

# Pensions and the crisis



How should retirement-income systems respond to financial and economic pressures?

No country, and no pension scheme, is immune from the effects of the crisis. Private pension funds lost 23% of their value in 2008, worth a heady US\$5.4 trillion. Economic output is falling and unemployment is rising, putting pressure on the finances of public pension schemes as well. How can OECD countries' pension systems weather this storm?

It started as a *financial* crisis. The collapse in stockmarkets had a profound effect on private pensions in many countries. They are an important part of retirement-income provision. And in some countries, they are already mature and play a significant role in providing old-age incomes.

The financial crisis then spawned an *economic* crisis. Output is falling. Unemployment is rising fast and is expected to reach 10% of the workforce in 2010. Earnings are under pressure from wage cuts and shorter working hours. This reduces revenues from pension contributions and increases the demand for unemployment and other benefits.

## 1 Economic crisis and its fiscal impact



Source: OECD interim economic projections

Weaker economies and fiscal-stimulus packages mean that the public finances are showing more red ink. Budget deficits in OECD countries are expected to balloon this year and next to reach nearly 9% of national income in 2010.

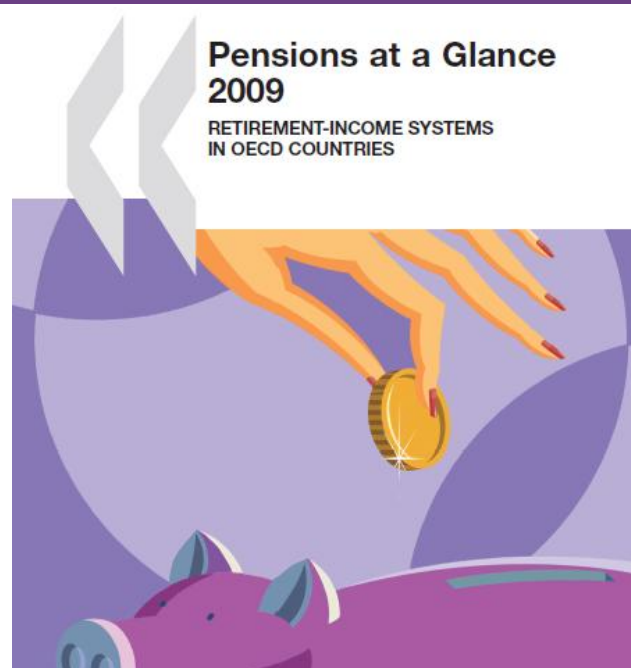
These developments mean that both public and private pension schemes are affected negatively by the crisis. This briefing sets out the key findings on pensions and the crisis from OECD *Pensions at a Glance 2009*. It explores the extent of the danger of the financial, economic and fiscal crisis turning into a *social* crisis. What are the implications for old-age

incomes in the next few years? What can governments do to mitigate the impact? Which policies should they avoid? What would help pension systems cope with future crises?

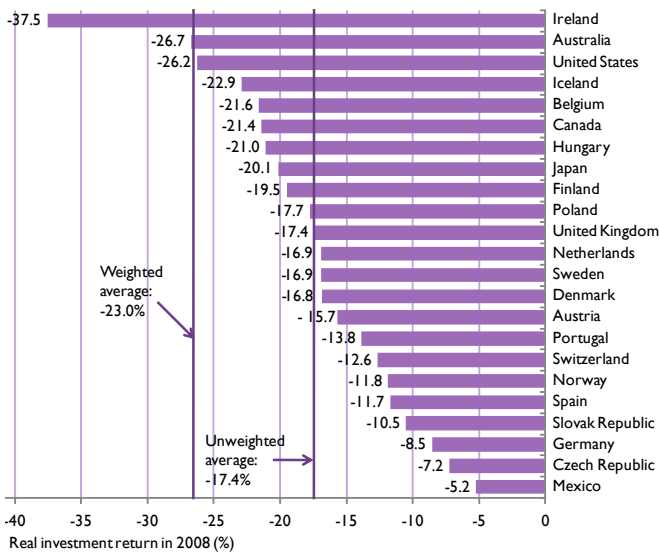
## Financial markets and private pensions

Private pension funds mainly had a dreadful year in 2008 as a result of the financial crisis. The second chart (overleaf) shows private pension investment performance in 23 countries. It gives the real return on investments, after taking inflation into account, where private pension funds have significant assets.

