of contribution in 2002				
	25	27	29	31	33	25	29	31	35	37
Replacement rates: earning-related system, law 335/95										
	67.1	67.1	67.1	67.2	67.2	76.6	76.7	76.7	76.8	76.8
Replacement rates with prorated contribution-based system										
Retirement year	*2012*	*2010*	*2008*	*2006*	*2004*	*2017*	*2013*	*2011*	*2007*	*2005*
coeff. (1)	*2005*	*2005*	*2005*	*2005*	*1995*	*2015*	*2005*	*2005*	*2005*	*2005*
57	62.5	63.5	64.4	65.4	66.5	68.8	71.6	72.6	74.5	75.5
58	62.9	63.8	64.7	65.6	66.5	69.4	72.0	72.9	74.7	75.6
59	63.3	64.1	64.9	65.7	66.6	70.0	72.5	73.3	75.0	75.7
60	63.8	64.5	65.2	65.9	66.7	70.6	73.0	73.8	75.2	75.9
61	64.3	64.9	65.5	66.1	66.9	71.3	73.5	74.2	75.4	76.0
62	64.8	65.3	65.8	66.3	67.0	72.1	74.1	74.7	75.7	76.2
63	65.3	65.8	66.2	66.6	67.1	72.8	74.7	75.2	76.0	76.3
64	65.9	66.3	66.6	66.8	67.2	73.7	75.4	75.7	76.3	76.5
65	66.6	66.8	67.0	67.1	67.4	74.6	76.1	76.3	76.6	76.7
% change in pension amount (2)										
57	-6.9%	-5.4%	-4.0%	-2.7%	-1.0%	-10.2%	-6.7%	-5.4%	-3.0%	-1.7%
58	-6.3%	-4.9%	-3.6%	-2.5%	-1.0%	-9.4%	-6.1%	-4.9%	-2.7%	-1.6%
59	-5.7%	-4.4%	-3.2%	-2.2%	-0.9%	-8.6%	-5.5%	-4.4%	-2.4%	-1.4%
60	-5.0%	-3.9%	-2.8%	-1.9%	-0.7%	-7.8%	-4.8%	-3.8%	-2.1%	-1.2%
61	-4.2%	-3.3%	-2.3%	-1.6%	-0.4%	-6.9%	-4.1%	-3.3%	-1.8%	-1.0%
62	-3.4%	-2.6%	-1.9%	-1.3%	-0.3%	-5.9%	-3.4%	-2.6%	-1.4%	-0.8%
63	-2.6%	-2.0%	-1.4%	-1.0%	-0.1%	-4.9%	-2.6%	-2.0%	-1.1%	-0.6%
64	-1.7%	-1.2%	-0.8%	-0.6%	0.0%	-3.8%	-1.7%	-1.3%	-0.7%	-0.4%
65	-0.7%	-0.5%	-0.2%	-0.2%	0.3%	-2.6%	-0.8%	-0.5%	-0.2%	-0.1%

(1) Transformation coefficients with 10-year adjstments in accordance with law 335/95
(2) Percentage decrease of pension amount

For retirements at 62 years, the percentage reduction in pension benefits is –3.4 percent with 25 years of contributions by year-end 2002 and –1.3 percent with 31 contribution years.
For retirement at either 64 or 65, pension benefits, calculated with reference to the new system, would only be marginally reduced for almost all affected workers. This is due to the high transformation coefficient of contributions-based pension credits. For workers close to retirement, with 33 or 34 contribution years, the benefits would be equal if not greater.
For those retiring with 40 years of contributions, the reduction of the pension would be higher since more years would be valued by contributions-based calculations. The greatest loss, -10.2 percent, is suffered by a worker with 25 contribution years in 2002 who retires at 57 years of age. The amount of the reduction would drop to –5.9 percent for retirement at 62 and to –2.6 percent with retirement at 65. In this case, there is a negative effect arising from the application of lower transformation coefficients in addition to the higher number of years in the contributions-based system.

Higher contributions seniority in 2002 means progressively smaller losses.

Public sector employees
Examples for these workers are more complicated due to problems relating to a different pension base depending on the reference period and the proration of annuity coefficients applied by Law 724/1994. This results in differences not only between private and public sector employees, but also within the public sector between state, local government and health service employees.
A factor which affects the amounts of pension benefits for public sector employees are earnings benefits. These may only be included in the determination of pension benefits in connection with pension credits acquired after 31/12/1992.[2]/. Their amount has a significant effect on final pension benefits.[3]
In the State employee division, results are influenced by the pension calculation method applied in that sector.
There will be less of an effect from the change to a prorated contributions base since the amount of pension benefits under the earnings-related system for periods following 1992, partially replaced by a new method of calculation, was more penalised than other sectors by various reform laws:
with respect to the private sector this is due to pension benefits being based on average salaries taken over the last ten years before retirement, compared to the last salary drawn for the private sector;
with respect to local authorities, for the lower rates of return attributable to the credits acquired after 1992.
For this reason, the effect of the proration on the reduction in the replacement rate is less pronounced for state employees than for local government or private sector employees.

(2) Article 2, sub-paragraph 11 of Law 335.
(3) The results of the computer runs shown in Tables A4.1-2 and A4.1-3 relate to benefits amounting to 15 percent of total remuneration. The percentage reduction in replacement rates, compared to the coverage produced by Law 335, does not change as the weight of earnings benefits varies. The level of absolute coverage, however, does change significantly whether in the earnings-based or the new prorated system. The reduction in the replacement rate, fact, becomes greater the proportion of earnings benefits.

Table A4.1-2 - Effects on replacement rates determinated by the transition to the prorated contribution-based system starting in 2003. State employees (1)

	Replacement rates: contribution period 35 years					Replacement rates: contribution period 40 years				
	Years of contribution in 2002					Years of contribution in 2002				
	25	27	29	31	33	25	29	31	35	37
Replacement rates: earning-related system, law 335/95										
	68.1	68.1	68.1	68.3	68.4	76.8	76.9	76.9	77.0	77.2
Replacement rates with prorated contribution-based system										
Retirement year	*2012*	*2010*	*2008*	*2006*	*2004*	*2017*	*2013*	*2011*	*2007*	*2005*
coeff. (1)	*2005*	*2005*	*2005*	*2005*	*1995*	*2015*	*2005*	*2005*	*2005*	*2005*
57	65.4	66.0	66.6	67.2	68.0	71.8%	73.9	74.5	75.7	76.4
58	65.8	66.3	66.8	67.4	68.1	72.4%	74.3	74.9	76.0	76.6
59	66.2	66.7	67.1	67.6	68.2	73.0%	74.8	75.3	76.2	76.7
60	66.7	67.0	67.4	67.8	68.3	73.7%	75.3	75.7	76.4	76.8
61	67.2	67.4	67.7	68.0	68.4	74.4%	75.8	76.1	76.7	77.0
62	67.7	67.9	68.0	68.2	68.6	75.1%	76.4	76.6	76.9	77.1
63	68.2	68.3	68.3	68.4	68.7	75.9%	77.0	77.1	77.2	77.3
64	68.8	68.8	68.7	68.7	68.8	76.7%	77.7	77.7	77.5	77.5
65	69.5	69.3	69.1	68.9	69.0	77.6%	78.4	78.2	77.8	77.7
% change in pension amount (3)										
57	-4.0%	-3.1%	-2.2%	-1.6%	-0.6%	-6.5%	-4.0%	-3.1%	-1.6%	-1.0%
58	-3.4%	-2.6%	-1.9%	-1.3%	-0.4%	-5.7%	-3.4%	-2.6%	-1.4%	-0.8%
59	-2.8%	-2.1%	-1.5%	-1.1%	-0.3%	-4.9%	-2.8%	-2.1%	-1.1%	-0.7%
60	-2.1%	-1.6%	-1.1%	-0.8%	-0.1%	-4.1%	-2.1%	-1.6%	-0.8%	-0.5%
61	-1.4%	-1.0%	-0.6%	-0.5%	0.0%	-3.2%	-1.4%	-1.0%	-0.4%	-0.3%
62	-0.6%	-0.4%	-0.2%	-0.2%	0.3%	-2.2%	-0.6%	-0.4%	-0.1%	-0.1%
63	0.2%	0.3%	0.3%	0.2%	0.4%	-1.2%	0.2%	0.3%	0.3%	0.2%
64	1.1%	1.0%	0.9%	0.5%	0.6%	-0.1%	1.0%	1.0%	0.7%	0.4%
65	2.1%	1.8%	1.4%	0.9%	0.9%	1.0%	2.0%	1.8%	1.1%	0.7%

(1) Non-pensionable earnings benefits in the A pension portion = 15%.
(2) Transformation coefficients in accordance with law 335/95
(3) Percentage decrease of pension amount

On retirement at 57 years of age with 35 contribution years for those individuals who had 25 years of contributions in 2002, the reduction in pension benefits is –4 percent while it is –1.6 percent for individuals with 31 contribution years in 2002 (Table A4.1-2). Analogous to the private sector, the loss in pension coverage decreases as retirement age increases. But for these workers there is no decrease in benefits for retirement at 62/63 years of age while for later retirement the new system would provide better benefits.
For retirement with 40 years of contributions, the amount of the reduction would be greater as a result of the effect, as described for the private sector, of a higher number of contribution years in the new system. From 63/64 years of age, however, there would be an increase in pension benefits due to the high coefficients used to transform the pension credits into annuities.

In the **local authorities** division, the decrease in replacement rates caused by the prorated system is greater than for private sector or State employees, particularly for individuals with low amounts of pension credits at 31/12/2002.
On retirement at 57 years of age with 35 contribution years for those

Table A4.1-3 - Effects on replacement rates determined by the transition to the prorated contribution-based system starting in 2003. Public employees of local authorities

	Replacement rates: contribution period 35 years					Replacement rates: contribution period 40 years				
	Years of contribution in 2002					Years of contribution in 2002				
	25	27	29	31	33	25	29	31	35	37
Replacement rates: earning related system, law 335/95										
	68.9	67.7	66.9	66.6	66.6	78.4	76.5	76.0	76.1	76.9
Replacement rates with prorated contribution-based system										
Retirement year	*2012*	*2010*	*2008*	*2006*	*2004*	*2017*	*2013*	*2011*	*2007*	*2005*
coeff. (1)	*2005*	*2005*	*2005*	*2005*	*1995*	*2015*	*2005*	*2005*	*2005*	*2005*
57	63.1	64.5	64.2	64.8	65.9	69.5%	71.4	71.9	73.9	75.5
58	63.5	64.8	64.5	65.0	65.9	70.0%	71.8	72.2	74.1	75.6
59	63.9	65.1	64.7	65.1	66.0	70.6%	72.3	72.6	74.3	75.8
60	64.4	65.5	65.0	65.3	66.1	71.3%	72.8	73.1	74.6	75.9
61	64.9	65.9	65.3	65.5	66.3	72.0%	73.3	73.5	74.8	76.1
62	65.4	66.3	65.6	65.7	66.4	72.7%	73.9	74.0	75.1	76.2
63	66.0	66.8	66.0	66.0	66.5	73.5%	74.5	74.5	75.4	76.4
64	66.6	67.3	66.3	66.2	66.6	74.3%	75.2	75.0	75.7	76.6
65	67.2	67.8	66.7	66.5	66.8	75.2%	75.9	75.6	76.0	76.8
% change in pension amount (3)										
57	-8.4%	-4.8%	-4.0%	-2.7%	-1.1%	-11.4%	-6.7%	-5.4%	-2.9%	-1.8%
58	-7.8%	-4.3%	-3.6%	-2.5%	-1.1%	-10.7%	-6.1%	-4.9%	-2.6%	-1.6%
59	-7.2%	-3.8%	-3.2%	-2.2%	-0.9%	-9.9%	-5.5%	-4.4%	-2.3%	-1.5%
60	-6.5%	-3.2%	-2.8%	-1.9%	-0.8%	-9.1%	-4.9%	-3.9%	-2.0%	-1.3%
61	-5.8%	-2.6%	-2.4%	-1.6%	-0.5%	-8.2%	-4.1%	-3.3%	-1.7%	-1.1%
62	-5.0%	-2.0%	-1.9%	-1.3%	-0.3%	-7.3%	-3.4%	-2.7%	-1.3%	-0.9%
63	-4.2%	-1.4%	-1.4%	-0.9%	-0.2%	-6.3%	-2.6%	-2.0%	-1.0%	-0.6%
64	-3.4%	-0.6%	-0.8%	-0.6%	0.0%	-5.2%	-1.7%	-1.3%	-0.6%	-0.4%
65	-2.4%	0.1%	-0.2%	-0.2%	0.3%	-4.1%	-0.8%	-0.5%	-0.1%	-0.1%

(1) Non-pensionable earnings benefits in the A pension portion = 15%.
(2) Transformation coefficients in accordance with law 335/95
(3) Percentage decrease of pension amount

individuals who had 25 years of contribution in 2002, the reduction in pension benefits is –8.4 percent while it is –2.7 percent for individuals with 31 contribution years in 2002 (Table A4.1-3).
Similar to the private sector, the loss of pension coverage decreases as retirement age increases. It is, however, only for those workers with high amount of pension credits in 2002 and who are aged 64/65 years on retirement that there is no loss of benefits following the introduction of the new system.
It is this sector where employees will have the most serious pension reductions through the application of prorated contributions-based system. This effect is because of the adverse manner in which the calculation is made for periods prior to 2002, especially for State employees. This is due to the structure, as amended by Law 774/94, of the division's yearly rates of return.

Self-employed workers
It is the self-employed who will suffer the most as a result of the change to the prorated contributions-based system. These workers have a contributions rate of 20 percent in the new system, which is significantly lower than the 33 percent rate for both public and private sector employees: pension benefits will therefore be much lower in

respect of those years where the new system's calculation is applied.

Table A4.1-4 - Effects on replacement rates determined by the transition to the prorated contribution-based system in 2003. Self-employed

	Replacement rates: contribution period 35 years					Replacement rates: contribution period 35 years				
	Years of contribution in 2002					Years of contribution in 2002				
	25	27	29	31	33	25	29	31	35	37
Replacement rates: earning related system, law 335/95										
	64.8	64.7	64.6	64.6	64.5	74.1	73.9	73.9	73.8	73.7
Replacement rates with prorated contribution-based system										
Retirement year	*2012*	*2010*	*2008*	*2006*	*2004*	*2017*	*2013*	*2011*	*2007*	*2005*
coeff. (1)	*2005*	*2005*	*2005*	*2005*	*1995*	*2015*	*2005*	*2005*	*2005*	*2005*
58	55.2	57.0	58.9	60.8	62.7	59.1	63.4	65.3	69.0	70.9
59	55.4	57.3	59.1	60.9	62.8	59.5	63.6	65.5	69.1	70.9
60	55.7	57.5	59.3	61.0	62.8	59.9	64.0	65.8	69.3	71.0
61	56.0	57.7	59.4	61.1	62.9	60.3	64.3	66.0	69.4	71.1
62	56.3	58.0	59.6	61.3	63	60.7	64.6	66.3	69.6	71.2
63	56.7	58.3	59.8	61.4	63.1	61.2	65.0	66.6	69.8	71.3
64	57.0	58.5	60.1	61.5	63.1	61.7	65.4	66.9	70.0	71.4
65	57.4	58.9	60.3	61.7	63.2	62.3	65.8	67.3	70.2	71.6
% change in pension amount (2)										
58	-14.9%	-11.8%	-8.8%	-5.9%	-2.8%	-20.2%	-14.3%	-11.7%	-6.5%	-3.8%
59	-14.5%	-11.5%	-8.5%	-5.7%	-2.6%	-19.7%	-13.9%	-11.4%	-6.3%	-3.7%
60	-14.1%	-11.2%	-8.3%	-5.6%	-2.6%	-19.2%	-13.5%	-11.0%	-6.1%	-3.6%
61	-13.6%	-10.8%	-8.0%	-5.4%	-2.5%	-18.6%	-13.0%	-10.7%	-5.9%	-3.5%
62	-13.1%	-10.4%	-7.7%	-5.2%	-2.3%	-18.0%	-12.5%	-10.3%	-5.7%	-3.4%
63	-12.6%	-10.0%	-7.4%	-5.0%	-2.2%	-17.4%	-12.0%	-9.9%	-5.5%	-3.2%
64	-12.0%	-9.5%	-7.0%	-4.7%	-2.2%	-16.7%	-11.5%	-9.4%	-5.2%	-3.1%
65	-11.4%	-9.0%	-6.7%	-4.5%	-2.0%	-16.0%	-10.9%	-8.9%	-4.9%	-2.9%

(1) Transformation coefficients in accordance with law 335/95
(2) Percentage decrease of pension amount

In particular for an individual who had 25 years of contributions in 2002, and retires at 58 years of age, the reduction in pension benefits is –14.9 percent while retirement with 40 years of contributions would result in a loss of 20.2 percent. Fewer contribution years to be valued by the contributions-based system and/or an increase in retirement age would limit the decrease in pension benefits. Even if he retired at 65 years of age with 25 contribution years in 2002, the self-employed worker would be subject to a decrease in pension benefits of –11.4 percent, with a total of 35 years of contributions, and -16 percent with a total of 40 years of contributions.

Macroeconomic effects of transition to contribution-based pensions

The decrease in benefits caused by the change-over to the prorated contributions-based system would produce savings which would initially be very limited because of its gradual application but would increase over time.

The savings of the individual pension divisions would vary, with the State divisions savings being quite low as suggested by the numerous differentials of the divisions' replacement rates.

It should, however, be noted that annual savings depend on retirement rate assumptions for forecasts and, in reality, on the effects caused by the

impact the transition to a contributions-based system might have on the affected workers' propensity to retire. The prospect of lower pension reductions or even of an increase in benefits as a result of a higher retirement age could facilitate the tendency to postpone retirement. In this case, savings in the initial years would increase although expenditure would increase in later years due to the higher average pension benefits.

Appendix A4.2 - Pension indexation

Indexation in the Italian pension system

In Italy, indexation of pensions to prices was introduced by Law 153 of 1969. Percentage increases were calculated with reference to changes in the cost of living as shown by variations in the so-called scala mobile, or escalator, index.

Subsequently Law 160 of 1975 provided for the implementation of price indexation by applying absolute increases of equal amounts to all pensions regardless of the level of their benefits. In addition, the first link was established, with percentage changes, to the contractual earnings index for industrial workers. This method of indexation, responding to the necessity of the time, caused a levelling of pension expenditure despite high levels of inflation. Law 730 of 1983 returned to percentage s to prices and contractual earnings. Whereas the earnings index adjustment was to be made 1 January of every year, and the percentage increase was the same for all pensions, the price index adjustment was to be made quarterly. There was to be a full adjustment of pension benefits not exceeding twice the minimum pension, a 90 percent adjustment for pensions between two and three times the minimum pension and 75 percent for amounts exceeding three times the minimum. In 1986, Law 41 reduced the number of automatic price change adjustments to two (1 May and 1 November). There were subsequent thoroughgoing changes to this system of indexation in 1992 and 1995. Legislative Decree 384 of September 1992 suspended all forms of automatic pension adjustments until 31 December 1993. The subsequent conversion Law 438 of November 1992, confirmed the block to the November price alignments and January 1993 adjustment for increases in contract wages and, in addition, established that the two index adjustments were to be made in June and December, one month later than previously and set the percentage value of the adjustment at 1.8 and 1.7 percent, respectively. The aggregate percentage was below targeted inflation of 4.5 percent for the year.

Table A4.2-1 - Percentage changes in pensions since 1992

	%	Extent applied
January 1992	0.4	Indexation to contract salaries. Same adjustment for all amounts
May 1992	2.6	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding 3 times the minimum
June 1993	1.8	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding 3 times the minimum
December 1993	1.7	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding 3 times the minimum
January 1994	0.7	Only for pensions of less than one million lire
November 1994	4.0	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding 3 times the minimum
January 1996	5.4	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding 3 times the minimum
January 1997	3.9	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding 3 times the minimum
January 1998	1.7	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding by three to five times the minimum. No adjustments for pensions exceeding five times the minimum.
January 1999	1.8	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding by three to five times the minimum, 30% for amounts exceeding by five to eight times the minimum. No adjustments for greater amounts.
January 2000	1.6	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding by three to five times the minimum, 30% for amounts exceeding by five to eight times the minimum. No adjustments for greater amounts.
January 2001	2.6	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding 3 times the minimum
January 2002	2.7	100% up to twice the minimum, 90% between two and three times the minimum, 75% for amounts exceeding 3 times the minimum

Subsequently, Legislative Decree 503 of December 1992 provided for only one price index adjustment, the scala mobile adjustment was abandoned in favour of the workers and employees cost of living index adjustment to be applied annually on 1 November. Law 724 of 1994 subsequently postponed the automatic adjustment to the following 1 January of every year. From 1993, therefore, pensions have only been indexed to prices with, from 1995, adjustments to be made one year in arrears. Furthermore, there is full indexation for pension benefits not exceeding two times the minimum pension, 90 percent indexation for benefits between two and three times the minimum and 75 percent for amounts above that. Subsequently, Law 449/98 provided that, for the 1999/2001 three year period, there would be a 30 percent adjustment based on the ISTAT index for pension benefits amounting to five and eight times the minimum pension while eliminating adjustments to amounts exceeding eight times the minimum pension.
Law 338/2000 limited the application period of Law 449 to two years and gave the first hint of a reversal in the trend of the previous ten years. It extended the full cost of living adjustment to benefit amounts of up to three times the minimum pension and 90 percent to amounts between three and five times the minimum pension. It confirmed a 75 percent adjustment to amounts above that level.
It should be remembered that article 34 of Law 448/1998 also provided for indexation to be applied to the total of all pension benefits in the event that the pensioner was entitled to more than one pension, rather than to each pension individually.

Effects on pensions in the period 1991-2001
During the period under review, with exception of the last increment in

January 1992, pension benefits were increased only with respect to changes in prices, in arrears, with an initial application of a provisional index often showing changes less the actual level and with progressively decreasing percentage adjustment bands as the level of pension benefits increased.
While pension benefits of a maximum of two times the minimum pension were substantially protected against price inflation, benefits above the maximum were progressively exposed to a decrease in real value as their amount increased.
Table A4.2-2, shows the annual amounts for various pensions commencing with 1991, gross of taxation, and after the increments shown in Table 4.2-1. The cost of living for workers and employees index is shown in the last column.

Table A4.2-2 - Annual pension amounts on the basis of automatic indexation
In euros

Monthly amount Jan. 1991 (euros)	387.34	516.46	774.69	1,032.91	1,291.14	1,549.37	2,065.83	Price index
Monthly amount Jan. 1991 (lire)	750,000	1,000,000	1,500,000	2,000,000	2,500,000	3,000,000	4,000,000	
1991	5,178.27	6,904.36	10,348.05	13,778.77	17,207.02	20,635.26	27,491.75	100.0
2001	7,051.66	9,336.85	13,864.37	18,279.90	22,548.67	26,450.53	34,828.85	138.5
% change - nominal	36.2%	35.2%	34.0%	32.7%	31.0%	28.2%	26.7%	38.5%
% change - in real terms	-1.7%	-2.4%	-3.3%	-4.2%	-5.4%	-7.5%	-8.5%	
% change in real terms with indexation to contract salaries	1.8%	1.1%	-0.5%	-0.8%	-2.0%	-4.2%	-5.3%	

As a result of the non-application of some adjustments in the first half of the 1990s and partial indexation of higher amounts, pensions were unable to maintain their purchasing power as shown by the cost of living index. The loss in real purchasing power ranges between –1.7 percent for pensions amounting to € 7,052 gross in 2001 to –8.5 percent for gross pensions of € 34,829.
Decreasing adjustments in relation to increases in pension benefits is a political decision relating to redistribution of income as is the application of decreasing rates of return in the earnings-related system for income amounts above pensionable income limits. Reduced indexation, however, is applicable to situations in which the individual concerned has no means of defence and his income is completely dependent on, at least for most pensioners, his pension benefits.
An estimation of the amounts lost to pensioners through the changes in indexation during the past is made difficult due to the disappearance of certain indices which were previously used such as the *scala mobile*.
It is, however, possible to examine the increases which would have been made if pensions had been linked to contract wages for industrial workers which was, in fact, the case until January 1992. That indexation was equal to the difference between the changes in contract wages and the changes in the *scala mobile* index for periods which did not coincide with a calendar year.
For reasons of simplification, and due to the lack of any substitute index,

the differences between the annual changes in contractual wages and those of the cost of living index were used both of which are shown in Table A4.2-3. In several years the difference was negative so that an index value of 0 was applied.

Table A4.2-3 - Contract wages and prices
(% change)

	Contract wages for industrial workers	Price index	Difference	% pension indexation (L.160/75)
1992	5.5	5.4	0.1	0.1
1993	3.4	4.2	-0.8	0.0
1994	3.2	3.9	-0.7	0.0
1995	3.0	5.4	-2.4	0.0
1996	3.1	3.9	-0.8	0.0
1997	3.6	1.7	1.9	1.9
1998	2.7	1.8	0.9	0.9
1999	2.3	1.6	0.7	0.7
2000	2.1	2.6	-0.5	0.0
2001	1.7	2.7	-1.0	0.0

Source: compiled on the basis of ISTAT data

The period under review starts in 1993 since the last automatic adjustment was made in January 1992. From that year to date, wage indexation would have been made only in January of the years 1993, 1998, 1999 and 2000 with a cumulative increase of 3.6 percent.
The pension adjustments, which would have been applied if this type of indexation had been used, are shown on the last line of Table A4.2-2. Pensions of lower amounts would have grown in real terms by 1.8 percent. The change, in real terms, would also have been positive for gross pension amounts of € 9,337, while losses for higher amount pensions would have been, to a certain extent, reduced although not negligible for gross pensions above € 26,000.
The indexation of pensions to wages would, therefore, have resulted in real increases for lower value pensions and would have off-set losses in real terms for higher value pensions even though the magnitude would not have been particularly significant. The impact on pensions of the elimination of the double indexation was, therefore, relatively limited.

Pension indexation and increases in national income
Automatic indexation of pensions is one way in which annuity income can be made to change. Another instrument is by making a one time payment, as foreseen by Legislative Decree 503/92 and by Law 335/95. This is a discretional power which can be exercised by the budget law. It has, however, never been used by any Government during the period under review. The application of a one time payment is a "political" measure which does not treat pensions in an equitable manner but subjects them to ad hoc treatment.
The indexation of pensions to prices alone, does not permit pensioners to share in increases in national income, whereas workers participate in such increases through wage rises for employees and through higher fee

for the self-employed.
Since the pensioner is deprived of these types of income, he, as an individual, can only participate in increased national income through automatic adjustments and political decisions. The pensioner's exclusion from these increments causes a deterioration in pension benefits relative to other types of income. At best, his income increases in line with the cost of living while others' income increases in line with the productivity of the economic system. If the economic position of an individual is not defined in absolute terms but in relation to other individuals, there has been a relative impoverishment of pensioners.
Indexing pensions to the contract wages for industrial workers did not solve the problem since it was a very limited form of indexation (as can be seen from the fact that its value was zero in several years). It was an indexation which reflected the circumstances of the time it was first applied, 1975, when there was a clear predominance of blue-collar workers over clerical staff and the influence of collective agreements, the only type of contract considered by the index, had extraordinary influence on overall wage increases.
In the 1990s, the weight of workers in total employment in the industrial sector has significantly decreased and wage increments are determined by negotiations at the corporate level and it is these increases which now have the most important weight in determining pay dynamics.
The annual variations in contract wages for industrial workers and those for industrial employees, blue-collar workers and clerical contracts, in the narrow sense of the term and of gross remuneration paid by large firms are shown in Table A4.2-4. The last item, in particular, better reflects growth in real earnings, especially when contract negotiations at the corporate level and related pay increases are also taken into account.
During the period 1992-2001 gross remuneration paid by large firms increased in nominal terms by 43.1 percent compared to the 35 percent of contract wages for industrial workers, 37.2 percent for industrial employee, workers and clerical contracts and 38,5 percent for the cost of living index.

If the differential component of the indexation had been remuneration

Table A4.2-4 - Wages, Value Added, GDP and prices
(% changes)

	Contract wages for industrial workers	Gross wages in large firms (A)	Price index (B)	Difference (A-B)	Value added at factor cost	GDP at market prices (current prices)
1992	5.5	5.9	5.4	0.5	5.6	5.3
1993	3.4	3.4	4.2	-0.8	2.1	3.0
1994	3.2	3.7	3.9	-0.2	5.1	5.8
1995	3.0	4.4	5.4	-1.0	7.5	8.1
1996	3.1	4.7	3.9	0.8	6.6	6.4
1997	3.6	3.7	1.7	2.0	3.5	4.5
1998	2.7	2.9	1.8	1.1	1.0	4.6
1999	2.3	1.5	1.6	-0.1	3.3	3.3
2000	2.1	2.6	2.6	0.0	5.2	5.1
2001	1.7	3.9	2.7	1.2	5.1	4.4
Var. %	35.0%	43.1%	38.5%		55.3%	63.5%

Source: compiled on the basis of ISTAT data

paid by large companies, pensions would have increased by an additional 5.7 percent even taking those years into account when the increment would have been zero (inflation higher than increases in earnings).

The contribution-based system and indexation

GDP is, obviously, the closest indicator of national income and its growth. This is because it is calculated with reference to current prices so that it also tracks price increases. It is the five year average of this statistic which is used in the contributions-based system to revalue contributions and it is to this statistic that pensions should be indexed. In the new system, however, it has been decided to only link pensions to prices.

In reality, the coefficients applied to transform pension credits into annuities discount indexation of 1.5 percent per annum, the same value assumed to be the real growth in GDP. This means that if gross domestic product's actual real growth rate is 1.5 percent, the system is in equilibrium while if GDP growth is either more or less, the system would either be in surplus or deficit.

Even if GDP grew in line with expectations, there would still be the problem of relative impoverishment, with the formation of pensions that fail to keep up with the pace of growth in incomes, as time coes by. Changes in GDP in current price terms during the 1990s are shown in Table A4.2-4. Its difference to other indicators, especially with respect to the rate of general price increases, is considerable.

In fact, compared to the increase in ISTAT's retail price index of 38.5 percent, GDP grew by 63.5 percent. Even after taking factor cost value added into account, to eliminate the effect brought about by net changes in indirect taxes on GDP, there is still a variation of 55.3 percent which is still significantly above the cost of living index. Once pension disbursement has been made, pensions will increase in line with prices while earnings growth will also reflect increases in productivity. In the medium to long term earnings growth should be near the growth rate of GDP. This, over time, means that pensions will diverge, even given similar employment histories. In addition, there will be a decrease in the ratio of pensions disbursed in any one year, indexed to inflation, and average earnings for subsequent years growing in line with GDP.

As previously mentioned this is not exclusively a problem of the contributions-based system, but it is more accentuated in this system because of the lower initial value of pension benefits than in the earnings-related system. Furthermore, if there are earnings and contributions patterns less regular than those contemplated by Law 335 and contributions less than the 33 percent used for employees, replacement rates will be decidedly low. In these cases a lack of an to GDP or to earnings poses a problem of not only relative, but also, absolute, impoverishment. This is because it is possible for pensions to fall below the subsistence level as time passes.

Set out in Table A4.2-5 are hypothetical replacement rates at the time of retirement which correspond to very likely contribution histories both in the current and future labour markets.

