Defined Benefits: managing assets and investment strategy

Introduction

This is the fourth and final Briefing Note in a series on the subject of private sector Defined Benefit (DB) pension schemes. The first explored the history of DB and the issues it now broadly faces. The second discussed the issue of governance and the growing complexity of trustees' role. The third dealt with issues associated with valuing and managing liabilities. This Briefing Note will discuss the challenges and opportunities trustees face when managing scheme assets and investment strategy.

This final Briefing Note considers:

- The scale and growth of DB scheme assets;
- How asset allocation has changed in recent years;
- The factors which are influencing DB scheme investment strategy;
- The different investment strategies at play in today's market;
- How trends may evolve in coming years.

DB schemes—a growing asset base

Despite the continued closure of DB schemes in the private sector and the contraction in the number of members, the assets of DB schemes continue to grow. In 2008, PPF eligible scheme assets totalled under £900bn, while in March 2016 they totalled £1.5tn,[1] which equates to roughly 75% of the value of the FTSE 100.[2] The intervening years have seen strong investment returns in some sectors. In 2016 alone, scheme assets grew by 14%.

However, liabilities have increased at a faster rate, increasing from just over £700bn to £1.63tn (valued on a s179 basis) over the same period, leaving the majority of schemes with a deficit that requires additional funding (a subject explored in more detail in our previous Briefing Note).[3]

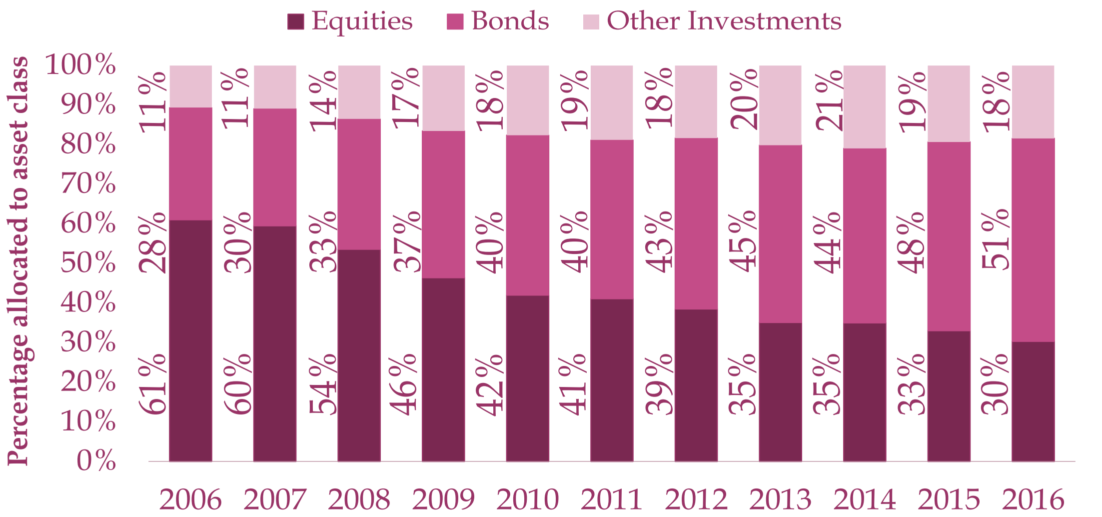
Asset allocation moves away from equities to bonds and other asset classes

Long-term trends in DB asset allocation have seen a shift away from equities towards bonds, as well as alternative asset classes. In the past, a typical DB scheme would be heavily invested in equities, with a small allocation to fixed income assets. But in recent years schemes have been increasingly investing less in return-seeking assets.

