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ABSTRACT

One of the major structural changes facing European economies is the adjustment to an older and more slowly growing population. Aging and lower fertility rates will result in a smaller proportion of the population being in the working age, especially after the year 2010. Estimates are that by 2030 there could be only 2 employed persons for every elderly person, compared with the current proportion of 3 working persons for every elderly person and about 5 workers to each elderly person in 1960. This situation is the result of the baby boom generation population moving through the age groups, of people living longer, and of the encouragement for earlier and earlier retirement. These trends will result in a strain on the welfare and retirement systems of Europe unless the trends can be changed through public policy responses. If public policy changes are made to increase the time workers are active in the labor market and to encourage workers to diversify their sources of retirement income, the strain on welfare resources can be ameliorated. (An appendix, making up half the document, profiles welfare systems in OECD countries Europe.) (Contains 10 references.) (KC)

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Welfare Systems, Ageing and Work: an OECD Perspective

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1. *Introduction*

One of the major structural changes facing OECD economies is the adjustment to an older and slower growing population. Ageing and lower fertility rates will result in a smaller proportion of the population being in the working age, particularly in the years after 2010. OECD estimates, based on constant participation rates, suggest that by 2030 there could be only two people in employment for every elderly person, compared with the current proportion of 3 and about 5 in 1960. The impact of a contracting or slower growing labour force will be to reduce growth in material living standards. OECD estimates based on a dynamic general equilibrium macroeconomic model suggest the cumulative effect by mid-century could be to reduce Japan's living standards - measured by GNP per capita adjusted for terms of trade effects - by 23 per cent, the European Union's by 18 per cent and the United States by 10 per cent below the level they might have reached in the reference scenario.[2]

The main force behind these estimates is demographics, but their amplitude could be even higher as a consequence of the trend towards early retirement. Today less than half the population aged between 55 and 64 in the OECD are employed, and in a number of countries the figure is less than a third. (It is about 25 per cent in Italy.) The trend to early retirement is, in part, a reflection of a rising demand for leisure as societies become more prosperous, but in addition, labour and social policies in many countries have tended to increase the financial incentives in favour of early retirement. A reversal of this trend is clearly possible (and necessary), but would not be sufficient to compensate for the effects of the demographics. Fewer workers supporting more retirees who live longer also raises fiscal issues and issues of inter-generational fairness. In particular, welfare systems in OECD countries will come under increasing pressure as public pension payments absorb a growing share of total welfare outlays. In 1985 pensions accounted for about 35 per cent of total social spending, but given demographic trends and current policies towards the elderly this share could rise dramatically over the coming decades.

The OECD has extensively analysed the demographic forces behind ageing populations and the factors driving the trend towards early retirement.[3] The single most important implication of this work for policy is to ensure an adequate retirement income provision for the aged and at the same time to limit the taxation burden on the active population. This will require an increase in the average number of years individuals spend active in the labour force and in the level and sources of provision for an adequate

2. For details on the model, the underlying assumptions used and the simulated scenarios see Turner *et al.* (1998).

retirement income. There are no simple solutions towards achieving these goals; dismantling the welfare state or advocating no reform are not viable options. The OECD perspective stresses the need for action on many fronts, addressing a number of issues and cutting across traditional boundaries of economic, financial and social disciplines. This paper will focus on why reforms are required and will illustrate some of the OECD principles for responding to the challenges posed by ageing societies in the context of diverse social welfare systems.

2. *The scale of the demographic problem and labour market trends among older workers*

Demographic projections by the United Nations suggest that during the next five decades the population of the OECD area will rise by about 100 million to reach 1.2 billion, although in over half the member countries - most notably in Italy - population levels will, at some point during the first half of the next century, start to fall (Table 1).[4] In particular, the overall population in Europe and Japan is expected to decline from around 2005. For the United States, population growth is expected to remain positive, mainly due to immigration, albeit considerably lower than the pace of 1 per cent recorded over the past 25 years. On the other hand, over the same period growth in the number of elderly people - 65 years of age and over - will be eleven times as rapid, increasing by 152 million to reach almost 300 million in 2050 (Table 2). All OECD countries, albeit to varying degrees and at different stages, will face ageing populations. In Europe, the population aged over 65 will increase by about 1½ per cent per annum on average until year 2030 (1.2 per cent in the past 25 years), before slowing over the subsequent 20 years. In the United States, the pace will be about a percentage point faster, but broadly at the same rate as in the past 25 years. For Japan, however, the ageing process is more advanced, with the rapid rises in the elderly population already experienced over the past 25 years starting to ease from about 2010 onwards. After 2025, growth in the number of elderly is expected to slow in most OECD countries and, depending on the assumptions about mortality, could stabilise by the middle of the next century.

The increasing pace and number of elderly people is largely due to the post-war "baby boom" generation moving through the age structure, but also because people are living longer (Table 3) and

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3. This work was synthesised in the 1998 OECD report, *Maintaining Prosperity in an Ageing Society*, and a detailed investigation of the incentives favouring early retirement is included as part of the OECD's latest Jobs Study follow-up, OECD (1999d).

4. UN projections are based on assumptions for the female fertility rate, net immigration and mortality rates. Fertility rates are typically assumed to gradually reach the population replacement rate, which would imply a steady population. In most OECD countries net immigration rates are assumed to be zero, but in a few (Australia, Canada, Germany, New Zealand, Sweden and the United States) net immigration rates range between around 1 per 1,000 in Sweden and 4 per 1,000 in Canada. Mexico is the only OECD country with a negative net immigration rate of about -1.5 per 1,000.

fertility rates have fallen (Table 4). Longevity in OECD countries currently averages about 77 years, some 10 years longer compared with the early 1960s and further improvements are projected in all OECD countries. Moreover, trends towards better nutrition, public health, education, less physically strenuous jobs and advances in health care have contributed to a higher life expectancy for the current generation of elderly people and with fewer disabilities (Table 5).

As a consequence of these demographic trends, the aged dependency ratio - the number of people aged 65 years and over relative to the number aged between 15 and 64 years - in virtually all OECD economies is projected to show a marked increase over the coming decades. In 1998 the ratio ranged between 15 and 25 per cent across the G7 countries (Figure 1). For the OECD area as a whole the ratio is expected to double in the next five decades to reach just over 40 per cent. Considerably sharper increases are expected among some of the major continental European countries and Japan. In Italy, for example, the ratio, which is already rising sharply is expected to continue doing so to reach a peak above 65 per cent around 2050. In Germany and France, it is likely to remain fairly steady over the next 10 years, but then quickly rise before stabilising at close to 40 per cent by the middle of the next century. For Japan, the dependency ratio has already doubled over the past 25 years to 20 per cent and is expected to almost triple to reach 55 per cent in 2050. A reduction in the number of other dependants, because of fewer children, and the expected continuation of the upward trend in female participation in the labour force will partially offset the burden on the working-age population, but will not be sufficient to avert pressure on budgetary positions and output in the coming decades.[5] Even though such longer-term projections are particularly hazardous, as they depend on assumptions about future birth rates and life expectancy, alternative assumptions about demographic trends do not make a big difference to the outlook, except in the very long run.

In addition to a rising number of elderly people who are living longer, workers in almost all OECD countries have tended to withdraw permanently from the labour force at earlier and earlier ages over the past two decades, especially in countries with high unemployment. In 1960 the average retirement age in the OECD area was around 65 years for both males and females. By 1995, males were on average

5. Even if this article is exclusively concerned with the effects of demographic changes on welfare systems, it should be pointed out, as noted by one referee, that in some countries a major problem is also given by very high inactivity rates amongst women of all cohorts. In Greece, Italy and Spain, for example, the female employment rate of prime age (25-54) women was still in 1998 about or below 50 per cent (that compares with rates of about two thirds or more in most of the other OECD countries).

retiring at 62 years and females at 60.[6] Among most of the major continental European economies the decline has been larger and often starting from a lower level (Figure 2). The biggest drops in the average retirement age have happened in Belgium, the Netherlands, France and Spain. In Ireland and Italy there has been a marked decline among females and a more moderate fall for males. In line with the fall in retirement ages and the difficulties in some countries older workers - those aged between 55 and 64 - still active in the labour force have finding jobs, the employment rate of this age group has dropped in many OECD countries (Table 6). In some (France, the Netherlands and Spain) the employment rate has declined to less than 35 per cent for the 55 to 64 year old population and to about 25 per cent or below in Italy and Belgium, while in others (United States, Japan, Korea, Norway and Sweden) it is well above 50 per cent and has remained broadly steady over the past 15 years.