Table A4.2-5 - Ratio of pension to average pay
Average real income growth +2%; inflation 1%

Years after the pension	Average pay	Pension fully indexed to prices				Pension / average pay ratio			
1	100.0	80.0	60.0	50.0	40.0	80.0%	60.0%	50.0%	40.0%
2	103.0	80.8	60.6	50.5	40.4	78.4%	58.8%	49.0%	39.2%
3	106.1	81.6	61.2	51.0	40.8	76.9%	57.7%	48.1%	38.4%
4	109.3	82.4	61.8	51.5	41.2	75.4%	56.5%	47.1%	37.7%
5	112.6	83.2	62.4	52.0	41.6	73.9%	55.4%	46.2%	37.0%
6	116.0	84.1	63.1	52.6	42.0	72.5%	54.3%	45.3%	36.2%
7	119.5	84.9	63.7	53.1	42.5	71.0%	53.3%	44.4%	35.5%
8	123.2	85.8	64.3	53.6	42.9	69.6%	52.2%	43.5%	34.8%
9	126.9	86.6	65.0	54.1	43.3	68.3%	51.2%	42.7%	34.1%
10	130.7	87.5	65.6	54.7	43.7	66.9%	50.2%	41.8%	33.5%
11	134.7	88.4	66.3	55.2	44.2	65.6%	49.2%	41.0%	32.8%
12	138.7	89.3	66.9	55.8	44.6	64.3%	48.3%	40.2%	32.2%
13	142.9	90.1	67.6	56.3	45.1	63.1%	47.3%	39.4%	31.5%
14	147.2	91.0	68.3	56.9	45.5	61.8%	46.4%	38.7%	30.9%
15	151.7	92.0	69.0	57.5	46.0	60.6%	45.5%	37.9%	30.3%
16	156.3	92.9	69.7	58.0	46.4	59.4%	44.6%	37.2%	29.7%
17	161.0	93.8	70.4	58.6	46.9	58.3%	43.7%	36.4%	29.1%
18	165.8	94.7	71.1	59.2	47.4	57.1%	42.8%	35.7%	28.6%
19	170.8	95.7	71.8	59.8	47.8	56.0%	42.0%	35.0%	28.0%
20	176.0	96.6	72.5	60.4	48.3	54.9%	41.2%	34.3%	27.5%
21	181.3	97.6	73.2	61.0	48.8	53.8%	40.4%	33.6%	26.9%
22	186.8	98.6	73.9	61.6	49.3	52.8%	39.6%	33.0%	26.4%
23	192.4	99.6	74.7	62.2	49.8	51.7%	38.8%	32.3%	25.9%
24	198.2	100.6	75.4	62.9	50.3	50.7%	38.0%	31.7%	25.4%
25	204.2	101.6	76.2	63.5	50.8	49.7%	37.3%	31.1%	24.9%

Ten years after retirement, the ratio of pension benefits to average pay falls by 16.3 percent, after 15 years the fall has become 24.2 percent and after 20 years 31.4 percent.
In the earnings-related system, initial pensions amounted to 80 percent of last pay or income. After ten years, however, it becomes 67 percent of average earnings and after twenty years it decreases to 55 percent. A pension which is initially 50 percent, decreases to 41.8 percent after ten years and to 34.3 percent after twenty. These percentages are of course even lower where initial replacement rates are less than 50 percent.
Given the likely widespread nature of these situations in the future, the problem of insufficient pension revaluations is likely to require support by public finances.
There is also an equity problem. During their working lives pensioners contributed to creating national income. Once having left the labour force, however, they are excluded from participating in the increases that income. This can be acceptable in poor societies where, as Federico Caffè pointed out, people could be forced by poverty to use sticks to drive old people into the middle of a river. This is, however, certainly not acceptable for rich societies like Italy. The elimination of double indexation is one of the measures that created more savings, even if, as seen there have only been a few years when the level of minimum contract wages would have led to an adjustment in pension benefits .
In a 1996 study, the RGS estimated that the annual cost of ing pensions would be about 4 percent of nominal GDP.
Improved indexation, therefore, poses grave problems in terms of financial sustainability. It is a problem which, if ignored or glossed over,

will sooner or later result in a social reaction which will have to be addressed.

Appendix A4.3 – The TFR and supplementary pension schemes for public sector employees

The need to harmonise salaries and pension payments between private and public sector employees and, more importantly, the pressing requirement to also permit public sector employees to subscribe to pension funds as provided by Legislative Decree No. 124/93 encouraged legislation to extend TFR funds to the public sector. At the time Legislative Decree No. 124/93 was issued, it was not, in fact, possible for public sector employees to join pension funds since there were no public sector TFR fund. The public sector equivalent was the End-of-Service Allowance (Gratuity Payments for state employees and Service Bonuses for local government and health service employees): typical retirement benefits managed and disbursed by insurance plans and funded by employee and employer contributions.

The replacement of the end-of-service allowance by the employee severance fund as required by Law 335/1995 was neither easy nor fast. The introduction of a employee severance fund for public sector employees was a provision of Law 335/1995, article 2, sub-paragraphs 5-8. It provided for the creation of a employee severance fund for all public sector employees whose employment commenced on or after 1 January 1996. It delegated the manner in which this would be implemented to the collective bargaining process.

Technical complexities in addition to the effect on public finances of replacing end-of-service allowances by the employee severance fund led to a stalemate in the negotiations relative to the application of article 2 of Law No. 335, by 30 November 1995. It was for these reasons, it was subsequently ordered to link the introduction of public sector severance payment funds to the creation of supplementary pension schemes and it was for this purpose that monies were set aside to fund pensions for public sector employees. In order to promote subscription to pension funds, article 56, sub-paragraph 59 of Law No. 449/97 in fact provided for the right to opt for the severance payment instead of the end-of-service allowance. This effectively permits public sector employees to benefit from additional contributions to supplementary pension schemes of 1.5 percent calculated with reference to the amount of the end-of-service allowance. Article 26, sub-paragraphs 18-20 of Law 448/98 subsequently provided for the allocation of 200 billion lire per year to fund supplementary pensions and delegated the definition of the relevant conditions for the transition and implementation arrangements relating to the introduction of the severance payment fund to the collective bargaining process. These included the option to either change to the employee severance fund with subsequent adjustments to overall pay and contributions, with no change in net pay, or to retain the end-of-service allowance. This was a departure from Law No. 335/95 which provided for its general application for all employees whose employment commenced subsequent to 31 December 1995.

ARAN accepted these arrangements on 29 July 1999. The agreement to the above mentioned conditions was implemented by the President of the

Council of Ministers Decree of 20 December 1999. Certain amendments were made to that that decree by Legislative Decree 346/2000 and, above all, by article 74 of Law 388/2000. These provisions changed certain terms and conditions relating to the introduction of the employee severance fund Moreover, they also increased the amount of finances for the development of public sector employee supplementary pension schemes, through re-allocations, to 300 billion lire per year in addition to a one off payment of 100 billion for the fund's formation costs.

These changes were subsequently incorporated in the President of the Council of Ministers Decree of 2 March 2001 which amended certain provisions of the 20 December 1999 decree. The amendments set out the precise responsibilities of INPDAP relating to its statutory duties and, lastly, defined the criteria relating to the annual allocation of funds for public sector employee supplementary pension schemes.

The complexity of the arrangements, against a background of unfavourable public finances, was primarily linked to the difficulty of simultaneously providing:

1. the termination or progressive reduction in INPDAP payments of end-of-service allowances as a result of their re-allocation to employee severance funds while continuing to honour existing obligations relating to the payment of end-of-service allowances;
2. the increased cost of labour connected with higher allocations to employee severance funds compared to end-of-service allowances.

The legal and contractual arrangements are based on the following:

a) employee severance funds were extended to all permanent public sector employees employed after 31 December 2000. Employees employed on or prior to that date may retain their rights to public sector employee end-of-service allowances unless they opt for employee severance fund entitlement. This right is to be exercised at the time of joining any supplementary pension scheme.

b) the employing agency's share in funding severance payment entitlements is equal to its obligations to fund INPDAP's payment of end-of-service allowances. This does not take the form of an employer's accrual of salary entitlements but continues in the form of an employer's contribution to INPDAP.

c) employee's contributions to INPDAP are eliminated for personnel entitled to employee severance funds and the full contribution is now paid by the employer. In order to avoid changes to the amount of public expenditure, however, and to avoid the creation of salary differentials (arising from whether an employee is entitled to severance indemnities or end-of-service allowances), employees' net pay remains unchanged. This is accomplished by reducing gross pay in the same amount as the eliminated employee's contributions. This reduction in gross pay has no effect on the employee for the purposes of taxation or social security contributions and serves to off-set increased contributions to INPDAP by the employing agencies.

d) INPDAP, which is funded by contributions to establish employee severance funds, is the agency responsible for employee severance fund payments in addition to its existing obligations regarding

the payment of end-of-service allowances.

e) notional provisions for severance indemnities paid by INPDAP on the termination of employment are made at the rate of 6.91 percent of a reference amount determined by collective bargaining notwithstanding lower contributions as a result of a smaller calculation base.

This solution permitted the deferral and distribution over time of related costs, so that a short term deterioration in public finances could be avoided. As a result the interruption of or reduction in funding INPDAP's payment of end-of-service allowances could be avoided.

Appendix A4.4 – INPDAP's role in supplementary pension schemes

The legislation and collective bargaining which extended employee severance funds to the public sector simultaneously provided for those employees' rights to the establishment of supplementary pension funds. The relative shortcomings of public sector employees' employee severance funds (notional allocation of funds by INPDAP paid on the termination of employment), even though not representing a lack of uniform regulations and supplementary pension rights for private and public sector employees, does entail the creation of distinctive aspects relating to the administration of supplementary pension schemes for public sector employees.

The ARAN-Unions Framework Agreement of 29 July 1999 and the President of the Council of Ministers' Decree of 20 December 1999, as amended, provided that the monies allocated to employee severance funds should not be made available to occupational funds (together with the contributions paid by public sector employers and employees) but should be maintained by INPDAP. It is only upon the termination of employment that INPDAP will transfer the vested amounts, which consist of notional allocations to the employee severance fund in addition to the 1.5 percent supplement available to qualifying employees. Both allocations will be increased by a return which, initially, will be equal to the average returns earned by a group of operational supplementary pension funds selected on the basis of criteria set out in a special decree by the Ministry of the Economy and Finances. Once the public sector pension funds have become established, the rate of return to be applied to the notional allocations will be the rate actually earned by those funds.

An employee's supplementary pension entitlements will, therefore, consist of a real amount (equal to that of a private sector employee's subscription to a supplementary pension scheme) and a notional or virtual amount which will become actual upon the termination of employment which, if conditions are satisfied, will trigger the disbursement of benefits.

The decision to entrust the "management" of the "virtual supplementary pension account" to INPDAP appears consistent with the organisational and financial logic behind giving INPDAP the responsibility for making notional provisions to and paying benefits from the employee severance fund.

The allocation of monies by INPDAP to supplementary pension accounts (in addition to those for severance funds) creates a problem with reference to the proper application of withholding taxes as required by Legislative

Decree No. 47/2000, as amended, in relation to any financial returns relating to these allocations. It would have been problematic to withhold taxes on virtual rather than effective returns. In this respect, INPDAP requested a pronouncement by the Revenue Authority, suggesting that a consistent solution would be to make notional withholdings from those allocations, effectively proposing virtual withholding taxes.
In its reply to INPDAP through the issuance of Resolution No. 80/E of 8 March 2002, the Revenue Authority held that it was in a position to accept the proposal. Furthermore, it stated that the proposal could be accepted without the need to amend existing legislation since notional withholdings were consistent with the rationale and interpretation of the relevant statute. It, therefore, imposed the following requirements on INPDAP:

- to keep virtual accounts relating to the allocations to the employee severance fund and supplementary pension schemes:
- to calculate revaluation amounts on these allocations and to apply virtual withholding tax:
- deduct the amount of withheld taxes from virtual funds.

INPDAP's responsibilities regarding supplementary pension schemes do not stop with maintaining virtual accounts. Based on statutory and collective bargaining requirements, INPDAP must provide a series of support functions for contractual pension funds for public sector employees. They are usually termed mandatory since they are included with institutional services INPDAP is required to provide to funds, and through them ultimately, to employees.
Very briefly, these are:

1. to make notional allocations, revalue and account for employee severance fund balances (including the supplementary amount of 1.5 percent for employees who had been entitled to the old end-of-service allowances but opted for employee severance funds) which will eventually be paid to supplementary pension schemes for pension fund members;
2. to keep records relating to the notional allocations to supplementary pension schemes (as well as the employee severance fund);
3. Transfer to pension funds, on the termination of employment, the balance of the allocations, as mentioned above;
4. distribute monies allocated in the State budget to fund contributions payable by employing state agencies;
5. pay the contributions due from employing State agencies to the pension funds for those employees who are members of sector pension funds.

The addition of collecting and verifying employees' contributions – a duty which does not imply additional organisational expenses or work since it merely supplements the same type of work already performed to process pay and contribution for employers – completes the service of collecting contributions relating to state employee members of occupational pension funds.
Since it had been necessary for INPDAP to equip itself for its mandatory services, it is in a position to offer gratuitous collections and related administrative services to all public sector funds. This would supplement

those services required by statute which are similar, and therefore supplementary to its normal institutional operations. Specifically, in addition to collecting contributions, INPDAP is in a position to offer the following services to funds free of charge:

- sending funds' annual statements to members since use can be made of the same dispatch service as for compulsory pension statements;
- making supplementary pension statements of benefits available for viewing on the internet since this can be linked to existing internet facilities for the compulsory pension scheme;
- the distribution of essential information relating to supplementary pensions and public sector occupational funds to workers and employing agencies in addition to the distribution of funds' forms and membership applications.

The organisation of these activities does not result in extra costs for INPDAP since these services are closely connected and integrated with the work already performed in connection with mandatory services.

Any additional costs would be minimal and, above all, largely off-set by the advantages to the Institute in terms of improved efficiency relating to compulsory pensions. INPDAP intends to take advantage of the opportunity presented by its requirement to perform mandatory and gratuitous services for pension funds not only to reduce funds' costs but also to accelerate their launch and to streamline compulsory pensions procedures.

INPDAP does not believe that the performance of these services could have an effect on the markets. First, because there is no company which at the moment has, or intends to obtain, access to income and contributions data which INPDAP either already has or is in the process of obtaining. Secondly, because INPDAP is prepared to offer these services to funds free of charge even if the funds decide to have other administrative services provided by private companies.

Prior to offering these gratuitous services, INPDAP, observing the requirement of article 6, sub-paragraph 1 bis of Legislative Decree 124/93, submitted its proposed conditions for the gratuitous offer of the above mentioned services to the Competition and Market Regulatory Authority.

The Authority raised no objections to or comments on INPDAP's proposal since it considered[4] that the gratuitous offer of certain administrative/accountancy services as set out in the proposal and any resultant effects on the market would be compensated by economies achieved by the offer of integrated mandatory and gratuitous services to pension funds. These economies would take the form of improved efficiency for compulsory pensions in addition to considerable cost reductions during the formation phase of pension funds for public sector employees.

Pension funds should, however, remain free to not accept INPDAP's offer of gratuitous administrative services.

(4) See Autorità Garante della concorrenza e del Mercato, "Opinion pursuant to article 6, paragraph 1-bis, of legislative decree no. 124 dated 21 April 1993, as amended and supplemented()... on the Regulation of INPDAP's free services for the collection and recording of members and member contributions on behalf of supplementary-pension funds" dated 22 March 2002.

Appendix A4.5 – Supplementary pensions in the public sector: estimated potential membership

Public sectors

The national ARAN/Unions Framework Agreement of 29 July 1999 as adopted by President of the Council of Ministers Decree of 20 December 1999, amended by President of the Council of Ministers Decree of 2 March 2001, shall be applied to all public sector employees as defined by article 1, sub-paragraph 2 of Legislative Decree No. 165 of 30 March 2001.

The following groups are consequently not included: magistrates, the diplomatic service, the prefectures, university lecturers and research staff, the military and the police. As will be seen below, it will also be possible for these categories to join supplementary pension schemes with procedures different to those set out it in the Framework Agreement for contract employees.

The number of public sector employees with permanent contracts in service on 31/12/2000 in those sectors included in article 1, Sub-paragraph 2 of the cited President of the Council of Ministers Decree as determined by the Ministry of the Economy and Finances in their annual report, is shown in the table. It shows the number of potential members of for supplementary pensions to be almost 2,700,000 employees.

Table A4.5-1 - Public employees as of 31/12/2000

	Total	Men	Women
Ministries	265,283	139,768	125,515
Autonomous bodies	38,607	34,685	3,922
School	921,667	236,596	685,071
Total government sector	1,225,557	411,049	814,508
Non-economic Public bodies	62,209	30,248	31,961
University	107,068	63,330	43,738
Regions - local authorities*	567,520	309,851	257,669
National healthcare system	545,700	191,126	354,574
National healthcare system - physicians	108,919	78,362	30,557
Research entities	15,125	9,697	5,428
Public sector*	1,412,042	686,167	725,875
TOTAL	**2,637,599**	**1,097,216**	**1,540,383**

* Included town and provincial clerks

Source: Statement of flows of the Ministry of the Economy and Finance

There are 1,225,000 State employees with permanent contracts, predominantly women. In the non-state sector, on the other hand, there are about 1,412,000 employees equally divided between men and women. The number of public sector employees not included in sub-paragraph 2 of article 1 of Legislative Decree 165/2001 should be added to the above numbers. In fact, even though there has been no legislation regarding the introduction of employee severance funds for these employees or regarding the right to opt for supplementary pensions, Legislative Decree 124/1993 (article 3, sub-paragraph 2) provides for supplementary pensions, in accordance with their respective rules and regulations, or through arrangements among employees as promoted by their associations.

It is, therefore, likely that these sectors will also establish supplementary pension funds.
The number of permanently employed in service at 31/12/2000 in these sectors is set out below:

Table A4.5-2 - Public employees as of 31/12/2000

	Total	Men	Women
Police forces	316,331	297,649	18,682
Armed forces	124,696	124,647	49
Magistrates	10,072	6,720	3,352
Diplomatic career	960	857	103
Prefectorial career	1,617	898	719
TOTAL	**453,676**	**430,771**	**22,905**

Source: Statement of flows of the Ministry of the economy and Finance

Considering total public sector employees with permanent contracts included in articles 1 and 2 of Legislative Decree 165/2001, the number of potential members of supplementary pensions was at 31/12/2000, 3,091,275 persons equally divided between men and women.

Number of funds
The negotiations regarding the formation of pension funds are just starting. An agreement to establish a School Personnel Fund has already been concluded.
It has been agreed to keep the number of funds limited. This will assure that the number of members is sufficiently high so that management costs will be reduced and the value of assets under management substantial.
The funds currently foreseen are:

- one fund for the schools division,
- one fund for the health services and local government division,
- one fund for health service physicians,
- one fund for the employees of ministries and autonomous corporations to which employees of quasi-state entities should be added.

The decisions to be made for Universities, Research Institutions and Fire Brigades are still uncertain. If, however, we limit ourselves to public sector employees there are at least four pension funds which could be established. The funds differ in size with respect to the number of potential members and participating employing agencies.

Assumptions regarding membership and the number of participating agencies
Health services and local government
The largest fund, in terms of potential membership, and the most complex fund to administer due to the number agencies involved, is certainly the fund for the health service and local authorities.
In practice, a good part of the members of the Local Government Employees Provident Fund could subscribe while, as mentioned above, the members of the health service medical staff provident fund should

establish their own fund.
There are about 1,400 members of CPDEL, the pension scheme for local authority employees,[5] an analysis of which is set out below:

Table A4.5-3 - CPDEL Members

Age group	Number	%	% members up to 50 years
20-24	738	0.05	0.08
25-29	36,783	2.62	3.84
30-45	659,970	46.95	68.83
46-50	261,419	18.6	27.26
51-58	288,119	20.5	
59 and more	158,515	11.28	
Total	**1,405,544**	**100**	
Total 20-50	958,910		100

The figures shown in the table, originally published in the Ministry of Economy and Finances Report relating to seniority of service of employees in this sector do not appear to be completely indicative.

Table A4.5-4 - Public employees as of 31/12/2000. National healthcare system* and local authorities

Seniority	Number	%
0 - 5	198,934	17.87
6 - 10	188,506	16.93
11 - 15	197,554	17.75
16 - 20	195,592	17.57
21 - 30	296,253	26.61
31 - 40	35,460	3.19
40 and more	921	0.08
Total	**1,113,220**	**100**

* Not including physicians
Source: Statement of flows of the Ministry of the Economy and Finance

A good 34 percent of the employees is shown to have been in service for less than ten years, while according to data shown in INPDAP's Sonar project, only 2.7 percent of employees is younger than 30. Data on years of contribution is certainly influenced by the fact that every time there is a change in the employing agency and often in category, seniority of service and years of contributions start again at zero. These figures, therefore, underestimate the actual total number of years of contribution by public employees.
It is more useful, therefore, to refer to the membership in the pension scheme for local authority employees. If it is then assumed that the age distribution of local government and health service employees is the same as that data, and the total number of employees is taken from the annual Ministry of the Economy and Finances report with reference to the employees in those two sectors, there is the following distribution:

(5) This number is higher than the nember of permanent employees of local governments and the health service as show in the Ministry of the Economic and Finances report. This is because there there are individuals who belong to other contract divisions and fixed term contract employees included in the membership figures.

Table A4.5-5 - Employees of NHS and local authorities (1)
Distribution by age group

Age group	Number	%	% members up to 50 years
20-24	585	0.05	0.08
25-29	29,133	2.62	3.84
30-45	522,710	46.95	68.83
46-50	207,049	18.6	27.26
51-58	228,196	20.5	
59 and more	125,547	11.28	
Total	**1,113,220**	**100**	
Total 20-50	759,477		100

(1) National healthcare system does not include physicians

There are 759,477 employees in the division younger than age 50.
This figure should be emphasized when considering the small number of employees younger than 30.
It is extremely difficult to forecast membership. From one point of view the health services/local authority division, excluding physicians, should be the one with the highest propensity to opt given that the Service Bonus calculation is less favourable compared to the state employees' Gratuity Payment. It should, however, be noted that supplementary pensions are still unknown to most people and it is only once that the funds are established that extent of interest in membership can be ascertained.
Nevertheless, however, assuming that 35 percent of all employees under 45 join in the first three years, completely excluding anyone older than that age, there would, initially, be 190,000 members.
35 percent membership was assumed for this study (and also for other funds) because it was the basis for the forecasts made for the National Framework Agreement in July 1999 for the purposes of determining costs. Here, however, it is limited to workers under 45 years of age.
The agencies potentially involved are all entities in the local division and all agencies and organisations in the health service division. In practice there are not less than 10,000 agencies.
If it is likely that most members will come from larger agencies, it is just as likely that a good number of these agencies may be involved for the membership of just one of their employees
From the administrative point of view, therefore, the situation is very complex given that timing of allocation of contributions is fundamental for supplementary pension schemes.

Schools
A similar sized fund would be the schools fund with at least one million potential members. In addition to the public employees, there could also be employees of related sectors such as recognized private schools and personnel of vocational schools as was set out in the fund's articles.
As mentioned above, this division has already formalised an agreement to establish a fund (March 2001) although, at the time of writing, it was not yet operational and had not yet been licensed.
Also in this case, given the size of the base, even limited membership

would result in a not irrelevant number of members. In fact, if it is assumed that only individuals with permanent contracts who were employed in the last two years joined, i.e., 80,000, the fund would be able to announce the elections of its governing bodies in a very short period of time since the minimum membership level was fixed at 30,000.
According to the Ministry of Finances annual report, there were almost 922,000 permanent employees in schools at year-end 2,000. Information regarding years of contribution appear to better reflect reality, also in consideration of the fact that movement from other public sectors to schools is extremely limited and that for there is no change in category for teachers except in the very limited cases of lecturers who become school principals. Taking employees with less than 25 years of contributions and assuming 35 percent membership in the first three years, there would be 260,000 members of the fund.

Table A4.5-6 - School: total employees as of 31/12/2000

Seniority	Number	%
0 - 5	18,945	2.06
6 - 10	128,947	13.99
11 - 15	174,016	18.88
16 - 20	193,581	21
21 - 25	229,448	24.89
26 - 30	133,151	14.45
31 - 40	42,387	4.6
40 and more	1,192	0.13
Total	**921,667**	**100**
Till 25	744,937	80.82

Source: Statement of flows of the Ministry of the Economy and Finance

Administrative activities would be very complex for this case as well. This is because there would be 11,000 participating autonomous school units as a result of the recent reform. It would be easier to control contributions since permanent employees and even substitute teachers employed for the entire school year are, in fact, paid directly by the Ministry of Economy and Finances on the instructions of the individual schools. Administrative reports on contributions, therefore, need only be made for one unit. The only direct involvement of individual schools is in relation to fixed term contracts with a duration longer than three months but less than one year as well as for employees of related sectors who are members of INPS for the compulsory pension scheme. In these other cases the administration service should manage reporting to the individual employers especially those outside the public sector

Ministries, autonomous agencies and quasi-state organisations
This fund's potential membership consists of about 370,000 employees (265,000 ministerial, 62,000 employees of public non commercial agencies and 40,000 employees of autonomous agencies, even if it is not certain that the employees of the latter will join this fund).
Also in this case, the data regarding the number of years of employees' contributions published in the annual report appear to underestimate the true amount of eligible pension credits.
Its membership potential, however, is significantly lower

Table A4.5-7 - Ministries, Autonomous bodies and quasi-public sector. total employees as of 31/12/2000

Seniority	Number	%
0 - 5	41,860	11.43
6 - 10	53,970	14.74
11 - 15	68,020	18.58
16 - 20	83,854	22.9
21 - 25	54,659	14.93
26 - 30	37,375	10.21
31 - 40	24,829	6.78
40 and more	1,805	0.49
Total	**366,099**	**100**
Till 25	302,363	82.58

Source: Statement of flows of the Ministry of the Economy and Finance

than that of the previous funds. There is, however, the distinct advantage of the involvement of a lower number of agencies with high concentrations of employees. From this point of view the ability to sensitise employees should be more straight forward.
A factor which could have a negative impact on membership is the special set of circumstances in the quasi-state sector, where it will not be possible to supplement the benefits base of the TFR by 1.5 percent.
Assuming, once again that 35 percent of the employees with up to 25 contribution years join the fund during its first three years despite the relative nature of this data means that there would be 105,000 members.

Health service physicians
Potential membership is about 110,000 physicians analysed as set out below:

Table A4.5-8 - Members in the CPS

Age group	Number	%
20-24	1	0
25-29	34	0.03
30-45	42,531	38.47
46-50	32,582	29.47
51-58	23,017	20.82
59 and more	12,390	11.21
Total	**110,555**	**100**
Total 20-50	75,148	

Conservatively restricting the number of physicians interested in supplementary pensions to those below 50 years of age gives potential membership of about75,000 persons. 35 percent membership in the first three years would bring membership to about 26,000.
Assumptions regarding physicians membership, however, is even more difficult. In addition to evaluating the economic attractiveness of the option to individual doctors, it is also necessary to consider the presence of numerous unions whose reaction to the fund will probably be determinant for membership.
A positive factor, on the other hand, is high average remuneration which partially compensates for the low number of members.
The agencies with which the administration service should open

discussions are in practice all public health service units in addition to any private companies if the fund is open to them.

Contributions

The difficulty to forecast membership, to any reasonable degree of certainty, makes it difficult to formulate reliable estimates of the amount of contributions which will be allocated to the pension funds.
Taking the school sector agreement to establish a fund as a point of reference, it can be estimated that the minimum employee's contribution will be equal to one percent of the eligible base for purposes of the employees severance fund and an analogous contribution for public sector employees while contributions to the severance payment fund (full for post 1.1.2001 hires and two percent for employees in service at 31.12.2000) are "virtual" and will only actually be paid to the funds on the termination of employment. As seen above, the "virtual" severance payment fund is the method used to avoid extra cost for public finances without limiting the possibilities offered to public employees by supplementary pensions.
It is, however, possible to make forecasts at least for the first year of contributions by assuming a subscription rate of 20 percent.

Table A4.5-9 - Assumptions for contributions to public employment funds
(euros)

	Members	Eligible average wage	Contribution x employee 1%	Government Contribution x employee 1%	Bonus 1%	TFR (1) 2%	Total contribution (millions of euros)	Total contribution (millions of euros)
			A	B	C	D	A+B	A+B+C
School	148,000	21,691.19	261.91	216.91	216.91	433.82	64.2	96.3
Ministeries - quasi-state bodies	60,000	18,075.99	180.76	180.76	180.76	361.52	21.6	32.5
Local authorities and NHS *	108,000	17,559.53	175.6	175.60	175.60	351.19	37.9	56.8
Physicians	15,000	42,349.47	423.49	423.49	423.49	846.99	12.7	19.0

(1) Employee severance payments
* National healthcare system

Given the forecast number of members and the average of eligible remuneration for severance fund purposes, a 1 percent employee's and employer's contribution, excluding any imputed contributions, would bring annual actual inflows to € 64.2 million for the school fund, € 21.6 million for ministries, € 37.9 million for local authorities and health service and € 12.7 million for the physicians fund. This would equate to government contributions totalling about € 68.2 million.
If we were to forecast the charge due to the bonus awarded, contributions flowing into the pension funds would increase by 50 percent. In this second case the agencies expenditure would be a total of € 136.4 million.

appendixes

Statistical appendix
AS4

Table AS4-1 - Financial effects on replacement rates determined by the modifications introduced by and subsequent initiatives

(in billions of lire and millions of euros)

		Lire		Euro	
Seniority pensions	(a) savings forecast	24,140	59,653	12,467.27	30,808.20
	(b) actual savings	24,531	61,183	12,669.20	31,598.38
	(b-a)	391	1,530	201.93	790.18
Modifications of survivors and disability pensions	(a) forecast savings	6,352	12,516	3,280.53	6,463.97
	(b) actual savings	2,049	3,644	1,058.22	1,881.97
	(b-a)	-4,303	-8,872	-2,222.31	-4,582.01
Expansion public-employee pool eligible for pensions	(a) revenues forecast	3,252	3,684	1,679.52	1,902.63
	(b) actual revenues	3,252	3,684	1,679.52	1,902.63
	(b-a)	0	0	0	0
Contract workers	(a) revenues forecast	14,689	16,788	7,586.24	8,670.28
	(b) actual revenues	14,696	24,321	7,589.85	12,560.75
	(b-a)	7	7,533	3.62	3,890.47
Contribution of 0.35% by employee and contribution of 0.35% by employer	(a) revenues forecast	12,044	14,799	6,220.21	7,643.05
	(b) actual revenues	13,254	16,761	6,845.12	8,656.33
	(b-a)	1,210	1,962	624.91	1,013.29
Cost of supplementary pension	(a) cost forecast	-4,677	-16,519	-2,415.47	-8,531.35
	(b) actual cost	-650	-8,002	-335.70	-4,132.69
	(b-a)	4,027	8,517	2,079.77	4,398.66
Lower personal income tax (IRPEF) revenues	(a) revenues forecast	-5,374	-8,265	-2,775.44	-4,268.52
	(b) actual revenues	-5,730	-10,607	-2,959.30	-5,478.06
	(b-a)	-356	-2,342	-183.86	-1,209.54
Increased contribution self-employed	(a) revenues forecast	2,703	8,612	1,395.98	4,447.73
	(b) actual revenues	2,840	8,907	1,466.74	4,600.08
	(b-a)	137	295	70.75	152.35
Extraordinary items due to prohibition against accumulation and to harmonisations	(a) revenues forecast	0	0	0	0
	(b) actual revenues	3,688	4,958	1,904.69	2,560.59
	(b-a)	3,688	4,958	1,904.69	2,560.59

Source: Ministerial Commission for Evaluation of the Effects of Law no. 335/95 and Subsequent Measures

Table AS4.2 - Occupational pension funds

(situation on 30/6/2002)

Funds		Date authorised to accept	Date licensed to operate	Members 30.06.02	Members 31.12.01	Members % change	Potential members (1)	Membership level (%)	ANPD (thousand of euros)
Funds that have assigned management mandates									
FONCHIM	salaried	25-10-1996	10-12-1997	113,200	109,948	3.5	185,000	61.2%	559,830
COMETA	salaried	10-12-1997	11-11-1998	381.791	368.409	9.8	1,000,000	38.2%	1,081,229
FONDENERGIA	salaried	8-05-1997	21-05-1998	30,002	31,388	2.7	47,000	63.8%	173,525
QUADRI E CAPI FIAT	salaried	8-05-1997	3-06-1998	13,971	14,597	-2.7	17,791	78.5%	77,515
FONDODENTISTI	self-employed	10-07-1998	21-04-1999	3,008	2,896	10.2	40,000	7.5%	12,026
COOPERLAVORO	salaried	10-03-1999	28-06-2000	12,844	12,252	20.3	340,000	3.8%	23,667
SOLIDARIETA' VENETO	salaried	20-10-1999	20-10-1999	12,638	12,069	13.3	340,000	3.7%	33,687
LABORFONDS	salaried	10-12-1999	19-04-2000	57,755	54,452	10.8	197,000	29.3%	102,745
PREVIAMBIENTE	salaried	4-11-1998	19-01-2000	15,854	15,072	9.4	42,000	37.7%	41,899
PEGASO	salaried	24-03-1999	28-06-2000	18,024	17,549	14.3	37,000	48.7%	38,977
FOPEN	salaried	8-09-1999	14-09-2000	51,836	54,520	0.4	70,000	74.1%	188,855
PREVICOOPER	salaried	7-08-1998	27-10-2000	8,761	8,474	13.1	55,000	15.9%	22,484
Total funds that have assigned management mandates: 12				**719,684**	**701,626**	**8.3**	**1,833,791**		**2,356,439**
Other licensed funds									
ALIFOND	salaried	7-08-1998	16-02-2000	31,800	30,848	2.3	300,000	10.6%	75,790
FONSER	salaried	30-12-1998	31-05-2000	370	366	-10.3	3,000	12.3%	1,420
ARCO	salaried	15-07-1998	28-09-2000	18,479	18,131	14.4	177,000	10.4%	16,144
TELEMACO	salaried	7-04-1999	27-10-2000	58,096	59,607	-8.6	70,000	83.0%	150,733
PREVIVOLO	salaried	25-11-1998	27-10-2000	2,664	2,636	16.3	2,700	98.7%	42,570
FUNDUM	self-employed	10-07-1998	14-11-2000	2,901	2,903	-7.5	2,000,000	0.1%	874
FONCER	salaried	28-01-1999	30-11-2000	6,221	6,035	14.5	35,000	17.8%	23,490
FONLIGURE	self-employed	17-02-1999	5-07-2000	1,180	1,180	-0.6	53,000	2.2%	49
FONDARTIGIANI	self-employed	28-04-1999	21-11-2000	3,081	3,079	1.1	1,800,000	0.2%	97
FONDO FAMIGLIA	salaried	14-07-2000	28-12-2000	4,571	4,163	-1.5			186
PREVIMODA	salaried	5-05-1999	26-04-2001	42,013	40,459	15.9	600,000	7.0%	38,955
FONDAPI	salaried	2-12-1998	16-05-2001	23,809	23,228	14.9	700,000	3.4%	13,149
FONTE	salaried	2-09-1998	23-10-2001	15,874	13,228	27.0	2,000,000	0.8%	23,948
CONCRETO	salaried	8-02-2000	30-10-2001	5,281	5,082	21.0	11,000	48.0%	2,070
FILCOOP	salaried		4-12-2001	571	571	1.1	160,000	0.4%	-
PREVAER	salaried		9-01-2002	2,200			15,000	14.7%	-
GOMMAPLASTICA	salaried	4-08-1999	16-01-2002	25,535	23,537	16.7	123,455	20.7%	5,705
MEDIAFOND	salaried	19-10-2000	16-01-2002	1,897	1,878		3,400	55.8%	1,124
BYBLOS	salaried	2-02-2000	31-01-2002	22,105	20,661	173.4	180,000	12.3%	-
EUROFER	salaried	29-08-2000	12-03-2002	27,000	24,053		106,000	25.5%	1,468
PREVIDOC	self-employed	1-10-1998	12-03-2002	1,371	1,371	0.3	32,000	4.3%	-
FONDAV	salaried	17-11-1999	5-06-2002	2,765	2,693	8.1	10,000	27.7%	-
Total licensed funds: 34				1,019,468	987,395	7.2	10,162,346		2,754,211
of which for salaried employees: 28				1,003,256	971,803	7.3	6,290,346	16.0%	2,740,979
of which for self-employed: 6				16,112	15,592	0.0	3,872,000		13,232

Funds		Date authorised to accept members	Minimum number of members (2)		Members 31.12.01	Members % change	Potential members (1)	Membership level (%)
Funds authorised to accept members; applied to obtain license to operate								
PRIAMO	salaried	14-09-2000	5,000	23,073	18,476		120,000	19.2%
Funds whose authorisation to accept members as been extended								
EUROGRUZZOLO	self-employed	28-07-1999	3,000	4	4		2,000,000	0.0%
FOPADIVA	self-employed	23-11-1999	2,000	984	867	18.8	35,000	2.8%
ARTIFOND	salaried	12-01-2000	10,000	3,597	1,530		900,000	0.4%
CONFEDORAFI	self-employed	21-08-2000	1,000	528	530	239.7	33,300	1.6%
FONTAN	salaried	30-11-2000	3,000	791	633		30,000	2.6%
MARCO POLO	salaried	30-11-2000	3,000	282	44		800,000	0.0%
PREVIAGENS	salaried	26-01-2001	1,000	714	687		40,000	1.8%
Total funds authorised to accept members: 8				29,973	22,771	198.6	3,923,200	
of which for salaried employees: 6				29,441	22,237	207.1	1,890,000	
of which for self-employed: 2				532	534	25.1	2,033,300	
Grand Total: 42				1,049,241	1,010,166	14.2	11,285,646	
salaried: 34				1,032,797	994,040	14.4	7,380,346	
self-employed: 8				16,444	16,126	2.4	3,905,300	
Other funds that have applied to obtain license to operate								
PREVEDI	salaried	2-07-2002					700,000	
MERCURIO	salaried	8-08-2002					13,000	

(1) The figures for regional funds have been excluded from the number of potential members.
(2) Represents the minimum level of subscriptions needed for authorisation.

