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PENSION CORPORATION

Back to the drawing board:
The economic crisis and its implications for pension provision in the United Kingdom

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Dr Frank Eich and
Dr Amarendra Swarup

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Key points

- The economic crisis has highlighted not only weaknesses in financial markets and regulation but also in existing pension systems in many countries. The UK provides a powerful example for this.
- Traditionally the British pension system has been characterised by a partnership between public and private sector, with the former providing a safety net for all, while the latter enabled those on average or higher incomes to enjoy a relatively high quality of life in retirement. For the majority of pensioners and pensioner couples, state benefit income was the main source of income in retirement though. Despite this, state pension spending is low relative to that in most other OECD countries.
- Even before the crisis, British pension arrangements appeared unstable, with the government introducing reforms to, among other things, boost private pension savings for those on low to medium incomes (Personal Accounts). The key development in the private sector was the closure of defined-benefit (DB) pension schemes, with most employees moved to defined-contribution (DC) schemes instead. This trend was not repeated in the public sector. The UK's public finances were in relatively good shape.
- The crisis has affected all parts of the British pension system. First, unemployment has increased, potentially leaving more people with broken employment records. Second, the net funding position of UK DB pension schemes deteriorated sharply, encouraging the CBI among others to warn that corporate sponsors should not be forced to close the funding gap as this could exacerbate the crisis. Third, the value of assets in DC schemes dropped equally sharply, leaving those close to retirement with substantially reduced wealth. The Bank of England's decision to lower interest rates and use quantitative easing further penalised savers and those who were considering purchasing an annuity. Fourth, the public finances have deteriorated dramatically, leaving the UK with one of the biggest structural deficits of any developed country. Fifth, in an effort to protect disposable incomes, households have cut back on retirement savings.
- The crisis has left all aspects of the British pension system in a weakened state and it is unlikely that it will return to its pre-crisis status once the economy recovers.
- The first reason for this is the perilous state of the public finances, with future governments – of whatever hue – required to cut spending and raise taxes to return its finances onto a sustainable path. This could jeopardise the current government's policy to link the basic state pension to earnings growth by 2012. It could also provide the background to more radical public sector pension reforms.
- Equally, the crisis will most likely encourage the remaining corporate sponsors of DB pension schemes to close these down and offer other arrangements to their employees instead. Personal Accounts, which are scheduled to be launched in 2012, could provide a useful benchmark.
- There are also question marks over Personal Accounts themselves. When launched, the government believed that individuals would have too much inertia to actively opt out of these accounts. However, with households facing a substantial hike in the tax burden, individuals might conclude that they cannot afford to help the government reduce its debt burden and save for retirement at the same time. As a result many more people than previously expected might opt out, undermining the rationale of the 2006 pension reforms.
- The bleak outlook should not only be seen as a challenge but also as an opportunity to create a more efficient and equitable pensions landscape. This would require a new division of responsibilities between the state, business and individuals.

Executive summary

This paper focuses on an issue, which so far has received relatively little attention by policy makers and the media, namely that the economic crisis has highlighted inherent weaknesses in existing pension systems in many countries. Using the example of the UK, the paper argues that the economic crisis will usher in further changes to the future provision of pensions, with the role of the private and public sectors likely to evolve in the years ahead. To support this argument, the paper first presents the pension landscape in the UK prior to the crisis, which was dominated by the closure of defined benefit pension schemes in the private sector and the government's reform efforts. The paper then describes the impact of the economic crisis from both a macroeconomic and financial perspective on all aspects of the pension system, from the government's deteriorating public finances to the collapsing funding position of occupational defined-benefit and defined-contribution schemes. The paper concludes by suggesting that the crisis has left the British pension system in a weakened state and that it is unlikely that it will return to its "pre-crisis" status once the economy recovers from the crisis.

i. Introduction and motivation

The European Union is currently in the midst of the deepest recession for decades, and perhaps understandably, much of the public and policy discussion is focussed on how to deal with the immediate economic consequences of the current crisis and how to avoid slipping into a depression. Going beyond the discussions on the appropriate size of a fiscal stimulus or monetary policy, most commentators would argue that the economic crisis has highlighted significant shortcomings in the regulatory environment of the global financial markets. Thus, the policy debate is also about how to avoid a similar crisis from happening again in the future, with most governments and international organisations agreeing that financial markets need to be better regulated.

This paper focuses on an issue, which so far has received relatively less attention by policy makers or the media, namely that the economic crisis is also highlighting inherent weaknesses in existing pension systems in many countries. This lack of attention can perhaps be explained by the fact that pensions are by their very nature a long-term issue and as such, often get crowded out by short-term challenges such as dealing with rapidly deteriorating public finances or a surge in unemployment, which are deemed to be more urgent. However, the fact that the provision of pensions has a long-term dimension does not make it a less important issue. Indeed, for many businesses and individuals, this is very much a live issue of great concern and for many – as will be argued in this paper - it actually makes dealing with the current economic crisis more difficult.

Using the example of the United Kingdom, the paper suggests that the economic crisis is likely to usher in further changes to the future provision of pensions, with the role and nature of state and private sector pensions likely to evolve in the years ahead. Pension systems in other EU countries are also likely to be affected by the crisis, though the magnitude and direction of change might vary.

While the paper has to be speculative at times, it uses recent developments to predict the future evolution of pension provision in the UK. The paper argues that future governments will have to return to the pension issue, as the existing set up is likely to fall short of expectations in terms of providing adequate pensions to future pensioners. Further, the large deficits exacerbated in private sector pensions by the recent turmoil is likely to lead increasingly to the closure of the remaining defined-benefit pension schemes, potentially creating a vicious circle for the UK economy more generally as these same schemes are a significant pool of domestic capital for the financial markets and hence for funding for private business.

The paper is structured as follows. Section II describes the pension landscape prior to the economic crisis, outlining the major developments that took place between the turn of the century and late 2007, when the world economy reached a turning point. Section III discusses developments since late 2007. It shows that all parts of the British pension system have been shocked externally by the crisis. Looking into the future, Section IV has to be speculative by nature and argues that the pension system is unlikely to return to the pre-crisis "equilibrium" after the crisis has abated. Instead, the crisis has set in motion a number of trends, which are likely to lead to a reallocation of responsibilities between state, business and individuals. As in the past, it is unlikely that the route of travel will be smooth. Section V provides some concluding comments.

ii. UK pensions and public finances prior to the financial and economic crisis

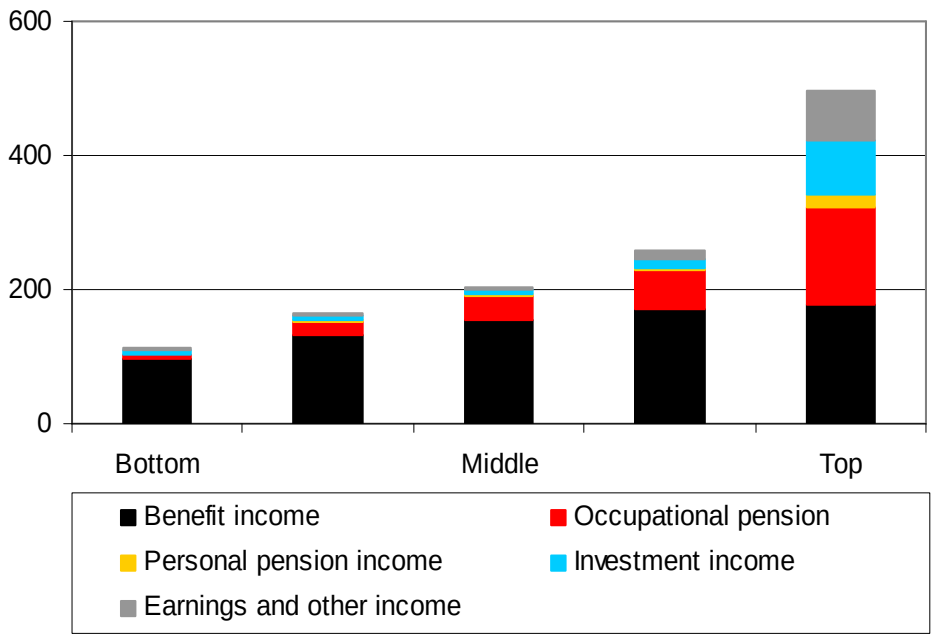
(a) The state's role in providing retirement income

Benefit income was the main source of retirement income for most pensioners…

Traditionally the UK pensions landscape has been characterised by a partnership between public and private sector, with the former providing a safety net for all to prevent people from living in poverty in old age and the latter enabling those on average or higher incomes to enjoy a relatively high quality of life also in retirement.

As is shown in Chart 1, in 2006-07 the state (the so-called first pillar of pensions) provided the main source of retirement income for the overwhelming number of single pensioners, with only those in the top quintile of incomes deriving more income from other sources (e.g. occupational or personal pensions) than from the state. Occupational pensions (the so-called second pillar) were the second most important source, followed by investment income. Private pensions (the so-called third pillar) played a relatively less important role.

Chart 1: Sources of income (quintiles, single pensioners, £ per week, 2006-07 prices)



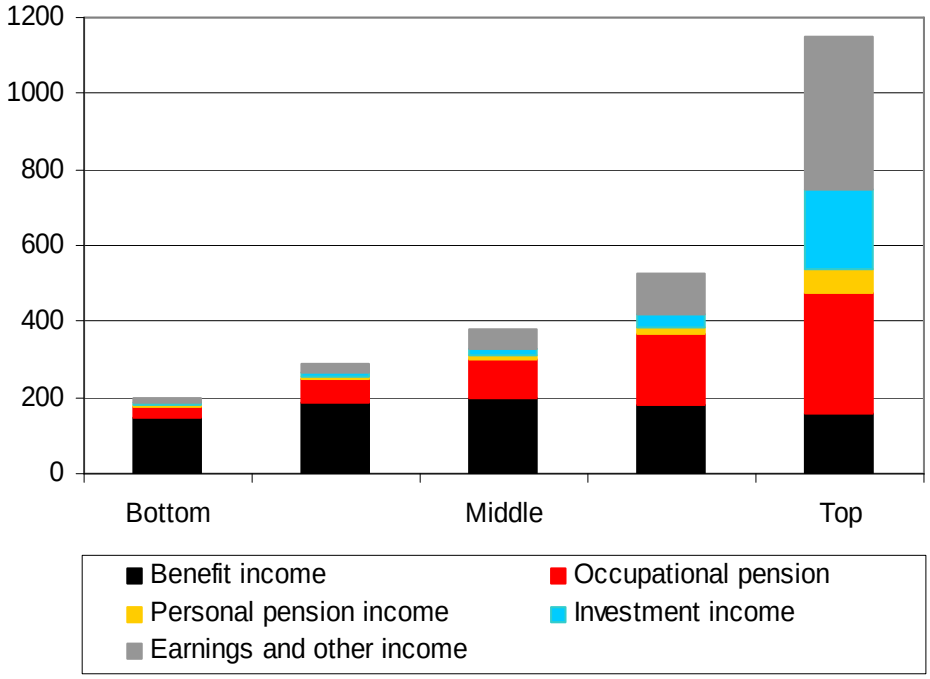
Source: ONS Pensioners' Income Series 2006-07.

The picture was more balanced for pensioner couples but even for this group, benefit income remained the main source of income up to the middle of the income distribution (see Chart 2). For couples in the top income quintile, the most important income source was "earnings and other income". This, however, reflects more the fact that pensioner couples are defined as: "*…married or cohabiting pensioners where one or more are over state pension age* "[1] so that this group comprises a large number of couples where the female has reached the current female state pension age of 60 years, while the male will not have reached the current male state pension age of 65 years and will still be active in the labour market. Overall though, occupational

[1] *Pensioners' Income Series 2006-07*, Office for National Statistics, page 6.

pensions are a much more important source of retirement income (in absolute and relative terms) for pensioner couples than for single pensioners.

Chart 2: Sources of income (quintiles, pensioner couples, £ per week, 2006-07 prices)



Source: ONS The Pensioners' Income 2006-07 Series.

Overall, at the beginning of the decade, the ratio of state to private provision in total pension provision was around 60:40[2] and as such the British pension landscape differed markedly from that seen in most other EU member states, where the state's role was generally much greater even for those higher up the income scale. According to the European Union's Social Protection Committee (SPC), in most countries pensioners receive most of their retirement income from unfunded (i.e. pay-as-you-go) statutory schemes; in only a number of countries (Denmark, Ireland, the Netherlands and the UK), private pensions provide an important part of retirement income.[3] The SPC also noted though that in most EU member states, private pensions had become more important over time and were expected to play a greater role in ensuring the adequacy of retirement income in the future.

In its 2002 Green Paper 'Simplicity, Security and Choice: Working and Saving for Retirement',[4] the British government identified that parts of society – those above low but below average incomes – were probably not saving enough and could be disappointed by future outcomes. In response, the government established the Pensions Commission, with the mandate to: "*keep under review the regime for UK private pensions and long-term savings, and to make recommendations to the*

[2] *Pensions: provisions in Part II of the Child Support, Pensions and Social Security Bill,* Bill 9 of 1999-2000, Research Paper 99/109, House of Commons Library, 1999, page 18. www.parliament.uk/commons/lib/research/rp99/rp99-109.pdf

[3] *Privately managed funded pension provision and their contribution to adequate and sustainable pensions*, European Union's Social Protection Committee, 2008.

[4] *Simplicity, Security and Choice: Working and Saving for Retirement*, Department for Work and Pensions, December 2002.

