

Pension reform and coverage

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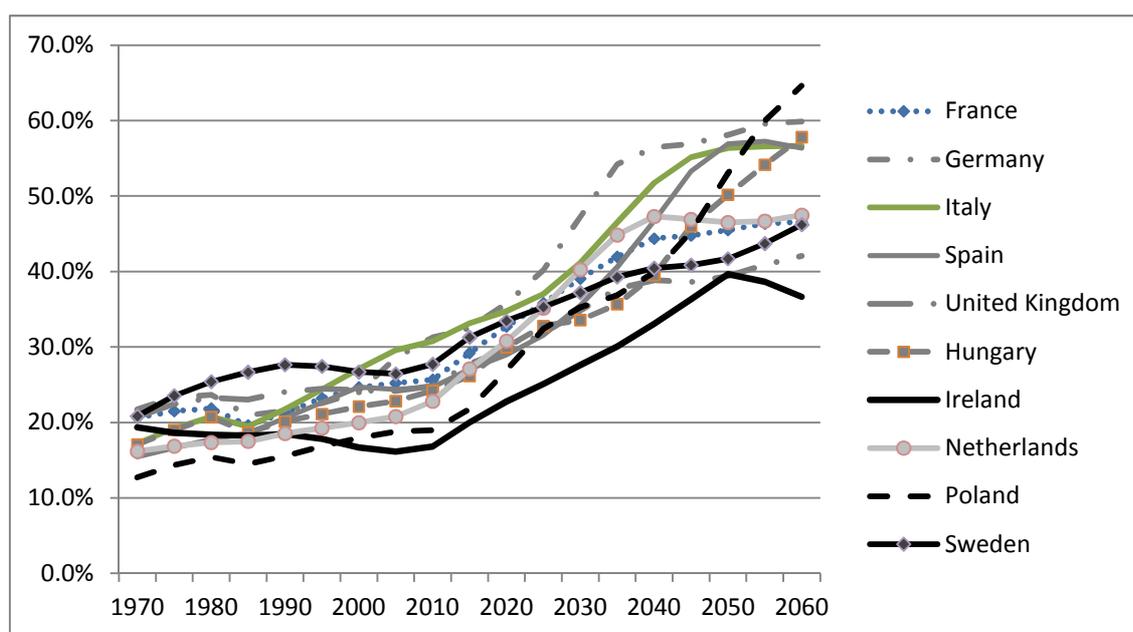
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The demographic context

The ageing of the population and the likely consequences of this for sustainability of public pension systems are major concerns for all the countries of the European Union. Almost all first pillar social security schemes are financed on a pay-as-you-go basis and are thus directly susceptible to changes in the pension dependency ratio. Strictly this should be calculated based on the ratio of the number of pension beneficiaries to the number of workers contributing to the pension plan. However, a reasonable proxy is the old-age dependency ratio based on numbers in the relevant population groups. Figure 1 uses numbers aged 65 and over as a proportion of numbers aged between 20 and 65.

Figure 1 Old-age dependency ratios in selected EU countries 1970-2060



Source: UN Population Projections, 2010 Revision and Eurostat

It is apparent that the old-age dependency ratio did not change very much for most countries in the years up to 2000, but from then on the increase projected to 2050 is quite steep. The prognosis is particularly alarming for Italy, Spain and Germany, where the ratio is projected to rise to about 60%, from current levels of around 30%, in other words in broad terms a halving of the number of workers to support each pensioner. The most important contributory factor to this is the exceptionally low level of fertility (defined as the number of children per woman) reached in these countries, particularly in the period 1990 to 2000. Expectation of life is increasing in all countries. The other factor which can assist (or hinder) a healthy development of the old-age dependency ratios is migration. Significant inwards migration at working ages reduces the old-age dependency ratio, even though some of the migrants will eventually form part of the elderly population in later

years. This is an important factor contributing to the somewhat less adverse projected development of dependency ratios in the United Kingdom (UK).