Source: Covipgen. (2002)

chapter 5

INPDAP PENSIONS

Synopsis

This chapter is devoted to INPDAP and, in particular, to the pension benefits it provides.

The first part describes the main features of INPDAP's pension spending and pensions. The legal framework for public-sector pensions is reviewed in light of the process to harmonise the rules of the public sector with those of the private one.

The second part is an extensive appendix, with full and systematically-arranged data on the benefits provided by the Institute as well as an overview of the pension system for public employees.

As to the pensions paid at year-end, the figures shown are as of 2001: pension spending is analysed by number of recipients and average amount, classified according to a number of variables, ranging from geographic area to beneficiary age to the class of the average yearly pension amount.

As regards categories, old-age pensions, whose beneficiaries are 65 or older as at the survey date, account for 60 percent of total pensions disbursed by INPDAP while there are no significant distribution differences by sex.

Greater differences emerge with respect to the types of pension: in the area of direct pensions, in the lower-age classes the distribution is skewed towards women, confirming the tendency of the gentle sex to retire at a younger age compared with men. The reverse is true for survivor pensions.

Most pensions (38 percent of the total) range from € 516.65 to € 1,032.9 per month; the number of monthly pension benefits ranging from 1,032.9 to 1,549.4 and that of monthly pensions greater than € 1,549.4 represent 34 percent and 22 percent of the total, respectively. Pension amounts lower than € 516.5 per month account for 6.1 percent of the total.

The analysis is expanded to cover new pensions which, together with the adjustments due to the indexation and mortality applicable to the pension stock, constitute the main reason for the changes in pension spending.

INPDAP pensions

The review of the 1996-2001 period reveals that the new pensions were strongly affected by the reforms implemented in the 1990s, which changed retirement rules repeatedly. This is reflected by the number of pensions, which experienced a substantial decrease, and by the rise of some parameters, such as average retirement age and contribution years.

5.1 Pension benefits in 2001[1]

As of the end of 2001, out of all pension schemes it manages, INPDAP paid a total of 2,367,201 pensions, for a total of € 38 billion.

The largest of these schemes, in terms of enrolees and pensions paid, is CTPS (Cassa per i Trattamenti Pensionistici ai dipendenti dello Stato – state employee pension scheme), which accounts for slightly less than 60 percent of the total pensions paid by INPDAP for a total of € 24.42 billion or 64 percent of INPDAP's pension spending.

CPDEL (Cassa per le Pensioni ai Dipendenti degli Enti Locali - Pension Scheme for Local Authority Employees) disburses slightly less than 900,000 pensions for a total of € 12 billion per annum, representing 38 percent and 32 percent of INPDAP's pensions disbursed and pension expenditure, respectively.

The other three schemes are marginal: CPS (Cassa per la pensione ai sanitari – Pension Scheme for Health Workers) pays approximately 2 percent of the total number of pensions, disbursing 3.8 percent of the annual monetary amount: CPI (Cassa per le pensioni agli insegnanti d'asilo e di scuole elementari parificate – Pension Scheme for Teachers in Officially Recognised Nursery and Elementary Schools) and CPUG (Cassa per le pensioni agli ufficiali giudiziari e coadiutori – Pension Scheme for Judiciary Officials and Assistant Judiciary Officials) account for less than 0.5 percent.

The yearly average benefits for all schemes managed by INPDAP amounted to € 16,129, with significant differences among the various schemes: the yearly average for CPS was slightly below € 32,000, that for CTPS was approximately € 17,300, whilst that for the other schemes – CPDEL, CPI and CPUG – the interval was smaller as the yearly average amount ranged from € 13,729 to € 13,046.

Table 5.1 – Number of pensions and yearly amount in 2001

	Number of Pensions	%	Yearly amount (in millions of euros)	%	Average yearly amount
Cpdel	894,444	37.8	12,102	31.7	13,530
Cpi	12,381	0.5	162	0.4	13,046
Cps	45,972	1.9	1,468	3.8	31,932
Cpug	2,285	0.1	31	0.1	13,729
Ctps	1,412,119	59.7	24,417	64.0	17,291
Inpdap	**2,367,201**	**100.0**	**38,180**	**100.0**	**16,129**

Within the CTPS, the distribution of pensions by department reveals that schools use up the majority of resources, with slightly less than 50 percent of total pensions paid to state employees, for a total expenditure of approximately 47 percent of the total. Police and ministries account for a substantial share as well, as in terms of pensions paid they received 18.6 percent and 14.7 percent of the total, respectively. The other departments represented less than 10 percent of the total for CTPS, in terms of number of pensions and spending.

(1) Data are as at year-end. The average yearly amount is determined on the basis of the average pension paid as at 31 December times 13; yearly pension spending is defined on the basis of the pension expenditure for December times 13. See Box 1.

As to the average pension amount, given an average of € 17,291 for state employees, at € 66,456, the magistrate department posted the highest average pension amount, followed by the military and university departments with average pensions in the amount of € 22,958 and € 22,599, respectively.

Table 5.2 - Number of pensions for state employees by department

	Number of Pensions	%	Yearly amount (in millions of euros)	%	Average yearly amount
Autonomous agencies	113,067	8.0	1,601	6.6	14,156
Police corps	262,267	18.6	5,083	20.8	19,382
Magistrates	3,825	0.3	254	1.0	66,456
Military	102,530	7.3	2,354	9.6	22,958
Ministries	207,390	14.7	3,102	12.7	14,956
School	700,553	49.6	11,515	47.2	16,438
University	22,487	1.6	508	2.1	22,599
Ctps	**1,412,119**	**100.0**	**24,417**	**100.0**	**17,291**

Table 5.3 illustrates the changes in total spending for all the schemes managed by INPDAP in the 1997-2001 period.
The average pension amount showed a faster growth rate than that of the number of pensions, except in 2001, where the number of pensions disbursed rose by 2.3 percent as against an increase of 1.7 percent in the average pension.
The combined trends of these two variables resulted in a pension expenditure that showed declining growing rates until 2000 (with increases of 4.4 percent in 1998, 4.2 percent in 1999, and 3.8 percent in 2000); in 2001, the growth rate was 4.1 percent.

Table 5.3 - Trend in the pension number and amounts

	Number of Pensions	Change	Yearly amount (in millions of euros)	Change	Average yearly amount	Change
1997	2,184,148		32,476		14,869	
1998	2,230,178	2.1	33,908	4.4	15,204	2.3
1999	2,273,696	2.0	35,340	4.2	15,543	2.2
2000	2,312,902	1.7	36,668	3.8	15,854	2.0
2001	2,367,201	2.3	38,180	4.1	16,129	1.7

Pension distribution by geographic area shows that slightly less than 43 percent of the pensions was paid in Northern regions, of which 22.5 percent in the North-West of Italy and 20.4 percent in the North-East. In the Southern regions, the number of pensions paid accounted for approximately 33 percent of the total, whilst in Central Italy the share of the total was 24 percent.
In terms of amounts as a share of the total, pension distribution by geographic area was almost the same.

In terms of average pension, at € 17,054, the yearly amount was higher in Central Italy; Southern regions were more or less in line with the national average (€ 16,344 vs. € 16,129); in Northern Italy, the yearly average pension amount (€ 15,154 and € 15,757 in the North-West and in the North-East, respectively) was lower than the national average.

Table 5.4 - Number of pensions and yearly amount by geographical area

	Number of Pensions	%	Yearly amount (in millions of euros)	%	Average yearly amount
North-W	531,570	22.5	8,055	21.1	15,154
North-E	483,655	20.4	7,621	20.0	15,757
Central	572,758	24.2	9,768	25.6	17,054
South and islands	779,218	32.9	12,736	33.4	16,344
Italy	**2,367,201**	**100.0**	**38,180**	**100.0**	**16,1291**

Data arrayed by age show that most pensions were paid to the 50-64 years old class, representing 34.4 percent of total pensions; pensions paid to the 65-74 years old class were lower in number, though still significant, while those disbursed to the over-75 years old class accounted for 31.5 percent and 29.9 percent, respectively. Pensions paid to beneficiaries below 49 years of age were 4.3 percent of total pensions.

The number of old-age pensions, to beneficiaries 65 years or older as at the survey date, accounted for 61.3 percent of the total disbursed by INPDAP.
Overall, out of the total pensions paid by INPDAP, old age pensions were equally distributed between men and women: benefits received by women older than 65 represented 61.1 percent of the total for this sex, as opposed to 61.6 percent for men.
Differences are significant, however, with respect to the type of pension. In the area of direct pensions, in the lower-age classes the distribution is skewed towards women, confirming the tendency of the gentle sex to retire at a younger age compared with men: in fact, the distribution by sex shows that the class including beneficiaries older than 65 accounts for 49.8 percent of the total for women and 62.6 percent for men. Concerning survivor pensions, which include pensions in favour of the surviving spouses of both pensioners and insured workers, the number of beneficiaries older than 65 was higher than the corresponding number of recipients of direct pensions, with a higher percentage for women than for men.
As to the distribution by monthly-amount class, most pensions were included in the range between € 516.5 and € 1,032.9, accounting for 38 percent of total pensions; benefits between € 1,032.9 and € 1,549.4 represented 34 percent of total benefits, while those above € 1,549.4 were 22 percent of the total.

Table 5.5 – Number of pensions by age class
(percentage values)

Age class	Direct pensions			Survivor pensions			TOTAL		
	Male	Females	Total	Male	Females	Total	Male	Females	Total
Under 49	2.1	3.9	2.9	31.0	5.6	8.3	3.9	4.5	4.3
50-64	35.3	46.3	40.4	23.2	15.1	16.0	34.5	34.3	34.4
65-74	35.3	29.8	32.8	20.0	28.4	27.5	34.4	29.3	31.5
Over 75	27.3	20.0	23.9	25.9	50.9	48.2	27.2	31.9	29.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Tot. 65 and over	*62.6*	*49.8*	*56.7*	*45.9*	*79.3*	*75.7*	*61.6*	*61.1*	*61.3*

Pension benefits below € 516.5 per month constituted a residual portion, equivalent to 6.1 percent.
Moving on to analyse pensions by sex and type, significant differences emerge. Approximately 50 percent of the pensions paid to women range from € 516.5 to € 1,032.9, while for men most pension amounts are included in the range between € 1,032.9 and € 1,549.4.
By type, pensions between € 516.5 and € 1,032.9 represented 38 percent of total pensions; out of these, 57 percent were survivor pensions while 32 percent were direct pensions.

Tabella 5.6 – Number of pensions by monthly amount class
(percentage values)

Amount class (euros)	Direct pensions			Survivor pensions			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
< 516.5	1.4	2.5	1.9	56.0	14.8	19.2	4.7	7.2	6.1
516.5-1,032.9	21.1	44.8	32.0	39.4	58.9	56.8	22.2	50.2	38.1
1,032,9-1,549.4	42.3	33.2	38.1	3.8	21.8	19.9	40.0	28.8	33.7
> 1,549.4	35.2	19.5	28.0	0.9	4.5	4.1	33.1	13.7	22.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

BOX 1 – INPDAP's schemes

CPDEL - Pension Scheme for Local Authority Employees
Formed from the merger between the pension fund for town clerks and other municipal employees , set up under law 754/1907, and the pension fund for local authority salaried staff, set up under law 720/1916.
CPDEL covers employees of:
1) municipalities
2) provinces
3) regional authorities (except Sicily)
4) local health authorities
5) hospitals (non-medical staff)
6) municipality-owned companies
7) some quasi-state agencies

CPS - Pension Scheme for Health Workers
Set up under law 335 in 1898, CPS was given its present name under law 379 in 1959. CPS covers the following employees:

1) National health service medical employees;
2) Medical and veterinary surgeons employed by municipalities, provinces and public welfare and charity institutions;
3) Government medical and veterinary surgeons not entitled to a state pension.

CPI - Pension Scheme for Teachers in Officially Recognised Nursery and Elementary Schools
Set un under law 4646/1878, this scheme took its current name under law 379/1955 and covers the following:
1) Teachers in public non-state elementary schools;
2) teachers in non-profit nursery schools;
3) Principals, teachers and assistants in schools for the blind and deaf mutes.

CPUG - Pension Scheme for Judiciary Officials and Assistant Judiciary Officials

Set up under law 754/1907, it took its current name under law 1128/1951 and covers the following:
1) Judiciary officials;
2) Assistant judiciary officials;
3) Deputies.

CTPS - Pension Scheme for State Employees
Effective 1 January 1996 a separate scheme was set up under INPDAP's management to provide pension benefits to all State employees, as well as to all the other employee categories whose pensions are paid out of general taxation. This scheme covers:
1) Civil servants and employees of so-called autonomous agencies;
2) Teaching and non-teaching staff in schools
3) University professors and non-teaching staff;
4) Military and police corps and their equivalents.

Departments
Pension beneficiaries under this scheme are classified in different departments:

School: former teaching and non-teaching staff in schools;
University: former teaching and non-teaching staff in universities;
Ministries: former employees of ministries, career diplomats and prefects;
Autonomous agencies: former employees from the agency for road and highway operations (Anas), state monopolies; loan and deposit fund, fire-fighters.
Police corps: former state police officers, carabinieri, finance police officers, prison guards and their chaplains

Armed forces: former army, navy, air force, and harbour-master personnel and their chaplains;
Magistrates and their equivalents: former employees of the judiciary, court of accounts, State council, court martial, State attorney

A glossary of terms

Average yearly amount: average gross monthly amount of pensions as at 31/12 times 13

Yearly amount: gross pension spending in December times 13

Direct pension: benefits paid to direct pensioners (old age, seniority, disability)

Worker survivor pension: benefits paid to spouse or dependent children of enrolees who die while in service

Pensioner survivor benefits: paid to survivor of deceased pensioned

Survivor pension: benefits paid to surviving spouse or dependent children of both enrolees and pensioners.

5.2 An analysis of the developments in new pensions

The process to reform the pension system in the 1990s was characterised by a number of temporary and structural measures designed to affect new pensions.

In particular, these reforms had an impact not only on the way benefits were computed (amount effect) but also on the requirements to qualify for retirement (number effect). The category most affected by these changes was that of seniority pensions, a function marked by particularly generous rules, especially in the public sector.

The steps taken in the area of seniority pensions had a twofold objective: on one side, the requirements to access pension benefits were raised; on the other, the date pensions were effective, i.e. the period pension benefits were actually paid compared with the date on which the corresponding pension rights vested, was postponed through the introduction of so-called "windows". While the first measure determined a decrease of the annual flow of beneficiaries, thus reducing the relevant pressures, the second gave rise to cash savings as a result of the postponement until the following year of the pensions payable in the year of reference.

In particular, with the Dini reform, and later with the Prodi reform, the number of service years required was gradually raised to 40 by 2008; moreover, in addition to the service years requirement, an age requirement was introduced; as a result, seniority pensions could be accessed with 35 years of service and a gradually rising age, until it reaches 57 in 2002 for the private sector and 2004 for the public sector.

These reforms were intended to harmonise the rules in the public and private sectors: before the reform, in fact, workers in the private sector could qualify for a seniority pension with 35 contribution years, while public-sector employees were required to have only 20 contribution years.

This harmonisation process had a more substantial impact on the ranks of public employees, with the resulting adjustment to the growth rate of public expenditure that was more significant than that in the private sector. This emerged also from the report prepared by the Commission set up to check the effects of law 335/95 on seniority pensions; in fact, following the application of this law, as amended and supplemented, the public sector achieved greater savings compared with the private sector.

The effects of the reforms can be assessed by reviewing the number of new

pensions in the 1996-2001 period, with reference to the number of pensions paid and other significant parameters.

In particular, for each of the five schemes managed by INPDAP, the available data cover the yearly flows of new pensions, age, contribution years of the beneficiary at the time of payment, the average gross pension amount.[2]

The number of pensions is provided in accordance with the cash-basis accounting method, not in accordance with the accrual-basis method, in order to examine the effect of the "windows" on trends in the number of pensions.

The survey covers direct pensions; survivor pensions, involving both spouses and dependents of enrolees or pensioners, are not significant for purposes of this inquiry, as in this case the collection of a pension is beyond the control of the recipients.

The analysis was conducted separately for all the schemes managed by INPDAP; within the CTPS, consideration was given to the departments which make it up, in order to capture some peculiar aspects.

Starting from the stock of pensions outstanding as at 1 January 2002, the cumulative number of pensions which became effective in the 1996-2001 period under the five schemes managed by INPDAP amounted to 497,751 units.

The period 1996-2001 makes it possible to identify the effects of both the Dini and the Prodi reforms. While the immediately preceding years saw some interventions (Amato reform) designed to review pension requirements, no attention is paid to that period in this inquiry, as it was characterised by a number of different measures which distort the interpretations of its results. Reference is made, in particular, to those measures introduced to achieve some forms of saving by "blocking" the payment of seniority pensions in given periods, which determined massive pension applications at the end of the "block" periods.

The consequences of this phenomenon continued throughout 1996 and 1997, which saw a substantial increase of new retirement applications. Despite the higher requirements to access pensions and the introduction of "windows", the significant number of retirements was definitely attributable to the "blocking-unblocking" measures. In particular, in 1995 the payment of seniority pensions was suspended, with the result that the following two years witnessed a swelling tide of applicants.

Starting in 1998, the number of new pensions fell to a substantial extent and then stabilised, as it went from 132,784 units in 1997 to 66,241 units in 1998, to 71,560 units in 1999, and 67,454 units in 2000; a further decrease occurred in 2001, with a total of 49,762 new pensions.

---

(2) In particular, the analysis focuses on pensions paid as of 1 January 2002 but which were effective in the 1996-2001 period; thus, the research refers to pension entitlements that were still outstanding as at the survey date.
This means that no account is taken of the pension rights vested in the 1996-2001 period and that were eliminated completely from the period under review. However, since the period examined is short, the phenomenon should be modest and statistically immaterial. Moreover, based on this methodology, the average gross pension amount is that as at 1 January 2002.

Table 5.7 - Pensions paid as of 1/1/2002 by retirement year

	1996				1997				1998			
	Number	Age (1)	Contrib. period (1)	Average amount (2) (euros)	Number	Age (1)	Contrib. period (1)	Average amount (2) (euros)	Number	Age (1)	Contrib. period (1)	Average amount (2) (euros)
Cpdel	43,736	58	34	1,321	57,372	56	33	1,235	21,797	59	33	1,333
Cpi	440	60	33	1,366	764	55	30	1,048	220	62	31	1,149
Cpug	82	64	34	1,379	116	62	35	1,455	69	64	36	1,343
Cps	1,756	62	37	4,207	2,458	61	36	4,126	1,393	63	37	4,598
Ctps	63,936	58	34	1,696	72,074	55	32	1,571	42,762	58	34	1,725
Inpdap	**109,950**	**58**	**34**	**1,585**	**132,784**	**56**	**32**	**1,470**	**66,241**	**59**	**34**	**1,654**

	1999				2000				2001			
	Number	Age (1)	Contrib. period (1)	Average amount (2) (euros)	Number	Age (1)	Contrib. period (1)	Average amount (2) (euros)	Number	Age (1)	Contrib. period (1)	Average amount (2) (euros)
Cpdel	25,937	58	34	1,303	24,093	59	33	1,316	19,052	59	34	1,448
Cpi	244	61	32	1,283	271	61	31	1,106	191	60	31	1,190
Cpug	88	64	37	1,406	102	64	37	1,406	80	64	37	1,656
Cps	1,605	62	38	4,544	1,390	62	37	4,533	1,351	62	37	5,358
Ctps	43,686	57	33	1,672	41,598	59	33	1,613	29,088	60	34	1,719
Inpdap	**71,560**	**58**	**34**	**1,601**	**67,454**	**59**	**33**	**1,569**	**49,762**	**60**	**34**	**1,712**

(1) Figures refer to age and contribution years on retirement.

(2) Figures refer to monthly average amount paid up to 1/1/2002

In addition to the changes in the number of pensions, table 5.7 shows the trends of other important variables, such as age and contribution years upon retirement.

In the first two years of the period under review (1996 and 1997), age and contribution years declined, still due to "unblocking". The next period, however, was marked by a gradual and continuing increase of retirement age; in particular, in 1997 the average age decreased to 56, from 58 years in 1996; in the subsequent years, this rose until it reached 60 in 2001. The number of contribution years went from 34 in 1996 to 32 in 1997, and then went back up to reach an average of 34 years.

As to the individual schemes, there emerge significant differences, also in terms of developments. In 2001, given an average retirement age of 60 years for all the schemes, in CTPS and CPDEL, the schemes accounting for the majority of retirees, the average retirement ages were 60 and 59, respectively. CPI also had an average age of 60, while the average retirement age was 62 for CPS and 64 for CPUG. These last two schemes showed also a significantly greater length of service, compared with the others, as they amounted to 37 and 36 years, respectively.

As to the changes related to the separate schemes, CTPS showed the most significant increase in retirement age, with an average of 58 years in 1996, which fell to 55 in 1997, and then increased gradually to 60 in 2001.

A review by department within CTPS shows that magistrates and university personnel retire at a relatively old age – 68 years and 63 years, respectively - and with a significant length of service – 39 and 36, respectively. On the other hand, armed forces and police corps, whose retirement is governed by a specific legal framework, retire at a relatively younger age – 49 years and 50 years, respectively - and with a shorter length of service – 35 years and 30 years, respectively.

In keeping with the current pension stock, also new pensions are higher on average in the scheme for health workers, due to the large number of contribution years and the higher wage levels.

BOX 2 – The legal framework and the harmonisation process with the private sector

The harmonisation between the rules of the public sector and those of the private sector was a dominant theme during the 1990s.
The process to place the public sector on an equal footing with the private sector began with legislative decree 503/92 (Amato reform). The main provisions involved:

- the raising of the number of contribution years to qualify for seniority pensions.
  In particular, for public employees who entered service after 31 December 1993 and for those who had fewer than eight years' service the minimum requirement of 35 contribution years was extended and brought into line with that for the private sector. For employees with over eight years' service, there was to be a gradual raising of the contribution years required, inversely proportional to the years of service remaining before vesting under the previous rules; finally, for those who had already qualified for early retirement (19 years, 6 months and 1 day for men, 14 years, 6 months and 1 day for women employed by the State; 24 years, 6 months and 1 day for men, 19 years, 6 months and 1 day for women in the other areas of public employment) the previous rules applied;

- the extension of the earning period to calculate pension amounts
  In particular, for new employees in both the public and private sectors, the earning period to be considered was extended to the entire working lifetime, instead of the last salary in the public sector and the salary for the last five years in the private sector. For workers already in service, however, pensions would consist of two components, one or the years up to 1992 and the other for the following years. In particular, the first component would be governed by the previous rules (last salary in the public sector); for the other component, instead, a new calculation method would be adopted, based on whether at the end of 1992 the worker had fewer or more than 15 contribution years. In case the worker had fewer than 15 contribution years, the second component would be calculated considering all the working years after 1992; in the other case, this component would ordinarily be calculated on the basis of the last ten years of employment.

Law 537/1993 provided for public employees who opted for early retirement with fewer than 35 contribution years to pay a penalty, in proportion to the number of remaining years to meet that requirement.
A further change to the pension system for public employees was due to the enactment of law 724/1994. This called for:

- the change of the pensionable salary to calculate the pension, taking into account that , starting 1 January 1995, pensions would be computed by considering the salary items subject to contributions, including for the first time the special catch-up allowance (indennità integrativa speciale). According to the previous rules, instead, pensions were commensurate

with pay and some allowances, excluding any supplementary components of pay; the special catch-up allowance was calculated separately (before law 79/1983, this was considered in its entirety, regardless of the length pf service; eventually it was included in the calculation in an amount equivalent to 1/40 for each contribution year);
- the change in the annual rate of return, whereby starting on 1 January 1995, this was set at 2 percent, in line with that of the Ago-Fpld, whereas for the period before that date the previous rules apply. Harmonisation between public and private sectors received a strong boost with law 335/95 (Dini reform).

Also Law 335/1995 (Dini reform) aimed to harmonise the rules of the public sector with those of the private sector.
On the matter of deciding the contributory and pensionable base, the Dini reform extended article 12 of law 153/69 to the public sector: starting on 1 January 1996 all salary components were subject to contributions and therefore pensionable.
Law 335/95 made additional changes in the area of seniority pensions. In particular, employees of the public sector who were not required by the foregoing changes to fulfil the 35-year contribution requirement had three options for early retirement:

1) the same conditions as the private system's (the only requirement set by the reform law was contribution years or, in alternative, a combination of age and length-of-service requirements);
2) the age requirement only, with penalties for the years remaining to complete 35 contribution years;
3) retirement regardless of age, but with penalties for the years remaining to complete 37 contribution years.

Finally, non-work related disability pensions were extended to public employees and the rules on survivor pensions were further harmonised.
Moreover, the separate pension scheme for State employees, formerly the responsibility of the Treasury, was transferred to INPDAP, setting employers' and employees' contributions. This scheme was financed not only with contributions but also out of general taxation. Eventually law 662/1996 unified and reassessed the contribution rates for members of the other four pension plans managed by INPDAP.
Law 449/97 (Prodi reform) stepped up the harmonisation process, since it aimed to bring the rules on seniority pensions in line with those of the private sector by 2004. In particular, early retirement could no longer be accessed without 35 contribution years, setting forth new requirements:

1) at any age with more than 35 contribution years and rising, in the 1998/2008 period, from 36 to 40 years;
2) at least 35 contribution years and an age ranging from 53 in 1998 to 57 in 2004, when full harmonisation should be achieved.

appendixes

Statistical appendix
AS5

Table AS5-1 - Distribution by fund, gender and pension type of the number and amount of pensions paid as of 31/12/2001
(in thousands of euros)

INPDAP

	GENDER	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
		Number	Yearly amount	Average yearly amount	Number	Yearly amount	Average yearly amount	Number	Yearly amount	Average yearly amount	Number	Yearly amount	Average yearly amount
	Female	324,559	3,878,470	11.950	44,073	395,223	8.967	133,581	1,421,576	10.642	502,213	5,695,269	11.340
CPDEL	Male	370,709	6,273,219	16.922	8,626	42,241	4.897	12,511	90,244	7.213	391,846	6,405,704	16.348
	Total (1)	**695,301**	**10,151,851**	**14.601**	**53,018**	**438,299**	**8.267**	**146,125**	**1,511,977**	**10.347**	**894,444**	**12,102,128**	**13.530**
	Female	11,590	152,728	13.178	39	198	5.089	67	548	8.181	11,696	153,474	13.122
CPI	Male	188	4,613	24.540	181	1,168	6.453	313	2,258	7.213	682	8,039	11.788
	Total (1)	**11,778**	**157,341**	**13.359**	**222**	**1,371**	**6.177**	**381**	**2,809**	**7.373**	**12,381**	**161,522**	**13.046**
	Female	284	3,576	12.591	351	3,821	10.886	612	6,569	10.734	1,247	13,966	11.200
CPUG	Male	990	17,169	17.343	34	134	3.929	11	89	8.123	1,035	17,392	16.804
	Total (1)	**1,274**	**20,745**	**16.283**	**388**	**3,968**	**10.226**	**623**	**6,659**	**10.688**	**2,285**	**31,371**	**13.729**
	Female	3,886	130,899	33.685	4,637	75,572	16.298	10,374	172,820	16.659	18,897	379,291	20.071
CPS	Male	25,933	1,078,410	41.584	775	6,203	8.004	337	3,834	11.378	27,045	1,088,448	40.246
	Total (1)	**29,820**	**1,209,370**	**40.556**	**5,438**	**81,919**	**15.064**	**10,714**	**176,671**	**16.490**	**45,972**	**1,467,960**	**31.932**
	Female	485,141	8,305,175	17.119	77,746	871,979	11.216	245,492	3,032,794	12.354	808,379	12,209,948	15.104
CTPS	Male	563,514	11,918,050	21.150	16,150	99,831	6.181	23,507	186,127	7.918	603,171	12,204,007	20.233
	Total (1)	**1,048,771**	**20,224,789**	**19.285**	**94,303**	**973,186**	**10.320**	**269,045**	**3,219,218**	**11.965**	**1,412,119**	**24,417,193**	**17.291**
	Female	825,460	12,470,848	15.108	126,846	1,346,793	10.618	390,126	4,634,308	11.879	1,342,432	18,451,949	13.745
Total	Male	961,334	19,291,463	20.067	25,766	149,576	5.805	36,679	282,552	7.703	1,023,779	19,723,591	19.265
	Total (1)	**1,786,944**	**31,764,097**	**17.776**	**153,369**	**1,498,743**	**9.772**	**426,888**	**4,917,335**	**11.519**	**2,367,201**	**38,180,175**	**16.129**

(1) Total includes pension entries which had no gender classification

Table AS5-2 - Distribution by department, gender and pension type of the number and amount of pensions paid as of 31/12/2001
(in thousands of euros)

CTPS

DEPARTMENT	GENDER	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
		Number	Yearly amount	Average yearly amount	Number	Yearly amount	Average yearly amount	Number	Yearly amount	Average yearly amount	Number	Yearly amount	Average yearly amount
	Female	416,109	7,289,656	17.519	23,797	210,674	8.853	49,160	509,657	10.367	489,066	8,009,987	16.378
School	Male	184,850	3,312,404	17.919	10,500	65.959	6.282	15,873	125,825	7.927	211,223	3,504,188	16.590
	Total (1)	**600,990**	**10,602,597**	**17.642**	**34,509**	**277,214**	**8.033**	**65,054**	**635,606**	**9.770**	**700,553**	**11,515,417**	**16.438**
	Female	44	568	12.915	7,552	104,217	13.800	32,663	479,410	14.677	40,259	584,195	14.511
Military	Male	61,080	1,759,715	28.810	550	3,660	6.654	611	6,136	10.043	62,241	1,769,511	28.430
	Total (1)	**61,130**	**1,760,355**	**28.797**	**8,121**	**107,949**	**13.293**	**33,279**	**485,589**	**14.591**	**102,530**	**2,353,893**	**22.958**
	Female	2,925	49,682	16.985	17,131	231,412	13.508	80,139	1,087,098	13.565	100,195	1,368,192	13.655
Police corps	Male	158,605	3,689,152	23.260	1,650	9,821	5.952	1,728	15,256	8.829	161,983	3,714,230	22.930
	Total (1)	**161,548**	**3,739,236**	**23.146**	**18,843**	**241,501**	**12.816**	**81,876**	**1,102,423**	**13.465**	**262,267**	**5,083,159**	**19.382**
	Female	23,258	306,353	13.172	8,512	81,699	9.598	23,387	241,770	10.338	55,157	629,822	11.419
Autonomous agencies	Male	54,928	950,230	17.300	728	4,071	5.592	2,210	16,164	7.314	57,866	970,465	16.771
	Total (1)	**78,194**	**1,256,625**	**16.071**	**9,273**	**85,949**	**9.269**	**25,600**	**257,962**	**10.077**	**113,067**	**1,600,536**	**14.156**
	Female	36,600	532,875	14.559	17,749	186,383	10.501	57,606	650,206	11.287	111,955	1,369,465	12.232
Ministries	Male	90,410	1,700,021	18.803	2,043	11,284	5.523	2,880	20,625	7.161	95,333	1,731,930	18.167
	Total (1)	**127,050**	**2,233,125**	**17.577**	**19,846**	**197,810**	**9.967**	**60,494**	**670,864**	**11.090**	**207,390**	**3,101,799**	**14.956**
	Female	6,173	123,593	20.022	2,273	32,455	14.278	1,475	21,746	14.743	9,921	177,794	17.921
University	Male	11,720	324,340	27.674	635	4,172	6.570	174	1,501	8.628	12,529	330,013	26.340
	Total (1)	**17,906**	**448,218**	**25.032**	**2,932**	**36,729**	**12.527**	**1,649**	**23,247**	**14.098**	**22,487**	**508,194**	**22.599**
	Female	32	2,446	76.446	732	25,139	34.343	1,062	42,907	40.402	1,826	70,492	38.605
Magistrates	Male	1,921	182,187	94.840	44	863	19.607	31	620	20.003	1,996	183,670	92.019
	Total (1)	**1,953**	**184,633**	**94.538**	**779**	**26,034**	**33.419**	**1,093**	**43,527**	**39.823**	**3,825**	**254,194**	**66.456**
	Female	485,141	8,305,175	17.119	77,746	871,979	11.216	245,492	3,032,794	12.354	808,379	12,209,948	15.104
TOTAL	Male	563,514	11,918,050	21.150	16,150	99,831	6.181	23,507	186,127	7.918	603,171	12,204,007	20.233
	Total (1)	**1,048,771**	**20,224,789**	**19.284**	**94,303**	**973,186**	**10.320**	**269,045**	**3,219,218**	**11.965**	**1,412,119**	**24,417,193**	**17.291**

(1) Total includes pension entries which had no gender classification.

