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## PENSIONS DURING THE CRISIS: IMPACT ON RETIREMENT-INCOME SYSTEMS AND POLICY RESPONSES

By Anna Cristina D'Addio and Edward Whitehouse<sup>1,2</sup>

The financial and economic crisis has never been far from the headlines for the last 18 months and rarely have other stories pushed its impact on people off the front pages. The crisis has had a particularly profound effect on pension systems and retirement incomes, the two areas explored in this paper.

The *financial* part of the crisis has dealt a heavy blow to private pension funds: in the calendar year 2008, their investments lost 23 percent of their real value on aggregate in OECD countries. This is the equivalent of a heady U.S. \$5.4 trillion. It means that many people have lost a substantial amount of their retirement savings, from pension plans and other assets.

However, the financial crisis is growing into an *economic* crisis. The OECD's recent economic forecast for its 30 member countries predicts a fall in gross domestic product

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<sup>2</sup> Rafal Chomik, on secondment to the OECD from the Department of Work and Pensions in the United Kingdom, provided valuable research assistance. The contribution to the analysis of other colleagues at the OECD is also gratefully acknowledged: Pablo Antolín, Martine Durand, John P. Martin, Mark Pearson, Monika Queisser, Andrew Reilly, Fiona Stewart and Juan Yermo. The views expressed are those of the authors alone and do not necessarily reflect the official stance of the OECD or of the governments of its member countries.

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(GDP) in 2009 of 4.4 percent and stable output in 2010. Unemployment in the OECD reached a low point of 5.6 percent in 2007, increasing to 6.0 percent in 2008, with further rises to 8.4 percent in 2009 and 9.9 percent in 2010.

This means that public pension schemes are also affected. Unemployment and lower earnings will reduce the contribution revenue of pay-as-you-go pension systems, making it more difficult for these systems to deliver pension benefits. Some public pension reserve funds have also suffered major losses on their investments.

No country and no pension scheme is therefore immune from the impact of the financial and economic crisis. This brief survey begins by analyzing which countries are most affected.<sup>3</sup>

### 1. Impact on pension systems

With respect to the real investment returns in 2008 for countries with significant pension funds, there is considerable variation around the aggregate loss of 23 percent for the OECD as a whole. The United States, which accounts for around one-half of all private-pension assets in OECD countries, showed the third largest decline: around 26 percent. Only Ireland and Australia, with losses of 38 percent and 27 percent, showed a worse investment performance. In another five countries—Belgium, Canada, Hungary, Iceland and Japan—real investments fell by more than 20 percent. At the other end of the scale, losses were only around 10 percent in Germany, the Slovak Republic, Norway, Spain and Switzerland. They were smaller still in the Czech Republic and Mexico.

The explanation for these differences is relatively straightforward. In 2008 as a whole, world stockmarkets (as measured by the MSCI index) fell by nearly one-half while the world government-bond index (Citigroup) increased by around 7 percent. Property markets in many OECD economies weakened, in some cases dramatically. These assets, along with corporate

bonds and deposits, account for nearly all pension funds' investments. However, pension funds' portfolios differ significantly between countries and it is this variation that accounts for different performance. In fact, the data suggest a clear and strong relationship between the proportionate share of equities and the investment loss.

The scale of the impact of the crisis on individuals' incomes in old age depends on the role that private pensions play in providing retirement incomes. There are five countries where the private pensions including other savings provide 40- to 50-percent of retirement incomes: Canada, the Netherlands, the United States, Australia and the United Kingdom.

The financial part of the crisis has therefore had most impact in countries where private pensions already play a major part in providing old-age incomes and where private-pension assets are invested heavily in equities.

But private pensions are a significant part of current workers' retirement provision in many other OECD countries. A number now have mandatory private pensions. For today's younger workers, private pensions are expected to provide around one-third of retirement incomes in Hungary, one-half in Poland, 60 percent 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.

### 2. Impact on individuals

The most important determinant in the degree of impact of the crisis on pensions is the age of the individual.

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<sup>3</sup> The chapter on "Pension systems during the financial and economic crisis" in OECD, (2009), *Pensions at a Glance 2009: Retirement-Income Systems in OECD Countries*, (OECD, Paris), provides a more comprehensive treatment of this issue.

***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 percent 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 labor market, they have 30 years or more in which to recoup losses and offset gaps in contributions.

Similar arguments apply to prime-age workers, though the effect on their private retirement savings (in pensions and other assets) is greater. In the United States, account balances for 35 – 44 year-olds (with the same five to nine years' tenure in the plan as the 25 – 34 year-olds) fell by nearly 15 percent. The decline for 45 – 54 year-olds was nearly 18 percent. Nevertheless, prime-age workers still have time for asset values to recover. Also, their jobs tend to be safer in downturns than those of younger or older workers.

***Pensioners***

Those already retired will, in general, be unaffected by the crisis. The impact of the economic crisis on labor markets is of no direct significance to them. Most are also protected against the losses affecting private pensions even where these are a significant source of retirement income because occupational plans and annuity providers hold assets to back promises to pay a certain pension. 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 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 who held assets, including houses, outside of pension plans might have lost substantial amounts.

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.

***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. Unemployment or early retirement can permanently reduce their old-age incomes due to an incomplete contribution history. People in this age group do not have much time to wait for markets to recover and losses to be recouped. Even postponing retirement may only allow them to offset part of their losses.

