PENSION CORPORATION

Pension Corporation Research

The financial and economic crisis and pension systems: International experiences

December 2009

Dr Frank Eich

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A previous version of this paper was published as part of the London School of Economics' Pensions Tomorrow initiative. For further information on this initiative see www.lse.ac.uk/collections/management/pensionsTomorrow/

Key points

- The financial and economic crisis has adversely affected not only the British pension system but also those in most other countries as well.
- Theoretically, the crisis should have a medium to long-term impact on a pay-as-you-go pension system, with future contribution rates to be increased and retirement income generosity to be reduced to ensure fiscal sustainability. The impact is similar on occupational defined-benefit pensions, with current pensioners continuing to receive their full pension and those close to retirement unlikely to face major changes. Over the longer term, the sponsors of DB pension schemes are likely to renegotiate employee contribution rates, age of entitlement and future generosity. Schemes might be closed altogether.
- One would expect a much more immediate impact on DC pension schemes, with falling equity prices reducing the value of accumulated pension fund assets without delay. Those close to retirement or considering buying an annuity would be most affected by such a fall. It can be expected though that asset values will recover again over the long term.
- Real-world experiences in a number of representative countries including Australia, Chile, Germany and Sweden are in line with what is predicted theoretically.
- The main finding is that regardless of whether a country relies more heavily on an unfunded pay-as-you-go state pension system (as in Germany) or funded private pensions (whether defined benefit or defined contribution, as in Australia or the United States) the crisis has had an adverse effect everywhere. Existing systems will have to be refined or restructured more fundamentally. Over the long term, it is likely that closing the widening funding gaps will require increased lifetime contributions (including by working longer) and/or reductions in the generosity of pensioner benefits.
- The exact response will vary from country to country and will to a large extent be determined by a society's interpretation of "inter-generational fairness".

Executive summary

There has been much discussion in the British general and specialised media over the last year on the adverse consequences of the economic and financial crisis on the British pension system. It should come as no surprise that the crisis has also adversely affected pension systems in most other countries too. This paper contributes to the current debate on pensions in the UK by discussing how pension systems outside the UK have been affected by the economic and financial crisis, and what governments have done to deal with the emerging issues. The paper starts by discussing what theory tells us about the likely impact of this type of crisis on different types of pension systems. While the impact should be more long term in the case of pay-as-you-go state pensions and defined-benefit occupational pensions, theory would suggest that the effects will be felt more immediately in the case of defined-contribution pension schemes or private savings. The paper then goes on to present a number of key developments and policy actions (if any) that have taken place in a select number of countries in the realm of pensions since the onset of the crisis in the second half of 2007. These countries have been chosen as they are representative for a large number of countries, from Chile with its very high dependency on private pensions to Germany, where unfunded social security pensions remain by far the most important source of retirement income. The paper finds that the real world experiences are in line with what could be expected theoretically and argues that regardless of whether a country relies more heavily on an unfunded pay-as-you-go state pension system or funded private pensions (whether defined benefit or defined contribution) the crisis has had an adverse effect everywhere. Existing systems will have to be refined or restructured more fundamentally, with the exact response likely to vary from country to country reflecting society's interpretation of "inter-generational fairness". Annex A provides information on the respective ageing trends in these countries, while Annex B discusses the respective arrangements set up to protect current and future pensioners' entitlements if and when a pension scheme's corporate sponsor becomes insolvent.

i. The economic crisis and pensions

The crisis has had an impact on British pensions…

There has been much discussion in the British general and specialised media over the last year on the adverse consequences of the economic and financial crisis on the British pension system. Tumbling stock markets have not only had an adverse impact on the value of assets held in defined-contribution pension schemes, it also decimated the funding position of occupational defined-benefit pension schemes, leading to a new wave of closures of defined benefit pension plans, which in turn is creating a widening gap between public sector and private sector pension provision.1 Meanwhile, the sharp recession and the deteriorating tax base have left the government with a significant structural fiscal deficit, which raises questions regarding its ability to finance more generous state pensions in the future. Furthermore, the government announced to postpone the roll-out of its flagship Personal Accounts project, which is meant to help those on modest incomes to save more for retirement.[2]

…but equally though on pension systems elsewhere

It should come as no surprise that the crisis has also adversely affected pension systems in most other countries too. In June 2009, the Organisation for Economic Co-operation and Development (OECD), for example, argued that: "*no country, and no pension scheme, is immune from the effects of the crisis*…", with "*…both public and private pension schemes…affected negatively*…"[3] The OECD goes on to urge governments to: "*…continue reforms to ensure that public and private retirement income provision is socially as well as financially sustainable*."[4]

This paper contributes to the current debate on pensions in the UK by discussing how pension systems outside the UK have been affected by the economic and financial crisis, and what governments have done to deal with the emerging issues.[5] Before presenting and discussing key developments in the area of pension provision in a selected number of representative countries, the paper sets out the different ways a financial crisis could impact on different types of pension systems. To provide some background, the country sections also offer very brief insights into the countries' pension systems more generally, while the two annexes provide further information on the demographic challenges facing the countries and arrangements to protect pensioner benefits in case of corporate insolvency. The paper concludes by stating that the crisis has affected all types of pension systems and that further reforms will be required to deal with the legacy of the crisis.

ii. What does theory tell us about the impact of the crisis on pension systems?