The trend has continued year on year since at least 2006. Since 2006, the proportion invested in equities has halved (from 61% to just 30%), while the proportion invested in bonds has almost doubled (from 28% to 51%) and the proportion invested in other investments also almost doubled (from 11% to 18%) (Chart 1).[4]

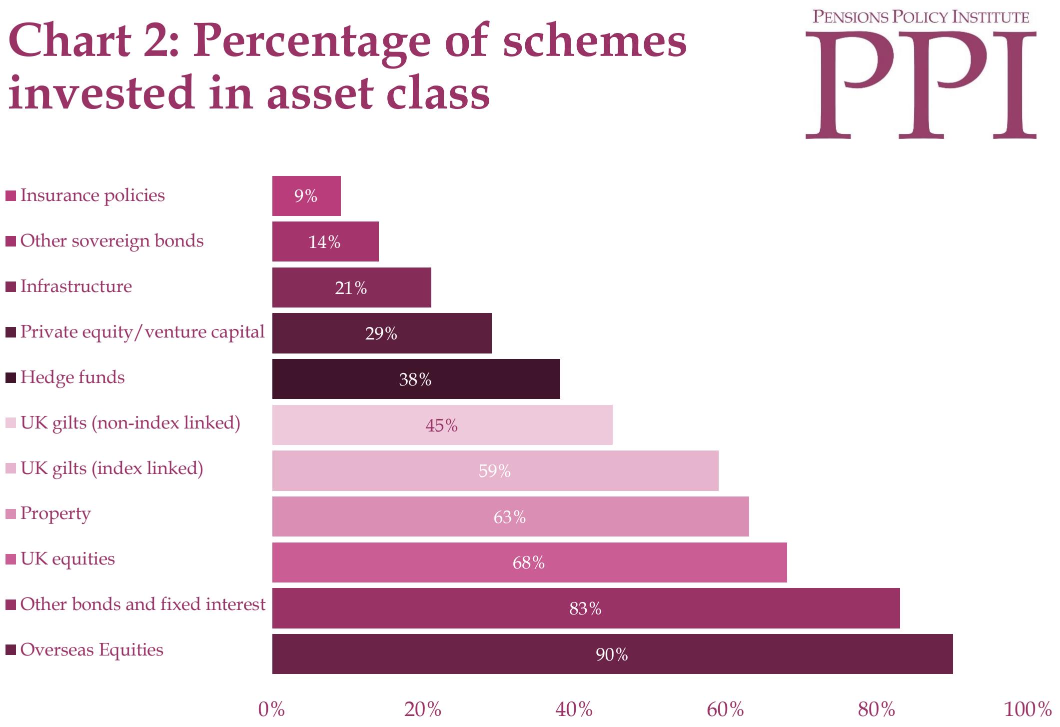
Chart 1: Trends in DB asset allocation 2006-2016

Allocation to equities has declined over this ten-year period, while allocation to both bonds and other investments (including insurance policies, cash and deposits, property, and hedge funds) has steadily increased



Source: PPF Purple Book 2016

Chart 2: Percentage of schemes invested in asset class



Source: PLSA annual survey 2016, sample of 125 DB schemes

There have also been changes at a more granular level as schemes have moved away from pure UK assets to a more diversified portfolio, exemplified by the shift away from UK equities to international equities and a move away from UK government bonds towards international and corporate bonds (Chart 2).[5]

A complex mixture of factors influence investment strategy

When identifying an appropriate investment strategy for their DB scheme, trustees must make difficult decisions that involve a number of considerations. A large number of factors influence investment decisions; some relate to the scheme itself while others are external in nature.

Scheme specific factors that will influence the asset allocation include:

