Department for Work & Pensions

Security and Sustainability in Defined Benefit Pension Schemes

Presented to Parliament
by the Secretary of State for Work and Pensions
by Command of Her Majesty
February 2017

Cm 9412

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Ministerial foreword

The need to plan for retirement is something that affects nearly everyone in our society. We want to encourage more people to save for the retirement that they want to have, and to also feel a sense of ownership of their pensions. However, to do this people need confidence that the pensions system is working and that their hard-earned pension savings are protected.

In the private sector, Defined Benefit (DB) pension schemes provide an important source of income in the retirement plans of millions of people. Around £1.5 trillion is held under management by these schemes. They help to fuel the UK economy through investment in UK government bonds, corporate bonds and equities. The pensions provided by these schemes are on average £7,000 per annum, which can be a vital source of income for around 11 million members (current and future pensioners). The vast majority of nearly 6,000 DB pension schemes are run effectively and we are fortunate to have a robust and flexible system of pension protection in the UK. We recognise however that some people believe the system could be changed to deliver better outcomes or to increase confidence in pension saving.

We all have a responsibility to ensure the system works in the interests of everyone – employers, schemes and scheme members. This consultation is for all of those with an interest in effective, efficient and well-functioning DB schemes to reflect on the issues that the sector faces and to start an informed discussion on the best way forward.

This Green Paper sets out the evidence we have available about the key challenges facing DB pension schemes and highlights a number of options that have been suggested to us to improve confidence in the system. Through this Green Paper, we want to hear from as many people as possible. In order to ensure a balance between member protection, sustainability and affordability of these important pensions we want to continue the debate and to start building a consensus on what, if anything, we should do to further support the sector.

2017 is set to be a busy year in the world of pensions but by working together we can help to secure the retirement incomes of today's and future pensioners.

Damian Green

Secretary of State for Work and Pensions

Richard Harrington

Minister for Pensions

£1.5 trillion

is held under management of Defined Benefit schemes

Or roughly **3/4** of the annual GDP of the UK

Around 11 million members in Defined Benefit pension schemes

11 million

Decline in Defined Benefit schemes

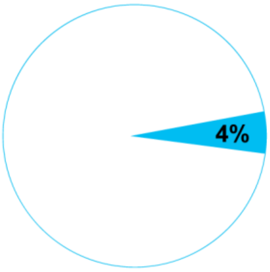
Active membership in last 10 years

DOWN 50+%

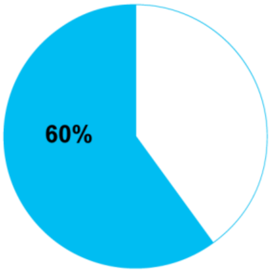
Open to new members

DOWN 13% in 2016

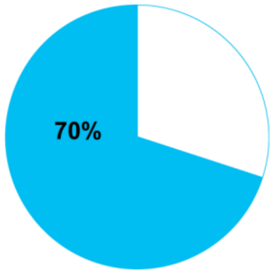
Most schemes are small, with only 4% with more than 10,000 members



These schemes hold over 60% of assets



And have around 70% of members in them*



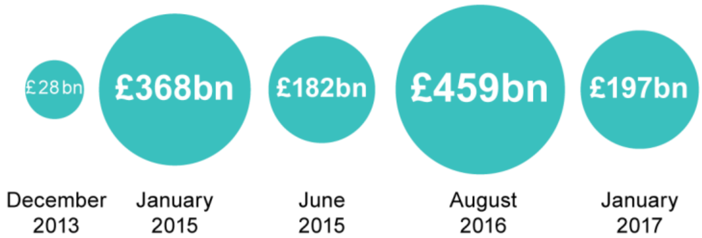
Average Defined Benefit scheme pension payment is £7,000 per annum

£7,000

Average** pensioner annual income is

£16,000

DB scheme deficit estimates vary over time



2016 saw the Pension Protection Fund make compensation payments of:

£616m

to circa **120,000** members

with an average compensation of

£4,000

per annum

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* Based on our indicative calculations based on the top 100 pension schemes

** average of state, Defined Benefit and Defined Contribution pensions

Note: figures as at the beginning of 2017

Executive Summary

In the private sector, Defined Benefit (DB) pension schemes provide an important source of income in the retirement plans of millions of people. Around £1.5 trillion is held under management by these schemes. They help to fuel the UK economy through investment in UK government bonds, corporate bonds and equities. The pensions provided by these schemes are on average a modest (just under £7,000 per annum) but nonetheless vital source of income for around 11 million members (current and future pensioners).

For those employers providing DB pensions and the trustees responsible for running these schemes, the years following the financial crash of 2008 have been particularly challenging, with record low interest and gilt rates driving up the cost of scheme liabilities compared to the increases in assets, thereby leading to increases in funding deficits.

News of these increased deficits, combined with a number of high profile cases during 2016, have led some commentators to declare that there is a fundamental problem with the funding and regulation of these schemes.

This Green Paper therefore explores those concerns and sets out the current key data available on the funding of these schemes and how they are regulated. Whilst recognising that the system may not be operating optimally in all areas, our main conclusion is that there is not a significant structural problem with the regulatory and legislative framework.

However this Green Paper draws together a number of suggestions from commentators (including the Work and Pensions Select Committee) on how the system could be changed to potentially deliver better outcomes. It seeks to identify where there may be particular problems or issues in order to start an informed discussion on the best way to improve the management and oversight of the risks inherent in providing DB pensions.

Background & Key Statistics

Whilst almost all DB schemes currently have a funding deficit, our modelling suggests that these deficits are likely to shrink for the majority of schemes if employers continue to pay into schemes at current/ promised levels.

The available evidence does not appear to support the view that these pensions are generally ‘unaffordable’ for employers. While DB pensions are more expensive than they were when they were originally set up, many employers could clear their pension deficit if required. There is also little evidence that scheme funding deficits are driving companies to insolvency, and it seems clear that the majority of employers should be able to continue to fund their schemes and manage the risk their schemes are running. The single biggest risk to the members of these schemes is the collapse of the sponsoring employer.

However, there are some employers who are finding that their pension scheme deficit is having a significant impact and where the level of Deficit Repair Contributions may become unsustainable.

Issues and Options

In considering the current position of these schemes and their sponsors, the Department for Work and Pensions undertook an informal consultation with a range of stakeholders in the summer of 2016. The overarching view of virtually all those contacted is that on the whole the regulatory regime for DB schemes is satisfactory and that the funding regime sets a fair balance between the interests of the members and those of the sponsoring employers. There was a clear view that experiences differ from scheme to scheme, that some schemes and employers are struggling, and that some changes may be beneficial. However there was no consensus on whether or how to adjust the current balance between protecting members and supporting employers.

We have examined the evidence and the various changes that have been suggested in four broad areas and discussed their pros and cons. These are:

- Funding and Investment;
- Employer Contributions and Affordability;
- Member Protection; and
- Consolidation of Schemes.

Funding and Investment

Some commentators believe that the current valuation and funding arrangements influence schemes to make overly cautious and short term investment decisions.

The UK DB funding regime is not designed to eliminate all risk to members' benefits. Rather it seeks to strike a reasonable balance between the demands on the employer and the security of member benefits, recognising that a strong, sustainable sponsoring employer is the best protection for a DB scheme.

We have suggested that more might be done by both government and those in the pensions industry to help people and commentators better understand scheme valuations and 'scheme deficits', in order to provide a better sense of the risks to members.

We have also considered comments made that schemes are not using the available flexibilities when deciding what assumptions to use about future investment growth, and that this is leading to scheme deficits being overstated. Our conclusion is that it is not clear that in general discount rates being used are overly pessimistic, and that there is not strong evidence to demonstrate a systemic issue with the current flexibilities available.

In considering DB scheme investment strategies and asset classes, we would like to explore whether there is scope to encourage or facilitate some schemes to make more optimal investment decisions, and to mitigate any barriers to the greater use of alternative asset classes.

On the issue of the quality of scheme trustees' investment decision making, we do not feel that there is sufficient evidence on which any firm conclusions can be reached, and therefore intend to commission further research on this and to further investigate the factors that influence investment strategies and the choice of asset classes.

Employer Contributions and Affordability

We are not persuaded that there is a general 'affordability' problem for the majority of employers running a DB scheme. Consequently, we do not agree that across the board action is needed to transfer more risk to members, or indeed to reduce members' benefits in order to relieve financial pressure on employers.

However, we do recognise that there are some companies who are paying very substantial Deficit Repair Contributions which may not be sustainable in the long term. We have therefore considered what might be done for these 'stressed' schemes and their sponsoring employers, and the difficulties in doing so.

A number of people have put forward options including allowing a struggling business to more easily separate from their pension scheme, renegotiating benefits, providing more intensive support from the Pensions Regulator and enhancing the powers of the Regulator so that it could separate the scheme from the employer or wind up the scheme in specific circumstances.

All of these options have significant drawbacks and could raise 'moral hazard' issues, where sponsors might be tempted to look to reduce their liabilities by taking advantage of any easement available for 'stressed' schemes or employers.

We are therefore keen to receive as much feedback on this area and these options as possible.

Member Protection

Protecting members' interests is at the heart of our policy. The Regulator exists to ensure that members are protected. Many commentators have argued that its powers should be extended.

We have examined a number of options put forward to us covering scheme funding, corporate restructuring and information gathering powers, although in taking forward any changes to existing powers, we would need to be certain that any new powers are proportionate, and take into account the impact on the Regulator's resources and the levy on pension schemes which funds its activities.

The paper considers whether the Regulator should take a more proactive role in scheme funding and be more explicit about the level of risk it is appropriate for a scheme to take. On the issue of corporate restructuring, it has been suggested that the Regulator would be more effective if it had powers to act proactively in order to prevent certain corporate activities. Our view is that a blanket requirement on parties to obtain clearance from the Regulator ahead of any planned corporate actions would be disproportionate. We have, however, considered the case for the Regulator to have a clearance regime in certain specified circumstances, although we note the very significant difficulties that would need to be overcome before such an approach could be considered. It would need to be very narrowly limited to avoid potentially significant disadvantages to business, and a high threshold would need to be set for the circumstances where seeking clearance would be required.

In looking at current information gathering powers, options for change include the creation of a duty, applicable to all parties responsible for a scheme, to co-operate with the Regulator, and providing the Regulator with a power to interview relevant parties supported by a sanction for non-compliance.

Consolidation of Schemes

The final section of this paper considers the issue of scheme consolidation. Most DB schemes are small, and the data suggests that small schemes have higher administrative costs, are unable to benefit from the economies of scale available to larger schemes, and tend to have less effective governance.

This section considers the arguments for and against the aggregation of smaller schemes into one or more consolidation vehicles in order to reduce costs, improve investment options and governance. A number of consolidation models and their pros and cons are considered, together with the question of whether a move to greater consolidation should be a voluntary or compulsory act and, if a compulsory approach were taken, how this might work.

Our view is that there appears to be a strong case supporting greater voluntary consolidation. Some commentators have argued that, in certain circumstances, schemes might be required to consolidate, but we are not convinced that compulsion would be a proportionate response.

In considering the design of "Superfund" consolidation vehicles, one option raised is for government to design and run them through an arms length body. We have considered the case for and against this approach, and have concluded that it would not be appropriate to take this option forward, but we have asked whether it would be appropriate for government to provide some structures or incentives to encourage the pensions industry to innovate and to provide new consolidation vehicles.

Your Views

This Green Paper seeks the views of as wide a range of people and organisations with an interest in private sector DB pension schemes as possible. This includes members of these schemes, scheme trustees, sponsoring employers and scheme professionals. When responding please state whether you are responding as an individual or representing the views of an organisation. If you are responding on behalf of an organisation, please make it clear who the organisation represents and, where applicable, how the views of members were assembled. The aim is to enable everyone to be able to examine the available evidence, and to make their views known, in order to foster an informed debate and to see if there is any consensus on what, if any, changes to the legislation or regulation governing these schemes may be needed.

Please let us know what you think, providing any evidence that you may have that support your views or comments, so that we can consider the issues raised in this Green Paper. You can respond to this consultation via www.gov.uk/government/publications, email us at defined.benefit@dwp.gsi.gov.uk or write to us at DB consultation, Private Pensions, 1st Floor, Caxton House, 6–12 Tothill Street, London, SW1H 9NA. The consultation will run until 14 May 2017.

Part 1: Introduction

Purpose of the paper

1. In the private sector, Defined Benefit (DB) pension schemes provide an important source of income in the retirement plans of millions of people. Around £1.5 trillion is held under management by these schemes. They help with fuelling the UK economy through investment in UK government bonds, corporate bonds and equities. The pensions provided by these schemes are on average a modest (just under £7,000 per annum[1]) but nonetheless vital source of income for around 11 million current and future pensioners.
2. However, membership of private sector DB schemes amongst the working age population has been in steady decline for a number of years, with a marked decline since the turn of the millennium. Over the last ten years the number of active memberships has declined by more than 50% and the proportion of DB schemes that are open to new members fell from 35% in 2006 to 13% in 2016.[2]
3. The financial crash of 2008 has had an enduring effect on many aspects of the economy and in particular those activities, including pension funds, which are sensitive to fluctuations in the financial markets. Record low interest rates and reduced expectations for future investment returns have driven up estimates of deficits in DB pension funds. The impact of bond market movements has increased scheme liabilities more than their assets.
4. This has led to a number of commentators to declare that there is a fundamental problem with DB schemes. The Government understands people's concerns; however, it does not recognise this view of the pensions system. It is clear that a significant minority of employers are struggling to meet their obligations to their DB schemes, and some will indeed suffer insolvencies resulting in schemes being transferred into the Pension Protection Fund (PPF). However that is exactly why the PPF was set up, and it will effectively minimise potential losses to members. We also expect the vast majority of members to receive their benefits in full.
5. We do however, recognise the concerns that have been expressed, and think that now is the right time to ask questions about whether more could be done to help the sector to operate more efficiently, and to help to minimise burdens on employers and losses to individuals as much as possible. There is of course a potential tension between these objectives, and we need to strike a suitable balance.
6. For some, confidence in the UK pension protection framework is being undermined. A key question therefore is to understand what is driving this lack of confidence and what can be done to restore confidence in a system which has served most members well for a number of decades.
7. This Green Paper explores the issues facing DB pension schemes and aims to:
   - explore the strength and flexibility of the current system and the nature and size of potential risks to the retirement plans of scheme members, and the sustainability of the burden of costs falling to sponsoring employers;
   - identify anomalies or issues which undermine confidence and explore possible solutions to deal with these issues; and

1 PLSA, *Annual Survey*, 2015. Median average annual (nominal) pension, private sector.
2 PPF, *The Purple Book*, 2016 (note: excludes hybrid schemes).

- assess the risks and uncertainties inherent in any attempt to provide security to members over the very long term.

8. It invites a conversation on these issues. How can we assure up to 11 million people that their future benefits are secure? How can employers and trustees do the best for those 11 million people, while employers grow their business and look to the future?
9. We recognise our equality duties when considering any policy proposals. We would welcome any thoughts or information about what impact any potential proposals might have in relation to equality.
10. This paper and the consultation relates only to private sector DB schemes and is not concerned with other types of pension provision, such as public service pension schemes, usually set up under statute (and which have been subject to significant reform in recent years) or Defined Contribution (DC) schemes where there is no promised level of benefit in retirement. Throughout, references to 'DB schemes' should be read as such.

Who is it aimed at?

11. We are seeking the views of everyone who has a stake in the efficient operation of DB schemes and their sponsoring employers. **We are particularly keen to hear directly from members of DB pension schemes along with employers, trustees and pensions professionals.**

Why are we consulting?

12. DB pension schemes are an important pillar of the UK economy and pensions system. In order to generate the funds to pay the pensions of retired workers, around £1.5 trillion is invested by nearly 6,000 schemes. The average DB pension in payment is a little under £7,000 per annum, which is equal to around a quarter of the median gross earnings of full time employees in the UK.[3]
13. DB pension schemes are funded through contributions from both employers and (normally) active members of the scheme, and the returns from investing these contributions. The employer meets the balance of the cost for the scheme and therefore where the assets are forecast to be insufficient to provide for the total liabilities associated with the promised benefits, additional contributions from sponsoring employers are required.
14. Many DB schemes were set up at a time when life expectancy was significantly shorter, people moved jobs less often and there was less uncertainty over the long term economic outlook (and therefore investment returns).
15. Some commentators have suggested that these pension promises were originally made by employers on a 'best endeavours' basis, meaning that payment of the pension benefits accrued should not be taken as a firm commitment regardless of the circumstances in which employers may find themselves in the future. They argue that subsequent legal challenge and Government regulation have had the effect of providing greater security and benefit provision for members of these schemes, but at a greater cost to the sponsoring employer. They imply that Government should consider easing the resulting burden of the promises.
16. On the other hand, the Government believes that it is right that members should be afforded meaningful protection. Pensions are deferred pay, for which members have worked, and it is critical that the interests of current and future pensioners are given appropriate protection as we seek to balance the interests of the various interested parties.
17. The central challenge for all DB schemes is how best to provide a high degree of security in income, in a world where nothing can be certain or guaranteed. How do you put enough money aside to pay

[3] ONS, *Annual Survey of Hours and Earnings (ASHE)*, 2016 provisional results: in April 2016 median gross weekly earnings for full time employees were £539; multiplying this by 52 gives approx. £28,000 per annum.

someone a pension when you cannot be sure how long that person will live? Or when you cannot be sure what inflation is going to be or how investments will grow?

18. Managing a pension fund is, therefore, all about understanding and managing risk and uncertainty. Pension schemes face fundamental uncertainties and the highest of expectations, knowing that if things go wrong, the consequences can be catastrophic for the individuals who rely on them.

19. In the main, pension schemes do a very good job of understanding and managing the risks they face. However the global financial crisis seems to have resulted in more fragile investor confidence. The number of DB schemes forecast to be in deficit has risen, and the aggregate deficit (on a s179 basis[4]) across DB pensions stood at around £196.5 billion at the end of January 2017.[5]

20. Recent high profile cases, although exceptional, have served to demonstrate the impact of deficits at either the time an employer fails, or at a time when a business needs to undergo restructuring to survive. These cases have raised public awareness of the risks to the security of pension entitlement and led to an inquiry by The Work and Pensions Select Committee into the Pension Protection Fund[6] (PPF) and the Pensions Regulator in respect of which a Report was published in December 2016.[7]

21. Wider concerns have been expressed by industry commentators about the level of deficits and what that could mean for employers' ability to invest in and grow their business, and the consequent risks to members' benefits. The Pensions and Lifetime Savings Association (PLSA) are carrying out their own investigation and published an interim report[8] at the end of October 2016 setting out their findings on the sustainability of the current system.

22. A number of commentators have suggested it is not fair to preserve the current level of benefits payable to retired, or older workers in DB schemes when their younger colleagues are unlikely to enjoy the same level of benefits themselves when they retire. Some go further and argue that the increasing costs to employers of meeting their DB pension pledges is crowding out investment in jobs, wages, and dividends and affecting employers' ability to contribute adequately to the pension pots of predominantly younger workers in DC pension arrangements.

23. The counter argument, which others have set out, is that there is no evidence that DB costs are impacting on investment or the provision of wages or pensions for younger workers.

24. The Government believes it is right to examine the evidence in detail and evaluate those arguments. Given the need for clarity and certainty for sponsors and members of schemes, changes to pensions should be subject to a thorough test to ensure that the case for change is well made and that consequences are explored and understood.

25. How DB pensions are funded and how members' benefits are protected are important issues for millions of current and future pensioners, for thousands of businesses, and for the wider economy. The issues can be very emotive: members of schemes work for a promised pension as a form of deferred pay and the pension promise was used by employers as an incentive to recruit and retain a motivated workforce. However, there has been significant change since the majority of these schemes were set up: increased life expectancy, increasing economic uncertainty and a more pessimistic outlook for future investment returns from most asset classes. These changes have left some businesses struggling to make good on promises made in a different environment.

4 For an explanation of the different funding bases please see the section on Valuation Approaches in Part four (Paragraph 147 et seq.)

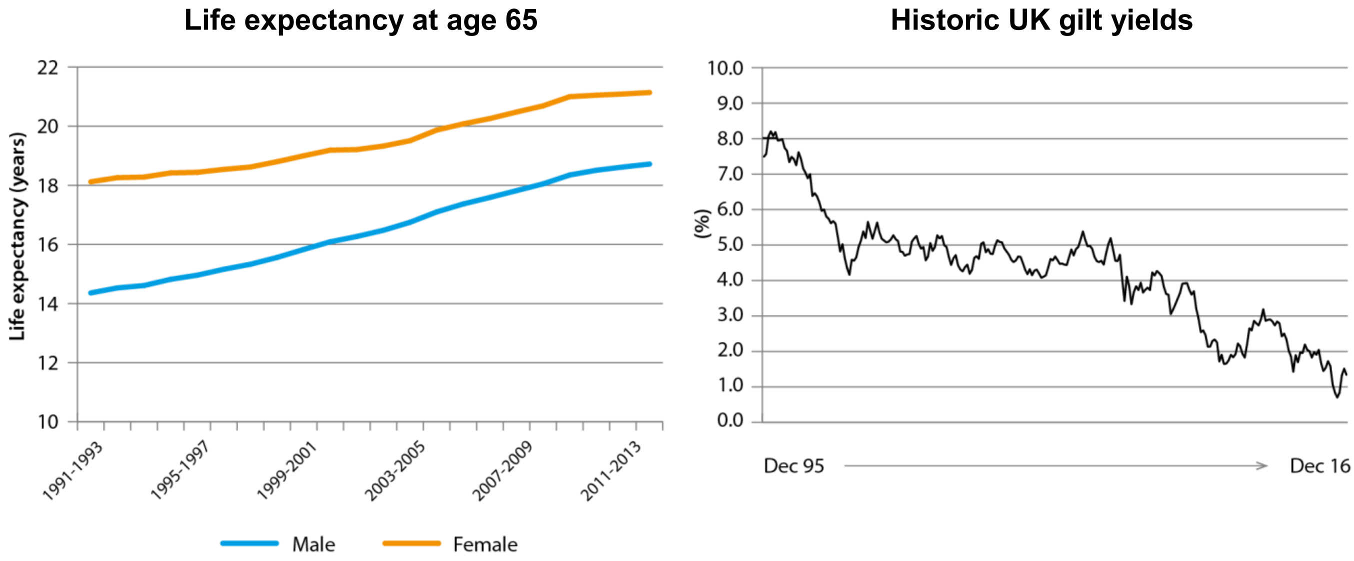
5 PPF, *PPF 7800 Index*. Available at: http://www.pensionprotectionfund.org.uk/Pages/PPF7800.aspx. See Annex 1

6 PPF, *Work and Pensions Select Committee written evidence*, 2016. Available at: http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/work-and-pensions-committee/pension-protection-fund-and-the-pensions-regulator/written/32928.html

7 PPF, *Work and Pensions Select Committee written evidence*, 2016. Available at: http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/work-and-pensions-committee/pension-protection-fund-and-the-pensions-regulator/written/33101.html

8 PLSA, *DB Taskforce*. Available at: http://www.plsa.co.uk/PolicyandResearch/DB/DBTaskforce.aspx

Figure 1: Social and economic environment – now and twenty years ago.



Sources: Life Expectancy data from ONS[9], gilt yields from BoE Yield Curves datasets (nominal, spot rate, 10 years maturity).

26. This document explains how the current DB pension system operates and is funded, and the mechanisms in place to regulate it. It also explores the evidence around the funding of DB schemes, looks critically at a range of issues that have been raised by high profile cases, and by industry commentators lobbying for changes.

27. Its purpose is to set out the Government's views on these issues, and to begin a conversation about the best way to approach the management of risks inherent in long term pension provision. It explores whether there are ways that we can build on existing provision to protect members, while helping employers grow and succeed, and to meet the promises they have made.

[9] ONS, *Life expectancy at Birth and at Age 65 by local Areas in England and Wales,* 2015. Available at: Link:https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/lifeexpectancyatbirthandatage65bylocalareasinenglandandwalesreferencetable1

Part 2: Defined Benefit schemes and their protection and regulation

Fundamental principles of Defined Benefit schemes

28. Generally speaking workplace pension schemes can be divided into two different types:
    - **Defined Benefit (DB)** – where the scheme promises to pay a pre-determined amount of pension to its members based on their salary and years of contribution, independent of investment returns; and
    - **Defined Contribution (DC)** – where the individual and (often) their employers contribute into a pension pot, and the amount of pension the members receive depends on how much money has been paid into the pot and its investment returns.
29. A DB scheme commits to providing a pension based on a pre-determined formula. There are a number of different ways in which the pension can be defined. A number of schemes are based on the member's final salary at the end of their working life or when they leave employment. Others operate on a career average basis, where the pension promised is based on the average wage over the member's time of employment, generally revalued in line with inflation.
30. With the exception of schemes set up under statute,[10] the vast majority of occupational pension DB schemes are set up under trust. This means the scheme is run by a group of trustees who manage the assets of the pension scheme and have a duty to act in scheme members' collective best interests. They must run the scheme in accordance with the trust deed and scheme rules and overriding legislation. Together, these define matters such as the age at which a person can take their pension and the method of calculating the pension payable. Generally, the scheme rules would also define when, how and by whom the scheme rules could be changed.
31. Over time, the Government has set certain minimum requirements for benefit structures, such as compulsory revaluation and indexation:
    - revaluation is a measure of inflation protection applied to deferred pensions such that the pension earned up to the point the member left the scheme is increased, to reflect some or all the movement in prices in the period up to retirement;
    - indexation is a measure of inflation protection of pensions in payment by increasing pensions each year, to reflect some or all of the movement in prices over the past year. It can also be at a fixed rate set out in the rules of the scheme.
32. In addition, schemes have been subject to tax requirements, such as how early a member can take their pension and there are strict requirements on sponsors who wish to separate themselves from their scheme.

Scheme liabilities

33. Scheme liabilities represent the value of future pension entitlements which have been built up over time by members of the scheme. DB schemes provide members with a good indication of what

[10] usually public sector or ex-public sector organisations

benefits they can expect to get and when. However, it also means that the scheme (and the sponsoring employer) is locked into funding pensions due many years ahead.

34. Scheme liabilities are often expressed in terms of “Present Value” (PV). PV is the sum of money needed now, which, invested over the duration of the scheme’s pensions commitments, is expected to be sufficient to pay out all the pensions promised. Throughout this paper, references to DB schemes’ liabilities should be read as such.

Scheme assets

35. Contributions are paid to schemes by sponsoring employers and, in most cases, active employees who are in the scheme. Schemes invest the contributions into a fund to generate investment returns for the future – the fund is the scheme’s assets. The scheme trustees must produce and maintain a statement of investment principles for a DB scheme, which covers investment choices, risk management and measurement, the expected returns on investment and other key principles of the scheme.

36. Scheme deficit is the shortfall in the value of the scheme’s assets compared to its liabilities.

Scheme funding

37. Schemes must have sufficient assets to pay out pensions whenever they are due. Holding assets to provide for future payments allows pension commitments to be managed in a prudent and structured manner, benefiting from returns on investments made specifically for the purposes of meeting pensions liabilities. Also, in the absence of suitable funding of the scheme, members would be left very exposed to the risk of losing (part of) their pensions if the sponsoring company becomes insolvent.

38. Therefore, the law requires trust-based occupational schemes to be funded. Money paid into a scheme by employers and employees cannot generally be used by the employer for other purposes.[11] The employer is the guarantor of last resort and will need to pay higher contributions than planned if the fund is deemed insufficient to cover the scheme’s liabilities.

39. The law does not, however, require all schemes to be ‘fully’ funded at all times; nor does it require the level of funding to be such that the scheme is able to secure all of their liabilities at that point in time with an insurance company in what is known as a “buy-out”. Requiring this would reduce the risk to members but would be much more expensive for employers and, for many schemes, would be unnecessary. Rather there is a scheme specific valuation regime, which takes account of a range of scheme specific circumstances, such as the likelihood of the sponsoring employer being able to support the scheme in the future. It requires a scheme to have sufficient and appropriate assets to cover its Technical Provisions - the actuarial calculation of the liabilities of the scheme. However, where there is a funding deficit, the trustees must put in place a recovery plan, so that the scheme can be expected to return to being “fully” funded within an acceptable timeframe.

40. The legislative framework therefore allows for flexibility in how trustees and employers meet their funding requirements, subject to the high level principles set out in legislation. However, as this does not require full funding at a buy-out level, this leaves a risk that the employer becomes insolvent, with insufficient assets in the scheme or passing to the scheme from the insolvency process to enable all the benefits to be secured with an insurance company.

41. The legislative and regulatory regime of DB pensions is intended to ensure an appropriate balance between the needs of the sponsoring employer to operate and grow its business, protecting the security of members’ benefits, and to protect the Pension Protection Fund (PPF). We consider this balance – including the role of the Pensions Regulator (‘the Regulator’) and the PPF - in detail in the next sections.

[11] although the law does allow a scheme to make a payment to an employer in very limited circumstances

Protection and regulation

Trustees

42. Occupational pension schemes are set up under trust and are therefore legally separate from the sponsoring employer. Trustees are ultimately responsible for running the scheme, including the decisions around scheme funding, recovery plans (which must be agreed by sponsors in the vast majority of cases), investment choices, and the assumptions to be used to calculate scheme liabilities.

43. Trustees are very much the "first line of defence" for scheme members and have a fiduciary duty to act in the best interests of all members of the scheme. When investing their scheme's assets they must also comply with any requirements imposed by their scheme's trust deed and rules as well as with legislative requirements. To satisfy these requirements, trustees are required to take expert advice. Often functions such as day-to-day administration will be delegated to third parties. In addition, there are requirements to appoint an independent actuary to be the scheme actuary to ensure trustees get expert advice on funding, and also to appoint an auditor to ensure accounts and financial statements are audited. Trustees must appoint other advisors where necessary - for example, legal, investment and covenant advisors - to ensure they continue to meet their obligations.

44. Although the trustees are not expected to be experts in all matters relating to the DB scheme, they are required by law to maintain sufficient knowledge and understanding to be able to carry out their functions, and in particular:
    - to understand fully any advice they are given;
    - to challenge that advice if it seems sensible to do so; and
    - to be able to participate fully in all decision making processes.

45. There is a requirement that at least one third of the trustees are nominated by the scheme membership. Trustees need to be mindful at all times of the capacity in which they are operating and the potential conflicts of interest that can arise in the performance of their duties. For example, trustees who are directors or senior employees of the sponsoring company, or even trade union representatives, all potentially have conflicts of interest that need to be managed.

46. The independent Pensions Regulator provides guidance and support to both trustees and employers to help them understand their duties. Its statutory objectives include:
    - to protect the benefits of members of work based pension schemes;
    - to reduce the risk of situations arising that may lead to claims for compensation from the PPF; and
    - to minimise any adverse impact on the sustainable growth of an employer when undertaking its scheme-funding related functions.

47. In order to meet these objectives, the Regulator has a range of powers to intervene where it has concerns about a funding plan or where an employer is seeking to walk away from its pension promises.

48. Where a scheme's sponsoring employer becomes insolvent the scheme is required to wind-up and buy-out benefits with an insurance company, providing ongoing security for members' benefits. Where there is a deficit, the scheme may have insufficient assets to buy-out member benefits in full. In such circumstances the PPF may provide compensation to members if the scheme cannot afford to secure a level of benefits at least equal to the level of compensation the PPF would provide. In addition, the PPF administers the Financial Assistance Scheme (FAS), for members of underfunded schemes that started to wind-up between 1 January 1997 and 5 April 2005, and the Fraud

Compensation Fund (FCF), which may offer compensation for losses to the scheme due to dishonesty under certain circumstances.