Analysing the impact of the economic and financial crisis, the OECD has observed that: "*…because of the long horizon involved…all kinds of pension provision are subject to risks and uncertainties of different kinds*…"

[1] *Public sector pensions: Rationale and international experiences*, Frank Eich, 2009.
[2] See *Back to the drawing board: the Economic crisis and its implications for pension provision in the United Kingdom*, Frank Eich and Amarendra Swarup, June 2009, for a detailed discussion. Eich and Swarup argue that all aspects of the system had been adversely affected, with the crisis highlighting fundamental flaws, which had already been present pre-crisis. They conclude that the issues were so complex and the challenges so substantial that a bold solution would have to be found to move British pensions onto a more efficient, equitable and sustainable footing fit for the 21st century.
[3] *Pensions and the crisis How should retirement-income systems respond to financial and economic pressures?*, OECD Media Briefing for Pensions at a Glance 2009, June 2009.
[4] Crisis highlights the need for sweeping pension reforms, says OECD, www.oecd.org/document/23/0,3343,en_2649_34757_43123095_1_1_1_1,00.html (accessed 1st October 2009).
[5] The paper does not discuss the impact of the economic and financial crisis on UK pensions as it assumes that the reader is aware of the main developments. If not, for an introduction see Back to the drawing board: the Economic crisis and its implications for pension provision in the United Kingdom, Frank Eich and Amarendra Swarup, June 2009 though there are many other papers that are equally useful.

It is important to understand in what ways different pension schemes could be affected by such a crisis. The three main types of pension schemes are:

- unfunded pay-as-you-go (PAYG) social security;
- occupational defined benefit (DB); and
- occupational defined contribution (DC).

In addition, private pensions can also play an important role. They share many characteristics with defined contribution pension schemes.

Pay-as-you-go

Social security pensions generally promise a more or less guaranteed income in retirement and are financed through current workers' contributions (in the case of the UK national insurance contributions, NICs). A PAYG pension system cushions the immediate effects of a crisis on current retirees and as such could also act as a powerful automatic stabiliser within the welfare state during an economic downturn by maintaining pensioner incomes, which in turn would help to support domestic demand.[6] Everything else equal, countries with strong PAYG pension systems are therefore likely to require less discretionary fiscal stimulus than countries with weaker PAYG systems.

Theoretically the effects on a PAYG pension system…

The impact of an economic and financial crisis on a PAYG pension system will generally be of a more medium- to long-term nature, with contribution rates likely to increase and future retirement income generosity to be reduced to ensure that the unfunded system remains financially long-term sustainable. This is regardless of whether the system is set up within the general government budget (as is for example the case in the UK) or organised separately (as is the case for example in Germany).

Defined benefit

…and defined-benefit occupational pensions should be longer term…

The impact of an economic and financial crisis on occupational defined-benefit pensions is similar to that on pay-as-you go pensions. Current pensioners are likely to continue to receive their full pension and those close to retirement are also unlikely to face major changes. Again, the impact will be more of a medium- to long-term nature, with the sponsors of DB pension schemes likely to renegotiate employee contribution rates, age of entitlement and future generosity. The sharp funding shortfall could also encourage an increasing number of corporate sponsors to close these schemes to new members or even altogether.

Defined contributions

…but much more immediate on defined-contribution schemes

The impact of an economic and financial crisis on DC pension schemes is much more immediate, with a fall in equity prices reducing the value of accumulated pension fund assets without delay. Those close to retirement or considering buying an annuity would be most affected by such a fall. Those affected can be expected to adapt their level of spending within a very short time span as a result. Over the longer term though, it can be expected that asset values will recover again, with the result that younger cohorts will most likely be only marginally affected – if at all – by such a crisis.

As the above illustrates, the timing of an impact of an economic and financial crisis on the different pension schemes varies, suggesting that a mixture of all three schemes could offer the best guarantee to withstand such a crisis. Indeed the OECD argues that: "*…diversifying pension provision remains the right strategy, in the face of demographic, political, economic and financial risks*…"

According to the European Commission, the economic and financial crisis has already had an impact on EU member states' attitudes towards DC pensions. Especially some of the central and Eastern European member states, which had no established social security pension systems in the wake of the collapse of communism in the 1990s and

[6] For this to be true, the pay-as-you-go pension system must be allowed to run deficits or surpluses over time. In a pay-as-you-go system, which is legally required to be in balance at all times, a drop in contributions due to increased unemployment, for example, would have to be offset through higher contribution rates.

based their pensions strategy on the success of funded DC pensions, are apparently reconsidering aspects of their existing schemes.[7]

iii. Country-specific experiences

It is not the purpose of this short paper to provide a comprehensive assessment of the impact of the economic and financial crisis on all pension systems around the world. Instead this section presents a number of key developments and policy actions (if any) that have taken place in the realm of pensions since the onset of the crisis in the second half of 2007 in a select number of countries. These countries have been chosen as they are representative for a large number of countries, from Chile with its very high dependency on private pensions to Germany, where unfunded social security pensions remain by far the most important source of retirement income. Annex A provides information on the respective ageing trends in these countries, while Annex B discusses the respective arrangements set up to protect current and future pensioners' entitlements if and when a pension scheme's corporate sponsor becomes insolvent.