The largest loss of 37.5% was in Ireland. But investments also lost more than a quarter of their value in Australia and the United States. At the other end of the scale, losses were just over 10% in the Slovak Republic and lower still in the Czech Republic, Germany and Mexico. The value of pension funds in the United States dominates the OECD picture, so the *total* decline in assets in the OECD was 23%. But the *unweighted* average for the 23 countries was rather lower: 17%.



## 2 Pension funds' real returns in 2008



Note: includes countries where pension fund assets in 2007 were worth more than 4% of GDP

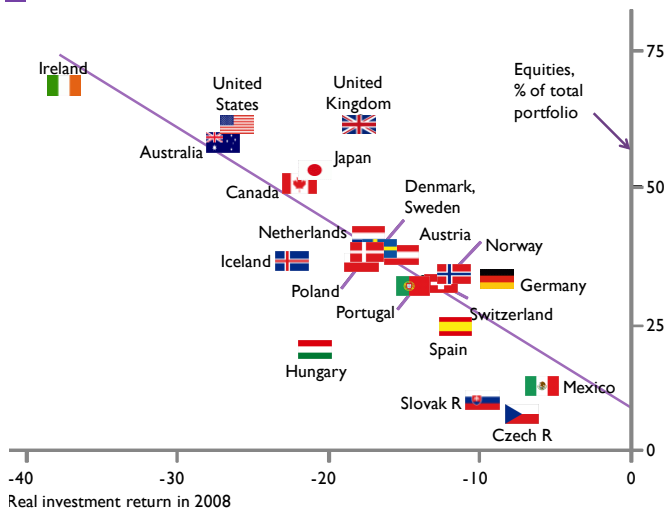
Source: OECD *Pensions at a Glance 2009*, Figure I.3

## Investments and performance

These huge differences in investment returns are explained by differences in the way pension funds are invested. Stock markets in OECD countries all fell by around 45% in 2008. Government bonds tended to rise, with the international index up by over 7% in 2008. These assets, along with deposits and property, are the main ones in which pension funds invest.

Figure 3 compares the share of portfolios in equities at the end of 2007 with investment performance in 2008. Stocks made up the majority of pension funds' portfolios in English-speaking countries before the crisis hit. Both the equity share – around two-thirds – and investment losses were largest in Ireland. More than half of portfolios in Australia, Canada, the United Kingdom and the United States were also in equities.

## 3 Equity portfolio shares and returns



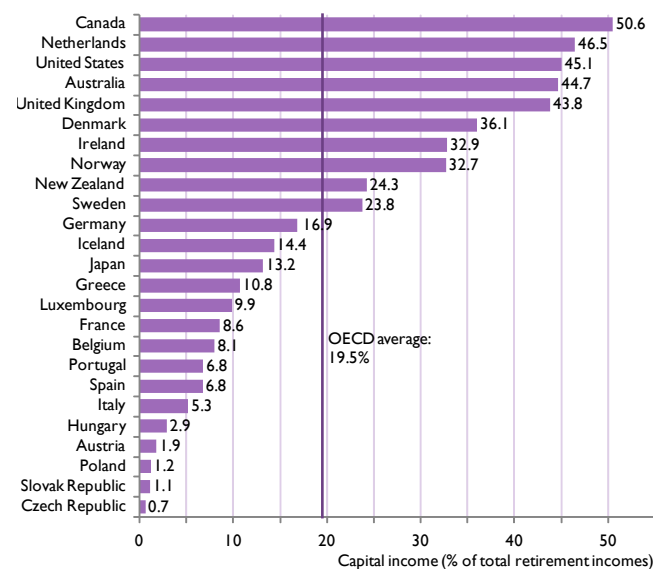
Source: OECD *Pensions at a Glance 2009*, Figure I.4

In contrast, shares are only around 10% of portfolios in the Czech and Slovak Republics, and Mexico. Pension funds in these three countries all saw fairly small investment losses in 2008. At the centre of the chart is a cluster of countries where pension funds hold about a third of their assets in shares where investment returns were close to the unweighted OECD average of a loss in 2008 of 17.4%. Still, it is important to bear in mind that equities have historically delivered higher returns than bonds (see p. 6 below).