The Pensions Regulator

The Regulator's approach to scheme funding

49. The Regulator is focussed on enabling and educating trustees and employers about their duties, for example by providing trustees with Codes of Practice to help them comply with their legal responsibilities. This is supplemented with a range of supporting guidance, statements and other educational tools relating to scheme funding. The Regulator also publishes regulatory intervention reports, known as Section 89 reports, which demonstrates its considerations in particular cases.

50. The Regulator's guides cover subjects such as how to adopt an Integrated Risk Management approach to scheme funding and assessing and monitoring the willingness and ability of the employer to back the scheme (the employer's covenant). In particular, the guidance highlights the importance of trustees understanding the scheme's exposure to:

    - risk across employer covenant, investment and funding, and having in place a risk management strategy that is integrated across these areas;
    - trustees having a good understanding of the employer's financial position and growth plans (including how these enhance the employer covenant, or indeed otherwise); and
    - trustees and employers using the flexibilities in the funding regime and working together to increase the likelihood of reaching an appropriate scheme funding outcome.

51. The guidance clarifies that trustees may take some risk in achieving their objectives while stressing that they should understand and manage that risk effectively.

52. The past two years have seen a number of new or updated publications from the Regulator to help trustees and employers to understand the funding and regulatory regime, and to manage the potential impact of the challenging economic conditions on scheme funding. To address concerns by sections of British industry, the Pensions Act 2014 extended the Regulator's objectives to include minimising any adverse impact of the scheme funding regime on the sustainable growth of an employer. The Regulator updated its scheme funding code of practice issued in July 2014. Alongside the Code, the Regulator issued its DB regulatory and enforcement strategy, setting out how the Regulator was incorporating the new objective into its regulatory approach. This strategy sets out the Regulator's approach to balancing its statutory objectives and protecting the accrued rights of members.

53. To provide topical guidance for schemes about to undertake their valuations the Regulator publishes Annual Funding Statements which seeks to strike the right balance between protection and sustainable growth. Most recently, this includes the guidance referred to above on monitoring employer support and adopting an Integrated Risk Management approach to scheme funding, emphasising the need to take a long term view. These publications have been welcomed by trustees and employers, but given that formal scheme funding valuations take place every three years, the Government and the Regulator recognise that new guidance takes time to bed-in across the DB landscape.

The Pension Protection Fund

54. Despite the efforts of trustees, employer sponsors and the Regulator there will always be situations where an employer, because of insolvency, is unable to provide its scheme with enough money to fully buy-out the scheme benefits. This is why the PPF exists. It pays compensation to those DB pension scheme members whose sponsoring employer has become insolvent and where the scheme is unable to secure benefits at least equal to the level of compensation the PPF provides.
55. Before the introduction of the PPF, when a scheme wound up underfunded, the remaining assets were shared out according to a priority order, which required pensions in payment to be covered first. In many cases, this meant non-pensioners got very little of their accrued rights covered. Alongside changes to the priority order on wind-up, the PPF was designed to produce a fairer outcome across members and ensure a substantial safety net was in place, placing a floor under the losses members could experience.
56. Where a company becomes insolvent, the scheme moves into what is known as a PPF assessment period. During this time the scheme pays benefits limited to PPF compensation levels and a valuation is undertaken to see if the scheme can buy annuities for members which would pay them at least PPF compensation level pensions. If they can, they exit the PPF assessment period and look to buy-out benefits with an insurer. If they cannot the PPF takes on the assets of the scheme and pays compensation to members.
57. PPF compensation is based on the member's pension or accrued benefits, at:
    - 100% for anyone who was over the scheme's normal pension age at the date of employer insolvency or who was paid their pension on the grounds of ill health, or who was in receipt of a spouse/dependant's pension; and
    - 90% for everyone else, subject to a cap (which currently produces maximum compensation of £33,678 a year at age 65).
58. The inflation protection given to PPF compensation may be less generous than the level which would have been provided by the scheme.
59. To ensure efficient operation and control costs the PPF compensation rules are based on straightforward facts, such as the date of insolvency, the member's age and standard rules on revaluation and indexation. This avoids the complexity (and resulting costs) that could arise from trying to replicate each scheme's rules, including those which allow for discretionary payments.
60. The PPF has four sources of income and funding:
    - assets of schemes which enter the PPF;
    - investment returns;
    - recoveries from insolvent employers; and
    - a levy on ongoing schemes.
61. The levy calculation for each scheme reflects the risk that the scheme poses to the PPF. It takes into account the chances of the scheme having to enter the PPF following employer insolvency, and the size of the deficit the PPF would inherit.

Regulator powers

62. As discussed above, the Regulator will always try to help trustees fulfil their duties through education and support. However they do have a range of powers to intervene in the running of a DB scheme where this approach is not sufficient or not appropriate, and will enforce the law where necessary.

63. In extreme cases, the Regulator can intervene to change the accrual of future benefits, to set scheme liability valuation assumptions or to require the employer to pay a particular schedule of contributions. The circumstances where the Regulator can do this are set out in legislation – for example, where the trustees and employer have failed to reach agreement on a recovery plan within 15 months of the valuation date.

64. The Regulator also has powers to intervene where there is evidence of a breach of law or where actions are unreasonable or disproportionate.

65. The Regulator most often comes to public attention when a scheme is at risk of entering the PPF. This is usually where a company either becomes insolvent or is close to being so, but there have been occasions where an ongoing employer has sought to extract itself from its pension obligations without appropriate mitigation.

66. The Regulator's anti-avoidance provisions[12] were (in part) introduced to prevent parties from taking action designed to avoid funding a deficit and passing the liability on to the PPF. The Regulator's main anti-avoidance powers are:

    - **Contribution Notices:** These allow the Regulator to direct that where a corporate transaction results in an attempt to avoid their liabilities to the scheme or where an act or a failure to act results in material detriment to the likelihood of the scheme being able to pay full benefits, those involved must pay a specified amount to the scheme or, if the scheme has transferred to the PPF, to the PPF; and

    - **Financial Support Directions:** These require financial support to be put in place for an underfunded scheme where the Regulator concludes that the pension liabilities of one company within a group should be guaranteed or otherwise supported by an associated or connected entity.

67. Where a company with a DB scheme is proposing to restructure itself or to sell a part of its business, the sponsor can request the Regulator to provide clearance. This is a voluntary process whereby a clearance statement gives assurance that, based on the information provided, the Regulator will not use its anti-avoidance powers to issue to the applicants either contribution notices or financial support directions in relation to a DB scheme and a particular event. This process ("voluntary clearance") was developed to create greater certainty around decision making for business, as it basically informs the relevant parties as to whether the Regulator would consider a proposed act as an attempt to avoid responsibilities towards the pension scheme.

68. Even if a company decides not to use the voluntary clearance process, the Regulator is usually made aware of significant events which could have an effect on the pension scheme, particularly through the notifiable events and whistle blowing requirements.

69. The **notifiable events framework**[13] places a duty on the trustees of schemes and their sponsoring employers to notify the Regulator when certain events occur. For example, a decision by the employer to cease to carry on business in the United Kingdom, or a decision by a controlling company to relinquish control of the employer company.

[12] section 38 to 56 of the Pensions Act 2004
[13] regulations made under section 69 of the Pensions Act 2004 set out which events have to be notified.

70. The framework is intended to provide a warning of possible avoidance or insolvency related to underfunded DB schemes, giving the Regulator the opportunity to assist or to intervene. A failure to report a notifiable event to the Regulator is subject to a civil penalty.

71. The duty to report breaches of the law – whistleblowing[14] – applies to those involved in running pension schemes, and covers breaches in certain circumstances of any legislation or rule of law concerning the administration of pension schemes.

72. In order for the Regulator to use its anti-avoidance powers it gathers all the relevant evidence to enable an informed decision to be reached and must follow due process. There is a right of appeal to the Upper Tribunal which is headed by a High Court judge.

Regulated apportionment arrangements

73. A regulated apportionment arrangement (RAA) is available in situations where the trustees believe that insolvency of a company is likely and the company is proposing to avoid this by either re-structuring or selling the company to another, but needs to discard its liabilities (including its pensions liabilities) in order to achieve this end. The controversy normally arises because what is seen is that a company continues to trade, but the pension scheme has moved into a PPF assessment period, with all that this means for the members.

74. A regulated apportionment arrangement is not an express power of the Regulator but does require the Regulator's approval. It will only consider agreement if it believes it is reasonable to do so, and the PPF confirms it has no objection. During the approval process, the Regulator will consider whether:

- employer insolvency is otherwise inevitable;
- there are other solutions (including funding options for the scheme) that would avoid insolvency;
- the scheme might receive more from an insolvency;
- a better outcome might otherwise be attained for the scheme by other means (including through the use of the Regulator's powers where relevant);
- the position of the rest of the employer group; and
- the outcome of the proposals for other creditors.

75. The PPF's criteria for non-objection can be found in their guidance for restructuring and insolvency professionals.[15]

[14] under section 70 of the Pensions Act 2004

[15] PPF, *Insolvency Guidance.* Available at: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/insolvency_guidance.pdf

Part 3: Defined Benefits – the evidence

Defined Benefit landscape

76. This section sets out some key statistics – for the purposes of setting the background before going into more specific topics later in this section and in Part Four.

77. According to the latest Purple Book,[16] there are 5,794 DB schemes (as at March 2016). Only approx. 4% of them have more than 10,000 members; however, the schemes with more than 10,000 members hold over 60% of the total assets held by DB schemes – more details are set out in Table 1 below.

Table 1: Members and assets in DB schemes.

Number of members	Fewer than 100	100-999	1000-4,999	5,000-9,999	10,000+	Total
Number of schemes[17]	2,056	2,563	783	184	208	**5,794**
No. of schemes as % of total schemes	35%	44%	14%	3%	4%	100%
Assets held, £ billion	14.2	115.9	209.8	164.5	837.0	**1,341.4**
Assets held as % of total assets	1%	9%	16%	12%	62%	100%
Liabilities (s179 basis[18]), £ billion	15	140	257	190	961	1,563
Liabilities (s179 basis), as % of total liabilities	1%	9%	16%	12%	62%	100%

Source: Purple Book 2016.

78. Most schemes are relatively small in terms of number of members and assets, and the vast majority of assets and liabilities are in the minority of very big schemes. The total amount of assets held by DB schemes is huge – around £1.5 trillion.[19] It is roughly three quarters of the annual Gross Domestic Product (GDP) of the UK.[20]

79. In total, the DB schemes have about 11 million members (current and future pensioners), although some individuals may be members of more than one scheme. Of the 11 million, 40% (approximately 4.5 million) are pensioners and the remaining are future pensioners – see Figure 2 overleaf.

[16] PPF, *Purple Book*, 2016

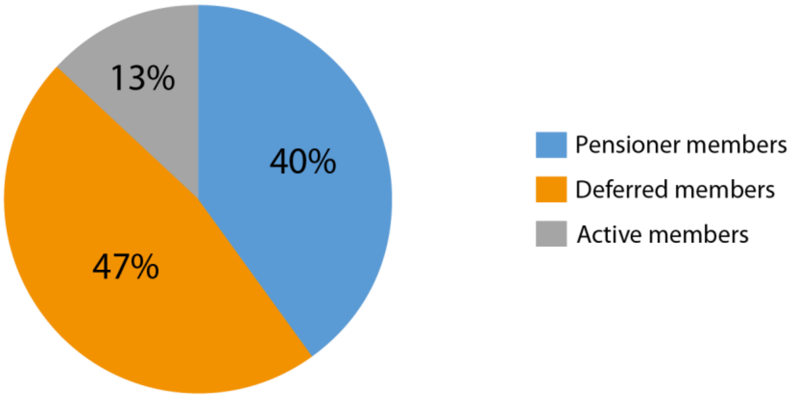
[17] Note the number of schemes and data in this table is taken from PURPLE 2016 based on completed scheme returns for 5,794 at that date and hence is different to the estimated total number of schemes of 5,886

[18] For an explanation of the different funding bases please see the section on Valuation Approaches in Part four (Paragraph 147 et seq.)

[19] PPF, *PPF 7800*, 2016

[20] ONS, *estimate for UK GDP of £1.87tn*, 2015

Figure 2: Distribution of DB members by type.[21]



Source: Purple Book 2016.

80. Most DB schemes are closed to new members. In 2016, only 13% of DB schemes[22] were open to new members, compared to 43% back in 2006. Scheme closure either to new members, or future accrual, was relatively steady between 2006 and 2012, although has slowed significantly since then. The biggest decline occurred in 2010 when the proportion of schemes open to new members dropped down to 18% from 27% in 2009. There have been no increases observed in any years since 2006.

81. Although DB schemes are in decline in terms of new members, they still hold huge amounts of assets (as set out above), and the peak in DB pension scheme payments is not anticipated to be reached until about ten years time.[23]

82. There are certain industry sectors where DB prevalence is relatively high – for example, manufacturing, finance, engineering, and former publically owned companies. At the same time, DB schemes can be found across a wide range of companies, including Small and Medium Enterprises (SMEs) and charities.

83. More details of the DB landscape and background statistics can be found in the Purple Book, which is published by the PPF, and the Regulator's Scheme Funding Statistics.[24] The following sections of this Part will concentrate on specific aspects of DB schemes.

Defined Benefit funding

84. The funding level of DB pension schemes is a matter of concern to many pension scheme sponsors, trustees and members. At the end of October 2016, about 90-95%[25] of DB pension schemes are likely to be in deficit as measured by the Technical Provisions.[26] The average funding ratio on a Technical Provisions basis at this date was around 80%.[27]

85. To help understand how funding levels will change over time, the PPF have adapted their Long Term Risk Model (LTRM) – designed to model the PPF's own funding position – to perform

[21] Active members are those who are currently working and building up benefits in the scheme; deferred members are no longer building up benefits in the scheme but have not yet started receiving a pension; pensioner members are those that are currently receiving a pension from the scheme
[22] includes 'hybrid' schemes (a hybrid scheme is one that provides Defined Benefit and Defined Contribution benefits)
[23] tPR, *Corporate Plan*, 2014
[24] tPR, *Scheme funding statistics*, 2016. Available at: http://www.thepensionsregulator.gov.uk/docs/scheme-funding-appendix-2016.pdf
[25] tPR estimates. See Annex 2
[26] For an explanation of the different funding bases please see the section on *Valuation Approaches* in Part four (Paragraph 147 et seq.)
[27] tPR estimates. See Annex 2

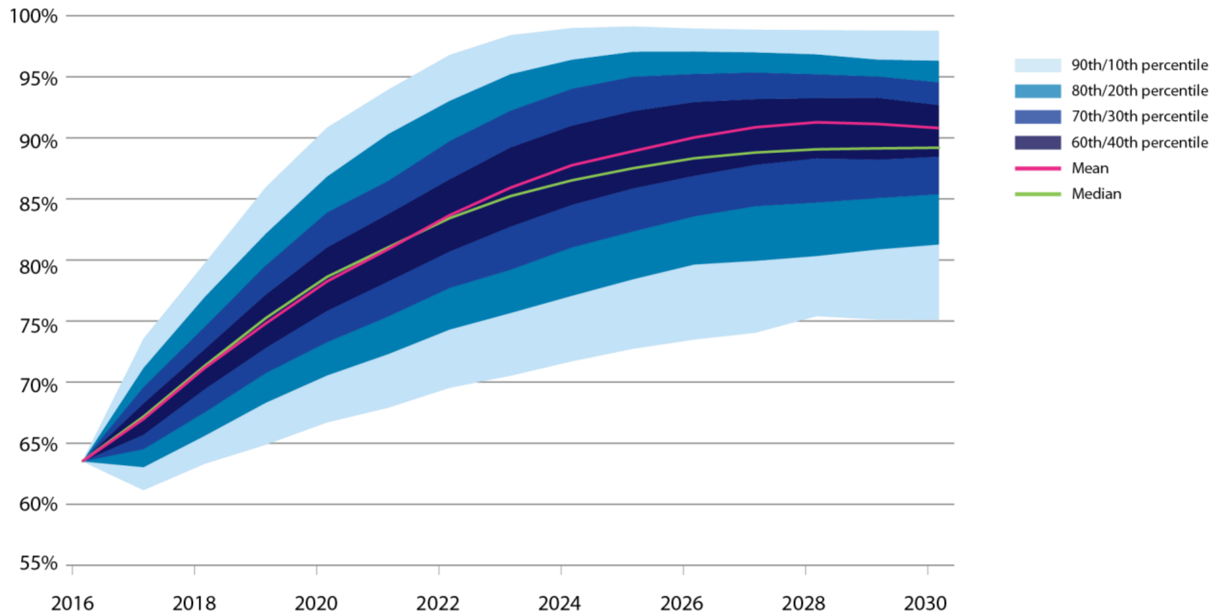
projections of funding levels for DB schemes under different future economic scenarios. This modelling uses a large number of economic scenarios and other inputs together with modelling assumptions to perform projections of DB scheme assets and liabilities. When this model is run using a particular set of assumptions termed the 'base case', the median projection is that by 2030 schemes will in aggregate be funded to around 90% on a buy-out basis, which, applying a rough rule of thumb, is approximately 120% on a Technical Provisions basis.

86. There is a distribution of outcomes around the median projection in the PPF's modelling results. In the worst 10% of outcomes in the "base case" scenario the aggregate funding level is projected to be 75% and lower on a buy-out basis by 2030. In the best 10% of outcomes, the aggregate funding level is projected to be nearly 100%, excluding schemes that are sufficiently well funded to buy-out as the modelling assumes these schemes buy-out and exit at the point they are able to do so.

87. There will however be a distribution of different funding positions for individual schemes around any aggregate position. So whilst an aggregate position may be positive, individual schemes within the modelling could be significantly worse off.

88. It should be emphasised that any modelling is subject to related uncertainties and limitations, and is heavily dependent upon the underlying assumptions used. At best, then, modelling can only be used as one input or a guide to form judgements about the way the future will unfold. In the base case critical assumptions include that sponsors will be able to continue to pay deficit recovery contributions at current levels or higher if deficits subsequently increase, and that gilt yields and equity returns are anticipated to increase over time, with gilt yields increasing to nearly 4% per annum by 2030.

Figure 3: DB scheme funding level projections on a buy-out basis, 'base case' scenario.



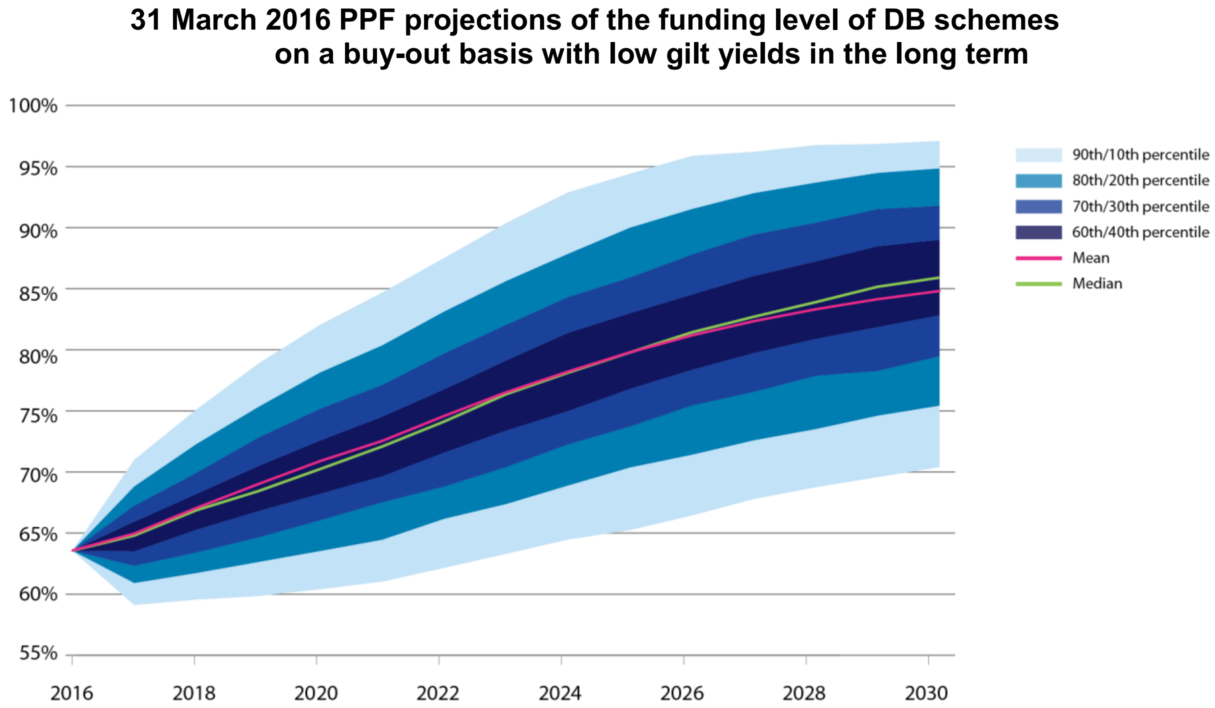
Source: PPF analysis[28] using the PPF Long Term Risk Model, March 2016.

89. Obviously, there is no certainty that the assumptions underlying the 'base case' scenario will be borne out in practice. The PPF have therefore also run the model based on an amended set of assumptions where future gilt yields are assumed to remain at the current low levels.[29] Based on the latter scenario, the PPF find that the average funding level at 2030 decreases by around five

[28] Carried out for the purposes of this project
[29] Assumes that gilt yields remain at the same level as at 31 March 2016

percentage points (compared to using the 'base case' scenario'), and the rate of improvement in funding level is slower – see Figure 4 below.

Figure 4: DB scheme funding level projections on a buy-out basis, 'low gilt yield' scenario.



Source: PPF analysis[30] using the PPF Long Term Risk Model, March 2016.

90. Even under this relatively 'cautious' scenario, the median projection shows an increase in the aggregate funding level from around 65% to around 85% on a buy-out basis by 2030 (or to over 110% on a Technical Provision basis, using the rough rule of thumb mentioned earlier). The main explanation why the projected median funding level is only 5 percentage points lower than under the 'base case' scenario is that whilst lower gilt yields result in higher projected liabilities (due to the increased cost of buy-out), this is offset to a large extent by higher value of assets in bond investments. It is also worth noting that the modelling assumes employer deficit repair contributions continue until individual scheme deficits are eliminated. Compared to the 'base case' scenario, therefore, this scenario assumes a higher value of deficit repair contributions are made by employers over the period.

91. In general, the modelling signals that as long as employers continue to meet their scheme funding requirements even under relatively cautious future economic scenarios, funding levels are likely to continue rising and achieve a reasonably 'comfortable' position at the aggregate level by 2030. The median position can reasonably be expected to improve further from 2030 for those schemes not adequately funded by then. At the same time, it is important to note that any results from the modelling of future outcomes come with caveats and have to be interpreted with caution. Also, it cannot be taken for granted that all sponsors will be able to pay today's level of contributions, which in many cases are high, for a sustained period. On the other hand, some other sponsors may have capacity to pay higher contributions which would improve the expected outcomes for the funding of the scheme.

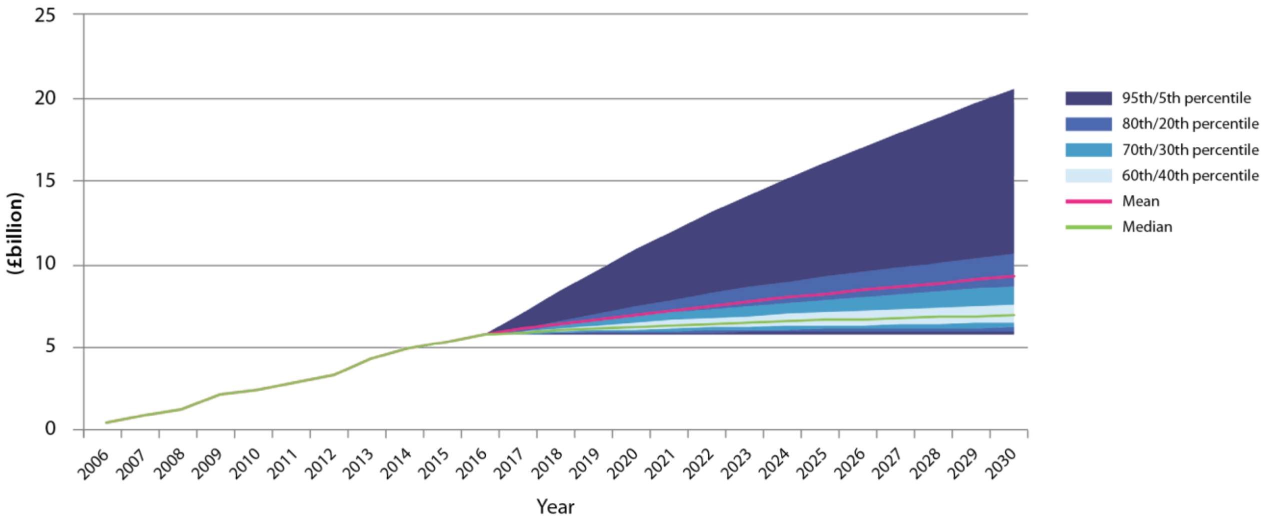
30 Carried out for the purposes of this project

The risk of employer insolvency

92. As noted earlier, for as long as an employer stands behind a scheme and is able to provide sufficient financial support then – regardless of the funding position of the scheme – members will receive their benefits in full. The critical risk to members (and the PPF) is, therefore, insolvency of the sponsoring employer(s) at any point when the scheme is underfunded. At the point of insolvency, the funding position of the scheme is crystallised. An underfunded scheme will not be able to secure members their full benefits, and members may require the safety net provided by the PPF.

93. The modelling of funding levels set out above includes schemes that are not sufficiently well funded to buy-out where the sponsoring employer(s) has become insolvent. The PPF separately model and publish projections of the value of claims on them (i.e. the size of deficits they inherit from schemes). The chart below shows the history and projection of the cumulative deficits of schemes entering the PPF as at 31 March 2016.

Figure 5: History and projection of cumulative deficits of schemes entering the PPF



Source: PPF Long Term Funding Strategy Update, July 2016[31]

94. Around 880 schemes and 235,000 members have transferred to the PPF to date, with total claims on the PPF amounting to around £5.5 billion (including both schemes that have already transferred and those that are expected to transfer).[32] As figure 5 shows, in the mean case the additional claims on the PPF may amount to around £3.5 billion by 2030. If future experience of the ratio of claim amount to number of schmes transferring to the PPF is assumed to be in line with historical experience then this would imply around 600 schemes and around 150,000 members transferring to the PPF by 2030.

95. In the worst 5% of simulated outcomes the additional claims on the PPF may be £15 billion or more, resulting from 2,000 or more schemes and 640,000 or more members transferring to the PPF by 2030 (if future experience of the ratio of claim amount to number of schemes transferring to the PPF is in line with historical experience). However, future experience may of course be different to what has occurred in the past, their future experience could vary substantially if there are large claims

[31] PPF, *Funding Strategy Review*, 2016. Available at: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/Funding_Strategy_Review_2016.pdf
[32] Beginning of calendar year 2017

from large individual schemes. It is therefore difficult to forecast with any accuracy the numbers of schemes and members that may transfer to the PPF in the future.

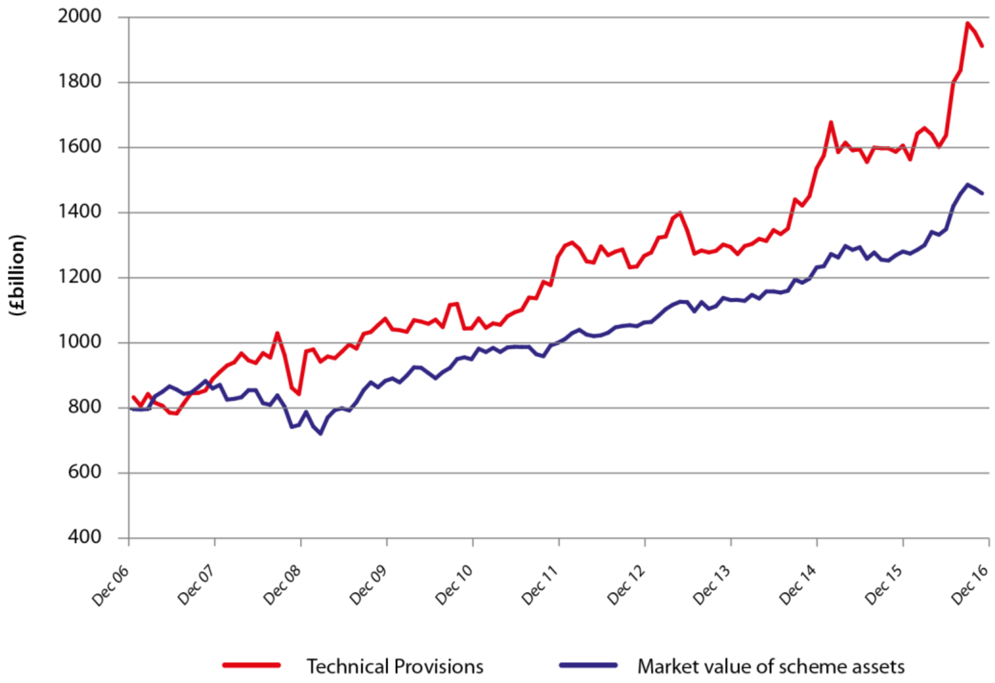
What is driving deficits?

96. Surplus or deficit is the difference between assets held by the scheme and its liabilities. The four single most important factors affecting the comparison of assets and liabilities and therefore the net surplus or deficit are:

- past levels of scheme funding;
- investment returns on the scheme assets, and in particular the day-to-day movement in market values of the underlying assets;
- the assumption regarding expected future investment returns and inflation and the impact this has on the real and nominal discount rates that are used to convert the expected future cash flows into a present value (which, as set out above, is then compared against the market value of the assets); and
- assumptions regarding longevity and other factors affecting the members of the scheme.

97. In recent years there has been a growing gap between DB scheme assets and liabilities and hence an increase in deficits (see Figure 6 below for more details).

Figure 6: Gap between assets and liabilities



Source: PPF/tPR[33]

98. During this time asset growth has been relatively steady, notwithstanding the significant dip following the financial crisis in 2008/2009. Estimated liabilities have shown a higher level of volatility,

[33] This illustration of the development of the cumulative funding position of DB schemes is based on the PPF's 7800 index and shows the assets and section 179 liabilities from that index along with Technical Provisions. The Technical Provisions are an approximation, based on highly summarised data, intended to indicate the broad movements of the two measures (PPF and Technical Provisions) over this period. See Annex 1

and have also increased at a faster rate. Much of this has resulted from schemes not hedging against the falls in gilt yields to historically low levels, and lower expectations for future investment returns which has had the effect of depressing discount rates and increasing estimated present value of scheme liabilities.

99. Figure 7 below illustrates that although there has been short term volatility, the overall trend for ten-year gilt yields since the middle of the last decade has been a decline from approximately 5% or even higher sometimes to below 1%. Putting this into a wider context, the nominal par-yield on ten-year gilts was about 5% in December 2007, approximately 7% in December 1997, and approximately 10% in December 1987.[34]

Figure 7: Historical UK gilt yields.