Australia

Australia's pension system is characterised by relatively modest state pensions (the so-called "Age Pension"), with private pensions and other investments more than twice as important as in OECD countries more generally. This is reflected in a relatively modest share of state pension spending in GDP, which at 3½ per cent is less than half the OECD average. Private pensions and investment make up nearly half of all retirement income, a similar proportion to that seen in the UK.

Australia's superannuation pension system suffered substantial losses…

Australia operates a mandatory defined-contribution superannuation scheme, which covers most workers including since 2005 those in the public sector.[8] Australia's pension system has suffered more than those in most other developed countries, with real investment returns in pension funds in 2008 dropping by more than a quarter, a reflection of the funds' large exposure to equities. Only Ireland recorded a more pronounced drop, the average in the OECD was 17 per cent.[9]

Even before the onset of the crisis, the Australian pension system faced a number of major challenges. For example, in terms of old-age income poverty Australia has done relatively badly and the recent decline of the value of private pensions (though some of the losses have in the meantime been recovered) could make the problem even more pronounced as an increasing share of people might end up relying mainly on the state pension. To deal with this issue the government announced in its 2009-10 Budget to increase the value of the "Age Pension" from September onwards.[10] At the same time though, the government also announced a gradual increase in the qualifying age for the Age Pension from 65 years in 2017 to 67 years in 2023[11] and is currently reviewing aspects of the tax system, including those covering the taxation of saving.[12]

Chile

Chile is an interesting case study as the country relies more than most on funded private pensions to ensure adequate retirement incomes - the role of private pensions is close to 100 per cent[13] - and has been considered by some as a role model for a country, which despite remaining problems has successfully moved to funded private pensions.[14]

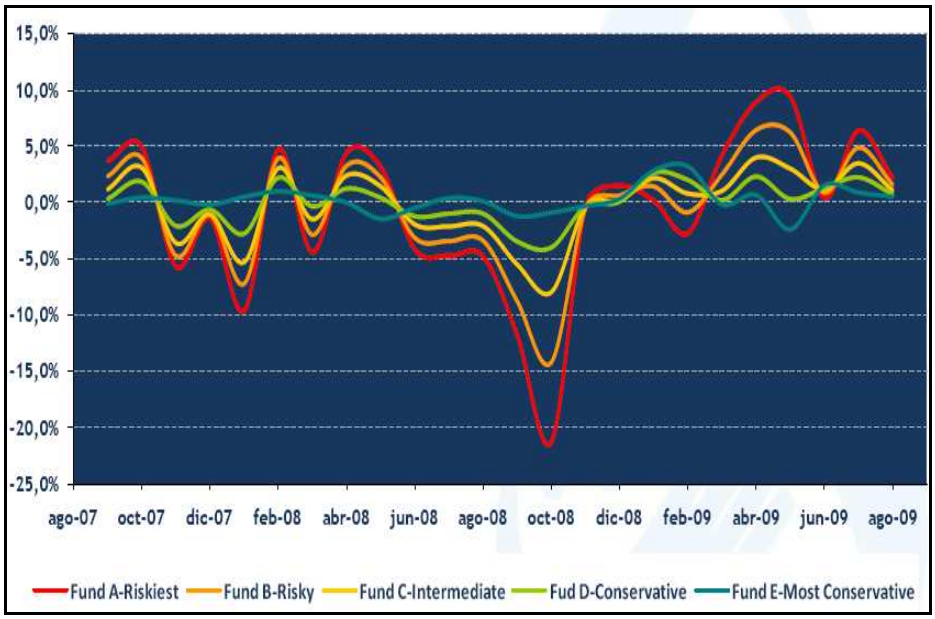
[7] *The economic crisis and pensions in the EU*, European Commission MEMO/0999, March 2009.
[8] See *Public sector pensions: Rationale and international experiences*, Frank Eich, June 2009.
[9] *Australia Highlights from OECD Pensions at a Glance 2009*, OECD, 2009.
[10] www.centrelink.gov.au/internet/internet.nsf/individuals/ssp_pension_increase.htm
[11] *Secure and Sustainable Pension Reform*, Treasurer of the Commonwealth of Australia, Joint Press Release with the Minister for Families, Housing, Community Services and Indigenous Affairs, May 2009.
[12] *Australia's future tax system Towards a better taxation of savings*, Ken Henry Chair Australia's Future Tax System Review Panel and Secretary to the Treasury, October 2009. http://taxreview.treasury.gov.au/Content/Content.aspx?doc=html/speeches/09.htm
[13] *Pensions in a financial crisis How should retirement-income systems respond to financial-market turmoil?*, OECD, 2008.
[14] *Chile's Pension Reform: An Inspiration to Others*, universia Knowledge Wharton, 2005. For more information on the Chilean pension system see *Latin America's Aging Challenge Demographics and*

…as did Chile's defined contribution schemes but more recently these have been reversed again

With Chileans by law required to save in funded (defined contribution) pension schemes, they were fully exposed to the dramatic decline in asset prices between mid 2007 and the end of 2008 but have also benefited more recently from the recorded rebound: between July 2007 and the end of 2008 the value of Chilean pension fund assets dropped by nearly 20 per cent; however, by September 2009 most of that decline had been reversed.[15]

As in other countries with a strongly developed funded private pension system, in theory it is those close to retirement who are most exposed to the swings in asset prices. However, in practise this does not need to be a major problem. In the case of Chile, the mandatory pension funds are managed by the so-called "Administrators of Pension Funds" (AFPs), which offer five different types of funds labelled A to E, with A being most risky and E least risky. The government has encouraged individuals to move their assets into increasingly less risky assets over time but this is not compulsory.[16] The performance of the different fund types over the last two years gives credence to this recommendation, with the riskier ones experiencing sharper fluctuations than the less risky ones. See Chart 1.