A feature of most of these social security systems is a fixed retirement age – or age at which people become entitled to pension. If retirement dependency is measured by comparing numbers over a fixed retirement age with numbers below that age (and above the deemed age of the start of working life, be that 16, 18, 20 or some other age), then increasing life expectancy and reducing fertility will naturally result in worsening dependency ratios. Another way of looking at it is to work out the retirement age needed in each future year which would maintain the dependency ratio at current levels. Table 1 below gives the projected ages which would apply in 2050 in order to maintain the old-age dependency ratio at the 2010 level which derives from a pension age of 65.

Table 1 Pension age in 2050 to maintain old-age dependency ratio at 2010 level

Spain	76.0
Netherlands	75.5
Ireland	75.0
Italy	74.7
Poland	74.3
Germany	73.9
France	72.8
Hungary	72.1
United Kingdom	71.7
Sweden	71.3

Source: Own calculations based on UN 2010 Population Projections, 2010 Revision

The financing of funded private pension plans is not directly affected by the worsening old-age dependency ratio, but increasing expectation of life at retirement age is a serious concern for the cost of pensions.

A relevant indicator is the expectation of life of a member at retirement age. Expectation of life at age 65, say, is the average of all the possible periods for which someone currently aged 65 could live, from dying immediately to living for 50 years (or even more). It is not the same as subtracting 65 from the expectation of life at birth, since it is conditional on the individual having already survived to 65. When expectation of life at 65 (or any other age) in a particular year is quoted, it is generally derived from the mortality rates at all different ages in that year. This makes it a somewhat artificial concept, as these are not the mortality rates which you could actually expect to apply to a group of people aged 65 today. The resulting figure is called the period expectation of life.

To calculate the expectation of life that someone aged 65 in 2012 will experience requires the mortality rate in 2012 for someone aged 65, the rate in 2013 for someone aged 66 and so on, up to the rate in 2062, say, for someone then aged 115. This is known as the cohort expectation of life which provides a more useful indicator of what it would cost to buy an annuity for a 65 year old or to estimate the present value of the liability of a defined benefit pension plan to pay a pension to a 65 year old for the rest of their life. Unfortunately, however, this data is not readily available for most countries.

So to illustrate improvements in expectation of life, Figure 2 shows the historic and projected development of cohort expectations of life at age 65 for males and females for the UK, for which

complete data is available on both a period and cohort basis and Figure 3 compares the period expectations of life at 65 for future years with cohort expectations of life for those attaining age 65 in each future year. It is to be expected that this will be the reality, in broad terms, in all countries of the EU, and the consequential increase in cost will represent a huge challenge for the financing of private pensions.

Figure 2 Expectation of life at 65 according to the mortality dates experienced or projected for cohorts reaching 65, 1850-2060, England & Wales

