Pension Reforms in Europe

Securing Pensions for the Next Fifty years – Achievements of Recent Reforms in Selected Countries

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Public pension systems following the pay-as-you-go (PAYG) principle are experiencing increasing pressure. Apart from system-immanent problems such as diminished labour supply incentives due to the partial tax character of contributions and distortions of relative prices of labour and other production factors these developments can be mostly attributed to demographic changes. Increasing longevity, for example, extends the period of inactivity and dependency (see Table 1 and Figure 1).[1] Apart from this permanent development, declined birth rates have already started to change the age structure of the population, augmenting the size of older cohorts while decreasing the younger population's share. Although fertility rates are not expected to fall below current levels within the next 50 years (see Table 2), the past decline has only started to manifest itself and it will take some decades until this transitional effect disappears. Thus, the dependency ratio, measured by the number of persons 65 years of age or older in relation to those between 15 and 64 years, will increase sharply. The projections of the dependency ratio from 2000 to 2050 depicted in Table 3 for selected countries indicate that, in round terms, the countries will move from having four to only two persons of working age (or even less as in the case of Italy) for every elderly person (Economic Policy Committee 2002).

Table 1

Life Expectancy of men and women in years, 2000 and 2050

	Men		Women	
	2000	2050	2000	2050
Denmark	75.2	79.4	79.6	83.1
Germany	74.7	80.0	80.8	85.0
France	74.8	80.0	82.8	87.0
Italy	75.5	81.0	82.0	86.0
Netherlands	75.5	80.0	80.9	85.0
Finland	73.9	80.0	81.1	85.0
Sweden	77.3	82.0	82.0	86.0
United Kingdom	75.2	80.0	80.0	85.0

Source: Economic Policy Committee (2002).

Developments that have countered the increasing dependency ratio in past years include the increasing labour market participation of women in virtually all industrialised countries and the peak of labour force participation of the post-World War II "Baby Boom" generation. Until the end of this decade these factors will continue to overlay the adverse effects of demographic change on public pensions. The validity of this outlook, however, hinges on a well functioning labour market and the absence of longer-lasting structural slumps.

Basic reform possibilities

The financial breakdown of public pension systems is by no means an inevitable event. Reforms in various aspects are still possible and have already been implemented in several countries. The pension system can usually be divided into three different pillars. The first pillar commonly consists of a pension scheme financed by taxes, contributions or combination of those following the pay-as-you-go principle with the currently active generation paying the pensions of the retired. Funded elements have played a minor role in most countries up to recently, mostly functioning as a buffer to smooth cyclical fluctuations in the systems' pension expenditures.

The second pillar comprises occupational pension schemes. Employers and employees contribute to

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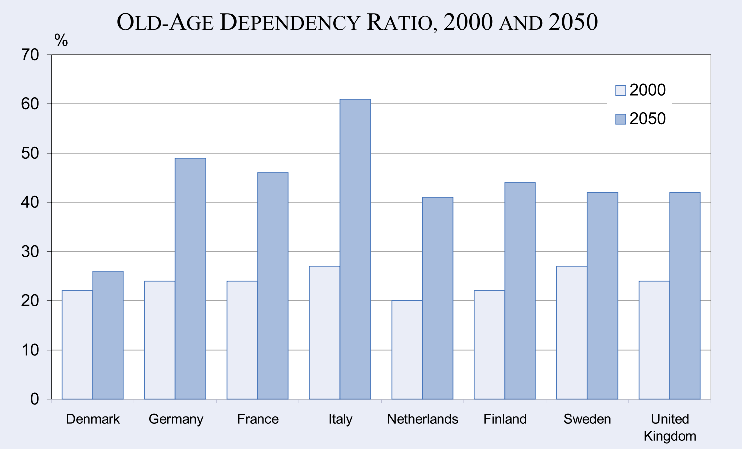
[1] Longer periods of education have also played a role in shrinking the relative length of the working period.

Figure 1



Source: Economic Policy Committee, 2002.

funds[2] that are organized either within the firm or externally through financial service companies. Occupational schemes can be based on legislation or collective agreements between business and labour groups. Coverage with such schemes can be mandatory or optional.

The importance of the first and second pillar differs between countries. In the Netherlands, for example, there is only a basic tax-based universal scheme in the first pillar solely applicable to the private sector, whereas the main emphasis lies on an occupational scheme that is mandatory for the vast majority of employees. In Italy, on the other hand, no occupational pension schemes exist. A contribution-based PAYG scheme in the first pillar is the only publicly provided form of old-age insurance. See Table 3 for an overview of the pension systems of selected EU-countries (Economic Policy Committee 2001).