Chart 1: Pension funds monthly returns, Chile



Source: Pension System in Chile: The Effect of the Financial Crisis, Berstein, 2009.

However, not all individuals have followed this advice. As a result, they could end up on the non-contributory means-tested "Pension Basica Solidaria", which was introduced in mid 2008 to provide a minimum income in retirement.17 One emerging policy issue is in what way the existing approach could be strengthened to deliver the desired outcomes.[18,19]

Retirement Policy in Brazil, Chile, and Mexico, Richard Jackson *et al*. 2009 and *Chile's Next Generation Pension Reform*, Barbara Kritzer, 2008. The remaining problems should not be underestimated, with around half of the population either not at all or only inadequately contributing to funded private pensions. Moreover, fees remain high and competition limited, thus leading to inefficiencies. See *OECD Reviews of Labour Market and Social Policies Chile*, OECD, 2009.

[15] Centro de Estadísticas de la Superintendencia de Pensiones.

[16] *The Fall of Pension Funds in Chile: A Lesson from the Downturn*, universia Knowledge Wharton, 2009.

[17] *National Retirement Savings Systems in Australia, Chile, New Zealand and the United Kingdom: Lessons for the United States*, David John and Ruth Levine, 2009.

[18] A number of options are discussed in *Pension System in Chile: The Effect of the Financial Crisis*, Berstein J., Solange: 2009. These include introducing a life-style default fund option or improving financial literacy among other ideas.

[19] More generally, in October 2009 the OECD and the International Organisation of Pension Supervisors argued that private pensions in Latin American have emerged from the economic and financial crisis if

Germany

The impact on current German pensioners was modest…

In Germany, unfunded (pay-as-you-go) social security pensions have traditionally been the most important form of pensions. Despite recent efforts by successive governments to promote private pensions (mainly in the form of the "Riester Rente"), this continues to be true to this day. According to the OECD, private pension income made up around a sixth of all pension income earlier this decade but is projected to increase to a quarter in the future, which remains well below the OECD average.[20] As part of a wider policy response to make the country's pension system long-term fiscally sustainable, in addition to promoting private pensions, the German government also decided in 2007 to raise the official retirement age from 65 years to 67 years by the mid 2020s and to introduce a "sustainability factor", which will adjust automatically the generosity of future pension benefits based on future trends in longevity.

The German pension system appears to have weathered the immediate effects of the financial and economic crisis reasonably well, helped not only by the relative importance of the state sector but also by the relatively conservative investment strategy of private pension funds. As a result the drop in real investment returns of Germany's pension funds were among the lowest within the OECD in 2008. Public trust in the existing structures appears to remain solid.

One immediate and controversial policy response to the financial and economic crisis has been to backtrack on an earlier decision to link increases in pensioner benefits to nominal earnings growth. With nominal earnings under risk of falling as a result of low inflation and the recession, the previous government modified the existing pension up-rating formula in June 2009, making it impossible for nominal pensions to fall in the future. This modification has been criticised for undermining the inter-generational solidarity principle of the German social security pension system.[21]

Over the medium to long term, the crisis is likely to have a substantial impact on the German pension system as well, with future funding shortfalls in the social security system almost certainly leading to higher contribution rates and less generous pension benefits, thus making everybody worse off – young and old - over the longer term.[22] When making these inevitable policy choices, it is likely that the issue of inter-generational solidarity will play an important role in shaping the outcomes.

Netherlands

In the Netherlands the two main sources of retirement income are the statutory flat-rate pension (Algemene Ouderdomswet, AOW) and quasi-mandatory occupational pensions imposed by collective agreement by the social partners in the private and public sectors. The latter, which are of a defined-benefit nature, are legally required to be at least 105 per cent funded. Overall, the Netherlands relies much more on private pension incomes than most other OECD countries.

The financial and economic crisis has tested the Dutch pension model to the maximum, with the sharp decline in asset values leading to a funding crisis – the second this decade – for many of the more than 900 occupational pension funds in operation. At the end of 2008 the funding ratio stood at 95 per cent, down from around 150 per cent in mid 2007. However, by end of June 2009 the ratio had increased to 102 per cent again, not far short of the required ratio.[23]

anything strengthened. See *Private pensions in Latin America have emerged stronger after the financial and economic crisis*, OECD, October 2009.

[20] *Pensions and the crisis How should retirement-income systems respond to financial and economic pressures?*, OECD, 2009 and *Pensions in a financial crisis How should retirement-income systems respond to financial-market turmoil?*, OECD, 2008.