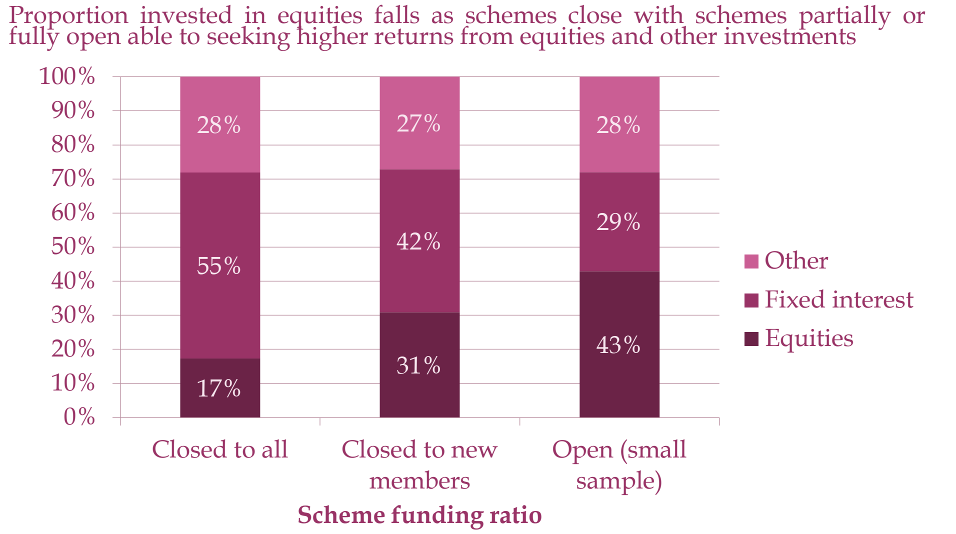
- The funding position of the scheme and the scheme's funding objectives. Schemes in deficit may adopt a very different approach to those in surplus while schemes planning for self-sufficiency may differ in approach to those seeking full buy-out.
- The strength of the employer covenant. Trustees may feel able to take more risk if the employer covenant is strong than if it is weak. However, trustees also need to consider the ability of the sponsor if downside investment risk materialises.
- The status of the scheme. Schemes closed to future accruals may invest more in risk reducing assets in order to secure benefits, but also need to focus on generating cash.
- The profile of the liabilities. As schemes mature with more and more pensioner members, the asset mix may need to more accurately reflect the profile of the scheme's cash-flow needs. Trustees may need to tread carefully in order to meet the long-term liabilities, achieve growth and pay out benefits in the shorter term.
- The risk appetite of the trustees and the sponsor's tolerance for risk will also be taken into account.

Scheme status and funding position have an impact on asset allocation

As covered in the previous Briefing Note in this series, the introduction of new accounting standards for DB pension schemes (originally FRS17 and more recently IAS19) have led many schemes to close to new members and future accruals. In turn, many schemes have adopted a lower risk strategy in order to reduce corporate balance sheet volatility.