Table AS5-3 - Distribution by region and pension type of number and average yearly amount of pensions paid as of 31/12/2001
(in thousands of euros)

INPDAP

	DIRECT PENSIONS		WORKER SURVIVOR PENSIONS		PENSIONER SURVIVOR BENEFITS		TOTAL	
	Number	Average yearly amount	Number	Average yearly amount	Number	Average yearly amount	Number	Average yearly amount
NORTH								
Liguria	70,925	17.266	4,764	10.314	19,166	11.630	94,855	15.778
Lombardia	230,062	15.718	13,266	9.745	41,380	11.228	284,708	14.787
Piemonte	115,133	16.578	6,826	10.003	24,968	11.773	146,927	15.456
Val D'Aosta	4,133	16.501	285	8.981	662	10.866	5,080	15.345
Emilia Romagna	151,342	16.866	8,363	10.184	30,997	11.323	190,702	15.672
Friuli Venezia Giulia	52,675	17.675	3,935	10.748	11,720	11.686	68,330	16.249
Trentino Alto Adige	37,183	17.371	1,790	9.804	6,519	11.799	45,492	16.275
Veneto	141,573	16.675	8,687	10.267	28,871	11.487	179,131	15.528
TOTAL	**803,026**	**16.572**	**47,916**	**10.090**	**164,283**	**11.475**	**1,015,225**	**15.441**
CENTRE								
Lazio	207,659	20.260	23,278	10.873	60,152	12.466	291,089	17.899
Marche	53,846	17.624	3,579	9.527	12,248	11.282	69,673	16.093
Toscana	131,235	17.681	9,226	10.039	30,780	11.592	171,241	16.175
Umbria	31,011	18.064	2,474	10.017	7,270	11.264	40,755	16.363
TOTALE	**423,751**	**18.966**	**38,557**	**10.493**	**110,450**	**12.012**	**572,758**	**17.054**
SOUTH and ISLANDS								
Abruzzo	42,798	18.236	3,404	9.364	10,800	11.047	57,002	16.344
Basilicata	15,279	18.042	1,870	8.464	3,489	10.384	20,638	15.880
Calabria	54,954	18.140	7,118	8.431	14,158	10.797	76,230	15.870
Campania	136,041	19.091	21,888	9.087	39,565	11.291	197,494	16.420
Molise	9,847	18.379	1,159	8.581	2,528	10.443	13,534	16.057
Puglia	110,554	18.593	11,215	9.572	28,881	11.404	150,650	16.544
Sardegna	59,514	17.898	5,479	9.441	12,941	11.184	77,934	16.189
Sicilia	131,180	18.810	14,763	9.148	39,793	11.305	185,736	16.434
TOTAL	**560,167**	**18.601**	**66,896**	**9.129**	**152,155**	**11.209**	**779,218**	**16.344**
OVERALL TOTAL	**1,786,944**	**17.776**	**153,369**	**9.772**	**426,888**	**11.519**	**2,367,201**	**16.129**

Table AS5-4 - Number of pensions paid as of 31 December for the years indicated

CPDEL

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTALE		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	357,535	307,329	664,864	12,712	156,317	169,029	370,247	463,646	833,893
1998	360,653	311,510	672,163	13,512	160,302	173,814	374,165	471,812	845,977
1999	365,369	316,784	682,153	14,482	164,731	179,213	379,851	481,515	861,366
2000	369,042	322,071	691,113	15,523	168,778	184,301	384,565	490,849	875,414
2001	370,709	324,559	695,301 (1)	21,137	177,654	199,143 (1)	391,846	502,213	894,444 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Table AS5-5 - Number of pensions paid as of 31 December for the years indicated
CPI

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	191	11,391	11,582	364	72	436	555	11,463	12,018
1998	196	11,420	11,616	386	74	460	582	11,494	12,076
1999	196	11,465	11,661	403	74	477	599	11,539	12,138
2000	189	11,541	11,730	429	72	501	618	11,613	12,231
2001	188	11,590	11,778	494	106	603 (1)	682	11,696	12,381 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Table AS5-6 - Number of pensions paid as of 31 December for the years indicated

CPS

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	23,940	3,411	27,351	386	13,163	13,549	24,326	16,574	40,900
1998	24,499	3,505	28,004	397	13,475	13,872	24,896	16,980	41,876
1999	25,065	3,645	28,710	435	13,837	14,272	25,500	17,482	42,982
2000	25,511	3,764	29,275	475	14,131	14,606	25,986	17,895	43,881
2001	25,933	3,886	29,820 (1)	1,112	15,011	16,152 (1)	27,045	18,897	45,972 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Tabella AS5-7 - Number of pensions paid as of 31 December for the years indicated

CPUG

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	914	210	1,124	24	947	971	938	1,157	2,095
1998	926	233	1,159	23	948	971	949	1,181	2,130
1999	945	249	1,194	24	938	962	969	1,187	2,156
2000	971	266	1,237	24	930	954	995	1,196	2,191
2001	990	284	1,274	45	963	1,011 (1)	1,035	1,247	2,285 (1)

(1) Total for 2001 includes pensions entries which had no gender classification.

Table AS5-8 - Number of pensions paid as of 31 December for the years indicated

CTPS

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	534,957	429,792	964,749	27,906	302,587	330,493	562,863	732,379	1,295,242
1998	546,268	446,295	992,563	29,144	306,412	335,556	575,412	752,707	1,328,119
1999	553,326	462,075	1,015,401	30,082	309,571	339,653	583,408	771,646	1,355,054
2000	558,022	476,751	1,034,773	31,431	312,981	344,412	589,453	789,732	1,379,185
2001	563,514	485,141	1,048,771 (1)	39,657	323,238	363,348 (1)	603,171	808,379	1,412,119 (1)

(1) Total for 2001 includes pension entries which had no gendeer classification.

Table AS5-9 - Number of pensions paid as of 31 December for the years indicated

INPDAP

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	917,537	752,133	1,669,670	41,392	473,086	514,478	958,929	1,225,219	2,184,148
1998	932,542	772,963	1,705,505	43,462	481,211	524,673	976,004	1,254,174	2,230,178
1999	944,901	794,218	1,739,119	45,426	489,151	534,577	990,327	1,283,369	2,273,696
2000	953,735	814,393	1,768,128	47,882	496,892	544,774	1,001,617	1,311,285	2,312,902
2001	961,334	825,460	1,786,944 (1)	62,445	516,972	580,257 (1)	1,023,779	1,342,432	2,367,201 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Table AS5-10 - Average yearly amount of pensions paid as of 31 December for the years indicated
(in thousands of euros)

CPDEL

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	15.335	10.893	13.281	7.348	10.166	9.954	15.061	10.648	12.607
1998	15.683	11.125	13.571	7.893	10.532	10.327	15.402	10.923	12.904
1999	16.022	11.366	13.859	7.949	10.635	10.418	15.714	11.116	13.144
2000	16.370	11.598	14.146	8.010	10.716	10.488	16.032	11.295	13.376
2001	16.922	11.950	14.601 (1)	6.268	10.227	9.793 (1)	16.348	11.340	13.530 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Table AS5-11 - Average yearly amount of pensions paid as of 31 December for the years indicated
(in thousands of euros)

CPI

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	15.859	12.013	12.077	7.420	9.473	7.759	10.325	11.998	11.920
1998	16.182	12.236	12.302	7.743	9.582	8.039	10.585	12.219	12.140
1999	16.488	12.442	12.509	7.902	9.624	8.166	10.682	12.424	12.339
2000	16.912	12.637	12.705	8.053	9.746	8.297	10.762	12.619	12.525
2001	24.540	13.178	13.359	6.935	7.043	6.933 (1)	11.788	13.122	13.046 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Table AS5-12 - Average yearly amount of pensions paid as of 31 December for the years indicated
(in thousands of euros)

CPS

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	34.093	27.137	33.226	11.103	15.245	15.127	33.728	17.692	27.230
1998	35.783	28.227	34.837	12.740	16.490	16.383	35.416	18.913	28.724
1999	37.539	29.687	36.544	13.255	17.029	16.914	37.125	19.665	30.029
2000	39.027	30.874	37.979	13.912	17.638	17.517	38.568	20.422	31.168
2001	41.584	33.685	40.555 (1)	9.026	16.547	16.010 (1)	40.246	20.071	31.932 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Table AS5-13 - Average yearly amount of pensions paid as of 31 December for the years indicated
(in thousands of euros)

CPUG

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1997	15.765	10.752	14.829	7.166	10.197	10.122	15.545	10.297	12.647
1998	16.119	11.089	15.108	8.406	10.383	10.336	15.932	10.523	12.933
1999	16.548	11.472	15.489	8.964	10.525	10.488	16.368	10.724	13.259
2000	16.896	11.997	15.843	8.706	10.641	10.593	16.699	10.943	13.557
2001	17.343	12.591	16.283 (1)	4.954	10.790	10.511 (1)	16.804	11.200	13.729 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Table AS5-14 - Average yearly amount of pensions paid as of 31 December for the years indicated
(in thousands of euros)

CTPS

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Totale
1997	18.796	15.839	17.479	8.423	11.617	11.348	18.282	14.373	16.072
1998	19.337	16.189	17.922	8.982	12.047	11.781	18.813	14.521	16.380
1999	19.878	16.524	18.351	8.690	12.265	11.948	19.301	14.816	16.747
2000	20.360	16.828	18.733	8.855	12.437	12.110	19.747	15.088	17.079
2001	21.150	17.119	19.285 (1)	7.211	12.080	11.538 (1)	20.233	15.104	17.291 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Table AS5-15 - Average yearly amount of pensions paid as of 31 December for the years indicated
(in thousands of euros)

INPDAP

Year	DIRECT PENSIONS			SURVIVOR PENSIONS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Totale
1997	17.840	13.628	16.026	8.048	11.234	10.984	17.417	12.875	14.932
1998	18.349	13.962	16.444	8.602	11.662	11.415	17.915	13.095	15.267
1999	18.848	14.287	16.849	8.426	11.846	11.561	18.370	13.362	15.606
2000	19.308	14.585	17.217	8.557	11.995	11.700	18.794	13.608	15.917
2001	20.067	15.108	17.776 (1)	6.920	11.569	11.057 (1)	19.265	13.745	16.129 (1)

(1) Total for 2001 includes pension entries which had no gender classification.

Table AS5-16 - Distribution by pension type and gender of the most important variables (31/12/2001)
(in thousands of euros)

INPDAP

	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)
Number of pensions	825,460	961,334	**1,786,944**	126,846	25,766	**153,369**	390,126	36,679	**426,888**	1,342,432	1.023.779	**2,367,201**
Average yearly gross amount of pension	15.108	20.067	**17.775**	10.617	5.805	**9.772**	11.879	7.703	**11.519**	13.745	19.266	**16.127**
Average age	66	68	**67**	63	42	**59**	76	65	**75**	68	67	**68**
Number of pensions with family allowances	11,872	140,913	**152,785**	3,713	249	**3,962**	3,008	350	**3,358**	18,593	141,512	**160,105**
Average yearly amount of family allowances	0.734	0.426	**0.450**	1.419	1.233	**1.407**	0.826	0.837	**0.827**	0.885	0.429	**0.482**

(1) Total includes pension entries which had no gender classification.

Table AS5-17 - Distribution by pension type and gender of the most important variables 31/12/2001
(in thousands of euros)

CPDEL

	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)
Number of pensions	324,559	370,709	**695,301**	44,073	8,626	**53,018**	133,581	12,511	**146,125**	502,213	391,846	**894,444**
Average yearly gross amount of pension	11.950	16.922	**14.601**	8.967	4.897	**8.301**	10.642	7.213	**10.348**	11.340	16.348	**13.535**
Average age	64	68	**66**	59	38	**56**	75	63	**74**	66	67	**67**
Number of pensions with family allowances	8,076	79,544	**87,620**	1,854	105	**1,959**	1,223	142	**1,365**	11,153	79,791	**90,944**
Average yearly amount of family allowances	0.714	0.394	**0.423**	1.538	1.232	**1.522**	0.887	0.903	**0.889**	0.870	0.396	**0.454**

(1) Total includes pension entries which had no gender calssification.

Table AS5-18 - Distribution by pension type and gender of the most important variables 31/12/2001
(in thousands of euros)

CPI

	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)
Number of pensions	11,590	188	**11,778**	39	181	**222**	67	313	**381**	11,696	682	**12,381**
Average yearly gross amount of pension	13.178	24.540	**13.359**	5.089	6.453	**6.212**	8.181	7.213	**7.383**	13.122	11.788	**13.048**
Average age	65	72	**65**	32	52	**48**	67	70	**69**	65	66	**65**
Number of pensions with family allowances	102	12	**114**	2	1	**3**	0	1	**1**	104	14	**118**
Average yearly amount of family allowances	0.905	0.645	**0.878**	1.793	1.296	**1.627**	0.000	0.705	**0.705**	0.922	0.695	**0.895**

(1) Total includes pension entries which had no gender calssification.

Table AS5-19 - Distribution by pension type and gender of the most important variables (31/12/2001)
(in thousands of euros)

CPUG

	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)
Number of pensions	284	990	**1,274**	351	34	**388**	612	11	**623**	1,247	1,035	**2,285**
Average yearly gross amount of pension	12.591	17.343	**16.283**	10.886	3.929	**10.272**	10.734	8.123	**10.688**	11.200	16.804	**13.742**
Average age	64	73	**71**	67	36	**64**	78	62	**78**	72	72	**72**
Number of pensions with family allowances	2	85	**87**	8	0	**8**	1	0	**1**	11	85	**96**
Average yearly amount of family allowances	1.054	0.342	**0.359**	1.233	0.000	**1.233**	0.853	0.000	**0.853**	1.166	0.342	**0.437**

(1) Total includes pension entries which had no gender calssification.

Table AS5-20 - Distribution by pension type and gender of the most important variables (31/12/2001)
(in thousands of euros)

CPS

	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)
Number of pensions	3,886	25,933	**29,820**	4,637	775	**5,438**	10,374	337	**10,714**	18,897	27,045	**45,972**
Average yearly gross amount of pension	33.685	41.584	**40.555**	16.298	8.004	**15.110**	16.659	11.378	**16.493**	20.071	40.246	**31.948**
Average age	64	71	**70**	59	25	**54**	75	46	**74**	69	69	**69**
Number of pensions with family allowances	2	41	**43**	44	2	**46**	23	0	**23**	69	43	**112**
Average yearly amount of family allowances	0.661	0.509	**0.516**	1.412	1.141	**1.401**	0.624	0.000	**0.624**	1.128	0.538	**0.901**

(1) Total includes pension entries which had no gender calssification.

Table AS5-21 - Distribution by pension type and gender of the most important variables (31/12/2001)
(in thousands of euros)

CTPS

	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)	Female	Male	Total (1)
Number of pensions	485,141	563,514	**1,048,771**	77,746	16,150	**94,303**	245,492	23,507	**260,045**	808,379	603,171	**1,412,119**
Average yearly gross amount of pension	17.119	21.150	**19.285**	11.216	6.181	**10.350**	12.354	7.918	**11.966**	15.104	20.233	**17.296**
Average age	67	68	**68**	65	45	**62**	76	66	**75**	70	67	**69**
Number of pensions with family allowances	3,690	61,231	**64,921**	1,805	141	**1,946**	1,761	207	**1,968**	7,256	61,579	**68,835**
Average yearly amount of family allowances	0.772	0.469	**0.486**	1.297	1.234	**1.292**	0.786	0.792	**0.787**	0.906	0.471	**0.517**

(1) Total includes pension entries which had no gender calssification.

Table AS5-22 - Distribution by age class, pension type and gender of pensions paid as of 31/12/2001

INPDAP

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0 - 20	-	-	**-**	7,548	7,708	**15,256**	1,885	2,003	**3,888**	9,433	9,711	**19,144**
20 - 25	8	4	**12**	3,651	3,327	**6,978**	1,279	1,149	**2,428**	4,938	4,480	**9,418**
25 - 30	7	55	**62**	248	240	**488**	204	178	**382**	459	473	**932**
30 - 35	42	251	**293**	428	140	**568**	235	251	**486**	705	642	**1,347**
35 - 40	184	959	**1,143**	1,236	255	**1,491**	530	514	**1,044**	1,950	1,728	**3,678**
40 - 45	2,406	2,912	**5,318**	2,831	506	**3,337**	1,157	744	**1,901**	6,394	4,162	**10,556**
45 - 50	29,337	16,356	**45,693**	5,198	1,093	**6,291**	2,361	1,188	**3,549**	36,896	18,637	**55,533**
50 - 55	80,823	55,333	**136,156**	9,060	1,961	**11,021**	5,708	1,944	**7,652**	95,591	59,238	**154,829**
55 - 60	130,778	118,410	**249,188**	11,626	2,089	**13,715**	11,016	2,425	**13,441**	153,420	122,924	**276,344**
60 - 65	170,762	165,218	**335,980**	15,999	2,350	**18,349**	24,594	3,659	**28,253**	211,355	171,227	**382,582**
65 - 70	132,404	175,532	**307,936**	17,529	1,969	**19,498**	41,911	3,978	**45,889**	191,844	181,479	**373,323**
70 - 75	113,691	163,826	**277,517**	17,506	1,781	**19,287**	69,528	4,715	**74,243**	200,725	170,322	**371,047**
75 - 80	88,342	134,297	**222,639**	15,209	1,306	**16,515**	89,928	5,697	**95,625**	193,479	141,300	**334,779**
> = 80	76,653	128,133	**204,786**	18,584	1,020	**19,604**	138,605	8,104	**146,709**	233,842	137,257	**371,099**
TOTAL	**825,437**	**961,286**	**1,786,723**	**126,653**	**25,745**	**152,398**	**388,941**	**36,549**	**425,490**	**1,341,031**	**1,023,580**	**2,364,611**

Total doesn't include 2,590 pension entries which had no gender and age classification.

Table AS5-23 - Percentage breakdown of pensions paid as of 31/12/2001 by age class, pension type and gender

INPDAP

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
under 49	**3.9**	**2.1**	**2.9**	**16.7**	**51.5**	**22.6**	**2.0**	**16.5**	**3.2**	**4.5**	**3.9**	**4.3**
50-64	**46.3**	**35.3**	**40.4**	**29.0**	**24.9**	**28.3**	**10.6**	**22.0**	**11.6**	**34.3**	**34.5**	**34.4**
of which:												
50-54	9.8	5.8	7.6	7.2	7.6	7.2	1.5	5.3	1.8	7.1	5.8	6.5
55-59	15.8	12.3	13.9	9.2	8.1	9.0	2.8	6.6	3.2	11.4	12.0	11.7
60-64	20.7	17.2	18.8	12.6	9.1	12.0	6.3	10.0	6.6	15.8	16.7	16.2
65-74	**29.8**	**35.3**	**32.8**	**27.7**	**14.6**	**25.4**	**28.7**	**23.8**	**28.2**	**29.3**	**34.4**	**31.5**
of which:												
65-69	16.0	18.3	17.2	13.8	7.6	12.8	10.8	10.9	10.8	14.3	17.7	15.8
70-74	13.8	17.0	15.5	13.8	6.9	12.7	17.9	12.9	17.4	15.0	16.6	15.7
over 75	**20.0**	**27.3**	**23.9**	**26.7**	**9.0**	**23.7**	**58.8**	**37.8**	**57.0**	**31.9**	**27.2**	**29.9**
TOTAL	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**

Table AS5-24 - Distribution by age class, pension type and gender of pensions paid as of 31/12/2001

CPDEL

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0 - 20	-	-	**-**	3,118	3,108	**6,226**	716	796	**1,512**	3,834	3,904	**7,738**
20 - 25	1	1	**2**	1,230	1,015	**2,245**	390	303	**693**	1,621	1,319	**2,940**
25 - 30	4	6	**10**	83	79	**162**	73	65	**138**	160	150	**310**
30 - 35	27	17	**44**	159	69	**228**	89	93	**182**	275	179	**454**
35 - 40	89	91	**180**	461	111	**572**	186	168	**354**	736	370	**1,106**
40 - 45	1,105	338	**1,443**	1,331	245	**1,576**	385	251	**636**	2,821	834	**3,655**
45 - 50	16,390	1,342	**17,732**	2,440	476	**2,916**	834	426	**1,260**	19,664	2,244	**21,908**
50 - 55	42,258	16,071	**58,329**	4,045	644	**4,689**	2,330	763	**3,093**	48,633	17,478	**66,111**
55 - 60	55,331	53,925	**109,256**	4,976	643	**5,619**	4,516	1,086	**5,602**	64,823	55,654	**120,477**
60 - 65	67,504	77,123	**144,627**	6,691	723	**7,414**	9,637	1,552	**11,189**	83,832	79,398	**163,230**
65 - 70	52,258	76,766	**129,024**	7,012	616	**7,628**	15,615	1,659	**17,274**	74,885	79,041	**153,926**
70 - 75	39,863	63,820	**103,683**	5,792	448	**6,240**	24,588	1,705	**26,293**	70,243	65,973	**136,216**
75 - 80	26,670	44,099	**70,769**	3,808	268	**4,076**	30,328	1,617	**31,945**	60,806	45,984	**106,790**
> = 80	23,044	37,099	**60,143**	2,906	180	**3,086**	43,421	1,974	**45,395**	69,371	39,253	**108,624**
TOTAL	**324,544**	**370,698**	**695,242**	**44,052**	**8,625**	**52,677**	**133,108**	**12,458**	**145,566**	**501,704**	**391,781**	**893,485**

Total doesn't include 959 pension entries which had no gender and age classification.

Table AS5-25 - Percentage breakdown of pensions paid af of 31/12/2001 by age class, pension type and gender
CPDEL

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
under 49	**5.4**	**0.5**	**2.8**	**20.0**	**59.2**	**26.4**	**2.0**	**16.9**	**3.3**	**5.8**	**2.3**	**4.3**
50-64	**50.9**	**39.7**	**44.9**	**35.7**	**23.3**	**33.6**	**12.4**	**27.3**	**13.7**	**39.3**	**38.9**	**39.2**
of which:												
50-54	13.0	4.3	8.4	9.2	7.5	8.9	1.8	6.1	2.1	9.7	4.5	7.4
55-59	17.0	14.5	15.7	11.3	7.5	10.7	3.4	8.7	3.8	12.9	14.2	13.5
60-64	20.8	20.8	20.8	15.2	8.4	14.1	7.2	12.5	7.7	16.7	20.3	18.3
65-74	**28.4**	**37.9**	**33.5**	**29.1**	**12.3**	**26.3**	**30.2**	**27.0**	**29.9**	**28.9**	**37.0**	**32.5**
of which:												
65-69	16.1	20.7	18.6	15.9	7.1	14.5	11.7	13.3	11.9	14.9	20.2	17.2
70-74	12.3	17.2	14.9	13.1	5.2	11.8	18.5	13.7	18.1	14.0	16.8	15.2
over 75	**15.3**	**21.9**	**18.8**	**15.2**	**5.2**	**13.6**	**55.4**	**28.8**	**53.1**	**25.9**	**21.8**	**24.1**
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-26 - Distribution by age class, pension type and gender of pensions paid as of 31/12/2001

CPI

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0 - 20	-	-	**-**	16	27	**43**	8	13	**21**	24	40	**64**
20 - 25	-	-	**-**	10	7	**17**	5	3	**8**	15	10	**25**
25 - 30	-	-	**-**	1	-	**1**	-	1	**1**	1	1	**2**
30 - 35	-	-	**-**	1	1	**2**	-	2	**2**	1	3	**4**
35 - 40	-	-	**-**	-	4	**4**	-	-	**-**	-	4	**4**
40 - 45	7	-	**7**	-	5	**5**	-	3	**3**	7	8	**15**
45 - 50	861	1	**862**	1	17	**18**	1	5	**6**	863	23	**886**
50 - 55	1,638	2	**1,640**	-	18	**18**	2	19	**21**	1,640	39	**1,679**
55 - 60	1,551	18	**1,569**	-	28	**28**	2	24	**26**	1,553	70	**1,623**
60 - 65	1,762	26	**1,788**	3	22	**25**	1	24	**25**	1,766	72	**1,838**
65 - 70	1,609	30	**1,639**	3	19	**22**	5	30	**35**	1,617	79	**1,696**
70 - 75	1,329	35	**1,364**	1	15	**16**	7	44	**51**	1,337	94	**1,431**
75 - 80	1,258	35	**1,293**	1	10	**11**	10	47	**57**	1,269	92	**1,361**
> = 80	1,575	41	**1,616**	2	8	**10**	26	97	**123**	1,603	146	**1,749**
TOTAL	**11,590**	**188**	**11,778**	**39**	**181**	**220**	**67**	**312**	**379**	**11,696**	**681**	**12,377**

Total doesn't include 4 pension entries which had no gender and age classification.

Table AS5-27 - Percentage breakdown of pensions paid af of 31/12/2001 by age class, pension type and gender

CPI

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
under 49	**7.5**	**0.5**	**7.4**	**74.4**	**33.7**	**40.9**	**20.9**	**8.7**	**10.8**	**7.8**	**13.1**	**8.1**
50-64	**42.7**	**24.5**	**42.4**	**7.7**	**37.6**	**32.3**	**7.5**	**21.5**	**19.0**	**42.4**	**26.6**	**41.5**
of which:												
50-54	14.1	1.1	13.9	0.0	9.9	8.2	3.0	6.1	5.5	14.0	5.7	13.6
55-59	13.4	9.6	13.3	0.0	15.5	12.7	3.0	7.7	6.9	13.3	10.3	13.1
60-64	15.2	13.8	15.2	7.7	12.2	11.4	1.5	7.7	6.6	15.1	10.6	14.9
65-74	**25.3**	**34.6**	**25.5**	**10.3**	**18.8**	**17.3**	**17.9**	**23.7**	**22.7**	**25.3**	**25.4**	**25.3**
of which:												
65-69	13.9	16.0	13.9	7.7	10.5	10.0	7.5	9.6	9.2	13.8	11.6	13.7
70-74	11.5	18.6	11.6	2.6	8.3	7.3	10.4	14.1	13.5	11.4	13.8	11.6
over 75	**24.4**	**40.4**	**24.7**	**7.7**	**9.9**	**9.5**	**53.7**	**46.2**	**47.5**	**24.6**	**34.9**	**25.1**
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-28 - Distribution by age class, pension type and gender of pensions paid as of 31/12/2001

CPUG

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0 - 20	-	-	**-**	14	12	**26**	-	-	**-**	14	12	**26**
20 - 25	-	-	**-**	6	5	**11**	1	1	**2**	7	6	**13**
25 - 30	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**
30 - 35	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**
35 - 40	-	-	**-**	3	1	**4**	1	-	**1**	4	1	**5**
40 - 45	2	-	**2**	8	1	**9**	-	1	**1**	10	2	**12**
45 - 50	25	2	**27**	6	2	**8**	1	1	**2**	32	5	**37**
50 - 55	17	7	**24**	16	3	**19**	5	-	**5**	38	10	**48**
55 - 60	36	28	**64**	28	3	**31**	11	-	**11**	75	31	**106**
60 - 65	65	114	**179**	42	3	**45**	26	1	**27**	133	118	**251**
65 - 70	56	159	**215**	58	1	**59**	61	2	**63**	175	162	**337**
70 - 75	49	248	**297**	54	2	**56**	104	2	**106**	207	252	**459**
75 - 80	21	263	**284**	48	1	**49**	124	1	**125**	193	265	**458**
> = 80	13	169	**182**	68	-	**68**	271	1	**272**	352	170	**522**
TOTAL	**284**	**990**	**1,274**	**351**	**34**	**385**	**605**	**10**	**615**	**1,240**	**1,034**	**2,274**

Total doesn't include 11 pension entries which had no gender and age classification,

Table AS5-29 - Percentage breakdown of pensions paid af of 31/12/2001 by age class, pension type and gender

CPUG

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
under 49	**9.5**	**0.2**	**2.3**	**10.5**	**61.8**	**15.1**	**0.5**	**30.0**	**1.0**	**5.4**	**2.5**	**4.1**
50-64	**41.5**	**15.1**	**21.0**	**24.5**	**26.5**	**24.7**	**6.9**	**10.0**	**7.0**	**19.8**	**15.4**	**17.8**
of which:												
50-54	6.0	0.7	1.9	4.6	8.8	4.9	0.8	0.0	0.8	3.1	1.0	2.1
55-59	12.7	2.8	5.0	8.0	8.8	8.1	1.8	0.0	1.8	6.0	3.0	4.7
60-64	22.9	11.5	14.1	12.0	8.8	11.7	4.3	10.0	4.4	10.7	11.4	11.0
65-74	**37.0**	**41.1**	**40.2**	**31.9**	**8.8**	**29.9**	**27.3**	**40.0**	**27.5**	**30.8**	**40.0**	**35.0**
of which:												
65-69	19.7	16.1	16.9	16.5	2.9	15.3	10.1	20.0	10.2	14.1	15.7	14.8
70-74	17.3	25.1	23.3	15.4	5.9	14.5	17.2	20.0	17.2	16.7	24.4	20.2
over 75	**12.0**	**43.6**	**36.6**	**33.0**	**2.9**	**30.4**	**65.3**	**20.0**	**64.6**	**44.0**	**42.1**	**43.1**
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-30 - Distribution by age class, pension type and gender of pensions paid as of 31/12/2001

CPS

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0 - 20	-	-	**-**	349	411	**760**	67	68	**135**	416	479	**895**
20 - 25	-	-	**-**	183	195	**378**	53	62	**115**	236	257	**493**
25 - 30	-	-	**-**	8	17	**25**	7	1	**8**	15	18	**33**
30 - 35	-	-	**-**	9	2	**11**	8	3	**11**	17	5	**22**
35 - 40	-	-	**-**	46	8	**54**	16	9	**25**	62	17	**79**
40 - 45	4	5	**9**	117	6	**123**	18	17	**35**	139	28	**167**
45 - 50	195	28	**223**	271	24	**295**	71	14	**85**	537	66	**603**
50 - 55	579	479	**1,058**	386	38	**424**	154	18	**172**	1,119	535	**1,654**
55 - 60	701	1,859	**2,560**	446	15	**461**	324	15	**339**	1,471	1,889	**3,360**
60 - 65	632	3,277	**3,909**	608	16	**624**	761	27	**788**	2,001	3,320	**5,321**
65 - 70	542	4,900	**5,442**	688	11	**699**	1,275	17	**1,292**	2,505	4,928	**7,433**
70 - 75	640	6,647	**7,287**	701	10	**711**	1,978	26	**2,004**	3,319	6,683	**10,002**
75 - 80	377	5,615	**5,992**	486	15	**501**	2,173	25	**2,198**	3,036	5,655	**8,691**
> = 80	214	3,123	**3,337**	337	7	**344**	3,432	33	**3,465**	3,983	3,163	**7,146**
TOTAL	**3,884**	**25,933**	**29,817**	**4,635**	**775**	**5,410**	**10,337**	**335**	**10,672**	**18,856**	**27,043**	**45,899**