[21] *Auswirkungen der Finanzkrise auf die Gesetzliche Rentenversicherung, ihre Beitragszahler und ihre Rentner*, Axel Börsch-Supan, Martin Gasche and Christina Benita Wilke, 2009.

[22] *Ibid.*

[23] *Effects of the financial crisis on the pension schemes of European Countries*, Mika Vidlund, August 2009 and *Table 8.8 Estimated Funding Ratios of Pension Funds*, De Nederlandsche Bank.

…while Dutch pension funds suffered a funding crisis…

To deal with the crisis, the Dutch central bank, which regulates the pension funds, agreed to extend the period to make up any funding shortfalls from normally three to five years and asked more than 300 pension funds to submit recovery plans detailing how they intend to make up the funding shortfalls over this time horizon.[24] Not all funds intend to pursue the same strategy: some, including the largest fund (ABP), which is the fund for public sector workers and teachers, have agreed with their social partners to raise the contribution rates. This is not a viable option for all funds though as many sectors of the Dutch economy have been hit hard by the crisis. Other funds have therefore announced to freeze pensions in nominal terms for those in retirement and/or limit the accrual of future pension entitlements for those in work. The impact of the crisis on Dutch pensioners and future pensioners has therefore been immediate.

Less attention has been given to the flat-rate AOW pension, which is financed by contributions on earnings. It is current policy that the maximum contribution rate is limited to 18.25 per cent; any potential funding shortfall then needs to be made up through general taxation.[25] With the Dutch public finances moving from a small surplus to a significant deficit as a result of the crisis,[26] it is likely that the crisis will also have longer-term consequences for the funding arrangements and/or generosity of the AOW pension. In a first step in this direction, the Dutch government announced in October to increase the state pension age from 65 years in two steps between 2020 and 2025 to 67 years.[27]

Sweden

The Swedish pension system is based on the three pillars of state, occupational and private provision, with the national pension system playing the greatest role. The Swedish experiences are interesting as the country is seen as being at the forefront of pension reforms in the developed world. Much of this perception has to do with the fact that Sweden reformed its national pension system in 2000 to offer defined benefit and defined contribution pension entitlements. These entitlements are financed by contributions equivalent to 18½ per cent of pension-qualifying income, of which 16 percentage points are used to finance the pay-as-you go earnings-related DB national pension while the remainder of 2½ percentage points is invested in personal DC funds ("premium pension"). For those who do not choose their own fund from the options offered by the state-backed 7th AP Fund (which in reality has turned out to be the overwhelming majority), there is also a default fund. The state also offers a means-tested guarantee pension to prevent pensioner poverty.

The reformed national pension system was set up to be independent from the government's public finances. One consequence of this is that it cannot rely on general taxation to make up any potential funding shortfalls, for example during an economic downturn. This role is played by five state-backed buffer funds (1st to 4th and 6th AP fund) instead. One aspect of the DB pension is that an individual's retirement income matches exactly lifetime contributions. To achieve that and to ensure fiscal sustainability, benefits are adjusted automatically in line with future longevity increases. The Swedish government also believes that this set up is inter-generationally fairer than previous arrangements. In addition, most Swedes are members of occupational pension schemes.[28]

…and Sweden's buffer funds went into deficit

The Swedish pension system provides a relatively high degree of transparency with respect to who carries what risks associated with preparing for retirement but like other pension systems has not been immune from the crisis. As a result of the crisis, for the first time since the inception of the new pension system, the buffer funds were in deficit in 2008. Based on current policy, the earnings-related DB pension to current pensioner would have to be cut over the coming years to re-balance the system. Given

[24] *State of affairs regarding pension fund recovery plans*, De Nederlandsche Bank, July 2009.
[25] *The old age pension system in the Netherlands*, Dutch Ministry of Social Affairs and Employment, 2008.
[26] *Spring Forecast 2009*, European Commission, 2009.
[27] See *Government unveils retirement age rise plan*, NRC Handelsblad, 16 October 2009.
[28] For more information see *Sweden's strategy report for social protection and social inclusion 2008-10*, Government Offices of Sweden, 2008, *The Swedish old age pension system*, Försäkringskassan, 2008 and www.ap7.se/engelska/index.html (accessed 5th October 2009).

the unpopularity of such a move, politicians have been keen to devise alternatives, from using general taxation to make up the deficit after all to compensating pensioners through other means.[29] It could be argued that these suggestions are not in the spirit of the national pension system as they undermine the principle of inter-generational burden sharing.

The economic and financial crisis has also been the catalyst to consider more structural changes to the pension system, ranging from the suggestion to merge the five buffer funds into one super fund (partly to gain economies of scale) to the proposed overhaul of the AP7, with the default option evolving into a clearly defined option offering a lifecycle investment strategy.[30]

Swedish experiences demonstrate that even the country's well-structured pension system has not been able to escape the adverse consequences of the economic and financial crisis, and that further reforms will have to be implemented to deal with the legacy of the crisis. However, it seems likely that the underlying set up of the Swedish pension model will remain more or less intact.