## Private pensions and old-age incomes

Countries differ in the importance of private pensions in the retirement-income package, as well as the way pension funds are invested. Figure 4 shows how much of retirement income comes from 'capital', which includes all private savings (although in most cases it is mainly private pensions). To focus on pension provision, the calculations exclude incomes from work (employment or self-employment, which account for a fifth of incomes of people aged over 65, on average). The remainder, up to 100%, consists of income transfers from the state: predominantly, public pensions, of course. The data are from the mid 2000s.

## 4 The role of private retirement savings



Source: OECD income-distribution database; see Figure 2.3 in OECD *Pensions at a Glance 2009* and OECD (2008), *Growing Unequal?*

For current retirees, private financial sources make up more than 40% of retirement incomes in five OECD countries: Australia, Canada, the Netherlands, the United Kingdom and the United States. In contrast, they are less than 5% of incomes in five countries of Central and Eastern Europe: Austria, the Czech and Slovak Republics, Hungary and Poland. On average, they account for a fifth of retirement incomes.

But private pensions are a significant part of current workers' retirement provision in more OECD countries than the chart suggests. A number now have *mandatory* private pensions. For today's younger workers, private pensions are expected to provide around a third of retirement incomes in Hungary, half in Poland, 60% in the Slovak Republic and three-quarters in Mexico. Although the impact of the *current* crisis in these countries will be relatively minor, it highlights the need for resilience to a *future* crisis. ■

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## Impact on individuals

### Whose pensions are most affected?

The focus so far has been on the financial crisis and its varying effect on countries' retirement-income systems. Now we can turn to the impact on different individuals in those countries and the effects of the wider economic crisis. The most important difference in the degree of impact of the crisis on pensions is with the age of the individual, as shown by the 'traffic lights' in the table on the next page, which range from red for strongly affected through yellow for a moderate impact to green for little or no effect.

### Younger and prime-age workers

Most *younger* workers are little affected by the financial crisis because their accumulations of retirement savings are small. In the United States, for example, 25-34 year-olds' balances in their private pension plans increased by nearly 5% on average in 2008, according to the Employee Benefit Research Institute. This is because their new contributions outweighed investment losses. Although they may suffer from the effects of the economic crisis on the labour market, they have 30 years or more in which to recoup transitory investment losses and offset the effect of gaps in their contribution records.

Similar arguments apply to *prime-age* workers. The financial crisis has affected their private retirement savings (in pensions and other assets) more than younger workers. In the United States, for example, account balances for 35-44 year-olds (with the same 5-9 years' tenure in the plan as the 25-34 year-olds above) fell by nearly 15%. The decline for 45-54 year-olds was nearly 18%. Nevertheless, prime-age workers still have plenty of time for asset values to recover. Also, their jobs tend to be safer in economic downturns than those of younger or older workers.

## Pensioners

People who are already retired will, in general, be unaffected by the crisis. The impact of the economic crisis on labour markets – jobs and earnings – is of no direct significance to them. Most are also protected against the effects of the financial crisis on private pensions, even in countries where these are a significant source of income in old age. This is because occupational plans and annuity providers hold assets to back promises to pay a certain pension. However, there are two exceptions.

The first affects people in defined-contribution pensions. These schemes provide retirement support by the accumulation of pension contributions and investment returns. The issue is how people use the money during retirement. Many retirees are protected from the crisis because they bought an *annuity* on retirement, locking in earlier investment gains and benefitting from life-long pension payments.

But many did not buy an annuity at retirement or deferred doing so. Some, particularly in Australia and the United States, had a lot of equities in their portfolios and so their losses have been large. Similarly, people in all countries who held financial assets outside of pension plans might have lost substantial amounts because of the crisis, again depending on the way the money is invested. Some also invested in housing to provide for old age, and house prices have fallen in many countries.

The second exception, where retirees *are* affected by the crisis, is in countries where pensions in payment are subject to automatic adjustments linked to pension-scheme finances (see p. 7 below).

### Workers nearing retirement

Older workers – those close to retirement – are the group most acutely affected by both the economic and the financial crisis. They are often among the first to lose their jobs during a downturn and among the most vulnerable to long-term unemployment. A long period of unemployment or early retirement due to the economic crisis can permanently reduce their old-age incomes due to an incomplete contribution history.