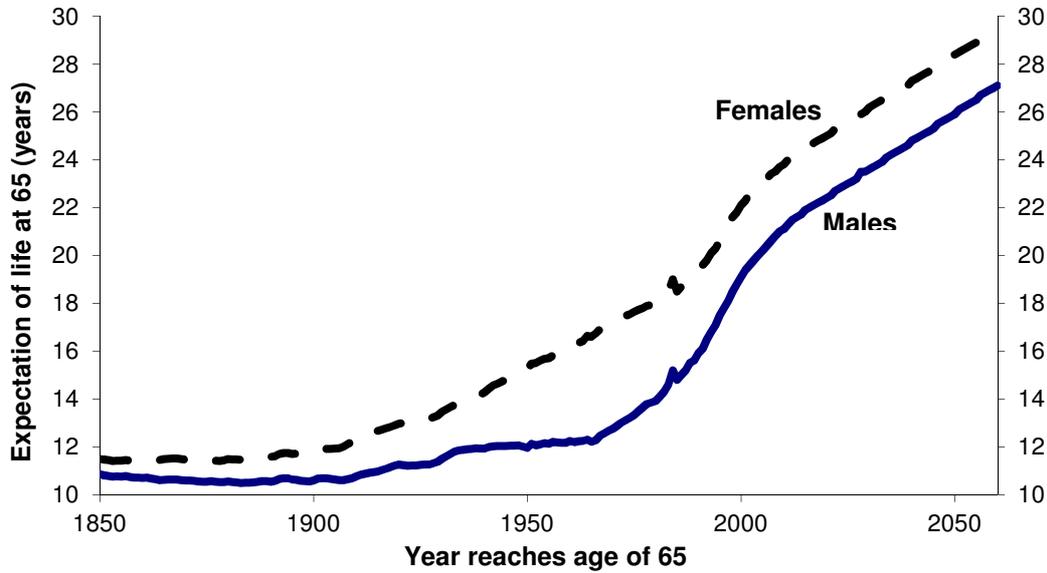
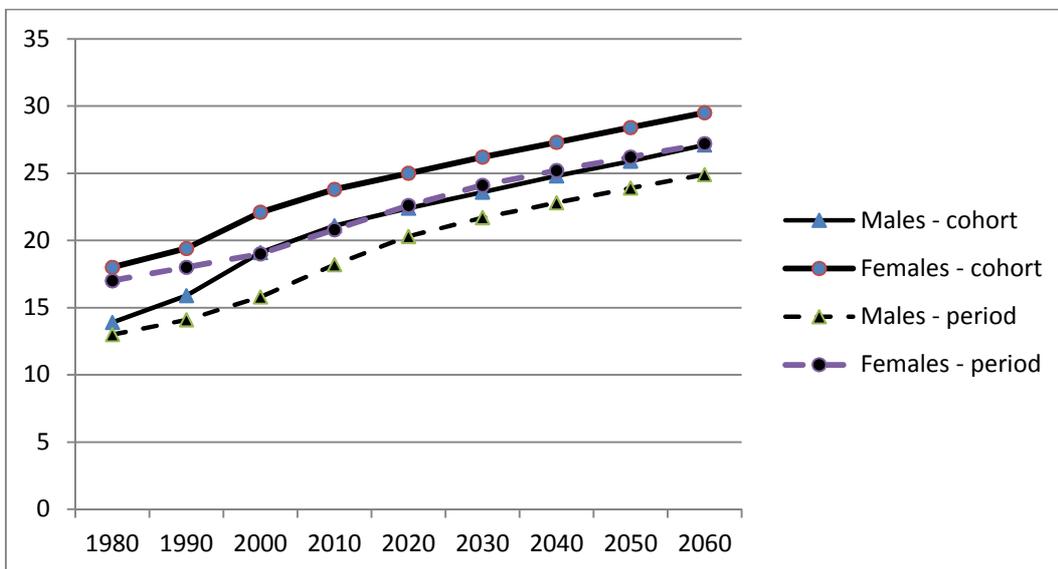


Figure 3 Period expectations of life at 65 from 1980 to 2060 and cohort expectations of life for those attaining age 65 from 1980 to 2060, England and Wales



Although raising retirement age is a political hot potato in most countries, there is no doubt that this is an issue which must be grasped. With expectation of life at 65 (or other retirement ages in different countries) rising fast, maintaining a reasonably constant expectation of life at retirement age would require retirement age to be increased by at least one year each decade.

Table 2 Retirement age required to maintain cohort expectation of life at 21 for males and 24 for females. England and Wales

	2010	2020	2030	2040	2050	2060
Expectation 21 for males	65.1	66.6	68.0	69.2	70.5	71.8
Expectation 24 for females	64.8	66.1	67.3	68.4	69.6	70.7

This shows that to maintain a constant cohort expectation of life at retirement, the age of retirement would need to increase by over 1.3 years per decade for males and almost 1.2 years per decade for females.

Coordinating pension policy in the European Union

Although the cost and future sustainability of social security expenditure is clearly a major issue, fiscally, economically and socially, for the member states of the EU, in fact very limited scope is available to the EU to coordinate policy, either for the first pillar, or for second and third pillar complementary pensions. The EU treaties do not give power to the EU authorities to override the rights of sovereign member states to organise social security (and complementary pension plans) in whatever way they wish. Individual member states should, however, control their expenditure on social security in such a way as to be able to meet the limits agreed on public spending. Because of the impact of social security expenditure on current and future public spending, and the risk that uncontrolled social security expenditure poses to financial stability, the Council of Ministers of the EU has issued various official pronouncements about the importance of addressing the issue of an ageing society.