Secretary of State for Work and Pensions on whether there is a case for moving beyond the current voluntarist approach."[5]

For many, the Pensions Commission provided a "once-in-a-lifetime opportunity" to establish a new pensions landscape in the UK.[6] The Pensions Commission presented its final report in 2006[7] and made a range of policy recommendations, which provided the basis for the government's Pensions Act 2007 and Pensions Act 2008.[8] The main policies were to:

- link from 2012 at the earliest future increases in the basic state pension to earnings growth rather than inflation. This policy is meant, inter alia, to simplify the system, with less reliance on means testing;[9]
- introduce Personal Accounts from 2012 onwards, in which individuals will be enrolled automatically but with the option of opting out. The government hopes that this will increase private savings, with firms required to contribute three per cent of pay in addition to the employee's four per cent and the government's one per cent; and
- increase gradually the state pension age from 65 years in 2020 to 68 years by 2044.

One of the overarching objectives of the pension reforms was to increase future pensioner incomes while ensuring fiscal sustainability over the long term.[10] Hence the decision to introduce Personal Accounts and raise the state pension age, the latter meant to offset – at least partly – the projected increase in state pension spending resulting from the planned indexation of the basic state pension to earnings and further predicted increases in life expectancy. Overall the government projects that the announced policies will lead to slightly higher state spending on pensions, as a share of GDP, over the coming decades than was projected before the reforms.[11]

…nonetheless state pension spending was low by international standards and is projected to remain so

Despite these reforms in the UK and despite the fact that over the same period, governments in many EU member states pushed through reforms aimed at making state pensions relatively *less* generous over time, the European Union's Economic Policy Committee projects public pension spending in the UK to remain relatively modest on the European level. Chart 3 shows public pension spending, as a share of GDP, in 2007 as well as projected spending in 2020 and 2050. Amounting to 6.6% in 2007, public pension spending in the UK was 3.6 percentage points lower than the average in the EU15; this gap is projected to increase to 4.4 percentage points by 2050.

[5] www.dwp.gov.uk/mediacentre/pressreleases/2004/oct/pens1210-gwpcr.asp

[6] *Will Turner rise to the challenge?*, Age Concern, Media Briefing 29 November 2005.

[7] *A New Pension Settlement for the Twenty-First Century*, Pensions Commission, November 2005.

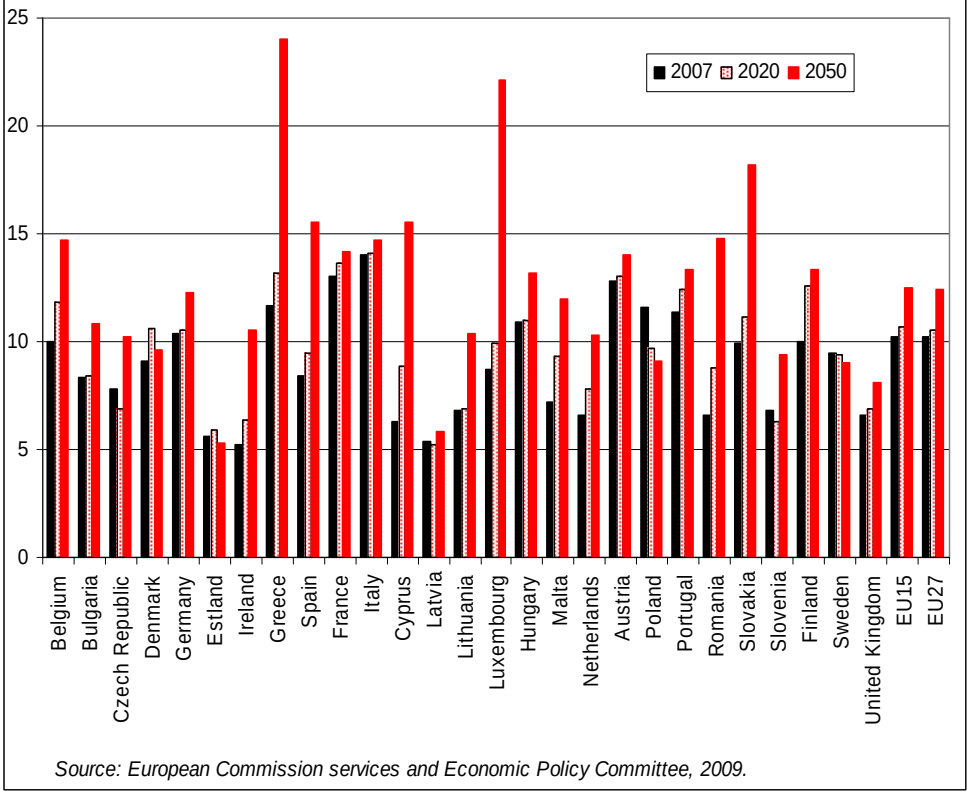
[8] See the Office for Public Sector Information at www.opsi.gov.uk/acts for more information.

[9] Thus reversing a policy introduced in the late 1980s by the then Conservative government.

[10] In 1998 the government stated that it wanted to shift the public/private pension ratio of 60:40 in 2000 to 40:60 by 2050. See *The Public/Private Mix in UK Pension Policy*, Phil Agulnik and Nicholas Barr, The Journal of Current Economic Analysis and Policy, Volume 1, Number 1, 2000, pages 69 to 80.

[11] *2005 Long-term public finance report*, HM Treasury, 2005 and *2006 Long-term public finance report*, HM Treasury 2006.

Chart 3: Public pension expenditure (per cent of GDP)



Source: European Commission services and Economic Policy Committee, 2009.

In addition to containing future increases in public age-related spending (e.g. pensions, health, long-term care), raising long-term trend growth and reducing government debt have generally been considered to be the most appropriate policies to ensure long-term fiscal sustainability.[12] In 2000, gross debt amounted to 41% of GDP in UK, one of the lowest shares in the EU15 and much lower than the EU15 average of 63%. However, this position gradually weakened over the years with UK gross debt edging up slightly to 44% in 2007 while the EU15 average came down to 60%, mainly as a result of marked reductions in debt in a number of member states. The accession of the central and eastern European countries to the EU in 2004 and 2007 – many of them with relatively low public debt – accentuated the UK's relative decline in this respect. Having had the third lowest debt to GDP ratio out of the EU15 in 2000, the UK only came 13th out of 27 in 2007.[13]

(b) The role of occupational pensions in preparing for retirement

The number of open defined-benefit and…

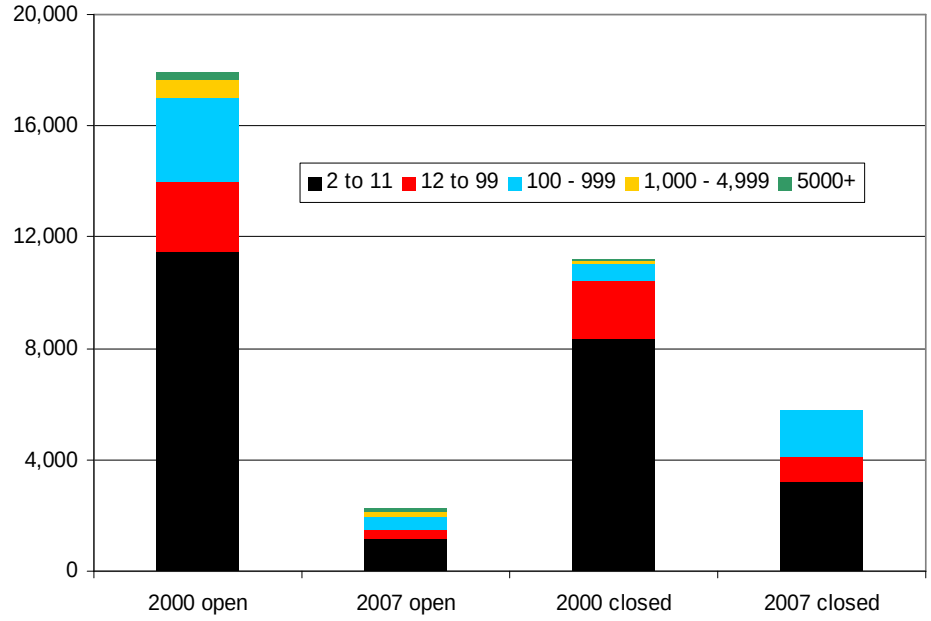
Since the beginning of this decade, the world of occupational pensions has also undergone profound changes. For many observers, the most obvious development has been the dramatic decline in the number of defined-benefit (DB) pension schemes, with many companies closing these schemes to new entrants and even existing employees. Chart 4 shows that there were close to 18,000 open DB schemes in 2000 in the UK; that number had dropped to 2,200 by 2007. Over the same period, the number of closed schemes also fell drastically. The chart also shows that in absolute terms the closure of DB schemes was particularly pronounced for smaller schemes with up to 11 members. It is not a coincidence that employer contribution rates also rose

[12] This follows the conclusions of the 2001 Stockholm European Council. See http://europa.eu/bulletin/en/200611/p106003.htm (accessed 21 April 2009).

[13] Public finance statistics for the EU member states can be found at www.ec.europa.eu/eurostat (accessed 21 April 2009).

significantly over the same period, and we will discuss this in more detail later in this paper.

Chart 4: Number of open and closed defined-benefit schemes in the private sector



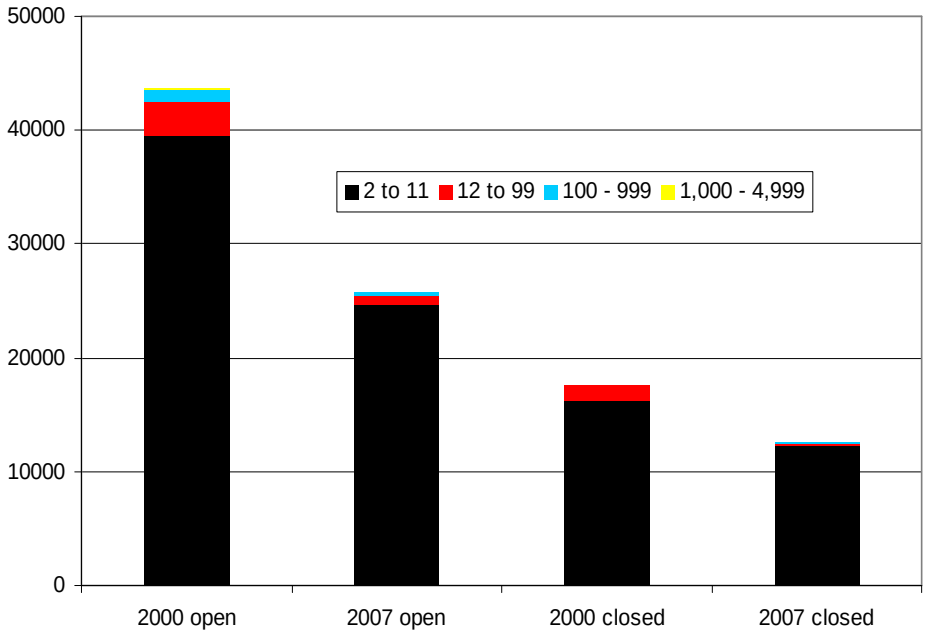
Sources: Government Actuary's Department Occupational Pension Schemes Survey 2000 and Office for National Statistics Occupational Pension Schemes Survey 2007.

…defined-contribution schemes dropped sharply in the private sector…

Chart 5 shows that the number of open defined-contribution (DC) schemes also fell over that period though the decline was of a more moderate nature. Equally, the number of closed DC schemes also fell. The overall decline hides a number of trends, including the fact that many businesses that had previously been offering DB pension schemes to their employees closed these down in favour of DC schemes. This has meant that individuals – often unknowingly - have taken on an increasing share of the risks associated with pension provision, including those relating to longevity, investment returns and inflation. Whether this is a (socially) sustainable arrangement will be discussed in later sections.[14]

[14] The allocation of risk also raises questions regarding the efficiency of the pension system. See *Pensions Tomorrow A White Paper*, Frank Eich and Amarendra Swarup, 2008 at www.lse.ac.uk/collections/management/PDFs/Pensions_Tomorrow_White_Paper.pdf

Chart 5: Number of open and closed defined-contribution schemes in the private sector



Sources: Government Actuary's Department Occupational Pension Schemes Survey 2000 and Office for National Statistics Occupational Pension Schemes Survey 2007.

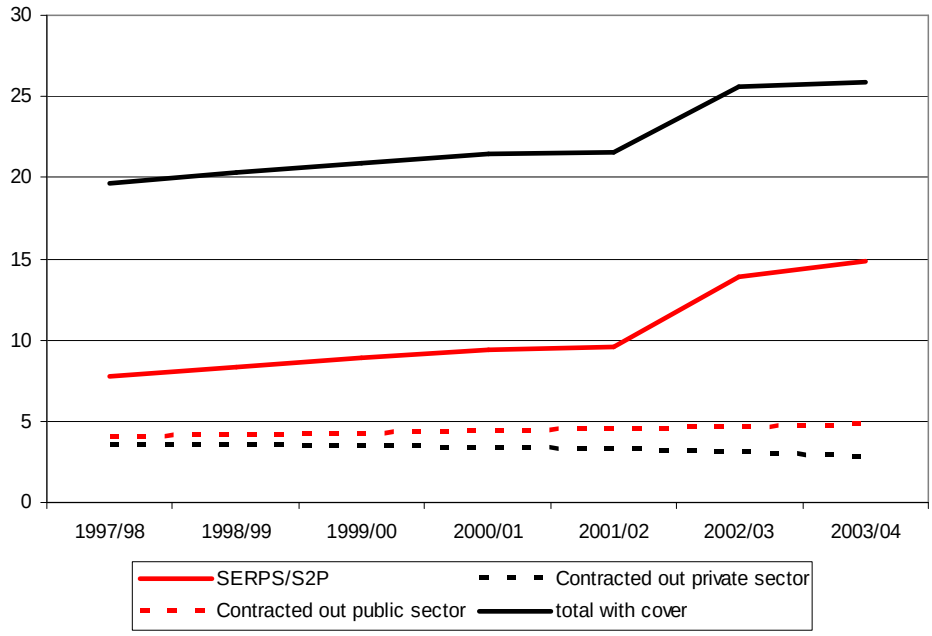
The transition from DB to DC schemes was often accompanied by a reduction in employer contribution rates, with employees – either as individuals or organised as trade unions - showing little opposition to this development. There are a number of possible explanations for this. For example, it is possible that individuals lacked the financial literacy to understand what these changes implied for their retirement income decades into the future. Another possible explanation could be that many employees perceived their financial position to be strong regardless – including in retirement – as housing wealth increased strongly over that period.[15]

…with more individuals saving for retirement in the government's own earnings-related scheme

The decline in the number of open private sector DB and DC schemes does not mean that the number of employees in second-tier pension schemes fell though. In fact, the opposite was true, with the number of employees covered by some type of second-tier scheme rising from 20.9 million in 1999-2000 to 25.9 million by 2003-04. This was mainly due to the introduction of the government's State Second Pension (S2P) in 2002, which replaced the previous state earnings-related pension scheme (SERPS).