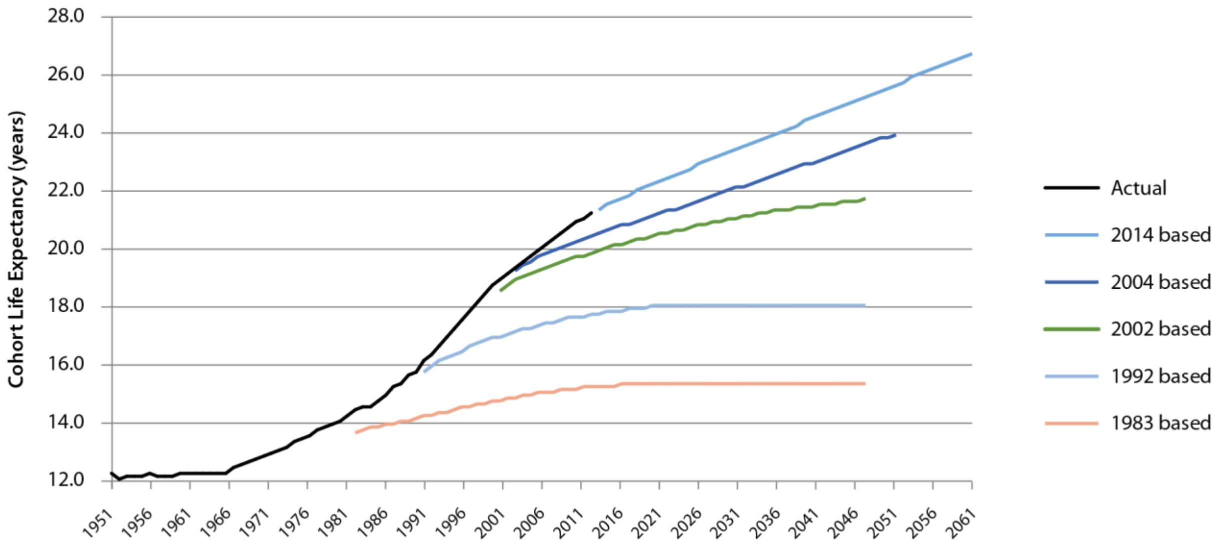
Source: Bank of England Yield Curves[35] (Government Liability Curve, nominal, spot rate, 10 years maturity).

100. The PPF modelling projections discussed at the beginning of this Part shows improved funding in aggregate even with lower gilt yields.

101. Longevity increases have also significantly affected the value of scheme liabilities. Longevity has been rising faster than was predicted when most DB schemes were set up. For example, as figure 8 overleaf shows, in 1983 it was predicted that life expectancy at age 65 was going to be 15.2 years in 2014; it actually turned out to be 21.0 years, which is nearly 40% higher than predicted at the time.

[34] Data extracted from Bank of England database on 05/12/2016 (annual average yield from British Government Securities, 10 year nominal par yield).
[35] Bank of England, *Yield Curve – archive data*. Available at: http://www.bankofengland.co.uk/statistics/Pages/yieldcurve/archive.aspx

Figure 8: Illustration of projected cohort expectations of life (years), at age 65, Males – United Kingdom 1951 to 2063



Source: Government's Actuary Department/Office for National Statistics[36]

Are Defined Benefit schemes affordable?

102. It has been claimed by some that DB schemes are no longer 'affordable'. However, there is no agreed definition of what level of pension contribution is affordable. What is 'affordable' is to an extent dependent on the specific circumstances of individual schemes and their sponsoring employers. Sponsoring employers have a range of demands on their funds, including maintaining business operations, investing in product development to maintain a competitive position in the market, research and development, servicing debts, pension contributions, dividends, maintaining a cash reserve to provide liquidity, and many more. Clearly employers need to make choices about how best to make use of their cashflow to ensure they can continue to operate, grow and, among other goals, support their pension schemes.

103. A key question here is to what extent pension scheme liabilities are limiting employers' ability to make the best use of the resources available. Answers to this question tend to vary. For example, in their February 2017 Inflation report the Bank of England said:

'… one way pension deficits might affect the wider economy is if firms reduce their investment spending in order to increase their pension contributions. Bank staff have examined whether listed companies' investment has been affected by pension deficits using firm-level data from TPR for 2009 to 2014 matched to company accounts data. While investment is not found to be negatively associated with the size of a firm's pension deficit, it is found to be slightly lower among those firms with larger deficit reduction contributions. In aggregate though, this approach suggests that deficit reduction plans only had a very small effect on investment growth between 1996 and 2015 - on average less than 0.1 percentage points lower over that period as a result of pension contributions.

[36] DWP, *Cohort Estimates of Life Expectancy at Age 65,* 2011. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223190/life_expectancy.pdf.
ONS, *Expectation of Life, Principal Projection, United Kingdom,* 2015. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/expectationoflifeprincipalprojectionunitedkingdom

The estimated impact of pension contributions on investment could reflect reduced cash flows available for investment or perhaps higher funding costs for companies with large deficits. However, this approach does not account for the fact that contributions are invested in financial assets, which may have lowered the cost of finance for other firms and therefore supported investment.'[37]

104. At the same time, there are signals that pension deficits are seen as a problem either now or in the future by many sponsoring employers. For example, according to a 2015 survey by the consultancy Barnett Waddingham,[38] '80% of companies with material funding shortfalls recognised their DB pension scheme as a principal business risk within their annual report and accounts'.

105. It is argued by some employers that DB pension contributions are far too high to be sustainable and are certainly far higher than originally intended when schemes were set up. For example, according to a 2016 report by Lane Clark and Peacock,[39] the cost of providing pensions for FTSE 100 companies was 24% of salary back in 2009, whereas in 2016 it was 50% of salary, calculated on an IAS19 accounting basis[40] based on the cost of accrual in a typical 60ths final salary scheme. While this relates to the cost of future accrual rather than the removal of accumulated deficits, it does highlight the increase in expected cost of funding pension benefits.

106. However, even with these increased costs, the evidence that DB schemes are unaffordable is far from being conclusive, and should be considered with caution. Estimates of deficits and contributions relative to sponsor balance sheets and dividends vary and will depend on the methodology chosen, but some recent evidence highlights that:

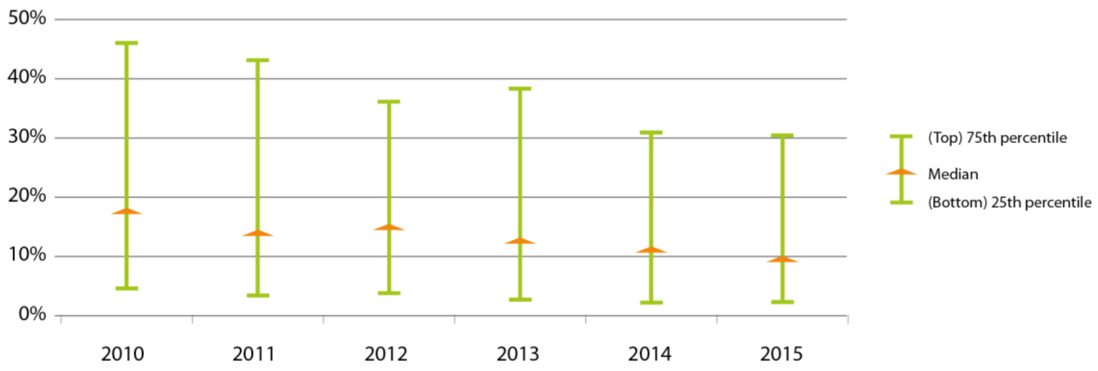
- In 2015, FTSE 100 companies paid around five times as much in dividends as they did in contributions to their DB pension schemes.[41]
- The 56 FTSE 100 companies with a DB pension scheme deficit paid 25% more in dividends (£53 billion) relative to their disclosed IAS19 deficit (£42 billion).[42] Therefore, in theory, these companies have the ability to immediately repair their pension scheme deficits were they to feed their dividends into Deficit Repair Contributions (DRCs).
- In their most recent funding statement analysis, the Regulator indicated that for the current FTSE 350 companies which sponsor DB schemes, the trend in DRCs as proportion of dividends has generally declined over the period from 2010. This is further illustrated in Figure 9, where the median ratio declined from around 17% in 2010 to less than 10% in sponsors' latest accounts. The Regulator argues that this has been mainly driven by the significant increase in aggregate dividends over the period, without a similar increase in contributions. This is potentially an additional signal that affordability may not be an issue at the aggregate level.
- Similarly, the Regulator estimates that at the median, FTSE 350 companies paid around five times as much in dividends as they did in DRCs in 2010 but this ratio has moved to 11 times in their latest data available.[43]

37 Bank of England. Inflation Report. February 2017.
38 Barnett Waddingham, *Impact of pension schemes on UK business,* 2015 Available at: https://www.barnett-waddingham.co.uk/media/filer_public/6e/0a/6e0aae2c-e8ee-4edd-80c9-ec4a4b987069/ftse350_report_2015.pdf
39 Lane Clark & Peacock, *23rd annual survey of FTSE 100 companies' pension disclosures,* 2016. Available at: http://www.actuarialpost.co.uk/downloads/cat_1/lcp-afp-online_2016.pdf
40 See the section on *Valuation approaches* at paragraph 148 et. Seq. for an explanation.
41 Lane Clark & Peacock, *23rd annual survey of FTSE 100 companies' pension disclosures,* 2016. Available at: https://insight.lcp.uk.com/acton/attachment/20628/f-0168/1/-/-/-/-/Accounting%20for%20Pensions%202016.pdf:
42 Lane Clark &Peacock, *Accounting for Pensions*, 2016
43 When published alongside tPR's 2016 annual funding statement

- For FTSE 350 companies with a DB scheme, it has been estimated that 71% could clear the IAS19 DB deficits shown on their balance sheet with less than six months of the net cash generated.[44]

107. However, the figures and statements quoted above show the aggregate positions and there are outliers presented in some of the same publications. For example, according to Lane Clark & Peacock[45] six companies paid contributions that were greater than the dividends they paid out. In addition, there were seven FTSE 100 companies with accounting liabilities greater than their market capitalisation as at year end 2015 according to the same source. Therefore on aggregate there does not appear to be clear evidence of affordability issues, however at the more individual scheme level further scrutiny could be beneficial.

Figure 9: Ratio of DRCs to dividends (where both DRCs and dividend are non zero) – Current FTSE350 companies sponsoring DB/Hybrid pension schemes.



Annual Funding Statement analysis 2016, tPR[46]

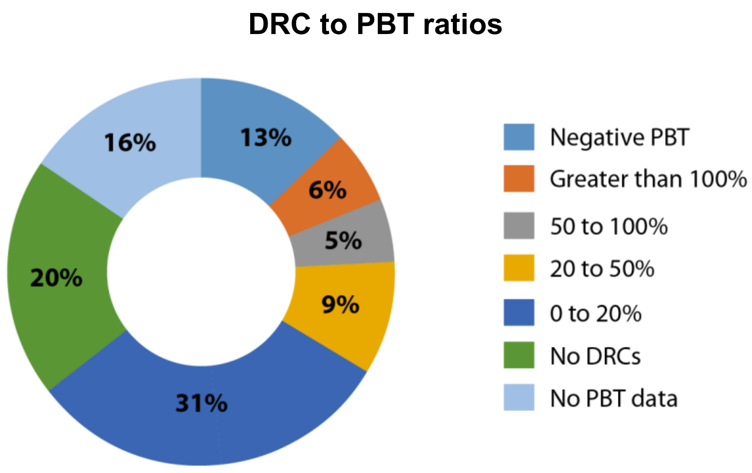
108. Also, data from the Regulator, which attempts to cover all companies (not just FTSE 350), suggest that where profit before tax (PBT) data is available around 50% of all employers with DB schemes are either paying no DRCs or paying DRCs which, taken as a ratio, are less than 20% of their reported PBT. On the other hand, again where PBT is available, 20% of employers are paying DRCs that are in excess of 100% of their PBT or are loss making employers.[47] No PBT data is held for the remaining 16% of employers. So there is a significant minority for whom DRCs may become unsustainable in the near future, although the data may not be truly representative of their affordability position. This would depend on a number of factors including the strength of the employer's balance sheet, their ability to generate cash flow and their position in any wider group.

109. There is no single measure of affordability that gives definitive conclusions. We chose to look at DRC to PBT ratios here as it is probably the best single indicator since PBT gives an indication of the employers available cash after debt service and maintenance capital expenditure. However, DRC to PBT alone does not reveal the full picture of affordability; for example, in theory, there may be a company where a 90% ratio is not a problem, and there may be a company where a much

[44] Barnett Waddingham, *Impact of pension schemes on UK business,* 2015. Available at: https://www.barnett-waddingham.co.uk/media/filer_public/6e/0a/6e0aae2c-e8ee-4edd-80c9-ec4a4b987069/ftse350_report_2015.pdf
[45] Lane Clark & Peacock, *Accounting for Pensions*, 2016
[46] tPR, *Annual funding statement analysis,* 2016. Available at: http://www.thepensionsregulator.gov.uk/docs/db-analysis-tranche-eleven-review-2016.pdf
[47] the analysis behind the numbers was subject to certain assumptions and limitations, and should be treated with some caution.

lower percentage is a problem.[48] However, we believe that at the aggregate level DRC to PBT ratios give a reasonably prudent illustration of the affordability situation.

Figure 10: Deficit Repair Contributions as a percentage of profit before tax



Source: tPR analysis for the purposes of this project.

110. It is also important to bear in mind that Small and Medium sized Enterprises (SMEs), Quasi-Public and 3rd Sector employers may not have the resources of the relatively large FTSE 350 companies; and so the former are the sectors we may need to consider more carefully when we are considering DB affordability. However, at this stage we do not have sufficiently conclusive evidence that there definitely are more affordability issues there than elsewhere.

111. Whilst it is hard to find evidence that deficits are driving companies into insolvency, there are clearly employers for whom their pension scheme deficit is a significant call on their resources. Also, we are beginning to see some signals that DRC to PBT ratios may be higher for smaller companies. So in general, while most schemes look to be affordable for their sponsors there is a mixed picture and a need to explore this further.

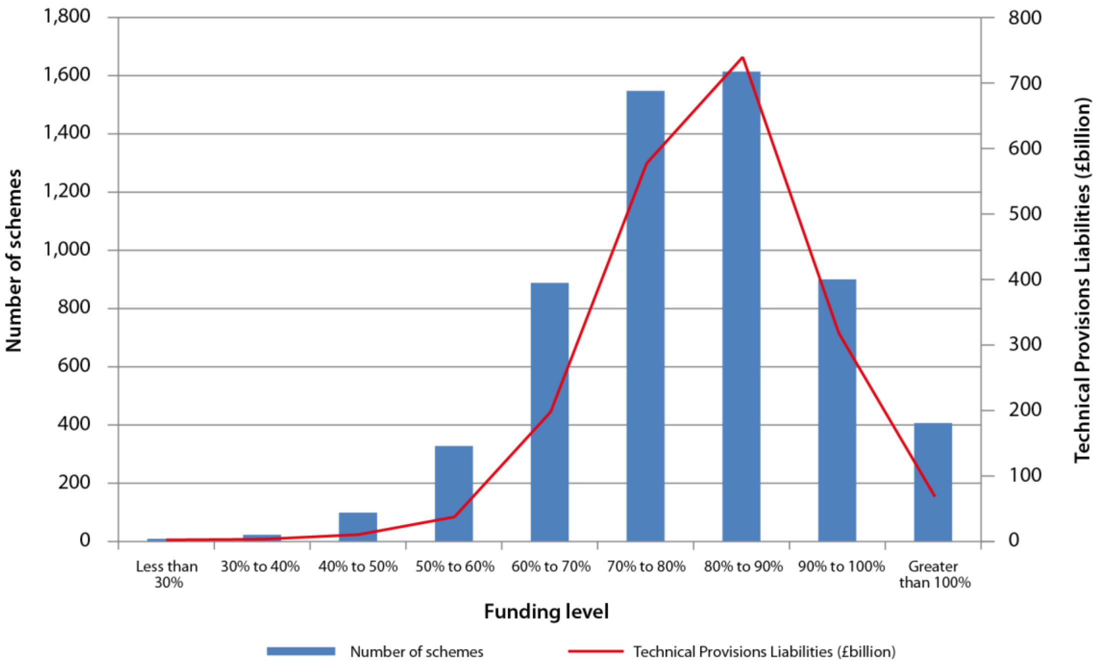
Can we identify struggling schemes and their sponsors?

112. The diverse nature of DB schemes and their sponsors means it is very hard to identify in a straightforward way which employers are facing the greatest difficulty supporting their DB schemes. However there are a number of indicators that can help us with an aggregate view.

113. Data from the Regulator shows that as at October 2016 on average schemes are funded to around 80% of Technical Provisions. However, Figure 11 overleaf[49] shows that there is a wide distribution of funding levels across schemes. While around 400 schemes are funded above 100% of Technical Provision (in surplus) around 450 are funded below 60%. It is worth noting that schemes are free to set the assumptions and approach to their Technical Provisions on a scheme specific basis and so the relative strength of those assumptions varies meaning funding levels are not necessarily comparable from one scheme to the next.

[48] In cases where, for example, the company needs a lot of extra investment into its business operations to remain competitive
[49] tPR estimate. See Annex 2

Figure 11: Schemes by Technical Provisions funding level (October 2016)



Source: tPR data

114. As Figure 11 above shows, there are around 450 schemes (which is around 10% of all DB schemes) with a funding level less than 60% on a Technical Provisions basis. In addition, the red line clearly shows that their liabilities account for a lower share of the total DB liabilities than the share in the total DB scheme count; which means we can infer that on average it is relatively smaller (in terms of liability amount) schemes that are more likely to have funding levels of less than 60%. While around 50% of all DB schemes are funded above 80%.

115. All schemes in deficit on a Technical Provisions basis have recovery plans in place to reach full funding. Statistics for schemes in Tranche 9[50] recently published by the Regulator shows that around 75% of schemes in deficit have recovery plans of around 10 years or less.

116. Scheme maturity level (which can be measured by the current proportion of liabilities in respect of pensioners and dependants) is a useful factor when it comes to considering scheme funding strength. An analysis of the funding levels by maturity shows that the funding ratios of schemes that are most mature, that is, where the majority liabilities relates to members receiving a pension, tend to be slightly higher than those of less mature schemes although for the latest tranche the ratio is lower for the most mature schemes.

50 A certain tranche means a certain subset of schemes

Table 2: Scheme funding levels by scheme maturity.

	Weighted average funding level - Tranche (percentage of schemes)								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Maturity (ratio of pensioner TPs to total TPs)									
Less than 25%	82	88	90	73	83	90	83	86	85
25% to less than 50%	86	93	92	73	84	87	84	83	89
50% to less than 75%	95	94	88	80	84	89	85	86	90
75% or greater	100	99	87	85	90	87	92	95	87

Source: tPR Scheme Funding Statistics 2016 Appendix.

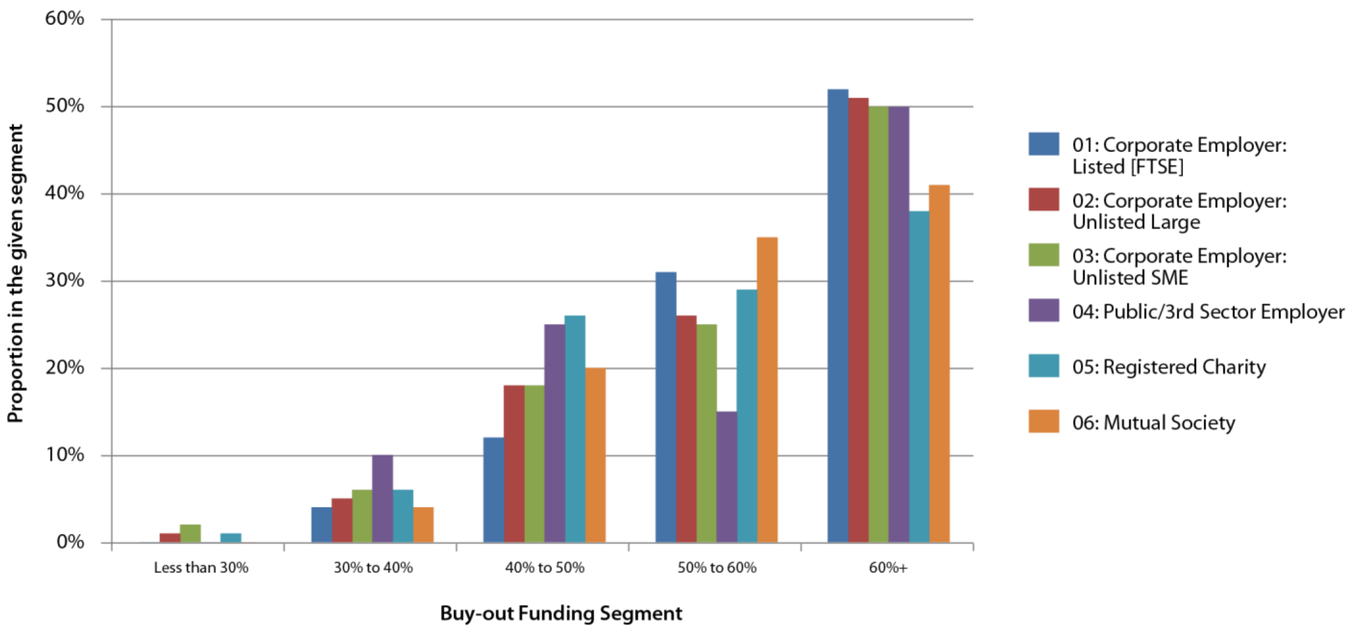
117. All else being equal, schemes with a high maturity level have less time to address their deficits. This is because a greater proportion of their liabilities will be paid out in the next few years. Where they have a deficit such schemes might need to move to a position whereby they sell their assets in order to meet these cash flows. This would leave them more vulnerable to risks of a downturn in market conditions as they may need to sell assets at lower than expected prices, leading to increased calls on the sponsor for contributions in the short term with knock-on impacts for their business plans. Similarly, it may be that the employers of the more mature schemes are seeking to be able to buy-out of their liabilities with an insurance company and are therefore more willing to increase funding. These are the most likely explanations why mature schemes tend to be better funded on average. However, where mature schemes are poorly funded they may be particularly exposed to the sponsors' ability to repair the deficit in a time to meet its liabilities as they become due (but there are other factors that have to be accounted for when considering risks).

118. Although in general analysis found little correlation by business sector, in terms of the funding level by type of business, schemes sponsored by charities, or public or third sector employers tend to have relatively low buy-out funding levels. Around 33% of all charities and around 35% of all public and third sector employers have a buy-out funding level below 50%. For other employer categories the average proportion with a buy-out funding level below 50% is lower - around 23% on average[51]. In addition – but not shown in the chart overleaf schemes with high fixed indexation do seem to be paying a higher level of DRCs relative to sponsor profits[52].

[51] tPR. See Annex 1

[52] The analysis is based on the position as at March 2015 and does not consider either the changes as a result of the current low interest rate environment or the risks that the future may pose more challenging conditions that implicit in the March 2015 conditions.

Figure 12: Employer type vs. buyout funding level.



Source: tPR

119. However, some schemes that are poorly funded and so appear to be challenged may be less vulnerable than they appear if they have strong employer covenants[53] and various forms of security or other arrangements in place that may enable them to achieve considerable improvements over the short term.

120. The chart overleaf shows the aggregate proportion of DB liabilities on a Technical Provisions basis split between the four Regulator categories of employer covenant strength. In Figure 13 overleaf ‘1’ is the strongest level of covenant strength and ‘4’ is the weakest. These are known as Covenant Grades 1-4 (CG 1-4).

[53] The financial ability of the sponsoring employer to support a Defined Benefit pension scheme so that it is able to meet its liabilities as they fall due. See Annex 1

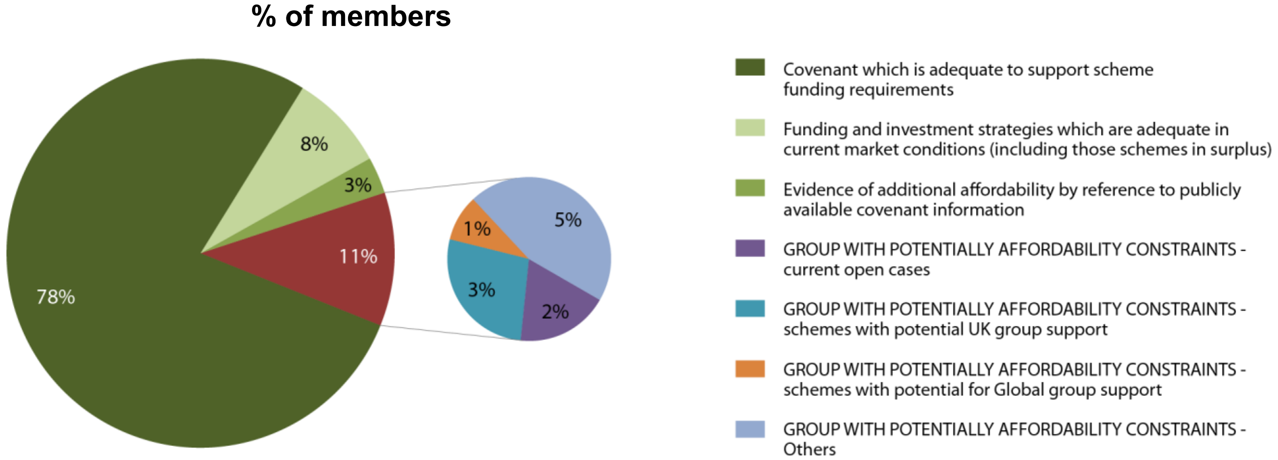
Figure 13: Technical provisions categorised by sponsor covenant.

Source: tPR rating

121. Whilst it should be remembered that the covenant grade data from the Regulator shown in this chart is based on a quick 'desk top review' of the sponsor covenant for the purpose of their resource prioritisation, what this shows is that the vast majority of pension scheme liabilities lie with the strongest employers. Only around 10% of liabilities sit with 'weak' employers. Additionally, even those in the covenant grade 4 category, and so classified as weak, are not all expected to 'fail' and a deeper review of the position is needed. Conversely, in certain circumstances a scheme's covenant can deteriorate very significantly and possibly over a short period of time.

122. Analysis carried out by the Regulator which looks at one way in which this issue could be analysed suggests that the percentage of members in schemes that have the potential to be facing significant affordability issues is relatively small - see Figure 14 and explanations of the method and results below.

Figure 14: Segmented DB schemes by potential affordability position.



Source: tPR analysis for the purpose of this paper. See Annex 2

123. The approach taken to this analysis segments all schemes by a number of different indicators that relate to how likely the scheme is to be in a position to pay members benefits in full and filters schemes down to reach a more refined estimate as to how many members are in schemes that are potentially challenged.

124. The Regulator has estimated that around 89% of members are in schemes where either the covenant is deemed adequate to support the scheme (assessed either through the Regulator's covenant grade approach or using publicly available sponsor data), and where the scheme is in surplus or the scheme has in place a funding and investment strategy which is deemed adequate under current circumstances.

125. As part of the analysis, various assumptions have been made to determine whether there is adequate covenant support, which in combination with the funding and investment strategies that are in place would suggest that affordability is not constrained. These assessments are based on a range of information including the Regulator's internal risk indicators.

126. This leaves approximately 11% of all DB scheme members in schemes that may potentially have affordability constraints. However, breaking down this 'potential affordability constraints' category (i.e. the 11%) in more detail, we see that:

- approximately a third of them (which equals about 4% of all DB scheme members) are in schemes that have the potential to benefit from wider group support either from a UK or global entity. It may be the case that this wider group has no legal obligation to support the scheme, and the Regulator's guidance warns trustees as to the risks of relying on non-legally binding employer support, but this does suggest that many of these schemes may have or be in a position to crystallise this support one way or another; and
- a further approximately one fifth of the 11% category (which equals 2% of all DB scheme members) are in schemes where the Regulator is directly engaging with the trustees and employer.

127. This leaves only 5% of all DB scheme members in schemes where the prospect of additional support appears uncertain.

128. While this analysis is based on modelling outputs and assumptions and so should be viewed with a degree of caution, it does help illustrate that the number of members in schemes with potential affordability issues is likely to be relatively low and could be as low as 5% under the Regulator's approach above, and even then, not all these schemes are expected to fail. This broad conclusion is also consistent with the expected number of members to be in schemes that fall into the PPF assessment by 2030, which is just 2% (as discussed above).

Pensions and Lifetime Savings Association DB Task Force modelling

129. We are aware that for their DB Task Force, the Pensions and Lifetime Savings Association (PLSA) commissioned modelling from Gazelle Corporate Finance Limited's 'Mousetrap' Integrated Risk Model to help them better understand the risk to members' benefits. This work appears to paint a different picture than the modelling of the PPF would suggest in terms of number of schemes expected to fail.

130. The results of the PPF Long Term Risk Model broadly indicate that the funding level of DB schemes in aggregate is likely to improve over time. However, there may be issues at an individual scheme level that aren't apparent at the aggregate level and one such issue may be schemes with weak sponsors.

131. The PLSA's results indicate that schemes with the weakest sponsors (Covenant Grade 3 and Covenant Grade 4) are likely to struggle to reach 100% funding on a buy-out basis in 30 years' time, with members facing the prospect of benefit losses as a result. The results also suggest that derisking of investment strategies for some DB schemes with the weakest covenants is more likely

to increase instead of decrease the overall probability of benefit losses for members, due to the increased length of time the scheme is reliant on the sponsor for Deficit Repair Contributions.

132. PPF's results are based on a model which is different from the PLSA's modelling both in terms of model design and the assumptions used; and both are likely to have contributed to the differences in the results. An example of where PPF may have used a different approach to the assumptions is the sponsor probability of default. Also, the models are different in their purposes, with both models having their uses (more details about both models can be found online[54]).

133. In general, we are aware that any modelling work, albeit being a very powerful tool for policy making, has limitations as by definition a model is a simplification of reality; and that modelling outcomes are dependent on the underlying inputs and assumptions and modelling approach. Therefore, we aim to consider views and modelling results from several different sources for the purposes of exploring whether more could be done to help the sector to operate more efficiently, and to identify and mitigate any inherent structural risks within the universe of sponsors with DB pension schemes.

Summary

134. Many employers are putting significant sums into their schemes, but estimated scheme deficits are rising or at best not reducing for many. This experience has been heavily driven by falling gilt yields and expected returns on investments in other asset types, which drive the discount rates by which scheme funding is measured.

135. The evidence tends to suggest that the majority of employers are likely to be able to fund their DB schemes to at least 100% on a Technical Provisions basis and manage the risks their schemes are running and many could afford to reduce their deficits or lower risk to a greater extent. This means that, short of company insolvency, the benefits are deemed to be not at high risk. However, there are a relatively small number of employers which are not currently in a strong position to be able to provide a high level of support for the risks their schemes are running and so the scheme is reliant on achieving significant investment returns and/or a significant upturn in the position of the sponsor.

136. Whilst clearly some employers are finding that the costs of supporting their DB scheme is impacting on their ability to invest, grow and pay dividends, there is no evidence of an imminent crisis affecting the sustainability of DB pensions generally, and in most cases members are only at risk if a sponsoring employer collapses.