United States

Private pensions and other investments play a greater role in providing for retirement income in the United States than in most other developed countries, contributing 44 per cent of total pensioner income (the OECD average is 20 per cent). The large majority of these private pensions are nowadays of a defined contribution nature (e.g. the so-called 401(k)); the previously popular defined benefit pension schemes play an increasingly marginal role. In addition to private pensions, pensioners also benefit from (relatively modest) social security pensions, which are financed through payroll taxation.

In the US the value of assets in DC pension schemes dropped sharply…

The financial and economic crisis has had a significant adverse effect on private pensions, with US private pension funds recording a net real investment return of -26 per cent in 2008. This is similar to that experienced in Australia (see above) and substantially higher than the OECD average. This sharp drop in the value of private pension funds can mainly be explained by the funds' strong bias into equities: pre-crisis, equities made up nearly 60 per cent of all assets.[31] The sharp fall in pension assets hit those close to retirement but also many pensioners as annuities are unpopular.[32] The recovery in equity prices since the beginning of 2009 has, however, partly made up for the previous losses.

The impact of the financial and economic crisis has not been limited to falling and rising pension fund values, and associated changes in pensioner spending behaviours though. The crisis has also affected retirement saving itself, partly as a result of the sharp increase in the unemployment rate (from around 6 per cent in mid 2008 to close to 10 per cent in the second half of 2009) but also because an increasing number of employers appears to have reduced their contributions to DC pension funds during the downturn.[33] It remains to be seen whether the latter development is merely cyclical or will turn out to be more permanent. Another development is that older workers are increasingly postponing retirement to make up for the decline of the value of their pension fund assets.

…while the outlook for social security pensions deteriorated too

As in many other countries, the crisis has also had an adverse effect on the social security budget, which includes state pension spending. According to the Congressional Budget Office (CBO), the short-term outlook for the social security budget deteriorated markedly between mid 2008 and mid 2009 as spending is up as a share of GDP while receipts from payroll taxes are down. As a result the long-term fiscal outlook for the

[29] *Effects of the financial crisis on the pension schemes of European Countries*, Mika Vidlund, August 2009,
[30] *Swedish government to overhaul AP7*, www.ipe.com, 30th September 2009 (accessed 5th October 2009).
[31] *United States Highlights from OECD Pensions at a Glance*, OECD, 2009.
[32] *401(k) Plans and Retirement Savings: Issues for Congress*, Patrick Purcell and John Topoleski, 2009.
[33] *Managing Defined Contribution Plans in the Current Environment*, Watson Wyatt, 2009.

social security budget has also worsened slightly, adding to the substantial fiscal challenges.

Overall, the crisis has had a major short-term impact on the US pensions landscape and could also have longer-term consequences. This would especially be the case if retirement saving does not rebound, which could make an increasing number of pensioners dependent on the state pension. As the US already has the 4th highest old-age income poverty rate in the OECD, this could pose major challenges.34

iv. Concluding comments

Using a number of country studies for illustration, this paper discussed the different channels through which the financial and economic crisis has impacted on different pension systems. The real world experiences are in line with what could be expected theoretically.

Overall, every type of pension system has been adversely affected by the crisis

The main finding is that regardless of whether a country relies more heavily on an unfunded pay-as-you-go state pension system or funded private pensions (whether defined benefit or defined contribution) the crisis has had an adverse effect everywhere. Existing systems will have to be refined or restructured more fundamentally. Over the long term, it is likely that closing the widening funding gaps will require increased lifetime contributions (including by working longer) and/or reductions in the generosity of pensioner benefits. The exact response will vary from country to country and will to a large extent be determined by a society's interpretation of "inter-generational fairness".

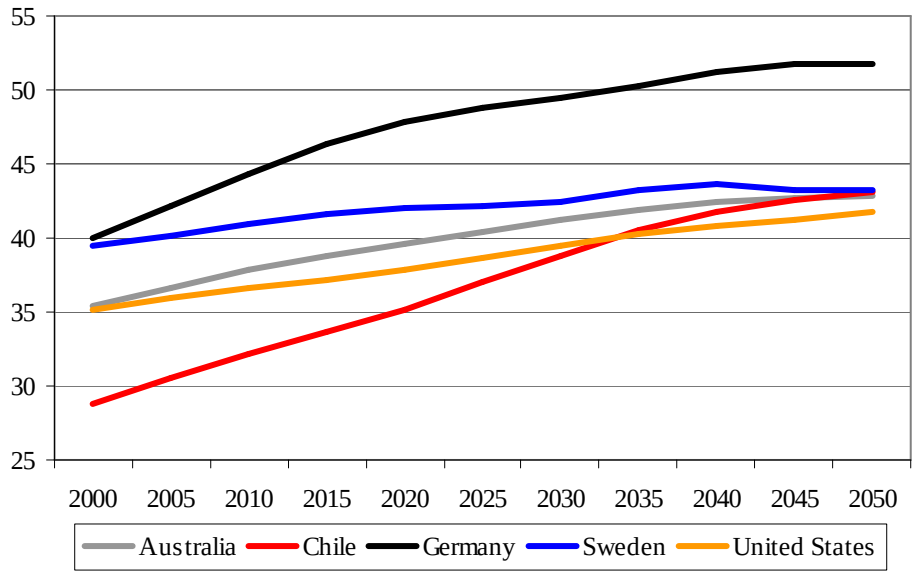
[34] *United States Highlights from OECD Pensions at a Glance*, OECD, 2009.