In 2009 a major report, known as The 2009 Ageing Report, was prepared by the European Commission (Directorate General for Economic and Financial Affairs – DG ECFIN) and the Economic Policy Committee (EPC) of the Economic and Financial Affairs Council of Ministers of the EU. This included projections of the budgetary impact of the ageing population in the 27 EU Member States over the period 2007-2060 and was presented to the ECOFIN Council in May 2009.

In 2011 the European Parliament published a report on Pension Systems in the EU – contingent liabilities and assets in the public and private sector. This study provided an overview of the different pension systems across EU Member States and described contingent liabilities and assets in the public and private sectors. The study assessed both the recent development of the pension schemes and the current state of play. As a result, good practices were identified and sound features commended which should be implemented across the EU. Key elements of an adequate and sustainable pension scheme were identified as including, for example, a higher labour market participation rate, most notably amongst older workers, a higher retirement age and an appropriate mix of pension pillars.

In the field of social security the most significant EU achievement has probably been the coordination of aggregation of rights in the social security schemes of the different EU countries. This enables a worker who has periods of membership of the social security schemes of more than one country to aggregate their service in the different schemes in order to establish entitlement to qualify for a pension in each scheme. The pension entitlement in each scheme is calculated according to the respective accrual rules but with the combined service determining whether the individual is entitled to receive a pension.

In the field of complementary pension plans the most significant piece of EU legislation has been Directive 2003/41/EC on the activities and supervision of institutions for occupational retirement provision (the so-called IORP Directive). This covers the governance and regulation of institutions of retirement provision, which are essentially the various types of entity which can offer complementary funded pension schemes. Pay-as-you-go and book value schemes are excluded. The aim was to ensure a more level playing field for the operation of such schemes and to make it easier for cross-border pension schemes to be developed. There is also a directive on equal treatment of men and women in complementary pension schemes.

Recently there has been an acceleration of activity, with a major Green Paper "Towards adequate, sustainable and safe European pension systems" (SEC(2010)830) published by the European Commission in July 2010. This generated a considerable amount of discussion on both first pillar social security and funded complementary schemes.

In April 2011 the European Commission asked EIOPA (European Insurance and Occupational Pensions Authority) for advice by mid-December 2011 on the EU-wide legislative framework for IORPs. The deadline was later extended, and EIOPA responded on 15 February (EIOPA-BOS-12/015) with a very extensive document. The main thrust of this is about whether similar principles to those being enacted in the Solvency II Directive for insurers could be used to introduce more of a risk-based regulatory environment for institutions of retirement provision. It is expected that the European Commission will propose a new draft Directive on IORPs towards the end of 2012, but the ideas covered in the Call for Advice are quite controversial and it is likely that it will take several years for a new Directive to be negotiated.

Policy responses to the ageing of the population

Raising the retirement age is an obvious reform to make in the light of the demographic facts described above. This was one of the policy recommendations from the 2011 European Parliament report referred to above.

Some countries envisage raising retirement age step by step over a long period (the UK has already legislated increases from 65 to 68 over the period to 2046, although the increase to 66 has been brought forward to 2020 and further increases are now to be brought forward as well, with a recent announcement in the March 2012 Budget that there will be an automatic review of the state pension age to ensure it keeps pace with increases in longevity). Others have implemented single step changes, in some cases from quite a low starting point. Another approach has been to pass on the cost of increasing longevity to those reaching pension age.

Another way to approach the issue of raising retirement age may be to create incentives for people to work longer, rather than changing the formal required age of retirement. This is a normal feature of a defined contribution pension system, for example with individual account funded accumulation as in Poland and Estonia, or notional defined contribution as in Sweden, Italy or Latvia. Accumulated rights are converted into pension using annuity factors appropriate to the age at which annuitisation takes place (this does not have to be the same age at which retirement takes place).