3. *The macroeconomic implications of welfare provision for ageing*

Most research assessing the likely macroeconomic impacts of the projected demographic trends has tended to focus on the development of simplified models, usually on the assumption of unchanged policies.[7] One of their main purposes is to quantify the impact of ageing trends on living standards and evaluate options which may mitigate such impacts. These models, however, cannot capture the full complexity of individual country welfare systems in general and pension systems in particular.[8] Assumptions have to be made about longevity, retirement age, real and nominal wage trends, productivity improvements and tax receipts several decades into the future. Small differences in these assumptions, particularly productivity changes, can produce very different results. Uncertainty as to the nature of the relationship between age and health expenditure further complicates the task of forecasting the fiscal impacts of ageing. Moreover, changes in pension systems are most likely in those countries where the projected fiscal burden of ageing is most serious. For example, in Italy, where the expected fiscal burden of ageing is one of the most acute among the OECD countries, the authorities have implemented or proposed two major reform programmes over the 1990s. The results of these simulation exercises, therefore, certainly exaggerate the projected fiscal impacts, since they are typically based on a no policy

6. The standard age of entitlement to a public pension for females in about half the OECD countries is lower by about 5 years than the age for males, even though it could be argued that there is no strong reason for this now.

7. See Turner *et al.* (1998) for an assessment of the macroeconomic implications of ageing, based on modelling work at the OECD. Results from work done at the IMF and the European Commission are reported in Chand and Jaeger (1996) and European Commission (1993) respectively.

8. Substantial differences in the institutions of the welfare systems of OECD countries, as well as in their evolution over time, make it difficult to define policy recommendations that would equally apply to all countries. This notwithstanding, there seem to be common elements that allow some broad classification among groups of countries. For further details, see the Appendix.

change scenario. Nonetheless, the models are a helpful tool to identify those countries which are likely to face substantial social spending pressures.

Bearing the caveats of this kind of exercise in mind, the main conclusions from OECD research recently undertaken[9] on the macroeconomic impacts of ageing are:

- Without sustained improvements in factor productivity growth or changes in labour force participation rates, output growth in the OECD is likely to slow over coming decades. In the absence of specific policy adjustments, ageing populations will also tend to reduce the growth of living standards. Investing pension funds in foreign assets possibly earning higher returns is not expected to offset slower growth in living standards.
- Unless reforms are implemented, projected pension benefit levels will greatly exceed projected pension contributions in the majority of OECD countries, resulting in large increases in deficits in the pension accounts, and in public finances in general. OECD calculations suggest that fiscal balances could deteriorate by about 5 per cent of GDP over the next 30 years and the ratio of public debt to GDP would start to rise rapidly in 10 years' time in Europe and the United States and straight away in Japan (Figure 3). The deterioration in fiscal positions is accentuated when the impact of ageing on expenditures on health and education are factored into model calculations.
- The size of the potential deficits in pension accounts in many countries is such that continuing major reforms to public pension systems will be required, although these might not be sufficient in themselves to ensure desired living standards for retirees without unacceptable rises in contribution rates.
- Differences in ageing patterns across countries will very likely result in prolonged swings in current-account positions of OECD countries vis-à-vis each other and vis-à-vis the rest of the world, that could cumulate to large changes in net foreign asset positions.
- Ageing and policy reactions to it, are likely to influence the evolution of private and public saving rates. The passage of the large baby-boom cohorts through the high-saving stages of the life cycle will tend to boost the private saving rate, but it may subsequently drop as older people draw down accumulated assets. The extent to which national saving rates could fall in different countries will depend on interaction between private saving ratios and the rate at

9. The results broadly reflect the structure of public pension systems as they stood in 1995. In countries where reforms had been announced, these were to the extent possible incorporated in the simulation model. However, complex and subsequent reforms, such as those introduced in Italy, are not reflected in the results.

which their populations are ageing, the details of the public pay-as-you-go systems and their success in pursuing fiscal consolidation.[10]

4. *Welfare provision for ageing and incentives for early retirement*[11]

The current trend towards early retirement is, in part, a reflection of a rising demand for leisure as societies become more prosperous. But, in addition, a number of countries have lowered the standard age of retirement, while in most OECD countries policies until recently have tended to discourage work before the retirement age, especially among the low-skilled and low-paid. By reducing the annual accrual rate of pension rights and increasing the generosity of pensions the disincentives for older workers to remain active in the labour market have risen. The disincentives are particularly strong after the earliest age at which pensions become available. In some 12 OECD countries, the public old-age pension for a 55 year old male working for 10 more years would have increased in 1995 the pension replacement rate by only 3 percentage points or less (Table 7).[12]

Moreover, in some countries the authorities have actively or tacitly encouraged early retirement as an unemployment reduction mechanism, relaxing entitlement conditions for the receipt of unemployment-related and disability benefits. The importance of these schemes varies widely across countries, but they tend to be most common in continental European economies where benefit levels are more generous (Table 8). Table 9 summarises the incentives to early retirement into a so-called "implicit" tax on continued work. This implicit tax on work for the 55-70 age span, once other income-support schemes are also factored in, is close to or above 50 per cent in most European countries and has increased over recent decades. Features of tax systems also tend to discourage older workers from remaining active in the labour market.

In addition, there are disincentives to remaining active in the labour force once the standard age of retirement is reached. In some countries the law forbids combining work with the receipt of an old-age pension and in others the combination of means testing of pensions and low permitted earnings implies that

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10. See Turner *et al.* (1998) and Hviding and Merette (1998) for an analysis of these issues.
11. The analytical background for this section is based on Blöndal and Scarpetta (1999).
12. The pension replacement rate is the ratio of pension benefits to economy-wide average earnings. There is no single pension replacement rate. It can differ according to previous earnings, household composition, other household income, length of contribution periods, annual accrual rates, the age at which pensions are accessed and minimum and maximum levels of pension. Likewise, the denominator depends on the assumptions made to calculate average earnings. The summary replacement rates referred to here is a simple average of four cases: two earnings levels - economy-wide average and 2/3 of the average - and two household compositions - a single worker and a worker with a dependent spouse.

the bulk of pensions would be lost at earnings close to the average level. Even in the few countries where pensions and earnings can be combined in principle, the start of pension payments is often conditional on quitting the current job.

Incentives to early withdrawal from the labour market have helped soften some of the effects of industrial change on older generations and may have reduced pockets of high unemployment within certain localities. In a broader context, this policy has been justified in some countries as a way of "creating" jobs for younger workers, by redistributing employment opportunities from the old to the young. But lower employment rates at one end of the age spectrum have not translated into higher or rising employment rates at the other end. Indeed, as a general rule, countries that have high employment rates among older workers also have high employment rates for the young (Figure 4).[13] In addition, this policy option increasingly conflicts with the need to improve the financial viability of public pension systems.