Turning to the financial crisis, unlike younger and prime-age workers, people in this age group do not have much time to wait for financial markets to recover and losses in private pensions and other savings to be recouped. Even postponing retirement may only allow them to offset part of their losses.

As with retirees, the scale of the impact of the financial crisis on retirement incomes depends on the way assets were invested. Some older workers moved their investments towards less risky assets as retirement approached. But most did not. In the United States, for example, nearly 45% of 55-65 year olds held more than 70% of their private pension assets in equities, according to the Employee Benefit Research Institute. This is only a little below the 50% with such a portfolio under the age of 55. In Australia, more than 60% of people stick with the default investment option of their private plan and equities typically make up around 60% of this portfolio.

The financial crisis has a direct impact on retirement incomes for people with defined-contribution plans. In Iceland, the Netherlands and Switzerland, private pensions are defined-benefit (or a variant): the value of the pension depends on individual earnings and the number of years covered by the scheme.

In Canada, Ireland, Sweden, the United Kingdom and the United States, private pension were traditionally also defined benefit. There has been a shift towards defined-contribution plans in all these countries (albeit at different speeds). Still, many or most of older workers in these countries will get all or most of their pensions from defined-benefit schemes.

In theory, pensions in these schemes are ‘defined’ by a set of rules and should be paid regardless of pension-

fund investment performance. However, investment losses have hit these funds hard. The yardstick is the ‘funding ratio’: the assets of the scheme relative to its liabilities to pay current and future liabilities.

In Ireland, the United Kingdom and the United States, funding ratios for defined-benefit plans have fallen from 110-120% to around 75%. Ratios have also declined in Belgium, Finland and Switzerland, but remain above 100%.

In the Netherlands, defined-benefit schemes are cutting back on benefit adjustments which are generally indexed. The effect of these policies affects equally retirees’ benefits and accrued pension rights of workers. Elsewhere, the crisis is accelerating the shift from defined-benefit to defined-contribution plans. For example, some schemes in the United Kingdom and the United States, already closed to new members, are stopping additional accruals for existing members. Also, defined-contribution provision is being wound back as a series of employers have announced temporary suspension of their payments into individuals’ retirement-savings accounts.

### Automatic stabilisers

Most public retirement-income programmes pay the same benefit regardless of the outcome of private pensions, but some do not. In Australia and Denmark, most of today’s retirees (65% and 75%, respectively) receive resource-tested benefits. These entitlements

## 5 Scale of impact of the crisis on retirement-income provision by age group

		Age group		
		Younger/prime-age	Nearing retirement	Retired
	Strong impact		Individuals with long periods in defined-contribution, private plans Especially if heavily exposed to riskier assets	Individuals who did not take an annuity on retirement Especially if retirees exposed to riskier assets
	Moderate impact		Individuals in defined-benefit, private plans Especially if plans have solvency problems	Retirees in schemes with automatic adjustment of benefits
	Little impact	Most individuals	Many individuals Especially where public pension spending is high	Most retirees (with public or private pensions)

increase if private pensions deliver lower retirement incomes. In Australia, a dollar less of private pension income for many currently means 60 cents more public pension. A large share of older people – 20-35% – receives means-tested benefits in Canada, Ireland and the United Kingdom as well. These programmes act as ‘automatic stabilisers’, meaning that some or most retirees do not bear the full brunt of the financial crisis on their incomes in old-age.

The tax system also works as an automatic stabiliser: as private pensions and other savings deliver a smaller income, less tax is due and so the decline in *net* (after-tax) pensions is smaller than the fall in asset values. Of the countries where private retirement savings are an important source of old-age income, taxes act as a significant automatic stabiliser in Denmark, Norway and Sweden. In contrast, only a minority of retirees pay taxes in Australia, Canada, Ireland, the United Kingdom and the United States, so the stabilising effect is limited to richer retirees. ■

## Policy responses

### Options and arguments

The crisis has prompted a range of changes to pension systems. Some of these were designed to tackle structural problems with retirement-income provision that were highlighted and exacerbated by the crisis.

But we start with more immediate measures. Some countries have included one-off payments to older people in their economic-stimulus packages. These range from US\$140-180 in Greece to over US\$1,000 in Australia. The United Kingdom and the United States have also made one-off payments.