Lastly, the third pillar comprises all voluntary individual savings plans specifically aimed at old-age provision. Life-insurance and personal stock-market investments with annuitised returns are popular instruments in this pillar. In order to secure the financial sustainability of public pension systems and provide beneficiaries with acceptable income levels, there is room for manoeuvre in every single pillar.

Reforms within existing pay-as-you-go systems

A first approach to account for demographic pressures within existing PAYG systems is the explicit or implicit reduction of benefit levels. This can in principle be achieved by modifying the pension formula. In defined-benefit systems, i.e. mostly earnings-related systems, a reduction of the replacement rate in comparison to net earnings of the average active worker is possible. Less generous adjustment of pensions to inflation and productivity gains entails reductions of the replacement rate as well. Such reforms have taken place in Germany and Finland, for example. More subtle methods for reducing benefit levels for specific groups of retirees include the introduction of a ceiling for benefits as well as increasing the number of necessary years or the amount of overall contributions to be eligible for full benefit entitlement. Furthermore, changes of price or wage level indexation rules influence the replacement rate. Reform along those lines have been implemented in Finland, Germany, Italy and the UK. In Sweden, the public PAYG system has been turned into a "notional" defined-contribution system in which the size of benefits varies with the current demographic situation.

In the nineties, early retirement schemes that were originally implemented in view of soaring unemployment turned out to put a huge burden on public pension systems while not being very successful in reducing unemployment. Although the statutory age for men to be eligible for old-age pensions was 65 years in almost all EU-countries[3] in 1999, actual

[2] These can also be arrangements mimicking funds like accrued pension liabilities in the company's balance.

[3] Exceptions were France with 60 years and Denmark with 67 years.

Table 2

Fertility Rates, 2000 and 2050

	2000	2050
Denmark	1.8	1.8
Germany	1.4	1.5
France	1.7	1.8
Italy	1.2	1.5
Netherlands	1.7	1.8
Finland	1.7	1.7
Sweden	1.5	1.8
United Kingdom	1.7	1.8

Source: Economic Policy Committee (2002).

Table 3

Overview of 1st and 2nd pillar pensions in selected EU Member States

	DK	D	F	I	NL	FIN	S	UK
FIRST PILLAR								
General								
Universal (Means-tested)	Yes (Yes)	No	Yes[e)](Yes)	No	Yes[h)] (No)	Yes (Yes)	Yes (Yes)	Yes (Yes)
Labour-marked-based	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Private sector								
Mandatory	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PAYG/FF/SF[a)]	SF	PAYG/SF	PAYG/SF	PAYG/SF	-	PAYG/FF	PAYG/FF/SF	PAYG
Public sector								
Mandatory	Yes	Yes[d)]	Yes	Yes	-	Yes	Yes	Yes
PAYG/FF/Sf[a)]	SF	SF	PAYG/SF	PAYG/SF	-	PAYG/FF	PAYG/FF/SF	PAYG
Self-employed								
Mandatory	Yes[b)]	Yes	Yes[f)]	Yes	-	Yes	Yes	Yes
PAYG/FF/SF[a)]	SF	PAYG/SF	PAYG/SF	PAYG/SF	-	PAYG/SF	PAYG/FF/SF	PAYG
SECOND PILLAR								
Private sector								
Mandatory	No[c)]	No	Yes[g)]	No	Yes[i)]	No	No[c)]	No
Public sector								
Mandatory	No[c)]	Yes	No	No	Yes	No	No[c)]	No

[a)] PAYG (Pay as you go); FF (Fully funded); SF (Financed by state budget). – [b)] Partial. – [c)] Mandatory for the individual, but voluntary in the sense that contributions are negotiated between employers and unions. – [d)] Special pension scheme for civil servants with life-time status. Wage and salary earners in the public sector, however, belong to the general statutory pension scheme. In their case the same features as for wage and salary earners in the private sector apply. – [e)] In France, a unique public scheme for basic pensions does not exist. However, there is a guarantee that all elderly persons (or households to which they belong) have the right to a minimum level of resources. – [f)] The basic scheme is mandatory whereas the complementary scheme is voluntary. – [g)] For part of the private sector. – [h)] Application to the system depends on the years of permanent residence in the Netherlands between the age of 15 and 65 years; therefore a division of the system by sector is not relevant. – [i)] A vast majority of all employed persons (more than 90 %) takes part in an occupational pension scheme.