5. *The policy response*

It is quite clear from the above that demographic trends, together with social and labour market policies which favour early retirement will put severe strains on government budgets and living standards. Budgetary pressures are amplified in those economies with low employment/participation rates. Given tax burdens in many countries are already high and further increases could be detrimental to employment prospects, major changes to existing social systems or lower government expenditures will be required if substantial increases in public debt are to be avoided. In no circumstances would the option of no reform ensure an adequate retirement income provision for the aged and at the same time limit the taxation burden on the active population. Nor do societies wish to downsize their welfare systems. There are no simple solutions. Yet demographic trends provide only a narrow window of opportunity before reform will become much more painful. Moreover, because many of the reforms require advance notice and gradual implementation, responses need to be put in place early. Indeed, a major difficulty and challenge for policy makers is anticipating problems and building support for reforms even though the impacts of ageing are only likely to arise one or two decades down the road. The strategy suggested by the OECD centres on achieving an increase in the average number of years individuals spend active in the labour force and in the level and sources of provision for an adequate retirement income. At the same time, policies which augment productivity will help support improvements in living standards.

13. For more details see OECD (1999d).

Achieving these goals is likely to require action on many fronts. The OECD recommends that frameworks be put in place at the national level in order to harmonise and sustain ageing system reforms and to build-up public understanding, and in a way that takes account of the diversity that exists between countries. Within such frameworks, the OECD has identified seven principles to guide reforms (see Table 10). As with the OECD's Jobs Strategy, it is important that emphasis is placed on all the principles, as effective reform requires an holistic response. As an example, raising the standard age of entitlement to an old age pension is likely to reduce disincentives to work at older ages, but it may not be very effective as long as other features of current pension systems remain intact and if other welfare benefits distort the choice between continuing employment and retirement in favour of the latter. For instance, in many OECD countries entitlement conditions have changed for receipt of unemployment related and disability benefits for older workers such that these benefits effectively serve as de facto early retirement payments. In a few countries, more than a third of all males aged 55 to 64 receive non-employment benefits and it is common in many countries that more than a fifth of the age group receives such benefits.

5.1 Increasing time spent active in the labour market

The difference in the average age of retirement across countries essentially reflects the structure of incentives to work. Increasing the incentives to remain in the labour market could lead to an increase in the participation rate of older males of almost 10 percentage points in those countries where the financial penalties are particularly large (Finland, France, Italy, the Netherlands and Portugal).[14] Such improvements would help ease the budgetary pressure on public pension funds and social security budgets in general. They would also limit the extent of the slowdown in the growth of living standards brought about as a consequence of ageing population. Specific measures to increase the number of years individuals spend active in the labour force could include: increasing the length of the contribution period for full benefit and generally linking life-time benefits and contributions; removing pension earnings rules and other penalties for working later; increasing the average age of entitlement to full pension and the lower age limit for early retirement; and phasing out programmes that encourage access to invalidity or open-ended unemployment benefits for labour market reasons.

14. See Blöndal and Scarpetta (1999) for details on the model used to calculate these effects on the male participation rate. In some of the countries where the potential impact on male participation rates is high, measures have since been implemented, which make the pension system more actuarially neutral. This is especially so in Italy.

Many countries have already taken initial steps along these general lines or have decided on changes, but have not yet started the implementation phase.[15] Specific reforms differ from one country to another, but will generally result in lower pensions and higher overall contributions, primarily from those who are currently less than 40 years of age. For example, Canada, Finland, Germany, Italy, New Zealand, Norway, Portugal, Sweden and the United Kingdom have reduced, or are beginning to reduce the final benefit available after the usual number of years of work and/or contribution. Some of these countries and others, including Australia, Belgium and Hungary, have made or planned changes which encourage a longer working life and greater flexibility in the work to retirement transition, via increases in the statutory retirement age, longer contribution periods or years of prior employment before individuals can exercise early retirement benefits and lowering benefit payments for those who retire early.

Few of the reforms have or will affect existing retirees, or those close to retirement, because imposing a burden on those who have few means to adjust would undermine trust in the pension system. Some changes however, such as increases in pension contribution rates, go in the opposite direction since they raise the opportunity cost of remaining in work. Moreover, because pension reforms have typically not involved flanking changes in other benefit systems, important distortions remain. Measures which facilitate further increases in employment/participation rates will thus need to be pursued. Nonetheless, even large increases in the employment rate are unlikely on their own to prove sufficient to deal with the fiscal implications of ageing populations.

5.2 Diversifying sources of retirement income

A more diversified structure of retirement income is needed so that sources, other than public pension payments, play a growing role in provision for retirement. A wider range of income sources would also help lower the risk of future income loss. The so-called "3 pillar" system would put in place a system where retirees would potentially have three sources of pension payments; income from a pay-as-you-go pension, from a compulsory fully funded pension plan and from a voluntary fully funded pension plan. Specific measures to diversify retirement income provision and facilitate the "3 pillar" system could include increasing the size of advance-funded elements in countries where pay-as-you go systems now dominate; reducing the size of public pension benefits where these are now unnecessarily high; adjusting earnings-related pensions so that there is a direct link between life-time benefits and contributions and separating out the anti-poverty and income-replacement elements of public pensions into different programmes.

15. A detailed description and analysis of recent reforms can be found in OECD (1999a, 1999b).

Again, some countries have taken initial steps along these lines which lay the ground for future change and a few countries have taken measures that will ultimately make their pension systems broadly neutral by strengthening the link between life-time contributions and pension benefits. Mexico, for example, has transformed its previous pay-as-you-go system into a fully funded capitalisation system. Italy will retain its pay-as-you-go system, but pension benefits will be determined by the stock of contributions and made available from the age of 57 onwards, with adjustments reflecting life expectancy and expected GDP growth rates. Other countries - Hungary, Poland and Sweden - will introduce two-tier pension systems; a pay-as-you-go tier and a fully funded compulsory tier. There are limits, however, on the speed that a country can move towards the 3 pillar system, because of inter-generational equity considerations, as current workers will be paying twice; once for the pensions of the current retired and again for their own pension fund. No fully satisfactory solutions to this problem are available.[16] Furthermore, financial structures and taxation systems would require modification, which also implies a period of transition.

16. In Italy, however, it may be possible, as suggested in a number of quarters, including the government, to draw on the resources currently held in the *Trattamento di fine rapporto* to develop at least part of the second pillar of the system.

Appendix. Welfare Systems in OECD Countries

No two welfare systems are identical, as each country has developed its framework for providing welfare support in the context of different goals, priorities, resources and perceived needs, and these have evolved in diverse ways and at different speeds from the time when most systems were put in place after the second world war. This makes it difficult to advocate specific policy recommendations for reforms to welfare systems that respond to the pressures implied by ageing societies and which apply equally to all OECD countries. Nonetheless, there are some common elements which permit welfare systems, albeit in very broad terms, to be classified as belonging to one of three models: the Scandinavian, Anglo-Saxon and continental European (or Bismarck) models.

The Scandinavian model (Denmark, Sweden, Norway and Finland) is characterised by relatively extensive and generous benefit levels and typically include a special emphasis on providing social services, such as childcare and care for the elderly and disabled. For some benefits (e.g. unemployment benefits), strict eligibility requirements apply. The transfer payments and welfare services provided are partially financed through voluntary contributory insurance funds (except Denmark), but primarily from general government revenue. In contrast, continental European welfare states place more exclusive stress on transfer payments, which are also relatively generous and payments are funded more exclusively from payroll taxes. Features of the Anglo-Saxon model (e.g. Canada, United States, United Kingdom, Australia and New Zealand) include lower benefit levels and more restrictive eligibility requirements. On the other hand, eligibility is usually not confined to those who have contributed, since payments are largely funded from government revenue.

However, the composition of transfer payments varies widely across countries within welfare models as well as between countries with different models. In southern European countries the bulk of

social expenditures are on old age pensions, whereas protection against risks of unemployment, poverty etc. is implicitly assumed to be born by the family and so such payments from the state are modest. In Italy, for example, old age pensions and survivors benefits account for some three fifths of total social spending, which is about 16 percentage points higher than the European Union average. Old-age pension replacement rates are typically large in those countries where old age pension payments absorb a significant proportion of total welfare spending and, not surprisingly, where pension contribution rates are high. In Japan, which has a model combining features of the continental European and Anglo-Saxon systems, old-age pension payments and public expenditures on health account for over 80 per cent of overall social expenditures.