Those who delay annuitisation to a later age should have more accumulated assets (although this is subject to the risk of investment values fluctuating in a funded system) and will get a larger pension because the annuity factor is lower for a higher age of conversion.

A similar effect can be achieved in a defined benefit pension design by defining the benefit as a lump sum at a given retirement age, increased if retirement age is deferred, and converted into pension using a factor appropriate to the age at which the pension is taken. Another approach with similar effect, adopted by Finland in its latest reforms, requires the pension payable at the specified retirement age to be adjusted by a factor which passes on to the new pensioners the improvement in life expectancy at that age from an agreed base level. The Finnish reform also involves having much higher pension accrual factors at higher ages, so as to increase the incentive for people to go on working and take their pension later.

The reforms adopted in Sweden and Italy in 1994, and subsequently in several other countries (e.g. Poland and Latvia) introduced the concept of notional defined contribution (NDC). The new NDC schemes accumulate contributions as though they were funded pension schemes, using an economic index (such as earnings growth or total wage mass) instead of investment returns. The contributions are not in fact invested but used to pay benefits, as in any pay-as-you-go scheme. However, the benefit calculation is based on the notional accumulation of contributions up to the chosen retirement age, at which point the "individual account" is converted to pension using an appropriate age-related retirement annuity. In the Swedish version of NDC the pension increase adjustment allows only for increases to be implemented in circumstances where the economy is growing satisfactorily.

The value of the individual account prior to retirement is also subject to the application of an automatic balance mechanism. This takes into account the value of individual accounts and the value of pensions in payment, compared to the value of real investments held in the buffer fund and the value of future contributions, assessed rather crudely, with a view to arriving at an automatic balance mechanism (ABM) factor. If this is less than unity, all accumulated individual account balances are reduced by the application of this factor in order to bring the system back into formal balance. Whilst the existence of the ABM has been widely applauded (notably by the World Bank¹) as a way of genuinely achieving long-term financial sustainability, there are some serious concerns in Sweden that it will lead to more or less arbitrary reductions in benefit levels without proper democratic debate.

In Sweden they also introduced a mandatory funded individual account pension plan (PPM) at the same time as the NDC first pillar. This accumulates 1.5% of earnings in funds, with a wide variety of investment choice. Another important element of reform in many countries has been to encourage, or facilitate through the introduction of new pension vehicles, a diversification of the provision of pension benefits between pay-as-you-go and funded systems. The introduction of funded systems brings several challenges of its own, notably the need for effective regulation. Germany, with a long tradition mainly of book-reserved pension plans, has in recent years introduced funded pension vehicles, both for corporate pensions and for individuals. France has also introduced new vehicles for pension saving through the workplace, to supplement the long-standing pay-as-you-go *régimes complémentaires*.

Several central and eastern European countries introduced mandatory second pillar funded pensions, as part of a package of reforms involving cutting back the first pillar pension scheme in order to make it more affordable. Success with these new funded schemes has been somewhat mixed, with Hungary recently effectively ending the experiment and Poland imposing cuts in the mandatory contribution level, making the second pillar less viable.

¹ Pension Reform: Issues and Prospects for Non-Financial Defined Contribution (NDC) Schemes. Edited by Robert Holzmann and Edward Palmer. World Bank 2006. ISBN 0-8213-6038-8

Many different measures have been enacted in different countries. One of these is the 'sustainability index' implemented in the German social security system. This adjusts benefit levels to offset the impact of demographic change but does so in the context of a pay-as-you-go scheme by adjusting benefits in payment directly to offset changes in the dependency ratio.

Many pay-as-you-go systems have seen numerous other changes implemented, from raising contribution rates through to modification of the benefit formula, e.g. to allow for averaging of salary over the whole working life instead of just part of it, and less generous indexation arrangements.

In funded schemes in the private sector there has been a wholesale move by employers to close down the accrual of defined benefits and replace defined benefit schemes with defined contribution. Already there has been some adverse reaction to passing all the investment (and part of the longevity) risk on to scheme members, but employers have become more and more risk averse. Various possible structures intermediate between pure defined benefit and pure defined contribution have been suggested, but have not yet received widespread acceptance, often because regulatory structures are not well-adapted to these "risk-sharing" models.