Source: Economic Policy Committee (2001).

withdrawal from the labour force took place up to six years earlier (see Fig. 2; Scherer 2001). Thus, many recent reforms have aimed at raising the actual retirement age. At first, this can be achieved be increasing the statutory retirement age for old-age pensions or early retirement schemes. Attempts in this direction have been taken in Italy, Belgium, Germany, Finland, Portugal, Sweden, Switzerland and the UK, albeit in some cases only for specific early retirement schemes or for either men or women. Other possible measures include the abolishment of certain early retirement schemes, tightened eligibility criteria for early retirement and a modification of the pension formula for early retirees towards an actuarily fair calculation of benefits in view of lower lifetime contributions and longer retirement periods for such individuals.

Finally, funded elements can be introduced to PAYG systems in order to offset future benefit reductions with returns from accumulated capital. These funds can be fuelled by current surpluses of public pensions or by additional contributions or tax revenues. This has happened in the Netherlands and Canada, for example.

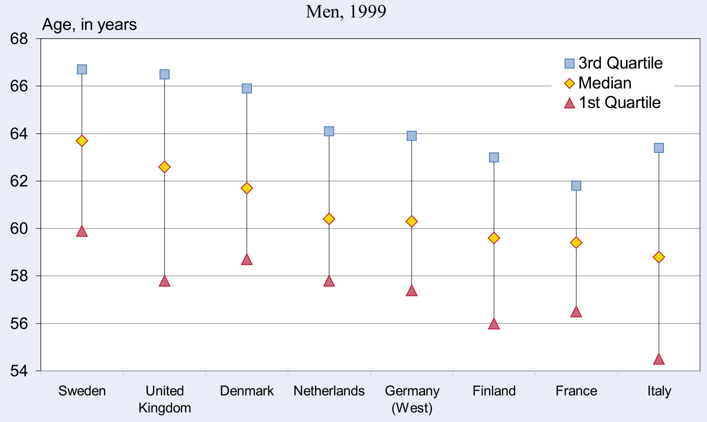
Introduction and promotion of occupational and private individual schemes

In the nineties awareness was raised that modifications of the existing earnings- or tax-related systems in the first pillar alone could hardly suffice to guarantee desired pension levels or contribution rates because certain measures such as broadening the social security coverage could only bring temporary relief. Apart from that, demographic burden would simply be too large to be borne by earnings-related PAYG elements of the pension system alone. Hence, attention has turned to occupational and private individual pension schemes as well.

In occupational schemes starting points for reform can be found on various levels. First of all, the introduction of such schemes has to be mentioned for countries where this step has not yet been taken or where occupational schemes only apply to certain groups of employees. The take-up rate of existing occupational and also individual schemes can be increased by creating incentives for workers to sign such plans. This is achieved primarily by favourable tax treatment of contributions from employees or employers. But it is also possible, e.g.,

Figure 2

DISTRIBUTION OF AGE OF WITHDRAWAL FROM THE LABOR FORCE
Men, 1999



Source: Scherer, 2001.

to allow for partial deductibility of occupational or private pension benefits from the income-base for the calculation of means-tested public pensions.

Increasing transparency, reducing transaction costs and guaranteeing minimum returns are regulatory instruments to raise employees' willingness to sign occupational or private plans. Considering the regularly observed myopia of individuals with respect to old-age provision, turning voluntary schemes into mandatory plans can also be an option. A less radical approach would call for a mandatory scheme with the individual possibility of opting out.

Recent reforms in selected countries

The pension system has been repeatedly subject to reforms in virtually every industrialised country in the 1990s and thereafter. The changes have been far too numerous to be presented here in detail. Therefore, a sample of especially innovative, comprehensive or prototypical reforms that are instructive for an ongoing discussion had to be selected.[4]

Partial reform of the public pension system in *Austria* can be viewed as a rather conservative approach (see Bertelsmann Foundation 1999 and 2000b). Mostly modifications of the existing system, which is a mandatory earnings-related PAYG system, have been undertaken. This includes broadening social security coverage to part-time workers with very low working time and self-employed who pretend to work for their own accounts simply for tax and social security evasion reasons. This can merely be a temporary relief for the pension system as increased coverage automatically entails higher pension claims. In addition, the statutory eligibility age for early retirement has been raised over a two year period from 60 to 61.5 years and from 55 to 56.5 years for men and women, respectively. This increase applies to self-employed and civil servants as well. Furthermore, reductions of pension benefits due to early retirement have been augmented from two to three percentage points for every year short of the statutory retirement age. Persons retiring after the statutory age will receive a bonus of four percentage points for each year. Both aspects of this legislation provide incentives for postponing retirement.