One strength of the Scandinavian model is that it encourages high labour force participation, since child care provision, a factor which strongly influences female participation in the labour market, especially among lone parents is widely available as a service offered by the state. Extensive government provided social services has also stimulated demand for female employment. Another strength also shared by the continental model, is that their relatively generous payments tend to mitigate the incidence of poverty. The main cost of these systems, however, is the large burden they put on the taxpayer. High payroll taxes may also be detrimental to employment. Overall, employment rates are generally quite low in continental welfare states. The Anglo-Saxon model does not appear to discourage employment opportunities among low-skill and low-paid jobs and the incentive to work tends to be higher, since replacement rates are relatively low. On the other hand, the incidence of households living below the poverty line and the number of "working poor" tend to be more heavily concentrated in those countries which have adopted the Anglo-Saxon model.

References

Blöndal, S and S. Scarpetta (1999), "Early retirement in OECD countries: the role of social security systems", *Economic Studies* No. 29, 1997/II.

Chand, and Jaeger (1996), "Ageing populations and public pension schemes", *IMF Occasional Paper* No. 147.

Commission of European Communities (1993), "Age and attitudes: main results from a Eurobarometer Survey".

Hviding, K and M. Merette (1998), "The macroeconomic effects of pension reforms in the context of ageing populations: overlapping generations model simulations for seven OECD countries", OECD *Economics Department Working Paper* No. 201.

OECD (1998), *Maintaining Prosperity in an Ageing Society*, Paris.

OECD (1999a), *A Caring World: Analysis*, Paris.

OECD (1999b), *A Caring World: National Achievements*, Paris.

OECD (1999c), *A Caring World: The New Social Policy Agenda*, Paris.

OECD (1999d), *The OECD Jobs Strategy: Assessing Performance and Policy*, Paris.

Turner, D, C. Giorno, A. De Serres, A. Vourc'h and P. Richardson (1998), "The macroeconomic implications of ageing in a global context", OECD *Economics Department Working Paper* No. 193.

Table 1. **Total population growth** [1]

	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
United States	1.7	1.2	0.9	1.0	0.9	0.7	0.6	0.5	0.3	0.2
Japan	1.2	1.0	1.1	0.6	0.3	0.0	-0.3	-0.5	-0.6	-0.6
Germany	0.6	0.7	0.1	0.1	0.4	0.0	-0.1	-0.2	-0.3	-0.4
France	0.9	1.1	0.6	0.5	0.4	0.3	0.1	0.0	-0.1	-0.2
Italy	0.6	0.7	0.5	0.1	0.0	-0.3	-0.5	-0.7	-0.8	-1.0
United Kingdom	0.3	0.6	0.1	0.2	0.2	0.1	0.1	0.0	-0.2	-0.3
Canada	2.7	1.8	1.4	1.2	1.1	0.9	0.8	0.6	0.4	0.4
Australia	2.3	2.0	1.5	1.5	1.1	0.9	0.8	0.6	0.4	0.4
Austria	0.2	0.6	0.1	0.2	0.6	0.2	-0.1	-0.3	-0.5	-0.7
Belgium	0.6	0.5	0.2	0.1	0.2	0.0	-0.1	-0.2	-0.4	-0.5
Czech Republic	0.7	0.3	0.5	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-0.9
Denmark	0.7	0.7	0.4	0.0	0.3	0.1	-0.1	-0.2	-0.4	-0.4
Finland	1.0	0.4	0.4	0.4	0.4	0.1	0.1	-0.1	-0.3	-0.3
Greece	1.0	0.5	0.9	0.6	0.4	-0.1	-0.4	-0.6	-0.7	-0.8
Hungary	0.7	0.3	0.4	-0.3	-0.3	-0.4	-0.5	-0.6	-0.7	-0.7
Iceland	2.1	1.5	1.1	1.1	1.0	0.8	0.6	0.4	0.2	0.0
Ireland	-0.5	0.4	1.4	0.3	0.6	0.7	0.7	0.4	0.3	0.2
Korea	2.1	2.5	1.8	1.2	0.9	0.6	0.4	0.2	0.0	-0.3
Luxembourg	0.6	0.8	0.7	0.5	1.2	0.6	0.2	-0.1	-0.3	-0.4
Mexico	2.9	3.2	2.9	2.1	1.7	1.3	1.0	0.8	0.5	0.3
Netherlands	1.3	1.3	0.8	0.6	0.5	0.1	-0.1	-0.2	-0.4	-0.6
New Zealand	2.2	1.7	1.0	0.8	1.4	0.9	0.8	0.6	0.5	0.4
Norway	0.9	0.8	0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1
Poland	1.8	1.0	0.9	0.7	0.2	0.1	0.0	-0.2	-0.3	-0.4
Portugal	0.5	0.2	0.8	0.1	0.0	-0.1	-0.3	-0.4	-0.5	-0.7
Spain	0.8	1.0	1.1	0.5	0.1	-0.1	-0.4	-0.5	-0.7	-0.9
Sweden	0.6	0.7	0.3	0.3	0.4	0.1	0.1	-0.1	-0.2	-0.2
Switzerland	1.3	1.4	0.2	0.8	0.8	0.3	0.0	-0.2	-0.4	-0.6
Turkey	2.8	2.5	2.3	2.4	1.7	1.3	1.0	0.8	0.6	0.4
OECD Total	1.3	1.2	1.0	0.8	0.7	0.5	0.3	0.2	0.0	-0.1
Memorandum item: Total population, in millions										
OECD Total	774.3	872.5	962.2	1043.2	1117.7	1170.1	1207.7	1228.9	1231.9	1220.9

1. Average annual percent change over 10 years to date shown.

Source: United Nations Population Division, *World Population Prospects: The 1998 Revision.*

Table 2. **Elderly population growth in OECD countries** [1]

Population aged 65 and over

	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
United States	2.7	1.9	2.2	2.0	1.0	1.2	3.0	2.7	0.7	0.3
Japan	2.7	3.2	3.7	3.4	3.9	2.4	1.7	-0.1	0.5	-0.1
Germany	2.3	2.4	1.4	-0.3	1.3	1.9	0.7	1.7	0.6	-0.6
France	1.1	2.1	1.4	0.5	1.7	0.7	2.1	1.4	0.8	-0.1
Italy	1.9	2.3	2.4	1.6	1.8	1.1	0.9	1.2	0.9	-0.9
United Kingdom	1.2	1.6	1.7	0.6	0.4	0.7	1.6	1.5	0.6	-0.3
Canada	2.5	2.2	3.3	3.0	2.5	2.0	3.2	2.8	0.9	0.4
Australia	2.7	1.9	2.9	3.0	1.9	1.9	3.1	2.4	1.4	0.6
Austria	1.7	2.2	1.0	-0.1	0.4	1.3	1.4	2.3	1.1	-0.3
Belgium	1.4	1.7	0.9	0.6	1.2	0.5	1.7	1.7	0.4	-0.5
Czech Republic	1.3	3.6	1.4	-0.6	0.8	1.2	2.7	0.8	0.8	0.7
Denmark	2.2	2.2	2.0	0.8	0.0	1.2	1.8	1.0	0.5	-0.8
Finland	1.8	2.8	3.1	1.5	1.4	1.4	2.9	1.2	-0.2	-0.3
Greece	2.9	3.6	2.6	1.0	3.2	1.1	0.8	0.9	1.0	0.2
Hungary	2.8	2.8	1.9	-0.4	0.6	0.4	1.5	0.1	0.8	0.8
Iceland	2.4	2.6	2.2	1.9	1.8	1.4	3.0	2.8	1.3	0.6
Ireland	0.0	0.4	1.0	0.8	0.6	1.5	2.8	2.2	1.4	1.7
Korea	3.0	2.4	3.3	4.0	3.9	3.9	3.2	4.2	2.3	0.5
Luxembourg	1.6	2.3	1.5	0.4	1.9	1.5	1.9	1.9	0.9	-0.1
Mexico	3.3	2.4	1.7	2.5	3.6	3.7	4.0	4.0	3.9	2.4
Netherlands	2.8	2.5	2.1	1.7	1.3	1.5	2.7	2.0	0.8	-0.8
New Zealand	1.8	1.6	2.6	1.9	1.9	1.7	2.9	2.6	1.3	0.6
Norway	2.3	2.3	1.9	1.4	0.0	0.8	2.4	1.6	1.0	-0.4
Poland	2.8	4.6	3.0	0.6	1.9	0.6	3.0	1.7	0.4	1.4
Portugal	1.8	1.7	2.1	2.8	1.5	0.7	1.0	1.3	1.5	0.4
Spain	2.0	2.8	2.0	3.1	2.2	0.7	1.0	1.7	1.6	0.1
Sweden	2.2	2.1	2.1	1.2	0.2	1.3	1.8	0.9	0.4	-0.4
Switzerland	1.8	2.7	2.2	1.1	1.0	1.6	2.0	2.3	0.9	-0.6
Turkey	3.6	4.8	3.1	1.4	4.9	2.6	3.5	4.0	3.4	2.6
OECD Total	2.2	2.4	2.2	1.6	1.8	1.6	2.2	2.0	1.1	0.4
Memorandum item: Total population aged 65 and over, in millions										
OECD Total	66.2	83.6	103.6	121.5	145.8	170.2	211.2	256.5	286.9	298.1