Annex A: Ageing trends

All the countries discussed in this paper will have to deal with the consequences of ageing populations over the coming decades. However, the magnitude of these changes and the levels themselves vary from country to country.

For example, Germany and Chile are faced with the most rapid ageing trends, with the median age in Germany projected to increase from around 40 years today to around 52 years (+12 years) by mid century. Over the same period, the median age in Chile is projected to increase even more, from around 28 years to 43 years (+15 years), though the eventual level is similar to that in Australia or Sweden. See Chart A1. Different assumed fertility rates are an important reason why the projected increases differ so much.

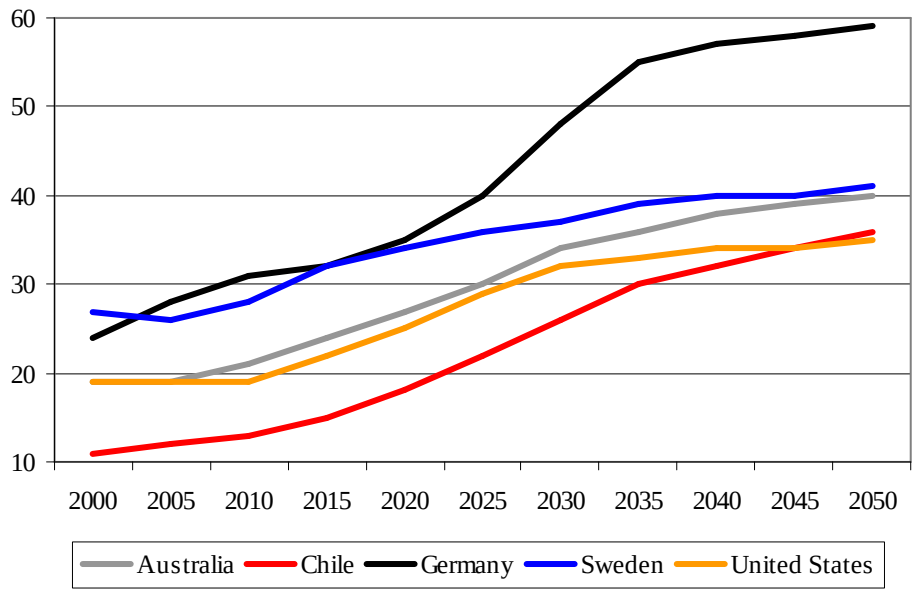
Chart A1: Median age (years)



Source: United Nations World Population Prospects The 2008 Revision.

The evolution of the old-age dependency ratio (defined as the number of people aged 65 years and over relative to the number of peopled aged 15 to 64 years) paints a similar picture. Starting at around 25 per cent (in other words there was one person aged 65 years and older for every four people aged 15 to 64 years) in 2000, the ratio is projected to increase to 60 per cent by mid century in Germany. By contrast, in Sweden the ratio is projected to increase less markedly – to 40 per cent – though the starting point was very similar. The projected increase in Chile is similar to that in Germany. Starting with a ratio of around 10 per cent, by mid century there could be as few as three people aged 15 to 64 years for every person aged 65 years and over. See Chart A2.

Chart A2: Old-age dependency ratio (Per cent)



Source: United Nations World Population Prospects The 2008 Revision.

Annex B: Protecting pensioner benefits in case of corporate insolvency

To protect pensioner benefits the Pension Protection Fund (PPF) was set up in the UK under the provisions of the Pensions Act 2004. The PPF's main function is to provide compensation to members of eligible defined benefit pension schemes, when there is a qualifying insolvency event in relation to the employer, and where there are insufficient assets in the pension scheme to cover the Pension Protection Fund level of compensation.[35]

While pension liabilities and assets are ring fenced from the corporate sponsor in stand-alone legal entities in the UK, this is not the case in all other countries. For example, it is possible that pension-related liabilities and assets are part of the corporate sponsor's liabilities and assets more generally. Whatever the arrangements, the issue of how pension entitlements should be treated relative to other creditor rights arises during bankruptcy proceedings. Should pension entitlements be given priority rights over other creditors, including secured creditors? Or should pension entitlements be treated in the same way as unsecured credit? These questions matter mainly in countries with well-established DB occupational pension schemes and less so in countries where DC occupational pensions dominate.[36]

Australia

With most Australians saving for retirement through DC-based superannuation schemes, bankruptcy law focuses mainly on outstanding employer contributions. These are treated as preferred creditors within the Australian legal system.

Germany

In Germany pension promises are virtually fully guaranteed by the Pensions-Sicherungs-Verein Versicherungsverein auf Gegenseitigkeit (PSVaG),[37] which was set up in the 1970s by private businesses as a private-sector institution without government backing. The set up is similar to the UK's PPF, with corporate pension sponsors paying a levy in return for the PSVaG taking on any pension obligations in case of insolvency. In 1999 bankruptcy law was changed, abolishing creditor priority rankings and putting unsecured creditors on an equal footing. This means that the PSVaG is in the same position as other unsecured creditors in case of corporate bankruptcy and as such has the right to full representation through the "creditors committee" during the bankruptcy proceedings.