137. It is not straightforward to identify a clearly defined segment of schemes or employers that would warrant targeted policy intervention, based on funding strength and member security. There are schemes that are poorly funded and with weak sponsors and so have a high likelihood of PPF entry in the future. However, there are no easily identifiable common characteristics across these schemes.

[54] Gazelle Group, *Estimation of the longer-term loss of benefits for UK Defined Benefit scheme members,* 2016. Available at: http://gazellegroup.co.uk/Articles/Gazelle-Corporate-Finance-PLSA-Mousetrap-Study.pdf

Part 4: Issues and options

Introduction

138. As we set out earlier in this paper, while in many quarters there is an apparent crisis in confidence in the DB pension system, the evidence suggests that there is no single or immediate crisis in DB funding for the system as a whole. Our analysis in Part Three shows that even if the current low interest rate environment were to continue in the medium term (i.e. future bond yields are lower than current market expectations), provided that employers continue to pay their deficit repair contributions at the rate currently agreed, the funding position of schemes is likely to improve, and the vast majority of members can be expected to get their pensions in full when they fall due.

139. During the summer of 2016 the Department for Work and Pensions (DWP) undertook an informal consultation on the state of the DB sector as a whole, taking views from a range of stakeholders representing employers, members and industry professionals in a series of meetings. The overarching view of virtually all stakeholders is that the regulatory regime for DB pensions is satisfactory, and that the funding regime sets a fair balance between the interests of the members and those of the sponsoring employers (though it was recognised that many employers are paying more for their DB pensions than expected when the schemes started). There was no overall consensus though, on the level of member protection. While some stakeholders feel members are over-protected, and therefore employers over-burdened, others thought that additional protection was needed to further reduce the risk of employers walking away from their pension promises. Nearly all agreed however that there is no need to change the fundamentals of the overall regime for DB pensions.

140. It is nevertheless clear that experiences differ from scheme to scheme: some schemes may have employers able to clear deficits and minimise risks to members more quickly than they are doing, while others may be struggling with the combination of a weak employer and poor funding. Although the system may not be in immediate crisis, it may not be operating optimally for all and in all circumstances. There may be a case for limited changes to the regulation of DB provision to help employers and trustees manage liabilities more effectively in some of the circumstances that exist.

141. This section reviews what the issues are commonly understood to be, and sets out in some detail the various measures that have been suggested by a range of stakeholders, as well as recommendations made by the Work and Pensions Select Committee in their recent report on DB pensions.[55] We assess the various options and recommendations, and explore the pros and cons of various approaches that have been suggested. The discussion of potential changes in this document is not intended to suggest that the Government thinks that those changes are viable or desirable. Our intention is to review the various options, and to encourage an informed debate on what if anything Government may need to do.

[55] House of Commons Work and Pensions Committee, *Defined Benefit pension schemes,* 2016. Available at: https://www.publications.parliament.uk/pa/cm201617/cmselect/cmworpen/55/55.pdf

Funding and investment

Background

142. A number of commentators who have said that they do not believe that DB pensions are affordable, have also suggested that the current regulatory environment – and the valuation and funding arrangements in particular are causing overly cautious investment approaches. They argue that these are driven by the short- term and point in time nature of scheme valuation, while DB pensions are necessarily a longer-term undertaking. In other words they believe that the system is inappropriately focused on the risks in the short term and that there is a way to provide member benefits with a more manageable burden on employers in the medium to long term.

143. In simple terms the current valuation regime requires a valuation of each schemes' assets and liabilities at least every three years. It is intended to provide regular checks on the funding position of the scheme so that employers and trustees can, where necessary, agree recovery plans to ensure they are on track to reach a funding level assumed to be needed to meet their pension promises as they fall due. A number of actuarial assumptions and other factors come into play in determining what is prudent at a particular point in time, each of which may increase or lessen the financial burden on the employer or potential risks to members. It is this supporting framework which has mainly been the focus of some commentators' criticism.

144. The UK DB funding regime is not designed to eliminate all risk to members' benefits at all times. That is why it is underpinned by the Pension Protection Fund (PPF). If it were designed to eliminate risk, employers would need to fund their pension promises to the much higher "full buy-out" levels, so that members' benefits could be secured with an insurance company in the event that the employer could no longer support the scheme. Rather, the system is designed to strike a reasonable balance between the demands on the employer and the security of member benefits (with the underpin of the PPF). Within this context, a strong, sustainable sponsoring employer supporting a prudently funded scheme is the best protection for members of a DB scheme.

145. The valuation measure used for a DB scheme does not directly affect the cost of paying the benefits. Ultimately the pension will cost what it costs, based on a number of factors including the longevity of members and the rate of inflation amongst others. The valuation measure used can however affect the speed at which funds are built up to cover the cost of the benefits, and it can also affect decisions about the investment strategy. This in turn can change the amount of return achieved on the assets and the volatility in that return. That may impact on the proportion of the cost met through sponsor contributions, and the amount that is met from investment returns and the risks to these expectations.

146. It is therefore important to understand the behaviours that result from the existing funding regime, and whether there are ways in which they can be fine-tuned to improve outcomes for scheme members, whilst remaining affordable for sponsors. Although the regulatory regime may influence behaviour, the investment strategy and deficit repair payments are not mandated by the system. Rather these are agreed through negotiation between the sponsoring employer and the trustees, based on a range of complex factors and objectives. These may include among others, the current position and future expectations of the funding position of the scheme, its maturity, the employer's financial situation, economic situation and asset returns, the objectives that sponsors and trustees have in the short and long run, and the employer's ability to stand behind investment risk.

Valuation Approaches

147. There are four main approaches to the calculation of DB liabilities in the UK system, each of which is used for a different purpose:

- the Statutory Funding Objective used by trustees as part of the scheme specific funding regime to value pension liabilities (often known as Technical Provisions);
- the Solvency measure – known as full buy-out – an actuarial estimate based on the cost of securing full scheme benefits with an insurer;
- FRS 17/102 (and IAS19) – used to calculate and present the pension liabilities in company accounts; and
- the Pension Protection Fund's Section 179 basis (a subset of the solvency measure) is the estimated cost of securing PPF compensation levels rather than the full scheme benefits with an insurer.

148. The Statutory Funding Objective for DB schemes was introduced by The Pensions Act 2004. It is scheme specific and requires a scheme to have sufficient and appropriate assets to cover its Technical Provisions - the actuarial calculation of the liabilities of the scheme.

149. Under the current system, a Statutory Funding Objective valuation is required at least every three years. In simple terms this establishes the value of assets expected to be needed at that point in order to pay benefits in the future. This takes account of a prudent assessment of anticipated asset performance - via the discount rate - and is used to set the level of ongoing employer contributions and forms the basis for agreeing a recovery plan to deal with any funding deficit identified.

150. The 'discount rate' is specific to each scheme and should be chosen prudently based either on the yields on high quality bonds, or the rate of return that assets held by the pension scheme now and in the future are prudently expected or assumed to generate over the lifetime of the scheme. The higher the expected return on the assets, the higher the discount rate, which reduces the present value of the liabilities. Therefore higher discount rates means the scheme needs to hold a lower level of assets now to cover future liabilities; and vice versa - a lower discount rate means more assets are needed today. In the former case we say that liabilities are lower, and in the latter case they are higher.[56]

151. When undertaking a valuation the trustee, advised by the scheme actuary, is required to use prudent economic and actuarial assumptions, taking account *if applicable, of an appropriate margin for adverse experience*.[57]

152. This measure is designed to tolerate a certain amount of risk based on the support that can be provided by the sponsor as a going-concern. If a scheme is fully funded on this basis, it does not mean that members' benefits would be secure if there were no longer a sponsoring employer. The funding regime allows for the fact that a fully funded scheme will continue to have sponsor support. So if the sponsor fails, and the scheme is fully funded on a Technical Provisions basis, the scheme could still either have to buy-out at a level below full benefits, but above the level of PPF compensation, or enter into the PPF. Since Technical Provisions are scheme specific and trustees are responsible for choosing the assumptions, (although in most cases requiring the agreement of the employer) schemes will inevitably choose differing approaches. Therefore, the level of protection for members afforded to them by the funding level of the scheme will vary from one scheme to the next.

153. As part of the actuarial valuation, actuaries are also required to provide an estimate of the solvency position of the scheme. This is an assessment of funding relative to the cost of buying out benefits with an insurance company. The solvency valuation tends to use a discount rate close to, or perhaps even less than, gilt yields. This is due to the constraints of the insurance regulatory regime, and must also include an allowance for ongoing running costs, and a margin for prudence and profit, that an insurance company is likely to use. The solvency valuation should also include an allowance for the expenses of winding-up the scheme that can be quite significant especially for the smaller

[56] It is important to highlight that looking at it from a strictly technical point of view the discount rate is about future assets not liabilities, but in this paper we define 'liability' as the amount of assets that need to be held now to pay out future pensions – therefore the definitions used are as set out above.

[57] The Occupational Pension Schemes (Scheme Funding), Regulations 2005 Regulation 5(4).

schemes. As a result the solvency measure is usually very high relative to the Statutory Funding Objective.

154. The corporate accounting measure is underpinned by international accounting standards, and uses high quality corporate bond yields to set the discount rate. This is the measure that is used for the valuation of the pension liabilities that appears on company balance sheets. This means that the accounting value of the scheme liabilities will move broadly in line with corporate bonds. Therefore, where the scheme invests in assets other than high quality corporate bonds, volatility in the accounting position may arise. As a result there may be an incentive for some sponsors to prefer an investment strategy that more closely aligns asset values with changes in the accounting liabilities – so investment in corporate bonds, or other interest rate matching investments. While this may be in the interests of the scheme sponsor, it may further constrain a scheme's ability to invest in higher return seeking assets.

155. The s179 basis valuation is similar to the full buy-out measure, except the liabilities are calculated based on the estimated cost of buying-out at PPF compensation levels rather than full scheme benefits. It is used to determine the funding position of an eligible pension scheme for the purpose of calculating PPF levies.

Perceptions of problems

156. Despite the evidence that the sector as a whole is not in crisis, there is a widespread perception that some employers are unable to sustain their contributions, that deficits are substantial, and that members benefits are very much at risk. This may in part be because attention is given to measures such as full buy-out which, at best, provide only a snapshot view of a target which is constantly moving (as a product of changes in asset values and yields) and may give a false impression about the level of security for members. It may also be because the numbers involved are very large, but are often quoted without context - for example, employer contributions are rarely compared with other relevant figures such as profits or dividends. Deficit figures such as buy-out are often quoted without reference to their meaning or use (or lack of use) in scheme funding or in judging risk to members' benefits over the longer term.

157. Furthermore, many pensions specialists have told us that many members understand neither the value of their DB pensions, nor the risks of it not being paid in full. Many are unlikely to fully understand the meaning of the scheme's funding position as set out in the Annual Statement which schemes must provide to members every year by law. Similarly, there is no disclosure of the strength of the sponsor covenant which is key to understanding the risks to the scheme and the members.

158. We think that more might be done by both Government and industry to help people better understand valuation and deficit data and provide an improved overall sense of the degree of certainty and risk in the regime as a whole. A range of deficit measures is published by Government bodies and advisory firms. It has been suggested, for example, that it might be helpful to provide a more coordinated and holistic view that includes measures such as 'best estimate'[58] of expected investment returns at the same time to give a more balanced view of the state of the sector.

159. Another way to improve understanding would be to require schemes to use a range of measures to report their funding position to members, trustees, sponsors and the Regulator. This could provide a richer and more rounded view of the funding position, and the actual risks to member benefits. However, we accept that costs may be a problem especially for smaller schemes, and it may be difficult for members to understand or make use of the information.

160. There are a range of different approaches to valuation or providing information on valuation results which have been suggested. These include:

[58] First Actuarial, *First Actuarial Best estimate*, 2016. Available at: http://www.firstactuarial.co.uk/InfoCentre/FAB

- a stochastic assessment of the ability of a scheme to meet its liabilities;
- a deterministic comparison of the expected asset and liability cash flows;
- an assessment of the "break-even return" required on the scheme assets to meet the liability cash flows; and
- an approach based on the existing Statutory Funding Objective but allowing for a smoothed market value of the assets rather than the asset value at the valuation date, and calculating the liabilities using a consistently smoothed discount rate.

161. There are advantages and disadvantages to all of these approaches and any move to abandon the current approaches completely and move to a completely different measure for the Statutory Funding Objective would be extremely disruptive. In order to give a more rounded assessment of the actual risk to members, it could be helpful to encourage or mandate the use of more than one measure. Whilst such measures may or may not be used for funding decisions, they could provide the basis for communicating risks and expectations to members.

Trustee decision making

162. Some commentators have suggested that valuation measures are having a negative impact on trustee decision making, resulting in short termism, and in some cases an overly conservative investment strategy. Sponsors have to be consulted on the strategy, given it is the sponsor who can be expected to have to pay for any such conservatism. Although adopting a lower risk investment strategy is aimed at reducing the risks to members and reducing the potential volatility in sponsor contributions, it could result in shifting the balance from investment returns to sponsor contributions, thus increasing costs for sponsors. Of course, higher risk investment strategies could also result in higher sponsor contributions if the investment risks crystallise; on the other hand, conservative investment strategies may result in higher returns foregone, increasing the burden on sponsors and putting at risk members' benefits.

163. It is worth noting that it is not just the trustees who influence decision making on the funding strategy. The employer is also central to this process, and does not necessarily approach the negotiation with the assumption that the lowest contributions are the optimal outcome. Some employers will have a range of concerns such as limiting the volatility of liabilities on the balance sheet, and maintaining a stable schedule of contributions with funding risks minimised. The trustee will also take account of the strength of the covenant when assessing the level of risk that is appropriate in the investment strategy.

164. There is a question about whether trustees are always sufficiently skilled to make decisions about the deployment of funds in what is an evermore sophisticated investment market. In contrast to Financial Conduct Authority (FCA) rules about a "suitable person" to advise on investment of assets, trustees do not require any particular skills or qualifications – although they are required to take advice from a suitably qualified person. So one way of improving the quality of decision making could be to require trustees to be trained, or to limit trustees to appropriate professionals.

165. Such an approach would not be entirely straightforward, as professionalisation of trustees would represent an additional expense, which not all schemes could easily absorb, and there may not in the first instance be a suitable supply of professional trustees available. The benefits of such an approach would therefore need to be shown to outweigh the additional burden.

166. This is an issue that the Regulator has recently explored and is taking forward in its work on 21st Century Trusteeship and Governance.[59] The Regulator found that respondents to their discussion paper thought minimum qualifications could not adequately test and measure the broad range of experience, skills, knowledge and attitude required of trustees on an ongoing basis. In particular, the qualities of a good chair were seen as more behavioural in nature and qualifications or registration

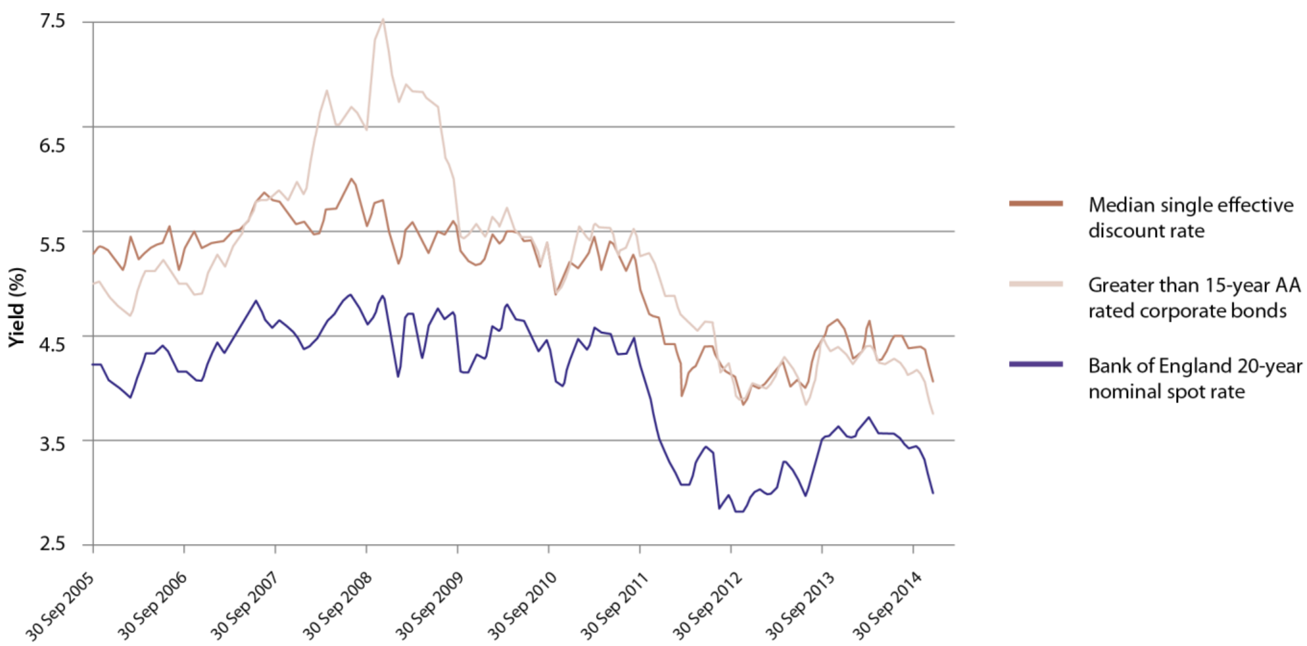
[59] The Pensions Regulator, 2016

with a professional body would not necessarily demonstrate competence for the role. There were also concerns that requiring qualifications would discourage people from becoming or remaining as trustees or chairs, and therefore hinder diversity on boards. Some respondents also stressed the importance of focusing on the competence of the board as a whole. Qualifications were thought to be too standard and not sufficiently flexible to meet the needs of trustee boards.

Setting the discount rate

167. Various commentators have expressed doubts about whether schemes are using the important flexibilities in the setting of the discount rate effectively, as the actual discount rate reported by schemes seems to track the gilt rate closely – as illustrated in Figure 15. The suggestion is that deficits may currently be over-stated while gilt yields are at historically very low levels, and that sponsors are being asked to potentially commit more in deficit repair contributions than might otherwise be required.

Figure 15: Median (nominal) Single Effective Discount Rate, Bank of England 20-year nominal spot rates, greater than 15-year AA rated corporate bonds.



Sources: tPR, Thomson Reuters, The Bank of England, Markit iBoxx

168. Although we do not have comprehensive investment return data, various publications have also suggested that DB funds tend to achieve much higher actual investment returns than the rates assumed for the purposes of liability valuations (which in turn would affect Deficit Repair Contributions and other decisions). For example, according to an OECD report, UK pension funds' real 4-year and 9-year geometric average annual returns were 8.4% and 6.5% respectively.[60]

169. However expectations for future returns may be very different. The relatively high returns achieved by schemes in the past may be largely a result of the increased market values of their existing bonds, due to yields falling. This implies a much lower return in the future for future purchases of these assets. In addition, equity returns in the past do not mean that these returns will necessarily

[60] Pension Markets in Focus, OECD 2015: Data calculated over the period Dec 2009 - Dec 2013 and Dec 2004 - Dec 2013 respectively for the UK only (all other countries in the chart were 5-year and 10-year average annual returns).

continue into the future (but note that the investment return figures presented above cover the period of the recession, so one might expect that they will be even higher in the future). It is also important to note that the returns assumed in the discount rate include allowance for future changes in investment strategies, where schemes may be on a path to lower risk.

170. It is difficult to reach a firm conclusion from the data about whether discount rates are overly pessimistic. The most important element of this is whether the discount rate is arrived at in an informed way and is fit for purpose, and that decisions are taken rationally.

171. The Government is not convinced that there is strong evidence for a systemic issue with a lack of flexibility with the setting of the discount rate. While it is true that the median discount rate does not appear to deviate significantly year on year relative to gilt yields, even small changes could be significant when compounded over many years. For example, the median outperformance assumption for discount rates over the 20 year real spot rate for tranches 3 and 5[61] differ by 0.25% per annum and such a difference might typically change the liabilities by about 3-5%,[62] which is likely to materially affect the calculated deficit.

172. In addition there is actually considerable variation in the discount rates used at scheme level. Published data from the Regulator below demonstrates this. Firstly, Table 3 shows that there is a wide distribution in the outperformance over gilts assumptions used by schemes across all Tranches. Secondly, Figure 16 shows the distribution in the change in outperformance from one valuation to the next.[63] It highlights that around a quarter of these schemes increased their outperformance by up to 0.25% per annum, a further quarter increased by 0.25% per annum to 0.5% per annum and another quarter by over 0.5% per annum. The remainder reduced their outperformance.

Table 3: Distribution of the outperformance of the real Single Effective Discount Rate over the 20 year real spot rate (Tranches 1-7 – schemes in deficit only; Tranches 8 and 9 – all schemes).

	Percentage - Tranche								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
95th percentile	1.84	1.76	1.98	2.04	1.71	1.92	2.04	2.08	1.99
Upper quantile	1.38	1.35	1.50	1.48	1.24	1.29	1.51	1.49	1.36
Median	1.07	1.01	1.19	1.13	0.94	1.00	1.15	1.14	1.03
Lower quantile	0.77	0.76	0.89	0.76	0.62	0.67	0.78	0.77	0.65
5th percentile	0.13	0.13	0.22	- 0.01	- 0.09	0.02	0.08	0.01	- 0.01

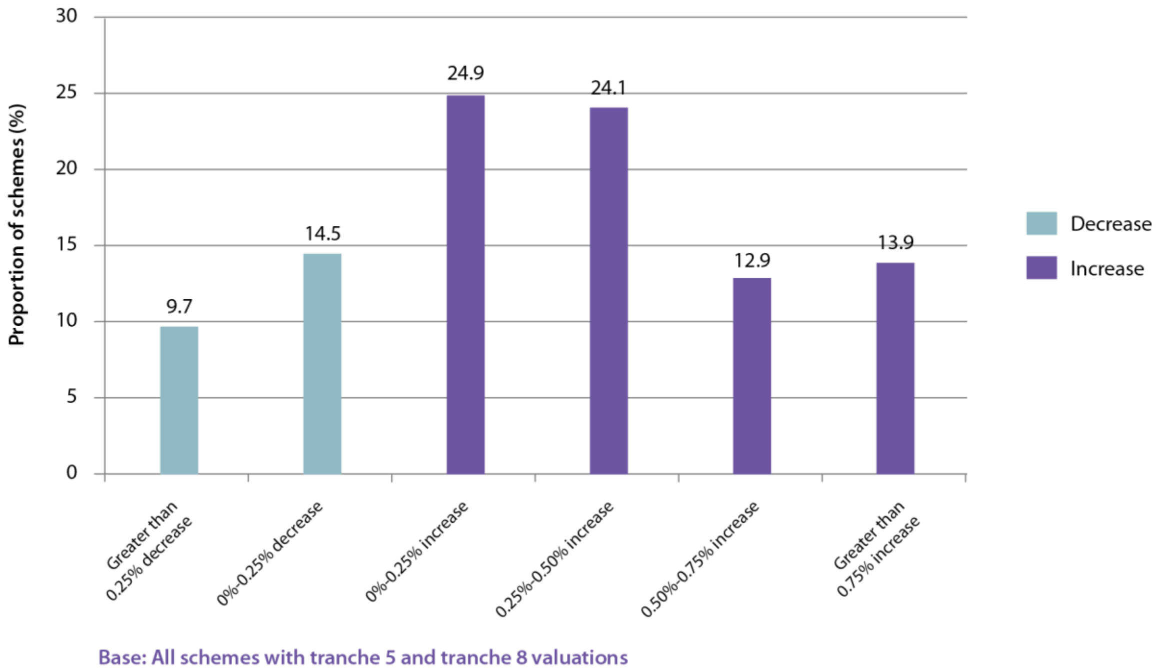
Source: tPR Scheme Funding Statistics 2016 Appendix.

61 tranches 3 and 5 are not strictly comparable and the comparisons are for illustrative purposes only. Schemes with valuation dates between Sep 2007 - Sep 2008 and Sep 2009 - Sep 2010 respectively, see Glossary for full definition of tranches)

62 assuming that discount rates are based on gilt yields and broadly 30% of assets are held in matching gilts.

63 Tranche 5 to 8 – broadly the same set of schemes

Figure 16: Distribution of percentage change in outperformance assumption over gilts.



Source: tPR, Thomson Reuters, The Bank of England.

Valuation cycles

173. Commentators have suggested that the triennial valuation cycle may be focussing trustees and sponsors on managing the position at the valuation date, rather than taking an appropriate longer term approach to scheme funding, which could result in higher contributions from the employer and more risk for the member.

174. However, there is already some flexibility built in to the valuation cycle, as trustees have up to 15 months from their valuation date to agree their valuation and to negotiate the contributions, including any recovery plan with the employer.

175. One option might be to reduce the 15 months that is currently allowed to finalise the valuation arrangements. The Work and Pensions Select Committee recommended in their recent report a period of nine months as a possible alternative. A shorter period would encourage trustees and employers to focus on the task in hand, would prevent any unscrupulous advisors from dragging the process out, and would result in more prompt reporting to the Regulator.

176. Another option might be to extend the scheme specific approach to the valuation cycle, and allow the Regulator to require more regular valuations from high risk schemes, but a longer cycle for those schemes which pose a much lower level of risk. The Work and Pensions Select Committee also recommended that riskier schemes should have to provide valuations to the Regulator more frequently, while low risk schemes should not be required to report as regularly.

177. We have not seen any compelling evidence to suggest that the triennial cycle of valuation itself is a significant problem for schemes, nor that it is itself impacting on the funding and investment strategy chosen by trustees. But we understand that there is a wide range of circumstances amongst schemes, and that a one-size fits all approach may not be the best use of the resources of all schemes or the Regulator.

178. We should be clearer about what the problem is that we are trying to solve. If it is to ensure that schemes have the right ongoing monitoring processes in place rather than overly focussing on the triennial valuation, and the Regulator has access to the information they need to undertake their functions, then changes to the valuation cycle may not be the best solution to this problem. In fact requiring a struggling employer with an underfunded scheme to undertake more frequent valuations might be completely counter-productive if it racks up cost on a disproportionate basis. Another option might be to introduce risk based reporting and monitoring requirements which may offer some reduced burden to lower risk schemes, with a proportionate monitoring regime for higher risk schemes.

Investment strategies

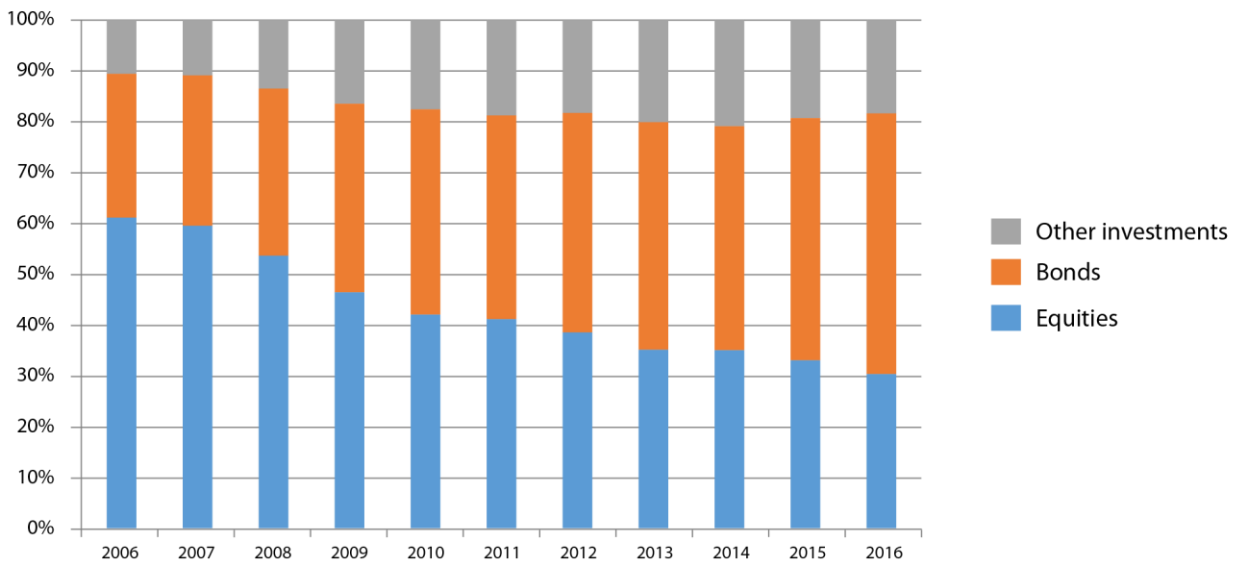
179. Some commentators argue that the valuation approach may also be causing significant volatility in the deficit measure, and driving some overly conservative investment strategies to mitigate this volatility. It is to be expected that as schemes mature – and most schemes in the DB sector are now closed to new members and to new accruals – they will seek to more closely match their assets to their liabilities, and so shift assets to bonds and gilts and other matching assets from potentially higher earning but more volatile assets. But it is argued that some schemes may be overly cautious in their investment strategies as a result, shifting the expected balance of funding from investment returns to contributions from the sponsor.

180. Where schemes are targeting a buy-out of the scheme with an insurance company in the short to medium term, they are likely to invest more in low risk low-return assets like bonds as well. But that reduces the ability of the scheme to improve the funding position through investment outperformance over bonds, which will again shift the reliance for any improvement in the funding position to the sponsor - although this consequence will have been explicitly recognised and accepted by the scheme and sponsor in agreeing the plan. Schemes with a longer-term aim of buying-out or reaching a low risk target position may not be seeking such overall close matching in the short term. Instead, they may be on a flight path for reaching their funding and investment target using a mixture of investment out performance through higher risk/return assets and sponsor contributions.

181. There can be little doubt that schemes have chosen to invest less in return seeking assets over recent years (as illustrated in the figure 17). This is part of a trend that started decades ago, and cannot therefore be entirely driven by the current valuation regime. But over the last decade the proportion of pension scheme assets held in equities has fallen from around 60% in 2006 to around 30% in 2016. At the same time, the proportion invested in government and corporate bonds rose from 30% to 50%.[64] Schemes have done this for a variety of reasons. Among them there may be reasons like lower returns on equity since the start of the global recession back in 2008, which have nothing to do with DB pensions and their regulation. On the other hand, there may be pension specific reasons like schemes willing to change cash flows when schemes stop being open to new members and start maturing more quickly.

[64] PPF, *Purple Book, Asset Allocation*, 2016

Figure 17: Weighted average asset allocation in Total assets.



Source: The Purple Book 2016, PPF

182. A point of interest in regards to this trend is the evidence that gilts and index-linked bonds seemed to have provided higher nominal returns than UK equities over a 10 year period from 2005 to 2015 (see Table 4). The lower average return on equities over the 10 year period was most likely due to the volatile period during the 2007/08 financial crisis. During this period share prices of most FTSE companies drastically fell thus lowering capital gain, in addition many of the said companies suspended dividend payments thus lowering dividend income for investors. Therefore in retrospect the derisking strategies that schemes chose to make may seem to have been a sensible decision.