1. Average annual percent change over 10 years to date shown.

Source: United Nations Population Division, *World Population Prospects: The 1998 Revision.*

Table 3. **Life expectancy in OECD countries**

Medium variant estimates and projections for the period shown

	Life expectancy, men			Life expectancy, women			Life expectancy, men and women		
	1960-65	1995-2000	2045-50	1960-65	995-2000	2045-50	1960-65	995-2000	2045-50
United States	66.7	73.4	79.0	73.4	80.1	84.6	70.0	76.7	81.8
Japan	66.5	76.8	80.8	71.6	82.9	86.9	69.0	80.0	83.8
Germany	67.4	73.9	79.1	72.9	80.2	84.7	70.3	77.2	81.9
France	67.6	74.2	79.1	74.5	82.0	86.2	71.0	78.1	82.6
Italy	67.4	75.0	79.8	72.6	81.2	85.5	69.9	78.2	82.6
United Kingdom	67.9	74.5	79.4	73.8	79.8	84.6	70.8	77.2	82.0
Canada	68.5	76.1	80.4	74.6	81.8	86.0	71.4	79.0	83.2
Australia	67.8	75.5	80.0	74.2	81.1	85.4	70.9	78.3	82.7
Austria	66.1	73.7	79.0	72.6	80.2	84.7	69.3	77.0	81.7
Belgium	67.9	73.8	79.1	73.9	80.6	85.0	70.8	77.2	82.0
Czech Republic	67.4	70.3	78.1	73.4	77.4	84.3	70.5	73.9	81.2
Denmark	70.3	73.0	77.9	74.4	78.3	83.1	72.3	75.7	80.5
Finland	65.4	73.0	79.6	72.5	80.6	86.0	68.9	76.8	82.7
Greece	67.9	75.6	80.0	71.2	80.7	85.1	69.5	78.1	82.5
Hungary	66.4	66.8	75.8	71.0	74.9	81.5	68.6	70.9	78.7
Iceland	70.8	76.8	81.2	76.1	81.3	85.6	73.4	79.0	83.4
Ireland	68.4	73.6	80.0	72.3	79.2	85.1	70.3	76.4	82.6
Korea	53.6	68.8	76.9	56.9	76.0	82.9	55.2	72.4	79.9
Luxembourg	65.7	73.3	78.9	72.1	79.9	84.7	68.8	76.7	81.8
Mexico	56.4	69.5	76.5	60.6	75.5	82.7	58.3	72.2	78.8
Netherlands	71.1	75.0	79.5	75.8	80.7	85.1	73.4	77.9	82.3
New Zealand	68.3	74.1	79.3	73.9	79.7	84.5	71.0	76.9	81.9
Norway	71.1	75.2	80.8	75.9	81.1	86.7	73.4	78.1	83.7
Poland	65.8	68.2	76.5	71.0	76.9	83.2	68.3	72.5	79.9
Portugal	61.4	71.8	78.1	67.1	78.8	84.1	64.2	75.3	81.1
Spain	67.9	74.5	79.4	72.7	81.5	85.7	70.2	78.0	82.5
Sweden	71.6	76.3	81.4	75.6	80.8	85.9	73.5	78.6	83.6
Switzerland	68.9	75.4	79.9	74.6	81.8	86.0	71.7	78.7	82.9
Turkey	50.5	66.5	76.0	53.7	71.7	81.3	52.1	69.0	78.6

Source: United Nations Population Division, *World Population Prospects: The 1998 Revision.*

Table 4. **Female fertility rates in OECD countries**

Medium variant estimates and projections [1]

	1950[2]	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
United States	3.4	3.7	2.5	1.8	1.9	2.0	1.9	1.9	1.9	1.9	1.9
Japan	2.7	2.1	2.0	1.8	1.7	1.4	1.5	1.7	1.8	1.8	1.8
Germany	2.2	2.3	2.3	1.5	1.4	1.3	1.4	1.5	1.6	1.6	1.6
France	2.7	2.7	2.6	1.9	1.8	1.7	1.8	2.0	2.0	2.0	2.0
Italy	2.3	2.4	2.5	1.9	1.3	1.2	1.3	1.4	1.5	1.7	1.7
United Kingdom	2.2	2.5	2.5	1.7	1.8	1.7	1.8	1.9	1.9	1.9	1.9
Canada	3.7	3.9	2.5	1.8	1.7	1.6	1.6	1.8	1.9	1.9	1.9
Australia	3.2	3.4	2.9	2.1	1.9	1.8	1.8	1.9	1.9	1.9	1.9
Austria	2.1	2.5	2.5	1.6	1.4	1.4	1.5	1.6	1.7	1.7	1.7
Belgium	2.3	2.5	2.3	1.7	1.6	1.6	1.6	1.7	1.8	1.9	1.9
Czech Republic	2.7	2.4	1.9	2.3	1.9	1.2	1.2	1.4	1.5	1.6	1.7
Denmark	2.5	2.5	2.2	1.7	1.5	1.7	1.8	1.9	1.9	1.9	1.9
Finland	3.0	2.8	2.1	1.6	1.7	1.7	1.8	1.9	1.9	1.9	1.9
Greece	2.3	2.3	2.4	2.3	1.5	1.3	1.3	1.4	1.6	1.7	1.8
Hungary	2.7	2.2	2.0	2.1	1.8	1.4	1.3	1.5	1.6	1.7	1.7
Iceland	3.7	4.0	3.2	2.3	2.1	2.1	2.1	1.9	1.9	1.9	1.9
Ireland	3.4	3.7	3.9	3.5	2.3	1.9	1.9	2.1	2.1	2.1	2.1
Korea	5.4	6.3	4.7	2.9	1.8	1.7	1.8	1.9	1.9	1.9	1.9
Luxembourg	2.0	2.2	2.2	1.5	1.5	1.7	1.7	1.8	1.8	1.8	1.8
Mexico	6.9	7.0	6.8	5.3	3.6	2.8	2.3	2.1	2.1	2.1	2.1
Netherlands	3.1	3.1	2.7	1.6	1.6	1.5	1.5	1.7	1.8	1.9	1.9
New Zealand	3.6	3.9	3.2	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.1
Norway	2.6	2.8	2.7	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.0
Poland	3.6	3.3	2.3	2.3	2.2	1.5	1.5	1.6	1.8	1.9	1.9
Portugal	3.0	3.0	2.8	2.4	1.6	1.4	1.4	1.5	1.6	1.8	1.8
Spain	2.6	2.8	2.9	2.6	1.5	1.2	1.2	1.3	1.5	1.6	1.7
Sweden	2.2	2.2	2.1	1.6	1.9	1.6	1.6	1.7	1.9	2.0	2.0
Switzerland	2.3	2.3	2.3	1.5	1.5	1.5	1.5	1.6	1.7	1.7	1.7
Turkey	6.8	6.5	5.6	4.5	3.8	2.5	2.1	2.1	2.1	2.1	2.1