Closed schemes are more likely to have a lower allocation to eq-

Chart 3: DB scheme asset allocation by scheme status

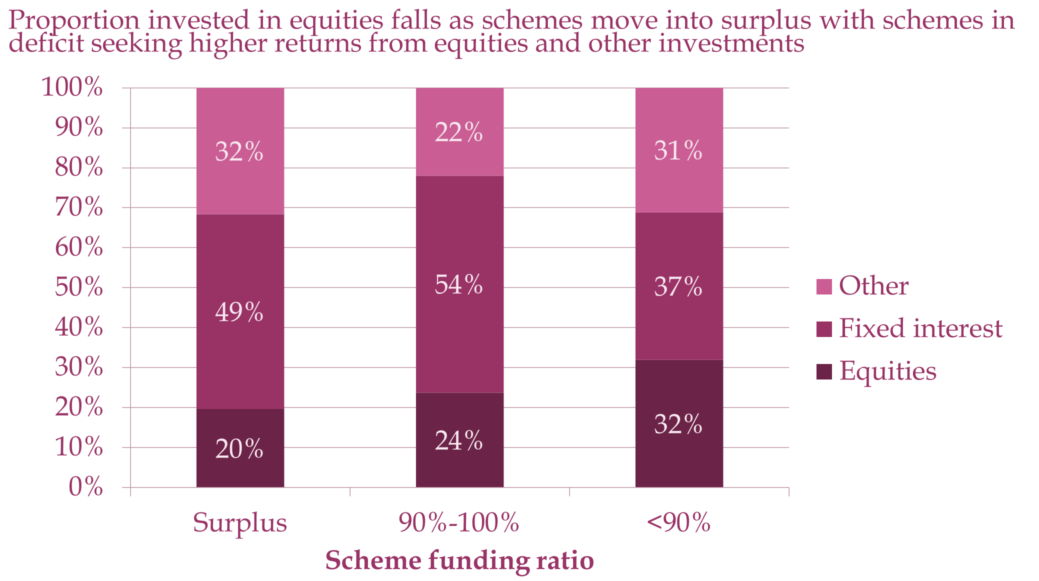


Source: PLSA annual survey 2016, sample of 125 DB schemes

uities and a higher allocation to bonds in order to secure benefits, reduce volatility and achieve the right cashflow. Closed schemes no longer attract normal contributions that can be used to help cashflow and they are also more mature and maturing relatively quickly. As such, they have shorter investment horizons and a greater need for liquidity and cashflow than open schemes. Data from the PLSA's annual survey of its fund members illustrates this point, with schemes closed to all future accruals investing just 17% in equities whereas schemes open to new members invest 43% in equities (Chart 3).[6]

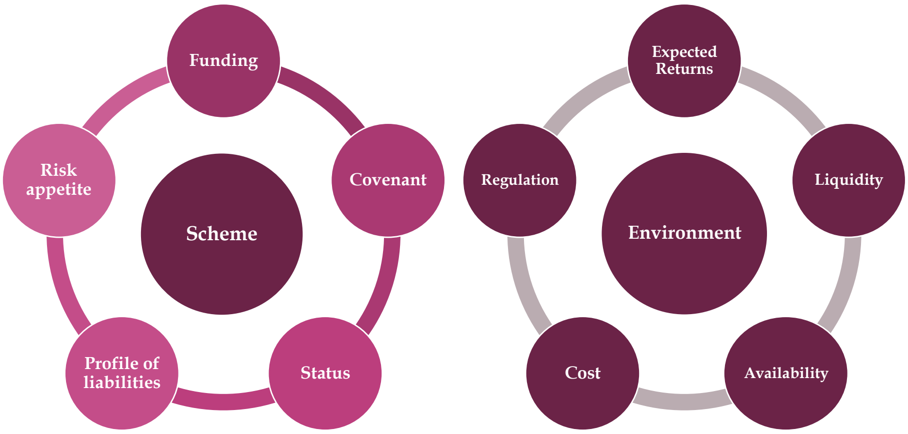
The funding position of the scheme can also shape the asset allocation. Schemes with a surplus or are very close to matching their liabilities may wish to secure benefits by moving away from return-seeking assets to assets that more closely reflect the profile of their liabilities. PLSA data reveals that schemes that are in surplus invest just 20% of their assets in equities with almost half in fixed interest. By contrast, schemes in deficit invest a third of their assets in equities and a lower proportion in fixed interest, suggesting that they hope that by seeking more return, they will lift the scheme out of deficit (Chart 4).

Chart 4: DB scheme asset allocation by funding position



Source: PLSA annual survey 2016, sample of 125 DB schemes

Box 1: Scheme and environmental factors shape investment strategy



The size of the scheme will also influence investment strategy. Smaller schemes have less access to some asset classes such as infrastructure that generally require large tranches of investment. They will also generally have less access to institutional fund management with its associated lower costs. Smaller schemes, particularly those related to executive benefits, may be more inclined to take risks than larger, more mature schemes.

Trustees also have a complex set of external factors to take into account when setting an investment strategy, not least of which is the legislative and regulatory environment in which they operate. Regulations require trustees to produce and maintain a statement of investment principles that sets out the scheme's investment strategy. They also require trustees to consider a range of scheme-specific factors when developing and reviewing the investment strategy (Box 1).