Table 4: Long term nominal and real returns on a gross annualised[65] basis[66]

10-year returns (2005-2015) %p.a.			
	Nominal	Price inflation	Real
UK equities[67]	5.6	3.0	2.6
Overseas equities[68]	7.2	3.0	4.2
Property	5.4	3.0	2.4
Index-Linked bonds	6.7	3.0	3.7
Gilts	6.4	3.0	3.4
Corporate bonds[69]	5.0	3.0	2.0
AA Corporate bonds[70]	5.6	3.0	2.6
Overseas bonds	5.4	3.0	2.4
Cash	1.8	3.0	-1.2

Source: Pension fund Indicators 2016, UBS.

65 Geometric average over the 10 years
66 UBS, *Pension fund Indicators*, 2016
67 FTSE All-share Index
68 FTSE World ex-UK Index
69 Iboxx Sterling non-Gilt All stocks Index
70 Iboxx Sterling Corporate AA15+, 2006-2015

183. The Government believes that while there is evidence of a shift away from return seeking assets over time, there is no evidence that this is driven by inappropriate measures of scheme liabilities. Rather in most cases it seems to be driven by decisions made by trustees and sponsors based on a number of considerations. There is a question, though, as to whether all parties have the information, skill set and experience that they need to ensure that they reach a well informed and appropriate decision.

184. Trustees operate under a duty to act in members' collective interests. It is therefore understandable that they might seek to minimise the risks of downside losses from the riskier investment options. Schemes are obliged by law to take specialist advice and to discuss their approach to investment with the sponsor. Most experts argue that both schemes and sponsors have chosen to de-risk to a greater or lesser extent in order to reduce the volatility of pension funding partly due to:

- their desire to match their maturing liabilities (as a result of scheme closure);
- providing a degree of matching to the Statutory Funding Objective or accounting standard;
- to minimise the risk of calling on the sponsor for higher contributions in future, potentially affecting their plans for sustainable growth; and
- because their long term funding goal is to be in a low risk position or to buyout their pension liabilities with an insurance company.

185. In general, targeting these objectives, and seeking to reduce volatility encourages schemes to adopt a lower risk strategy which limits the potential for higher returns from their investment portfolio. This may be an entirely rational trade-off.

186. But it is possible that there are instances of trustees and their sponsors choosing to take less risk than they reasonably could, given the strength of the sponsor covenant standing behind the scheme. As a result, investment strategies may be overly cautious resulting in sponsors having to pay more towards their schemes than would be required if higher returns on assets were achieved – of which there can be no guarantee in advance. This approach also limits the potential requirement for even higher contributions should investment risks materialise and may be agreed to by the sponsor for that very reason, indeed may have been suggested by the sponsor in order to minimise that risk and accepting the higher expected cost. We would like to better understand whether the decisions made in this context are optimal, well informed and rational, or whether they are overly conservative and potentially sub-optimal as a result of existing regulation. Some of the reasons put forward which we think at least in theory could pose a risk, and which we are keen to explore are:

- the trustees are not sufficiently skilled to deal with investment choices in an increasingly sophisticated investment environment;
- their decisions are being influenced by what some people claim is overly cautious guidance or influence from the Regulator;
- the decisions are influenced by overly cautious advice from the pensions advisory community, possibly influenced by herding (the tendency for individuals to follow the actions – whether or not rational – of a larger group);
- trustees are constrained in their decision making by a cautious approach from sponsors who are concerned about volatility, and minimising risk;
- smaller schemes are not able to access specialist investment advice, and may lack the scale to take advantage of some investment opportunities;[71] or

[71] For example, according to the Regulator's Trustee Landscape Quantitative Research 2015, 23% of DB only schemes in the sample responded that 'the scheme has to be selective in its appointment of advisors due to cost considerations' and 6% that 'the scheme can rarely afford to'. Among all respondents, incl. DC schemes, 38% of small schemes gave one of the two responses (i.e. either has to be selective or can rarely afford), but only 18% of large schemes.

- the decisions are influenced by expectations that high uncertainty currently present in the economy will remain in the medium/long term.

187. We have seen some evidence from commentators, most notably the PLSA in their interim DB Task Force report, which suggests that the investment derisking undertaken by some schemes may be short-sighted, and may be having the effect of crystallising deficits, and depriving schemes of the opportunity to benefit from returns from riskier assets.

188. In practice the decision over what an appropriate recovery plan looks like, the level of investment risk and how this will change over time, and the level of reliance on contributions from sponsors is a scheme and employer specific issue. This will depend on a number of factors, including the affordability position of the sponsor and their appetite and ability to make up any deficit and how this would affect their plans for growth.

189. The Regulator's guidance focuses on trustees and sponsors working together and managing the risks to the scheme by looking across the areas of investment, covenant and funding in an integrated way. The considerations above regarding the balance between investment risk and return and sponsor contributions would therefore be a key element in the trustee and employer discussions and decision making.

Asset classes

190. Some commentators have also suggested that a conservative approach to asset allocation may be depriving the UK economy of capital, in addition to depriving schemes of good investment opportunities.

191. To ensure benefits are paid when they are due, trustees and sponsors need to strike a balance between maximising the return on investments, whilst being mindful of the need to reduce, as far as possible, the risk of future contribution calls on the sponsoring employer that may ultimately be unaffordable. This means that they usually spread the majority of their assets between safer, low earning investments such as gilts and high grade corporate bonds, and higher earning but more volatile assets, such as equities, property and high yielding bonds. To diversify and hedge against certain events, they may make use of other asset classes such as hedge funds and insurance and derivative investments.

192. Some pension schemes adopt a wider range of asset classes than others. There may be several reasons for this. For example, larger schemes, or schemes with access to better levels of advice may be able to adopt a more sophisticated investment strategy. Also, larger schemes, or schemes backed-up by financially stronger sponsors, may be able to make use of relatively less conventional assets which over the longer term may deliver returns at least as good as the more traditional asset classes but offer diversification and the potential for out performance.

193. However, schemes have said that the alternative and probably more esoteric asset classes are not suitable for all schemes. For example, smaller schemes may not have sufficient assets to be able to invest in infrastructure projects. But on the other hand smaller schemes can access investments that require scale through investment products that are available in the market such as pooled arrangements – although of course there are costs involved in so doing. Other schemes may, for cashflow reasons, not wish to tie up their assets in long term infrastructure projects, or may find it difficult to find suitable investment opportunities in alternative asset classes which meet their needs in terms of risk and return or liquidity.

Funding and investment - conclusions

194. We would like to explore whether there is rationale and scope to encourage or facilitate some schemes to make different investment decisions, and to mitigate any barriers to greater use of alternative asset classes.

195. Suggestions for changes that might bring about a change in investment approach include giving the Regulator a more central role influencing or determining the level of risk a scheme should be taking, mandating or encouraging alternative valuation measures, or by improving the skills of trustees through training or professionalisation of trustees. We would welcome views on the full range of options that have been suggested.

196. However, the Government is not convinced that there is sufficient evidence about the nature and quality of trustee decision making, nor what the various influences are in smaller and larger schemes that result in the investment strategies that are adopted, and the asset classes that are chosen.

197. We therefore intend to work on collecting more information and insights on the nature and quality of trustee decision making, and to further investigate the factors that influence investment strategies and choices of asset classes in smaller and larger schemes. This should throw more light on the issue, and may throw up further options for change.

Changes which have been suggested

- Mandate or encourage schemes to publish a range of valuation measures.
- Better Government and industry communications about the meaning and context of valuations
- Regulator to allow for more regular valuations for high risk schemes, and a longer valuation cycle for lower risk schemes.
- Reduce the timescale for valuations from 15 months to 9 months.
- Introduce risk based reporting and monitoring requirements for schemes.
- Improve trustee decision making skills through training or better guidance.
- Mandate the use of professional trustees.
- More proactive role for the Regulator in scheme funding and risk management.
- Commission further research into trustee decision making, the factors affecting investment strategies and choices of asset classes.

Consultation Questions:

Question 1

Are the current valuation measures the right ones for the purposes for which they are used?

a) Are the flexibilities in setting the Statutory Funding Objective discount rate being used appropriately?
   - If not, why, and in which way are they not being used appropriately?
   - What evidence is there to support this view?
   - How could sponsors and trustees be better encouraged to use them?

b) Should we consider shorter valuation cycles for high risk schemes, and longer cycles for those that present a lower risk?
   - What should constitute a high or low risk?
   - Or should a risk based reporting and monitoring regime be considered?

c) Should the time available to complete valuations be reduced from 15 months?
   - What would be an appropriate length of time to allow?

d) Should other measures or valuation approaches, for example stochastic modelling, be mandated or encouraged?
- If so, which ones and for what purpose?
- How would the information provided to the Regulator to explain the agreed recovery plan differ from that at present?
- What would the costs be, and would they outweigh the benefits?

Question 2

Do members need to understand the funding position of their scheme, and if so what information would be helpful?

a) Should schemes do more to keep their members informed about the funding position of their schemes?

b) Do we need Government communications to provide information to the wider public and media about the degree of certainty and risk in the regime?
- What difference could this make?

Question 3

Is there any evidence to support the view that current investment choices may be sub-optimal? If yes, what are the main drivers of these behaviours and how could they be changed?

a) Do trustees/funds have adequate and sufficient investment options on offer in the market?
- Is there anything Government could do to address any issues?

b) Do members need to understand the investment decisions that are being made?
- If yes, are there any specific decisions that need articulating?

c) Would it be appropriate for the Regulator to take a lead in influencing or determining an acceptable overall level of risk for a scheme in a more open and transparent way?

d) Would asset pooling or scheme consolidation help schemes to access better investment opportunities?

e) Is regulation (including liability measurement requirements) incentivising overly risk-averse behaviours/decisions that result in sub-optimal investment strategies?
- If yes, which regulations and how do they impact on these decisions?

f) Are you aware of evidence of herding or poor advice from the intermediaries and advisors?

g) Are measures needed to improve trustee decision making: skills such as enhanced training, more Regulator guidance, or the professionalisation of trustees?

Employer contributions and affordability

Background

198. Employers are required to fund the scheme to a level which is expected to allow the promised benefits to be paid when they fall due. This must include an appropriate margin for prudence to mitigate adverse outcomes. The regime is designed to allow for schemes to temporarily fall into deficit. This can often happen due to the volatility in financial markets, despite employers paying all their contributions as agreed with the trustees, and is allowed by the regime provided that the employer agrees to a recovery plan. The length of the recovery plan and the level of contributions take into account the employers need to invest in the sustainable growth of the business.

199. While the modelling results suggest that the funding position of schemes is likely to improve in the future, deficits have been stubbornly persistent for some years despite very substantial payments by employers.

200. Since the financial crisis in 2008, deficits of UK DB schemes have increased significantly. The aggregate deficit of schemes in the PPF 7800 index (which estimates the ability of schemes to secure PPF compensation levels on a buy-out basis) was £196.5 billion at the end of January 2017 compared to a small aggregate surplus in early 2008. However, the aggregate deficit reached a peak of over £400 billion earlier in 2016, which demonstrates the volatility of the measure. The deterioration of the aggregate funding position since 2008 is largely the result of depressed bond yields driving down the expectations of returns from investments which trustees use to set discount rates to calculate the liabilities. Whilst scheme assets have increased in value over this period, this has been more than offset by the corresponding increase in liabilities.

201. Up to a point the increase in deficits is a natural consequence of the way the system is designed to work. The existence of the flexibilities in the UK DB funding regime is one reason why schemes have been able to operate in deficit. Today, around 90-95% of schemes are in deficit on a Technical Provisions basis.[72] On average Recovery Plans are around eight years long,[73] which is only marginally shorter than the average length when the current regime was introduced around 10 years ago. However, this is despite the volatility seen in market conditions and the historically low yield environment.

202. Apart from waiting for interest rates and gilt yields to rise, and/or for expected investment returns to follow suit, there are only four possible ways of improving the funding position of schemes. These are for employers to pay more Deficit Repair Contributions (DRCs) into the scheme, for the trustees to change their asset allocation to get better returns from investments, for the scheme to reduce liabilities, perhaps by reducing benefits or restructuring exercises, or for the prudence in the valuation assumptions to be reduced (although this latter option would only change the perceived funding position of the scheme rather than actually change the cost of the liabilities). Issues concerning investment strategies and asset classes are dealt with in the previous sections.

203. One of the best ways of protecting members' benefits in a DB scheme is for them to be backed by a strong employer that is able to generate the funds necessary to ensure a strong growing business and pay the contributions if the scheme needs them. This enables the scheme to take greater levels of risk with a high degree of confidence that the downside will be covered. This means it is in the

[72] tPR estimate. See Annex 2
[73] tPR, *Scheme Funding Statistics*, 2016

interests of the trustees and the members for the employer to be able to invest and generate profits and capital.

204. Similarly, members benefits may be better protected through requiring a higher level of DRCs from employers and/or reduced risk in the scheme. Increased contributions would however impact on the employers ability to use their available cash for other means and their ability to fund these increases will be highly dependent on the affordability position of individual sponsors.

205. A key question is whether the current regime is sustainable for employers, or whether it may be in the best interests of members, employers, the PPF, and potentially the wider economy, to alter the current balance of the regime between the protection of members, and the demands on sponsors.

Affordability

206. Various commentators have suggested that the scale of DB deficits and the substantial calls on sponsors' resources mean that DB has become an unsustainable drag on employers' resources. They suggest that there is a compelling case for a re-evaluation of the DB promise, necessitating the reduction of future benefits to take the pressure off employers, and to make the whole system more sustainable for the future.

207. Based on the evidence available on general affordability, we do not believe that this case has been made. Part Three of this paper suggests that overall most sponsors can manage their DB schemes including any DRCs and some could potentially afford higher levels of contributions.

208. The Government is not persuaded that there is a case for across the board changes that would reduce members' benefits in order to relieve the pressure on employers. The Government believes that DB pensions are hard promises – they are debts like any others, and debts should be honoured where sponsoring employers are able to do so. Measures to reduce pensions would be highly controversial, and would have significant legal implications, given that a pension is regarded as deferred pay, and is the property of the member. Also, it would introduce a significant additional uncertainty in the already uncertain environment which risks discouraging pensions savings in general. If the Government were to consider across the board measures to reduce DB liabilities by reducing benefits, very compelling evidence would be needed. We have not seen such evidence, but would be interested in views.

209. It is clear that there is a wide range of circumstances for sponsors and schemes within the DB sector. It might make sense to have a tailored approach, with different measures targeted at stressed sponsors and schemes, and those where there is more affordability.

Sponsors with significant resources, and severely underfunded schemes

210. From the evidence the Government has seen, as discussed in Part Three, it appears that at the aggregate level there may be a reasonable level of affordability in the system, and some sponsors may be able to go further and reduce deficits more quickly. Evidence suggests some employers with pension schemes in deficit have substantial cash holdings, or profitability which might allow them to reduce or eliminate their deficits. Although the DRC to Profit Before Tax (PBT) ratio data has to be interpreted very cautiously, since PBT only measures profit in a given year and often does not reflect the employer's underlying profitability. Around a quarter of all sponsoring employers that are paying DRCs and have positive profits are spending less than 5% of their PBT on DRCs. This suggests that there may be spare capacity for these employers to eliminate deficits more quickly. In failing to make faster progress in repairing deficits whilst they are able to do so, scheme members and the PPF are exposed to potentially unnecessary levels of risk. Employer strength can deteriorate rapidly and if the scheme remains underfunded when this occurs then members benefits would be under threat.

211. There may therefore be a case to encourage some sponsors who have significant resources available, but also have substantial deficits in their schemes, to make faster progress in repairing

those deficits and so reduce risk to members. Some commentators have argued that such an approach could be good for business as well as good for members, as reducing deficits when funds are available may help to prevent sponsors sliding into the category of stressed sponsors in the future, and companies with well funded schemes will tend to be favoured by the market.

212. One way to achieve this might be to tighten up the scheme funding regime for employers where there is significant affordability. One option, for example, would be to limit extensions to recovery plans, or to set hard limits on the lengths of recovery plans in certain circumstances. It could be argued that the employer should not be able to push back the date for dealing with the deficit or have a long recovery plan while they have significant resources available.

213. Another approach which has been suggested is to set interim funding targets for severely under funded schemes, and, until they are met, requiree the employer to stay closely in touch with the Regulator and explain on a regular basis what action is being taken to repair the deficit. One way of focussing these requirements for consultation would be to only apply them to schemes which were not funded to PPF level, because if their employers were to go insolvent this would have negative repercussions for the DB universe as a whole, rather than just for the scheme's members.

214. We would be interested in views on whether such action would be appropriate, as well as whether any other measures might be appropriate to ensure that sponsors who have the resources make appropriate contributions to their schemes in order to improve the security of member benefits.

Stressed schemes/sponsors

215. While DRCs may be affordable on average, this masks the fact that some companies are clearly struggling. Some companies are paying very substantial DRCs, which may not be sustainable in the long term. This section therefore looks at what measures are available or could be introduced to help schemes in this scenario and how these measures may mitigate or reduce risk to members, sponsors and the PPF.

216. Despite the fact that many employers have significant cash holdings, it is clear that contributions of this magnitude will have had an impact on profitability, and will have used up resources that would have been deployed in other ways. And whether or not these sums are technically affordablee, employers are certainly paying much more into DB pensions than they ever planned to when these schemes were inaugurated.

217. We have to be very careful with interpretation as there are many factors driving certain cash flows, but we believe there are sufficient indicators that appropriate DRC payments can be interpreted as a challenge for a significant minority of companies.

218. As we set out in Part Three, the results from the PPF's scheme funding modelling include schemes that aren't expected to be sufficiently well funded to buy-out where the employer has become insolvent, and at the 90th percentile (the worst 10% of outcomes) there are around 1,000 such schemes where the employer is predicted to become insolvent by 2030.

219. Although the system would be working as Parliament intended if members in these schemes were to get at least PPF compensation, this does not suggest that the system is free from problems. For the vast majority of stressed sponsors, business failure would occur regardless of the burden of DRCs. But there is a subset of employers where reducing the burdens of supporting a DB scheme, potentially coupled with business restructuring could result in better outcomes. We should therefore think very carefully about what can be done to relieve pressure on stressed sponsors and schemes to help to deliver the best possible outcomes.

220. Furthermore, although the modelling set out in Part Three shows that even if interest rates remain low for longer than expected in the standard scenario, funding levels overall are likely to improve. In the event of further economic crises or turmoil, we can expect there to be more sponsor insolvencies, and more members' benefits will be at risk of not being paid in full.

221. For some, this situation may not be sustainable in the long term, and continuing as things are may not be in the best interests of sponsors, members, and the PPF. So it is important that we investigate what could be done by way of mitigation and how various options for change would impact across these differing stakeholders.

Measures to target stressed schemes/sponsors

222. While we do not believe a case has been made for across the board reductions in benefits paid by DB schemes, there may be a case for changing the arrangements for stressed schemes and sponsors, which will help to preserve value and jobs in the economy, while also delivering a good deal for members.

223. If stressed employers are to be allowed additional flexibilities, the key questions then are how a struggling or stressed employer is to be defined and in what circumstances would it appropriate to target such easements. Wherever such lines are drawn there will be significant issues which would need to be resolved – for instance there is the possibility of moral hazard, where sponsors could seek to reduce their DB liabilities and take advantage of safety valves, by manipulating circumstances to ensure they meet the criteria.

224. It would not be appropriate to define a stressed scheme and sponsor purely on the basis of the scheme's funding level. Some poorly funded schemes have very strong sponsors who are clearly able to support the scheme and repair deficits without significantly compromising the underlying business. So an objective definition of a stressed scheme and sponsor would have to have an element of balancing the risks being run and contributions necessary to get a scheme to some pre-defined funding position, against the sponsor's ability to meet those demands – potentially using metrics such as profit before tax, which is one possible measure of a sponsor's ability to generate value. It may be that a sponsor's affordability position is so complex and scheme specific, that a judgement would need to be made on a case by case basis by, for example, the Regulator and the PPF, similar to the Regulated Apportionment Arrangements (RAAs) approach. We would be very interested in views on what appropriate metrics or methodologies for defining a stressed sponsor might be.

225. Some stakeholders argue that the current system leads to outcomes that are excessively binary in nature – an all or nothing approach where the scheme is either able to pay benefits in full, or for the scheme to enter the PPF which only happens when the employer fails – and that other measures could be put in place to help develop a 'middle ground'. In practice, however, many schemes whose sponsors fail are able to buy-out a level of benefits higher than PPF but still less than full benefits. Around 700 schemes comprising 235,000 members have transferred to the PPF to date and around 100 schemes comprising 50,000 members have bought out following insolvency of the sponsoring employer with a higher than PPF level of benefits. Around 40 schemes have been rescued to date following insolvency of the sponsoring employer.

226. Sponsors that are struggling are not able to separate themselves from the scheme and 'walk away' from their obligations without triggering section 75 debt, which is broadly equivalent to the scheme deficit on an insurance company buy-out basis. However, the current exception in the system to this can be achieved via an RAA which allows the sponsor, where insolvency is expected, to separate itself from the scheme. In these circumstances, sponsor insolvency is avoided and the scheme will usually either buy-out benefits above PPF level or transfer into the PPF. There has also been a very limited number of instances where members of the scheme are offered the chance to transfer to a newly created scheme rather than buy-out or enter the PPF. However, RAAs only apply in circumstances where the sponsor is likely to become insolvent in the next 12 months and the trustees, employer, the Regulator, and the PPF agree that a better outcome can be reached for all parties by separating the scheme from the employer before insolvency occurs.

227. Our analysis highlights that there appears to be a group of employers who are likely but not certain to become insolvent before completion of the recovery plan or members benefits are paid in full. However, many of these employers may not be able to access an RAA, as it is not clear that they

will become insolvent within the next 12 months. For the schemes sponsored by these employers, the current system does not offer any alternative. Their only option is to aim for investment returns to enable them to reach full funding or for the business to improve and generate more cash. But the burden of the pension scheme may itself be compromising the ability of the business to invest and recover, or to restructure. This also creates a risk for PPF members and levy payers because there is a risk that the PPF deficit could grow very substantially in the run up to a likely future insolvency.

228. There is a question therefore about whether the right balance is struck here and whether there might be alternatives. There may be a considerable prize – some employers who are struggling to survive with their DB commitments could potentially be given more breathing space, allowing the emergence of a sustainable business and potentially greater value to be realised for the scheme which would also effectively protect the PPF. Members might also be able to receive higher benefits than they would have in the PPF, despite not being able to receive their full benefits. Some commentators have suggested that more flexibility is needed to provide a safety valve for stressed employers in wider circumstances where it appears that it is unlikely members' benefits will be paid in full and that this could be of benefit to sponsors, members and PPF Levy payers. However, it is unlikely that any solutions in this area would benefit all parties and so a different trade-off would need to be made between sponsors, members and the PPF levy payers.

229. It is also important to recognise that the options that involve a 'transfer of wealth' from the members to the sponsor would raise moral hazard issues and there would need to be appropriate quid pro quo provisions in place. For example similar provisions to the condition for RAAs where the scheme would need to receive more than it would otherwise on insolvency, to ensure that the scheme is being treated fairly compared to other creditors to the employer.

230. Suggested options for change include:

a) allow struggling businesses to separate from their pension scheme more easily e.g. through widening the criteria for RAAs so it is available to more sponsors;

b) cut or renegotiate benefits, e.g. by a proportionate cut to the pension promised or tiered proportionate cuts for different levels of entitlement, or a reduction in inflation protection, or through a rise in the age at which an unreduced pension can be taken;

c) give the Regulator a workable power to separate the scheme from the sponsor or wind-up schemes in certain circumstances; and/or

d) provide more intensive support from the Regulator for both employer and scheme to review options including the potential for restructuring to rescue business value (even while keeping the pension scheme attached), and possible mandatory appointment of professional trustees, who have the relevant skills and experience of these difficult situations.

Separating schemes from struggling employers

231. As described above, it is already possible to separate the scheme from a sponsor via the mechanism of RAAs, although the circumstances in which they can be used are very limited. There is an argument that the current criteria for an RAA allowing separation of the scheme but leaving a viable employer are too strict in terms of the likelihood of insolvency within 12 months. Relaxing the RAA requirements was one of the recommendations made by the recent Work and Pensions Select Committee inquiry.

232. Where insolvency is considered to be highly likely but not within 12 months; and where restructuring could deliver significant benefits and realise more value for both the scheme and PPF than would be possible for insolvency, and leave a viable ongoing employer, then the current "within 12 months" rule prevents action being taken. Waiting until the 12 months rule is met may in some cases be too late to rescue value. So it makes sense to ask whether these rules should be relaxed. But such an approach raises many fundamental issues:

- if struggling employers have the option to not honour the pension promises made to their employees by separating themselves from the scheme, there is a danger that some members will have lost out unnecessarily if the business would have recovered without separation and that other creditors will have benefited at their expense;
- even if the sponsor eventually goes insolvent, members would continue to receive a higher level of benefits prior to then so early separation of the sponsor and scheme is unlikely to be in their interests;
- there is a moral hazard risk that an unscrupulous employer might deliberately aim to abandon their pension scheme in order to avoid the costs involved;
- employers that do honour their pension promises may be faced by unfair competition from companies that no longer have to honour them; and
- the addition of a new option, in addition to the existing ones of either fully honouring the pension promise or, failing to do so with the result that the scheme enters the PPF assessment, might undermine the current regime.

233. All these considerations suggest that greater use of RAAs, similar mechanisms, or benefit cuts for stressed schemes would need to be policed very carefully and ensure that the scheme is being treated fairly. It would be wiser to focus such relief only on a very limited number of sponsors, in other words, only on a small fraction of the potential 450 schemes, which are operating in very difficult circumstances. A key challenge here would be how to define which schemes and sponsors would be eligible, and a case by case approach might be needed.

234. Nevertheless, if it is possible to define the circumstances when separation would be allowable, and to manage the risks posed such action might increase the number of businesses that survive, with all the related benefits of employment and growth, but at the potential expense of some members.

Avoiding PPF or buy-out following a RAA/sponsor separation from the scheme

235. Under the existing system, where a scheme's sponsoring employer (or employers) becomes insolvent the scheme is required to wind-up and buy-out benefits with an insurer. This is a long standing legislative requirement and a principle on which a large part of the system (e.g. the basis for calculating employer debt) is built. This requirement is intended to ensure members have the greatest likelihood of receiving promised benefits. Without an employer to make good any shortfall in funding that arises at the point of insolvency or develops subsequently – through, for example, liability movements (including changes to life expectancy), poor investment returns, or unexpected costs it was decided that risks should be minimised by securing benefits with an insurance contract. The Pensions Act 2004[74] introduced the PPF into this system to provide a floor to members' losses. Where a scheme sponsor becomes insolvent the scheme would transfer to the PPF and members receive PPF compensation instead unless benefits can be bought out at an equivalent level or higher.

236. As recent experience shows, through RAAs the current system has flexibilities allowing schemes to be restructured, improving the sustainability of the employer and the overall covenant, with only a residual part of the scheme entering the PPF. However, again this is currently limited to circumstances where a RAA is applicable and members consent to transfer to a new scheme or the scheme has sufficient assets to buy-out above the PPF.

237. The potential for a scheme to run on without an employer – as an alternative to PPF entry or buy-out – has also been discussed. The idea is often linked to arguments for allowing reductions in scheme benefits in order to reduce the schemes liabilities to a level that may be affordable given the scheme's assets, with risks minimised to an acceptable level. This sort of approach would provide the possibility of scheme members receiving more than they would if the scheme wound up and

[74] Legislation.gov.uk, *Pensions Act 2004.* Available at: http://www.legislation.gov.uk/ukpga/2004/35/contents

sought to buy-out with an insurer or enter the PPF. However, facilitating this sort of arrangement carries with it some significant issues:

- how to avoid unscrupulous employers deliberately abandoning their scheme in order to avoid the costs involved and avoid honouring their commitments on deferred pay. And linked to this how to ensure the pension scheme debts are still enforced against the company;
- with no sponsor to make good investment losses or cover unexpected costs who bears the risk: scheme members or PPF members and levy payers? Similarly, should this type of arrangement facilitate an approach whereby investment and longevity risk is shared amoungst the whole membership;
- if the PPF underwrote these schemes it would be a significant change from its current role – making it responsible for compensation for schemes in cases where a scheme's investment strategy has failed. This raises the question of how entry to the PPF should be triggered given that an insolvency event is not possible. Given schemes running on in this way are likely to pursue similar investment strategies there is a potential for a significant concentration risk here (with many schemes claiming on the PPF at the same point in time). These risks would effectively be underwritten by the PPF's existing members and levy payers. There may then be a need for a new or separate safety net;
- what wider changes are needed to legislation and regulation to police and support what would effectively be a new system? Including how to control which schemes are allowed to run on in this manner and how (and when) to ensure wind-up/closure when funding deteriorates; and
- underlying these issues is the question of what level of risk is acceptable for members or PPF members and levy payers to bear. Will this be at different levels than for buy-out or for employer sponsored schemes? In which circumstances would this be a 'better' outcome than a greater level of certainty of receiving a lesser amount of PPF compensation, or the cost of securing benefits with an insurer.

238. A further dimension of this issue is that, if it is decided that such arrangements should be encouraged, whether it would be beneficial to establish a single fund – a Central Discontinuance Fund – to manage the benefits. This issue is discussed further in the consolidation section below.

Reducing Benefits for DB Members – where scheme and employer continue

239. Another approach for stressed employers is to allow reductions in benefits in some circumstances, either by employers and trustees renegotiating benefits at a reduced rate (potentially requiring approval from the Regulator), or by reducing the rate at which deferred pensions and/or pensions in payment increase over time, but allowing the scheme to continue alongside its existing sponsor(s).

240. Allowing even stressed employers to renegotiate pensions and reduce benefits in certain circumstances would be a radical move and highly contentious, as it undermines the nature of the hard promise of a pension as deferred pay. A very high bar in terms of evidence would need to be met before such an approach could be considered. There does not seem to be evidence of a crisis in affordability across the board that would warrant such action. However, some commentators have suggested that in certain circumstances it might be in the interests of both the members (even when the underpin the PPF provides is accounted for) and the employer to consider a renegotiation of the DB promise. A key question here is then when is the risk in the scheme too much for those whose scheme sponsors cannot show insolvency is likely.

241. We would be interested in views on whether there are any circumstances in which it would be appropriate to allow benefits to be reduced and how this would be defined.

Increased scheme wind-up power for the Regulator

242. The Regulator currently has a wind-up power dating from the Pensions Act 1995 focused on the interests of the generality of the membership. One option is to widen this power to recognise some or all of objectives introduced by the Pensions Act 2004 including to reduce risks to the PPF.

243. Using such a power would be a very serious step in that it would essentially crystallise the scheme's current funding position. It is in these stressed situations where the Regulator's objectives are most likely to conflict and therefore while scheme wind-up may reduce risks to the PPF, it could have a negative impact on employers and/or not be in the interests of members.

244. However, such a power may provide a back stop in situations where these sort of issues are already under active consideration and it seems unlikely that other solutions will lead to a positive outcome.

245. It is impossible to predict with accuracy exactly which schemes falling within the potential criteria for winding-up would be successful in paying full benefits either through their investment strategies and/or significant turnaround in the fortunes of the employer. The Regulator would therefore run the risk of winding-up schemes that might otherwise have been fine without such intervention and so leaves the Regulator in a difficult position where key judgements will need to be made.

Broader Regulator powers to allow severance

246. As discussed earlier, a broader approach to allow sponsors to separate themselves from schemes (e.g. through wider RAA criteria) is one option under consideration.