1. Data refer to five year averages to date shown.

2. Data for 1950 refer to the period 1950-55.

Source: United Nations Population Division, *World Population Prospects: The 1998 Revision.*

Table 5. **Disability-free and total life expectancy**
Years

Country	Life expectancy at 65	Disability-free life expectancy	Life expectancy at 65	Disability-free life expectancy
	Males		Females	
	Moderate disability-free life expectancy[1]			
Australia				
1981	13.9	7.9	18.1	10.1
1993	15.7	6.5	19.5	9.1
Canada[3]				
1986	14.9	8.5	19.2	9.4
1991	15.6	8.3	19.7	9.2
France				
1981	14.1	8.8	18.3	9.8
1991	15.7	10.1	20.1	12.1
Netherlands				
1983	14.0	8.0	18.6	7.4
1990	14.4	9.0	19.0	8.0
United States				
1980	14.2	6.8	18.4	9.3
1990	15.1	7.4	18.9	9.8
New Zealand				
1981	13.3	9.9	17.1	10.5
1993	14.8	10.0	18.4	10.2
Germany				
1986	13.8	10.6	17.6	13.0
1995	14.9	12.2	18.7	14.9
	Severe disability-free life expectancy[1]			
Australia				
1981	13.9	11.9	18.1	13.8
1993	15.7	13.4	19.5	14.8
Canada				
1986	14.9	12.8	19.2	14.9
1991	15.6	13.3	19.7	15.4
France				
1981	14.1	13.1	18.3	16.5
1991				
Japan				
1980	14.6	13.2	17.7	15.8
1990				
United Kingdom				
1980	12.9	11.8	16.9	15.0
1991				
Norway				
1975	14.0	13.3	17.2	16.1
1985	14.4	13.3	18.2	16.9

1. Health expectancy concepts are not yet totally harmonised. The "severe disability" measures are more comparable than those for "moderate disability".

Source: OECD (1999), *A Caring World: The New Social Policy Agenda.*

Table 6. **Employment rate of older workers in the OECD** [1]

	1980	1985	1990	1995	1998
United States	53.8	51.8	54.0	55.1	57.7
Japan	61.3	60.5	62.9	63.7	63.8
Germany	..	37.1	39.2	37.8	38.8
France	..	37.2	35.6	33.5	33.0
Italy	..	33.3	32.0	27.0	26.9
United Kingdom	..	47.0	49.2	47.6	48.3
Canada	51.5	47.2	47.0	43.6	45.4
Australia	43.5	37.3	41.8	41.4	43.7
Austria	..	..	..	29.0	28.0
Belgium		26.0	21.4	23.3	22.5
Czech Republic	..	..	..	34.5	37.1
Denmark		50.1	53.6	49.3	50.4
Finland	47.1	45.4	42.6	34.4	36.2
Greece		45.1	40.8	40.5	38.5
Hungary	..	..	..	17.1	16.6
Iceland [2]	..	..	85.4	85.1	86.7
Ireland	..	40.0	38.6	39.2	41.6
Korea	..	..	61.9	63.5	58.9
Luxembourg		25.4	28.2	24.0	25.0
Mexico [2]	..	..	54.1	51.2	53.9
Netherlands	36.3	27.3	22.4	22.7	33.3
New Zealand	..	..	41.8	50.4	55.7
Norway	63.9	65.5	61.8	63.1	66.9
Poland	..	..	..	33.8	32.3
Portugal	..	..	46.8	45.5	50.9
Spain	44.7	38.2	36.8	32.1	34.8
Sweden	65.7	65.0	69.4	61.9	63.0
Switzerland [2]	..	..	..	69.8	71.3
Turkey	..	..	42.7	42.4	41.1
Total OECD [3]	..	..	48.4	46.4	47.9

1. Employment of workers aged 55-64 as a percentage of the population aged 55-64.
2. The year 1990 refers to 1991.
3. For above countries with available data.

Source: OECD *Labour Force Statistics*, 1978-1998, Part III, forthcoming.

Table 7. **Expected increase in old-age pensions for a 55 year-old male by working for 10 more years** [1]

Percentage point increase in the summary replacement rate[2]

	1967	1995
Australia	0	0
Austria	13	12
Belgium	32	15
Canada	23	0
Czech Republic	n.a.	1
Denmark	2	1
Finland	10	4
France	25	17
Germany	13	11
Greece	n.a.	25
Hungary	n.a.	1
Iceland	n.a.	10
Ireland	0	0
Italy	24	10
Japan	5	3
Luxembourg	n.a.	19
Netherlands	0	0
New Zealand	0	0
Norway	17	9
Poland	n.a.	9
Portugal	15	10
Spain	0	0
Sweden	21	0
Switzerland	12	11
United Kingdom	0	10
United States	0	0

Note:

1. It is assumed that the individual started work at the age of 20 so that he has a potential contribution period of 35 years at the age of 55.
2. The pension replacement rate is the ratio of pension benefits to economy-wide average earnings. There is no single pension replacement rate. It can differ according to previous earnings, household composition, other household income, length of contribution periods, annual accrual rates, the age at which pensions are accessed and minimum and maximum levels of pension. Likewise, the denominator depends on the assumptions made to calculate average earnings. The summary replacement rates shown in the table are simple averages of four cases: two earnings levels - economy-wide and 2/3 of average - and two household compositions - a single worker and a worker with a dependent spouse.

Source: Blöndal and Scarpetta (1999).

Table 8. **Non-employment benefit schemes: Summary replacement rates for aged workers, 1995**
Yearly average from age 55 to the standard entitlement age for old-age pension

	Disability schemes [1]	Unemployment schemes [2]	Special ER schemes [3]
Australia	27.3	27.6	..
Austria	68.1	34.0	..
Belgium	58.3	40.0	52.9
Canada	..	..	..
Czech Republic	44.7	5.6	..
Denmark	38.8	71.5	20.0
Finland	60.0	30.0	..
France	50.0	34.4	52.0
Germany	44.1	29.1	..
Hungary	55.8	18.6	..
Iceland	..	..	..
Ireland	32.2	24.0	..
Italy	60.0	50.0	70.0
Japan	..	..	..
Luxembourg	52.9	77.6	64.8
Netherlands	70.0	52.5	..
Norway	57.0	..	14.7
New Zealand	31.5	30.0	..
Poland	46.9	16.2	..
Portugal	71.7	35.9	..
Spain	71.5	37.1	..
Sweden	69.6	..	..
Switzerland	..	..	..
United Kingdom	..	8.2	..
United States	..	..	..

Notes:

1. ".." denotes that disability benefits are granted,in principle, on medical criteria only.
2. ".." denotes that unemployment pensions are not available, or that job-search requirements are not relaxed for older workers.
3. ".." denotes that there are no special early retirement systems.

Source: Blöndal and Scarpetta (1999).

Table 9. **Implicit tax rates on continued work embedded in benefits for the elderly, 1995**

	Old-age pensions	Old age pensions plus:		
		Unemployment related benefits [1]	Disability benefits [1]	Special early-retirement [2]
United States	12	..	..	..
Japan	28	..	..	..
Germany	14	37	46	..
France	14	49	..	57
Italy	79	..[3]	..[3]	..[3]
United Kingdom	5	15	..	..
Canada	6	..	..	..
Australia	0	20	21	..
Austria	34	34	64	..
Belgium	23	37	44	56
Denmark	0	51	37	22
Finland	22	42	71	..
Ireland	14	32	32	..
Luxembourg	29	65	63	51
Netherlands	8	57	41	..[4]
New Zealand	9	27	..	..
Norway	15	..	65	17
Portugal	4	33	66	..
Spain	18	33	53	..
Sweden	18	..	76	..
Switzerland	0	..	..	..