Total doesn't include 73 pension entries which had no gender and age classification,

Table AS5-31 - Percentage breakdown of pensions paid af of 31/12/2001 by age class, pension type and gender

CPS

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
under 49	**5.1**	**0.1**	**0.8**	**21.2**	**85.5**	**30.4**	**2.3**	**51.9**	**3.9**	**7.5**	**3.2**	**5.0**
50-64	**49.2**	**21.7**	**25.2**	**31.1**	**8.9**	**27.9**	**12.0**	**17.9**	**12.2**	**24.3**	**21.2**	**22.5**
of which:												
50-54	14.9	1.8	3.5	8.3	4.9	7.8	1.5	5.4	1.6	5.9	2.0	3.6
55-59	18.0	7.2	8.6	9.6	1.9	8.5	3.1	4.5	3.2	7.8	7.0	7.3
60-64	16.3	12.6	13.1	13.1	2.1	11.5	7.4	8.1	7.4	10.6	12.3	11.6
65-74	**30.4**	**44.5**	**42.7**	**30.0**	**2.7**	**26.1**	**31.5**	**12.8**	**30.9**	**30.9**	**42.9**	**38.0**
of which:												
65-69	14.0	18.9	18.3	14.8	1.4	12.9	12.3	5.1	12.1	13.3	18.2	16.2
70-74	16.5	25.6	24.4	15.1	1.3	13.1	19.1	7.8	18.8	17.6	24.7	21.8
over 75	**15.2**	**33.7**	**31.3**	**17.8**	**2.8**	**15.6**	**54.2**	**17.3**	**53.1**	**37.2**	**32.6**	**34.5**
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-32 - Distribution by age-group, pension type and gender of pensions paid as of 31/12/2001

CTPS

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0 - 20	-	-	**-**	4,051	4,150	**8,201**	1,094	1,126	**2,220**	5,145	5,276	**10,421**
20 - 25	7	3	**10**	2,222	2,105	**4,327**	830	780	**1,610**	3,059	2,888	**5,947**
25 - 30	3	49	**52**	156	144	**300**	124	111	**235**	283	304	**587**
30 - 35	15	234	**249**	259	68	**327**	138	153	**291**	412	455	**867**
35 - 40	95	868	**963**	726	131	**857**	327	337	**664**	1,148	1,336	**2,484**
40 - 45	1,288	2,569	**3,857**	1,375	249	**1,624**	754	472	**1,226**	3,417	3,290	**6,707**
45 - 50	11,866	14,983	**26,849**	2,480	574	**3,054**	1,454	742	**2,196**	15,800	16,299	**32,099**
50 - 55	36,331	38,774	**75,105**	4,613	1,258	**5,871**	3,217	1,144	**4,361**	44,161	41,176	**85,337**
55 - 60	73,159	62,580	**135,739**	6,176	1,400	**7,576**	6,163	1,300	**7,463**	85,498	65,280	**150,778**
60 - 65	100,799	84,678	**185,477**	8,655	1,586	**10,241**	14,169	2,055	**16,224**	123,623	88,319	**211,942**
65 - 70	77,939	93,677	**171,616**	9,768	1,322	**11,090**	24,955	2,270	**27,225**	112,662	97,269	**209,931**
70 - 75	71,810	93,076	**164,886**	10,958	1,306	**12,264**	42,851	2,938	**45,789**	125,619	97,320	**222,939**
75 - 80	60,016	84,285	**144,301**	10,866	1,012	**11,878**	57,293	4,007	**61,300**	128,175	89,304	**217,479**
> = 80	51,807	87,701	**139,508**	15,271	825	**16,096**	91,455	5,999	**97,454**	158,533	94,525	**253,058**
TOTAL	**485,135**	**563,477**	**1,048,612**	**77,576**	**16,130**	**93,706**	**244,824**	**23,434**	**268,258**	**807,535**	**603,041**	**1,410,576**

Total doesn't include 1,543 pension entries which had no gender and age classification,

Table AS5-33 - Percentage breakdown of pensions paid af of 31/12/2001 by age class, pension type and gender

CTPS

Age class	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
under 49	**2.7**	**3.3**	**3.0**	**14.5**	**46.0**	**19.9**	**1.9**	**15.9**	**3.1**	**3.6**	**4.9**	**4.2**
50-64	**43.3**	**33.0**	**37.8**	**25.1**	**26.3**	**25.3**	**9.6**	**19.2**	**10.5**	**31.4**	**32.3**	**31.8**
of which:												
50-54	7.5	6.9	7.2	5.9	7.8	6.3	1.3	4.9	1.6	5.5	6.8	6.0
55-59	15.1	11.1	12.9	8.0	8.7	8.1	2.5	5.5	2.8	10.6	10.8	10.7
60-64	20.8	15.0	17.7	11.2	9.8	10.9	5.8	8.8	6.0	15.3	14.6	15.0
65-74	**30.9**	**33.1**	**32.1**	**26.7**	**16.3**	**24.9**	**27.7**	**22.2**	**27.2**	**29.5**	**32.3**	**30.7**
of which:												
65-69	16.1	16.6	16.4	12.6	8.2	11.8	10.2	9.7	10.1	14.0	16.1	14.9
70-74	14.8	16.5	15.7	14.1	8.1	13.1	17.5	12.5	17.1	15.6	16.1	15.8
over 75	**23.0**	**30.5**	**27.1**	**33.7**	**11.4**	**29.9**	**60.8**	**42.7**	**59.2**	**35.5**	**30.5**	**33.4**
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-34 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	1,585	3,170	**4,755**	14,533	9,527	**24,060**	10,242	4,843	**15,085**	26,360	17,540	**43,900**
258.24 - 516.46	19,250	9,939	**29,189**	19,762	8,401	**28,163**	31,950	12,191	**44,141**	70,962	30,531	**101,493**
516.47 - 774.69	143,132	41,290	**184,422**	25,824	4,225	**30,049**	82,488	10,431	**92,919**	251,444	55,946	**307,390**
774.70 - 1,032.91	226,459	161,270	**387,729**	38,787	2,669	**41,456**	157,462	7,259	**164,721**	422,708	171,198	**593,906**
1,032.92 - 1,291.14	152,885	235,117	**388,002**	17,689	616	**18,305**	80,088	1,412	**81,500**	250,662	237,145	**487,807**
1,291.15 - 1,549.37	121,253	171,800	**293,053**	4,040	119	**4,159**	11,076	212	**11,288**	136,369	172,131	**308,500**
1,549.38 - 1,807.60	97,300	138,845	**236,145**	1,841	57	**1,898**	4,945	93	**5,038**	104,086	138,995	**243,081**
1,807.61 - 2,065.83	45,142	78,152	**123,294**	1,397	40	**1,437**	3,835	62	**3,897**	50,374	78,254	**128,628**
2,065.84 - 2,324.06	8,218	35,671	**43,889**	897	18	**915**	2,733	39	**2,772**	11,848	35,728	**47,576**
2,324.07 - 2,582.28	2,253	19,665	**21,918**	600	17	**617**	1,658	23	**1,681**	4,511	19,705	**24,216**
> 2,582.28	7,983	66,415	**74,398**	1,476	77	**1,553**	3,649	114	**3,763**	13,108	66,606	**79,714**
TOTAL	**825,460**	**961,334**	**1,786,794**	**126,846**	**25,766**	**152,612**	**390,126**	**36,679**	**426,805**	**1,342,432**	**1,023,779**	**2,366,211**

Total doesn't include 990 pension entries which had no gender and age classification.

Table AS5-35 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

INPDAP

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	2.5	1.4	1.9	27.0	69.6	34.2	10.8	46.4	13.9	7.2	4.7	6.1
516.47 - 1,032.91	44.8	21.1	32.0	50.9	26.8	46.9	61.5	48.2	60.4	50.2	22.2	38.1
1,032.92 - 1,549.37	33.2	42.3	38.1	17.1	2.9	14.7	23.4	4.4	21.7	28.8	40.0	33.7
> 1,549.37	19.5	35.2	28.0	4.9	0.8	4.2	4.3	0.9	4.0	13.7	33.1	22.1
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-36 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

CPDEL

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	697	228	**925**	5,142	3,888	**9,030**	3,239	1,962	**5,201**	9,078	6,078	**15,156**
258.24 - 516.46	13,150	2,768	**15,918**	8,563	2,633	**11,196**	11,698	4,176	**15,874**	33,411	9,577	**42,988**
516.47 - 774.69	104,936	20,342	**125,278**	13,476	1,530	**15,006**	40,856	4,229	**45,085**	159,268	26,101	**185,369**
774.70 - 1,032.91	120,537	95,750	**216,287**	13,118	461	**13,579**	58,874	1,852	**60,726**	192,529	98,063	**290,592**
1,032.92 - 1,291.14	51,937	123,105	**175,042**	2,435	58	**2,493**	14,304	169	**14,473**	68,676	123,332	**192,008**
1,291.15 - 1,549.37	20,785	68,637	**89,422**	620	23	**643**	2,636	50	**2,686**	24,041	68,710	**92,751**
1,549.38 - 1,807.60	6,697	24,623	**31,320**	269	9	**278**	884	23	**907**	7,850	24,655	**32,505**
1,807.61 - 2,065.83	2,310	11,514	**13,824**	179	9	**188**	432	9	**441**	2,921	11,532	**14,453**
2,065.84 - 2,324.06	762	4,937	**5,699**	83	1	**84**	217	5	**222**	1,062	4,943	**6,005**
2,324.07 - 2,582.28	582	3,604	**4,186**	41	4	**45**	132	6	**138**	755	3,614	**4,369**
> 2,582.28	2,166	15,201	**17,367**	147	10	157	309	30	**339**	2,622	15,241	**17,863**
TOTAL	**324,559**	**370,709**	**695,268**	**44,073**	**8,626**	**52,699**	**133,581**	**12,511**	**146,092**	**502,213**	**391,846**	**894,059**

Total doesn't include 385 pension entries which had no gender and age classification.

Table AS5-37 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

CPDEL

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	4.3	0.8	2.4	31.1	75.6	38.4	11.2	49.1	14.4	8.5	4.0	6.5
516.47 - 1,032.91	69.5	31.3	49.1	60.3	23.1	54.2	74.7	48.6	72.4	70.0	31.7	53.2
1,032.92 - 1,549.37	22.4	51.7	38.0	6.9	0.9	6.0	12.7	1.8	11.7	18.5	49.0	31.9
> 1,549.37	3.9	16.2	10.4	1.6	0.4	1.4	1.5	0.6	1.4	3.0	15.3	8.4
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-38 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

CPI

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0,00 - 258.23	7	-	**7**	20	52	**72**	13	42	**55**	40	94	**134**
258.24 - 516.46	237	2	**239**	7	67	**74**	11	113	**124**	255	182	**437**
516.47 - 774.69	3,244	13	**3,257**	5	43	**48**	20	93	**113**	3,269	149	**3,418**
774.70 - 1,032.91	3,435	39	**3,474**	6	18	**24**	15	56	**71**	3,456	113	**3,569**
1,032.92 - 1,291.14	2,836	51	**2,887**	-	-	**-**	7	7	**14**	2,843	58	**2,901**
1,291.15 - 1,549.37	1,352	45	**1,397**	1	-	**1**	-	-	**-**	1,353	45	**1,398**
1,549.38 - 1,807.60	357	25	**382**	-	-	**-**	1	1	**2**	358	26	**384**
1,807.61 - 2,065.83	73	5	**78**	-	-	**-**	-	-	**-**	73	5	**78**
2,065.84 - 2,324.06	10	2	**12**	-	-	**-**	-	-	**-**	10	2	**12**
2,324.07 - 2,582.28	4	-	**4**	-	-	**-**	-	-	**-**	4	-	**4**
> 2,582.28	35	6	**41**	-	1	**1**	-	1	**1**	35	8	**43**
TOTAL	**11,590**	**188**	**11,778**	**39**	**181**	**220**	**67**	**313**	**380**	**11,696**	**682**	**12,378**

Total doesn't include 3 pension entries which had no gender and age classification.

Table AS5-39 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

CPI

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	2.1	1.1	2.1	69.2	65.7	66.4	35.8	49.5	47.1	2.5	40.5	4.6
516.47 - 1,032.91	57.6	27.7	57.1	28.2	33.7	32.7	52.2	47.6	48.4	57.5	38.4	56.4
1,032.92 - 1,549.37	36.1	51.1	36.4	2.6	-	0.5	10.4	2.2	3.7	35.9	15.1	34.7
> 1,549.37	4.1	20.2	4.4	-	0.6	0.5	1.5	0.6	0.8	4.1	6.0	4.2
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-40 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

CPUG

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	1	-	**1**	23	16	**39**	9	1	**10**	33	17	**50**
258.24 - 516.46	8	2	**10**	54	13	**67**	57	3	**60**	119	18	**137**
516.47 - 774.69	75	29	**104**	71	3	**74**	139	3	**142**	285	35	**320**
774.70 - 1,032.91	89	110	**199**	144	2	**146**	364	3	**367**	597	115	**712**
1,032.92 - 1,291.14	73	301	**374**	54	-	**54**	39	1	**40**	166	302	**468**
1,291.15 - 1,549.37	33	375	**408**	2	-	**2**	1	-	**1**	36	375	**411**
1,549.38 - 1,807.60	4	156	**160**	1	-	**1**	-	-	**-**	5	156	**161**
1,807.61 - 2,065.83	-	4	**4**	-	-	**-**	-	-	**-**	-	4	**4**
2,065.84 - 2,324.06	-	3	**3**	-	-	**-**	-	-	**-**	-	3	**3**
2,324.07 - 2,582.28	-	3	**3**	-	-	**-**	1	-	**1**	1	3	**4**
> 2,582.28	1	7	**8**	2	-	**2**	2	-	**2**	5	7	**12**
TOTAL	**284**	**990**	**1,274**	**351**	**34**	**385**	**612**	**11**	**623**	**1,247**	**1,035**	**2,282**

Total doesn't include 3 pension entries which had no gender and age classification.

Table AS5-41 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

CPUG

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	3.2	0.2	0.9	21.9	85.3	27.5	10.8	36.4	11.2	12.2	3.4	8.2
516.47 - 1,032.91	57.7	14.0	23.8	61.3	14.7	57.1	82.2	54.5	81.7	70.7	14.5	45.2
1,032.92 - 1,549.37	37.3	68.3	61.4	16.0	-	14.5	6.5	9.1	6.6	16.2	65.4	38.5
> 1,549.37	1.8	17.5	14.0	0.9	-	0.8	0.5	-	0.5	0.9	16.7	8.1
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-42 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

CPS

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	3	12	**15**	209	136	**345**	188	28	**216**	400	176	**576**
258.24 - 516.46	33	149	**182**	621	329	**950**	713	78	**791**	1,367	556	**1,923**
516.47 - 774.69	171	485	**656**	627	158	**785**	1,273	72	**1,345**	2,071	715	**2,786**
774.70 - 1,032.91	388	1,343	**1,731**	841	60	**901**	2,433	67	**2,500**	3,662	1,470	**5,132**
1,032.92 - 1,291.14	345	2,326	**2,671**	663	24	**687**	2,064	50	**2,114**	3,072	2,400	**5,472**
1,291.15 - 1,549.37	321	1,992	**2,313**	439	27	**466**	1,099	14	**1,113**	1,859	2,033	**3,892**
1,549.38 - 1,807.60	282	1,344	**1,626**	328	10	**338**	703	10	**713**	1,313	1,364	**2,677**
1,807.61 - 2,065.83	263	1,206	**1,469**	286	7	**293**	553	6	**559**	1,102	1,219	**2,321**
2,065.84 - 2,324.06	212	981	**1,193**	197	6	**203**	388	4	**392**	797	991	**1,788**
2,324.07 - 2,582.28	229	1,032	**1,261**	139	4	**143**	295	1	**296**	663	1,037	**1,700**
> 2,582.28	1,639	15,063	**16,702**	287	14	**301**	665	7	**672**	2,591	15,084	**17,675**
TOTAL	**3,886**	**25,933**	**29,819**	**4,637**	**775**	**5,412**	**10,374**	**337**	**10,711**	**18,897**	**27,045**	**45,942**

Total doesn't include 30 pension entries which had no gender and age classification.

Table AS5-43 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

CPS

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	0.9	0.6	0.7	17.9	60.0	23.9	8.7	31.5	9.4	9.4	2.7	5.4
516.47 - 1,032.91	14.4	7.0	8.0	31.7	28.1	31.2	35.7	41.2	35.9	30.3	8.1	17.2
1,032.92 - 1,549.37	17.1	16.7	16.7	23.8	6.6	21.3	30.5	19.0	30.1	26.1	16.4	20.4
> 1,549.37	67.6	75.7	74.6	26.7	5.3	23.6	25.1	8.3	24.6	34.2	72.8	56.9
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-44 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

CTPS

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	877	2,930	**3,807**	9,139	5,435	**14,574**	6,793	2,810	**9,603**	16,809	11,175	**27,984**
258.24 - 516.46	5,822	7,018	**12,840**	10,517	5,359	**15,876**	19,471	7,821	**27,292**	35,810	20,198	**56,008**
516.47 - 774.69	34,706	20,421	**55,127**	11,645	2,491	**14,136**	40,200	6,034	**46,234**	86,551	28,946	**115,497**
774.70 - 1,032.91	102,010	64,028	**166,038**	24,678	2,128	**26,806**	95,776	5,281	**101,057**	222,464	71,437	**293,901**
1,032.92 - 1,291.14	97,694	109,334	**207,028**	14,537	534	**15,071**	63,674	1,185	**64,859**	175,905	111,053	**286,958**
1,291.15 - 1,549.37	98,762	100,751	**199,513**	2,978	69	**3,047**	7,340	148	**7,488**	109,080	100,968	**210,048**
1,549.38 - 1,807.60	89,960	112,697	**202,657**	1,243	38	**1,281**	3,357	59	**3,416**	94,560	112,794	**207,354**
1,807.61 - 2,065.83	42,496	65,423	**107,919**	932	24	**956**	2,850	47	**2,897**	46,278	65,494	**111,772**
2,065.84 - 2,324.06	7,234	29,748	**36,982**	617	11	**628**	2,128	30	**2,158**	9,979	29,789	**39,768**
2,324.07 - 2,582.28	1,438	15,026	**16,464**	420	9	**429**	1,230	16	**1,246**	3,088	15,051	**18,139**
> 2,582.28	4,142	36,138	**40,280**	1,040	52	**1,092**	2,673	76	**2,749**	7,855	36,266	**44,121**
TOTAL	**485,141**	**563,514**	**1,048,655**	**77,746**	**16,150**	**93,896**	**245,492**	**23,507**	**268,999**	**808,379**	**603,171**	**1,411,550**

Total doesn't include 569 pension entries which had no gender and age classification.

Table AS5-45 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

CTPS

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	1.4	1.8	1.6	25.3	66.8	32.4	10.7	45.2	13.7	6.5	5.2	6.0
516.47 - 1,032.91	28.2	15.0	21.1	46.7	28.6	43.6	55.4	48.1	54.8	38.2	16.6	29.0
1,032.92 - 1,549.37	40.5	37.3	38.8	22.5	3.7	19.3	28.9	5.7	26.9	35.3	35.2	35.2
> 1,549.37	29.9	46.0	38.6	5.5	0.8	4.7	5.0	1.0	4.6	20.0	43.0	29.8
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-46 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

SCHOOL

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	164	199	**363**	4,301	3,350	**7,651**	2,097	1,646	**3,743**	6,562	5,195	**11,757**
258.24 - 516.46	3,996	2,677	**6,673**	4,877	3,414	**8,291**	8,077	5,486	**13,563**	16,950	11,577	**28,527**
516.47 - 774.69	27,016	12,257	**39,273**	4,761	1,743	**6,504**	12,652	4,176	**16,828**	44,429	18,176	**62,605**
774.70 - 1,032.91	77,962	35,285	**113,247**	6,680	1,559	**8,239**	16,083	3,498	**19,581**	100,725	40,342	**141,067**
1,032.92 - 1,291.14	77,443	38,146	**115,589**	2,434	342	**2,776**	8,694	882	**9,576**	88,571	39,370	**127,941**
1,291.15 - 1,549.37	89,925	27,197	**117,122**	346	32	**378**	816	74	**890**	91,087	27,303	**118,390**
1,549.38 - 1,807.60	87,932	38,201	**126,133**	133	15	**148**	280	23	**303**	88,345	38,239	**126,584**
1,807.61 - 2,065.83	41,749	20,587	**62,336**	84	9	**93**	181	26	**207**	42,014	20,622	**62,636**
2,065.84 - 2,324.06	6,754	4,232	**10,986**	47	2	**49**	75	9	**84**	6,876	4,243	**11,119**
2,324.07 - 2,582.28	941	1,668	**2,609**	37	5	**42**	41	11	**52**	1,019	1,684	**2,703**
> 2,582.28	2,227	4,401	**6,628**	97	29	**126**	164	42	**206**	2,488	4,472	**6,960**
TOTAL	**416,109**	**184,850**	**600,959**	**23,797**	**10,500**	**34,297**	**49,160**	**15,873**	**65,033**	**489,066**	**211,223**	**700,289**

Total doesn't include 264 pension entries which had no gender and age classification.

Table AS5-47 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

SCHOOL

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	1.0	1.6	1.2	38.6	64.4	46.5	20.7	44.9	26.6	4.8	7.9	5.8
516.47 - 1,032.91	25.2	25.7	25.4	48.1	31.4	43.0	58.5	48.3	56.0	29.7	27.7	29.1
1,032.92 - 1,549.37	40.2	35.3	38.7	11.7	3.6	9.2	19.3	6.0	16.1	36.7	31.6	35.2
> 1,549.37	33.5	37.4	34.7	1.7	0.6	1.3	1.5	0.7	1.3	28.8	32.8	30.0
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-48 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

MILITARY

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	12	999	**1.011**	393	134	**527**	823	52	**875**	1.228	1.185	**2.413**
258.24 - 516.46	6	1.209	**1.215**	768	246	**1.014**	1.817	192	**2.009**	2.591	1.647	**4.238**
516.47 - 774.69	-	700	**700**	452	52	**504**	2.408	64	**2.472**	2.860	816	**3.676**
774.70 - 1,032.91	5	1.623	**1.628**	2.186	76	**2.262**	10.997	203	**11.200**	13.188	1.902	**15.090**
1,032.92 - 1,291.14	10	4.956	**4.966**	2.186	27	**2.213**	10.342	54	**10.396**	12.538	5.037	**17.575**
1,291.15 - 1,549.37	3	6.425	**6.428**	737	10	**747**	1.832	21	**1.853**	2.572	6.456	**9.028**
1,549.38 - 1,807.60	2	9.555	**9.557**	250	1	**251**	966	10	**976**	1.218	9.566	**10.784**
1,807.61 - 2,065.83	1	8.492	**8.493**	234	3	**237**	1.055	3	**1.058**	1.290	8.498	**9.788**
2,065.84 - 2,324.06	-	9.710	**9.710**	163	-	**163**	1.096	3	**1.099**	1.259	9.713	**10.972**
2,324.07 - 2,582.28	3	5.014	**5.017**	94	-	**94**	605	2	**607**	702	5.016	**5.718**
> 2,582.28	2	12.397	**12.399**	89	1	**90**	722	7	**729**	813	12.405	**13.218**
TOTAL	**44**	**61.080**	**61.124**	**7.552**	**550**	**8.102**	**32.663**	**611**	**33.274**	**40.259**	**62.241**	**102.500**

Total doesn't include 30 pension entries which had no gender and age classification.

Table AS5-49 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

MILITARY

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	40.9	3.6	3.6	15.4	69.1	19.0	8.1	39.9	8.7	9.5	4.6	6.5
516.47 - 1,032.91	11.4	3.8	3.8	34.9	23.3	34.1	41.0	43.7	41.1	39.9	4.4	18.3
1,032.92 - 1,549.37	29.5	18.6	18.6	38.7	6.7	36.5	37.3	12.3	36.8	37.5	18.5	26.0
> 1,549.37	18.2	73.9	73.9	11.0	0.9	10.3	13.6	4.1	13.4	13.1	72.6	49.2
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-50 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

POLICE CORPS

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	57	323	**380**	930	572	**1,502**	685	146	**831**	1,672	1,041	**2,713**
258.24 - 516.46	79	1,393	**1,472**	1,514	678	**2,192**	3,557	667	**4,224**	5,150	2,738	**7,888**
516.47 - 774.69	312	1,702	**2,014**	1,214	142	**1,356**	4,266	105	**4,371**	5,792	1,949	**7,741**
774.70 - 1,032.91	811	2,223	**3,034**	2,983	132	**3,115**	25,866	574	**26,440**	29,660	2,929	**32,589**
1,032.92 - 1,291.14	684	11,037	**11,721**	8,503	105	**8,608**	40,599	186	**40,785**	49,786	11,328	**61,114**
1,291.15 - 1,549.37	371	33,453	**33,824**	1,152	8	**1,160**	2,847	19	**2,866**	4,370	33,480	**37,850**
1,549.38 - 1,807.60	146	51,928	**52,074**	276	1	**277**	679	13	**692**	1,101	51,942	**53,043**
1,807.61 - 2,065.83	143	31,726	**31,869**	189	2	**191**	514	5	**519**	846	31,733	**32,579**
2,065.84 - 2,324.06	103	13,582	**13,685**	124	3	**127**	418	7	**425**	645	13,592	**14,237**
2,324.07 - 2,582.28	66	5,578	**5,644**	72	-	**72**	238	-	**238**	376	5,578	**5,954**
> 2,582.28	153	5,660	**5,813**	174	7	**181**	470	6	**476**	797	5,673	**6,470**
TOTAL	**2,925**	**158,605**	**161,530**	**17,131**	**1,650**	**18,781**	**80,139**	**1,728**	**81,867**	**100,195**	**161,983**	**262,178**

Total doesn't include 89 pension entries which had no gender and age classification.

TabLE AS5-51 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

POLICE CORPS

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	4.6	1.1	1.1	14.3	75.8	19.7	5.3	47.0	6.2	6.8	2.3	4.0
516.47 - 1,032.91	38.4	2.5	3.1	24.5	16.6	23.8	37.6	39.3	37.6	35.4	3.0	15.4
1,032.92 - 1,549.37	36.1	28.1	28.2	56.4	6.8	52.0	54.2	11.9	53.3	54.1	27.7	37.7
> 1,549.37	20.9	68.4	67.5	4.9	0.8	4.5	2.9	1.8	2.9	3.8	67.0	42.8
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-52 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

AUTONOMOUS AGENCIES

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	408	253	**661**	1,072	301	**1,373**	862	377	**1,239**	2,342	931	**3,273**
258.24 - 516.46	680	509	**1,189**	913	223	**1,136**	1,952	550	**2,502**	3,545	1,282	**4,827**
516.47 - 774.69	2,385	2,052	**4,437**	1,599	105	**1,704**	6,166	765	**6,931**	10,150	2,922	**13,072**
774.70 - 1,032.91	9,381	9,256	**18,637**	4,435	90	**4,525**	13,166	493	**13,659**	26,982	9,839	**36,821**
1,032.92 - 1,291.14	7,427	18,651	**26,078**	335	6	**341**	763	10	**773**	8,525	18,667	**27,192**
1,291.15 - 1,549.37	2,434	13,070	**15,504**	60	1	**61**	151	4	**155**	2,645	13,075	**15,720**
1,549.38 - 1,807.60	412	7,118	**7,530**	39	-	**39**	95	1	**96**	546	7,119	**7,665**
1,807.61 - 2,065.83	53	1,746	**1,799**	32	-	**32**	76	2	**78**	161	1,748	**1,909**
2,065.84 - 2,324.06	14	426	**440**	4	-	**4**	56	1	**57**	74	427	**501**
2,324.07 - 2,582.28	14	338	**352**	2	-	**2**	31	1	**32**	47	339	**386**
> 2,582.28	50	1,509	**1,559**	21	2	**23**	69	6	**75**	140	1,517	**1,657**
TOTAL	**23,258**	**54,928**	**78,186**	**8,512**	**728**	**9,240**	**23,387**	**2,210**	**25,597**	**55,157**	**57,866**	**113,023**

Total doesn't include 44 pension entries which had no gender and age classification.

Table AS5-53 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

AUTONOMOUS AGENCIES

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	4.7	1.4	2.4	23.3	72.0	27.2	12.0	41.9	14.6	10.7	3.8	7.2
516.47 - 1,032.91	50.6	20.6	29.5	70.9	26.8	67.4	82.7	56.9	80.4	67.3	22.1	44.1
1,032.92 - 1,549.37	42.4	57.8	53.2	4.6	1.0	4.4	3.9	0.6	3.6	20.3	54.9	38.0
> 1,549.37	2.3	20.3	14.9	1.2	0.3	1.1	1.4	0.5	1.3	1.8	19.3	10.7
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-54 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

MINISTRIES

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	200	893	**1,093**	2,174	893	**3,067**	2,200	562	**2,762**	4,574	2,348	**6,922**
258.24 - 516.46	911	1,066	**1,977**	2,043	570	**2,613**	3,905	864	**4,769**	6,859	2,500	**9,359**
516.47 - 774.69	4,171	3,248	**7,419**	3,226	326	**3,552**	14,293	875	**15,168**	21,690	4,449	**26,139**
774.70 - 1,032.91	12,457	14,325	**26,782**	8,044	200	**8,244**	29,395	489	**29,884**	49,896	15,014	**64,910**
1,032.92 - 1,291.14	10,848	33,962	**44,810**	872	22	**894**	3,162	43	**3,205**	14,882	34,027	**48,909**
1,291.15 - 1,549.37	5,239	18,946	**24,185**	489	10	**499**	1,587	22	**1,609**	7,315	18,978	**26,293**
1,549.38 - 1,807.60	1,148	5,220	**6,368**	332	5	**337**	1,222	6	**1,228**	2,702	5,231	**7,933**
1,807.61 - 2,065.83	392	2,474	**2,866**	202	7	**209**	895	6	**901**	1,489	2,487	**3,976**
2,065.84 - 2,324.06	227	1,348	**1,575**	111	1	**112**	349	3	**352**	687	1,352	**2,039**
2,324.07 - 2,582.28	277	2,019	**2,296**	69	-	**69**	172	1	**173**	518	2,020	**2,538**
> 2,582.28	730	6,909	**7,639**	187	9	**196**	426	9	**435**	1,343	6,927	**8,270**
TOTAL	**36,600**	**90,410**	**127,010**	**17,749**	**2,043**	**19,792**	**57,606**	**2,880**	**60,486**	**111,955**	**95,333**	**207,288**

Total doesn't include 102 pension entries which had no gender and age classification.

Table AS5-55 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

MINISTRIES

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	3.0	2.2	2.4	23.8	71.6	28.7	10.6	49.5	12.5	10.2	5.1	7.9
516.47 - 1,032.91	45.4	19.4	26.9	63.5	25.7	59.6	75.8	47.4	74.5	63.9	20.4	43.9
1,032.92 - 1,549.37	44.0	58.5	54.3	7.7	1.6	7.0	8.2	2.3	8.0	19.8	55.6	36.3
> 1,549.37	7.6	19.9	16.3	5.1	1.1	4.7	5.3	0.9	5.1	6.0	18.9	11.9
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-56 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

UNIVERSITY

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	35	263	**298**	268	185	**453**	125	27	**152**	428	475	**903**
258.24 - 516.46	149	164	**313**	387	223	**610**	163	62	**225**	699	449	**1,148**
516.47 - 774.69	822	461	**1,283**	377	113	**490**	411	45	**456**	1,610	619	**2,229**
774.70 - 1,032.91	1,394	1,310	**2,704**	323	63	**386**	257	19	**276**	1,974	1,392	**3,366**
1,032.92 - 1,291.14	1,281	2,580	**3,861**	178	23	**201**	92	6	**98**	1,551	2,609	**4,160**
1,291.15 - 1,549.37	789	1,657	**2,446**	152	8	**160**	76	4	**80**	1,017	1,669	**2,686**
1,549.38 - 1,807.60	320	671	**991**	150	10	**160**	64	3	**67**	534	684	**1,218**
1,807.61 - 2,065.83	158	392	**550**	121	2	**123**	72	3	**75**	351	397	**748**
2,065.84 - 2,324.06	136	431	**567**	99	4	**103**	60	-	**60**	295	435	**730**
2,324.07 - 2,582.28	136	390	**526**	77	3	**80**	39	1	**40**	252	394	**646**
> 2,582.28	953	3,401	**4,354**	141	1	**142**	116	4	**120**	1,210	3,406	**4,616**
TOTAL	**6,173**	**11,720**	**17,893**	**2,273**	**635**	**2,908**	**1,475**	**174**	**1,649**	**9,921**	**12,529**	**22,450**

Total doesn't include 37 pension entries which had no gender and age classification.