The Pension Regulator's (tPR) guidance states that while taking on higher risks may offer higher returns, trustees must make sure that the level of risk they are taking is appropriate for the scheme. In making investment decisions, trustees must find a balance between an appropriate level of risk which does not excessively threaten the security of member benefits, and an appropriate level of return in order to ensure that calls upon the sponsor for funding are manageable and do not threaten the growth and success of the wider business. Trustees must also consider the stewardship role that they will play and the position that they will adopt on environmental, social and governance (ESG) issues.

Central to the definition of the scheme's investment strategy is the question of risk and return. Trustees must take a view on the expected returns from different asset classes and the different risk to which they expose the scheme (for example, currency, interest rate, credit and liquidity risk). Some assets, such as equities or hedge fund investments, may be expected to deliver higher returns but may expose the scheme to more risk. Other investments, such as bonds, may deliver a predictable flow of income, offer less risk to capital but offer limited prospects for growth. Some assets, such as infrastructure, may offer the potential for good returns but the lack of liquidity may inhibit some, particularly very mature, schemes from investing.

As the shift to bonds and low-risk strategies has increased, so has the demand for inflation-matching assets such as index-linked gilts. UK private sector DB schemes already own around 80% of the long-dated index-linked gilt market. With demand increasing, there have been concerns about levels of supply for some years.[7] Potential demand is estimated to be almost five times supply, with demand likely to increase by around a third over the next five years. Projections suggest that the supply of index-linked gilts available to pension schemes is expected to fall short of demand until at least 2038.[8] Supply of index-linked gilts is particularly scarce at the long end of the curve, in spite of the removal of the maturity cap on gilt issuance. The issue of insufficient supply is further exacerbated by the buy-and-hold strategy used by pension schemes when investing in long bonds, which means that they will generally hold onto bonds until they reach maturity.

Another aspect of bond supply that trustees must consider is the level of match between these assets and the scheme's liabilities. Index-linked gilts are currently linked to RPI (Retail Prices Index), while scheme liabilities are linked to RPI, CPI (Consumer Prices Index) and LPI (RPI capped at 5%). To date the Debt Management Office that issues gilts has not been persuaded to issue CPI linked gilts. Alternative index-linked bonds, such as those issued by utilities companies, are also currently linked to RPI, but there are ongoing discussions about moving to CPI-indexation.[9]

Trustees may also accept contingent assets

In addition to assets invested within pension funds, trustees can also accept contingent assets that are held by a third party. The assets are only available to the pension scheme if/when a specific contingent event occurs. A contingent event may be company insolvency or a situation where a scheme does not have sufficient funds to cover its liabilities. In 2016, around 590 PPF eligible DB schemes held contingent assets, a significant reduction from its peak in 2011/12. This is largely because of a reduction in the number of Type A contingent assets (guarantees provided by the sponsor to fund the scheme, most commonly, to a pre-arranged percentage of liabilities). Type B contingent assets (security over holding of cash, real estate or securities) and Type C contingent assets (letters of credit and bank guarantees) have remained at roughly the same level over this period.[10]

Two broad categories of investment

Trustees adopt a variety of strategies depending on their assessment of their scheme requirements and the investment environment. Broadly speaking, strategies fall into two categories (with most schemes splitting their portfolio between the two):

- Growth seeking or total return strategies that seek higher returns as a way of reducing a fund's deficit.
- De-risking or liability driven investment (LDI) strategies that seek to align the assets of the scheme more closely to the future pattern of liabilities while employing techniques to hedge risks. Schemes may also adopt risk transfer strategies which look at ways of transferring risk to third parties on a route to potentially winding up the scheme.

The trend in recent years has been for schemes to move away from the former and towards the latter. The Government's Green Paper[11] poses the question as to whether schemes are adopting strategies that are overly cautious and, if so, whether this is due to one or more drivers:

- Gaps in the investment experience and skills of trustees;
- Regulation and the approach of the regulator leading to an overly cautious approach;
- A herding instinct on the part of schemes and their advisors;
- Sponsors wishing to reduce volatility and risk;
- Smaller schemes in particular having difficulty accessing some types of asset;
- Concerns about the economic outlook.