According to the PSVaG's latest annual report,[38] the number of new cases entering the scheme and the volume of payouts in 2008 was the lowest since 2000. However, the report also stated that activity had been picking up towards the end of the year and that the PSVaG expected a sharp deterioration in 2009.

According to German law, pension scheme sponsors are generally required to increase pensions in payment either in line with inflation or net earnings growth in the company.[39] However, in exceptional circumstances the corporate sponsor can also decide to temporarily freeze pension payouts in nominal terms. To do so, the corporate sponsor needs to demonstrate transparently and convincingly that it cannot afford these increases at that point in time. At the margin, this flexibility might allow businesses to avoid filing for bankruptcy.

[35] See www.pensionprotectionfund.org.uk
[36] The discussion is based on *Benefit Protection Priority Creditor Rights for Pension Funds*, Fiona Stewart, 2007.
[37] www.psvag.de/framesets/home1.html. Note that the PSVaG also covers Luxembourg.
[38] *Bericht über das Geschäftsjahr 2008*, PSVaG, 2009.
[39] Betriebsrentengesetz Paragraph 16. According to the *Bundesverband der Betriebsrentner* (Federation of Occupational Pension Beneficiaries) though, not all scheme sponsors follow the law. See www.bvb-betriebsrenten.de/rentenerhoehung.php?WEBYEP_DI=1

Netherlands

In the Netherlands the pension funds are legally independent of the corporate sponsor so that the latter is obliged only to pay overdue premiums in case of bankruptcy. An individual's rights with respect to his pension entitlements are therefore entirely with the pension fund and not with the employer. This arrangement puts particular pressure on the pension funds themselves to be able to honour the accrued pension promises at all times. To achieve this, Dutch law requires the pension funds to be at least 105 per cent funded at all times though the 2008-09 economic and financial crisis has tested this set up to the limit (see main text). As was also stated in the main text, it is the pension funds' responsibility to devise strategies to return to the required funding level during periods of underfunding. These strategies could include higher contribution rates but also reduced benefits for active, inactive and even retired members, thus allowing the cost of adjustment to be spread across different groups of people and many individuals.

Sweden

As stated in the main text, most Swedish employees have an occupational pension to complement their statutory arrangements. These pensions are generally of a defined-benefit nature. Salaried employees will generally be members of the so-called ITP pension scheme, which is based on a collective agreement between the Swedish Confederation of Industry and the Federation of Salaried Employees in Industry and Services. Companies can insure their pension promises with Alecta pensionsförsäkring (Alecta) or seek coverage with Pensionsgaranti (FPG), which was set up in 1961 as part of the ITP pension scheme and which is a mutual insurance company, owned by the insured companies. Pensionsgaranti has nearly 1,500 partners, including most of the companies listed on the Stockholm Stock Exchange. Generally the FPG is not a preferential creditor in a bankruptcy proceeding though it is in a strong position as only companies that can provide adequate collateral are allowed to participate in the scheme. According to FPG, credit losses have been negligible over the ten-year period up to 2008;[40] 2009 outturn data were not available at the time of writing.

United States

In the United States the Pension Benefit Guaranty Corporation (PBGC) protects the pension entitlements of nearly 44 million workers and retirees in the country's DB pension plans.[41] The PBGC was set up in 1974 by the Employee Retirement Income Security Act. The principle of the PBGC is similar to that of the PPF though the insurance premiums are set by a government institution, Congress. The PBGC collects insurance premiums from corporate pension scheme sponsors but also earns money from investments and receives funds from pension plans it takes over; it receives no subsidy from government.

The maximum insurance benefit is indexed to a contribution and benefit base in Social Security law and varies depending on the age of the individual when the DB pension plan was terminated. For 2010 the maximum insurance benefit has been set at US$54,000 for someone aged 65 years, rising to US$164,000 for someone aged 75 years at plan termination. According to the PBGC, these ceilings would only be binding for those on very high pension promises (most likely due to high incomes) or those who could benefit from a very generous, heavily-subsidised early retirement settlement.

According to the latest available information, the PBGC's financial situation improved in fiscal year 2008 as a result of successful negotiations in bankruptcy proceedings, interest rate changes that affect the value of PBGC's liabilities, and the continued absence of large plan terminations.[42] No information was available for fiscal year 2009 at the time of writing.

[40] www.fpg.se/CM.php?PageID=50455 (accessed 11 November 2009).
[41] www.pbgc.gov/
[42] *2008 Annual Report*, PBGC, 2008.

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About the author

Dr Frank Eich holds an MSc and PhD in Economics from the London School of Economics, and has worked as a professional economist both in the private and public sector. Before joining HM Treasury as an economic adviser in 2000, he worked for three years as a country economist for the Economist Intelligence Unit. In 2008 Frank worked on European and international economic policy issues in the German Finance Ministry in Berlin; he joined Pension Corporation as senior economist in October 2008.

Telephone + 44 (0)20 7105 2236
Email eich@pensioncorporation.com

PENSION
CORPORATION

Pension Corporation, 14 Cornhill, London EC3V 3ND. Telephone +44 (0)20 7105 2000 Fax +44 (0)20 7105 2001
Email info@pensioncorporation.com www.pensioncorporation.com

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