The best-known example of such risk-sharing mechanisms is in the Netherlands, where the multi-employer defined benefit schemes have entered into collective agreements to maintain the employer contribution rates constant, and take the strain of adverse experience developments by raising retirement age, reducing the level of indexation of pensions in payment, or making other adjustments to accrued rights to bring the system into balance at each valuation.

Another issue arises with increasing annuitisation using annuities issued by insurance companies. As this grows in scale, insurers are increasingly concerned about the systemic risk of increasing longevity which they are taking on. Another problem, which governments could more easily address, is that asset/liability management of an annuity portfolio requires a range of maturities of bonds to span the full duration of the liabilities, i.e. up to 50 years. Surprisingly there is an almost complete lack of euro denominated bonds with duration of more than 20 years. This will need to change if annuity markets and funded pension systems are to develop.

UK pension reforms

Pension reform in the UK could be said to have been in progress almost continuously since 1975, when the State Earnings-Related Pension Scheme (SERPS) was enacted. Successive reforms have produced a contributory pension system which is financially sustainable and relatively low-cost (compared to most other industrialised countries). The UK has also had one of the most well-developed funded occupational pension scheme sectors in the world, but this is now in serious decline, with almost all private sector employers with defined benefit plans having closed them to new entrants, and in most cases also to further accrual for existing members. Many employers have replaced their DB schemes with DC schemes. However, the combined rate of contribution is usually much lower than in the former DB scheme.

Mention has already been made of the changes to retirement age, which already go further and quicker than in most other EU countries and are now to be embedded with a regular automatic adjustment to state pension age with a view to keeping expectation of life at pension age as constant as possible.

One of the reasons for the retirement age policy is to offset the rising cost of benefits, particularly since the flat-rate basic pension is now going to be increased each year according to the highest of

the increase in average earnings, the increase in the Consumer Price Index and a fixed minimum increase of 2.5% (the so-called triple lock guarantee).

The other major reform taking place at present is the introduction of auto-enrolment. From October 2012 employers in the UK will have to auto-enrol eligible employees into a pension plan meeting the auto-enrolment (AE) requirements. Employers will have to contribute a minimum of 3% of relevant salary, employees will contribute a minimum of 4% and there will be tax relief on the employees' contributions, equivalent to adding at least a further 1% contribution. Individuals who are auto-enrolled will be permitted to opt out, but they will automatically be auto-enrolled again after three years, or if they change employers before that. Auto-enrolment may be into an eligible defined benefit scheme, which is likely to continue to be the case in the public sector. However, in the private sector it is likely to be into a defined contribution scheme, which may be either an existing scheme operated by the employer for employees (or for some of them) or a new scheme set up to meet the minimum auto-enrolment requirements.

A number of commercial providers are competing for the business of employers to offer auto-enrolment solutions. These include NEST (National Employment Savings Trust), a company set up by the government with the particular intention of ensuring that there is a fall-back for employers whose business is not attractive to other providers. Several master trusts have been established to operate as multi-employer schemes, including NOW: Pensions and B&CE. Many large insurance groups are also actively seeking auto-enrolment business, with their greatest interest being in employers with large workforces and good numbers of higher paid employees. In some cases insurers have entered into agreements with NEST for the latter to provide the auto-enrolment solution for lower paid workers, with the insurer taking the medium to high paid.

Auto-enrolment starts in October 2012 with the largest employers and will be staggered over three years, with a phasing in also of the employers' contribution level, so as to lessen the impact on the economy.

Recent announcements from the coalition government have suggested that priority is to be given to facilitating the development of new private pension plans, such as defined benefit plans targeting a lump sum at retirement, defined contribution plans with low guaranteed benefits and higher benefits provided if the experience justifies it and schemes which offer to provide a guaranteed income if a worker agrees to retire later. The hope is that something along these lines might help to encourage a resurgence of defined benefit plans.

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