A more comprehensive, but similar reform of pension legislation took place in *Finland* in 2001 with implementation beginning in 2003 and 2005 (see Bertelsmann Foundation 2002). Under the new arrangement, eligibility for a pension will start to accumulate beginning at the age of 18, in contrast to the current age of 23. Employees can choose to retire between an age of 62 and 68 years. There will be an incentive mechanism to postpone retirement so that the average accrual rate of the pension, which amounts to 1.5 percent of annual wages, will be raised to 4.5 percent starting at the age of 63. In return the rate at which pension claims accrue for those retiring earlier than the official age will be reduced. With the individual early pension and the unemployment pension scheme, two instruments for early retirement will be abolished and the retirement age in the ongoing part-time pension scheme will be raised from 56 to 58. The accrual rate for part-time pensioners will also be reduced, effectively diminishing incentives for using the remaining early retirement possibilities. In turn, measures for improved rehabilitation and education over the whole working life will be implemented, eventually enabling older workers to longer activity on the labour market. There is still dispute, however, on how to calculate pension claims. Currently, the last ten working years of every employment relationship is taken into account leading to redistribution from earners with

[4] The subsequent reform reports are based on information from Leinert and Esche 2000.

relatively flat earning profiles over time to those with steep earning increases over the life cycle. Not surprisingly, the current arrangement is favoured by white-collar trade unions, whereas business groups and blue-collar unions advocate the consideration of the whole working life.

Canada took a more progressive step with introducing a funded element to its earnings-related PAYG old-age pension (see Bertelsmann Foundation 2000b). The combined mandatory contribution rate for employers and employees has been raised from 5.6 percent of pensionable earnings in 1996 to 9.9 percent in 2003. The additional revenues form this increase together with generated surpluses of the PAYG system are being invested in a broad variety of assets similar to those in the portfolio of large employer pension funds. Before the reform, the surpluses of the PAYG system were mainly lent to Canadian provinces, yielding a comparably low return. With this step Canadians have opted for a relatively sharp increase of pension contributions which is expected to have detrimental effects on labour demand and employment. But this has been consciously preferred by both politicians and voters over the alternative of running the risk of future breakdown of the public pension system.

Other than that, the existing PAYG system has undergone only minor changes. These comprise abolishing the indexation of the basic annual exemption which is now frozen at CDN$ 3500 of earnings. This effectively increases total contributions over the life-cycle. Additionally, future benefits were slightly trimmed by 1.7 percent. These are measures for a rebalance of contributions and benefits.

Similarly, in the *Netherlands* a savings fund (AOW Spaarfonds) was established in 1998 to secure the financial sustainability of the universal basic pension scheme. The fund is filled from tax revenues. It was decided that money could not be withdrawn from this fund before 2020. After that date the accumulated assets are to be used as supplements to pension expenditures from the PAYG scheme.

Early retirement in the Netherlands has been financed up to recently by occupational schemes following the PAYG principle. The new provisions are instead fully funded and of the defined-contribution type. They have been integrated in general pension schemes offering workers the choice to retire before the statutory retirement age of 65. Some plans also include a premium for workers who delay retirement until that age.

The fundamental *Swedish* pension reforms of the 1990s had different aims (see Bertelsmann Foundation 1999; Palmer 2002). One was to convert the two-tier PAYG defined-benefit system of a predominant basic flat-rate scheme and an additional earnings-related scheme to a combination of notional defined-contribution PAYG and financially defined-contribution individual schemes. The goal was to promote mandatory savings through the public system but with privately managed assets with a large degree of control for the individual. Another aim was to reduce redistribution from blue to white-collar workers with the pension system that originated from the pension formula, similar to the Finnish case.

A funded component was introduced to the public PAYG pension system in 1994. From the total contribution of 18.5 percent of pensionable income, 2.5 percentage points are being paid to individual funds. The funds are controlled and generally managed by the official Premium Pension Authority, while management by private funds is also an option. Insured persons have control over the investment of their individual accounts and are allowed to change their fund manager.

By modification of the pension formula the defined-benefit principle of the former PAYG system has been replaced by a so-called notional defined-contribution. Incorporating the unisexual life expectancy from the point of retirement explicitly accounts for increasing longevity of the population. This lets individual pension benefits adjust accordingly to the demographic circumstances of the population at the time of retirement.