247. RAAs are initiated by sponsors and the Regulator has no direct power to enforce separation of this nature. The Regulator's powers could therefore be extended to include a power for the Regulator to require severance of a sponsor from its liability to a scheme.

248. Again, in these circumstances, it is important that there are tight controls around when this is appropriate and all the considerations above are relevant here.

More intensive support from the Regulator – 'special measures'

249. One approach to helping stressed schemes/sponsors would be to facilitate greater and more intensive support from the Regulator for these schemes. The Regulator already provides a number of statements and guidance documents around scheme funding. However, it could provide further guidance specific to trustees and sponsors of stressed schemes/employers, if this would add value and enhance understanding as to the actions schemes should take under the existing framework.

250. Similarly, the Regulator could increase its active engagement with stressed schemes/sponsors including to ensure appropriate expertise was in place (including consideration of professional trustees) to deal with the extremely complex situation the scheme is in. The Regulator already engages with a limited number of schemes each year, with the decision over which schemes to engage with based on the Regulator's risk based criteria.

251. In many cases there may be little value that can be added through further Regulator guidance and/or Regulator engagement with a stressed scheme/sponsor since the sponsor is contributing what it can afford to and the scheme has limited its risk appropriately. The Regulator may therefore need further tools (such as those discussed above including power to wind-up the scheme, separate the scheme from the sponsor or reduce benefits) in order for the Regulator to have meaningful engagement with schemes in this position. This could also include a differing monitoring and reporting framework where stressed schemes/sponsor are required to report certain data and information to the Regulator while they are under a period of 'increased scrutiny'.

Making more use of flexibilities

252. There are other ways in which pressure on employers could be reduced, for example by making more use of some of the existing flexibilities. One option would be for deficits to be repaired over a longer period. This would not mean directly cutting pensions, but would transfer some risk to members, as there is always a risk that the employer will become insolvent before the recovery plan is completed or that the funding position will deteriorate at a greater pace due to reduced sponsor contributions.

253. On average, Recovery Plans were around eight years long for Tranche 9 schemes in the Regulator's latest published statistics. They vary greatly across schemes as they are decided on a scheme and employer specific basis. Again for Tranche 9, this ranged from around 22% schemes in surplus with no recovery plan, to about 20% of schemes with plans over 10 years in length.[75] Factors that influence the length of the recovery plan include the following, which can be conflicting considerations:

- size of the deficit – a large deficit may need a longer recovery period to pay off;
- employer strength and affordability - impact upon the employer of paying the DRCs. The more cash an employer generates the faster it can pay its deficit; conversely a struggling employer may be pushed over the edge into insolvency by a short recovery period with larger DRCs up front;
- strength of the sponsoring employer – the lower the chance of employer insolvency the longer a trustee may be willing to wait for them to pay off the deficit, although it may also be possible for more to be paid faster; and
- risk to members – a large deficit with a struggling employer may ring alarm bells and encourage the trustees to seek earlier repayment of the deficit due to concern the employer may not still be solvent at the end of a longer recovery period although this would in practice be balanced against the affordability of the sponsor.

254. Therefore, all else being equal, lengthening recovery plans places greater reliance on the strength of the sponsor covenant as it relies on the sponsor still being in business and generating sufficient cash to meet its pension liabilities over a longer period of time.

255. The advantage of extending recovery plans is that the annual burden on the employer over the period of the recovery plan is reduced, although total amounts needed to pay off the deficit may be higher over a longer recovery period given the time value of money. The actual impact on total sponsor contributions will be highly dependent on the investment returns and whether a change in the recovery period would drive other behavioural changes such as the investment strategy of the scheme.

256. There may be an argument to go even further. The current valuation methods essentially estimate the size of the gap between when the money will run out and the demise of the last member many years in the future. Some have argued that there are cases in which a valid question upon identifying a deficit is when, in fact, the deficit needs to be paid. Should we consider rebalancing the risk so that future members such as the youngest and the longest lived have a greater degree of uncertainty? In other words should we consider deferred recovery plans or back loaded plans, where contributions are lower or suspended in the early years to allow greater investment in the business, provided that the short to medium term insolvency risk is considered low?

257. Inevitably even if the insolvency risk is judged to be low, this involves transferring more risk onto both the members and the PPF – there is always a risk that if the recovery plan is longer, or skewed to allow more of the contributions in the later years, that the company could suffer a downturn or become insolvent, leaving the scheme in a worse funding position than it would otherwise have been. One way to mitigate this additional risk might be to require the sponsor, where possible, to

75 tPR, *Scheme Funding Statistics – Appendix*. 2016

offer some other form of security to the scheme in return for some flexibility with its recovery plan and DRCs.

258. However, recovery plans are agreed between trustees and sponsors taking into account the affordability position of the sponsor and longer recovery plans and flexibility in how the recovery plan is designed are already allowed for under current legislation. Data from the Regulator also shows that schemes do use these flexibilities to a significant degree including use of contingent assets, varying recovery plan lengths and back end loading. Therefore, if action was to be taken to lengthen recovery plans, it may require Government (or the Regulator) to mandate a particular recovery plan length in order to force schemes to repair deficits over a longer period.

259. Given that recovery plans already reflect the position of the scheme balanced against the needs of the employer, it is unclear whether forcing a longer recovery plan (or in effect mandating a minimum length) would benefit the sponsor who may also be focussed on clearing the deficit swiftly and may not welcome an enforced longer period. This could also mean that schemes with longer recovery plans would be required to pay off their deficits over a shorter period which may put additional pressure on their sponsors.

260. Similarly, there is flexibility in how scheme calculate their liabilities and therefore deficits. Making adjustments to the recovery plan length in isolation of looking at other areas (most notably the valuation of liabilities) would create significant inconsistency across the requirements for schemes and may encourage undesired behaviours such as adjusting the scheme's Technical Provisions in order to 'retro fit' the recovery plan to the required length.

Liability management

261. Some employers already undertake incentive exercises (IEs) to seek to reduce their liabilities. Examples include pension increase exchanges where the initial level of pension income is increased in return for the loss of all or part of future pension increases and transfer exercises where an increased transfer value is offered where members agree to transfer their DB rights to a new pension arrangement.

262. The conduct of incentive exercises is currently controlled by a voluntary code of practice, based on seven principles including that it should not offer any cash incentives and depending on the type of incentive exercise, comply with requirements on advice, guidance, and/or value.

263. The Regulator's figures for the 2015/16 year show that a total of 355 Incentive Exercises were run in 93 pension schemes, which resulted in 211,170 offers being made – note some members were offered more than one type of IE so the number of offers does not equal the number of members involved. In total some 41,977 IE were accepted, of which by far the largest proportion (37,337) was in respect of a Pension Increase Exchange offer and 3,983 were in respect of an Enhanced Transfer Value.

264. Schemes are permitted, but not required, to allow small DB entitlements to be taken as a lump sum in some circumstances, rather than being paid as a pension. This is known as trivial commutation and is intended to avoid the disproportionate expense in administering and receiving small entitlements; payment of a lump sum in these circumstances can benefit both the member, for whom a small regular pension might make little difference while a relatively large lump sum could be beneficial, and for schemes/sponsors for whom that person's future pension liability – and the risks borne in connection with it – would end.

265. Tax rules allow a DB pension entitlement to be exchanged for a lump sum (with one quarter of the lump sum paid tax-free) where an individual's total pension entitlement is worth under £30,000, including private and other workplace pensions. Up to three pensions worth under £10,000 can also be exchanged for a lump sum regardless of the individual's total pension entitlement. However, there are rules in place to protect against people fragmenting pension savings in order to exchange pensions for a lump sum.

266. Some people have suggested that the trivial commutation rules are unduly burdensome and the Government would be interested to receive views on how these could be relaxed to make them simpler to operate in practice.

267. A number of commentators have suggested, and the Work and Pensions Select Committee Report recommended, that the Government consider relaxing the rules for taking small DB pension benefits entirely as lump sums – noting that such pensions can be disproportionately costly for schemes to administer and that a very small regular pension payment may be less valuable to a member than its cash value.

268. Current rules on trivial commutation allow members with small DB pensions to cash-in their entitlements subject to certain conditions:

- the member must be at least age 55; and
- the combined value of their total benefits is less than £30,000 (trivial commutation lump sums), or they may be able to take up to 3 lump sums of less than £10,000 for each separate DB benefit (small lump sums) without reference to the value of other DB benefits.

269. It has been suggested that allowing members to trivially commute earlier than age 55 might be beneficial in certain limited circumstances and increasing the limits on the value of pensions that can be subject to trivial commutation would allow more members to cash-in small DB benefits and reduce the costs for schemes to administer small regular pension payments. Clearly, there is a balance between offering such flexibility and providing provision for members in retirement and ensuring there are no abuses of the system. The advantages for schemes in terms of costs would need to be carefully balanced against the wider issues of focussing pension savings on later life.

270. Under the new Defined Contribution (DC) pension flexibilities introduced from April 2015, anyone with a right to a “cash equivalent transfer value” in a funded private sector DB scheme can transfer their benefits to a DC scheme in order to access the DC pension flexibilities, which would allow them to take some or all their benefits as cash (subject to tax) from currently age 55. Any changes to the rules regarding trivial commutation also need to consider the impact on the DC regime. In particular, if the minimum age for trivial commutation was reduced, then the DC pension flexibilities might also need to be changed to allow members to take some of their benefits earlier than age 55 up to the same limits used for trivial commutation. This would be a significant refocusing of the role of DC pension savings. Further, if the trivial commutation limits were changed, then we may need to review the amount above which independent financial advice is required for members taking transfer values from a DB scheme.

Indexation

271. Indexation is the term for increases to pensions in payment to provide a measure of inflation protection for pensioners. The statutory minimum applies to DB occupational pensions accrued after April 1997. It requires that pensions accrued between 1997 and 2005 must be increased each year by inflation capped at 5%, and pensions accrued after 2005 must be increased by inflation capped at 2.5% each year. The caps allow the inflation risk to be shared between the member and the sponsoring employer. Pensions accrued before April 1997 do not have to be increased unless scheme rules require it – although it should be noted that any Guaranteed Minimum Pensions accrued from April 1988 do have to be indexed by inflation capped at 3%, which can complicate the issue in practice.

272. The legislation regarding the statutory minimum does not refer to a particular index but requires the Secretary of State to make a decision each year about the most appropriate measure of any increase in the general level of prices. The Government switched from Retail Price Index (RPI) to Consumer Price Index (CPI) as its preferred measure of inflation for pension purposes in 2010. The rules of some schemes will reference the statutory minimum, while others will have a specific index written into the scheme rules, or may give the trustees some discretion as to which index to use. As

a result of the specifics in scheme rules, many schemes were unable to switch to CPI following this change.

273. Various commentators have suggested that indexation should be cut to reduce the burden on employers, either by allowing all schemes to reduce indexation to the statutory minimum, or to allow those schemes (around 75%) which have RPI written into their scheme rules to move to the currently lower CPI measure.

274. However, allowing all schemes to move from RPI to CPI or to move to statutory minimum indexation only (including removing any pre April 1997 indexation) would have significant impact on members' benefits. CPI has been lower than RPI in 22 years out of the last 27 years (and in 9 years, out of the last 10 years) up to 2015, and so would in all likelihood represent a reduction in members benefits. Many schemes also pay indexation above the statutory minimum.

275. Estimates from the Regulator are that moving from RPI to CPI would reduce aggregate scheme liabilities on a Technical Provisions basis by around 5-10%. Moving to statutory indexation only would mean an estimated of 15-20%.[76]

276. However, this could have a significant impact on members. Estimates from Hymans Robertson[77] show that a move from RPI to CPI would take away around £20,000 in benefits over an average DB scheme member's life. Moving to statutory indexation only would increase this loss to members substantially.

277. It would also likely have significant interactions with the gilt market and wider government financing objectives. Currently, index-linked gilts (ILGs) are linked to RPI, as this was the standard measure of inflation when ILGs were introduced. As pension funds hold nearly 23%[78] of their assets in ILGs, any changes to scheme indexation could have significant consequential effects on the price of these gilts, which would affect the Government's ability to issue debt in a cost-effective way.

278. Some stakeholders have indicated a desire for the Government to provide ILGs linked to CPI, either in addition to or instead of new RPI-linked issuance. The Debt Management Office (DMO) did consult on this in 2011, following the move of many schemes whose rules had referred to 'the standard measure of inflation' from RPI to CPI. However, the DMO decided not to pursue issuing CPI-linked gilts at that time. This was due to a number of factors, including concern about cost-effectiveness and risk at that time, including in relation to the potential inclusion of owner occupiers' housing in the CPI. These are complex issues which are yet to be resolved. While the DMO noted that its decision at that time did not preclude CPI-linked gilt issuance in the medium term, a strong case would need to be made for this position to be reconsidered.

279. The Government does not think the evidence is strong enough to suggest that indexation should be abandoned or reduced across the board. There could however be a case to suspend indexation in cases where the employer is stressed and the scheme is underfunded. And there may be a case to rationalise indexation arrangements, as the current arrangement where some schemes are prevented from moving to CPI by scheme rules is something of a lottery. This is covered in the upcoming section on Rationalising Indexation.

[76] TPR estimates assume that over the long term CPI will on average be 1% per annum lower that RPI. The extent of the reduction in scheme liabilities/benefits will depend on the benefit structure and the impact of how different caps apply on the maximum pension increases that are awarded each year.

[77] Hymans Robertson, *the generosirty of DB pensions could be reduced by up to £350 billion under options being considered by MPs,* 2016. Available at: https://www.hymans.co.uk/news-and-insights/news-and-blogs/news/the-generosity-of-db-pensions-could-be-reduced-by-up-to-350-billion-under-o/

[78] 22.8% in 2016 – Based on data in Purple Book 2016.

Conditional indexation

280. One suggestion is that increases should be conditional on the scheme and the sponsor having the resources to make the payments – so that no increases would be paid, for example, if the scheme was in deficit and the sponsor was unable to make up the deficit, and the trustees were satisfied that the best interests of members would be served by suspending indexation to allow the employer to strengthen its corporate finances. Increases could be restarted in future years once the employer had recovered. The Work and Pensions Select Committee in their recent report recommended permitting trustees to propose changes to scheme indexation rules, in the interests of members.

281. Whilst this may be a suitable way of ensuring that stressed schemes and their employers are supported in their endeavour to address deficits in hard times, as with all measures designed to help a subset of stressed schemes and employers, there is a moral hazard issue. There is the danger this could encourage employers to allow the funding level of their scheme to deteriorate in the hope that this would help reduce their liability to inflation link the scheme benefits. Therefore, requirements that the sponsor funds the scheme to a high level and limits risk when ‘times are good’ may be needed in conjunction with allowing relaxations in times of stress.

282. We would be interested in views about whether indexation should be suspended in some circumstances, and if so, in what circumstances that could be allowed and how the moral hazard issues could be addressed.

Rationalising indexation

283. The purpose of indexation of member benefits is to provide a measure of protection against the true value of benefits being eroded over time by the effects of inflation. As Table 5 below shows, it is currently something of a lottery as to whether a particular scheme has rules which refer simply to the statutory minimum, or whether they refer to a specific index such as RPI, or commit to a specific percentage each year. The Government’s preferred measure of inflation is currently CPI, which tends to be lower than RPI, although it is worth bearing in mind that CPI(H),[79] may possibly become the official measure of inflation used by the Office for National Statistics (ONS)[80] by March 2017.

Table 5 The effect of indexation

Pre 1997 Indexation		**Post 1997 Indexation**	
Indexation	**% of all DB/hybrid schemes**	**Indexation**	**% of all DB/hybrid schemes**
None	21		
CPI	8	CPI	21
RPI	40	RPI	75
Fixed, up to 3%	21	Fixed, 3% or over	4
Fixed, over 3%	10		
The above classification uses the main factor driving indexation and ignores caps and floors apart from the fixed rates pre 1997.			

Source: tPR estimates using simplifications for ease of presentation

79 CPI(H) is a new additional measure of CPI including a measure of owner occupiers’ housing costs.
80 As discussed in: ONS, *Statement on future of consumer price inflation statistics in the UK,* 2016, Available at: https://www.ons.gov.uk/news/statementsandletters/statementonfutureofconsumerpriceinflationstatisticsintheuk

284. There is an argument that if the fundamental nature of the promise that was made to members was to protect them against inflation, then the specification in scheme rules of a particular rate of increase, or a specific index, may have made sense at the time, but may now be anachronistic, and has little to do with the fundamental nature of the promise to protect against inflation.

285. The PLSA DB Task Force research found that "increasing pensions by a lower level of inflation was seen to be the most palatable benefit adjustment if one had to be made". Introducing a statutory over-ride to allow schemes to switch from RPI to CPI could amount to a saving to sponsors and lower future pension increases for members amounting to £90 billion as discussed previously. However, the changes would impact schemes differently, where the largest schemes would experience the largest monetary savings, and not all schemes would see a benefit from such an easement, but some members pensions would be significantly lower.

Revaluation

286. Revaluation is the term which describes the measure of inflation protection given to benefits in the pre-pension period – that is the period between leaving pensionable employments and normal pension age. The pension of a deferred member who leaves a DB occupational pension scheme on or after 1st January 1991 but before Normal Pension Age (NPA) is increased at NPA to provide some protection from inflation. The statutory minimum increase is inflation capped at 5% cumulative for pension accrued up to 5 April 2009 and 2.5% cumulative for pension accrued after 5 April 2009. Trustees of average salary schemes can choose to use an alternative method whereby deferred members must receive any increases they would have had had they remained in pensionable service.

287. The rationale for revaluation is similar to that for indexation – it is a valuable benefit which prevents inflation completely eroding the buying power of a pension before it is put into payment. The caps built into statutory revaluation mean that the inflation risk is shared between the member and the scheme. For individuals who were "contracted out" and are entitled to a Guaranteed Minimum Pension (GMP), the GMP must be revalued either by a fixed rate dependent on the date of leaving or by the increase in national average earnings using the same order as that to revalue earnings factors for state pension.

288. The Government has not received any representations suggesting that revaluation itself ought to cease. However, there are indications that a small number of schemes may have either a high fixed rate revaluation or the requirement to use RPI rather than CPI, the measure of inflation used by Government to set the statutory level. Exactly the same issues face these schemes as for schemes which have corresponding provisions for indexation.

Employer contributions and affordability – conclusions

289. While it does not seem that there is an affordability problem across the board, it is clear that there is a very wide spread of experiences amongst sponsoring employers and schemes. It does not appear that there is evidence to support measures to reduce burdens on employers across the board. However, there may be a case for rationalising indexation so that there is a level playing field across the sector.

290. But the wide spread of experience of sponsors and schemes, some of whom are clearly stressed, suggests that a targeted approach is needed. For some employers there may be a case for encouraging or requiring deficits to be closed more quickly, to reduce risks to members, while for a subset of stressed employers, there may be a case for greater use of existing flexibilities or new easements, but subject to finding ways to mitigate the moral hazard risk. We would welcome views on whether such a targeted approach is appropriate, and if so, what measures would be helpful.

Changes which have been suggested

- Interim funding targets, or a tougher funding regime for employers with severely underfunded pension schemes and capacity to pay more, or limits on the length of recovery plans in some circumstances.
- Making it easier to separate schemes from struggling employers.
- More intensive support from the Regulator for challenged schemes and sponsors.
- Power for the Regulator to wind-up schemes.
- Make it easier for schemes to “run on” without a sponsor where they have sufficient funding, or make it easier to transfer members in bulk to a scheme with lower benefits.
- More use of existing flexibilities such as longer recovery plans.
- New flexibilities like deferred or back loaded recovery plans.
- Allow renegotiations of pension promise in some circumstances.
- Allow schemes to suspend indexation in some circumstances.
- Allow schemes to move from RPI to a more modern index of inflation.
- Make trivial commutation rules easier to operate.
- Measures to ensure transparency and members are aware of the risks to their benefits.

Consultation Questions:

Question 4

Is there a case for making special arrangements for schemes and sponsors in certain circumstances such as a different regime for employers who can afford to pay more, and/or new or enhanced flexibilities for stressed sponsors and schemes?

a) Do you have any evidence that Deficit Repair Contributions are currently unaffordable?

b) Should we consider measures to encourage employers who have significant resources as well as significant DB deficits to repair those deficits more quickly?

   - If so, in what circumstances, and what might those measures be?

c) If measures are needed for stressed sponsors and schemes, how could “stressed” be defined?

   - Should a general metric be used, or should this be decided on a case by case basis?

d) Are there any circumstances where stressed employers should be able to separate from their schemes without having to demonstrate that they are likely to become insolvent in the near future?

e) How would it be possible to avoid the moral hazard of employers manipulating such a system in order to off load their DB liabilities?

   - Would some sort of ‘quid pro quo’ be appropriate to ensure the scheme is not disadvantaged relative to other creditors of the employer/stakeholders?
   - What could this look like?

f) Are there any circumstances where employers should be able to renegotiate DB pensions and reduce accrued benefits?
   - If so, in what circumstances?

g) Is there any evidence to suggest that there is an affordability crisis that would warrant permitting schemes to reduce indexation to the statutory minimum?

h) Should the Government consider a statutory over-ride to allow schemes to move to a different index, provided that protection against inflation is maintained?
   - Should this also be for revaluation as well as indexation?

i) Should the Government consider allowing schemes to suspend indexation in some circumstances?
   - If so, in what circumstances?

j) How would you prevent a sponsoring employer from only funding a scheme to a lower level in order to take advantage of such an easement?

k) Should Government consider allowing or requiring longer, deferred or back loaded recovery plans?
   - If so, in what circumstances?
   - Should other changes be considered, such as the valuation method of Technical Provisions?

l) Should it be easier to take small pots as a lump sum through trivial commutation?

Member protection

Background

291. The funding framework and the wider system for protecting DB pension members is intended to strike a balance between the interests of pension scheme members, the sponsoring employers and the PPF levy payers. Our assessment is that the vast majority of members can be expected to receive their full pension. We also think that where sponsoring employers are able to meet their pension promises, they should, and must, do so. If action were to be taken to alter the balance of risk between sponsors and members, due to affordability issues, it will be doubly critical to mitigate any moral hazard risk and ensure that sponsoring employers that are able to, do the right thing, and allocate the necessary funds to ensure that members' benefits are paid in full when they fall due.

Regulator powers

292. One way to ensure that sponsoring employers do make the contributions that are needed, and to ensure that they do not seek to evade their responsibilities might be to strengthen the powers of the Regulator or to strengthen the position of the trustees.

293. Increasing the powers of the Regulator is not something that should be undertaken lightly – it is important that any powers are proportionate to the issues at hand, and that clear principles are applied in assessing what those powers should be.

Scheme funding powers

294. Part Three of the Pensions Act 2004 replaced the Minimum Funding Requirement (MFR) with a scheme specific funding regime centred around the calculation of Technical Provisions on the high level principle of prudence. Where a deficit was calculated then a recovery plan would be required. This move was (in part) designed to move away from the previous rigid standard that did not encourage schemes to reflect their own circumstances (and those of the employer) in their funding strategies.

295. The current scheme funding regime is therefore more flexible and allows trustees and employers considerable latitude based on the nature and context of their particular circumstances in agreeing funding strategies for their scheme.

296. The Regulator has issued a Code of Practice in relation to scheme funding that sets out practical guidance and standards of conduct for schemes. The Code sets out the key principles to enable trustees and employers to put in place an appropriate funding plan and comply with the law. Central to the Code is the concept of Integrated Risk Management whereby trustees should consider the management of employer covenant, investment and funding risks; and that risk taking should be set in the context of the ability of the employer covenant to support those risks. Therefore an appropriate funding outcome would be one that reflects a reasonable balance between the need to pay promised benefits and minimises any adverse impact on an employer's sustainable growth.

297. Therefore the Regulator does not set out any standard boundaries regarding what level of funding or risk taking is appropriate, or over what period any deficits should be repaired. In the past the Regulator did have in place a number of internal triggers (such as recovery plans over 10 years in length) which served as a method to allocate their regulatory resource although these were not intended to be targets.

298. Similarly during their 2013 consultation on a revised Code of Practice for scheme funding, the Regulator looked into introducing a clearer picture of how they viewed appropriate risk through the proposal to publish a Balanced Funding Outcome (BFO) risk indicator. The response to this proposal was mixed, and while the majority of respondents favoured greater transparency from the Regulator in this area, others *were* concerned that it could be perceived as a new funding requirement.[81]

299. The absence of any clear boundaries or any legislative definition of what is 'prudent' or 'appropriate', has contributed to a significant divergence of approach across schemes which has been highlighted by the published data from the Regulator regarding valuations and recovery plans.

300. This divergence in funding outcomes and strategies is not in itself necessarily a negative outcome, since it is vital that funding and risk taking strategies take into account scheme specific circumstances, including the risk appetite of the trustees and sponsor and affordability position of the sponsor. However, it may be that schemes reach outcomes that represent significant (and unnecessary) risk to members (and the PPF). This may occur through a lack of understanding on the part of the trustees/advisors/sponsors, through misuse of the flexibility to adopt scheme specific assumptions/funding outcomes, or because some sponsors have the affordability to reduce risks to members or eliminate deficits at a faster rate than others.

[81] tPR, *Regulating Defined Benefit pension schemes – Consultation response,* 2014. Available at: http://webarchive.nationalarchives.gov.uk/20150703132441/http://www.thepensionsregulator.gov.uk/docs/regulating-db-consultation-response.pdf

301. Some have said that not only is this this lack of clarity challenging for trustees and their sponsors, but it also makes it particularly challenging for the Regulator to use its powers to enforce a more appropriate approach. A number of commentators, including the Regulator, have argued that the efficiency and effectiveness of the Regulator and the level of protection for members and the PPF could be enhanced if improvements were made in this area to allow more effective use of the Regulator's scheme funding powers. The recent Work and Pensions Select Committee Report into DB schemes also suggested that the Regulator should set out more clearly how trustees should use information from the sponsor when setting funding and recovery plans, but also that the Regulator should be tougher on recovery plans.

302. Options might include:

   a) setting out requirements explicitly in legislation, or

   b) giving the Regulator the power to set binding standards in this area, or asking the Regulator to set out its expectations in the form of detailed codes or guidance – which, to be effective may need to be supported by a legally enforceable "comply or explain" regime requiring trustees and sponsors to explain why they have not complied with the code.

303. Under option 'a', legislation could set out the requirements for funding in more detail so that it is clear what is expected of schemes and employers. This could be either a fixed target for all or cover a 'range' of acceptable outcomes that covers either or both the funding target and the expectations over how to reach this target (recovery plans).

304. This has the advantage of giving clarity to all parties over what is expected and a clear path for use of the Regulator powers where there is a breach.

305. Yet this may be viewed as a move back to the world of the Minimum Funding Requirement ('MFR') and limiting employer/trustee flexibility in areas where it would be appropriate to retain some flexibility (e.g. to reflect employer affordability/cash flow patterns). However, many criticisms of the MFR related to its weakness and inflexibility rather than the principle of having a funding standard and any such change could be implemented through consultation mindful of this issue to limit this risk. It would also need to be sensitive to changes in market/sponsor positions or scheme specific circumstances which may be difficult to include in legislation.

306. Under option 'b', legislation could set out a broad framework (or give the Regulator the power to do this) and would give the Regulator the power to set binding standards (or parameters). The Regulator would be responsible for setting out the details and full consultation is likely to be necessary. Some areas would need to be set out in legislation, but other areas/parameters could benefit from regular reviews and flexibility in implementation would be left to the Regulator to set out (e.g. setting limits for recovery plans in certain situations or defining 'prudence' for certain scheme types).

307. This has the same advantages and disadvantages as option 'a' but would give greater flexibility and ability for the framework to adapt to market conditions and give the Regulator the ability to adjust/revise as appropriate. This may mean that some flexibilities for schemes are reduced, but if done in a considered and open consultative way, it can be targeted on areas where flexibility is less necessary or is at risk of being misused.

308. This approach also brings into focus those schemes that would be unable to meet whatever framework is put in place. This is similar to issues discussed above in relation to stressed schemes/sponsors and is an important consideration. Solutions to this should be dealt with in a consistent and joined up way. The possible approaches set out to stressed schemes/sponsors are therefore all relevant here.

309. Such an approach might also help to address some issues around where there are concerns of excessive derisking, or excessively conservative investment strategies, as the Regulator could take an explicit view on the level of risk appropriate in the circumstances.

Corporate restructuring

310. Duties to notify the Regulator of certain corporate transactions already exist within pension legislation. The duty falls on the trustees and employer through the notifiable events framework, with penalties for non compliance. However, notification often occurs very close to the completion of the transaction, and trustees are sometimes not informed at all, which means that the Regulator is unable to act to prevent the transaction. There is some concern, shared by the Regulator, that the current regime is not working as well as it could.

311. The Regulator's current clearance regime is designed for the benefit of applicants who want certainty that their corporate actions will not be subject the Regulator's anti-avoidance powers, and so choose to approach the Regulator. This clearance power is separate to circumstances in which the Regulator may seek to investigate a corporate transaction when it is notified to them, usually retrospectively either through a notifiable event or some other aspect of the whistleblowing regime.

312. The Work and Pensions Select Committee have raised a question about whether it would be more effective if the Regulator were to have powers in some limited circumstances to act proactively to prevent certain corporate activities, rather than deploying retrospective anti-avoidance powers.

313. If this sort of approach were to be considered we would have to ensure that it did nothing to damage the competitiveness of UK business, and did not in any way inhibit legitimate business activity. It would need to be very narrowly limited to avoid potentially significant disadvantages to business, and a high threshold would need to be set for the circumstances where seeking clearance would be required. We would also need to give very careful consideration to the potential impact on corporate transactions and the rescue culture, particularly the likely impact on employment. We would need to proceed with caution here, as the introduction of compulsory clearance even in the most limited of circumstances could increase the risks to members of pension schemes falling into the PPF.

314. Making clearance a compulsory procedure even in very limited circumstances has the potential to make turnarounds more difficult and lead to more businesses being placed into insolvency. With turnarounds, there is often limited time available in which to conclude a deal. Businesses with an attached DB scheme could find themselves as unattractive investment targets. That could put more schemes into the PPF with consequences for the members and the PPF itself.

315. Giving the Regulator this power could also reduce the attractiveness of UK companies with DB pension schemes to investors, especially if investors believe this could restrict the ability of these companies to speedily restructure their operations should they fall into difficulty in the future.

316. The current regime seeks to balance the tension between the aim of protecting the pension scheme and the future prospects of the employees who also have an interest in the outcome of any deal. Any revised regime would also need to manage this difficult balance as it is inevitable that there will be circumstances where the business restructuring should proceed to ensure that jobs are saved even when the risks to the scheme have not been fully mitigated.

317. Some stakeholders have also pointed out that there are business decisions which are less recognisable as corporate transactions, but are likely to affect the ability of the sponsor to fund their DB scheme. For example, moving assets from the sponsor to another part of the corporate group cannot be effectively managed/controlled through a prospective clearance regime, and can only be addressed retrospectively.

318. The argument being put forward is that additional proactive powers, if designed effectively, could help to protect members and the PPF from detrimental corporate activities. They could also remove uncertainties for the parties involved. Passing through a clearance regime could give employers confidence to press ahead with changes, safe in the knowledge that they will not be subject to future sanction from the Regulator.

319. But the risks here are quite stark, and the Government recognises that it would be challenging to design, even if narrowly drawn, a regime which delivers benefits without potentially significant detriment to legitimate business activity. We would welcome views on whether this could be achieved, and if so, how.