### Stronger old-age safety nets

These and other countries have also made longer-term improvements in old-age benefits, which, like one-off payments, are targeted on the elderly poor. Finland has proposed the biggest change: from 2011, a new safety-net old-age income 23% higher than the existing benefit. Increases to minimum retirement incomes of 11% in Australia and 6% in Spain beyond existing indexation rules have also been announced. Belgium, France, Korea and the United Kingdom have adopted similar policies.

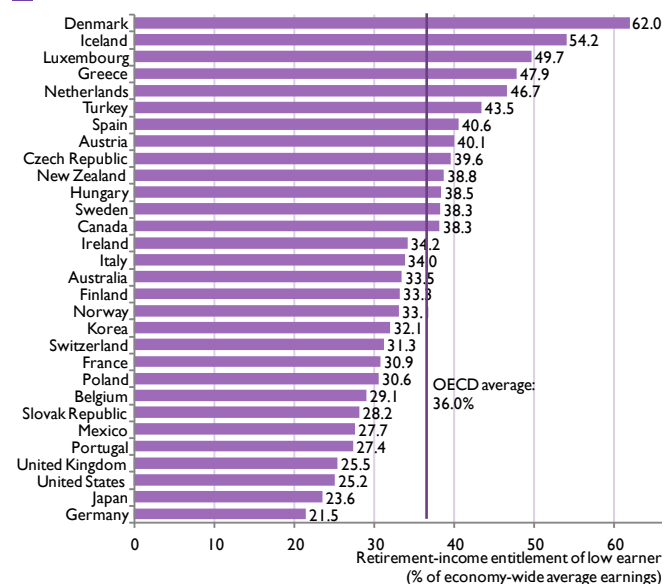
Of these countries, Australia and Korea have among the highest proportions of older people living in

poverty in OECD countries; the old-age poverty rate is also above-average in Spain.

Most of these measures are well targeted on existing social problems. However, some of them aimed at current retirees do not address the group affected most by the crisis: workers near to retirement.

There are other countries where old-age safety-nets are a concern. Figure 6 shows that full-career workers with low earnings (half the average) would have a retirement income of around 25% or less of average earnings in Germany, Japan and the United States. Once a period of early retirement or long-term unemployment (as a result of the economic crisis) is factored in, low-paid people are at significant risk of very low incomes in their old age.

### 6 Old-age safety nets for low earners



Source: OECD pension models; see OECD *Pensions at a Glance 2009*

### Early access to retirement savings

Another set of measures, like one-off payments, aims to stimulate demand to reduce the severity of the economic downturn. Individuals in Denmark and Iceland, for example, will be allowed early access to their pension savings. The risk, of course, is that these people will be left short of money when they retire. In both these countries that is unlikely: access is limited to accumulations well above that needed to provide a comfortable retirement.

Australia lets people use pension savings in cases of severe hardship: to avoid foreclosure on their homes, for example. And workers in the United States have long taken advantage of loans from their private pensions. These have mostly been repaid, with interest, because otherwise people face a tax penalty.

The effectiveness of these policies is limited because the people with more than enough retirement savings are less likely to get into financial difficulties when they are working. Care is needed to ensure that people do not unduly threaten their retirement incomes, but early access to pension savings should not entirely be off the menu of policy options.

### Bailing out pension accounts

Should governments bail out individuals' pension accounts in the same spirit as public bank rescues?

Defined-benefit schemes are already covered by the Pension Protection Fund in the United Kingdom and the Pension Benefit Guaranty Corporation in the United States. These programmes are meant to be financed by levies on occupational plans, but the government acts as an implicit guarantor.

With defined-contribution plans, the case for public intervention rests on the design of the retirement-income system as a whole. It is weaker in countries with a sizeable public pension scheme and where people have investment choices. In contrast, governments may have a moral, if not a statutory, duty to help where defined-contribution pensions are mandatory rather than voluntary, and where annuitisation at retirement is obligatory.

A direct bail-out – paying money into people's pension accounts – could be very costly and public finances are already strained. There is also a risk of moral hazard: the expectation of a bail-out next time things go wrong encourages people to invest more riskily. For these reasons, *ad-hoc* guarantees of investment returns or compensation for losses should be avoided.

A bail-out would make most sense for people who are close to pension age. But this poses political difficulties. If it were restricted to people within a few years of normal pension age, then workers just younger than the cut-off age would feel cheated. Similarly, retirees who annuitised their pension only recently, locking in financial-market losses, would complain if their contemporaries who kept their money in financial markets were to be compensated.