Funding has been an element of the PAYG ("ATP") system since its initiation in 1960. However, as in many other countries those were not individualised but rather designed mainly as a collective buffer to compensate for short-term fluctuations. Over the past two decades these buffer funds have totalled more than five times annual benefit payments. With the introduction of individual funds and a defined-contribution system, the ATP's assets have been reduced and partially transferred to the general government budget.

Quite different approaches to pension reform have been taken in *Germany* (see Bertelsmann

Foundation 2000b and 2001). In 1999, an ecological tax was levied on the used of non-renewable forms of resources such as oil and gas. The revenue from this tax supplements pension payments from the public earnings-related old-age pension system in order to keep the contribution rate at sustainable levels. After initial success, persistently high unemployment and low economic growth led to a contribution rate in 2003 almost as high as before the reform. As an additional reform in this area, modifications of the pension formula became effective in 2001. The standard pension level will be reduced from 70 to 67 percent for people having average net earnings for 45 years. This will be achieved by abandoning full adjustment of pension to wages.

Also in 2001, reforms to promote voluntary occupational and private pension insurance were adopted. Contributions exceeding a minimum amount to individual pension schemes that were previously accredited by government authorities have been subsidised since the beginning of 2002. The subsidy consists of a basic subsidy for the individual and additional subsidies per child. The basic subsidies started out at _38 per year in 2002 and will rise to € 154 by 2008. The additional support per child amounted to € 46 in 2002 and will increase to €185 by 2008. Thus, a couple with two children will receive up to € 678 from 2008 on. Alternatively, a deduction of annual old-age provision expenditure up to € 525 in 2002 increasing to € 2100 in 2008 from income tax liabilities is possible. Because of the lump-sum nature of the subsidy this scheme is especially profitable for low wage earners. The share of the subsidy in total contributions declines with rising income.

Accredited schemes must comply with the following regulations: The liquidation of assets is not possible until the age of 60. The financial service provider must guarantee that at least the nominal value of accumulated contributions is paid out during the withdrawal phase. To ensure transparency, a detailed report on the funds activities has to be presented annually. Most notably, the share of contributions used for administrative charges have to be reported separately.

The reform of occupational pensions has introduced the right for workers to have part of their earnings converted directly into contributions to occupational pension plans. Such contracts can be transferred to a new employer in the case of job change, or, alternatively, the employee has the right to continue paying contributions on his own. Formerly, occupational plans required the formal approval of the employer. The newly created possibility for investment into pension funds enables small and medium-sized employers to provide their employees with occupational plans. Previously, this was virtually impossible.

The traditional occupational plans, where the employer pays for the employee's contribution or employee and employer jointly contribute have been subject to minor reforms. The qualifying period for pension entitlement has been reduced from 10 to 5 years of uninterrupted employment at the same company provided the individual is 30 years of age. This will lead to an increasing number of beneficiaries of such schemes.

In the 1990s many countries started to extend their existing occupational pension schemes to groups of employees previously excluded from such forms of old-age provision. In Denmark, for example, occupational pensions have existed for public sector employees since the late 1960s. In 1991 business and labour groups agreed upon expanding pension coverage to workers in the private sector. Implementation took place in 1993 with an initial contribution rate of 0.9 percent. Since 2003 the rate has risen to 9.0 percent and it is expected that it will further increase to a level similar to the 12 percent in the public sector. Employers pay one third of contributions, the remaining two thirds are borne by the employees.

In the *United Kingdom* pension reform was implemented as a part of the comprehensive Welfare Reform and Pension Act in 1999 (see Bertelsmann Foundation 2000a; Whitehouse 2002). The aim is to reduce the state's share in the pension system by encouraging individuals to make their own provision in private insurance markets while at the same time ensuring low old-age poverty. Of the formerly two state-run pension schemes only the basic state pension has been retained. It is a flat-rate system with universal coverage and financed by employer and employee contributions, essentially giving a minimum income guarantee to prevent poverty of retired persons. The State Earnings Related Pension Scheme (SERPS) was designed to lift basic state pension benefits above subsistence levels. It was financed by employer and employee contributions as well but with the opportunity for workers to opt out of this system in order to obtain insurance in occupational or private schemes. With the exception of low-wage earners it was profitable for almost every worker to opt out and take up additional old-age provisions in the form of occupational or individual schemes instead. To further increase old-age income of low and medium wage earners, the SERPS have been replaced by the State Second Pension (S2P). The S2P gives employees with annual earnings up to £24,600 (in 2002/03 terms) a higher pension than SERPS, whether or not they are contracted out into a private pension. Most support is going to those on the lowest earnings (up to around £10,800). In that sense, the system is highly redistributive, and it is expected that individuals with annual earnings of more than 10,800 GBP will opt out of the system. Apart from low wage earners, also persons with fragmented working lives such as persons engaged in the care of relatives, disabled and long-term unemployed will receive higher benefits from the new scheme. As another measure against old-age poverty the Guaranteed Minimum Income has been introduced as a form of social assistance for elderly persons who did not contribute sufficiently to the basic state pension.