[15] There is a strong case to be made for the analysis of pension systems to cover the housing market and what role the latter might have – actual or perceived - in ensuring the desired quality of life in retirement. This will vary from country to country. Equally, developments in the housing market could be interpreted by studying trends in pension provision as well.

Chart 6: Number of employees in second-tier pension schemes (millions)



Source: DWP Second Tier Pension Provision at www.dwp.gov.uk/asd/asd1/dsu/second_tier/second_tier.asp

Several factors led to the decline of defined-benefit occupational pensions in the UK…

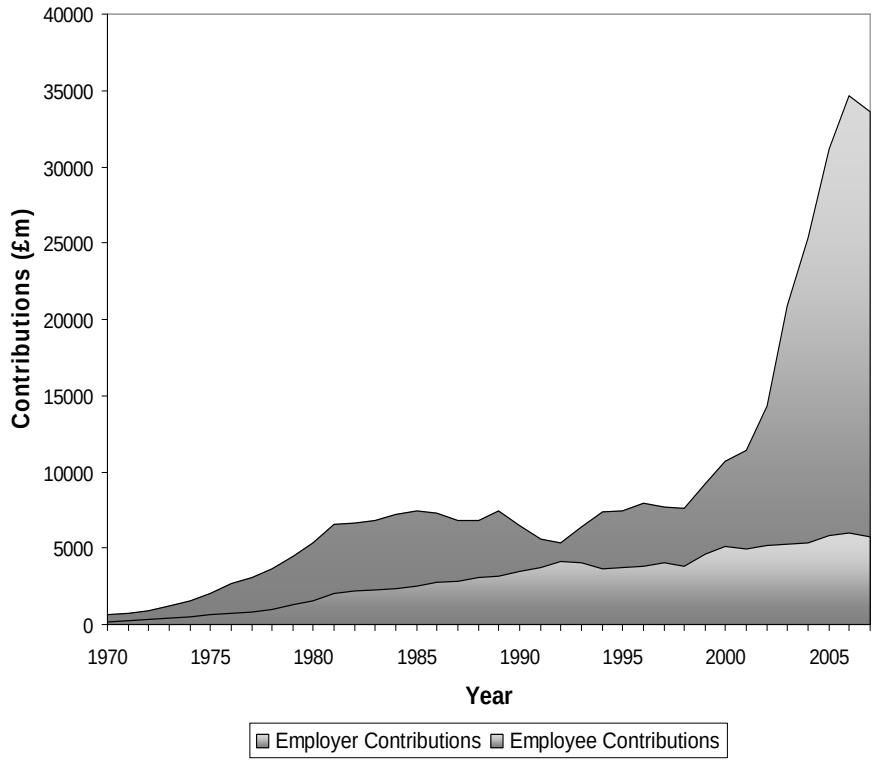
There are multiple reasons why DB schemes disappeared so rapidly over that period. A key reason must have been the growing burden for companies of employer contributions to pension schemes, thanks to the diverse risks they took on as the corporate sponsors of these schemes, such as longevity, interest rates and inflation.[16] As Chart 7 indicates, these rose significantly between 1970 and 2007, accelerating significantly over the last decade. The situation for sponsors of DB schemes was likely significantly impacted by the introduction of Financial Reporting Standard (FRS) 17 in 2000,[17] the UK version of International Accounting Standard (IAS) 19, which requires organisations to account explicitly for all employee (including pension) benefits they have committed to[18], and therefore, for the potential future impact of the risks they had taken onto their balance sheets.

[16] For most DB pension schemes, the key risks are longevity, interest rates, inflation and market risks. This is because the payment of a pre-defined set of benefits to individuals and their dependents in retirement means that the scheme – and the corporate sponsor underwriting the scheme – are exposed to significant longevity risk as people live longer and therefore, spend longer in retirement. In addition, as the majority of DB pensions are index-linked in some form, the scheme and sponsor are also exposed to future rises in inflation. There is also interest rate risk as the present value of these future liabilities is calculated using a discount rate that incorporates expected interest rates in the future. Thus, as long-term interest rates fall, liabilities would rise and vice versa. Lastly, the corporate sponsor of the scheme is left with the investment risk as the discount rate typically also incorporates expected future returns on the assets of the scheme and any shortfall in future payments to pensioners after investing the contributions made into the scheme must be met by the scheme and ultimately, its sponsor.

[17] www.iasb.org/NR/rdonlyres/C561FAFB-2E4E-41B8-A6D7-FB7E92070ED8/0/IAS19.pdf

[18] www.frc.org.uk/index.cfm

Chart 7: Annual Contributions to UK Pension Schemes



So

An additional complication was the downturn in the UK financial markets from 2000 to 2003. Sharp falls in equity valuations – the FTSE 100 fell 48% over the period December 1999 to March 2003 – meant that pension scheme assets were hit hard, as many had more than half their portfolio in equities in order to harvest hypothesised long-term risk premia. At the same time, long-term interest rates fell as the Bank of England embarked on a rate-cutting programme to stimulate the economy. As the discount rates used in the calculation of liabilities under FRS17 and IAS19 depend in part upon these, the result was a significant rise in the value of pension scheme liabilities. DB pension schemes and their sponsors found themselves in the midst of a perfect storm of falling assets and rising liabilities, leading to significant deficits at a time when sponsor balance sheets were ill-placed to take the additional burden. Indeed, between 2000 and 2007, employer contributions increased by a factor of 3.6 from £9.2 billion at the end of 1999 to £33.6 billion by the end of 2007, with special contributions increasing by a factor of nearly 8 to £12.6 billion.[19] Concurrent with that, as noted earlier, there was an acceleration in the closure of DB schemes in the private sector as employers sought to mitigate their legal liability.

The published liability matters as corporate scheme sponsors are required to follow the government's funding regulations for defined-benefit occupational pension schemes, as set out by the Pensions Regulator (tPR).[20,21] The Pensions Regulator was set up by the

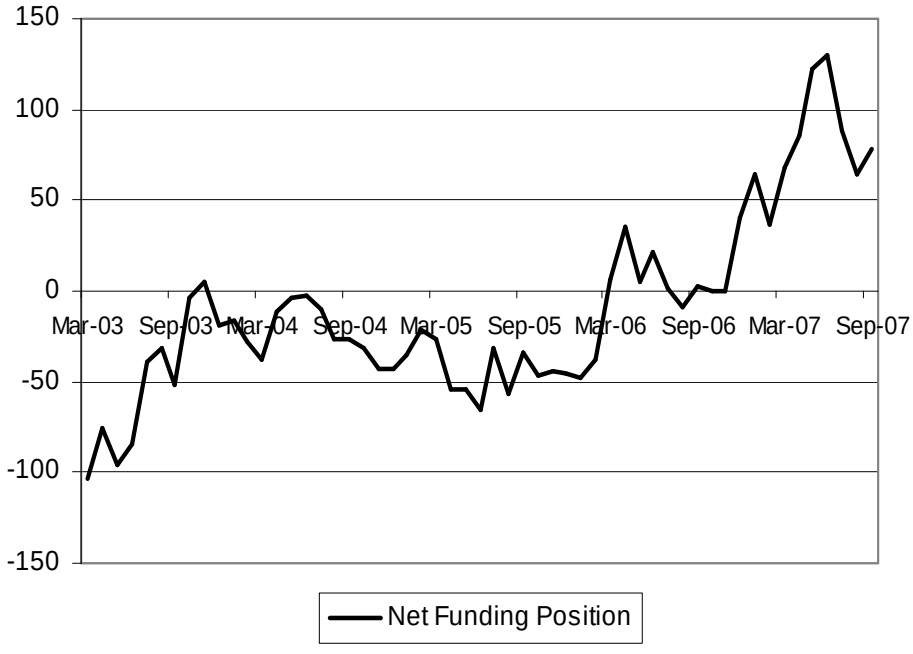
[19] It should be noted that while the data in Chart 7 cover all pension schemes, DB schemes were the dominant form of pension provision at the start of this decade and by virtue of their nature, would have been the overwhelming part of any special employer contributions made. This is because the investment risk sits with the corporate sponsor, leaving them with the responsibility of making good any deficits in the scheme's funding position. In contrast, investment risk sits with individuals in DC schemes, and employer contributions to DC and hybrid pension schemes amounted to only £1.3 billion in 2007.

[20] www.dwp.gov.uk/mediacentre/pressreleases/2005/dec/pens038-091205.asp
www.thepensionsregulator.gov.uk/codesOfPractice/definedBenefit/index.aspx

Pensions Act 2004 with the objectives of i) protecting the benefits of members of private sector occupational pension schemes, ii) promoting good administration of occupational pension schemes and iii) reducing the probability that the Pension Protection Fund (PPF) will have to pay out compensation.

The Pensions Regulator requires corporate sponsors to fund their liabilities and to make up any potential shortfall in funding over an agreed period of time. Chart 8 shows the relative funding position (assets minus liabilities) of private sector DB schemes between March 2003 and September 2007, as indicated by the Pension Protection Fund's PPF 7800 Index. Starting with a substantial deficit amounting to £103bn at the bottom of the financial markets in March 2003, the funding position improved over the next four years, with the net funding position turning positive (in other words the value of assets exceeding the value of liabilities) by 2006. By September 2007, when the bank-run on Northern Rock occurred,[22] UK defined-benefit pension schemes were in surplus by around £78bn. The strengthening funding position was due to the increase in the value of assets, which went up from £539bn in March 2003 to £872bn by September 2007, though over a third of this came from employer contributions. It should also be noted that the true funding position was still in deficit as the PPF 7800 Index is a monthly estimate of the funding position of 7,800 schemes, based on a conservative valuation of 90% of their entitlements up to a maximum of approximately £28,700 per annum – it, therefore, underestimates the true liabilities of these schemes.

Chart 8: Net Funding Position in UK DB pension schemes March 2003 to September 2007 (£bn)



Source: Pension Protection Fund, PPF 7800 Index.

[21] Note that the corporate sponsors of defined-benefit pension schemes are not necessarily required to fund their liabilities in all other countries. In Germany, for example, there is no legal requirement for corporate sponsors to accumulate assets to back their pension liabilities.

[22] The bank-run on Northern Rock can be seen as a defining moment in the unfolding of the economic and financial crisis in the UK as it brought the problems within the capital markets into the public domain. Before that few in the UK had worried too much about the health of the international financial sector.

The improvement above also masked the significant worsening and, to some extent, the high volatility as well of the funding position for pension schemes over the last decade. As mentioned earlier, many pension schemes value their liabilities by using a discount rate that is implicitly linked to the assumed return on their assets and future expectations of interest rates and inflation. Typically, prior to 2000, the discount rates varied significantly from scheme to scheme, with some choosing a point in time and a single discount rate for all their liabilities, while others chose more sophisticated approaches such as evolving discount rates over time. The waters were muddied further as liabilities were calculated insufficiently frequently and often relied on out of date longevity assumptions, presenting a less than prudent valuation of the true funding position.

However, the introduction of the FRS17 and IAS19 accounting standards led to a growing standardisation across pension schemes and a move towards valuing assets and liabilities on a mark-to-market basis. More recently, the Pensions Regulator has been urging schemes to adopt more realistic mortality assumptions that reflect the latest scientific evidence. The result has been a significant rise in liabilities and the strain posed on corporate balance sheets as outdated assumptions have been revised.

The volatility of the funding position also increased significantly thanks to the afore-mentioned growing use of mark-to-market methodology. The discount rates for the majority of pension schemes were now linked in some form to gilt or AA-rated corporate bond yields and therefore, could change materially day to day with changing expectations of future interest rates and credit spreads. However, the assets were largely in equities and their valuations, therefore, subject to the volatility in those markets. This led to sharp swings in the funding position from month to month, as implied by Chart 8, and a growing shift from equities into fixed income assets for pension schemes as they sought to manage and reduce the mismatch between their assets and liabilities.[23] The resulting volatility and mismatches on balance sheets was likely another factor behind the significant decline in DB schemes over the period and the decision to transfer these risks to the individual instead through the advent of DC schemes.

As stated, the Pensions Regulator's role is also to reduce the probability that the PPF will have to pay out compensation to insolvent pension schemes. The PPF was set up under the provisions of the Pensions Act 2004 to "*…pay 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 Pension Protection Fund levels of compensation*."[24]

The PPF is an industry-wide scheme, initiated by the government and supervised by the Pensions Regulator but without any formal (financial) government backing. The PPF is funded through an annual levy on corporate sponsors of DB pension schemes in the UK. The paper will argue later that this arrangement is likely to be tested in the future.

The closure of DB schemes in the private sector was in stark contrast to developments in the public sector, where the main scheme sponsors – the NHS, teachers or the civil service - continued to support their DB schemes in principle even though they too changed many scheme parameters. For example, new entrants into the civil service now have to work until 65 years rather than 60 years to receive their pension.[25] It has been argued that this continuity is partly due to the higher degree of unionisation in the public sector than in the private sector, which so far has prevented the government – the ultimate sponsor of these schemes – from taking more radical action. Even

[23] Over the last few years, there has also been a growing interest in liability-driven investment, i.e. the holistic management of the assets and liabilities as a single portfolio. This has led to a large increase in the number of pension schemes that now try and hedge out their interest rate and inflation exposures in an effort to minimise the volatility and risks of the funding position.