Notes:

1. ".." denotes that early retirement into the non-employment benefit system is not an option because of entitlement conditions.
2. ".." denotes that there are no public schemes or that such schemes are not used much.
3. These schemes are not relevant for a worker with a long contribution history as he can benefit from a full old age pension and retire before the standard retirement age.
4. Special early retirement schemes in the Netherlands are not mandatory.

Source: Blöndal and Scarpetta (1999).

Table 10. **OECD principles for population ageing reforms**

1. Public pension systems, taxation systems and social transfer programmes should be reformed to remove financial incentives to early retirement, and financial disincentives to later retirement.

2. A variety of reforms will be needed to ensure that more job opportunities are available for older workers and that they are equipped with the necessary skills and competencies to make them.

3. Fiscal consolidation should be pursued, and public debt burdens should be reduced. This could involve phased reductions in public pension benefits and anticipatory hikes in contribution rates.

4. Retirement income should be provided by a mix of tax-and-transfer systems, funded systems, private savings and earnings. The objective is risk diversification, a better balance of burden-sharing between generations, and to give individuals more flexibility over their retirement decision.

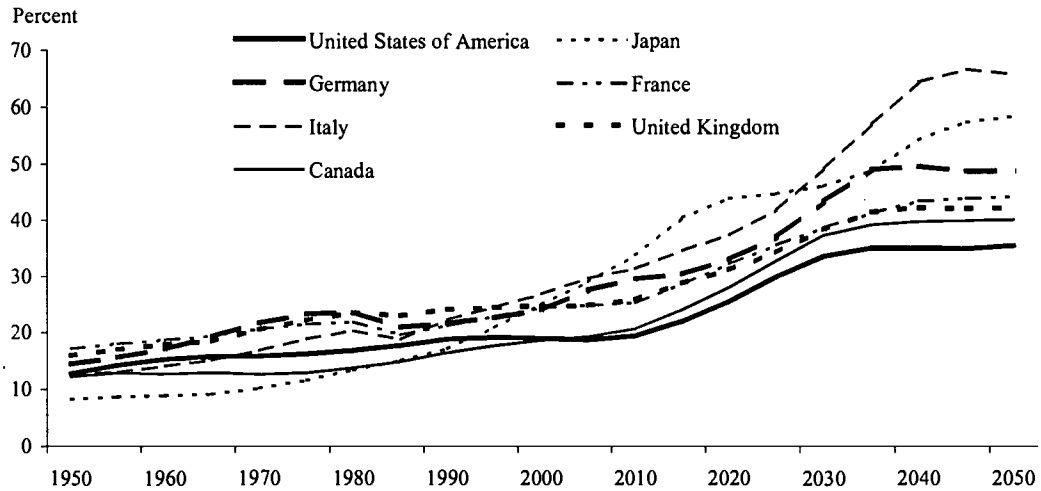
5. In health and long-term care, there should be a greater focus on cost-effectiveness. Medical expenditure and research should be increasingly directed to ways of reducing physical dependence, and explicit policies for providing care to frail older people should be developed.

6. The development of advance-funded pension systems should go hand-in-hand with that of a strengthening of the financial market infrastructure, including the establishment of a modern and effective regulatory framework.

7. Strategic frameworks should be put in place at the national level now in order to harmonise these ageing reforms over time, and to ensure adequate attention to implementation and the build-up of public understanding and support.

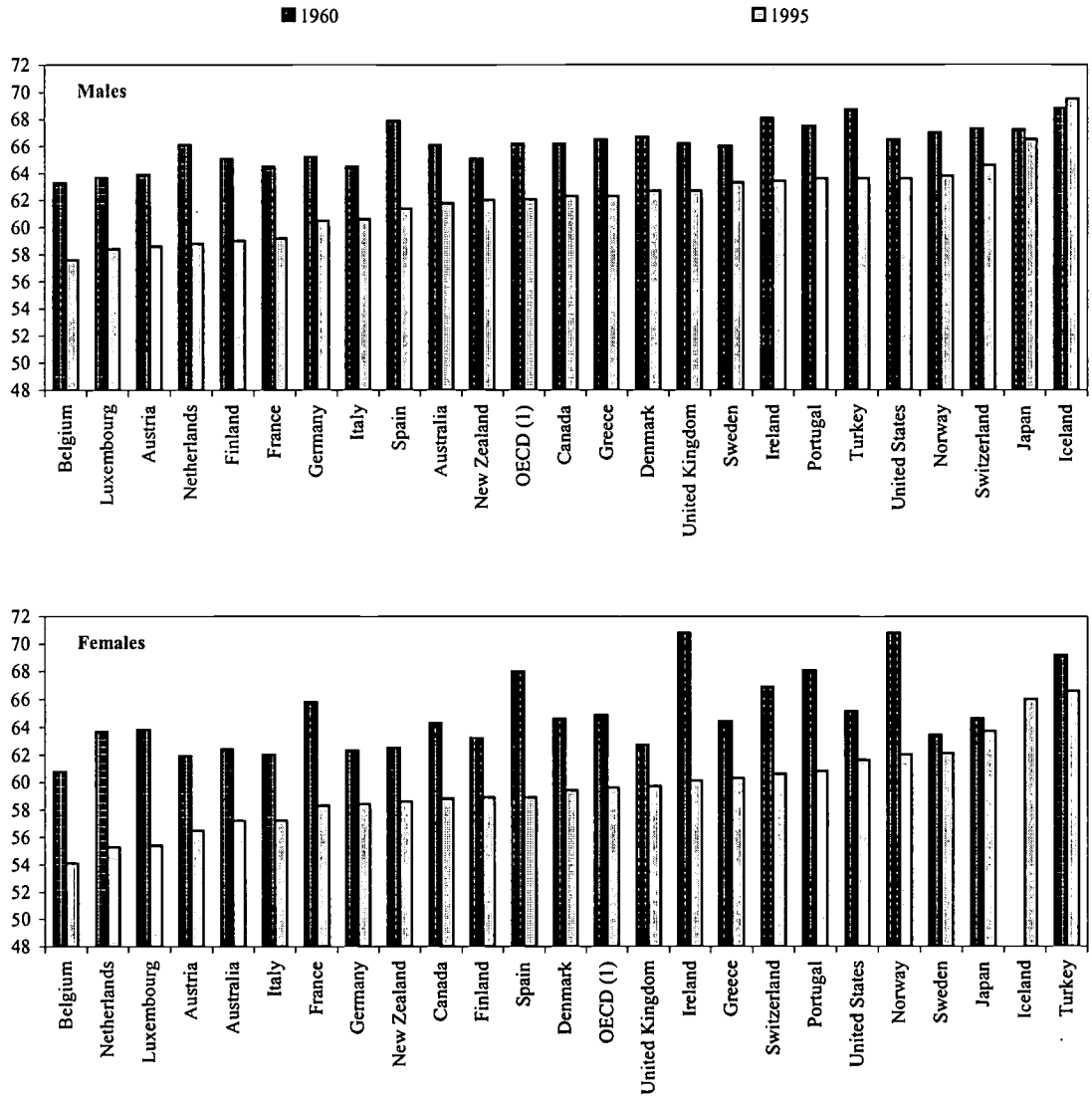
Figure 1. **Elderly dependency ratio**

Population aged 65 and over as a percentage of the working age population (aged 15-64)



Source: United Nations Population Division, *World Population Prospects: The 1998 Revision.*