Occupational schemes in the UK are mostly the result of contracting out of SERPS and therefore widespread. They are almost exclusively defined-benefit schemes with only one per cent of employees having additional occupational schemes following the defined-contribution principle. Occupational schemes are granted on a voluntary basis.

Facilitating access to private pension plans is the intention of newly introduced Stakeholder Pensions in the UK. Employers who do not offer occupational pension schemes or group personal pension plans are required to choose a stakeholder pension scheme from the private sector and then collect employees' contributions.[5] This new hybrid form of occupational and personal scheme is more regulated than other private insurance plans. Commission fees and administrative charges are limited to one per cent of pension contributions per year. Regulation aims at increasing In the case of job change, employees will retain their claims. Contributions to any occupational scheme in the UK are taxed at a lower rate.

[5] Small employers are exempted from this scheme.

Lessons to be learned from international experiences

At first sight, differences between the countries' reform strategies seem considerable. This is hardly surprising as reactions to demographic changes are also affected by historically evolved pension institutions. But there are also broad similarities.

In most countries it has been realized that small adjustments to public PAYG systems alone cannot guarantee the sustainability of the pension system. This is confirmed by simulation studies showing that only partial reform within the existing PAYG pension systems leads to an unsustainable accumulation of pension deficits in the future (Rother, Catenaro and Schwab 2003).

On the other hand, an entire shift away from PAYG systems to fully funded systems would be equally misleading. Such a radical reform would shift unbearable burdens from future to the currently active generations, making it economically and politically infeasible.

Thus, a mixed strategy of reforming PAYG systems and introducing or strengthening funded elements is recommended for restoring sustainability of pension systems. This strategy should consist of three elements:

First, strip existing PAYG schemes from inefficiencies. Most importantly, this includes the abolishment of labour market-motivated early retirement schemes. There is no empirical evidence that early retirement of elderly workers increases youth employment (see Blöndal and Scarpetta 1999; Eichhorst, Profit and Thode 2001, p. 302). As demographic changes move on, elderly workers' productivity will be increasingly needed. Additionally, unintended distribution effects of pension systems should be minimised. This especially applies for countries where pension benefits are calculated from a specific number of years with highest earnings. This favours white collar employees compared to blue collar workers, reducing work incentives for the second group.

Second, adjust the parameters of PAYG schemes to increased longevity and changing age structure. Although this measure alone is far from sufficient, increasing the retirement age or modifying indexation rules, for example, can greatly help in balancing contributions and benefits in the face of demographic changes. In this respect Sweden has gone a step further by incorporating longevity as a variable into the pension formula, effectively turning it into a defined-contribution system. This way, pension benefits can adjust without time lags caused by legislative procedures.

Third, promote occupational and private individual schemes. PAYG pension systems are much more directly affected by demographic changes than funded systems.[6] Therefore, the possibilities for the individual to receive additional insurance through funded occupational or individual schemes should be improved. Although such schemes should be offered by the private sector, there is large scope for government activity in setting the framework of private markets. The most important prerequisites are transparency and comparability of different schemes so that individuals can find offers that fit their needs. This includes information an administrative charges or the classification of different risk categories as to the kinds of investments that are made by fund managers.

Special attention has to be paid to low and medium wage earners and individuals with fragmented employment histories. They often lack the financial resources to engage in insurance other than public or employer-paid occupational schemes. Direct public subsidies and favourable tax treatment are measures to increase private scheme participation of those groups. The problems of "demographic myopia" and procrastination preventing individuals from privately saving for their retirement can at least partially be solved by a compulsory insurance with an opting out possibility. This means that individuals would have to become active in order to leave the insurance rather than to join it.

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[6] Although it can be shown that in a closed economy a funded pension system is equally vulnerable to a shrinking population, the integrated world economy permits partial immunization by investing domestic capital in foreign countries with different demographic structures and prospects.