Table AS5-57 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

UNIVERSITY

Monthly amount	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
class (euros)	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	3.0	3.6	3.4	28.8	64.3	36.6	19.5	51.1	22.9	11.4	7.4	9.1
516.47 - 1,032.91	35.9	15.1	22.3	30.8	27.7	30.1	45.3	36.8	44.4	36.1	16.1	24.9
1,032.92 - 1,549.37	33.5	36.2	35.2	14.5	4.9	12.4	11.4	5.7	10.8	25.9	34.1	30.5
> 1,549.37	27.6	45.1	39.1	25.9	3.1	20.9	23.8	6.3	22.0	26.6	42.4	35.4
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-58 - Distribution by monthly amount class, pension type and gender of pensions paid as of 31/12/2001

MAGISTRATES

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
0.00 - 258.23	1	-	**1**	1	-	**1**	1	-	**1**	3	-	**3**
258.24 - 516.46	1	-	**1**	15	5	**20**	-	-	**-**	16	5	**21**
516.47 - 774.69	-	1	**1**	16	10	**26**	4	4	**8**	20	15	**35**
774.70 - 1,032.91	-	6	**6**	27	8	**35**	12	5	**17**	39	19	**58**
1,032.92 - 1,291.14	1	2	**3**	29	9	**38**	22	4	**26**	52	15	**67**
1,291.15 - 1,549.37	1	3	**4**	42	-	**42**	31	4	**35**	74	7	**81**
1,549.38 - 1,807.60	-	4	**4**	63	6	**69**	51	3	**54**	114	13	**127**
1,807.61 - 2,065.83	-	6	**6**	70	1	**71**	57	2	**59**	127	9	**136**
2,065.84 - 2,324.06	-	19	**19**	69	1	**70**	74	7	**81**	143	27	**170**
2,324.07 - 2,582.28	1	19	**20**	69	1	**70**	104	-	**104**	174	20	**194**
> 2,582.28	27	1,861	**1,888**	331	3	**334**	706	2	**708**	1,064	1,866	**2,930**
TOTALE	**32**	**1,921**	**1,953**	**732**	**44**	**776**	**1,062**	**31**	**1,093**	**1,826**	**1,996**	**3,822**

Total doesn't include 3 pension entries which had no gender and age classification.

Table AS5-59 - Percentage breakdown of pensions paid af of 31/12/2001 by monthly amount class, pension type and gender

MAGISTRATES

Monthly amount class (euros)	DIRECT PENSIONS			WORKER SURVIVOR PENSIONS			PENSIONER SURVIVOR BENEFITS			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
< 516.46	6.3	-	0.1	2.2	11.4	2.7	0.1	-	0.1	1.0	0.3	0.6
516.47 - 1,032.91	-	0.4	0.4	5.9	40.9	7.9	1.5	29.0	2.3	3.2	1.7	2.4
1,032.92 - 1,549.37	6.3	0.3	0.4	9.7	20.5	10.3	5.0	25.8	5.6	6.9	1.1	3.9
> 1,549.37	87.5	99.4	99.2	82.2	27.3	79.1	93.4	45.2	92.0	88.8	96.9	93.1
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-60 - Distribution by age class and monthly amount class of pensions paid as of 31/12/2001

INPDAP

	0,00 - 258,23	258,24 - 516,46	516,47 - 774,69	774,70 - 1,032,91	1,032,92 - 1,291,14	1,291,15 - 1,549,37	1,549,38 - 1,807,60	1,807,61 - 2,065,83	2,065,84 - 2,324,06	2,324,07 - 2,582,28	over 2,582,28	TOTAL
0 - 20	12,795	4,939	837	324	94	54	23	24	9	7	38	**19,144**
20 - 25	4,293	3,758	830	322	96	35	20	12	9	12	31	**9,418**
25 - 30	292	390	127	70	21	10	5	1	2	1	13	**932**
30 - 35	236	552	232	185	64	23	14	7	7	2	25	**1,347**
35 - 40	439	1,187	816	775	232	81	44	22	14	12	56	**3,678**
40 - 45	873	2,832	2,636	1,902	1,030	618	379	117	35	18	116	**10,556**
45 - 50	1,581	5,844	21,323	11,133	3,207	2,365	6,082	2,984	521	108	385	**55,533**
50 - 55	2,775	9,121	42,671	45,403	21,065	10,299	8,488	9,309	3,603	527	1,568	**154,829**
55 - 60	2,885	9,551	41,414	73,478	61,946	36,169	27,972	10,472	5,411	1,745	5,302	**276,345**
60 - 65	3,137	12,219	47,050	90,414	82,687	56,329	49,323	18,945	7,093	4,185	11,200	**382,582**
65 - 70	2,713	12,338	46,712	86,021	79,171	46,835	41,009	26,138	8,356	6,637	17,395	**373,325**
70 - 75	3,003	12,436	39,106	88,702	79,656	47,903	35,150	29,855	10,621	5,352	19,263	**371,047**
75 - 80	3,549	12,269	30,807	84,973	71,179	52,509	33,825	20,450	8,135	3,156	13,927	**334,779**
> = 80	5,140	13,878	32,521	109,622	87,162	55,218	40,719	10,274	3,747	2,449	10,389	**371,119**
TOTAL	**43,711**	**101,314**	**307,082**	**593,324**	**487,610**	**308,448**	**243,053**	**128,610**	**47,563**	**24,211**	**79,708**	**2,364,34**

Total doesn't include 2,567 pension entries which had no gender and age classification.

Table AS5-61 - Distribution by age class and monthly amount class of pensions paid as of 31/12/2001

CPDEL

	0,00 - 258,23	258,24 - 516,46	516,47 - 774,69	774,70 - 1,032,91	1,032,92 - 1,291,14	1,291,15 - 1,549,37	1,549,38 - 1,807,60	1,807,61 - 2,065,83	2,065,84 - 2,324,06	2,324,07 - 2,582,28	over 2,582,28	TOTAL
0 - 20	6,310	1,094	223	70	20	7	1	3	2	2	6	**7,738**
20 - 25	1,780	845	230	59	8	6	3	1	0	1	7	**2,940**
25 - 30	131	95	50	23	4	1	1	1	1	-	3	**310**
30 - 35	103	199	87	49	8	3	-	-	1	-	4	**454**
35 - 40	185	459	288	136	16	10	3	-	-	-	9	**1,106**
40 - 45	291	1,468	1,215	523	87	20	14	6	5	3	23	**3,655**
45 - 50	453	3,310	14,233	3,140	443	110	69	35	25	12	78	**21,908**
50 - 55	647	5,150	30,892	19,445	6,746	2,053	515	199	114	84	266	**66,111**
55 - 60	553	5,051	28,309	39,501	28,005	11,631	3,309	1,291	696	542	1,590	**120,478**
60 - 65	564	6,034	30,657	50,173	39,611	20,052	6,893	2,498	1,347	1,091	4,310	**163,230**
65 - 70	633	5,994	27,784	48,363	35,788	17,923	7,409	2,871	1,190	901	5,071	**153,927**
70 - 75	882	5,688	21,019	46,162	32,337	14,768	6,173	3,447	1,053	785	3,902	**136,216**
75 - 80	1,135	4,190	15,162	39,205	24,438	12,363	4,208	2,492	915	636	2,046	**106,790**
> = 80	1,445	3,359	15,059	43,508	24,441	13,789	3,904	1,609	654	312	547	**108,627**
TOTAL	**15,112**	**42,936**	**185,208**	**290,357**	**191,952**	**92,736**	**32,502**	**14,453**	**6,003**	**4,369**	**17,862**	**893,490**

Total doesn't include 954 pension entries which had no gender and age classification.

Table AS5-62 - Distribution by age class and monthly amount class of pensions paid as of 31/12/2001

CPI

	0,00 - 258,23	258,24 - 516,46	516,47 - 774,69	774,70 - 1.032,91	1.032,92 - 1.291,14	1.291,15 - 1.549,37	1.549,38 - 1.807,60	1.807,61 - 2.065,83	2.065,84 - 2.324,06	2.324,07 - 2.582,28	over 2.582,28	TOTAL
0 - 20	50	10	3	-	-	-	1	-	-	-	-	**64**
20 - 25	21	1	1	2	-	-	-	-	-	-	-	**25**
25 - 30	1	-	-	1	-	-	-	-	-	-	-	**2**
30 - 35	1	1	2	-	-	-	-	-	-	-	-	**4**
35 - 40	2	2	-	-	-	-	-	-	-	-	-	**4**
40 - 45	1	4	4	4	1	-	-	-	-	-	1	**15**
45 - 50	2	56	750	65	7	-	3	1	1	-	1	**886**
50 - 55	10	42	1,115	460	44	6	-	-	1	1	-	**1,679**
55 - 60	7	45	587	634	261	76	7	1	-	-	5	**1,623**
60 - 65	4	44	294	665	558	211	44	3	1	1	13	**1,838**
65 - 70	4	64	225	499	492	310	75	13	2	1	11	**1,696**
70 - 75	7	57	146	354	471	288	62	35	4	-	7	**1,431**
75 - 80	7	56	121	368	468	247	68	21	3	1	1	**1,361**
> = 80	17	55	170	516	599	260	124	4	-	-	4	**1,749**
TOTAL	**134**	**437**	**3,418**	**3,568**	**2,901**	**1,398**	**384**	**78**	**12**	**4**	**43**	**12,377**

Total doesn't include 4 pension entries which had no gender classification.

Table AS5-63 - Distribution by age class and monthly amount class of pensions paid as of 31/12/2001

CPUG

	0,00 - 258,23	258,24 - 516,46	516,47 - 774,69	774,70 - 1.032,91	1.032,92 - 1.291,14	1.291,15 - 1.549,37	1.549,38 - 1.807,60	1.807,61 - 2.065,83	2.065,84 - 2.324,06	2.324,07 - 2.582,28	over 2.582,28	TOTAL
0 - 20	26	-	-	-	-	-	-	-	-	-	-	**26**
20 - 25	6	6	1	-	-	-	-	-	-	-	-	**13**
25 - 30	-	4	1	-	-	-	-	-	-	-	-	**5**
30 - 35	-	8	3	1	-	-	-	-	-	-	-	**12**
35 - 40	1	8	22	5	1	-	-	-	-	-	-	**37**
40 - 45	2	9	22	14	-	-	-	-	-	-	1	**48**
45 - 50	2	11	30	33	25	5	-	-	-	-	-	**106**
50 - 55	2	16	36	64	66	53	8	1		1	4	**251**
55 - 60	-	19	51	84	86	69	25	-	-	1	2	**337**
60 - 65	2	15	54	118	110	99	50	1	3	2	5	**459**
65 - 70	4	11	36	142	93	112	58	2	-	-	-	**458**
70 - 75	3	30	63	246	87	73	20	-	-	-	-	**522**
75 - 80	-	-	-	-	-	-	-	-	-	-	-	**0**
> = 80	-	-	-	-	-	-	-	-	-	-	-	**0**
TOTAL	**48**	**137**	**319**	**707**	**468**	**411**	**161**	**4**	**3**	**4**	**12**	**2,274**

Total doesn't include 11 pension entries which had no gender classification.

Table AS5-64 - Distribution by age class and monthly amount class of pensions pais as of 31/12/2001

CPS

	0,00 - 258,23	258,24 - 516,46	516,47 - 774,69	774,70 - 1.032,91	1.032,92 - 1.291,14	1.291,15 - 1.549,37	1.549,38 - 1.807,60	1.807,61 - 2.065,83	2.065,84 - 2.324,06	2.324,07 - 2.582,28	over 2.582,28	TOTAL
0 - 20	209	447	148	48	13	10	6	6	3	-	5	**895**
20 - 25	93	194	120	48	18	5	-	2	2	4	7	**493**
25 - 30	5	12	6	6	1	-	1	-	1	-	1	**33**
30 - 35	1	7	4	1	3	4	1	-	-	-	1	**22**
35 - 40	4	15	24	14	8	7	3	2	-	1	1	**79**
40 - 45	7	20	28	47	26	12	10	11	4	-	2	**167**
45 - 50	14	55	84	119	75	99	68	29	12	15	33	**603**
50 - 55	14	76	140	249	234	191	162	200	128	78	182	**1,654**
55 - 60	7	92	180	239	312	307	187	196	232	239	1,369	**3,360**
60 - 65	14	136	285	444	438	337	269	220	192	218	2,768	**5,321**
65 - 70	25	171	398	648	692	425	308	294	219	208	4,045	**7,433**
70 - 75	48	212	510	958	1,084	710	445	405	342	346	4,942	**10,002**
75 - 80	62	227	428	1,023	1,180	828	560	454	352	332	3,245	**8,691**
> = 80	66	258	423	1,280	1,382	955	655	497	300	257	1,073	**7,146**
TOTAL	**569**	**1,922**	**2,778**	**5,124**	**5,466**	**3,890**	**2,675**	**2,316**	**1,787**	**1,698**	**17,674**	**45,899**

Total daiesn't include 73 pension entries which had no gender classification.

Table AS5-65 - Distribution by age class and monthly amount class of pensions paid as of 31/12/2001

CTPS

	0,00 - 258,23	258,24 - 516,46	516,47 - 774,69	774,70 - 1.032,91	1.032,92 - 1.291,14	1.291,15 - 1.549,37	1.549,38 - 1.807,60	1.807,61 - 2.065,83	2.065,84 - 2.324,06	2.324,07 - 2.582,28	over 2.582,28	TOTAL
0 - 20	6,200	3,388	463	206	61	37	15	15	4	5	27	**10,421**
20 - 25	2,393	2,712	478	213	70	24	17	9	7	7	17	**5,947**
25 - 30	155	283	71	40	16	9	3	-	-	1	9	**587**
30 - 35	131	345	139	135	53	16	13	7	6	2	20	**867**
35 - 40	248	707	503	625	208	64	38	20	14	11	46	**2,484**
40 - 45	574	1,332	1,386	1,327	916	586	355	100	26	15	90	**6,707**
45 - 50	1,111	2,415	6,234	7,804	2,681	2,156	5,942	2,919	483	81	273	**32,099**
50 - 55	2,102	3,844	10,502	25,235	14,041	8,049	7,811	8,910	3,360	364	1,119	**85,337**
55 - 60	2,316	4,352	12,308	33,071	33,343	24,150	24,469	8,984	4,483	964	2,338	**150,778**
60 - 65	2,553	5,989	15,778	39,068	42,014	35,676	42,109	16,223	5,553	2,874	4,105	**211,942**
65 - 70	2,051	6,090	18,254	36,427	42,113	28,108	33,192	22,960	6,945	5,526	8,266	**209,932**
70 - 75	2,064	6,464	17,377	41,110	45,654	32,038	28,420	25,967	9,219	4,219	10,407	**222,939**
75 - 80	2,341	7,785	15,060	44,235	45,000	38,959	28,931	17,481	6,865	2,187	8,635	**217,479**
> = 80	3,609	10,176	16,806	64,072	60,653	40,141	36,016	8,164	2,793	1,880	8,765	**253,075**
TOTAL	**27,848**	**55,882**	**115,359**	**293,568**	**286,823**	**210,013**	**207,331**	**111,759**	**39,758**	**18,136**	**44,117**	**1,410,594**

Total doesn't include 1,525 pension entries which had no gender classification.

Table AS5-66 - Distribution by monthly amount class and fund of number of pensions paid as of 31/12/2001

Pension holder either 65 or over

Monthly amount class (euros)	CPDEL	CPI	CPUG	CPS	CTPS	TOTAL
	4,095	35	7	201	10,065	14,403
258.24 - 516.46	19,231	232	41	868	30,515	50,887
516.47 - 774.69	79,024	662	99	1,759	67,497	149,041
774.70 - 1,032.91	177,238	1,737	388	3,909	185,844	369,116
1,032.92 - 1,291.14	117,004	2,030	180	4,338	193,420	316,972
1,291.15 - 1,549.37	58,843	1,105	185	2,918	139,246	202,297
1,549.38 - 1,807.60	21,694	329	78	1,968	126,559	150,628
1,807.61 - 2,065.83	10,419	73	2	1,650	74,572	86,716
2,065.84 - 2,324.06	3,812	9	-	1,213	25,822	30,856
2,324.07 - 2,582.28	2,634	2	-	1,143	13,812	17,591
> 2,582.28	11,566	23	-	13,305	36,073	60,967
TOTAL	**505,560**	**6,237**	**980**	**33,272**	**903,425**	**1,449,474**

Table AS5-67 - Percentage breakdown of number of pensions paid as of 31/12/2001 by monthly amount class and fund

Pension holder either 65 or over

Monthly amount class (euros)	CPDEL	CPI	CPUG	CPS	CTPS	TOTAL
	4.6	4.3	4.9	3.2	4.5	4.5
516.47 - 1,032.91	50.7	38.5	49.7	17.0	28.0	35.7
1,032.92 - 1,549.37	34.8	50.3	37.2	21.8	36.8	35.8
>1,549.38	9.9	7.0	8.2	57.9	30.6	23.9
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-68 - Distribution by monthly amount class and fund of number of pensions paid as of 31/12/2001

Pension holder under 65 years of age

Monthly amount class (euros)	CPDEL	CPI	CPUG	CPS	CTPS	TOTAL
	11,017	99	41	368	17,783	29,308
258.24 - 516.46	23,705	205	96	1,054	25,367	50,427
516.47 - 774.69	106,184	2,756	220	1,019	47,862	158,041
774.70 - 1,032.91	113,119	1,831	319	1,215	107,724	224,208
1,032.92 - 1,291.14	74,948	871	288	1,128	93,403	170,638
1,291.15 - 1,549.37	33,893	293	226	972	70,767	106,151
1,549.38 - 1,807.60	10,808	55	83	707	80,772	92,425
1,807.61 - 2,065.83	4,034	5	2	666	37,187	41,894
2,065.84 - 2,324.06	2,191	3	3	574	13,936	16,707
2,324.07 - 2,582.28	1,735	2	4	555	4,324	6,620
> 2,582.28	6,296	20	12	4,369	8,044	18,741
TOTAL	**387,930**	**6,140**	**1294**	**12,627**	**507,169**	**915,160**

Table AS5-69 - Percentage breakdown of number of pensions paid as of 31/12/2001 by monthly amount class and fund

Pension holder under 65 years of age

Monthly amount class (euros)	CPDEL	CPI	CPUG	CPS	CTPS	TOTAL
	9.0	5.0	10.6	11.3	8.5	8.7
516.47 - 1,032.91	56.5	74.7	41.7	17.7	30.7	41.8
1,032.92 - 1,549.37	28.1	19.0	39.7	16.6	32.4	30.2
>1,549.38	6.5	1.4	8.0	54.4	28.4	19.3
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table AS5-70 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
CPDEL	43,736	58	34	1,321	57,372	56	33	1,235	21,797	59	33	1,333	25,937	58	34	1,303	24,093	59	33	1,316	19,052	59	34	1,448	191,987	58	33	1,306
CPI	440	60	33	1,366	764	55	30	1,048	220	62	31	1,149	244	61	32	1,283	271	61	31	1,106	191	60	31	1,190	2,130	59	31	1,171
CPUG	82	64	34	1,379	116	62	35	1,455	69	64	36	1,343	88	64	37	1,406	102	64	37	1,406	80	64	37	1,656	537	64	36	1,442
CPS	1,756	62	37	4,207	2,458	61	36	4,126	1,393	63	37	4,598	1,605	62	38	4,544	1,390	62	37	4,533	1,351	62	37	5,358	9,953	62	37	4,498
CTPS	63,936	58	34	1,696	72,074	55	32	1,571	42,762	58	34	1,725	43,686	57	33	1,672	41,598	59	33	1,613	29,088	60	34	1,719	293,144	57	33	1,656
TOTAL	**109,950**	**58**	**34**	**1,585**	**132,784**	**56**	**32**	**1,470**	**66,241**	**59**	**34**	**1,654**	**71,560**	**58**	**34**	**1,601**	**67,454**	**59**	**33**	**1,569**	**49,762**	**60**	**34**	**1,712**	**497,751**	**58**	**33**	**1,576**

Table AS5-71 - Distribution by department and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

CTPS

	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
School	44,109	59	34	1,575	43,042	57	31	1,373	30,263	59	35	1,575	30,453	58	33	1,492	29,955	59	33	1,456	20,319	60	33	1,496	198,141	58	33	1,492
Military	1,944	49	35	2,309	3,931	49	35	2,186	1,600	50	35	2,336	1,752	49	35	2,387	908	51	35	2,398	751	52	36	2,454	10,886	49	35	2,298
Police corps	6,343	51	30	2,164	10,695	49	30	1,990	4,335	52	30	2,148	4,060	50	30	2,058	3,268	51	31	2,012	1,742	53	31	2,252	30,443	50	30	2,075
Autonomous agencies	2,025	54	33	1,643	2,398	54	33	1,600	1,059	57	34	1,714	1,159	56	34	1,683	1,024	58	35	1,714	1,200	58	36	1,742	8,865	56	34	1,667
Ministries	7,000	59	35	1,505	8,789	58	34	1,431	4,098	60	35	1,607	4,582	60	35	1,657	4,557	60	35	1,573	3,573	61	36	1,788	32,599	59	35	1,560
University	2,361	63	36	2,289	2,991	60	34	1,916	1,296	64	36	2,655	1,536	64	36	2,625	1,763	64	36	2,599	1,405	65	37	3,167	11,352	63	36	2,435
Magistrates	154	69	40	8,535	228	67	39	8,244	111	68	39	8,743	144	68	39	9,116	123	68	39	9,021	98	67	39	9,087	858	68	39	8,715
TOTAL	**63,936**	**58**	**34**	**1,693**	**72,074**	**55**	**32**	**1,568**	**42,762**	**58**	**34**	**1,720**	**43,686**	**57**	**33**	**1,668**	**41,598**	**58**	**33**	**1,610**	**29,088**	**60**	**34**	**1,718**	**293,144**	**57**	**33**	**1,653**

Table AS5-72 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

CPDEL

Mounth	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	20,807	56	35	1,294	20,039	53	31	1,046	1,620	61	31	1,235	4,711	57	35	1,313	6,612	57	34	1,263	4,443	58	35	1,374	58,232	56	33	1,211
feb	1,325	61	32	1,346	2,494	58	33	1,332	1,120	61	31	1,207	1,211	60	32	1,292	1,490	60	34	1,323	1,248	60	33	1,346	8,888	60	33	1,314
mar	1,207	61	32	1,349	2,704	58	33	1,395	970	61	31	1,160	1,035	60	32	1,221	1,142	60	33	1,300	1,147	60	33	1,372	8,205	60	32	1,322
apr	3,626	58	33	1,367	3,071	57	33	1,328	5,893	57	35	1,458	3,624	57	34	1,276	4,066	58	32	1,203	2,696	58	35	1,359	22,976	58	34	1,341
may	1,551	59	32	1,402	2,667	57	33	1,363	1,490	59	33	1,326	1,191	60	32	1,306	1,167	60	33	1,334	1,149	60	34	1,399	9,215	59	33	1,357
ju	1,412	60	32	1,323	2,670	57	34	1,325	1,220	60	32	1,285	1,060	60	33	1,284	1,206	59	33	1,394	1,218	59	33	1,423	8,786	59	33	1,337
jul	3,088	59	33	1,380	5,477	57	34	1,379	2,604	57	34	1,298	3,681	57	34	1,298	2,016	60	34	1,395	1,985	59	35	1,447	18,851	58	34	1,361
aug	1,764	60	33	1,324	5,801	57	34	1,327	1,134	60	32	1,295	1,420	60	34	1,329	1,173	60	34	1,405	1,177	60	33	1,477	12,469	58	34	1,345
sep	2,144	59	33	1,292	5,120	57	34	1,314	1,230	60	32	1,292	1,597	60	33	1,324	1,300	60	34	1,440	1,109	60	34	1,501	12,500	59	33	1,339
oct	2,902	58	33	1,295	3,509	57	34	1,300	2,193	60	33	1,330	3,376	57	34	1,286	1,606	60	34	1,349	1,526	60	35	1,695	15,112	58	34	1,345
nov	1,288	59	32	1,273	2,513	58	33	1,313	990	60	31	1,212	1,250	60	32	1,326	1,050	60	33	1,357	710	61	34	1,808	7,801	59	33	1,346
dec	2,622	57	33	1,411	1,307	62	31	1,292	1,333	59	33	1,413	1,781	59	33	1,381	1,265	59	34	1,451	644	61	34	1,682	8,952	59	33	1,413
Tot,	**43,736**	**58**	**34**	**1,321**	**57,372**	**56**	**33**	**1,235**	**21,797**	**59**	**33**	**1,333**	**25,937**	**58**	**34**	**1,303**	**24,093**	**59**	**33**	**1,316**	**19,052**	**59**	**34**	**1,448**	**191,987**	**58**	**33**	**1,306**

Table AS5-73 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

CPI

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	147	59	34	1,234	236	50	27	866	15	60	29	997	21	59	32	1,143	45	59	32	1,115	20	58	33	1,096	484	55	30	1,027
feb	16	61	31	2,024	5	56	34	1,099	5	64	31	1,069	8	59	27	955	6	63	36	1,232	10	57	30	1,048	50	60	31	1,375
mar	3	60	20	792	9	59	33	1,175	8	60	31	1,163	8	63	28	927	7	59	31	1,128	5	56	28	1,957	40	60	30	1,184
apr	17	60	34	1,376	14	58	30	1,224	16	59	32	1,203	11	58	33	1,166	30	57	29	968	15	59	31	1,052	103	58	31	1,140
may	4	63	32	1,279	13	58	33	1,391	4	64	36	1,391	4	64	30	1,005	4	61	34	1,124	3	59	36	1,310	32	61	33	1,288
ju	3	64	31	1,255	13	57	32	1,038	7	55	23	773	2	63	32	1,066	5	59	23	826	13	59	29	990	43	58	28	972
jul	12	62	34	1,405	26	60	33	1,135	6	60	29	903	16	58	33	1,148	12	63	32	1,213	10	59	33	1,134	82	60	33	1,171
aug	10	59	31	1,189	15	61	30	1,141	4	60	25	927	9	63	30	987	3	56	23	996	5	55	32	1,082	46	60	29	1,087
sep	190	62	32	1,252	375	57	31	1,123	121	64	31	1,189	118	63	32	1,425	124	63	31	1,137	88	63	31	1,160	1,016	60	31	1,195
oct	23	56	33	3,029	32	59	32	1,094	20	60	31	1,202	30	59	32	1,157	19	60	31	1,075	10	61	32	1,931	134	59	32	1,516
nov	7	59	28	939	13	58	31	1,166	9	63	33	1,184	9	58	30	1,775	4	62	31	1,077	7	63	29	1,124	49	60	31	1,236
dec	8	55	33	1,221	13	61	32	1,014	5	63	31	1,050	8	63	29	1,107	12	60	32	1,127	5	58	37	1,291	51	60	32	1,118
Total	**440**	**60**	**33**	**1,366**	**764**	**55**	**30**	**1,048**	**220**	**62**	**31**	**1,149**	**244**	**61**	**32**	**1,283**	**271**	**61**	**31**	**1,106**	**191**	**60**	**31**	**1,190**	**2,130**	**59**	**31**	**1,171**

Table AS5-74 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

CPUG

Mounth	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	10	66	38	1,436	25	58	33	1,148	7	69	40	1,622	15	64	38	1,423	29	63	38	1,457	17	64	38	1,369	103	63	37	1,372
feb	10	68	36	1,391	3	70	40	1,591	6	67	37	1,370	4	65	38	1,408	5	62	31	1,020	9	68	39	1,468	37	67	37	1,374
mar	9	62	37	1,339	9	64	37	1,499	7	60	36	1,336	2	62	35	1,526	5	68	39	1,689	6	65	37	1,276	38	63	37	1,422
apr	9	59	32	1,200	7	65	35	1,275	7	61	35	1,288	7	61	36	1,307	9	62	34	1,333	9	64	36	1,280	48	62	35	1,279
may	1	65	21	606	11	63	37	1,506	7	65	36	1,352	5	66	39	1,447	8	63	36	1,296	5	65	37	1,303	37	64	36	1,372
ju	6	68	31	1,268	5	68	34	1,293	2	66	36	1,320	5	63	37	1,348	5	66	38	1,456	8	65	37	1,468	31	66	36	1,370
jul	6	64	32	1,280	14	61	36	1,862	10	65	34	1,200	15	63	37	1,451	4	60	35	1,413	9	63	37	1,359	58	63	36	1,472
aug	5	65	36	2,440	8	63	38	1,379	6	64	36	1,308	7	64	38	1,403	6	65	36	1,312	6	66	38	1,427	38	64	37	1,509
sep	7	66	34	1,327	12	64	36	1,366	5	65	34	1,453	4	66	40	1,457	11	69	38	1,542	2	64	40	3,644	41	66	36	1,537
oct	7	65	32	1,258	8	63	34	1,230	5	60	39	1,535	15	63	36	1,326	10	65	36	1,429	5	62	38	3,632	50	63	35	1,573
nov	5	68	34	1,338	8	64	34	2,437	5	67	30	1,004	4	63	35	1,345	6	63	35	1,241	4	61	35	3,081	32	64	34	1,761
dec	7	60	34	1,297	6	62	29	1,175	2	66	38	1,406	5	64	39	1,583	4	63	38	1,443	-	-	-	-	24	62	35	1,359
Tot,	**82**	**64**	**34**	**1,379**	**116**	**62**	**35**	**1,455**	**69**	**64**	**36**	**1,343**	**88**	**64**	**37**	**1,406**	**102**	**64**	**37**	**1,406**	**80**	**64**	**37**	**1,656**	**537**	**64**	**36**	**1,442**

Table AS5-75 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

CPS

Mounth	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	471	60	36	3,796	583	55	32	2,997	196	64	37	4,476	188	62	38	4,678	311	59	36	4,054	227	61	37	5,084	1,976	59	35	3,900
feb	94	65	37	4,457	142	62	37	4,297	102	65	38	4,623	72	65	39	4,737	100	63	38	4,719	80	64	38	5,282	590	64	38	4,638
mar	65	65	37	3,973	130	62	37	4,145	82	65	39	5,360	90	64	38	4,568	64	63	38	4,352	83	63	38	4,996	514	63	38	4,554
apr	157	60	36	3,711	159	63	38	4,399	294	61	37	4,361	170	61	37	4,293	190	61	36	4,136	180	60	36	4,756	1,150	61	36	4,292
may	87	63	36	4,108	143	63	38	4,365	65	65	38	4,472	100	63	37	4,327	88	63	37	4,513	110	63	38	5,473	593	63	37	4,560
ju	109	64	37	4,761	166	62	37	4,754	84	64	37	4,671	101	64	38	4,701	81	63	38	4,726	109	62	37	5,705	650	63	37	4,892
jul	144	62	37	4,400	293	62	37	4,481	100	64	38	4,613	227	61	37	4,405	112	62	38	4,474	139	63	38	5,316	1,015	62	37	4,579
aug	113	64	37	4,715	191	62	38	4,641	82	63	38	4,799	95	63	39	4,527	76	63	39	4,854	103	63	39	5,610	660	63	38	4,833
sep	124	64	37	5,035	196	62	38	4,374	80	64	38	4,516	113	64	38	4,722	71	63	38	4,832	86	62	37	5,694	670	63	38	4,790
oct	127	63	38	4,467	147	62	37	4,251	117	62	37	4,413	200	61	37	4,184	118	63	38	4,958	97	62	37	5,701	806	62	37	4,570
nov	90	64	37	4,336	138	63	37	4,448	70	65	38	4,845	91	63	39	4,766	81	63	38	5,089	66	64	39	5,990	536	63	38	4,822
dec	175	61	37	4,091	170	65	38	4,928	121	63	38	4,786	158	62	38	5,004	98	62	38	5,241	71	62	38	5,815	793	63	38	4,855
Tot,	**1,756**	**62**	**37**	**4,207**	**2,458**	**61**	**36**	**4,126**	**1,393**	**63**	**37**	**4,598**	**1,605**	**62**	**38**	**4,544**	**1,390**	**62**	**37**	**4,533**	**1,351**	**62**	**37**	**5,358**	**9,953**	**62**	**37**	**4,498**