[24] www.pensionprotectionfund.org.uk/index/about_the_ppf.htm

[25] www.civilservice.gov.uk/pensions/pensions-home-page/new-entrants.aspx

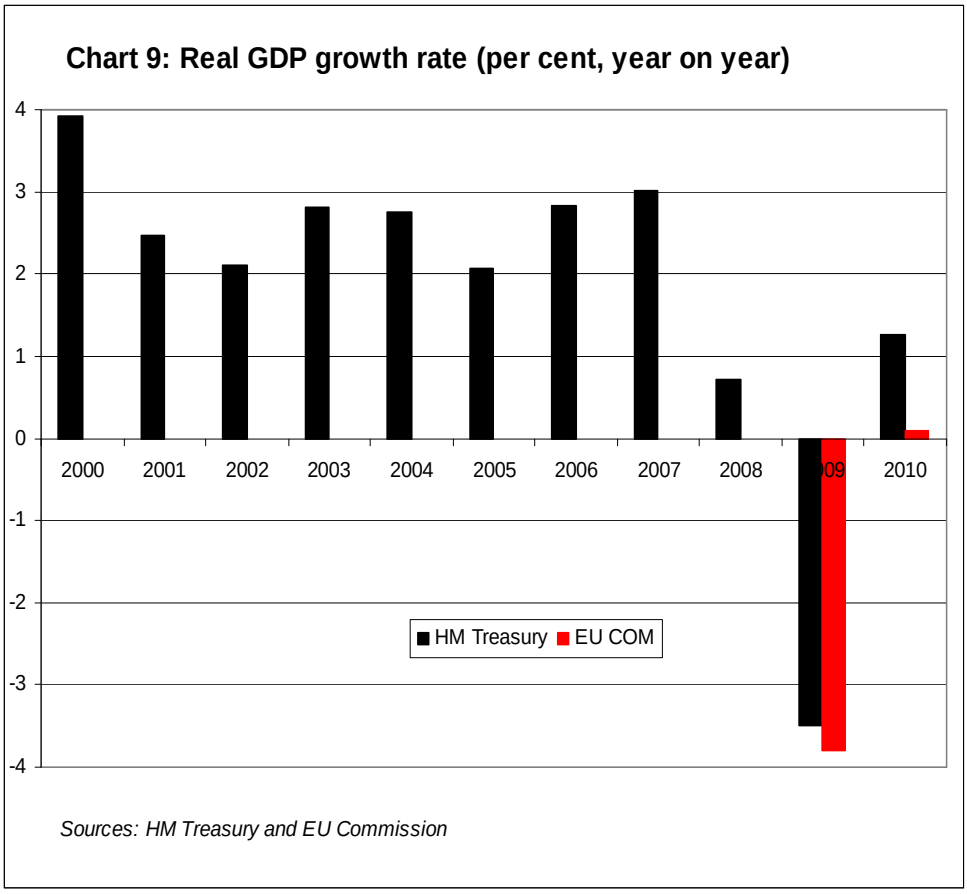
before the advent of the economic and financial crisis this divergence in private and public sector occupational pensions started a debate on the relative generosity of pensions in the two sectors.

iii. The crisis and pensions

(a) Deteriorating labour and capital markets

The end of the "NICE" decade…

The fortunes of the British economy have changed dramatically since 2007, when the first signs of the crisis emerged. As Chart 9 shows, up to 2007 the British economy had grown solidly and steadily, expanding by a fifth in real terms since the beginning of the decade.[26] In combination with benign inflationary pressures, this is what Mervyn King, Governor of the Bank of England since 2003, coined the NICE decade.[27]



…ended in a sharp recession and a weakening labour market…

The British economy gradually deteriorated over the course of 2008 and entered a technical recession in the second half of the year (though for the year overall GDP growth remained positive). For 2009 HM Treasury and international organisations such as the International Monetary Fund (IMF), the Organisation for Economic Cooperation and Development (OECD), and the European Commission (EU COM) forecast the British economy to suffer a deep recession. From 2010 onwards, it is forecast that growth will become positive again though opinions differ by how much. These

[26] In hindsight it seems "obvious" that what used to be interpreted as solid and steady economic growth was in fact partly the result of unsustainable developments. For example, economic growth outside the south east of England was to a large extent due to generous public sector spending, which was made possible by strong revenue growth, in turn partly the result of a rapidly expanding financial services sector based mainly in London. As we now know, this proved to be unsustainable, as did the surge in house prices across the UK up to 2007. It is not the purpose of this paper to investigate these issues in any detail.

[27] NICE = Non-inflationary, continuous expansion.

developments, if indeed they pan out as forecast, could have a significant impact on the future provision of pensions in the UK.

At the time of writing, the economic slowdown had already led to a sharp increase in the number of people unemployed and the unemployment rate. At the end of February 2009, the unemployment rate stood at 6.7% – 1.5 percentage points higher than a year earlier. Reflecting the downbeat economic forecast more generally, the European Commission forecasts the unemployment rate to increase further, peaking at 9.4% in 2010.

Chart 10: Unemployment rate (ILO definition)

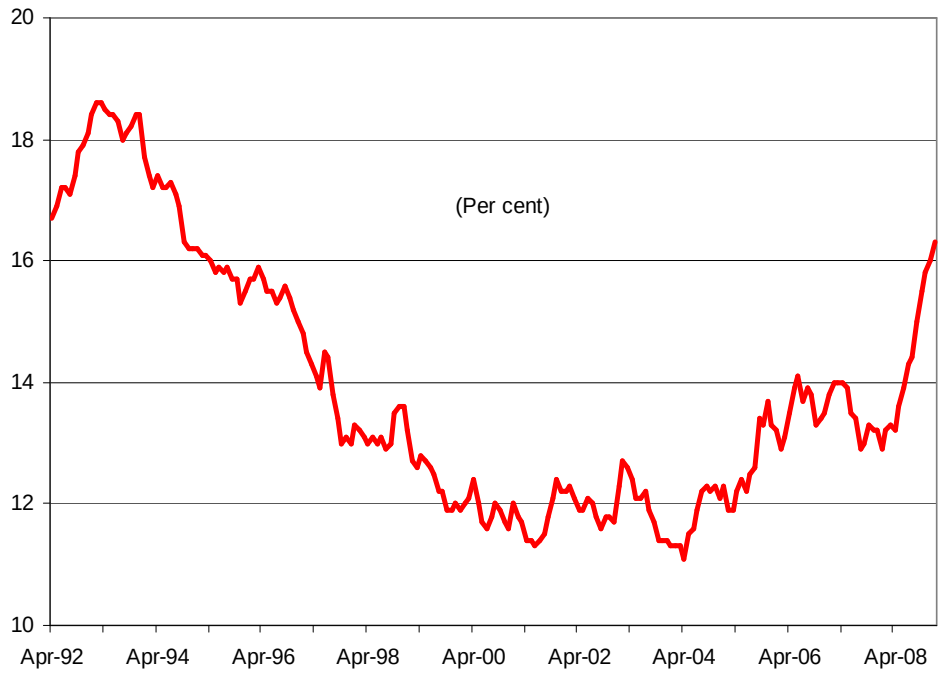
Source: European Commission Spring Forecast 2009.

The deterioration in the labour market is likely to affect different groups within society to a varying degree. For example, companies can be expected to "protect" their core workforce as long as possible from the downturn ("labour hoarding") but are more likely to shed older workers who are closer to retirement and will be less willing to take on new recruits. This suggests that the economic downturn could disproportionately impact on younger and older individuals. Moreover, the recession will have a more adverse impact on some industries than on others, and as the composition of the UK economy varies across the regions, the economic downturn will also have a regional dimension.

While most commentators expect unemployment to start falling again after 2010, it is probable that parts of society will not benefit from these improvements in the short to medium term. Indeed, someone who entered retirement earlier than previously expected due to the crisis is unlikely to return to the labour market at all once the economy has picked up again. For a number of those affected, not being able to work the additional years previously expected could make a significant difference to their retirement incomes. To complement their lower-than-expected retirement income, some might find it necessary to accept any type of job that might be offered to them.

The recession could also have longer-term adverse consequences for younger cohorts if the experiences from the early 1990s recession are anything to go by: despite government efforts there is evidence that some regional labour markets in the UK were still suffering from the repercussions of the early 1990s recession even 15 years later. Depending on the length and depth of the current recession, it is feasible that something similar could be experienced again, even though one should also not forget that the recession of the early 1990s affected disproportionately those in the manufacturing sector (and accelerated the shift towards a service economy), while this recession is expected to hit the services sector at least as much as manufacturing. Generally though, businesses can be expected to favour those just entering the labour market over those who have experienced unemployment once they start hiring again. Chart 11 shows that the unemployment rate for those aged 16 to 24 years has risen sharply since the beginning of 2008 and in early 2009 was at a level not seen since the mid 1990s. It is likely that the unemployment rate will continue to rise for at least several quarters longer, even after the economy has stabilised.

Chart 11: Unemployment rate for 16 to 24 years (not in full-time education, seasonally adjusted)



Source: ONS Labour Force Survey.

…which could leave more people with broken employment records…

All this matters for the future provision of pensions as generally only those in employment accumulate valuable pension entitlements. There is a risk that the recession will leave more people than previously expected with broken employment records and without adequate private pension provision, putting new pressures on the state sector to deliver over the longer term.

In addition to a regional, age and industry dimension, there will also be a sectoral dimension to the deterioration in the labour market: job losses will initially be concentrated in the private sector, with public sector worker likely to be relatively safe until the worst of the crisis is over as the government will be keen not to add to the gloomy unemployment figures through its own actions. Once the recovery is under way though, the government – of whatever hue[28] - can be expected to shed labour as it will

[28] The general election will have to be held by May 2010 at the latest.

try to bring its spending plans more in line with its future revenue stream. Given that a significant part of employment growth outside the South East this decade has been in the public sector, the likely future shrinkage in the public sector will probably pose challenges to particular regions of the UK.

With the labour market weakening and consumer confidence deteriorating, private consumption growth slowed sharply in 2008 and is forecast to be negative in 2009. The latter is partly due to the fact that disposable incomes are expected to fall but also because households are likely to increase precautionary savings as they increasingly worry about their near to medium-term financial prospects.[29]

Individuals appear to be less concerned about their long-term prospects though. AXA, the insurance group, calculated in November 2008 that around 1½ million people in the UK were considering stopping their pension contributions during the recession in an effort to offset falls in disposable income. According to AXA: "*…one in twelve pension holders feel they will be left with little choice but to take a pension holiday in the next two years, with 35-44 year olds most likely to cut saving*." AXA goes on to say that: "*Many people feel pension holidays are an easy way to improve their disposable income with few tangible consequences…*"[30] Whatever the exact number, it is indeed likely that a large number of people will be tempted to reduce their pension contributions over the next few years to cushion the shorter-term adverse consequences of the recession. Doing so could have a significant negative effect on the adequacy of their retirement incomes and could put pressure on a future government to fill any potential gap. It is also the opposite to what the government would like to achieve with its recent pension reforms: to encourage people to save more for their retirement. It is perhaps telling that AXA identifies the age group 35-44 as most likely to cut their pension contributions. It is exactly this age group, which according to the life cycle hypothesis should be saving most for retirement now.

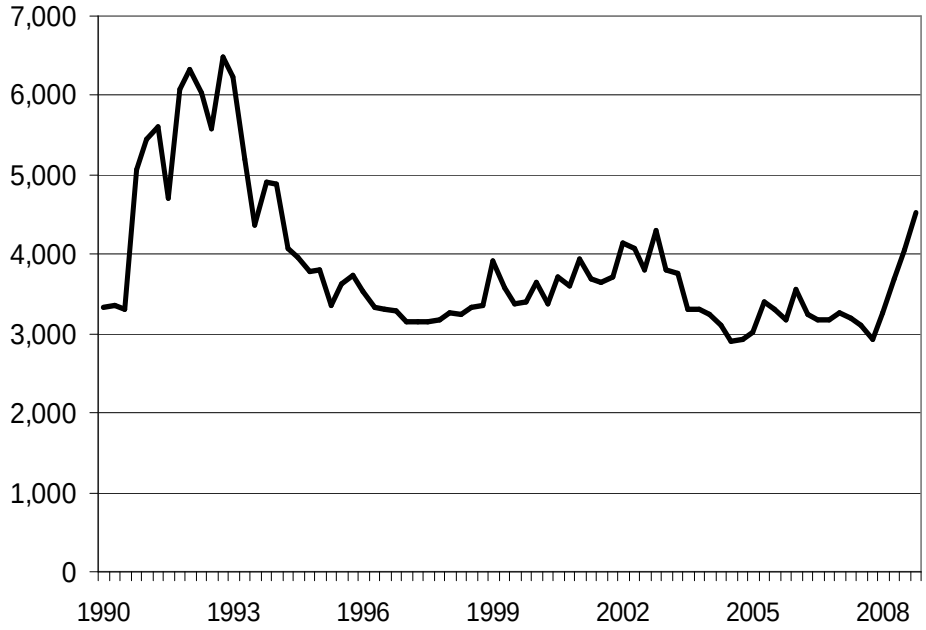
UK businesses and the financial markets

The economic and financial crisis is not only forcing businesses to shed labour, it is also having a very real effect on the survival probabilities of businesses in the UK. Chart 12 shows that in the final quarter of 2008 the number of firms going into liquidation in England and Wales was already (at least) in absolute terms the highest since the early 1990s. The picture was similar in Scotland and Northern Ireland. It is likely that during the course of 2009 the number will continue to increase before stabilising in 2010 as the economy returns to growth.

[29] See *Budget 2009 Building Britain's Future*, HM Treasury, April 2009.

[30] *Urgent action needed to prevent £35 billion pension hole*, AXA Press Release 15 November 2008.