The concerns raise questions about whether schemes are missing out on potential growth opportunities and whether the approach is depriving the UK economy of a source of capital. The paper concludes that, at present, the evidence to support change is inconclusive, but is open to change in regulation and the role of the regulator if it finds that investment strategies are sub-optimal or trustee decision making is ill-informed.

Growth seeking strategies adopt a more diversified approach

Growth seeking strategies can offer increased returns, potentially reducing the need for sponsor contributions in order to improve the scheme's funding position. However, if the increased risk crystallises and assets fail to deliver desired returns, the sponsor may eventually be called upon for higher contributions to enable the scheme to meet liabilities. Trustees need to consider whether such calls are likely to be met by the sponsor.

Traditionally, schemes sought out the prospects for investment growth by investing in equities. In more recent years, schemes have employed a variety of approaches including the use of diversified growth funds (DGFs), multi-asset fixed income and property. Some schemes have used alternative investments such as hedge funds, commodities and infrastructure investment among their growth assets. These alternatives to equities may offer yields in excess of bonds but with cashflows that are closer to scheme liabilities or yields that are not correlated to mainstream equity markets.

Diversified growth funds seek out growth through a range of diversified assets and hedging instruments. They offer schemes a simple way of accessing a range of assets that they may not have the ability to achieve on their own. The aim of DGFs is to deliver the returns of equities but without the volatility. The PLSA suggested that equities, high yield bonds and emerging market bonds are the three most popular asset classes, making up 70% of the value. The remaining 30% is spread between property, hedge funds, private equity, infrastructure, commodities and cash.[12]

Property

Pension schemes, particularly larger schemes, have invested in property for many years. 63% of the DB schemes responding to the PLSA's annual survey say that they invest in property. Property can bridge the gap between equities and bonds, offering higher returns than bonds but a steady income stream that is less volatile than equities.[13] However, property also increases liquidity risk in portfolios, as it involves long-term investment horizons and a very limited secondary market in which such commitments can be sold. As is the case with many alternative asset classes, investment in property declines with scheme size, with illiquidity, size of investment, inconvenience and governance demands often cited as the reason for this.[14] Some of these barriers can be overcome through the use of property funds rather than direct investment, although liquidity can still be an issue.

Infrastructure

One in five of the DB scheme respondents to the PLSA 2016 annual survey stated that they invest in infrastructure (such as major construction projects) but with an average of just under 2% of assets invested in the class. Investment in infrastructure may form part of either a growth or derisking strategy. Income flows can be relatively secure but credit risk can vary considerably scheme to scheme.

Investment in infrastructure may be particularly attractive to schemes that remain open to either new members or future accrual. While assets in infrastructure are relatively illiquid, they can provide schemes with a stable cashflow in the long-term that can assist in meeting long-dated liabilities. Infrastructure can provide schemes with increased scope for liability matching as these projects generally match the long-term horizons of the scheme, as well as reducing risk in some cases. Some schemes can have difficulty finding infrastructure opportunities that closely match their liabilities, particularly as it is a broad asset class within which there are large variances in terms of risk and return profiles.

Infrastructure investment may not be suitable for all schemes, particularly smaller schemes which may lack sufficient size to invest in such projects. However, pooled arrangements can make these asset classes more accessible for smaller schemes.

Derisking strategies become more sophisticated and common

One of the drivers of the move to derisking has been the desire on the part of trustees and sponsors for schemes to be self-sufficient and to reduce the risk of turning to sponsors for more funding. Derisking may also be a precursor to buy-out (and closure) of the scheme.

Low-risk strategies can reduce or even eliminate asset volatility, but may lead to a higher immediate deficit which requires recovery payments from the sponsor in the short-term in order to improve funding position. Before adopting this type of strategy, trustees will need to engage with the sponsor and be confident that the sponsor is both willing and able to support the move to derisking. Sponsors concerned about volatility on their balance sheet may well support the move in the expectation that funding will become more predictable and the demand for deficit reduction contributions will be eliminated in time.