Table AS5-76 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

CTPS

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	5,654	55	34	1,627	5,671	53	31	1,522	1,391	57	32	2,115	2,035	55	34	1,842	2,859	55	34	1,798	2,243	57	34	1,875	19,853	55	33	1,706
feb	1,136	56	32	1,847	1,844	53	32	1,878	813	57	32	1,793	686	57	32	1,841	903	58	33	1,846	765	58	33	1,827	6,147	56	32	1,846
mar	1,113	55	30	1,927	2,627	52	32	1,874	951	56	31	1,789	773	56	32	1,850	876	57	32	1,821	753	57	33	1,782	7,093	55	32	1,852
apr	1,632	55	32	1,763	2,724	52	32	1,813	2,568	55	34	1,856	1,792	54	33	1,856	1,864	54	32	1,633	1,238	56	34	1,745	11,818	54	33	1,786
may	1,153	54	31	1,863	1,744	53	32	1,862	1,064	55	33	1,774	788	56	33	1,937	897	57	33	1,720	720	56	32	1,801	6,366	55	32	1,830
ju	1,280	53	31	1,948	1,762	53	32	1,774	882	56	32	1,797	858	56	33	1,922	845	57	33	1,789	733	57	33	2,052	6,360	55	32	1,866
jul	1,931	55	32	1,700	4,194	53	33	1,771	1,884	54	33	1,883	2,020	53	33	1,829	1,125	58	34	1,785	1,040	58	34	1,996	12,194	54	33	1,807
aug	1,520	56	32	1,720	3,378	54	34	1,692	750	57	33	1,839	789	57	34	2,005	690	59	33	1,749	579	59	34	2,133	7,706	56	33	1,782
sep	41,286	59	34	1,613	41,552	57	32	1,423	28,324	59	35	1,612	29,013	58	33	1,527	28,047	59	33	1,490	19,261	61	34	1,503	187,483	59	33	1,528
oct	1,777	54	32	1,774	3,060	52	32	1,799	1,474	54	33	1,853	1,982	53	33	1,869	1,017	57	33	1,798	584	60	35	2,766	9,894	54	33	1,873
nov	2,071	62	34	2,595	2,224	58	33	2,147	1,456	62	34	2,650	1,365	63	35	2,713	1,373	63	35	2,722	927	67	37	3,911	9,416	62	34	2,663
dec	3,383	52	33	1,899	1,294	57	32	1,818	1,205	56	34	1,865	1,585	56	35	1,958	1,102	57	34	1,840	245	62	35	2,452	8,814	55	33	1,901
Total	**63,936**	**58**	**34**	**1,696**	**72,074**	**55**	**32**	**1,571**	**42,762**	**58**	**34**	**1,725**	**43,686**	**57**	**33**	**1,672**	**41,598**	**59**	**33**	**1,613**	**29,088**	**60**	**34**	**1,719**	**293,144**	**57**	**33**	**1,656**

Table AS5-77 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

INPDAP

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	27,089	56	35	1,407	26,554	53	31	1,189	3,229	59	32	1,810	6,970	57	35	1,558	9,856	57	34	1,506	6,950	58	35	1,656	80,648	55	33	1,398
feb	2,581	59	32	1,684	4,488	56	33	1,650	2,046	59	32	1,610	1,981	59	32	1,606	2,504	59	34	1,646	2,112	59	33	1,668	15,712	58	33	1,647
mar	2,397	58	31	1,688	5,479	55	33	1,690	2,018	59	31	1,628	1,908	58	32	1,633	2,094	59	33	1,612	1,994	59	33	1,679	15,890	57	32	1,663
apr	5,441	57	33	1,553	5,975	55	33	1,630	8,778	57	35	1,671	5,604	56	34	1,553	6,159	57	32	1,422	4,138	58	35	1,621	36,095	57	34	1,580
may	2,796	57	32	1,676	4,578	56	33	1,648	2,630	58	33	1,585	2,088	58	33	1,688	2,164	59	33	1,623	1,987	59	34	1,769	16,243	57	33	1,659
ju	2,810	57	32	1,741	4,616	56	33	1,619	2,195	58	32	1,619	2,026	59	33	1,725	2,142	59	33	1,675	2,081	59	33	1,866	15,870	57	33	1,694
jul	5,181	58	33	1,583	10,004	55	33	1,634	4,604	56	34	1,608	5,959	56	34	1,596	3,269	59	34	1,634	3,183	59	35	1,794	32,200	57	34	1,631
aug	3,412	58	33	1,614	9,393	56	34	1,525	1,976	59	33	1,646	2,320	59	34	1,688	1,948	59	34	1,661	1,870	60	34	1,907	20,919	58	34	1,616
sep	43,751	59	34	1,606	47,255	57	32	1,421	29,760	59	35	1,605	30,845	58	33	1,528	29,553	59	33	1,494	20,546	61	34	1,519	201,710	59	33	1,525
oct	4,836	57	33	1,562	6,756	55	33	1,589	3,809	58	33	1,626	5,603	56	33	1,595	2,770	59	34	1,666	2,222	60	35	2,157	25,996	57	33	1,647
nov	3,461	61	33	2,143	4,896	58	33	1,782	2,530	61	33	2,140	2,719	61	34	2,139	2,514	61	34	2,222	1,714	65	36	3,106	17,834	61	34	2,146
dec	6,195	54	33	1,753	2,790	60	32	1,756	2,666	58	33	1,770	3,537	58	34	1,801	2,481	58	34	1,772	965	61	35	2,180	18,634	57	33	1,789
Total	**109,950**	**58**	**34**	**1,585**	**132,784**	**56**	**32**	**1,470**	**66,241**	**59**	**34**	**1,654**	**71,560**	**58**	**34**	**1,601**	**67,454**	**59**	**33**	**1,564**	**49,762**	**60**	**34**	**1,712**	**497,751**	**58**	**33**	**1,576**

Table AS5-78 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

School

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	788	56	32	1,361	775	51	26	904	212	54	30	1,352	170	55	32	1,295	182	54	31	1,222	168	55	28	1,176	2,295	54	30	1,176
feb	194	53	27	1,192	170	53	28	1,102	226	54	30	1,294	170	54	29	1,289	239	55	29	1,208	219	54	28	1,267	1,218	54	29	1,229
mar	311	50	26	1,114	349	52	28	1,160	313	54	30	1,296	251	54	30	1,263	243	55	30	1,276	192	54	28	1,380	1,659	53	29	1,235
apr	234	51	26	1,071	284	53	28	1,206	217	53	31	1,339	224	54	29	1,249	327	56	31	1,085	153	55	29	1,344	1,439	54	29	1,198
may	227	51	26	1,121	362	53	29	1,227	215	54	30	1,320	211	54	30	1,259	257	55	31	1,315	207	54	28	1,519	1,479	53	29	1,285
ju	277	52	27	1,152	425	53	30	1,284	236	54	29	1,216	239	54	30	1,295	264	55	30	1,318	194	55	28	1,862	1,635	54	29	1,327
jul	341	54	30	1,316	514	54	30	1,306	257	54	30	1,307	241	54	30	1,245	216	56	30	1,227	154	56	29	2,227	1,723	54	30	1,372
aug	571	57	32	1,485	474	55	30	1,363	161	55	30	1,254	111	54	31	1,289	166	57	29	1,120	95	56	29	2,244	1,578	56	31	1,418
sep	40,203	59	34	1,604	38,480	57	32	1,392	27,589	59	35	1,601	28,180	58	33	1,508	27,377	59	33	1,476	18,774	61	34	1,481	180,603	59	33	1,511
oct	285	53	28	1,211	342	53	29	1,221	265	54	30	1,258	196	53	30	1,276	227	55	28	1,181	49	55	30	3,396	1,364	54	29	1,306
nov	414	57	28	1,317	533	57	30	1,432	376	58	31	1,465	283	58	31	1,416	310	58	30	1,402	107	65	33	2,174	2,023	58	30	1,447
dec	264	52	28	1,257	334	52	30	1,236	196	53	31	1,249	177	54	32	1,336	147	55	29	1,267	7	60	33	2,159	1,125	53	30	1,269
Total	**44,109**	**59**	**34**	**1,575**	**43,042**	**57**	**31**	**1,373**	**30,263**	**59**	**35**	**1,575**	**30,453**	**58**	**33**	**1,492**	**29,955**	**59**	**33**	**1,456**	**20,319**	**60**	**33**	**1,496**	**198,141**	**58**	**33**	**1,492**

Table AS5-79 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

Military

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	492	48	34	2,292	521	49	34	2,073	140	54	34	2,407	365	51	35	2,360	387	51	35	2,320	450	53	36	2,482	2,355	50	35	2,302
feb	47	48	32	1,995	265	50	35	2,220	53	51	34	2,154	42	50	34	2,592	23	51	36	2,576	16	49	33	2,044	446	50	34	2,235
mar	37	51	34	2,622	419	50	35	2,314	52	51	31	1,941	64	51	35	2,740	30	48	34	2,273	25	51	35	2,636	627	50	35	2,356
apr	45	47	32	1,757	355	49	35	2,228	331	50	36	2,287	242	48	35	2,216	96	50	35	2,430	132	51	36	2,248	1,201	49	35	2,243
may	37	51	34	2,025	198	49	35	2,248	115	50	35	2,176	56	50	35	2,606	47	50	35	2,420	30	50	35	2,600	483	50	35	2,294
ju	40	49	35	3,104	194	49	35	2,311	89	50	35	2,184	52	50	36	2,581	39	49	34	2,300	32	50	34	2,712	446	49	35	2,416
jul	75	52	34	2,363	613	49	35	2,139	386	50	35	2,317	244	48	34	2,241	104	52	35	2,451	55	53	35	2,549	1,477	49	35	2,251
aug	35	50	34	2,343	373	48	35	2,177	64	49	35	2,671	110	51	37	2,571	25	49	35	2,460	8	50	36	2,353	615	49	35	2,322
sep	68	49	34	2,420	457	48	35	2,117	91	50	35	2,570	111	51	36	2,625	40	49	35	2,585	1	69	40	1,928	768	49	35	2,295
oct	175	49	35	2,234	367	48	34	2,165	96	50	35	2,447	229	47	34	2,179	51	51	36	2,509	1	51	38	1,147	919	48	34	2,229
nov	108	51	36	2,473	116	49	34	2,235	45	49	34	2,472	54	50	35	2,732	14	48	32	2,339	0	0	0	0	337	50	35	2,427
dec	785	49	35	2,306	53	48	33	2,345	138	49	35	2,453	183	50	36	2,472	52	50	36	2,593	1	51	30	3,557	1,212	49	35	2,363
Total	**1,944**	**49**	**35**	**2,309**	**3,931**	**49**	**35**	**2,186**	**1,600**	**50**	**35**	**2,336**	**1,752**	**49**	**35**	**2,387**	**908**	**51**	**35**	**2,398**	**751**	**52**	**36**	**2,454**	**10,886**	**49**	**35**	**2,298**

Table AS5-80 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

Police corps

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	1,235	54	31	2,149	1,491	52	30	2,063	650	55	31	2,246	607	51	30	2,036	886	50	31	2,008	519	54	31	2,051	5,388	53	31	2,091
feb	404	51	30	2,178	674	49	30	1,992	224	51	30	1,985	140	52	30	2,058	164	52	31	2,053	126	52	30	2,065	1,732	50	30	2,051
mar	319	52	30	2,597	1,028	49	30	1,971	274	52	30	2,128	156	50	30	2,088	196	50	31	2,043	151	51	30	1,855	2,124	50	30	2,092
apr	399	51	30	2,118	1,016	48	30	1,998	687	52	31	2,108	573	50	30	2,008	558	47	30	1,951	213	52	31	1,990	3,446	50	30	2,027
may	397	50	30	2,165	597	48	30	1,969	264	51	30	2,109	176	51	30	2,011	210	51	30	1,995	123	51	30	1,954	1,767	50	30	2,040
ju	473	49	30	2,125	576	48	30	1,932	189	52	30	2,192	186	51	30	2,069	141	51	31	2,077	119	52	32	2,121	1,684	50	30	2,056
jul	508	50	30	2,012	1,471	49	30	1,973	516	52	30	2,119	677	49	30	2,044	198	53	31	2,169	174	53	31	2,432	3,544	50	30	2,047
aug	318	50	30	2,068	794	49	30	1,941	183	53	31	2,294	156	54	31	2,138	119	52	31	2,057	91	53	31	2,916	1,661	50	30	2,085
sep	378	50	30	2,104	1,183	48	30	2,009	283	53	31	2,204	201	52	30	2,103	186	52	30	1,943	86	53	32	2,932	2,317	50	30	2,085
oct	478	50	30	2,071	1,094	48	30	1,923	528	50	30	2,086	695	48	30	2,042	227	52	31	1,971	67	56	32	3,503	3,089	49	30	2,038
nov	302	50	30	2,522	426	49	30	1,994	223	52	30	2,177	119	53	30	2,101	141	50	30	1,853	32	60	35	3,317	1,243	51	30	2,183
dec	1,132	49	30	2,147	345	53	30	2,152	314	52	30	2,170	374	52	31	2,160	242	53	31	2,127	41	57	32	2,920	2,448	51	30	2,164
Total	**6,343**	**51**	**30**	**2,164**	**10,695**	**49**	**30**	**1,990**	**4,335**	**52**	**30**	**2,148**	**4,060**	**50**	**30**	**2,058**	**3,268**	**51**	**31**	**2,012**	**1,742**	**53**	**31**	**2,252**	**30,443**	**50**	**30**	**2,075**

Table AS5-81 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

Autonomous agencies

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	348	54	35	1,342	371	53	32	1,429	40	61	34	1,965	166	55	34	1,549	242	56	36	1,487	216	58	36	1,587	1,383	55	34	1,472
feb	85	57	33	1,846	160	56	33	1,719	40	62	34	1,690	58	59	33	2,188	80	60	36	1,927	64	59	36	1,592	487	58	34	1,812
mar	82	56	32	1,710	219	54	33	1,670	47	62	32	2,106	44	59	35	1,697	54	60	35	1,833	65	59	35	1,546	511	57	33	1,720
apr	173	54	34	1,744	415	52	31	1,680	326	55	34	1,889	175	54	33	1,629	150	57	35	1,607	177	56	36	1,543	1,416	54	33	1,705
may	99	55	33	1,791	83	58	35	1,986	67	60	35	1,546	51	59	36	1,921	62	59	35	1,710	72	57	35	1,746	434	58	35	1,787
ju	166	53	32	1,835	82	56	33	1,454	42	60	32	1,450	58	60	33	1,452	58	59	35	1,925	79	58	35	1,711	485	57	33	1,682
jul	231	53	32	1,774	221	56	35	1,574	147	56	35	1,558	149	54	34	1,708	78	60	35	1,761	205	57	38	1,567	1,031	56	35	1,649
aug	174	53	32	1,883	242	55	36	1,384	53	59	36	1,681	81	60	34	1,778	57	59	36	1,732	123	58	37	1,705	730	56	35	1,650
sep	111	54	32	1,492	208	55	35	1,357	52	55	32	1,380	82	58	34	1,730	51	59	35	1,829	67	58	37	2,014	571	56	34	1,558
oct	148	56	35	1,539	236	55	35	1,867	131	56	33	1,694	131	56	34	1,675	63	59	36	1,796	75	59	36	2,398	784	56	35	1,789
nov	65	57	33	1,568	105	57	35	1,762	48	60	34	1,521	39	59	35	1,639	36	60	34	1,771	45	59	36	2,854	338	58	34	1,823
dec	343	53	34	1,595	56	62	33	1,655	66	58	35	1,590	125	57	35	1,605	93	56	36	1,899	12	64	38	3,117	695	56	34	1,668
Total	**2,025**	**54**	**33**	**1,643**	**2,398**	**54**	**33**	**1,600**	**1,059**	**57**	**34**	**1,714**	**1,159**	**56**	**34**	**1,683**	**1,024**	**58**	**35**	**1,714**	**1,200**	**58**	**36**	**1,742**	**8,865**	**56**	**34**	**1,667**

Table AS5-82 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

Ministries

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	2,098	57	35	1,298	1,850	55	32	1,183	234	62	34	1,705	576	59	35	1,373	868	59	36	1,453	703	60	36	1,430	6,329	58	35	1,322
feb	345	62	36	1,643	441	60	35	1,491	223	63	35	1,738	220	61	35	1,650	297	62	35	1,538	265	62	36	1,822	1,791	61	35	1,627
mar	286	61	35	1,633	461	59	35	1,441	222	62	34	1,670	195	62	35	1,586	276	61	35	1,713	244	61	35	1,663	1,684	61	35	1,598
apr	639	59	35	1,631	513	59	34	1,438	778	59	36	1,487	439	60	34	1,658	534	60	34	1,357	446	60	35	1,496	3,349	59	35	1,510
may	314	60	34	1,639	374	59	34	1,602	346	59	35	1,411	237	61	35	2,077	248	61	34	1,510	230	61	35	1,586	1,749	60	34	1,620
ju	253	61	35	1,629	369	59	34	1,540	266	60	34	1,674	263	61	35	1,834	295	61	35	1,891	254	61	35	1,874	1,700	60	35	1,730
jul	646	60	35	1,493	1,161	57	35	1,435	493	59	36	1,560	584	59	36	1,555	438	61	35	1,622	391	61	35	1,735	3,713	59	35	1,534
aug	344	61	35	1,553	1,109	58	36	1,495	235	61	34	1,610	252	62	36	1,743	260	62	36	1,682	203	62	36	1,644	2,403	60	36	1,573
sep	415	61	35	1,859	934	58	35	1,494	250	62	35	1,711	358	61	36	1,830	303	61	35	1,743	270	62	35	2,020	2,530	60	35	1,709
oct	557	59	34	1,578	742	58	35	1,475	362	60	35	1,616	595	59	35	1,587	331	61	35	1,596	288	61	37	2,304	2,875	59	35	1,633
nov	360	60	34	1,714	438	59	35	1,610	255	62	35	1,898	281	60	35	1,787	254	61	33	1,612	138	64	36	3,140	1,726	61	35	1,826
dec	743	58	35	1,404	397	62	34	1,623	434	61	36	1,596	582	60	37	1,682	453	60	36	1,563	141	63	36	2,347	2,750	60	35	1,599
Total	**7,000**	**59**	**35**	**1,505**	**8,789**	**58**	**34**	**1,431**	**4,098**	**60**	**35**	**1,607**	**4,582**	**60**	**35**	**1,657**	**4,557**	**60**	**35**	**1,573**	**3,573**	**61**	**36**	**1,788**	**32,599**	**59**	**35**	**1,560**

Table AS5-83 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

University

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	678	58	35	1,520	639	54	31	1,340	97	63	35	2,168	137	60	35	1,815	279	59	35	1,698	172	61	36	1,924	2,002	57	34	1,574
feb	51	62	34	1,493	110	61	34	1,711	38	64	34	1,791	50	62	36	1,748	80	63	36	1,967	66	63	35	2,390	395	62	35	1,860
mar	60	62	33	1,618	120	60	34	1,751	38	65	36	1,907	52	63	34	2,182	65	62	36	1,979	68	64	36	2,127	403	62	35	1,902
apr	125	58	34	1,599	123	60	34	1,514	210	59	35	1,571	123	59	35	1,576	189	59	34	1,654	106	59	36	1,848	876	59	35	1,619
may	59	61	33	1,631	105	58	34	1,769	44	59	35	1,553	51	61	34	1,660	67	63	36	1,858	51	61	35	2,128	377	60	34	1,772
ju	45	62	34	1,562	103	60	34	1,886	49	61	33	1,613	47	62	36	1,981	45	61	34	1,626	46	62	36	2,405	335	61	35	1,852
jul	124	60	34	1,513	201	60	35	1,913	77	60	36	1,611	113	58	35	1,670	84	60	35	1,768	53	61	35	1,900	652	60	35	1,740
aug	72	61	34	1,412	371	59	35	1,539	52	60	36	1,577	71	61	35	1,998	56	62	36	1,925	51	62	36	2,238	673	60	35	1,662
sep	99	57	33	1,687	273	59	35	1,583	52	61	34	1,752	64	61	36	2,288	74	63	36	1,933	56	62	37	2,518	618	60	35	1,813
oct	123	58	34	1,507	254	59	35	1,660	84	60	34	1,843	119	59	35	1,649	106	62	36	2,217	92	61	37	2,834	778	59	35	1,869
nov	815	71	38	3,695	598	66	36	3,215	502	70	38	4,058	580	69	38	3,901	612	69	38	4,014	602	70	39	4,478	3,709	69	38	3,879
dec	110	60	34	1,651	94	63	33	1,895	53	61	36	2,341	129	61	37	2,134	106	61	36	2,091	42	62	37	2,128	534	61	35	2,004
Total	**2,361**	**63**	**36**	**2,289**	**2,991**	**60**	**34**	**1,916**	**1,296**	**64**	**36**	**2,655**	**1,536**	**64**	**36**	**2,625**	**1,763**	**64**	**36**	**2,599**	**1,405**	**65**	**37**	**3,167**	**11,352**	**63**	**36**	**2,435**

Table AS5-84 - Distribution by fund and retirement year of direct pensions paid as of 1/1/2002: number of pensions, age and contribution period at the retirement year and average monthly amount at 1/1/2002

(in euros)

Magistrates

Month	1996				1997				1998				1999				2000				2001				Total			
	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount	Number	Age	Contribution period	Average amount
jan	15	69	39	8,172	24	67	39	8,252	18	69	40	9,028	14	69	39	9,436	15	66	38	8,605	15	67	39	9,162	101	68	39	8,730
feb	10	66	39	8,101	24	69	40	8,625	9	67	39	8,053	6	70	40	8,980	20	69	40	9,477	9	67	40	8,712	78	68	40	8,748
mar	18	69	40	8,709	31	67	39	8,212	5	69	40	9,028	11	69	40	8,899	12	66	39	9,146	8	70	40	9,624	85	68	39	8,719
apr	17	66	39	8,199	18	66	38	7,774	19	63	38	8,024	16	67	38	8,507	10	63	36	8,097	11	65	38	8,671	91	65	38	8,179
may	20	69	40	8,792	25	66	39	8,120	13	67	39	8,850	6	68	39	9,196	6	69	40	10,398	7	68	39	9,233	77	68	39	8,780
ju	26	69	40	8,596	13	66	39	7,961	11	69	40	9,030	13	69	40	9,588	3	69	40	9,411	9	66	38	8,700	75	68	40	8,767
jul	6	71	40	9,379	13	67	39	8,325	8	71	40	9,440	12	65	38	8,686	7	65	39	8,333	8	66	38	8,719	54	67	39	8,747
aug	6	70	40	8,946	15	68	39	8,558	2	66	40	7,849	8	70	40	9,512	7	69	39	8,987	8	71	40	9,978	46	69	40	9,056
sep	12	66	38	8,031	17	67	39	7,982	7	68	39	8,531	17	69	40	9,209	16	68	39	8,891	7	69	40	9,638	76	68	39	8,659
oct	11	69	40	8,693	25	64	38	7,793	8	70	39	9,649	17	67	39	9,231	12	68	40	8,676	12	68	38	9,058	85	67	39	8,675
nov	7	69	40	8,731	8	68	40	8,923	7	68	39	8,754	9	68	39	9,033	6	70	40	9,262	3	69	40	9,622	40	69	40	8,988
dec	6	72	40	8,715	15	68	40	9,005	4	70	40	8,524	15	67	40	9,191	9	70	39	9,600	1	67	40	4,753	50	69	40	9,010
Total	**154**	**69**	**40**	**8,535**	**228**	**67**	**39**	**8,244**	**111**	**68**	**39**	**8,743**	**144**	**68**	**39**	**9,116**	**123**	**68**	**39**	**9,021**	**98**	**67**	**39**	**9,087**	**858**	**68**	**39**	**8,715**

ADVERSE SELECTION
Opportunistic behaviour occurring in presence of information asymmetry with respect to the characteristics of a person or of goods exchanged, as reflected by a worsening quality as prices change. A typical example is the marked for used cars. Another is that for health plans, where the insurer's imperfect information on the health conditions of the insured allows high-risk insurance buyers to enter plans designed for low-risk subjects. This leads to higher premiums – to meet the expenses generated by bad risks – which, in turn, entails a progressive worsening of the average risk quality, chasing out good risks.

AGENCY RELATIONSHIP
A relationship that occurs in a context of information asymmetry whereby the less informed party (so-called principal) relies on the more informed party (so-called agent). That between patient and doctor is a typical case of agency relationship.

ALLOCATIVE INEFFICIENCY
This is determined by a given interpersonal distribution of resources, the quantity of goods produced and demanded are different from those that maximize social well-being. Notice should be taken of the difference between productive inefficiency, which considers only the different combination among production factors, without any concern whether the goods produced meet consumer wants.

ASSET ALLOCATION
Process leading to the selection of investments most likely to achieve the desired rate of return.

BABY PENSION
Term denoting public sector seniority pensions paid earlier than private sector seniority pensions, i.e. pensions paid before the beneficiary reached 35 contribution years.

BAD RISKS
This expression indicates buyers or potential buyers of insurance with a high risk to incur the loss covered by insurance, e.g. to become sick. From the insurer's standpoint, these persons are more costly.

BENCHMARK
Index or standard of reference for a variety of performances, which was originally utilised to measure the returns generated by of asset managers. In this case a benchmark may be set for the entire portfolio o by asset class. Active asset managers strive to beat the benchmark.

glossary

CONTRIBUTION-BASED SYSTEM
Under this system pensions are calculated on the amount of contributions paid over an entire working lifetime. For instance, with the system introduced under law 335/95, the accumulated contributions (as determined on the basis of the pensionable amount not on the basis of the actual contributions) are adjusted each year in line with the average change in nominal GDP in the 5 years preceding that of adjustment. The pension credits are then annuitized through specific conversion rates obtained by taking life expectancy on retirement into account and incorporating a GDP growth rate of 1.5%.
Based on law 335/95, the contribution-based system applies to people who entered the workforce after 1 January 1996 and on pro rata basis to those who, as at 31 December 1995, had less than 18 contribution years.

CONTRIBUTORY EARNINGS
Earnings on which pension contributions are paid which, according to law 153 of 1969, include "everything the employee receives from the employer relating to his employment in cash or in kind, before any withholding" Contributory earnings exclude expense reimbursements, long-service awards and cash-handling allowances, 50% of business travel allowances, one-time awards; also excluded are family allowances and benefits paid by social security institutions.

COST SHARING
With reference to a healthcare system, this means the allocation of costs between an insurer or a another paying party on one side and insured or consumer, on the other.

COST-CONTAINMENT
This expression indicates the different strategies to keep costs in check, at both micro-and macro-economic level. With reference to healthcare systems, it is used to indicate efficiency improvements, contracts with cheaper suppliers, pre-setting of fees or services and so on.

CREAM SKIMMING
Also known as cherry picking, this expression indicates the tendency to capture the best part of the market. In particular, in the case of healthcare, cream skimming occurs when the provider of healthcare services or a paying party tries to select the most remunerative customers. In the case of a physician, these are people that pay more for services but use them less, whilst in case of hospitals those who have less serious pathologies, given the same refund, and in the case of paying parties, those who are less likely to become sick but who pay an average premium greater than the amount required for their specific risk.

DECILE
In relation to the values of a variable in a population, each decile represents 10 percent of the frequencies observed. Deciles are arrayed in a decreasing order, so that the first decile is the 10 percent of the population where the variable considered has the highest value.

DIAGNOSIS RELATED GROUPS (DRGs)
This is a type of plan where payments are based on average expected costs and not on cost actually incurred. This involves the classification of diagnoses in related groups (hence the name), paying the same cost for each group so classified.
Cases belonging to the same DRG are reimbursed the same amount, regardless of the actual cost.

EARMARKED
Originally this term indicated an identifying mark on the ear of a domestic animal. In public finance it signifies the amount collected by levying a tax and devoted to pay for a specific service (public good, etc.)

EARNINGS-RELATED SYSTEM
In an earnings-related system pensions are calculated with reference to the average salary received over a particular period of time and adjusted according to a pre-established index. Under the system operating in Italy, rates of return based on the number of years of work are applied to obtain the value of the pension. In accordance with law 335/95 the earnings-related system applies to people with 18 or more years of contributions as of 31 December 1995.

EMPLOYEE SEVERANCE FUND
(TFR – TRATTAMENTO DI FINE RAPPORTO)
TFR is regulated by Law 297/82. It is a lump-sum payment paid out by employers upon termination of employment, regardless of duration; thus, it is not a welfare or even less a pension benefit.
The amount of TFR is equal to the total provisions set aside every employment year, as adjusted in accordance with an index obtained by adding together a fixed value of 1.5 and 75 percent of the inflation rate.

END-OF-SERVICE BONUS FOR LOCAL AUTHORITY AND NATIONAL HEALTH SERVICE STAFF (INDENNITÀ DI PREMIO DI SERVIZIO)
A lump-sum payment made to local authority and national health service staff. on termination of employment. The sum is equal to one-fifteenth of 80 percent of the final 12 months of salary, inclusive of the special supplementary grant, for every year of pensionable service. However, staff employed on permanent contracts after 31 December 2000 receive a severance payment in accordance with the law on employee severance funds (TFR).

FUNDED SYSTEM
This method of funding the pension system involves the investment of contributions in financial markets. A funded system can be based on defined-contribution or defined-benefit arrangements; in the first case, the value of benefits paid to a retiree is equivalent to the credits accumulated by the individual through contributions and the relevant net investment returns; in the second case, the value of the benefits paid to an individual is determined on the basis of other criteria, even though the system is funded by members' contributions.

FUNDHOLDING
In the British system, this is applied to general practitioners (GPs). Such GPs not only are paid for services rendered to their patients, but they are also given a budget, or a cash amount, to cover part of "second level" expenditures (namely, specialist doctor visits, diagnosis and some kind of hospitalisation) for the patients registered with them.

GATEKEEPER
Usually this term signifies the role of the general practitioner as holder of the key to second level care. If the general practitioner is a gatekeeper, patients gain access to the second level only when the GP really thinks it is necessary.

INCOMPLETENESS OF MARKETS
Absence of markets because: a) it is impossible to exclude those that do not pay a price – as is the case with pure public goods, such as national defence; b) of uncertainty which, contrary to risk, does not make it possible to determine the likelihood of an occurrence – e.g. the level of inflation after retirement; c) of extreme forms of moral hazard and adverse selection – for instance, moral hazard prevents the development of insurance policies against unemployment.

INFORMATION ASYMMETRY
Situation characterised by an asymmetric distribution of information between two or more parties to a transaction. Information asymmetry may involve both the features of the goods and services being transacted or the behaviour of the better informed party to a transaction. Information asymmetry may lead to either adverse selection or moral hazard.

LABOUR COST PER UNIT OF OUTPUT
This is the ratio of the cost of labour to the output per unit of labour. It provides an indication of the competitiveness of the productive systems of a given country.

MEANS TEST
Term denoting a series of indicators of a person's financial resources (individual income, household income, wealth, etc.); eligibility of a person to receive cash benefits or services in kind are based on these indicators.

MORAL HAZARD
Opportunistic behaviour determined by an information advantage (see information asymmetry) and intended to increase one's gain in accordance with the terms and conditions of the transaction. Moral hazard can take many different shapes, e.g. efforts below the efficient level or excess consumption of goods and services.

OCCUPATIONAL PENSION FUNDS
These are pension funds intended for a specific group of workers; these are established on the basis of an agreement between employers and worker representatives.

OLD-AGE PENSIONS
A pension paid to those who reached the minimum pensionable age, provided that they have a minimum number of actual contribution years, whether nominal or as a result of creditable service.

OPEN PENSION FUNDS
This are started by banks, insurance companies, brokerage firm and asset management companies to allow workers to set up their individual pension plans, in absence of occupational pension funds. This is ideal for self-employed and other free agent workers.

PATH DEPENDENCY
A path depends on the starting point. This term indicates that the reforms that can be pursued depend on the starting conditions. In fact, a newly-adopted organisational system tends to give rise to institutions that support it and limit the possibility to change it.

PAY AS YOU GO (system)
This is the method of funding the pension system currently in place in Italy. Under this system the contributions paid annually by employees are used to fund the payment of existing pensions.

PAYING THIRD PARTY
This is an individual or an institution that pays the provider of healthcare services for services rendered to the consumer or patient. Instead of a direct payment from the consumer to the service provider there is an indirect one, with the patient that pays the paying third party and this, in turn, that pays the supplier. Typical third paying parties are insurance companies, health insurance institutions and the national health plan.

PENSIONABLE EARNINGS
Earnings on which pensions are calculated in the earnings-related system.
This is equivalent to the average contributory earnings over a given period of time and adjusted on the basis of the consumer price index plus one percentage point.

PPP
Purchasing Power Parity is a coefficient applied to statistics from different countries for the purpose of eliminating inflation- and exchange-rate differentials, which make their comparison difficult.

RATE OF RETURN
This is the interest rate at which, upon retirement, the stream of future pension payments determined on the basis of life expectancy is discounted to equate the amount of the pension credits.

REPLACEMENT RATE
This is the amount of pension cover as a share of salary. It is the ratio of pension on retirement to salary immediately preceding retirement.

RETIREMENT ALLOWANCE FOR MILITARY AND CIVIL SERVICE STAFF (INDENNITÀ DI BUONUSCITA)
A lump-sum payment made to military and civilian government employees by INPDAP on termination of employment. The sum is equal to one-twelfth of 80 percent of the final 12 months of salary, inclusive of the special supplementary grant (48 percent) for every year of pensionable service. However, staff employed on permanent contracts after 31 December 2000 receive a severance payment in accordance with the law on employee severance funds (TFR).

SECOND BEST
This term defines a situation arising after economic or healthcare policies have been implemented. This is not the optimal situation devised by theory; instead it is sub-optimal because in actual reality there is a larger number of constraints than those considered by theory (transaction costs, irrational behaviours, operator resistance and so on). Second best is the norm for every healthcare policy.

SENIORITY PENSION
A form of early retirement allowing the beneficiaries to take their pension before qualifying for an old-age pension, providing that they have at least 35 contribution years and, under the current system, have reached 57 years of age.