As with retirees, the impact of the financial crisis on retirement incomes depends on how 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 percent of 55 – 65 year olds held more than 70 percent of their private pension assets in equities, according to the Employee Benefit Research Institute. This is only a little below the 50 percent with such a portfolio under the age of 55. In Australia, more than 60 percent of people stick with the default investment option of their private plan and equities typically make up around 60 percent of this portfolio.

The financial crisis has a direct impact on retirement incomes for people with defined-

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

In theory, pensions in these schemes 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- to 120-percent to around 75 percent. Ratios have also declined in Belgium, Finland and Switzerland, but remain above 100 percent.

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 contributions.

#### ***Effect of automatic stabilizers***

Most public retirement-income programs 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 percent and 75 percent, respectively) receive resource-tested benefits. These entitlements increase if private pensions deliver lower retirement incomes. In Australia a dollar less of private income means 60 cents more public pension. A large share of older people—20- to 35-percent—receives means-tested benefits in Canada, Ireland and the United Kingdom as well. These act as automatic stabilizers so that some or most retirees do not bear the full brunt of the financial crisis.

Tax also works as an automatic stabilizer: as private pensions and other savings deliver a smaller income, less tax is due so the decline in net 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 stabilizer 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 stabilizing effect is limited to richer retirees.

### **3. Policy responses**

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. Some were more immediate measures, such as one-off payments to older people as part of economic-stimulus packages. These range from U.S. \$140 to \$180 in Greece to over U.S. \$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.

There are other countries where old-age safety-nets are a concern. Full-career workers with low earnings (half the average) would have a retirement income of around 25 percent 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.

#### ***Early access to retirement savings***

Another set of measures aims to stimulate the economy through the pension system. Individuals in Denmark and Iceland, for

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example, will be allowed early access to their pension savings. The risk 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, which are mostly repaid, with interest, to avoid tax penalties.

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

***Bailing-out pension accounts***

Defined-benefit schemes are already covered in the United Kingdom and the United States by programs that are financed by levies on occupational plans, but the government acts as an implicit guarantor. With defined-contribution plans, the case for intervention rests on the design of the pension system. It is weaker where public provision is sizeable and where people have investment choices. In contrast, governments may have a duty to help where defined-contribution pensions are mandatory rather than voluntary, and where annuitization is obligatory.

A direct bail-out—paying money into pension accounts—could be very costly. There is also a risk of moral hazard: encouraging 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 those close to pension age. But this may discriminate

against those younger than the cut-off age and retirees who annuitized only recently. 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 13 years.

Governments should rely on public retirement-income schemes to ensure against 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 short-sighted to base decisions on last year alone, when stock-markets 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.<sup>4</sup> The results 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 percent above inflation. It is higher for a portfolio of equities (8.9 percent) and lower for bonds (5.2 percent). With a balanced portfolio, real returns are expected to be 5.5 percent a year or less 10 percent of the time. Equally, they are projected to exceed 9.0 percent a year also 10 percent of the time. Equities clearly give a higher return at the price of greater risk.

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 to



less risky assets. Governments should at least encourage people to choose this strategy, but it may be necessary to go further, and make lifecycle investment 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.

#### **4. Further challenges: pension systems in the crisis and beyond**

The projected rise in unemployment in OECD countries—from less than 6 percent of the workforce to 10 percent 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 official unemployment. Whatever the short-term benefits, the medium- and long-term impact on labor 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 is little evidence yet of governments repeating these 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 percent of members of the private plans chose to switch back. However, it is no longer compulsory for labor-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 labor market entrants.

The motivation for this change is short-term fiscal problems. Some 60 percent 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 governments’ 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.

The sustainability adjustment in Germany links pensions to the dependency ratio: pensioners relative to contributors. But the government has over-ridden the adjustment for two years running, increasing entitlements above what would have resulted from the sustainability factor, affecting 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

<sup>4</sup> See OECD (2009), *Pensions at a Glance 2009: Retirement-Income Systems in OECD countries*. See also D’Addio, A.C., E. Whitehouse and J. Seisdedos (2009), “Investment Risk and Pensions: Measuring Uncertainty in Returns,” Social Employment and Migration Working Paper, n. 70, OECD, Paris.

<sup>5</sup> See OECD, (2009), *Pensions at a Glance 2009: Retirement-Income Systems in OECD Countries*, (OECD, Paris).

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future pensions). The ratio between the two has fallen to 96.7 percent, the first time it has been under 100 percent. 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 aging. 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.

#### **5. Conclusion**

The financial and economic crisis means that the short-term pressures on governments to act are huge. Nevertheless, the long-term challenges

for pension systems—from demographic change and population aging—have not gone away. If anything, they have been underlined and exacerbated by the financial and economic crisis. The impact of the economic and financial crisis on retirement incomes will be painful for many, in both public and private pension schemes. But in terms of pension policy, the effects of the crisis are dwarfed by the challenge of aging.

The crisis has also brought investment risk to the fore of many people's minds, but it is one of many economic, demographic, financial and social uncertainties in pension systems. One of the key lessons is that risk cannot be eliminated: it can only be reduced by diversifying retirement-income provision. The current crisis reinforces the message that old-age security is best maintained through diversified pension provision. 