Chart 12: Company liquidations in England Wales (seasonally-adjusted)

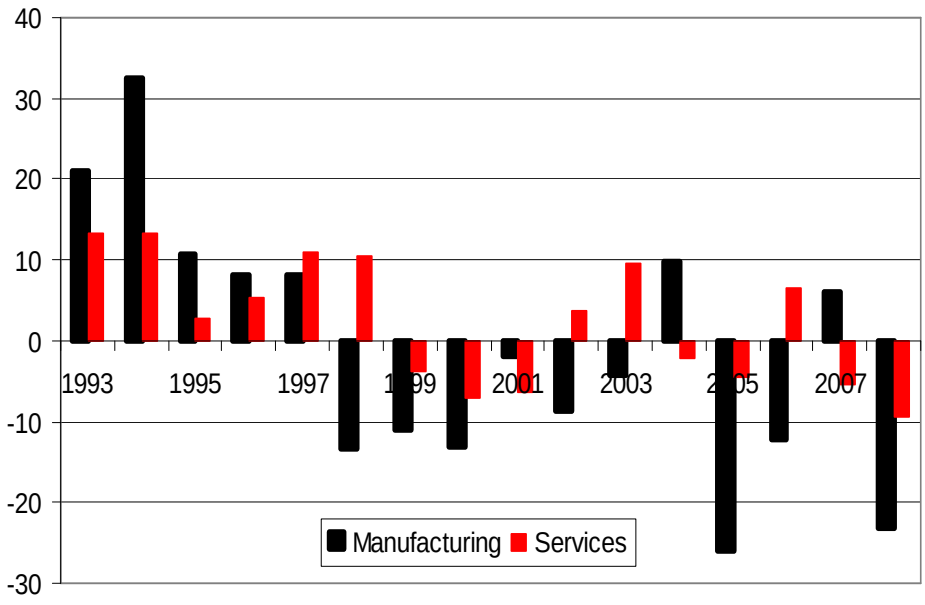


Source: The Insolveny Service at www.insolvency.gov.uk

Chart 13 shows that in 2008 corporate profitability in the services sector dropped by more in relative terms than in any other year since 1993. In the manufacturing sector, the drop of 23% was only exceeded by the fall in 2005.[31]

[31] Profitability is defined as the net rate of return on capital employed. That is, it is the value of profits, allowing for depreciation, divided by the value of fixed assets (allowing for depreciation) and inventories. Note that profitability has been consistently higher in the services sector than the manufacturing sector, reflecting the fact that the latter is substantially more capital intensive.

Chart 13: Year-on-year change in profitability (Per cent)[1]



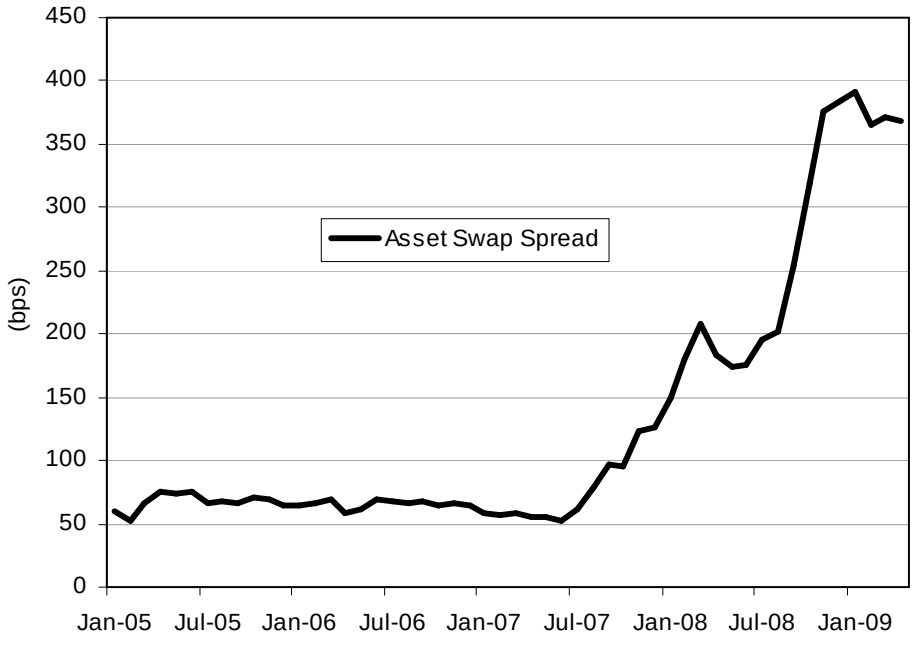
[1] *Profitability: Net rate of return on capital employed*
Source: ONS.

The sharp decline in financial markets…

Amongst the most dramatic and pertinent developments in the financial markets since 2007 are the substantial fall in asset prices and rise in credit spreads around the world. Financial markets – already reeling from the subprime induced 'credit crunch' in 2007 – were further pummelled by the unfolding global recession. As asset prices fell, banks found their over-leveraged balance sheets rapidly deteriorating and struggled to lend. Concerns over bank solvency grew following the run on Northern Rock and erupted with the bankruptcy of Lehman Brothers in the fourth quarter of 2008, and the effective nationalisation of leading banks and insurers such as RBS and AIG in an effort to prevent a systemic collapse of the global financial system. The associated heightened risk aversion also drove investors to seek shelter in perceived safer assets such as cash and government bonds, causing the value of riskier assets such as equities and most credit instruments to fall – a situation worsened by the forced selling on the part of banks and leveraged investors such as hedge funds.

The strain rippled outwards in a classic deleveraging spiral to have a corrosive impact on fundamentals such as the availability of credit to businesses and consumers as well as company earnings. The result has been paralysis in the credit markets and the cost of capital has increased meaningfully, impairing valuations and likely making refinancing more difficult for borrowers. As Chart 14 shows, credit spreads on investment grade corporate bonds – the difference between their yields and risk-free rates – have widened considerably during the crisis, and now are discounting events far worse than even the 1930s depression.

Chart 14: Credit Spreads for Merrill Lynch Over 10 Years Sterling Non-Gilts Index (AA - BBB ratings)



Source: Bloomberg, data as of 28 April 2009.

Equities have been similarly hard hit by an increasing challenged macroeconomic environment as financial balance sheets deleverage significantly. The consumer is retrenching and home prices continue to decline. Corporate capital expenditures are being cut or deferred, and earnings have fallen significantly. As Chart 15 shows, since its peak in mid 2007 the FTSE100 stock index has dropped sharply, ending 2008 on a similar level to that seen ten years earlier and reaching lows at the end of February 2009 last seen in late 2003. Other major stock indices developed similarly over that period. While equity markets have rebounded since in the last few weeks, it is doubtful whether the rally can be truly sustained given the lack of improvement in the underlying economy and the continued fall in reported corporate earnings.

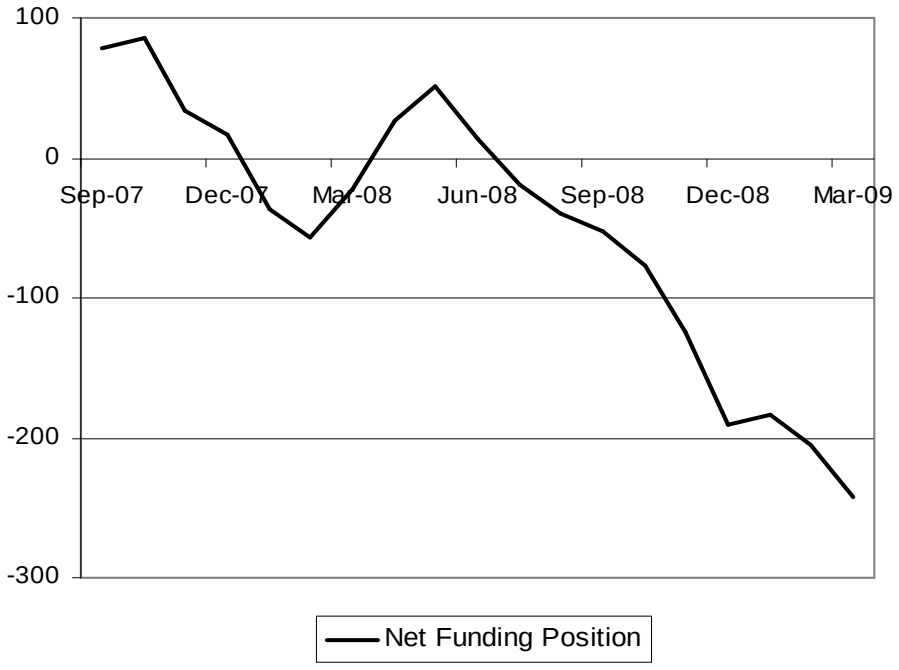
Chart 15: FTSE 100 Index performance (Dec 1998 – April 2009)

Source: Bloomberg, data as of 30 April 2009.

…has left defined-benefit pension funds with a huge funding gap…

The sharp declines have had a direct effect on the funding position of the defined-benefit pension schemes in the UK. The asset base of DB schemes has deteriorated markedly. Moreover, while the liabilities have decreased on accounting bases such as IAS19, this is misleading as these are discounted on the same afore-mentioned corporate bond spreads and are, therefore, lower. However, given the large levels of default risk implied by these self-same spreads, one could argue that the perceived fall in liabilities is cosmetic. On a prudent basis, as shown by Chart 16 below, the funding position has worsened significantly – an effect that is only masked for now for the majority of schemes till spreads normalise. Examining the PPF 7800 Index again, despite starting from a solid surplus of £78bn in September 2007 (see above), the value of the liabilities had yet again exceeded that of assets significantly within only a few months. By March 2009, the deficit amounted to £242bn, nearly a quarter of the entire liability.

Chart 16: Net Funding Position in UK DB pension schemes, September 2007 to March 2009 (£bn)



Source: Pension Protection Fund PPF 7800 Index.

While the previous period of underfunding took place in an environment of steady economic growth and rising equity prices, the new funding gap coincides with – and is to a large extent due to – the deterioration in economic fundamentals and falling equity prices. The deleveraging in financial markets and the wider economy has also left pension schemes open to the risk of deflation. For pension schemes, deflation is particularly problematic as most DB pensions are index-linked but the rate of increase cannot go below 0%. In other words, in a deflationary environment, the pension payments will not go up but they will not go down either. In contrast, asset valuations may suffer in a deflationary environment, thus worsening the funding position. Additionally, for those pension schemes that have chosen to hedge their inflation exposure, their portfolios are still ineffectual in a deflationary environment. This is because traditional hedging assets such as index-linked gilts will have capital erosion under deflation while others such as RPI swaps will return whatever inflation is – positive or negative. This can also lead to a worsening in the funding position and the need for further cash injections from already troubled sponsors looking at falling revenues.

The funding gap has been further accentuated by the policy response to these: the rapid fall in interest rates and gilts yields, as well as the recent programme of quantitative easing begun by the Bank of England. Both have contributed to further rises in the liabilities and a greater shortfall in the funding gap. This will be discussed in more detail later in this paper.

In January 2009, the Confederation of British Industry (CBI) warned that meeting the Pensions Regulator's requirement for corporate sponsors to close the funding gap within a short amount of time (see above) could in fact exacerbate the recession by forcing firms to divert urgently required capital from their core business activities into pension funds. In addition, the CBI worried that the PPF could expect firms to make higher contributions to the fund to deal with a rising number of insolvencies, making it

even more difficult for otherwise sound businesses to survive in the adverse business climate.[32] The Pensions Regulator's response was to acknowledge the need for flexibility but mainly to emphasise that unsecured creditors – including pension schemes - must be treated equitably and should not suffer, for example, from a company's decision to pay dividends to its shareholders.[33] This response has ignited debate and led financial markets to start scrutinising and incorporating once-ignored portions of the balance sheet into how they value companies. There is a danger that this may accelerate the closure of the remaining open DB schemes as company management is now incentivised by the markets to minimise and close off any pension liabilities, as they might be deemed detrimental to the interests of shareholders. Coupled with significant pressure on corporate sponsors to plug existing deficits, the result is likely to be a move towards constraining their present liabilities and avoiding future problems by switching employees from DB to DC schemes.

There is also a subtler impact on pension schemes. Many depend on the income from dividends on their equity investments to match their liabilities as they fall due, and will, therefore, be disadvantaged. They may also choose to move their holdings to companies with smaller liabilities and greater certainty of paying dividends, placing further strain on corporate balance sheets for those sponsors with DB schemes. This could create a vicious feedback mechanism where the mass behaviour and equity allocations of pension schemes could jeopardise their own sponsors' solvency and ability to contribute towards a growing funding gap. The ongoing stress on corporate balance sheets may also impact both a recovery from the current crisis and future economic growth in the long-term.

…and individuals in defined-contribution schemes with diminished wealth…

The sharp drop in the stock market has had a similarly devastating effect on the value of funds accumulated in defined-contribution schemes. While it is the corporate sponsor, which has to deal with the repercussions of this in the case of DB schemes, it is the individual which will have to take the hit in the case of DC schemes.

It has been estimated that the decline in equity prices reduced the value of assets in defined-contribution pension schemes from £550bn in October 2007 to £380bn by March 2009 – a drop of £160bn or nearly a third. This drop will affect the pension savings for around 3.7 million people in the UK.[34] As shown by Chart 15 earlier, the period 1998 to 2008 could be described as a "lost decade" for those who invested in equity to build up savings for retirement. While it is expected (and hoped for) that younger scheme members will have sufficient time to make up for these losses over their working lives to retire on an adequate pension, for those in their 50s or even closer to retirement, this opportunity might not exist.