SURVIVOR PENSIONS
Pensions to which family members are entitled in the event of the death of a pensioner or employee who at the time of death had vested pension rights under the plan he had joined. The amount of the pension payable to survivors, compared with that collected or due to the deceased, depends on the kinship of the family member(s)/survivor(s) (spouse, children, parents, brothers, sisters).

TAX WEDGE
This indicates the amount of taxes and contributions as a share of total wages. It is a fraction with the numerator equal to the difference between the cost of labour for the firm (gross pay and pension and other contributions payable by the employer) and the worker's take-home pay (i.e. net of taxes but inclusive of state transfers) and the denominator equal to the cost of labour for the firm (gross pay and pension and other contributions payable by the employer).

TERMS OF TRADE
Ratio of the export price index to the import price index, set equal to 100 in a given base year. This is needed to measure the relative advantage or disadvantage of a country in international trade (how many units of exports are given to other countries in exchange for a given number of units of imports).

TICKET SYSTEM
Method for sharing healthcare spending with patients at the time services are used. In fact, part of the costs for services rendered, both by private or public healthcare facilities, are for paid for by patients.

TRADE-OFF
A trade-off occurs when, in presence of multiple objectives, one can be achieved only by sacrificing at least another.

TRANSFORMATION COEFFICIENTS
These coefficients are utilised to convert accumulated pension credits into pension benefits (see contribution-based system).

UCITS
Undertakings for Collective Investments in Transferable Securities. These include: open-end mutual funds, variable-capital investment trust (SICAVs), harmonised investment funds, occupational funds.

UNIVERSALISM, UNIVERSALISTIC
Insurance coverage of the population. It indicates the hare of the population that is entitled to obtain social protection benefits provided by the state. It used without any qualification, it means that the entire population is covered.

bibliography

Aaron, H. (1966), *The Social Insurance Paradox, in Canadian Journal of Economics,* vol. 32

AAVV (2001), *Prometeo: atlante della sanità italiana,* Italpromo Esis, Rome

AAVV (2001), *Pensioni: guida a una riforma,* Ideazione editrice

Acocella, N. (2001), *Il dibattito sul welfare state: le implicazioni per l'Italia,* in G. Lunghini, F. Silva and R. Targetti Lenti (ed.), *Politiche pubbliche per il lavoro,* il Mulino

Adema, W. (1996), *Net Public Social Expenditure, Labour Market and Social Policy Occasional Paper,* n.19, Oecd

Adema, W. (1999), *Net Social Expenditure, Labour Market and Social Policy Occasional Paper,* n.39, Oecd

Aghion, P. (1998), *Inequality and Economic Growth,* in P. Aghion, J.G. Williamson, *Growth, Inequality and Globalization,* Cambridge University Press

Agulnik, P. (2000), *Maintaning Incomes after Work: Do Compulsory Earnings-Related Pensions Make Sense,* Oxford Review of Economic Policy, vol. 16, n. 1

Albert, M. (1993), *Capitalismo contro capitalismo,* Mulino, Bologna

Amato, G. e Marè, M. (2001), *Le pensioni. Il pilastro mancante,* il Mulino

Aprile, R. (2001), *Gli scenari demo-economici nei modelli di previsione della R.G.S.,* in A. Verde (ed.), *Temi di finanza pubblica,* Cacucci Publisher, Rome

Arachi, G. e Zanardi, A. (2000), *Il federalismo fiscale regionale: opportunità e limiti,* in L. Bernardi (ed.) *La Finanza Pubblica in Italia – Rapporto 2000,* Bologna, Il Mulino

Arachi, G. e Zanardi, A. (2001), *La devoluzione nel paese del dualismo,* in L. Bernardi (ed.) *La Finanza Pubblica in Italia, – Rapporto 2001,* Bologna, Il Mulino

Arellano, J.P. (1980), *Sistemas alternativos de seguridad:un analisis de la experiencia chilena,* Coleccion de Estudios Cieplan

Arenas de Mesa, A. (2000), *Cobertura previsional en Chile, lecciones y desafios del sistema de pensiones administrado por el sector privado,* CEPAL

Artoni, R. (1999), *Sviluppo economico e welfare state: trade off o sinergie?* Relazione al Convegno: *Perchè il welfare state? Sviluppo economico ed istituzioni della cittadinanza sociale,* Rome 1/10/1999, mimeo

Atkinson, A. B. (2000), *La povertà in Europa,* il Mulino

Balassone, F. e Franco, D. (2000), *Fiscal Federalism and the Stability and Growth Pact: a Difficult Union,* paper presented at the XII SIEP Scientific Meeting, Pavia, 6-7 October

Barca, L. e Franzini, M. (ed.) (2001), *La cittadinanza difficile. Diritti e welfare,* il Ponte Publisher, Florence

Bardhan, P., Gintis, H. e Bowles, S. (1998), *Recasting Inequality,* Verso, New York

Bariletti, A. et al. (1999), *La sanità tra scelta e razionamento,* Milan, Il Sole 24 Ore

Barr, N. (2002), *La riforma delle pensioni: miti, verità e scelte normative, GE-Diritto ed Economia dello stato sociale,* n. 2

Benefield, N. A. (2001), *Publicly Funded School Voucher Programs: a Policy Analysis,* Dissertation.com

Bertola, G., Boeri, T. e Nicoletti, G. (ed.) (2001), *Protezione sociale, occupazione e integrazione europea,* il Mulino

Bertola, G., Jimeno, J.F., Marimon, R., e Pissarides, C. (2000), *Eu Welfare Systems and Labour Markets: Diverse in the Past, Integrated in the Future?,* in G. Bertola, T. Boeri e G. Nicoletti (ed.), *Welfare and Employment in a United Europe,* Cambridge (Mass.), MIT Press

Blake, D. (2000), *The United Kingdom: Examining the Switch from Low Public Pensions to High-Cost Private Pensions,* Paper presented at the NBER – Kiel Institute Conference on *Coping with the pension Crisis – Where does Europe stand?*

Blake, D. (2002), *The United Kingdom: Examining the Switch from Low Public Pension to High-Cost Private Pensions,* in M.Feldstein & H.Siebert , *Social security reform in Europe,* Chicago, NBER 2002

Blank, R. e Haskins, R. (ed.) (2001), *The New World of Welfare,* Washington DC, The Brookings Institutions

Boeri, T. (2000), *Lo stato asociale,* Laterza, Bari

Boldrin, M. et al. (1999), *The Future of Pension Systems in Europe, Economic Policy – A European Forum,* 29, October

Economic Bulletin - Bank of Italy (2000), *Supplemento al Bollettino Statistico: i bilanci delle famiglie italiane nell'anno 1998,* nuova serie, 18 Aprile 2000, Numero 22, Anno X, Rome

Boeri, T. e Pellizzari, M. (1999), *Ammortizzatori del terzo livello* in De Caprariis (1999), pp. 209-298

Bosi, P. e Pisauro, G. (1994), *La spesa per il sostegno del reddito dei disoccupati,* in Ministero del Tesoro, Commissione per la Spesa Pubblica, *Il controllo della spesa pubblica,* Rome, pp. 229-41

Buratti, C. (1990), *Successi e fallimenti del SSN: un bilancio dopo i primi 10 anni, Economia Pubblica,* 3, 145-154

Burtless, G. (1999), *Social Security Privatization and Financial Market Risk: Lessons from U.S. Financial History,* Paper presented at the World Bank Conference *New Ideas About Old Age Security,* September 14-15, Washington D.C.

Bustamante, J. (1998), *El Sistema chileno de Pensiones,* Seminario Internacional Reforma da Previdencia Social, Brasili, diciembre

Carra, L. e Padovani, G. (2002), *Sanità: modelli a confronto, Le Scienze,* May 14-15

Caruso, E. (2002), *Spesa, finanziamento e disavanzi nella Sanità: la dinamica delle Regioni, Politiche sanitarie* (to be published)

Casarico, A. (2000), *An Economic Analysis of Pension Systems and Reforms,* D. Phil thesis, Nuffield College, Oxford

Canzi, M. e Vaggi, G. (1996), *L'onere degli ammortizzatori sociali,* Working paper # 32, Dipartimento di Economia Politica e Metodi Quantitativi, Università di Pavia

Castellino, O. (1995), *Le pensioni difficili,* il Mulino

Castellino, O. (1996), *La redistribuzione tra ed entro generazioni nel sistema previdenziale italiano,* in F. Padoa-Schioppa Kostoris, *Pensioni e risanamento della finanza pubblica,* il Mulino

Castellino, O. e Fornero, E. (1997), *Privatizzare la previdenza sociale? Condizioni, modalità e limiti,* in *Politica Economica,* n. 1

Ceprini, M. e Modigliani, F. (1998), *Social Security: una proposta per l'Italia,* in *Economia Italiana,* n. 2

Cgil Lombardia (2001), *Un bilancio dell'attuazione della legge regionale 31/97. Analisi e proposte del Dipartimento della sanità lombarda,* in www.sanita.lombardia

Chernichovsky, D. (2000), *The public-private mix in the modern health care system,* NBER, Working Paper, n. 7881

Ciampi, C. A. (1999), *Globalizzazione e riforma del sistema monetario internazionale,* in F. R. Pizzuti (ed.) (1999a)

Commissione di vigilanza sui fondi pensione (2001), *Relazione, Anno 2000*

Commissione di vigilanza sui fondi pensione (2002), *Relazione, Anno 2001*

Commissione ministeriale per la valutazione degli effetti della legge n. 335/95 e successivi provvedimenti – Ministerial decree dated 18 July – (2001), *Verifica del sistema previdenziale ai sensi della legge 335/95 e successivi provvedimenti, nell'ottica della competitività, dello sviluppo e dell'equità,* Ministero del lavoro e delle Politiche Sociali, September, Rome

Commissione per l'analisi delle compatibilità macroeconomiche della spesa sociale (1997), *Relazione Finale,* Rome

Costa, G., Perucci, C. e Dirindin, N. (1999), *Le disuguaglianze nella salute e il Piano Sanitario, Epidemiologia e Prevenzione,* 23, 133-140

Croci Angelini, E., D'Ambrosio, C. e Farina, F. (2001), *La diseguaglianza interregionale nell'Unione europea,* in *GE Diritto ed economia dello stato sociale,* n. 2, Gangemi Publisher

De Caprariis, G. (ed.) (1999), *Mercato del lavoro e ammortizzatori sociali,* il Mulino

De Cecco, M. (1999), *La globalizzazione finanziaria: specificità e differenze storiche,* in F. R. Pizzuti (ed.) (1999a)

Department of Social Security (1999), *Social Security Statistics 1999,* London, Government Statistical Office

Department of Social Security (2000), *Retirement Pension. Summary Statistics*

Di Biase, R. e Gandiglio, A. (1998), *Prestazioni sociali per i lavoratori in uscita anticipata dal mercato del lavoro nel settore privato. Italia e confronti internazionali, Assistenza Sociale,* n. 3-4, pp.45-88

Diamond, P. (1994), *Privatization of Social Security: Lessons from Chile, Revista de Analisis Economico*

Diamond, P. e Valdes-Prieto, S. (1994), *Social Security Reform,* in B. Bosworth, Dornbusch R. e Laban R. (ed.), *The Chilean Economy: Policy, Lessons and Challenges,* The Brookings Institution, Washington, D.C.

Diamond, P. (1998), *The Economics of Social Security Reform, NBER working paper 6719,* September

Diamond, P. (ed) (1999a), *Issues in Privatizing Social Security,* MIT Press

Diamond, P. (1999b), *Administrative Costs and Equilibrium Charges with Individual Accounts, NBR Working Paper,* n. 7050

Diamond, P. (1999c), *What Stock Market Returns to Expect for the Future?, in Issue in Brief,* Center for Retirement Research, Boston College, Boston, n. 2

Dirindin, N. e Pagano, E. (ed.) (2001), *Governare il federalismo,* Rome, Il Pensiero Scientifico

Doeringer, P. B. (1990), *Bridges to Retirement, Older Workers in a Changing Labor Market,* Itaca N. Y., ILR Press

Echp (1999), *Selected Indicators from the 1995 Wave,* European Commission – Eurostat, Luxemburg

Economic Policy Committee-Working Group on Ageing (2000), *Progress report to the Ecofin Council on the Impact of ageing populations on public pension system*

Economic Policy Committee (2001), Budgetary challenges posed by ageing populations: the impact on public spending on pensions, health and long-term care for the elderly and possible indicators of the long-term sustainability of public finances

Econpubblica (2000), *Un'analisi comparata dei sistemi pensionistici europei: Italia, Francia, Germania e Regno Unito,* mimeo

Eiro (2001), *Progressive retirement in Europe*

Enthoven, A. (1985), *Reflections on the management of the NHS,* London, NPHT

European Observatory on Health Care Systems (2001), *Health Care in Transition: Italy*

European Observatory on Health Care Systems (2001), *Health Care in Transition: UK*

European Observatory on Health Care Systems (2001), *Health Care in Transition: Sweden*

European Observatory on Health Care Systems (2001), *Health Care in Transition: Spain*

European Observatory on Health Care Systems (2001), *Health Care in Transition: Germany*

European Observatory on Health care Systems (2001), *Health Care in Transition: Belgium*

Eurostat (2000a), *European social statistics. Social protection 1980-1997*

Eurostat (2000b), *European social statistics. Social protection 1980-1998*

Eurostat (2001), *European social statistics. Social protection 1980-1999*

Evans, D. et al. (2001), *Comparative efficiency of national health systems: cross national econometric analysis,* BMJ vol. 323 pp. 307-310

Farina, F. (2000), *The Economics of European Monetary Integration and the Convergence Problem,* in O. Fabel, F. Farina and L. F. Punzo (ed.), *European Economies in Transition. In Search of a New Growth Path,* London, Macmillan

Farina, F. e Tamborini, R. (2002), *Le politiche macroeconomiche di stabilizzazione in Europa nel nuovo regime di unione monetaria* in F. Farina e R. Tamborini (ed.), *Mutamenti istituzionali e strutturali dopo l'unione monetaria europea,* Bologna, Il Mulino

Feldstein, M. (1996), *The Missing Piece in Policy Analysis: Social Security Reform, American Economic Review,* 86, 1-14, May

Feldstein, M. e Samwick, A. (1998), *The Transition Path in Privatizing Social Security,* in M. Feldstein (ed.) (1999). *Privatizing Social Security,* University of Chicago Press, Chicago

Fiorentini, G. e Ugolini, C. (2000), *Accordi contrattuali tra produttori e finanziatori in un contesto di programmazione sanitaria, Politica Economica,* 2: 169-194

Fitoussi, J.P. e Le Cacheux, J. (ed.) (2002), *Rapport sur l'Etat de l'Union européenne 2002 Fayard*

Fornero, E. (1999), *L'economia dei fondi pensione,* Bologna, il Mulino

Fornero, E. e Castellino, O. (ed.) (2001), *La riforma del sistema previdenziale italiano,* il Mulino

Franco, D. e Sestito, P. (1995), *Il sistema di protezione sociale dei disoccupati: alcune riflessioni su una possibile riforma, Politica Economica,* n. 3, pp. 389-412

Franco, D. e Sestito, P. (1999), *Nuove idee per il sistema di protezione sociale a fronte del rischio di disoccupazione,* in De Caprariis (1999), pp. 299-350

Franco, D. (2000), *Italy: a never-ending pension reform, paper presented at NBER – Kiel Institute Conference on "Coping with the pension Crisis – Where does Europe stand?"*

Franzini, M. (1999), *Globalizzazione, profitti e salari,* in F. R. Pizzuti (ed.) (1999a)

Fronstin, P. e Helman, R. (2001), *Findings from the Health Confidence Survey 2000, EBRI Notes,* Vol. 22, No. 4

Geanakoplos, J., Mitchell, O. e Zeldes, S. (1998a), *Would a Privatised Social Security System Really Pay a Higher Rate of Return?, Pension Research Council WP 98-6*

Geroldi, G. (2000), *Le ragioni per riformare gli strumenti di sostegno al reddito per i disoccupati e gli incentivi all'occupazione,* mimeo

Giaimo, S. (2001), *Who pays for Health Care Reform?* in P. Pierson (ed.), *The New Politics of the Welfare State,* Oxford University Press

Giarda, P. (1998), *La revisione del sistema pensionistico nel 1997: come avrebbe potuto essere, in Economia Politica,* n. 2

Giarda, P. (2000), *Il federalismo fiscale in attuazione della legge n.133/1999: aspetti tecnici, ragioni e problemi aperti, Economia Pubblica, 5,* 5-46

Giarda, P. (2002), *Le regole del federalismo fiscale nell'articolo 119: un economista di fronte alla nuova costituzione, Siep Working Papers,* 115/2001

Granaglia, E. (2001), *Modelli di politica sociale,* il Mulino

Gronchi, S. e Aprile, R. (1998), *The 1995 Pension Reform: Equity, Sustainability, and Indexation, in Labor,* vol. 12, n. 1

Haskins, R. e Primus, W. (2002), *Welfare Reform and Poverty,* in I.V. Sawhill, R.K.Weaver, R. Haskins e A. Kane (ed.), *Welfare Reform and Beyond. The Future of the Safety Net,* Washington DC, The Brookings Institution

Hassink W. H. J., van Ours J. C., Ridder G. (1997), *Dismissal through disability, De Economist,* volume 145 (April)

Herbertsson, T. T. Orszag, J. M. Orszag, P. R. (2000), *Retirement in the Nordic Countries. Prospects and Proposals for Reform,* Nordic Council of Ministers, TemaNord

Holzmann, R. e Stiglitz, J. E. (ed) (2001), *New Ideas about Old Age Security, The World Bank,* Washington, D.C.

Hurst, J. (2000), *Challenges for Health Systems in member countries of the OECD, Bulletin of the WHO,* 78 (6)

Ilo (2000), *Encouraging the Employment of Older People,* Conference of the Ministers of Labour of G.8 Countries, Turin, 10-11 November 2000

IMF, *World Economic Outlook,* April 2000

Inps (1998), *Modello previsionale 1998: un progetto per la simulazione dell'andamento dei regimi generali obbligatori dei lavoratori dipendenti e dei lavoratori autonomi*

Inps (2001), *Rapporto 1999/2001*

Isae (2002), *Rapporto trimestrale sulle priorità nazionali*

Istat, *Conto economico consolidato della protezione sociale* (anni vari)

Istat (1998), *Il sistema pensionistico italiano: beneficiari e prestazioni,* Anno 1997

Istat, *I Trattamenti Pensionistici* (anni vari)

Istat, *Rapporto annuale* (anni vari)

Iversen, T. (2001), *The Dynamics of Welfare State Expansion: Trade Openness, De-industrialization, and Partisan Politics,* in P. Pierson (ed.), *The New Politics of the Welfare State,* Oxford University Press

Jee, M. e Z. Or (1999), *Health outcomes in Oecd Countries: a framework of health indicators for outcome-oriented policy making",* Oecd, Labour Market and Social Policy, Occasional Paper n.36

Kalish, D. W. e Aman, T. (1998), *Retirement Income Systems: The Reform Process across Oecd Countries, Social Policy Division,* Oecd working paper

Klevmarken, N.A. (2001), *Swedish pension reforms in the 1990s,* paper prepared for the conference of Fundacion Ramon Areces on pensions in Europe, Madrid, 15-16 March

Koen, V. (2000), *Public expenditure reform: the health care sector in the UK,* Oecd Economics Department Wp Series, n. 256

Latulippe D. (1996), *Effective retirement age and duration of retirement in the industrial countries between* 1950 *and* 1990, Discussion Paper 2, *Issues in Social Protection,* Ilo

Le Grand, J. (2000), *The quasi-market experiments in public service delivery: did they work?,* mimeo

Lisv(1999), *Kroniek van de Sociale Verzekeringen 1999,* Landelijk Instituut Sociale Verzekeringen

Mapelli, V. (1996), *Sanità: la riforma incompiuta,* in L. Bernardi (ed.) *La Finanza Pubblica in Italia – Rapporto 1996,* Bologna, Il Mulino

Mapelli, V. (1999), *Sanità: la rivincita del piano sul mercato* in L. Bernardi (ed.) *La Finanza Pubblica in Italia – Rapporto 1999,* Bologna, Il Mulino

Mapelli, V. (2001a), *Le relazioni istituzionali fra regioni e Asl nella programmazione sanitaria,* Rome, Commissione Spesa Pubblica

Mapelli, V. (2001b), *La sanità cambia marcia o rotta,* in L. Bernardi (ed.) *La Finanza Pubblica in Italia – Rapporto 2001,* Bologna, Il Mulino

Mays, N., Mulligan, J. e Goodwin, N. (2000), *The British quasi-market in health care: a balance sheet of the evidence, Journal of Health Service and Resource Policy,* vol. 5, n.1

Massicci, F. (2001), *Sistema pensionistico: problemi e prospettive,* in A. Verde (ed.), *Temi di finanza pubblica,* Cacucci Publisher, Rome

Mastrangelo, J. (1999), *Politicas para la reduccion de costos en los sistemas de pensiones: el caso de Chile,* CEPAL

Materia, E. *et al.* (1999), *Disuguaglianze nell'assistenza sanitaria: ospedalizzazione e posizione socio-economica, Epidemiologia e Prevenzione,* 23, 197-206

McPake e Mills, A. (2000), *What can we learn from international comparisons of health systems and health system reform?, Bulletin of the WHO,* 78 (5)

Mesa-Lago, C. (2000), *Estudio comparativo de los costos fiscales en transiciòn de ocho reformas de pensiones en América Latina,* CEPAL

Mesa-Lago e Arenas de Mesa (1998), *The Chilean pension system in Do Options exist,* University of Pittsburgh press

Milone, L. M. (1999), *Globalizzazione, localizzazione delle attività produttive e distribuzione del reddito nei paesi avanzati: uno sguardo d'assieme,* in F. R. Pizzuti (ed.) (1999a)

Ministero del Tesoro, Ragioneria Generale dello Stato (1996), *Tendenze demografiche e spesa pensionistica, Conti pubblici e congiuntura economica,* Quaderno monografico, n. 9

Ministère de l'Emploi et de la Solidaritè (1997), *Les comptes de la protection sociale 1990-1997,* Paris, La documentation Francaise

Ministero dell'Economia e delle Finanze-RGS (2001), *Le tendenze di medio-lungo periodo del sistema pensionistico e sanitario – previsioni elaborate con i modelli del Dipartimento della Ragioneria Generale dello Stato aggiornati al 2001, Temi di finanza pubblica e protezione sociale,* Quaderno n. 3

Ministero dell'Economia e delle Finanze-RGS (2002), *Le tendenze di medio-lungo periodo del sistema pensionistico obbligatorio – le previsioni del Dipartimento della Ragioneria Generale dello Stato aggiornate a maggio 2002 utilizzando le nuove basi assicurative dell'Inps*

Ministero del Tesoro, *Relazione Generale sulla Situazione Economica del Paese* (anni vari)

Ministero del Tesoro, Ragioneria Generale dello Stato (1997), *Sanità, scuola, pensioni: le nuove previsioni basate sugli scenari demografici Istat, Conti pubblici e congiuntura economica,* Quaderno monografico, n. 9

Ministero del Tesoro, Ragioneria Generale dello Stato, Ispettorato generale per la spesa sociale (1999), *Aggiornamento del modello di previsione del sistema pensionistico della RGS: le previsioni '99*

Ministero del Tesoro, Ragioneria Generale dello Stato, Ispettorato generale per la spesa sociale (2000), *Le tendenze di medio-lungo periodo del sistema pensionistico italiano, Temi di finanza pubblica e protezione sociale,* Quaderno, n. 2

Ministero della Sanità (2002), *L'uso dei farmaci in Italia – Rapporto Nazionale,* Anno 2001

Mishra, R. (1999), *Globalization and the Welfare State,* Edward Elga, Cheltenham

Modigliani, F. e Ceprini, M. (2000), *Come salvare la pensione riformando il metodo di finanziamento dei sistemi previdenziali europei: il caso dell'Italia,* in *Rivista di Politica Economica,* July-August

Mossialos, E., Dixon, A., Figueras J. e Kutzin, J. eds. (2002), *Funding health care: options for Europe,* Open University Press, Buckingham

Murthi, M., Orszag, M.J. e Orszag, P.R. (2001), *Administrative Costs under a Decentralized Approach to Individual Accounts: Lessons from the United Kingdom* in R. Holzmann e J.E. Stiglitz (ed.), *New Ideas about Old Age Security,* Wahington DC, World Bank

Nap (2001), *National Employment Action Plan 2001: The Netherlands*

Netherland Bureau for Economic Policy Analysis (2000), *Ageing in the Netherlands,* The Hague

Nucleo di valutazione della spesa previdenziale (2001), *Gli andamenti finanziari del sistema pensionistico obbligatorio*

Nucleo di valutazione della spesa previdenziale (2002), *Gli andamenti finanziari del sistema pensionistico obbligatorio*

Oecd (1996), *Caring for frail elderly people: policies in evolution*

Oecd (1998), *Maintaining Prosperity In An Ageing Society: the Oecd study on the policy implications of ageing*

Oecd (2000), *Italy, Economic Survey*

Oecd (2000), *Taxing wages 1999-2000*

Oecd (2001), *Ageing and Income: Financial Resources and Retirement in 9 Oecd Countries*

Oecd (2002), *Economic Survey of the Netherlands*

Office for National Statistics (2000), *United Kingdom National Accounts (the Blue Book) 1999*

Onofri, P. (1999), *Globalizzazione e strumenti delle politiche sociali in Europa,* in F. R. Pizzuti (ed.) (1999a)

Orszag P. and Stiglitz J. (2001), *Rethinking Pension Reform: Ten Myths about Social Security Systems,* in Holzmann, R. e Stiglitz, J. E. (2001)

Oppenheimer, P. M. (1999), *Un confronto fra il 2000 e il 1900: come si differenzia la globalizzazione di oggi dal libero scambio di ieri?,* in F. R. Pizzuti (ed.) (1999a)

Padoa-Schioppa Kostoris, F. (1996), *La riforma italiana delle pensioni di anzianità e vecchiaia del 1995 e gli effetti per la finanza pubblica,* in F. Padoa-Schioppa Kostoris, *Pensioni e risanamento della finanza pubblica,* il Mulino

Palme, M. e Svesson, I. (2002), *Income security programs and retirement in Sweden,* to be published

Palmer, E. (2000), *The Swedish pension reform model: framework and issues,* WB *Discussion Paper*

Palmer, E. (2002), *Swedish pension reform: its past and its future,* in Feldstein M. e Siebert H. (ed.) *Social security and pension reform in Europe,* NBER

Palmer, N. (2000), *The use of private sector contracts for primary health care, Bulletin of the WHO,* 78 (6)

Peracchi, F. e Rossi, N. (1996), *Nonostante tutto è una riforma,* in F. Giavazzi, A. Penati e G. Tabellini (ed.), *Le frontiere della politica economica II,* Milano, Il Sole 24 Ore

Pierson, P. (1994), *Dismantling the Welfare State? Reagan, Thatcher and the Politics of Retrenchement,* Cambridge University Press

Pizzuti, F. R. (1995), *Economia e politica della previdenza sociale,* in O. Castellino (ed.), *Le pensioni difficili,* Il Mulino, *Collana della Società Italiana degli economisti*

Pizzuti, F. R. (1998), *Pension Reform and Economic Policy Constraints in Italy, in Labor,* vol. 12, n. 1

Pizzuti, F. R. (ed.) (1999a), *Globalizzazione istituzioni e coesione sociale,* Donzelli Publisher, Rome

Pizzuti, F. R. (1999b), *Globalizzazione, Welfare State e dumping sociale,* in F. R. Pizzuti (ed.) (1999a)

Pizzuti, F. R. (1999c), *Mercati e istituzioni nella neoglobalizzazione,* in F. R. Pizzuti (ed.) (1999a)

Pizzuti, F. R. (1999d), *Trasferimenti intergenerazionali, previsioni pensionistiche e politica economica,* in M. Acocella, G. Rey, M. Tiberi (ed.), *Saggi di politica economica in onore di Federico Caffè,* volume 3°, F. Angeli, Rome

Pizzuti, F. R. (2001), *Previdenza e crescita economica: brevi note sulla situazione italiana,* in A. Verde (ed.), *Temi di finanza pubblica,* Cacucci Publisher, Rome

Pizzuti, F. R. (2002), *Costo del lavoro, previdenza, Tfr, GE-Diritto ed Economia dello stato sociale,* n. 1

Preker, A., Harding, A. e Travis, P. (2000), *Make or buy' decisions in the production of health care goods and service, Bulletin of the WHO,* 78 (6)

Rapiti, E. *et al.* (1999), *Disuguaglianze socio-economiche nell'efficacia dei trattamenti sanitari. Tre esempi del Lazio, Epidemiologia e Prevenzione,* 23, 153-160

Reinhardt, U. (1992), *The United States: Breakthroughs and Waste, Journal of Health Politics, Policy and Law,* vol. 25, n. 1 pp. 210-230

Rodrik, D. (1997), *Has Globalization Gone too Far,* Washington DC, Institute for International Economics

Saltman, R.B. e Figueras, J. (ed.) (1997), *European Health Care Reform,* WHO

Sawhill, I. e Haskins, R. (2002), *Welfare Reform and the Work Support System,* in I.V. Sawhill, R.K.Weaver, R. Haskins e A. Kane (ed.), *Welfare Reform and Beyond. The Future of the Safety Net,* Washington DC, The Brookings Institution

Sawhill, I.V., Weaver, R.K, Haskins, R. e Kane, A. (ed.) (2002), *Welfare Reform and Beyond. The Future of the Safety Net,* Washington DC, The Brookings Institution

Scherer P. (2001), *"Withdrawal from the Labour Force in Oecd Countries",* Oecd Occasional Papers, n. 49

Schiattarella, R. (1999), *Delocalizzazione internazionale e occupazione: un'analisi per i settori tradizionali italiani,* in F. R. Pizzuti (ed.) (1999a)

Schram, S.F. e Soss, J. (2002), *Success Stories: Welfare Reform, Policy Discourse, and the Politics of Research,* in R. Abelda e A. Withorn, *Lost Ground,* Cambridge Mass., South End Press

Secit (2000), *Imposte sugli utili delle società di capitali e cuneo sul fattore lavoro in Italia e Germania: un'analisi comparata per il periodo 1996-2005*

Sen, A. (2000), *Merit and Justice,* in K. Arrow, S. Bowles e S. Durlauf (ed.), *Meritocracy and Economic Inequality,* Princeton University Press, tradotto in italiano in *GE Diritto ed economia dello stato sociale,* n. 2, Gangemi Publisher

Sole 24 ore- Sanità (2002), 4-10 giugno

Solow, R.M. (2001), *Stato sociale: la soluzione più conveniente, GE-Diritto ed Economia dello stato sociale,* n. 1

Standing, G. (1999), *Flessibilità globale: integrazione economica o disintegrazione sociale?,* in F. R. Pizzuti (ed.) (1999a)

Statistiches Jahrbuch fur die Bundesrepublik Deutschland, 2000

Stiglitz, J. (1989), *Il ruolo economico dello Stato,* Bologna, Il Mulino

Svimez (2001), *Primo Rapporto sugli effetti del federalismo fiscale sul sistema delle autonomie locali,* Rome

Taroni, F. (1996), *DRG/ROD e nuovo sistema di finanziamento degli ospedali,* Rome, Il Pensiero Scientifico

Taroni, F. (2000), *Livelli essenziali di assistenza: sogno, miraggio o nemesi?* in G. Fiorentini (ed.), *I servizi sanitari in Italia,* Bologna, Il Mulino

Taylor, L. (ed.) (2001), *External Liberalization, Economic Performance and Social Policy,* New York, Oxford University Press

Traversa, G., Magrini, N. e Brunetti, M. (2002), *Consumo e spesa pubblica nel settore farmaceutico* in G. Fiorentini (ed.), *I servizi sanitari in Italia,* Bologna, Il Mulino

Tullock, G. (1971), *Public Decisions as Public Goods, Journal of Political Economy,* 79, pp. 913-18

Uthoff, A. (2001), *La reforma del sistema de pensiones en Chile: desafios pendientes,* CEPAL

Vitaletti, G. (2000), *Problemi e potenzialità della riforma pensionistica del 1995 in un confronto tra modelli previdenziali stilizzati,* in *Economia Pubblica,* n. 4

Wagstaff, A., van Doorslaer,E., e altri (1999), *Equity in the finance of health care: some further international comparisons, Journal of Health Economics,* 18, p.263-290

Walker,A. (1993), *Age and attitudes: the main results from a Eurobarometer survey,* Eurobarometer surveys n. 69, European Commission, Brussels

Wittenberg, R. Sandhu, B. e Knapp, M. (2001), *Funding long-term care: the public and private options* in Mossialos, E., Dixon, A., Figueras J. e Kutzin, J. eds. (2002) *Funding health care: options for Europe,* Open University Press, Buckingham

World Bank (1994), *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth,* Oxford University Press

World Bank (1999), *World Development Report 1999/2000*

World Bank (2000), *World Development Report, 2000/2001, Attacking Poverty*

World Bank (2002), *Globalization, growth, and poverty,* New York, Oxford University Press

print