The only example of a direct bail-out is in Israel. However, this scheme is very limited in scope (covering only any losses since November 2008) and costs are spread over a 13-year period.

For reasons of equity and fiscal costs, governments should rely on public retirement-income schemes to

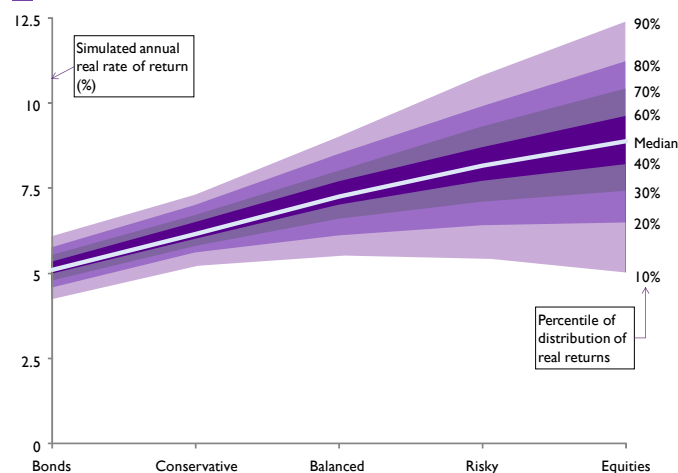
ensure that investment losses do not translate into old-age poverty for a generation of retirees. Paying compensation as a public benefit spreads the cost across the retirement of the individuals involved, reduces political tensions and reduces moral hazard.

### Investments and risks

Pensions are long-term investments and it would be very short-sighted to base decisions on last year alone, when stockmarkets lost nearly half their value but government bonds showed positive returns.

Based on a quarter century's data on performance of equities and bonds, the OECD has simulated real investment returns over the 45-year horizon of retirement savings. The results (in Figure 7) show a range of portfolios across the horizontal axis: from pure bonds at the left to pure equities at the right. The white line shows median returns: half the time returns will be above this level, and half the time below. For a 'balanced' portfolio – half each in equities and bonds – the median return is 7.3% above inflation. It is higher for a portfolio of equities (8.9%) and lower for bonds (5.2%). The shaded areas of the fan show the likelihood of different outcomes, based on past experience. With a balanced portfolio, real returns are expected to be 5.5% a year or less 10% of the time. Equally, they are projected to exceed 9.0% a year also 10% of the time. Equities clearly give a higher return at the price of greater risk.

### 7 Investment risk and pensions



Source: D'Addio, A.C., J. Seisdedos and E.R. Whitehouse (2009), 'Investment risk and pensions: measuring uncertainty in returns', Social, Employment and Migration Working Paper no. 70, OECD.

For all but the most risk-averse, equities should remain part of people's retirement savings. But there is one strategy that can reduce risk without undue sacrifice of returns. 'Lifecycle' investing involves a move from riskier assets, such as equities, to less risky

assets, such as deposits and government bonds, as people near retirement. Governments should at least encourage people to choose this strategy, but it may be necessary to go further. Many people stick with the default investment option, so it would make sense that lifecycle investment is the default. This would put investments for most people on automatic pilot while preserving choice for the minority who wish to manage their investments actively.

Mexico and the Slovak Republic have investment choice in mandatory private pensions, with riskier options unavailable to older workers. But, for the moment, even the riskier funds tend to hold less than 20% of assets in equities. Poland will also introduce investment choice and lifecycle investing. In the United States, lifecycle funds have not had much success. Although two-thirds of plans offer them as a choice, only around a quarter of members hold these funds and they account for just 7% of assets. This proportion might increase as new laws let plans automatically enrol people into lifecycle funds. But simply ensuring that lifecycle options are offered has not provided broad coverage. ■

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## Further challenges

### Pension systems in the crisis and beyond

The projected rise in unemployment in OECD countries – from less than 6% of the workforce to 10% in 2010 – will hit older workers hard. In past recessions, many governments have relaxed the rules or policing of early retirement and disability benefits. The aims were to protect incomes of older workers losing their jobs and limit increases in the rolls of registered unemployed. Whatever the short-term benefits, the medium- and long-term impact on labour markets was negative. After the early-1980s recession, unemployment (especially long-term unemployment) persisted well after economies had recovered and these policies were difficult to unwind.