…prompting pension consultants to suggest that individuals need to be more pro-active with their investment strategy

There is no regulation in the UK prescribing the type of pension fund an individual can invest in. Instead it is up to the individual to choose among the wide range of funds available and hence make a decision regarding the long-term investment strategy to pursue. This decision is often made without a full understanding of the different characteristics of the funds, including on the investment risk involved. In many instances individuals opted for the default option offered by their employer, regardless of whether this option was appropriate for their individual circumstances or not. As a result of this, many people approaching retirement might still find themselves exposed heavily to the fluctuations of the stock market when they should have moved their portfolio into less volatile investments such as government bonds. To quote Helen Dowsey of Aon Consulting: "*People need to take an active role in reviewing their pensions to deal with the current situation. For those facing retirement in the near future, particularly those who have not started switching out of equities as part of a*

[32] *Overreacting to pensions debt could deepen recession*, Confederation of British Industry, Press Release 19 January 2009.

[33] *Pensions Regulator issues statement to UK employers*, The Pensions Regulator, 18 February 2009.

[34] Recession hits private pensions, BBC 8 April 2009. http://news.bbc.co.uk/1/hi/business/7990488.stm (accessed 9 April 2009).

lifestyle strategy, the situation looks bleak and they need to consider all the options open to them."[35]

Dowsey is not alone is suggesting that individuals should review their long-term pension strategy in the light of changing circumstances. However, there is evidence that individuals are ill-equipped to do so and even if they are not, many have little inclination to prepare for the future. For example the Financial Services Authority found that: "*On the whole, the UK population is not particularly good at planning ahead. Fewer than half of the people interviewed had any provision in case they experienced a drop in income…Similarly, fewer than half had…made adequate provision for an expense they anticipated in the near future. Provision for retirement was similarly poor*."[36]

There is a second channel through which the retirement income of individuals with pension fund assets will be affected: annuity rates. Up to 2006, it was compulsory for individuals to convert their pension fund assets into an annuity by age 75 at the very latest. This more or less continues to be the case nowadays even though the Pensions Act 2004 also introduced the option of the Alternatively Secured Pension (ASP), which allows individuals to continue to draw down income within certain limits.[37]

While compulsion to purchase an annuity will ensure that an individual will not outlive his/her own pension assets, annuity rates fluctuate over time with market conditions and hence someone's annual income during (parts of) retirement will depend on the annuity rate offered at the day of conversion. This means that an individual saving for retirement through a defined-contribution pension scheme will not only be exposed to the investment returns in the stock market (which the individual cannot influence) but also the fluctuations of the annuities market (which the individual cannot influence either). Annuity rates have fluctuated markedly since 2007 and have declined (sharply) since the Bank of England's announcement in March 2009 to pursue a policy of quantitative easing to stabilise the economy (see below). For most people, picking the best date to purchase an annuity therefore seems to have more to do with luck than with an understanding of economic fundamentals or the functioning of the financial markets.

Given the adverse and volatile market conditions a number of pension commentators have suggested that individuals should consider dividing their pension assets between annuities and income drawdown or to buy a number of smaller annuities over several months or even years. Furthermore, individuals have been urged to consider the purchase of inflation-linked annuities given the possibility of a sharp increase in inflation in the future.[38] While this appears to be honest advice in an adverse and uncertain financial environment, are individuals realistically in the position to make these decisions though?

(b) The crisis and its implications on fiscal and monetary policy

From leader to laggard: the UK's public finances

Just as the economic and financial crisis has decimated the funding position of defined-benefit and defined-contribution pension schemes in the UK, it has also had a very

[35] *DC schemes lost 10% in February*, IFAonline, 16 March 2009 at www.ifaonline.co.uk/public/showPage.html?page=847038 (accessed 9 April 2009).

[36] *Levels of Financial Capability in the UK: Results of a baseline survey*, Adele Atkinson, Stephen McKay, Elaine Kempson and Sharon Collard, Financial Services Authority Consumer Research 47, March 2006, page 83.

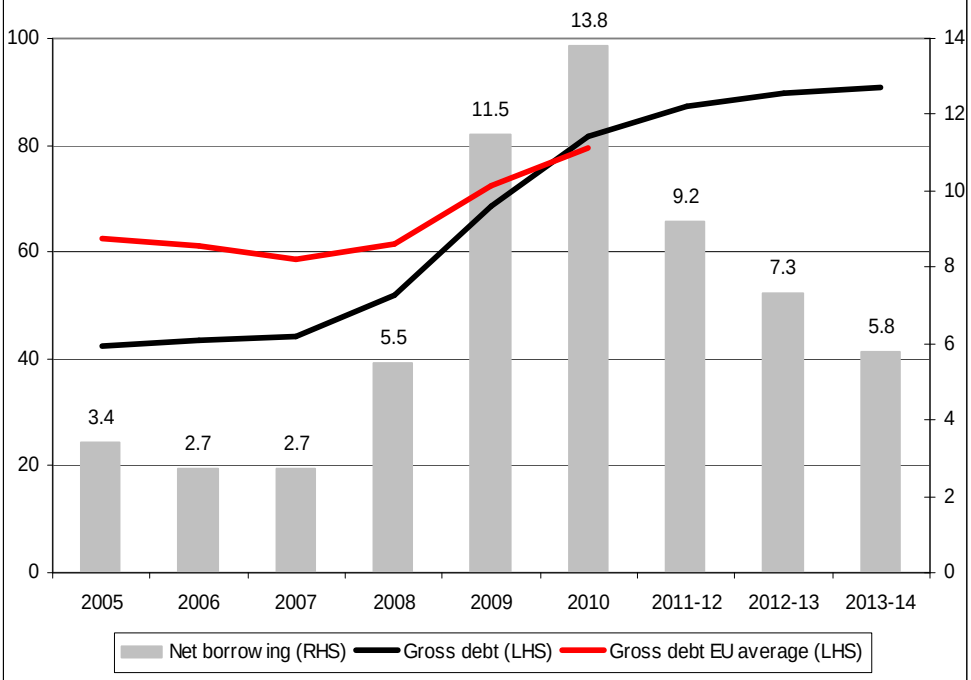
[37] Alternatively secured pensions were introduced in particular to assist those individuals with principled religious objections to pooling mortality risk, who might therefore be prevented from purchasing a pension annuity on ethical grounds. The government has recently introduced limits on the income withdrawal and new tax charges on ASPs in an effort to discourage people who do not have religious reasons for not purchasing annuities, or might use ASPs to transfer retirement benefits to family members.

[38] See for example, *Quantitative easing is bad for annuities*, Investors Chronicle, 18 March 2009 at www.investorschronicle.co.uk/Columnists/GuestColumnists/article/20090318/ae4ebd90-1303-11de-a6cb-00144f2af8e8/Quantitative-easing-is-bad-news-for-annuities.jsp (accessed 9 April 2009).

significant adverse effect on the state of the public finances. Chart 17 shows that the gross debt to GDP ratio was just above 40% up to 2007 but then started to increase by 2008 as the fiscal position deteriorated. Nonetheless, the ratio remained well below the EU average. The European Commission now forecasts that the gross debt to GDP will rise rapidly in the UK to exceed the EU average by 2010; the latest year of its forecast. At that point the UK is forecast to have the sixth highest debt to GDP ratio in the EU27, in other words EU COM forecasts that 21 countries will have lower debt – a dramatic change of fortunes from 2000 when the UK occupied the 3rd position (see above).

The chart also shows the British government's own official fiscal projections (which are similar to the European Commission's up to 2010). The government forecasts a rapid fiscal consolidation beyond 2010, with net borrowing more than halving between 2010 and 2013-14. Despite this, the gross debt to GDP ratio is forecast to continue to rise up to at least 2013-14.

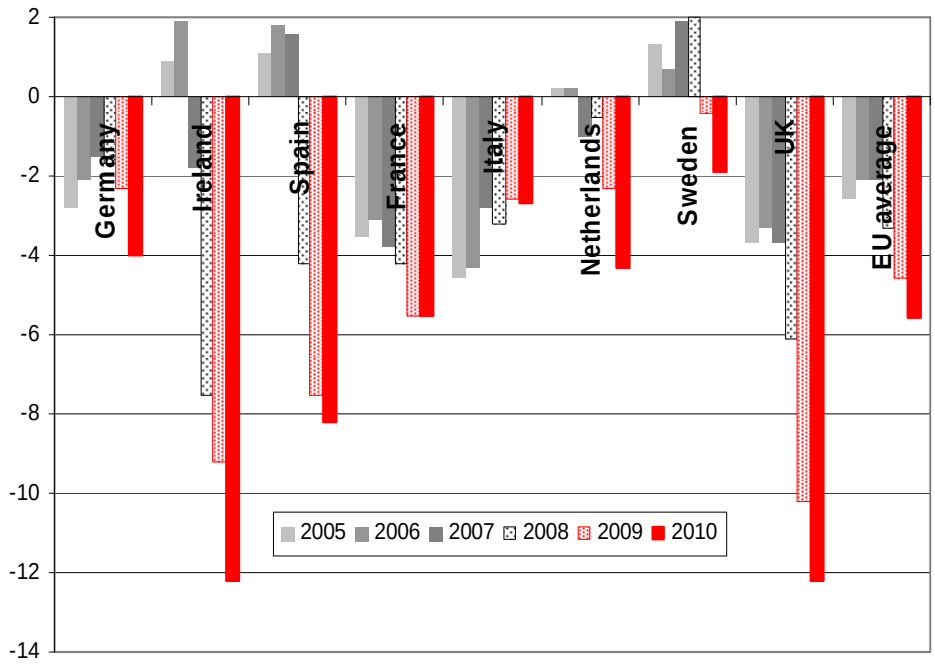
Chart 17: UK general government finances (% of GDP)[a,b]



a Maastricht definition. bActuals and forecasts up to and including 2010 from EU COM, 2011-12 and later HM Treasury forecasts for fiscal years.
Sources: HM Treasury Budget 2009 and European Commission Economic Forecast Spring 2009.

While fiscal deficits and debt are forecast to increase across the world as a result of the crisis, Chart 18 shows that the deterioration is expected to be particularly marked in the UK as much of the worsening is of a structural rather than cyclical nature. This suggests that the UK is likely to face bigger challenges getting its public finances back under control than most other EU member states. Annex A shows that challenges exist both on the spending and revenue side.

Chart 18: Cyclically-adjusted general government net lending (+) or borrowing (-), Per cent of GDP



Source: European Commission Forecast Spring 2009.

Public sector debt is an explicit liability for the government, which it is legally required to honour. The government is also exposed to a number of implicit liabilities though, which it might have to honour in the future. One such implicit liability could be the Pension Protection Fund (see above). When the fund was set up under the provisions of the Pensions Act 2004, the government made clear that this was an industry-wide scheme, financed by business and not by government.

This view has been challenged, in particular since the onset of the crisis, which has highlighted the scheme's potential inherent weaknesses. One such weakness is that the scheme could become unsustainable if a sharp economic slowdown forced a relatively large proportion of scheme members (in other words DB pension funds) into the arms of the fund. In that case the burden of financing the fund would fall onto a smaller number of operating scheme members (through an increased levy), increasing the risk that these might fail themselves. In other words, the PPF appears to be sustainable during "normal" economic times but unstable during sharp economic downturns. The Pensions Regulator has suggested to charge a counter-cyclical levy (higher during good times, lower during bad times) to deal with this characteristic.

Within that context, the National Association of Pension Funds (NAPF) has argued that: "*…We recognise the important role played by the PPF levy in guaranteeing member security and promoting confidence in pension provision. However, we must make sure it does not undermine current pension provision by placing too great a burden on well-funded schemes, especially where they are backed by a strong company. To give more certainty to pension schemes, we believe the aggregate levy should be capped at a fixed and specified level close to the current levy. The Government should assume*

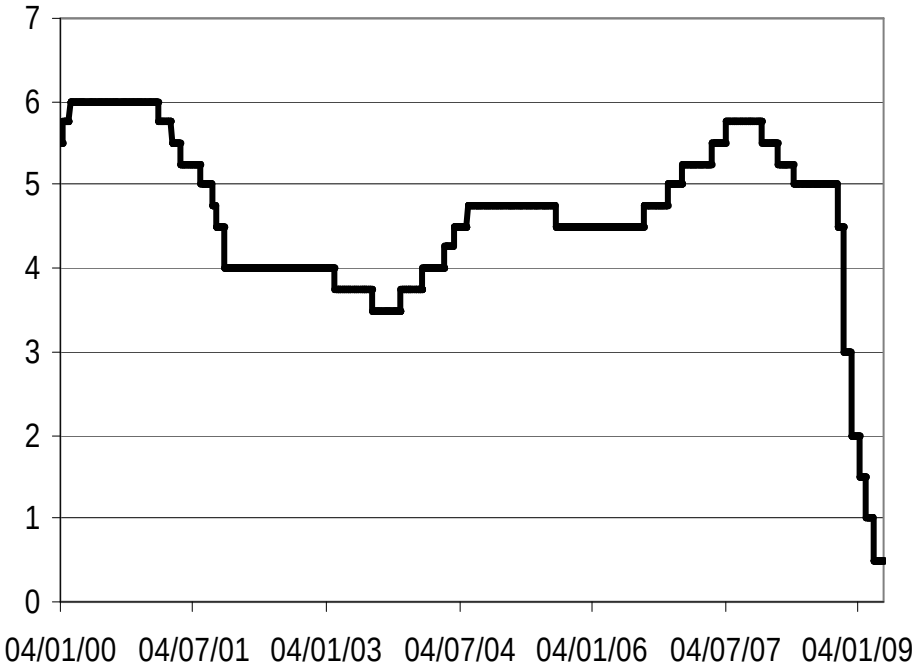
responsibility for costs above current levy levels and should also be the ultimate guarantor of the PPF."[39]

If nothing else, the NAPF's opinion illustrates that the government's position on who ultimately owns the occupational pension liabilities is being publicly challenged.