320. Another less stringent option for change would be not to require clearance but if the activity was shown to have been detrimental without appropriate mitigation, the Regulator would have the power to levy a significant fine in addition to pursuing the employer for any support. This fine could also work to deter poor behaviours and nudge employers to engage earlier with the Regulator. Such a punitive approach was recommended by the Work and Pensions Select Committee in their recent report.

321. Such a move could create significant ‘fear’ over the possible consequences of regulatory action, particularly if the scope was not significantly limited and so drive sponsors to seek clearance to be sure when otherwise it would be disproportionate or unnecessary. This could lead to the Regulator being overwhelmed with clearance applications and/or corporate activity being delayed or even halted altogether negatively affecting the sustainable growth of sponsors with DB schemes.

322. If such an approach were to be considered at all, we would need to be very clear about the criteria for the type of corporate actions and circumstances which would need clearance, and how any new powers might be applied to avoid the potential issues mentioned above. We would also need to put in place clear and narrow time limits for the Regulator to act in order to enable business to build this requirement into their due diligence processes.

323. The Government is interested in exploring the case for considering stronger Regulator powers in this area. However, we also believe that if the Regulator is given new powers in this area, they must be proportionate and workable, and not be detrimental to the effective functioning of the economy.

Information gathering

324. An effective regulatory regime requires clear and easy information flows. The current regime has been criticised on this count. One option to promote good information flow at any point in an investigation is to create an overall duty for parties to co-operate with the Regulator. This could be seen as an extension of existing powers which they already have in respect of Automatic Enrolment. An addition along these lines would help the Regulator to be more proactive in its approach to regulation and be in a position to investigate schemes and/or particular risks in a more efficient manner.

325. Further options would be a power for the Regulator to interview parties supported by a sanction for non-compliance with an information gathering notice to attract civil penalties, in addition to the existing possibility of criminal sanctions.

326. The Government believes that extending these existing powers to DB schemes is reasonable and proportionate and would be interested in views about the circumstances in which they should be available.

Resources

327. It is important to note, though, that the Regulator has limited resources. The Regulator already has extensive powers, but takes a risk based approach, and directs resources where there is the greatest need and where there is expected to be the greatest impact. It does not attempt to closely supervise all schemes, and nor would it have the resources to do so. One question is whether the Regulator should simply take a more proactive approach, engaging much more with a wider range of schemes on funding, risk and investment issues, using its existing powers. Although if it were to do so, it would of course require additional resource.

328. There are options for how any additional resourcing might be approached. The most straightforward would be simply to increase the levy that is currently paid by schemes. But a more targeted approach might be to introduce hard charging for certain services provided by the Regulator. For example, a charge could be introduced for clearance of corporate restructuring proposals.

The role of trustees

329. In the UK system the role of the trustee is absolutely critical for delivering benefits for members. As set out in Part One the vast majority of DB schemes are set up under trust. The trustees have a duty to act in the scheme members' collective best interests and to run the scheme in accordance with the trust deed and scheme rules. They have a key role in taking advice from the scheme actuary and other advisors and negotiating the contributions the sponsor needs to make to the scheme, including a recovery plan to deal with any deficit.

330. Some commentators have suggested that as well as strengthening the position of the Regulator, it would be helpful to strengthen the position of the trustees, for example by requiring the employer to engage constructively with the trustees, and to provide information that the trustees might reasonably require in order to carry out their functions. The recent Work and Pensions Select Committee Report on DB pensions recommended consulting on giving trustees powers to demand timely information from sponsors. While most sponsors work well with their trustees, this is not inevitable, and there may be a case for strengthening the trustees' ability to require certain information or engagement.

331. A further option might be to require employers and trustees to agree and publish a joint statement of objectives for the pension scheme. And there might equally be a role for Government in setting out a range of acceptable objectives such as buy-out, a reduction in balance sheet volatility, or reaching a certain level of funding by a certain time.

332. Other options that could be considered to make the trustees' position stronger might be to require formal consultation with trustees, if the scheme is severely underfunded, when the sponsor is considering making dividend payments.

Member disclosure

333. Members of DB pension schemes are often unclear as to the level and nature of risks their scheme runs. There is often an assumption that they and their employer have paid into the scheme all the monies necessary to guarantee the promised benefits.

334. This means it comes as a shock if the employer fails, the scheme is underfunded, and the scheme moves into the PPF assessment period, with the possibility that the members will not get their full pension. There tends to be an assumption that someone involved with the company, or the scheme, has done something wrong to create this situation, when usually this is not the case, and other protection measures, such as the Fraud Compensation Fund exist to address financial loss to members where there has been dishonesty.

335. Should the company collapse and, at that date, the scheme has insufficient assets to buy annuities for at least the amount each person would get in compensation, the scheme transfers to the PPF. In either case, all members are likely to face some loss, with those under the scheme pensionable age with high accrued pensions losing the most.

336. With regulatory pressure from Solvency II and limited resources, insurers will necessarily prioritise larger transactions when it comes to buy-outs and buy-ins. As a result smaller schemes may find it difficult to be quoted a competitive price when trying to buy-out their liabilities. According to a report by LCP,[82] smaller pension plans who do not engage effectively with the insurers and fail to get 'engaged pricing' from insurers can receive quotes as much as 5% higher and therefore may not complete a transaction. In addition, small schemes with fewer than 200 members have lower opportunities to diversify their longevity risks and their total longevity risk can be almost twice relative to large schemes. This is a matter of efficiency arising from economies of scale and a potential 'market failure' as smaller schemes are being 'crowded-out' of the market. Although the counter argument is that if the smaller schemes were to achieve good engagement with insurers they might benefit from more competitively priced buy-outs.

337. Actions needed to ensure these losses cannot occur would have to be radical, such as requiring schemes to fund to the full buy-out level, which would have significant knock-on effects, and runs counter to the fundamental nature of the regime which accepts a level of risk to balance the interests of the member, the employer and the PPF.

338. However, the PLSA DB Task Force found that 71% of respondents to their survey agreed with the statement "you are guaranteed to get the income you have been promised from a DB pension" and that, of those with a DB pension, less than half (48%) had previously considered whether a deficit could affect their scheme. The Task Force also found that a significant majority (62%) would prefer a lower level of income in retirement if it could be guaranteed, suggesting an appetite for certainty of a lower income over risk of a higher income. It may therefore be the case that members do not understand the nature of their DB benefits and that they have the potential to be reduced, but that the PPF offers a significant underpin with a high degree of certainty attached.

339. What would be helpful, though, is to ensure that the arrangements are more transparent, to ensure that members are more able to understand the risks that they are carrying, the arrangements that are in place to minimise those risks, and the level of compensation that would be paid if, in the worst cast scenario, their employer were to fail with an underfunded scheme.

340. Current legislation already requires that all schemes send members an annual statement of their benefits and information on the funding level of the scheme. However, it is possible that the language of such communications could be improved to help members understand the risks and what might be done to mitigate them.

Member protection – conclusions

341. It is our assessment that the funding framework and the wider system for protecting DB pension member's benefits is working broadly as intended– a significant majority can expect to receive their full pensions.

342. However, we are not complacent. In the light of recent cases, we have set out our thinking on how the powers of the Regulator and role of trustees could be further strengthened in certain areas to produce additional safeguards. We have also considered whether more needs to be done to improve the knowledge and understanding of all parties concerned including scheme membership.

343. Of course, increasing the powers of the Regulator is not something that should be taken lightly. There is a difficult balance to be struck here – while we want to ensure that members are protected, we do not want to achieve this at the expense of the competitiveness or effective operation of the UK economy, and in some circumstances it will be more important to preserve jobs and a viable business than to mitigate risks to the pension scheme. We would be interested in views.

[82] Lane Clark & Peacock, *10 years on… and one million pensions in the UK have now been insured through buy-ins and buy-outs*, 2016. Available at: https://insight.lcp.uk.com/acton/attachment/20628/f-04d8/1/-/-/-/-/LCP%20Pensions%20De-risking%20report%202016.pdf

Changes which have been suggested

- Additional scheme funding powers for the Regulator – perhaps with explicit standards and a “comply or explain” regime.
- Proactive compulsory clearance of certain corporate activities in limited circumstances.
- Levy substantial fines on companies for corporate transactions which have a detrimental impact on schemes.
- Impose a duty to co-operate and engage with the Regulator, backed by civil penalties.
- Require sponsors to engage with and provide information to trustees in a timely manner.
- Require consultation with trustees before paying dividends if scheme is severely underfunded.
- Better communications with members.

Consultation Questions:

Question 5

Do members need further protection, and should this be delivered by a stronger and more proactive Regulator, and/or trustees with enhances powers?

a) Would greater clarity over the requirements for scheme funding be helpful to members and to sponsors?
   - If so, would this be better set out in detail in legislation or through increased guidance and standards from the Regulator?

b) Is it possible to design a system of compulsory proactive clearance by the Regulator of certain corporate transactions, without significant detriment to legitimate business activity?
   - If so how?
   - What are the risks of giving the Regulator the power to do this?

c) Should the Regulator be able to impose punitive fines for corporate transactions that are detrimental to schemes?
   - If so, in what circumstances?

d) What safeguards could ensure that any additional powers given to the Regulator do not impact on the competitiveness of the UK business or the attractiveness of the UK market?

e) Should the Regulator have new information gathering powers?

f) Should civil penalties be available for non-compliance?

g) Should levy payers be asked to fund additional resources for the Regulator?

h) Should trustees be given extra powers such as powers to demand timely information from sponsors, to strengthen their position?
   - If so, what extra powers might be helpful?

i) Should trustees be consulted when the employer plans to pay dividends if the scheme is underfunded – and if so, at what level of funding?

j) Is action needed to ensure that members are aware of the value of and risks to their DB pensions?

Consolidation of schemes

Background

344. Various stakeholders have suggested that some form of consolidation would be helpful, and that it would help to make the delivery of DB pensions more efficient. It is clear that there could be economies of scale, with potentially lower costs per member, and scale could also deliver benefits through enabling more effective investment performance. The Government agrees that consolidation is worth exploring, but is aware that there are significant issues that would need to be overcome in order to achieve meaningful consolidation, and the scale of the challenges should not be underestimated.

Benefits and challenges of consolidation

345. There are around 6,000 pension schemes with approximately 11 million members. 10% of members are spread across 81% of these – so there are many small schemes. And about a third of all schemes, each consisting of 1 to 99 members, hold total assets worth just £14.2 billion (about 1% of total assets held by all DB schemes) as at 31 March 2016.[83] Regulator data suggests that small schemes have higher costs - they are not able to achieve the economies of scale which are available to larger schemes and are also less able to negotiate low cost investment management services. Similarly, Regulator analysis suggests that, in general, smaller schemes tend to have less effective governance and trusteeship.

346. For example, the Regulator's research reported in 21st Century Trusteeship and Governance discussion paper[84] found that when working with advisors some trustees, particularly in small schemes, commonly accepted advice without any detailed consideration and failed to regularly review the quality and value for money of the service they received. According to the Regulator's "Trustee Landscape Quantitative Research 2015",[85] of the schemes with external advisors/service providers 82% reported that the trustee board rarely or never disagrees with their advisors. The proportion is even higher for small schemes, with 50% reporting 'rarely' and 36% 'never'. Also, the trustee boards of smaller schemes are less engaged in their funds' investment decisions, and do not plan these activities in detail.

347. In their interim Asset Management market study[86] the Financial Conduct Authority (FCA) said:

"Trustees of pension schemes, and other types of oversight committees that oversee institutional investments, face a range of challenges in their role and their dealings with asset managers. These include low and variable levels of investment experience on the committees and resource constraints.

We found that there is a relationship between some of the challenges facing oversight committees and their size, with smaller schemes (in terms of assets under administration and the number of

[83] PPF, *Purple Book*, 2016
[84] tPR, 2016
[85] tPR, *Trustee Landscape Quantitative Research*, table D5, 2015. Available at: http://www.thepensionsregulator.gov.uk/docs/trustee-landscape-quantitative-research-2015.pdf
Note: the sample includes both DB and DC schemes.
[86] Financial Conduct Authority, *Asset Management Market Study Interim Report*, 2016, 1.44 – 1.46. Available at: https://www.fca.org.uk/publication/market-studies/ms15-2-2-interim-report.pdf

trustees), generally being less well-resourced and knowledgeable. The amount of assets also affects oversight committees' bargaining position, with smaller schemes being less able to secure discounts from asset managers. It is likely that smaller pension schemes could achieve significant cost savings from consolidating their assets.

However, there are challenges and incentives that work against consolidation. Even within a single employer, amalgamating schemes with different objectives and funding levels is challenging and can be costly in the short term."

348. These findings are also supported by the recent PLSA DB Task Force report, where they cited evidence that the impact of good governance could add up to 1% of the funds value in year or improve the performance margin by 2% or more each year over their benchmarks.

349. In addition, such a vast landscape of schemes with differing characteristics and scheme specific circumstances makes for a challenging landscape for the Regulator to effectively regulate. The Regulator has finite resources and so is only able to actively engage with a small fraction of schemes directly and so approaches regulation in a risk based fashion. This inevitably means that, all else being equal, it is likely that larger schemes will be the primary focus since they contain the greatest number of members and assets under management. Similarly, in publishing guidance and codes or practice, the Regulator has to 'talk to' a very large and diverse range of schemes of differing circumstance and size (and therefore budgets for key tasks such as risk management). This can reduce the effectiveness of that guidance and risks it speaking to the 'lowest common denominator' or being too focussed on larger schemes better able to apply the standards required.

350. This evidence and analysis is well recognised and has led many stakeholders to argue that small schemes should be encouraged to merge or aggregate into one or more consolidation vehicles. Such a move would not only reduce running costs and be likely to improve governance but would also reduce the considerable administrative burden on small employers of managing their own pension scheme.

351. In addition, some of the areas discussed above with regards to potential new solutions for stressed schemes/employers, such as easier separation of schemes from their employers or reducing members' benefits, could be taken a step further by requirements that certain standards of efficiency or good governance are a prerequisite for approval. Requiring such schemes to transfer to a consolidation vehicle could also serve this purpose as well as having the broader benefits that consolidation could bring.

352. The (potential) benefits that consolidation might support – depending on the nature of the consolidation options taken forward - therefore fall into the following main areas:

- efficiency and lower costs 'per member', due to economies of scale;
- access to more investment opportunities, and a more sophisticated investment strategy;
- improved standards of governance and trusteeship;
- more cost effective approach to buy-out for smaller schemes; and
- providing a potential solution to stressed schemes/sponsors.

353. However, discussions with trustees and stakeholders suggest that there are likely to be a number of challenges to the successful implementation of this initiative:

- to consolidate existing schemes would require considerable up front costs for the sponsor as it would be necessary to improve the quality of scheme records before passing over the management of the scheme, and there are significant challenges in amalgamating different funds;
- trustees and advisors have vested interests – trustees may fear losing control over the day-to-day running of the scheme, including important decisions over funding and investment strategy

and on sensitive matters such as discretionary benefits; and trustees and advisors may not be incentivised to consider consolidation, if that could put their own positions at risk;

- sponsors might not be willing to share sensitive information about their business and commercial strategy, which often must be shared with scheme trustees when they consider the strength of the employer covenant;
- where schemes pool investments, schemes with different characteristics such as maturity and funding level may have difficulty agreeing investments which meet their employer and member needs; and
- full consolidation of schemes is difficult if schemes have different benefit structures, and moving members to new benefits structures is not straightforward.

354. A number of commercial providers are already in a position to offer consolidation vehicles so if the above concerns could be addressed, or some other impetus introduced, then consolidation could be achieved quite quickly.

Consolidation models

355. There are a number of different approaches to consolidation. These are discussed below including comments on the extent to which they could meet the four stated objectives of consolidation.

Ring-fenced consolidation

356. At the simplest level schemes could share back office functions: shared administration as well as actuarial, legal, investment and covenant assessment functions, but maintain the separation (or ring-fencing) of the assets and liabilities of the transferring schemes.

357. This could be extended to cover combined trustee services, with a single trustee board working for the whole consolidated scheme. This could produce additional saving through more co-ordinated governance arrangements and help improve the quality of trusteeship.

358. As well as the previous shared services, schemes could also pool their assets. The consolidation vehicle would then either offer a single investment strategy, or offer a number of standard funds with different characteristics and levels of risk tolerance, which individual sponsors could chose to invest in, delivering benefits of scale in terms of buying and investment powers, but maintaining some element of choice for different sponsors.

359. Such an approach could deliver better investment performance (through reduced costs), as well as savings on back office costs, and could therefore have a significant impact on the likelihood of members receiving their benefits.

360. This is similar to the approach already offered by DB master trusts which have one actuary, one set of trustees, a single pool of investments, and a single shared back office function. These arrangements have not proved to be very popular thus far, and there is a question as to whether the model is suitable, or whether more needs to be done to incentivise or to encourage consolidation in this sort of model. In effect this is consolidation of administration rather than consolidation of schemes.

361. Simplification or streamlining of benefits could help support this approach by making it easier to pool administration and investment and, where desired, to achieve more fundamental consolidation. This is because many schemes have complex benefit structures with several classes of member, and members having several different tranches of benefits earned at different times subject to different rules around inflation protection, survivor’s benefits, or accrual.

362. If all the schemes comprising fewer than 100 members (around 2,400 schemes) were merged into ‘superfunds’ of, say, more than 20,000 members, then running costs for these schemes might

reduce from around £100 million per annum to around £20 million per annum – a saving of £80 million a year. However, if all the schemes comprising fewer than 1,000 members (around 5,000) were merged into 'superfunds' of more than 20,000 members, then running costs for these schemes might reduce from around £0.6 billion per annum to £0.2 billion per annum – a saving of £400 million a year.[87] These are significant savings for the schemes and sponsors concerned, but are not a significant proportion of the aggregate estimated deficits (which at present vary from a few hundred million pounds to nearly one trillion pounds depending on measurement method and time point). It is important to note that the amount saved would depend on various circumstances and is difficult to predict with certainty, but we believe the figures mentioned here give a reasonable high level illustration of the maximum savings we might expect.

363. It is already the case that accrued rights can be "reshaped" but only with the consent of the individual members concerned unless the reshaped benefits are actuarially equivalent to the original benefits. Many industry practitioners argue that, in practice, it is too hard to get agreement from the high numbers of members involved.

364. Trustees have also said they are reluctant to use the actuarially equivalent route to a more efficient benefit structure because of concerns that even if the new benefit structure was agreed to be actuarially equivalent, given that the future is uncertain, some members may end up being worse off as a result. For example, a member that lives longer than average will lose out from a flat rate of benefit because a lower initial benefit increased by inflation would give them more over their lifetime.

365. However, it should be recognised that such economies of scale through consolidation along the lines described above may not necessarily be achieved where the scheme is still segregated (i.e. assets and liabilities are required to be ring-fenced for individual sections):

- valuation costs: for funding purposes, the legislation requires that each section is treated as an individual 'scheme' therefore a valuation must be obtained for each section and then an appropriate recovery plan would need to be negotiated to the section's employer. So it is not clear whether there is any scope for radical/material cost reduction here;
- investment: as valuations would need to be carried out on a per-section basis, the investment strategy would be assessed in context of, and decided following consultation with sponsoring employer of, each segregated section. However, it may be possible for there to be sufficient cross-over between sections that some form of global investment might be able to be made, enabling some improvement in return through reduced costs;
- governance: it may be necessary to set out some clearer lines and governance standards that would be required for the consolidating scheme in order to help ensure that the potential savings and improved running of the scheme materialised in practice;
- up front costs: further analysis would also need to assess whether any potential costs savings would outweigh the potential costs of transferring into the consolidation vehicle. Mergers of schemes can be complicated and require substantial legal and actuarial advice, and involve detailed member communications; and
- other costs: although some legal savings could be made in terms of scheme compliance, if each section of the DB Master Trust has its own benefit structure (drafted to mirror the old scheme's benefits) then it is likely that the legal costs might not be materially reduced. Similarly, if there are separate benefit sections then the administration burden of tailoring benefit statements, reconciling member data and preparing it for actuarial reports will not greatly reduce costs.

366. Given this, it is important to approach with caution when comparing the cost differences between large and small schemes in trying to estimate the potential savings that could be made. Further evidence and analysis would be needed to be certain that consolidation would deliver the material

[87] Estimated by G.A.D. based on tPR's DB Pensions Landscape, November 2016 and its DB scheme running cost research, April

costs savings however these models could help achieve the first two aims of consolidation set out above – namely improved efficiency and improved standards of governance and trusteeship.

Full consolidation

367. Full consolidation would involve all the previous shared services and asset pooling, but would also involve the consolidation of liabilities. This model would involve the transfer of the assets and liabilities of several schemes into a single consolidation vehicle, which is not segregated or ring-fenced in any way.

368. This approach raises some significant questions around cross-subsidy and how liabilities would be shared across participating schemes and sponsors. This challenge should not be underestimated and could have a significant impact on the sponsors and members. It is a fundamental issue with consolidation under this model and schemes would have to find ways of sharing their risk – including their investment risk, their mortality risk, and their covenant risk.

369. Such an approach would probably provide the most efficient simple consolidation vehicle, offering the most savings in terms of both administration and investment outperformance. Greater scale in terms of assets may allow access to different investment opportunities, and access to better advice may lead to a more sophisticated investment strategy, potentially delivering better investment performance. However, this model could still suffer from significant upfront costs in terms of managing the scheme mergers and would also be the most challenging to achieve, raising a significant number of questions in relation to how the risks were shared across members, sponsors and the PPF Levy payers.

Winding-up lump sums

370. It is possible that consolidation along these lines would require or trigger a scheme winding-up. In this circumstance, winding-up lump sums (WULS) could be provided in respect of small DB pensions. At present, the provision of WULS has a number of pre-conditions, in particular that the purpose of the winding-up should not be solely to provide WULS. However, assuming WULS can be provided as a result of consolidation, then this might generate further additional savings but at the expense of members deferred pensions. The limit on the value of pension commuted is currently £18,000, which is out of line with other lump sums, such as the trivial commutation limit. However, consolidation could also potentially be achieved without winding-up a scheme and possibly triggering a Section 75 debt. The Government would be interested to hear what complications could arise as a result of consolidation under existing Scheme Trust Deed and Rules that could be a barrier to consolidation. The Government is also interested in what statutory mechanisms might be needed to facilitate consolidation in all cases without inadvertently triggering a Section 75 debt and allowing WULS to be provided in the process.

371. We would therefore be interested in views on whether the rules for WULS could be widened, for example, allowing schemes to partially wind-up simply to allow them to pay WULS. The rules for WULS should be considered alongside those for trivial commutation and transfer values to ensure policy objectives are met and the rules are not open to abuse or considered too confusing so that people are put off from considering the options.

"Superfund" consolidators

372. It has been suggested that it might be helpful for Government to design new consolidation vehicles, and run them through an arms length body, or to provide the framework and encourage the industry to innovate. In their recent report, the Work and Pensions Select Committee recommended the creation of a statutory aggregator to facilitate the consolidation of small schemes, possibly run by the PPF.

373. The Government is not convinced that it should interfere in this market, but does think that the creation of consolidators or aggregators would be a helpful development. We would also have to think carefully about whether the market is likely to provide vehicles of this sort and there are questions about whether it would be necessary to provide some structures or incentives to encourage the industry to provide vehicles of this nature.

374. One area where this approach could be appropriate would be to address potential market failure in the buy-out market. Currently it can be very difficult for small schemes to buy-out, even if they are very well funded. And there is an argument that there is a significant gap in the consolidation market. At one end of the scale for very well funded schemes buy-out is effectively a form of consolidation, as the liabilities pass to an insurance company. At the other end of the scale, for insolvent sponsors and their schemes, the PPF is also effectively a consolidation vehicle. But there is nothing available in between these two extremes, which would allow sponsors to move their scheme into an alternative vehicle and give themselves certainty for the future.

375. A new consolidation vehicle – a type of "central discontinuance fund" or "superfund" might help to meet the needs of this group.

376. Such a vehicle could be targeted at smaller schemes which are at or close to 100% funding on a buy-out basis. It might have a single benefit structure, and a single consolidated fund, rather than having assets allocated to individual schemes. It would then pursue a low risk investment strategy, allowing both employers and trustees to be discharged. This could provide a welcome additional route for smaller employers to remove the risks associated with running a DB scheme, providing greater certainty for members and employers.

377. But there are a number of key questions that would need to be addressed before such an approach might be considered. These are private arrangements between companies and their employees, and the Government does not think that there is a case for transferring any of the risk to the taxpayer.

378. So there are questions about who bears the risk, similar in nature to the issues set out above regarding 'full consolidation' if the link to sponsors remains, and what Government would need to do to set the parameters for schemes of this sort to allow the industry to innovate and to design superfund models to meet the needs in this area.

379. The options for risk bearing would be for the residual risk to be borne either by the employer, the member, or the PPF Levy payers. If the risk remains with the employer, then the employer could not be fully discharged, so that assets and liabilities would remain attributable to individual schemes. A mechanism would have to remain to allow the employer to be called upon for additional funding if the funding level of its scheme were to reach a certain level. But this approach undermines one of the main advantages of the model – that it provides a route for the employer to discharge their liability.

380. The other approaches for managing the risk are to either transfer the risk wholly to the members, or for risk to be shared between the members and the PPF. As these options break the employer link, they could be operated in conjunction with a single consolidated fund. Under the first approach members would fully bear the risks, with provisions for benefits to be reduced (potentially to zero) or increased above standard entitlements depending on the overall funding position of the consolidated vehicle, and with no facility to enter the PPF. In addition, there are potential conflicts of interest which could arise if the PPF were to manage the consolidation vehicle while also providing protection in the event that such management should lead to insufficient funding.

381. The second approach would allow the members to bear the risk up to a point, and to build in a safety valve allowing benefits to be reduced to a certain level if the funding level demanded it, but with an absolute floor of PPF compensation levels. However, this raises questions around whether it is appropriate for the risks to be transferred from sponsors to members and under what circumstances this should apply to prevent moral hazard issues and transfer of wealth from members to other creditors.

382. The scheme as a whole would need to pay a levy to the PPF in order to be eligible for entry into the PPF should the scheme fail. However this would be a significant change in role for the PPF which would effectively be under-writing the investment risk of the consolidation vehicle. This would need amendments to supporting legislation and consideration given to ring-fencing this risk from the PPF's current levy payers (rather than allowing any cross-subsidy) as well as potentially significant changes to legislation.

383. Another approach might be to provide a single consolidation fund of the same superfund type, but targeted at stressed schemes and employers.

384. A consolidation vehicle for very high-risk schemes might achieve a better management and distribution of risk between members, employer and the PPF, and potentially offers another exit strategy for stressed employers other than the existing options which are essentially to:

- continue running the scheme for as long as possible, with the employer paying the contributions it can afford, potentially in conjunction with a high risk investment strategy to attempt to close the funding gap before employer insolvency; or
- trigger wind-up (either by trustee action or intervention from the Regulator) in order to crystallise the funding position.

385. These issues are discussed in depth above in the section on stressed/schemes sponsors and are equally relevant here. But requiring consolidation in these circumstances could have significant additional benefits.

386. Such a fund would reduce administration costs, and by creating a much larger fund, should enable a more sophisticated investment strategy. It might therefore be possible to allow the employer to continue with much more certainty about the future costs of DB pensions, and for members to have confidence that their benefits are likely to be paid in full. Or, if the employer were able to fund it, it would be possible to monetise the covenant, and allow the employer to be discharged.

387. But such a scheme would be far from simple to implement, particularly if schemes with very different benefit structures and funding profiles were to be accommodated in a single vehicle. It would therefore require hard choices to be made about whether such a fund continued to be underpinned by the PPF, and if so what levy it would pay, the extent to which employers would remain liable if liabilities increased or the value of assets fell, or whether some sort of safety valve should be designed-in, to allow benefits to be reduced in some circumstances.

Voluntary or compulsory consolidation

388. One option to encourage voluntary consolidation might be for Government to remove any regulatory and other barriers to consolidation, and to set out some standards for consolidating schemes, to improve confidence in the viability of the process. These standards might be as simple as defining a standard basic benefit formulation and a methodology for conversion to the new standard. It might also involve setting out the standards that are expected from a consolidation vehicle, such as a DB master trust, which could help to stimulate the creation of market driven solutions to the consolidation issue.

389. In their recent report the Work and Pensions Select Committee recommended that the Government bring forward proposals for removing regulatory and other barriers to scheme consolidation. We would welcome views on what any regulatory and other barriers to scheme consolidation are, so that further consideration can be given to them.

390. Another approach, which could encourage some schemes to move towards partial or full consolidation, could be to require schemes to report and potentially publish their administration costs including investment costs. Most occupational DC schemes, now need to produce an annual Chair's statement, which sets out not only the scheme's administration and investment charges and (where available) its transaction costs, but also the Chair's evaluation of the scheme's value for

money, details of the scheme's investment strategy, and how the trustees have met the legislative requirements for trustee knowledge and understanding and prompt and efficient processing of financial transactions.

391. Respondents to the Regulator's discussion paper 21st Century Trusteeship and Governance[88] noted the difference between governance and reporting requirements across benefit type, and many favoured aligning the requirement across DC and DB. One option might therefore be to consider extending the Chair's statement to include DB schemes and the DB sections of hybrid schemes. Measures of this sort could prompt schemes to consider and explain why they don't partially or fully consolidate to improve their efficiency. We could also consider supplementing the Chair's statement with a legislative requirement for trustees to explicitly update on what they are doing to consolidate and reduce costs.

392. The costs incurred by DB schemes for administration and advice are a concern that goes wider than the debate about the merits and practicability of consolidation. Although costs do not impact outcomes for members directly, as they would do in the DC world, given the very large sums which sponsors have paid into DB schemes in recent years, it is in the interests of all parties that the best value is achieved from every pound spent.

393. Costs vary enormously between schemes, and it is possible that a combination of lack of expertise in some areas, coupled with a lack of transparency is resulting in some costs being greater than they might otherwise be.

394. We would be interested in views about whether the scale of costs is worrying, and what action may be needed to drive down costs and charges perhaps by improving transparency to encourage competition in the provision of services and advice to the sector.

395. The Government also thinks that soft measures of this sort to encourage and facilitate more consolidation are a reasonable and proportionate response to fragmentation, and would be interested in views.

396. A number of commentators have suggested that in certain circumstances, schemes might be required to consolidate. If such an approach were to be considered, we would have to think very carefully about the criteria against which the need to invoke compulsory consolidation might be judged, especially if the preferred model involved the consolidation of liabilities.

397. One approach might be for Government to set out a standard for governance and costs, and schemes which were unable to meet the standards would be required to move into a consolidation vehicle. Another approach would be to focus compulsory consolidation on small or stressed schemes. In this approach, you might set a scale and a funding threshold – so schemes with assets below a threshold, and with funding below a pre-determined level would be required to consolidate.

398. But any Government intervention, such as mandating consolidation, would require there to be compelling evidence to demonstrate that compulsion is a proportionate response. And while it is clear that smaller schemes pay more per member in administration costs, may be constrained by limitations in advice and investment choices, and in some cases employers may be struggling with contributions, it is worth bearing in mind that there are no clear trends indicating that smaller schemes are in a worse funding position relative to larger schemes, although the position of small schemes may be affected by the inclusion of many executive schemes in that group. The table overleaf illustrates that the smallest schemes with fewer than 100 members have the best aggregate funding position on both s179 and buy-out bases. The Government is not therefore convinced that compulsion would be a proportionate response.