This time, there has been little evidence yet of governments repeating these past mistakes. But unemployment tends to lag changes in economic output and so is expected to continue growing for some time. The word ‘yet’ is the operative one: vigilance is required to ensure that the danger of using early retirement and disability benefits to disguise unemployment is averted.

### Backtracking on pension reforms

More worrying is evidence of reversal of pension reforms. The Slovak Republic has encouraged people to opt back into the state pension scheme rather than diverting part of their contributions to private, defined-contribution plans. When this was first offered, only 6% of members of the private plans chose to switch back. However, it is no longer compulsory for labour-market entrants to join the private funds and the public scheme is the default option. This is an irreversible, once-in-a-lifetime decision which will have long-term effects on the retirement incomes of new labour market entrants.

The motivation for this change is short-term fiscal problems. Some 60% of workers actively chose to join the new private pensions at the time of reform. This was many more than expected, and the diversion of contributions from the public to the private scheme has left a hole in the government’s finances. A more sensible way of alleviating short-term fiscal problems is temporarily to reduce the contribution going into private pensions. Although no OECD country has adopted this strategy, it is likely to be used in Estonia, Latvia and Lithuania, for example.

### Automatic benefit adjustments

Some OECD countries – Canada, Germany and Sweden – have automatic adjustments to pension entitlements to reflect the state of the schemes’ finances. These work in a similar way to adjustments in occupational plans in the Netherlands (p. 4 above).

The sustainability adjustment in Germany links the pensions to the dependency ratio: the number of pensioners relative to the number of contributors. But the government has over-ridden the adjustment for two years running, increasing entitlements by 1.1% in 2008 and 2.41% this year. The sustainability factor would have resulted in increases of 0.46% and 1.76% respectively. Because Germany has pension-point scheme, this policy affects both pensions in payment and the accrued rights of current workers.

The balance mechanism in Sweden compares the assets of the fund (investments plus future contributions) with the liabilities (current and future pensions). The ratio between the two has fallen to 96.7%, the first time it has been under 100%. Under the rules, pensions in payment and accrued rights should be cut next year to restore the balance. In practice, it is likely that cuts will be postponed.

Automatic-adjustment mechanisms were introduced as a way of ensuring long-term financial sustainability of pension systems in the face of population ageing. Recent experience suggests that their design needs a re-think. It does not seem sensible to reduce benefits in a pro-cyclical way, taking money out of the economy when it is weak. However, cuts needed to restore financial health must not be cancelled rather than merely postponed or need to be clawed back when economies recover.

## Pensions are a long-term issue

The short-term pressures on governments to act are huge, as assets prices have sunk, output is falling and unemployment is rising. But the long-term challenges for pension systems – from demographic change and population ageing – have not gone away. If anything, they have been underlined and aggravated by the financial and economic crisis.

OECD countries have been ageing for some time. In 1950, there were seven people of working age for every one of pension age. This number is currently around four and, by 2050, there will be fewer than two people of working age for every one aged over 65 on average. The impact of the economic and financial crisis on retirement incomes will be painful for many. But in terms of pension policy, the effects of the crisis are dwarfed by the challenge of ageing. ■

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## Risk and pensions

### Security through diversity

The financial crisis means that *investment risk* is at the forefront of the minds of the public and policymakers alike. But there is a range of risks and uncertainties in pension systems, driven by the fact that there is an

average of 60 years between the time people first contribute and when they draw the last benefit. With public pensions, there is always the risk that governments and voters change their minds about what is a reasonable retirement income – especially when faced with the pension and healthcare costs of an ageing population – and pay lower benefits than expected. Indeed, many countries' public finances are weak and the effects of the crisis, economic stimulus and bank rescues have taken a further toll.

Risk cannot be eliminated: it can only be reduced by diversifying retirement-income provision. The OECD has argued that 'diversity has many virtues'. The report on *Maintaining Prosperity in an Ageing Society* went on to say that 'each of the elements of the system has its own strengths and weaknesses and a flexible balance among them not only diversifies risk but also offers a better balance of burden-sharing between generations'.

There are economic, demographic, financial and social uncertainties in pension systems. The best approach for individuals and governments is to use a mixture of ways of providing retirement incomes. Diversity of pension provision is the best way to deliver security in old age. The current crisis reinforces this message. ■

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## Follow-up

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