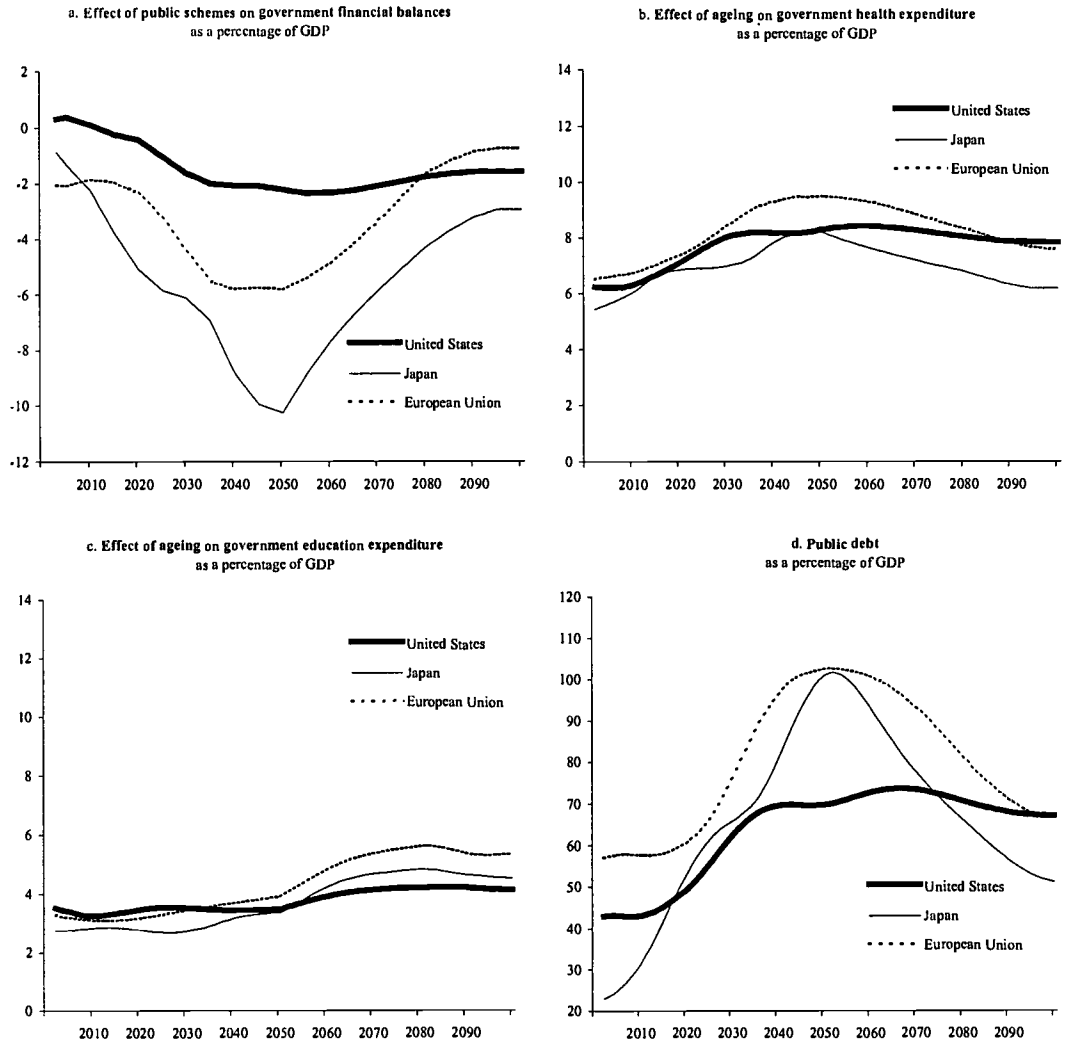
Figure 2. **Estimates of the average age of retirement**



1. Unweighted average

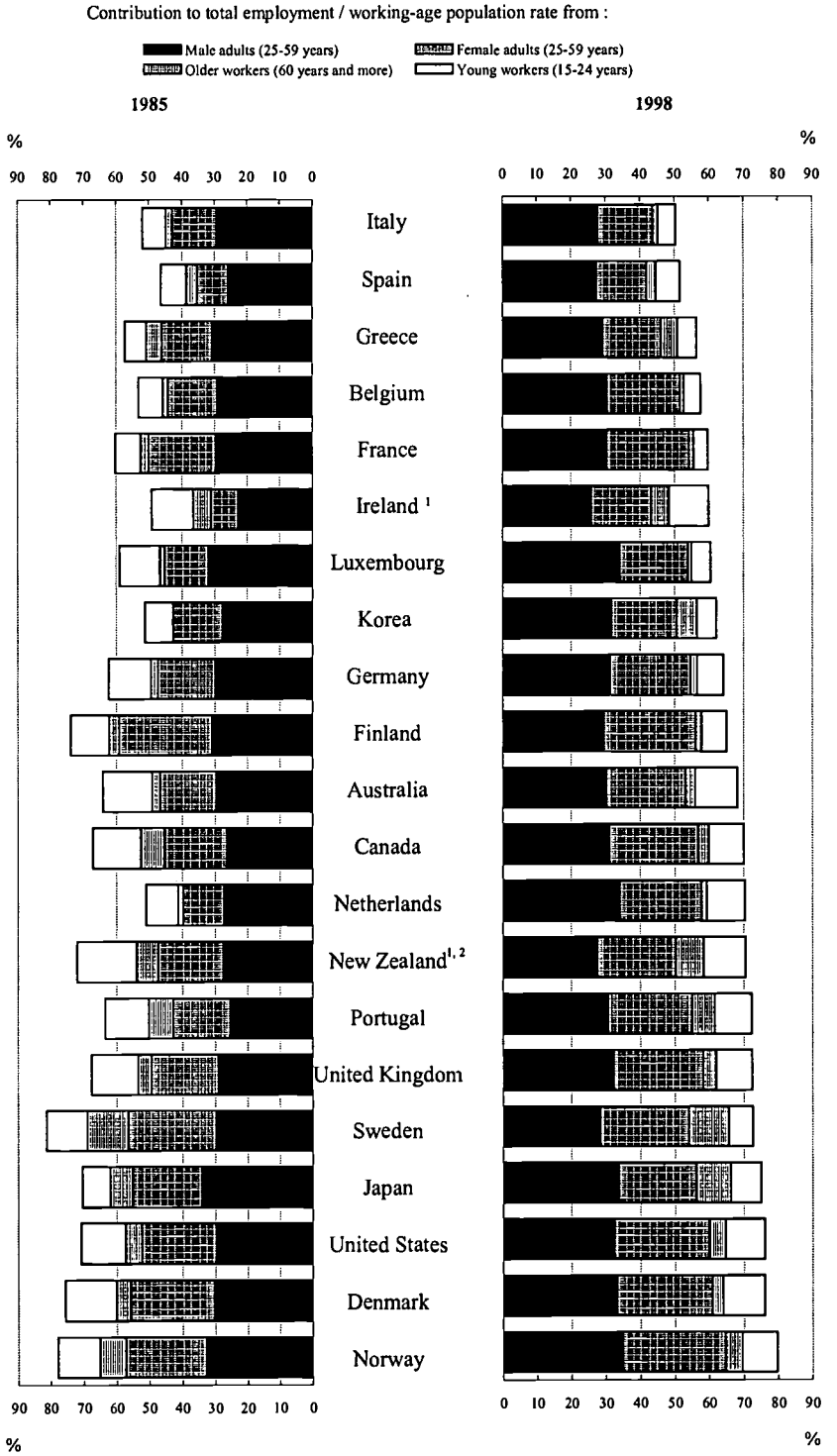
Source: ILO, *Economically Active Population 1950-2010,* December 1996.

Figure 3. **The direct effects of ageingon government finances**



Source: Turner *et al.* (1998).

Figure 4. **Decomposition of employment rates in OECD countries, 1985 and 1998**



1. Adults, 25-54 years of age; older workers, 55-64 years of age.
2. 1986.

Sources: OECD *Labour Force Statistics*; OECD *Employment Outlook*, 1999.

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