[88] The Pensions Regulator, 2016

Table 6: Cross-section of DB schemes by weighted average funding ratio at 31 March 2016 against number of members.

Membership Group	Weighted average funding ratio	
No. of members	s179	Estimated full buy-out
1 to 99	93.2%	66.8%
e	82.6%	60.4%
1,000 to 4,999	81.7%	61.1%
5,000 to 9,999	86.7%	64.5%
10000+	87.1%	63.9%
Total	**85.8%**	**63.2%**

Source- Purple Book 2016

399. We would nevertheless be interested in views about whether there could ever be a case for compulsory consolidation, and if so, what the criteria for entry into the consolidation system might be.

Multi-employer schemes

400. Consolidation is already possible through multi-employer schemes, which provide DB pensions for a range of associated or non-associated employers. These schemes have had their own problems, and we have had representations from a number of them, particularly about the way orphan debt and employer debt as a whole is managed.

Employer debt

401. Employer debt is broadly the amount the employer must pay into a DB occupational pension scheme when it ceases to participate at a time when there is a shortfall between the scheme’s assets and liabilities. This can happen through insolvency, winding-up or an employment cessation event.

402. An employment cessation event occurs when an employer in a multi-employer pension scheme ceases to have any employees who are active members of the scheme at a time when at least one other participating employer continues to have employees who are active members.

403. An employer debt is calculated by reference to the cost of buying-out members’ benefits with an insurance company on full buyout basis and includes a share of any orphan liabilities. Orphan liabilities are those attributable to members whose employers no longer participate in the scheme. The policy rationale is that trustees have a duty to ensure that all members’ rights are protected and that their scheme is properly funded.

404. Amounts of employer debt can be very significant, but there are already a number of ways in which employers ceasing to participate in a multi-employer scheme can reduce the amount of debt they are required to pay, for example by entering into an apportionment arrangement.

405. In 2015 we published a "Call for Evidence" seeking views about section 75 employer debt regime for non-associated multi-employer DB schemes. This explored the impact of possible changes to the employer debt regime following an employment cessation event that had been suggested by stakeholders. We intend to consult on a new option employers can consider to manage the employer debt in these circumstances.

406. More generally some respondents questioned the inclusion of orphan liabilities attributable to former employers who left the scheme prior to full buyout requirements in the calculation of an employer debt. They say that for some employers this orphan debt can be significant compared to the debt arising from their own current or former employers, and in some circumstances – for example the owners of unincorporated businesses (such as Plumbers) who may be personally liable for the debt – it may be catastrophic.

407. In the context of DB affordability we would like to understand scale of this issue and explore other ways of relieving the pressure on some employers, while ensuring that orphan members receive the full benefits that they have accrued and expect to receive.

Consolidation - conclusions

408. Further encouragement of multi-employer schemes (with any appropriate adjustments to their legal structure/requirements) or the introduction of a Superfund Consolidator as described above has the potential to meet all of the aims for consolidation as set out at the start of this chapter - improved efficiency and governance, better investment performance, providing a more cost effective form of buy-out and providing for an enhanced solution for stressed schemes/sponsors. However, there are a number of issues and risks that would need to be fully thought through, before the Government could take any action to encourage or facilitate such a change. The benefits of such a move would also need to be material.

409. The Government believes that there is a strong case for voluntary consolidation, and would like to see more schemes consolidate. It would appear to offer significant savings in terms of administrative costs, as well as the benefits of scale such as access to more sophisticated investment advice and the ability to access better investment opportunities, that might not be available except via unitised arrangements with their additional levels of costs to smaller schemes.

410. We would be interested in views about whether there is anything in the current legislation or regulatory arrangements which is preventing or discouraging consolidation. We would also welcome views about what if anything the Government could do to facilitate or encourage further consolidation of this sort.

Changes which have been suggested

- Make it easier to simplify and to re-shape benefits.
- Set standards for consolidation vehicles such as DB master trusts, and a standard simplified benefit model.
- Require schemes to publish their administration costs and the charges paid for investment and other advice and services.
- Provide a legislative framework for new consolidating superfunds targeted at delivering an alternative to buy-out, or at consolidating stressed schemes – and allow the industry to innovate to create new vehicles.
- Changes to the employer debt regime in multi-employer schemes.

Consultation Questions:

Question 6

Should Government act to encourage, incentivise, or in some circumstances mandate the consolidation of smaller schemes into vehicles with greater scale and better governance in order to reduce the risk to members in future from the running down of closed, especially smaller, DB schemes?

a) Is there anything in the existing legislative or regulatory system preventing schemes for consolidating?
   - How might such barriers be overcome?

b) What other barriers are there which are preventing schemes from consolidating?
   - How might they be overcome?

c) Should Government define a simplified benefit model to encourage consolidation?

d) Should rules be changed to allow the reshaping of benefits without member consent?
   - In what circumstances?
   - Should there be prescribed restrictions to the types or limits of such reshaping?

e) Are costs and charges too high in DB schemes?

f) Should schemes be required to be more transparent about their costs or justify why they do not consolidate?
   - In what circumstances?

g) Is there a case for mandatory consolidation?
   - In what circumstances?

h) Should the Government encourage the use of consolidation vehicles, including DB master trusts?
   - If so how might it do so?

i) Are further changes needed to the employer debt regime in multi-employer schemes to encourage further consolidation?

j) Is there a case for consolidation as a cheaper, but more efficient form of buy-out, with the employer and trustees discharged?
   - If so, (a) what should be the requirements for a scheme to enter such a consolidator, especially the level of funding; and
   - (b), should the residual risk be borne by the member, or by the PPF?

k) Should Government encourage creation of consolidation vehicles for stressed schemes?

l) Should employer debt legislation for multi-employer schemes require full buy-out and for the actuary to assess liabilities for an employer debt by estimating the cost of purchasing annuities?

m) How else could historic orphan liabilities be met if they were not shared between employers?

n) Are new measures needed to help those trustees of an association or employers who could be held individually liable for an employer debt?

Annex 1: PPF modelling of DB schemes

Introduction

The projections of aggregate funding levels of DB schemes have been carried out using the PPF's Long Term Risk Model (LTRM). This is a stochastic model that was built with the primary purpose of projecting the PPF's own assets and liabilities, including those coming from claims on the PPF (the assets and liabilities of schemes that transfer to the PPF following a qualifying insolvency event). This is then used to measure the progress of the PPF towards meeting its funding objective, as determined through calculation of the probability of success.

The PPF's LTRM has therefore been used for a secondary purpose in this paper. While the LTRM has been able to generate projections that have been used in this paper, it is worth noting the assumptions adopted and limitations of the LTRM when used for this purpose, which are noted in the sections below. It is also worth northing that this modelling is based on 2,000 simulations (2,000 economic senarios only, with credit scenarios excluded) compared to the 1,000,000 simulations (2,000 economic scenarios combined with 500 credit scenarios) that are used to project the PPF's own assets and liabilities, including those coming from claims on the PPF. More detailed information on the LTRM can be found in the PPF's Long Term Funding Strategy Update.[89]

Assumptions

- To model future economic scenarios, the LTRM uses an Economic Scenario Generator (ESG) provided to the PPF by Moody's Analytics. This ESG stochastically models financial variables and has been used to produce 2,000 economic scenarios for the PPF.
- Asset performance is modelled stochastically using information provided to the PPF by an external provider, Barrie & Hibbert, and adapted for use by the PPF. This typically results in a level of outperformance of assets over liabilities.
- A time-varying term premium (TVTP) model has been used to model nominal yields. The TVTP model results in smooth, mean-reverting average yield projections which are weakly correlated to the initial nominal yield curve.
- The LTRM has been used to project assets and s179 liabilities. Aggregate buy-out liabilities have been assumed to be 140 per cent of aggregate s179 liabilities (and aggregate Technical Provisions are assumed to be 110 per cent of aggregate s179 liabilities).
- Individual schemes buy-out and exit the DB system once they become 140 per cent funded on an s179 basis (s179 liabilities are assumed to be broadly similar to Technical Provisions at an individual scheme level).
- The LTRM has been used to model economic scenarios only and has not modelled credit risk scenarios. Therefore schemes that would have experienced insolvency of the sponsoring employer(s) by 2030 have not been removed from the aggregate funding level projections on the basis of materiality to the overall results.

[89] PPF, *PPF Long-Term Funding Strategy Update,* 2016. Available at: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/Funding_Strategy_Review_2016.pdf

- Deficit Repair Contributions (DRCs) are initially calculated by assuming deficits will be eliminated over the term of the scheme's current recovery plan plus three years (to reflect the general experience of extensions in recovery plans). This level of DRCs is then assumed to be maintained or increased if amortising the higher deficit over the input recovery plan length plus three years results in a higher level of DRCs (subject to a cap of five per cent of the scheme's liabilities until the deficit is eliminated). This means that if deficits reduce quicker than anticipated by recovery plans then they will be eliminated more quickly (instead of assuming DRCs decrease) and if deficits increase then DRCs will continue, perhaps at a higher level.
- For schemes with the strongest sponsoring employers (about 10 per cent of all liabilities), DRCs are assumed to be paid until the scheme reaches 100 per cent funding on a buy-out basis (instead of a Technical Provisions basis which is the case for all other schemes). Sponsor solvency and scheme funding are correlated in that both are driven by the general state of the economy.

Limitations

- To project the funding levels across the 2,000 economic scenarios and over time, the schemes are split into two groups. The large schemes (approximately 600 schemes) are modelled independently and the small schemes are grouped (approximately 5,200 schemes are grouped into 170 clusters based on a number of common characteristics). Schemes are grouped in this way for computing efficiency purposes, at a cost of decreased accuracy in the projections.
- The LTRM makes an approximate allowance for the affordability of DRCs by limiting them to a proportion (five per cent) of the scheme's liabilities. However, it does not consider the financial obligations of the sponsoring employer to assess whether DRCs are affordable. Instead sponsoring employers are assumed to be able to continue to pay DRCs until just prior to insolvency.

Annex 2: TPR calculations

Funding estimates as at 31 October 2016

The estimated funding figures used for this paper as at 31 October 2016 are based on adjusting the scheme valuation data supplied to the Pensions Regulator (tPR) by trustees of DB schemes as at their most recently submitted Part 3 valuation or via annual scheme returns. This data is then updated at various dates using changes in market indices for principal asset classes.

DB scheme return information that we rely on may not be the most up to date information available to the trustees. Furthermore the data from DB scheme returns is provided at an aggregated level and therefore does not contain the level of detail which is available to scheme actuaries when advising trustees.

To enable tPR to undertake modelling, many simplifications and approximations are applied to the data in order to undertake the calculations. In particular, we have made assumptions about a scheme's liabilities in aggregate rather than accurately reflecting the individual underlying liabilities of each scheme. The assumptions we have made may be a significant source of difference when compared with schemes own up to date information.

Many of the assumptions and simplifications have been driven by data limitations. For example we do not take into account changes to investment strategies that may have been implemented since information was last submitted to us (nor can we if this data is not available). Other experience which we do not allow for in our estimates include (amongst other items); employer covenant experience, membership or benefit changes or longevity experience (how long people live).

The method for estimating the assets takes into account returns on individual asset classes along with the proportions invested in these assets, taken from information submitted to tPR via the DB scheme returns, with adjustment to take account of derivative based hedging strategies. Further account has been taken in respect of Deficit Repair Contributions.

The method for estimating the liabilities is determined solely by changes in conventional and index-linked gilt yields. The approximation does not allow for benefit accrual, benefit outgo or actual scheme experience or any allowance for any changes to the shape of the yield curve. Similarly we have not made any allowance for any changes to both financial and demographic assumptions that the trustees choose to adopt in the future.

There are many alternative approaches to the simplifications and approximations which could be made, which would result in different answers to those presented here. TPR have not attempted to explore the impact of different methodologies.

Given the limitations of the data and the simplifications made to the calculation method the results presented here will be different to those if they had been calculated by a scheme actuary for an individual scheme.

Development of funding since 2006

TPR has previously published in their DB Annual Funding Statement (AFS) an estimated projection of liabilities on a PPF measurement basis (taken from the PPF7800 information) and assets.[90] This graph is reproduced in this paper as set out in Part 3.

TPR have estimated Technical Provision liabilities within this graph, which has been derived from the movement in the PPF 7800 index for all schemes in that index. Due to differences in the data held and different calculation approaches, the figures included in this graph are different to those produced by tPR using DB scheme data (as set out above).

Should tPR subsequently publish historical Technical Provision figures based on the data and model as described under “Funding estimates as at 31 October 2016”, they will not be the same as those derived by reference to the PPF7800 data set. Differences include (but are not limited to):

- The data sets used in the PPF7800 and tPR model will differ due to PPF eligibility/ineligibility.
- PPF have periodically revised its methodology for calculating the PPF7800 and restated figures at some data points.
- The PPF 7800 does not allow for contributions paid (or cashflows or scheme experience).
- The PPF 7800 does not allow for liability hedging strategies which use derivatives.

Employer data

TPR rely solely on the information supplied via scheme returns to identify the employer population, which may not be the most up to date or contain the level of detail that would be available to covenant advisors when advising their clients. This inevitably leads to many more simplifications and approximations in the methods used to estimate aggregate and individual covenant support.

TPR have used the latest published corporate financial data available from their sources as at 1 April 2016 in respect of statutory employers to which more than one DB membership is directly attributable – the most recent data primarily relating to accounting years ending in 2014 or 2015.

For some employers (and therefore some schemes), the required data was not available – mainly SMEs (small and medium sized enterprises), public/third sector or overseas companies – and therefore the analyses may not be representative of these schemes and/or sectors.

In order to estimate the available covenant support certain assumptions and simplifications have been made. The principal assumptions (though not an exhaustive list) are as follows:

- Where an employer participates in more than one scheme and/or a scheme is sponsored by more than one employer, the division and aggregation of an employer’s financial support among those schemes in which it participates are based on the relative number of members in each scheme attributable to each employer.
- Where corporate financial information for statutory employers was not available individually, consolidated accounts for the relevant group have been used, thus potentially overstating the covenant support available.
- Where corporate financial information was not available for all statutory employers to a scheme, information aggregated over only those employers for whom the relevant data was available was used, thus potentially understating the covenant support available.

[90] See page 10 http://www.thepensionsregulator.gov.uk/docs/db-analysis-tranche-eleven-review-2016.pdf

Any of these assumptions, made to overcome data limitations, may be a significant source of error at the individual scheme/employer level. Throughout this analysis tPR have used certain accounting-based metrics as indicators of covenant support to compare with actuarially assessed liabilities, deficits or contributions. In practice, other measures may provide more appropriate indicators of formally assessed covenant strength and these may vary, among other things, by type of employer.

Accordingly this analysis, or the metrics, should not be seen as a substitute for such bespoke assessments.

Employer Affordability

Within tPR's affordability analysis a comparison of Deficit Repair Contributions (DRCs) to profit before tax (PBT) has been undertaken. The ratios of DRCs to PBT as used for this analysis should be taken as indicative of a sponsoring employer's affordability. For example, looking at PBT in isolation may not be an appropriate methodology for assessing affordability due to inaccurate, misleading or absent data resulting from a complex group structure within which one or more employer(s) sits. Additionally, DRCs may be funded by other companies within the employer's group. However, it is a consistent methodology for considering general trends across the spectrum of DB schemes.

The assessment of how affordable pension scheme contributions are to a particular employer is not an exact science and we make a number of high-level assumptions to determine which categories of employers might be deemed to be reasonably able to support their schemes, leaving a pool where no such positive evidence exists. Note that this does not mean that all employers in this residual pool will have affordability issues, but rather that this group is where we might expect affordability to be most constrained.

Employer Covenant

The strength of the employer covenant is an important element in scheme funding and a key part of the risk assessment process. TPR use a number of metrics relating to employers to determine the covenant risk. However, it is recognised that this is a highly complex area and that a one-size-fits-all approach to looking at the employer covenant would miss the many complexities and nuances of individual employers. For these reasons, TPR combines the use of metrics with professional judgement when assessing covenant.

The assessment of covenant, being the outlook and plans for sustainable growth, seeks to understand the ability of the employer to provide funding to the scheme if required and how the scheme may affect the employer. The principles below set out at a high level some of the factors taken into account, although it is recognised that for different types of employers the application of these principles may differ (for example not-for-profit employers and multi-employer schemes):

- The strategic outlook for the sector and the position of the employer within the industry including the age, brand and public profile of the employer (i.e. its intellectual property);
- The income streams, cash generation and profitability of the employer, and the trends in these over time. The ability to fund future increases in pension contributions and any adverse impact this may have on these;
- The level of reinvestment of profits/cash/income within the business to ensure sustainability;
- The level of debt of, or secured by, the employer, and the ability to service this comfortably from income streams and cash generation within the business;
- The strength of the balance sheet and its ability to withstand trading shocks or decreases to its income streams;

- The size and value of the balance sheet and assets in comparison with the size of the pension liabilities and deficit and their availability to reduce deficits, including, where the employer is considered weak, the likely asset cover in insolvency;
- Any restrictions on income, assets or reserves;
- The level and sustainability of dividends (or other analogous distributions, for example distributions to members of limited partnerships), as a proportion of profitability and cash generation.

Glossary of Terms

Active members	Current employees who are contributing (or having contributions made on their behalf) to an organisation's occupational pension scheme. The scheme may be open or closed but cannot be frozen.
Alternative asset classes	These include hedge funds, commodity and managed futures, private equity, and credit derivatives.
Asset classes	A group of securities that exhibits similar characteristics, behaves similarly in the marketplace and is subject to the same laws and regulations i.e. equities, stocks or bonds.
Average salary scheme	A Defined Benefit scheme that gives individuals a pension based on a percentage of the salary earned in each year of their employment (rather than the final year).
Baby boom	A temporary marked increase in the birth rate. There were two baby booms in the second half of the twentieth century: immediately following the Second World War and in the early 1960s.
Bond	A debt investment with which the investor loans money to an entity that borrows the funds for a defined period of time at a specified interest rate. Corporate bonds follow a similar structure to gilts, paying a fixed amount to the owner following a given schedule.
Bulk-buyout	On winding-up an occupational scheme, trustees will normally buy-out accrued benefits of members and other beneficiaries with immediate or deferred annuities.
Bulk negotiated funds	The central clearing house negotiates and specifies a limited number of fund options (by risk or asset class) and then invites tenders from fund managers.
Consumer price index (CPI)	CPI measures changes in the price level of a market basket of consumer goods and services purchased by households.
Decile	The 10^{th} part of a distribution.
Deferred member	A member of an occupational pension scheme who has accrued rights or assets in the scheme but is no longer actively contributing (or having contributions paid on his behalf) into the scheme.
Deficit Repair Contributions (DRC)	Contributions made by sponsors to make up the deficit in an underfunded scheme over a specific period of time.
Defined Benefit (DB)	A pension benefit related to a members' salary or some other value fixed in advance.
Discount rate	An interest rate used to reduce an amount of money at a date in the future to an equivalent value at the present date. Discount rates are at the heart of most actuarial calculations and this especially applies to calculating the liabilities of DB schemes no matter the valuation method.
Employer Covenant	Ability and willingness of the employer to support the scheme.
Employer debt	Broadly the amount the employer must pay into the scheme when it ceases to participate at a time when there is a shortfall between the scheme’s assets and liabilities, calculated on a buy-out basis (also known as “section 75 debt”).

Employer	The employer who sponsors a DB scheme and so is the ultimate guarantor of scheme benefits.
Equity	Share or any other security representing an ownership interest.
Final salary scheme	A Defined Benefit scheme that provides a pension based on the number of years of pensionable service, the accrual rate and final earnings as defined by the scheme.
Gilts	"Gilt-edged securities", also known as government bonds. These are bonds issued by the UK Government. Gilts are generally considered to be one of the safer forms of investment so generate a correspondingly lower return than some more risky assets such as corporate bonds or equities. Some gilts make payments which are fixed in cash terms, whereas others make payments which go up or down in line with inflation.
Gross Domestic Product (GDP)	A measure of economic activity in a country. It is calculated by adding the total value of a country's annual output of goods and services.
Hedge funds	An investment fund where the fund manager can use financial derivatives and borrowing. This allows them to take more risk than an equity or bonds fund, in the hope of providing a higher return.
IAS19	This valuation method is used when companies report their annual financial accounts. The methodology is set on a common basis and facilitates international accounting standards. It is intended to be a best estimate of the costs of a scheme; and is based on high quality corporate bonds.
Incentive exercises	Is where an employer connected to a DB scheme seeks to reduce risk and costs associated with the scheme by offering members the option to transfer out of the scheme or modify their benefits.[91]
Index-linked	Bonds, gilts, annuities and other financial products can be linked to an index and pay an income which increases in line with that index and the capital values of which increase in line with that index.
Large firm	A firm with 250 or more employees.
Life expectancy	Life expectancy (or the expectation of life) at a given age, x, is the average number of years that a male or female aged x will live thereafter.
Long-dated gilts/bonds	Gilts or bonds with many years (e.g. 20) left until maturity.
Longevity	Length of life.
Longitudinal	A research study which follows a group of individuals over a period of time.
Major asset classes	The main groups of assets chosen for investment i.e. bonds and equities.
Mean	The average value of a group, calculated as the total of all the values in a group and dividing by the number of values.
Median	The median of a distribution divides it into two halves. Therefore half the group are above the median value and half below.
Medium-size firms	A firm with 50-249 employees.
Micro-employer/micro-business	A firm employing fewer than five employees or a firm employing fewer than nine employees.
Net Present Value	The present value of an investment's future net cash flows minus the initial investment.
Nominal	When used in relation to bonds, gilts or annuities, they pay an income which is constant in cash terms (i.e. are not index-linked).
Occupational pension	A pension which is provided via the employer, but the pension scheme takes the form of a trust arrangement and is legally separate from the employer.

91 tPR, *Incentive exercises.* Available at: http://www.thepensionsregulator.gov.uk/guidance/incentive-exercises.aspx

Pension accrual	The build-up of pension rights. In a Defined Benefit scheme this may be based on the number of years of contributions.
Pension Increase Exchange	When members of a DB scheme are given the choice to swap some or all of their non-statutory pension increases for an increase to their pension.
Pension Protection Fund (PPF)	Established in April 2005 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 PPF levels of compensation.
The Pensions Regulator (tPR)	The UK regulator of work-based pension schemes.
Price-indexed	Increasing each year in line with inflation.
Regulated Apportionment Arrangements	A regulated apportionment arrangement is a statutory mechanism which allows a company to free itself from its financial obligations to a pension scheme in order to avoid insolvency, provided that certain conditions are met and the RAA is approved by both the Pensions Regulator and the PPF.[92]
Rate of return	The gain or loss of an investment over a specified period, expressed as a percentage increase over the initial investment cost. Gains on investments are considered to be any income received from the asset, plus realised or unrealised capital gains.
Real terms	Used in relation to figures which have been adjusted to remove the effect of increases in prices over time (i.e. inflation), usually measured by the Retail Prices Index. Thus if something shown in real terms increases then it is rising faster than prices, whereas if it is constant, it rises at exactly the same pace as prices.
Retail Prices Index (RPI)	This is an average measure of the change in the prices of goods and services bought for consumption by the vast majority of households in the UK, including housing costs.
Risk Based Levy	The levy for the PPF based on the risk of the pension scheme entering the PPF. It takes account of the scheme's liabilities in relation to its members, the scheme's level of funding and the risk of the sponsoring company becoming insolvent.
Risk-free rate	The theoretical rate of return of an investment with no risk. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time. In practice the rate of return from gilts is generally used.
Small and Medium Enterprises (SMEs)	Firms with 249 or fewer employees.
Small firm	A firm with 49 or fewer employees.
State Pension Age	The age at which an individual can first claim their state pension.
Tranche	In relation to Defined Benefit scheme funding valuation, the set of schemes which are required to carry out a scheme-specific funding valuation within a particular time period. Schemes whose valuation dates fell from 22 September 2005 to 21 September 2006 (both dates inclusive) were in Tranche 1, from 22 September 2006 to 21 September 2007 were Tranche 2 (both dates inclusive).
Working age population	Generally defined as those aged 15 to 64.[93]

92 Out-Law.com, *Regulated apportionment arrangements 'no magic bullet' for struggling schmes, says expert,* 2016. Available at: http://www.out-law.com/en/articles/2016/march/regulated-apportionment-arrangements-no-magic-bullet-for-struggling-schemes-says-expert/
93 OECD, *Working age population,* 2016. Available at: https://data.oecd.org/pop/working-age-population.htm

Summary of Consultation Questions

Question 1

Are the current valuation measures the right ones for the purposes for which they are used?

a) Are the flexibilities in setting the Statutory Funding Objective discount rate being used appropriately?
- If not, why, and in which way are they not being used appropriately?
- What evidence is there to support this view?
- How could sponsors and trustees be better encouraged to use them?

b) Should we consider shorter valuation cycles for high risk schemes, and longer cycles for those that present a lower risk?
- What should constitute a high or low risk?
- Or should a risk based reporting and monitoring regime be considered?

c) Should the time available to complete valuations be reduced from 15 months?
- What would be an appropriate length of time to allow?

d) Should other measures or valuation approaches, for example stochastic modelling, be mandated or encouraged?
- If so, which ones and for what purpose?
- How would the information provided to the Regulator to explain the agreed recovery plan differ from that at present?
- What would the costs be, and would they outweigh the benefits?

Question 2

Do members need to understand the funding position of their scheme, and if so what information would be helpful?

a) Should schemes do more to keep their members informed about the funding position of their schemes?

b) Do we need Government communications to provide information to the wider public and media about the degree of certainty and risk in the regime?
- What difference could this make?

Question 3

Is there any evidence to support the view that current investment choices may be sub-optimal? If yes, what are the main drivers of these behaviours and how could they be changed?

a) Do trustees/funds have adequate and sufficient investment options on offer in the market?
- Is there anything Government could do to address any issues?

b) Do members need to understand the investment decisions that are being made?
- If yes, are there any specific decisions that need articulating?

c) Would it be appropriate for the Regulator to take a lead in influencing or determining an acceptable overall level of risk for a scheme in a more open and transparent way?

d) Would asset pooling or scheme consolidation help schemes to access better investment opportunities?

e) Is regulation (including liability measurement requirements) incentivising overly risk-averse behaviours/decisions that result in sub-optimal investment strategies?
- If yes, which regulations and how do they impact on these decisions?

f) Are you aware of evidence of herding or poor advice from the intermediaries and advisors?

g) Are measures needed to improve trustee decision making: skills such as enhanced training, more Regulator guidance, or the professionalisation of trustees?

Question 4

Is there a case for making special arrangements for schemes and sponsors in certain circumstances such as a different regime for employers who can afford to pay more, and/or new or enhanced flexibilities for stressed sponsors and schemes?

a) Do you have any evidence that Deficit Repair Contributions are currently unaffordable?

b) Should we consider measures to encourage employers who have significant resources as well as significant DB deficits to repair those deficits more quickly?
- If so, in what circumstances, and what might those measures be?

c) If measures are needed for stressed sponsors and schemes, how could “stressed” be defined?
- Should a general metric be used, or should this be decided on a case by case basis?

d) Are there any circumstances where stressed employers should be able to separate from their schemes without having to demonstrate that they are likely to become insolvent in the near future?

e) How would it be possible to avoid the moral hazard of employers manipulating such a system in order to off load their DB liabilities?

- Would some sort of 'quid pro quo' be appropriate to ensure the scheme is not disadvantaged relative to other creditors of the employer/stakeholders?
- What could this look like?

f) Are there any circumstances where employers should be able to renegotiate DB pensions and reduce accrued benefits?

- If so, in what circumstances?

g) Is there any evidence to suggest that there is an affordability crisis that would warrant permitting schemes to reduce indexation to the statutory minimum?

h) Should the Government consider a statutory over-ride to allow schemes to move to a different index, provided that protection against inflation is maintained?

- Should this also be for revaluation as well as indexation?

i) Should the Government consider allowing schemes to suspend indexation in some circumstances?

- If so, in what circumstances?

j) How would you prevent a sponsoring employer from only funding a scheme to a lower level in order to take advantage of such an easement?

k) Should Government consider allowing or requiring longer, deferred or back loaded recovery plans?

- If so, in what circumstances?
- Should other changes be considered, such as the valuation method of Technical Provisions?

l) Should it be easier to take small pots as a lump sum through trivial commutation?

Question 5

Do members need further protection, and should this be delivered by a stronger and more proactive Regulator, and/or trustees with enhances powers?

a) Would greater clarity over the requirements for scheme funding be helpful to members and to sponsors?

- If so, would this be better set out in detail in legislation or through increased guidance and standards from the Regulator?

b) Is it possible to design a system of compulsory proactive clearance by the Regulator of certain corporate transactions, without significant detriment to legitimate business activity?

- If so how?
- What are the risks of giving the Regulator the power to do this?

c) Should the Regulator be able to impose punitive fines for corporate transactions that are detrimental to schemes?

- If so, in what circumstances?

d) What safeguards could ensure that any additional powers given to the Regulator do not impact on the competitiveness of the UK business or the attractiveness of the UK market?

e) Should the Regulator have new information gathering powers?

f) Should civil penalties be available for non-compliance?

g) Should levy payers be asked to fund additional resources for the Regulator?

h) Should trustees be given extra powers such as powers to demand timely information from sponsors, to strengthen their position?

- If so, what extra powers might be helpful?

i) Should trustees be consulted when the employer plans to pay dividends if the scheme is underfunded – and if so, at what level of funding?

j) Is action needed to ensure that members are aware of the value of and risks to their DB pensions?

Question 6

Should Government act to encourage, incentivise, or in some circumstances mandate the consolidation of smaller schemes into vehicles with greater scale and better governance in order to reduce the risk to members in future from the running down of closed, especially smaller, DB schemes?

a) Is there anything in the existing legislative or regulatory system preventing schemes for consolidating?

- How might such barriers be overcome?

b) What other barriers are there which are preventing schemes from consolidating?

- How might they be overcome?

c) Should Government define a simplified benefit model to encourage consolidation?

d) Should rules be changed to allow the reshaping of benefits without member consent?

- In what circumstances?
- Should there be prescribed restrictions to the types or limits of such reshaping?

e) Are costs and charges too high in DB schemes?

f) Should schemes be required to be more transparent about their costs or justify why they do not consolidate?

- In what circumstances?

g) Is there a case for mandatory consolidation?

- In what circumstances?

h) Should the Government encourage the use of consolidation vehicles, including DB master trusts?

- If so how might it do so?

i) Are further changes needed to the employer debt regime in multi-employer schemes to encourage further consolidation?

j) Is there a case for consolidation as a cheaper, but more efficient form of buy-out, with the employer and trustees discharged?

- If so, (a) what should be the requirements for a scheme to enter such a consolidator, especially the level of funding; and
- (b), should the residual risk be borne by the member, or by the PPF?

k) Should Government encourage creation of consolidation vehicles for stressed schemes?

l) Should employer debt legislation for multi-employer schemes require full buy-out and for the actuary to assess liabilities for an employer debt by estimating the cost of purchasing annuities?

m) How else could historic orphan liabilities be met if they were not shared between employers?

n) Are new measures needed to help those trustees of an association or employers who could be held individually liable for an employer debt?

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