Turning to monetary policy, the Bank of England's decision to reduce interest rates from a peak of 5¾% in mid 2007 to ½% by early 2009 (see Chart 19) had a significant effect on the return on savings. While the Bank of England's monetary loosening might have had the desired effect of supporting aggregate demand, the policy also had a very significant redistributive role, with net savers losing out and net borrowers benefiting. Pensioners overwhelmingly belong to the former group (not least because most of them with mortgages will have paid these off) and many pensioners complement their income from the state pension with interest from savings. For many, the reduction in interest rates represents a very serious blow to their day-to-day household finances.

It also significantly impacted occupational DB scheme liabilities. As discussed earlier, pension liabilities are calculated with reference to fixed income yields, with future liabilities being discounted at an appropriate rate for their maturity. This discount rate is fundamentally interlinked with gilt yields. Even when the discount rate is set relative to swaps or corporate bonds, these rates are generally derived from gilt yields, which are perceived to be the risk free rate. Thus, any reduction in gilt yields propagates through the system and using the resulting yields as the benchmark for measuring current liabilities gives larger pension liabilities and deficits that might otherwise be expected.

Chart 19: Bank of England Official Bank Rate (%)



Source: Bank of England Statistics.

[39] *NAPF PROPOSES PPF LEVY REFORMS IN RESPONSE TO LEVY CONSULTATION*, National Association of Pension Funds, Press Release PR/06/09, 17 February 2009.

As discussed above, the Bank of England's decision in March 2009 to pursue quantitative easing, in other words to inject money directly into the economy rather than to rely solely on interest rates,[40] also has additional adverse effects. While central banks can have a direct impact on the *quantity of money* in the system, they do not have direct control over the *velocity of money* in the system**.** That is determined by the entities that buy and borrow and lend, i.e. banks, businesses and ordinary consumers. In order to have an effect on the economy, the money needs to move through the system and that can only be determined by their willingness to borrow and lend, rather than hoard and save.

In the meanwhile, the quantitative easing programme has led to a fall in short and medium term gilt yields, leading to additional increases in pension liabilities. Schemes and their sponsors are poorly positioned to cope with these.

Conversely, quantitative easing also risks stoking inflation if it works but is not reversed in a timely manner. Quantitative easing need to be actively reversed by central banks. If central banks are too slow in reversing policy for fear of derailing the recovery, or find that they cannot unwind their asset purchases, inflation will accelerate in the future. This is a problem for pension schemes as many of their liabilities are index-linked, so they could be severely impacted as their liabilities go up significantly. Traditional assets such as corporate bonds could also be adversely impacted in an inflationary environment as investors demand higher yields to compensate for higher inflation. Thus, pension funds could find themselves hit on two fronts: falling asset values and rapidly rising liabilities. Only those with inflation hedging in place are likely to be well placed in such a situation. An additional complication may also occur if inflation goes too high (typically above 5%) for a sustained period. While DB schemes are often capped in this regard and would benefit from liability erosion, DC schemes and individuals may suffer as their pensions will no longer keep up with inflation, and the real value is therefore eroded.

iv. Some likely future developments

(a) A decade of public finance austerity

Predicting the future is not possible and what follows has to be by its very nature highly speculative. However, even acknowledging the fact that history does not evolve in a linear fashion and is full of surprises, it should still be possible to sketch out how the British pension landscape might evolve over the coming years by looking at past trends and experiences elsewhere. In our view the developments presented in this section are all possible, with some trends almost certain, while others are merely feasible. The usefulness of this section is not to predict the future pension landscape with certainty (it can't) but to discuss the different forces, which are likely to shape pension provision in the UK in the years to come. Doing so will hopefully highlight opportunities, challenges and second-order implications, which could otherwise be missed.

The starting position is one of relative weakness. The economic and financial crisis has impacted on all aspects of the British pension system and has left arguably all of them in a weakened state. Following the crisis government debt will be higher, and the funding position of defined-benefit and defined-contribution pension schemes weaker. Depending on the severity of the recession, the number of unemployed people will also be substantially higher than predicted only a few years ago, leaving more people than previously expected with broken employment records. Furthermore, house prices will have dropped sharply from their peak in 2007, leaving many with lower housing wealth than they had hoped for ahead of their retirement. Using the proceeds from downsizing or equity withdrawal will no longer be a feasible option for many to boost their finances in retirement.

[40] www.bankofengland.co.uk/monetarypolicy/assetpurchases.htm (accessed 15th April 2009).

One way to think about the future is to assume that once the economy emerges from recession, everything will return to the pre-crisis "equilibrium", with government debt, as a share of GDP, eventually returning to pre-crisis levels, pension fund assets (held in defined-benefit and defined-contribution schemes) increasing again in value and private households starting to contribute to their Personal Accounts from 2012 onwards, as envisaged by the government. In other words one may believe that the external shocks generated by the economic and financial crisis will leave no legacy.

While this is possible, we believe that this is unlikely to be the case though as, first, the British pensions landscape was not in a stable equilibrium even before the crisis and, second, the recession appears to have set in motion a number of trends, which should lead to a reallocation of responsibilities in the world of UK pensions.

Government must reduce its debt by cutting spending and increasing taxation…

As was argued in the previous section, the economic crisis will leave the government's public finances in a much weakened state, with debt forecast to more than double between 2007-08 and 2013-14. Whichever party will win the 2010 general election, it can be taken as a given that the next government will vigorously consolidate the budget to return the public finances to a sustainable path. Returning the government deficit to a level, which will allow the debt to GDP ratio to fall, will require strict public spending settlements and an increase in the tax take for years to come.[41] The government will have to balance the need for consolidation with the need to promote economic growth; too fast a consolidation and the public sector could act as an unacceptable drag on the economy.

To illustrate the challenge, the Institute for Fiscal Studies calculated that if the government locked in forever its fiscal stance as forecast in the 2008 Pre-Budget Report, it would still take until the early 2030s for government debt – as a share of GDP – to return to the level seen before the crisis.[42] Annex B demonstrates that this is probably an optimistic assessment of the long-term challenges.

…potentially making the indexation of the state pension to earnings growth by 2012 unaffordable…

To achieve this gradual reduction in net borrowing (in absolute terms and as a share of GDP), it can be expected that a future government will scrutinise all spending areas equally, including pensions. As such the perilous state of the public finances is likely to put a question mark over the government's ability to implement its announced policy of indexing the state pension to earnings growth from 2012 onwards. In fact, when announcing the policy, the government made clear that it would only go ahead with the implementation if the policy was affordable at the time. It is conceivable that the government will make use of this opt-out clause. A future government might also take the state of the public finances as an opportunity to push through further reforms in the area of public service pensions.

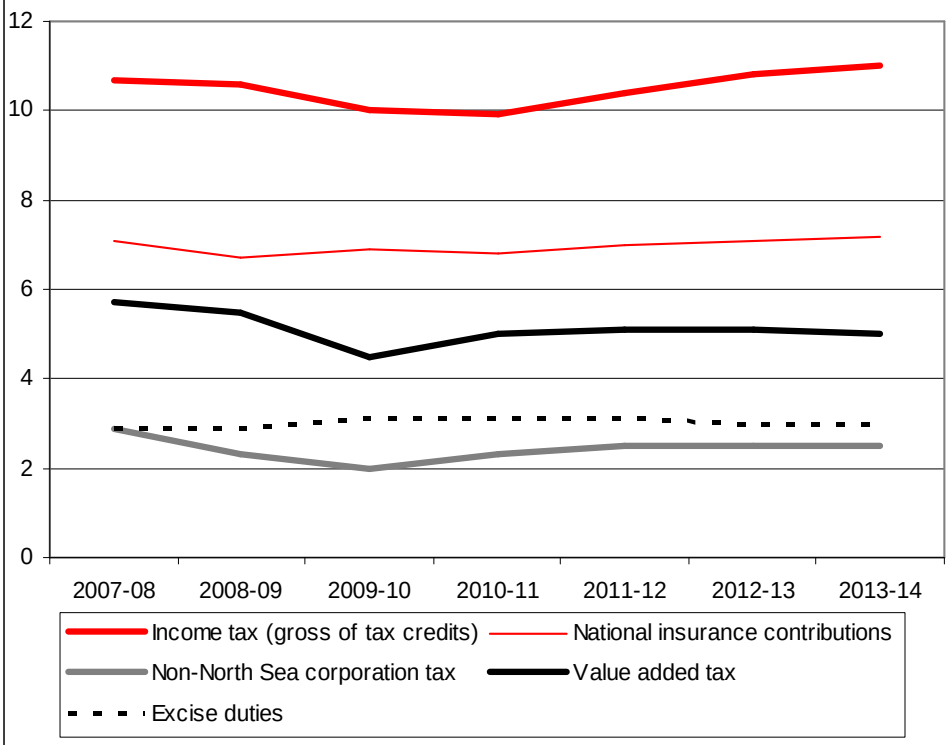
These spending measures will most likely be complemented by efforts to raise the share of total receipts in GDP at least to the level seen prior to the crisis. Achieving this could pose a challenge similar in magnitude to that on the spending side as the government will no longer be able to rely on generous receipts from the financial services sector or stamp duty to boost income.

Chart 20 shows the shares of different sources of government receipts in GDP. In 2007-08 the most important sources of government receipts were income tax (10.7% and hence close to a third of all receipts), national insurance contributions (7.1%), value-added tax (5.7%) and corporation tax and excise duties (both 2.9%).

[41] The primary balance required to reduce the debt to GDP ratio will depend on the economic growth rate and the interest rate.

[42] *The IFS Green Budget 2009*, Institute for Fiscal Studies, January 2009.

Chart 20: Current receipts (% of GDP)



Source: Budget 2009, HM Treasury

Increasing any of these revenue sources as a share of GDP could dampen economic growth. In addition, raising corporation tax rate could undermine international competitiveness, which in turn could make the UK a less attractive destination for foreign direct investment (FDI) in the future. It is difficult to imagine that a future government would be prepared to jeopardise the UK's position as the most popular destination for FDI within the European Union.

Despite the unattractiveness of the options, the government will have to increase taxes though and it is likely that much of this will fall on households, either through higher value added tax or higher income taxes/social security contributions. Whether this will be achieved through higher tax rates or changes to the tax bands (perhaps creating stronger fiscal drag) is not important in this context.[43] What is though is that higher VAT and/or income tax burden would affect negatively household real disposable incomes. As will be discussed below, households can be expected to respond to this by changing their own savings behaviour.

Last but not least, a future government can also be expected to scrutinise its portfolio of public-sector holdings, with the aim of privatising parts of it in an effort to raise capital (in addition to any other merits this might have). In May 2009, for example, the government announced that it would consider part-privatising the Royal Mail postal services and as part of such a move it would move the pension scheme from a funded to an unfunded (pay-as-you go) basis. As a result the government would be able to use the existing assets in the pension fund to pay down national debt.[44]

[43] In addition, a future government can be expected to explore other funding sources, including environmental taxation, more aggressively.

[44] *Pension rescue to appear as £24bn windfall*, Financial Times, 9 May 2009.

The economic crisis is also likely to put a question mark over the timing of the government's Personal Accounts project. It is not inconceivable that the government will decide to postpone the launch of the Personal Accounts until individuals and businesses feel to be in the position to contribute financially to the scheme. 2012 might be too early for that. Such a delay would also allow the government to postpone payment of its own contribution of one per cent to the scheme.

(b) Occupational and private pensions, and national savings

One can expect the remaining occupational defined-benefit schemes in the private sector to close down…

It can be said with near certainty that the crisis will accelerate the speed with which the remaining corporate sponsors of occupational defined-benefit pension schemes will close these down. These corporate sponsors are generally large (they employ many people and their pension funds have many members). This development was not inevitable; indeed it appeared that prior to the crisis many larger corporate sponsors had committed themselves to DB schemes. The funding structure of the Pension Protection Fund might provide another impetus for corporate sponsors to close down their schemes. This might lead to an increased interest in buy-out options offered by a number of providers in the UK.

The obvious move for these corporate sponsors is to offer defined-contribution plans instead, shifting the risks associated with pension provision squarely onto the individual. While this might not be socially and economically optimal, it is the strategy, which companies will most likely pursue. One should also not be too surprised to see even more corporate sponsors reducing their contribution rates to DC schemes in an effort to reduce their costs.

…and many firms to limit contributions to defined-contributions schemes to a minimum as they recover from the crisis…

The launch of Personal Accounts in 2012 – if indeed this goes ahead as planned – will provide a useful official benchmark for an "acceptable" contribution rate: 8%.[45] While this might be more than what is currently offered by many schemes (and hence ought to be seen as an improvement in terms of preparing for retirement), it cannot be ruled out that those corporate sponsors that currently offer more generous contributions will "level down" their rates to match the new "official" lower figure in an effort to reduce cost. Indeed, the Pensions Policy Institute in the UK has suggested that the introduction of Personal Accounts might in fact reduce overall savings.[46] One should not be surprised to see corporate sponsors of currently relatively generous DC schemes to promote the benefits of Personal Accounts to their staff in the years up to 2012.

For all this to happen, individuals would have to be sufficiently content with the fact that they have been automatically enrolled into the Personal Accounts scheme to not bother actively opting out. When designing it, the government believed that auto enrolment with the option of opting out offered the best of both worlds of compulsion and voluntarism. However, it can easily be imagined that individuals will not be content with this arrangement given the economic circumstances, hence undermining the rationale of the entire pension reform.

Chances are that the stock market will eventually pick up again and as a result the value of assets held in defined-contribution pension schemes is also likely to increase again. However, for many investors this could be too little too late. They will face retirement on an income below that expected. In addition, their housing wealth will also be much lower though over the longer term it is likely that house prices will go up again.

There is another aspect often ignored – the impact of changes in pension provision on the financial markets. Beyond the greater scrutiny of company balance sheets, there are deeper unintended consequences which could increase the UK and London's financial vulnerability. Factors such as the de-regulatory changes embodied in the "Big Bang" of 1986 and the Sarbanes-Oxley legislation in the US changed the financial

[45] 4 per cent from the employee, 3 per cent from the employer and 1 per cent from the government. In addition, one should not ignore the possibility that administrative challenges could put the official launch date of Personal Accounts in jeopardy.

[46] *Will personal accounts increase pension savings?*, Pensions Policy Institute, November 2007.

landscape profoundly and boosted London's position as a pre-eminent global financial centre. However, they have also increased its vulnerability to any global recession due to the long-term "hollowing out" of the domestic financial market. DB pension funds are one of the last major pools of domestic savings though the rate of decline has been accelerating – a trend reflected in their share ownership, with pension funds now owning only 12% of the UK equity market compared to a third 15 years ago. The impact on debt and equity markets over the longer-term cannot be understated, given the sheer weight of capital they represent.

Further, the increasing awareness of the need to manage pension assets and liabilities as a singular entity coupled with recent market events have provided a catalyst for a growing call for pension funds to de-risk and for a flight towards geographical diversification. The unintended consequences for the UK economy are profound. As DB schemes close at record rates and the remaining look elsewhere to generate the requisite returns to make up deficits, this important source of domestic savings is likely to shrink leaving the UK much more vulnerable than ever to future downturns and creating a vicious circle.

The economic crisis is also likely to affect the behaviour of individuals in the future, with most changes geared towards raising disposable income. Many older workers can be expected to stay in the labour market for longer than they had previously planned even though it is by no means certain that all will get the employment opportunities they seek. For those who can stay or find employment, this will be an opportunity to boost income and savings ahead of retirement. It also means that the existing pension assets – for those on DC pension schemes – or other savings will have to last a shorter period of time. What these individuals cannot do though is to change their absolute lifetime savings to any substantial degree in these few years. It is possible that for many their savings will turn out to be inadequate.

…while households might opt out of Personal Accounts to boost disposable income…

Younger cohorts can also be expected to change their behaviours and not necessarily as hoped for by the government. As stated above, the government's flagship Personal Accounts scheme relies on individuals not to opt voluntarily out of the schemes they had automatically been enrolled into. Using insights gained from a relatively new discipline within the economic profession – behavioural economics – the government predicted that most individuals would show too much inertia to make the effort to opt out. It can be assumed though that the degree of inertia will also depend on what could be gained by acting/lost by not acting.

It remains to be seen in what financial circumstances households will find themselves after the recession. If the situation is adverse, then more individuals than predicted might make the effort and opt out of the Personal Accounts schemes in an effort to boost real disposable income, in turn to be used for consumption purposes (which might have had to be postponed during the recession) or to reduce further outstanding household debt.

…as the government raises taxes in an effort to bring down debt

The probability that working-age households might indeed behave in this way is raised by the fact that, as was discussed above, the government will have to increase the tax burden on households to reduce its own debt stock. Individuals might in their view reasonably conclude that after helping the government to pay off its own debt, that there is little left to save for retirement. Opting out then could be seen as an "easy" way out to "improve" the household finances in the short to medium term. In other words, it is possible that government saving (or more precisely reduction in net borrowing) could crowd out household savings so that the launch of Personal Accounts might not have the desired effect on national savings.

v. Concluding comments: towards a new pensions landscape (again)

While one does not have to be as pessimistic as Frank Field, Member of Parliament for the Labour Party and a former social security minister under Tony Blair, who thinks that: "*…things were so bad there could be riots in the streets…*"[47], in our view it is probable that the economic crisis will accelerate the process towards a new pensions landscape in which the state will take on explicitly a larger role in providing income to those in retirement.

One reason why this is likely the case is the gradual ageing of the UK population itself. While 43% of those eligible to vote were 50 years and over in 2006, official projections show this fraction to increase to 46% by 2016 and to nearly half by 2026.[48] Over the same period, the median age of those eligible to vote is projected to rise from around 45 years to around 48 years. While the actual population will probably look different in ten or 20 years' time than currently projected, one can be confident that the population will age. As such one can also be confident that issues of importance to older people (or to those who prepare for retirement) will increasingly move up the political and policy agenda. It doesn't need a lot of imagination to suggest that the future provision of pensions could be a decisive issue in a future general election.

What we do not know is how quickly and in which way this transition might happen. For example, a resurgence of house prices could (temporarily) reduce the pressure to reform as home owners once again feel that they have the financial assets to enjoy a good quality of life in retirement. A rebound in equity prices could do the same, giving important breathing space for sponsors and members of DB and DC pension schemes alike. What it would not do is to deal with the underlying issues in the provision of pensions in the UK identified in this paper.

Until the economic crisis erupted, the government was keen to keep the state's role in providing pensions limited. The UK prided itself for keeping future increases in state pension spending under tight control and was seen by some as a European role model in this regard. With the public finances deteriorating sharply as a result of the crisis, the government will if anything be even more reluctant to take on an ever greater responsibility in this area. However, with a large number of retirees and people approaching retirement age likely to be disappointed by their financial circumstances and the role of government in society changing as a result of the crisis, a future government might not have much choice but to accept a greater explicit role in providing pensioner incomes in the future. Rather, the choice appears to be between preparing for such an outcome in a measured fashion and reacting hurriedly to changing circumstances.

Faced with disappointing retirement income, an ageing population will most likely turn to the state to make up for any potential shortfall

In our view this situation should not only be seen as a challenge though but also as an opportunity. The crisis could be the trigger to create a more efficient, simpler and equitable system, which would give a larger part of society greater certainty with respect to planning for retirement and old age. Despite all its ambitions and other achievements, the Pensions Commission arguably fell short of fully achieving that. As part of such a transition, the allocation of risks associated with saving for retirement should also be reassessed and elements of the recent pension reforms scrutinised again. It is not clear to us that the current arrangements, which have shifted an ever greater part of the burden onto the individual, are efficient or equitable. It is outside the scope of this paper to develop any potential solutions; however, we intend to return to this in a subsequent paper. What is clear to us is that addressing such a complex problem will require a bold solution.

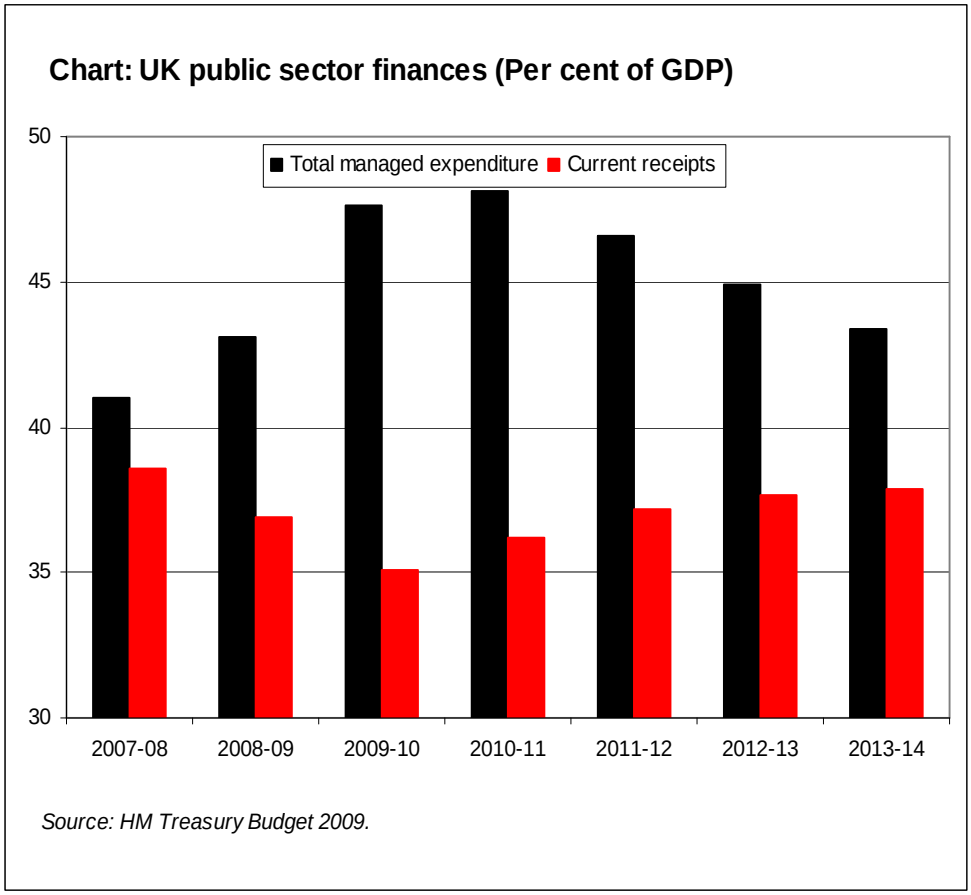
[47] *Rage against the pensions machine*, Adam Shaw, Financial Times 18/19 April 2009, Personal Finance Section, page 3.

[48] These figures are based on the Government Actuary's Department latest, 2006-based principal population projections for the UK. See www.gad.gov.uk.

Appendix A

The following chart shows the forecast evolution of total managed expenditure (current and capital spending) and current receipts, as a share of GDP, in the UK up to 2013-14. The sharp increase in total managed expenditure, as a share of GDP, between 2008-09 and 2009-10 is partly due to an actual increase in spending but also because GDP is forecast to fall. Both developments lead to an increase in the ratio. The increase in absolute spending, in turn, reflects the settlements of the 2007 Comprehensive Spending Review and discretionary measures launched since then to support the economy. On the receipts side, the decline reflects falling revenue across the board, including from income tax, value added tax and corporation tax.

The chart suggests that a future government, of whichever hue, will have to deal with both the spending and revenue sides of the public finances to return the budget onto a long-term sustainable path.



Source: HM Treasury Budget 2009.

Appendix B

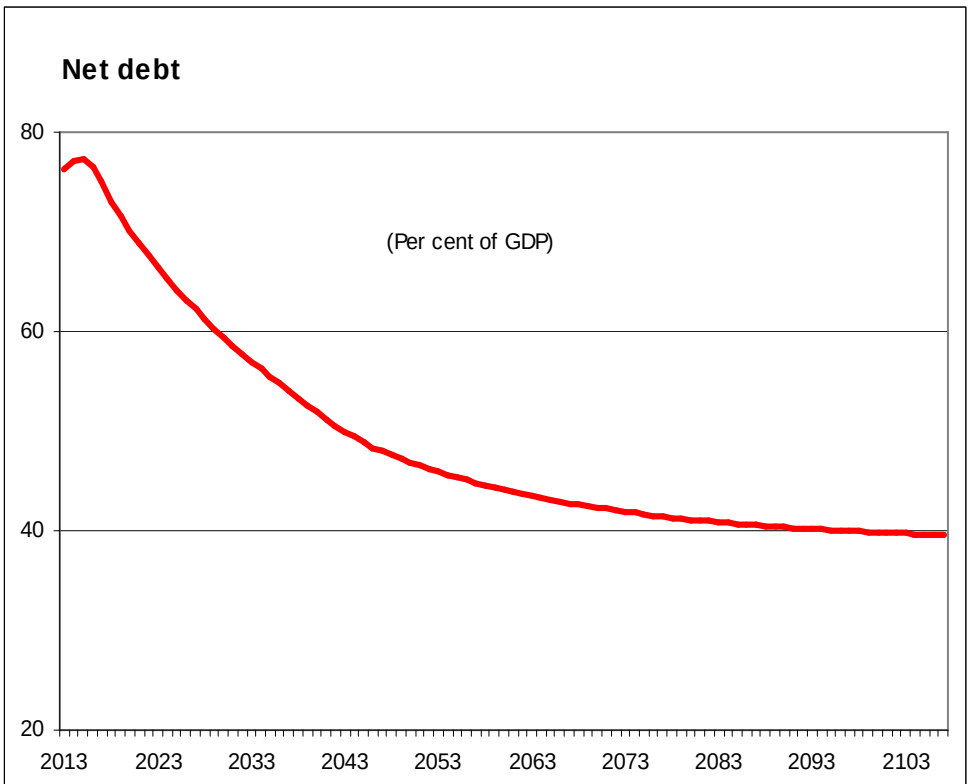
In its 2009 Green Budget presented in January 2009, the Institute for Fiscal Studies argued that it would take a generation for the net debt to GDP ratio to return to pre-crisis levels if the government locked in its medium-term fiscal stance over the long term. If anything, it will take longer than that.

The chart below shows the evolution of the net debt to GDP ratio using the fiscal position in 2013-14 and the following assumptions consistent with the announcements in HM Treasury's Budget 2009 that:

(a) the Government delivers a further consolidation of 0.8% of GDP a year in the cyclically-adjusted current budget beyond 2013-14 up to and including 2017-18; and
(b) real GDP growth averages 3¼% up to and including 2017-18.

Beyond 2017-18 it has been assumed that public sector net borrowing, as a share of GDP, will remain unchanged forever and that real GDP growth fluctuates between 2¼ to 2½% per year consistent with the latest published official long-term economic projections, presented in HM Treasury's 2008 *Long-term public finance report*.

The net debt projection is simplistic, not least because it does not pick up the fact that debt interest payments will fall as a share of GDP as the debt stock starts to decline as a share of GDP. Everything else equal, this would lead to an accelerated decline in the net debt to GDP ratio. However, the projection also does not capture the significant fiscal pressures, which are expected to arise from the ageing of the population. Even maintaining the fiscal stance as forecast for 2017-18 over the longer term will present major challenges.



Source: Authors' own calculations based on HM Treasury medium-term forecast as published in Budget 2009.

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Government Actuary's Department
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Pension Protection Fund

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About the authors

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

Dr Amarendra Swarup handles alternative investments at Pension Corporation and is also the Head of Risk Management for the company. He was previously at Altedge Capital, a AAA-rated hedge fund of funds based in London. Amarendra holds a PhD in Cosmology from Imperial College London and is a CAIA (Chartered Alternative Investment Analyst) charter-holder as well as a member of the CAIA Exam Council. He has written extensively for a wide range of media publications and academic journals. He is currently working with Bloomsbury Publishing to put together a comprehensive volume of essays on global finance.

Telephone + 44 (0)20 7105 2234
Email swarup@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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