The shift in focus from maximising total returns to derisking and liability matching is likely to continue. A study of more than 90 multi-national DB schemes found that 73% favoured these strategies over traditional total return strategies.[15]

There are two key considerations which may encourage trustees to derisk:

- Volatility and uncertainty regarding future liabilities; and
- Decreasing and eventually negative cashflows resulting from accelerating scheme maturity, particularly as many schemes close to new members and/or future accruals.

Derisking strategies will differ by scheme and will primarily be determined by the objectives identified by trustees. Strategies for schemes which are aiming at self-sufficiency will differ from those of schemes aiming at buy-out.

Growth in liability driven investing

While schemes have de-risked on an informal basis for many years, investing mainly in fixed-interest bonds to achieve this, more sophisticated strategies have developed under the banner of liability driven investing (LDI).

Schemes implement LDI strategies by investing in assets which are correlated with their liabilities. They are designed to reduce risk to member benefits and the risk of increased contribution demands upon the sponsor.

As liabilities have been increasingly volatile in recent years, deficits have fluctuated and most have grown, sometimes even when assets have performed well. Sponsors are uncomfortable with this volatility and uncertainty when the effect can be seen in their accounts.

Early LDI strategies focused primarily on investing in long bonds which more accurately mirrored the long-term liabilities of the scheme. Today, more sophisticated LDI strategies have emerged which employ the use of other financial instruments such as multi-asset credit and derivatives including options, futures and swaps.

Hedging strategies become increasingly attractive as a scheme's funding position improves and the need to generate growth decreases. Hedging techniques seek to reduce the risk of movements in interest rates, currency or inflation thereby reducing volatility (at a cost) and securing benefits. They also offer scope for gearing and can be an effective use of the limited assets of a pension scheme, leaving more funds that can be invested in return-seeking assets.

KPMG's 2016 report on LDI suggested that UK pension scheme liability hedging grew by 13% in the year to £741bn of liabilities hedged. The same report suggests that whereas LDI was traditionally the domain of larger schemes, smaller schemes are now accessing LDI through pooled funds and some through segregated or bespoke arrangements.[16]

Maturing schemes need cashflow driven strategies as schemes mature

As schemes mature and more members are in receipt of their pensions, not only do schemes need to continue to manage the risks in their portfolio but increasingly to align the income and maturities of their investments with their cashflow needs. Many DB schemes are reported to be cashflow neutral or negative today, and as they mature, funding pensions in payment can become harder unless planned well in advance. Schemes that wish to remain self-sufficient may need to realign their portfolio to ensure that they can continue to make pension payments.

Managing longevity risk becomes more important as investment risk is reduced

As schemes derisk their investment portfolio, one of the other major risks remaining is longevity risk; the risk that members and their dependants live longer than has been assumed in the scheme valuation. If this risk is not managed, trustees and sponsors run the risk of the scheme running out of money as it matures. Schemes employ three different techniques to manage this risk: longevity swaps, buy-ins and buy-outs. All involve transferring some of the risk to a third party.

Longevity swaps

Longevity swaps transfer the risk of increased liabilities resulting from increased life expectancy of members from the scheme to an insurer. Scheme trustees agree to pay a premium to the insurer based on an agreed upon current projection of longevity (the ‘fixed leg’). In return the insurer will pay the scheme based on actual longevity as it occurs (‘floating leg’). This means that the scheme will no longer struggle to pay liabilities if members live for longer than expected.

Between 30 June 2009 and 31 March 2016, 33 longevity swaps were competed, with around £56.4bn of liabilities covered.[17]

While longevity swaps and other risk transfer deals can benefit DB schemes, sponsors and in most cases members, they introduce counter-party risk. This is the risk that the provider of the deal (the insurer) becomes unable to meet liabilities (member benefits). This means that trustees must not only consider the immediate costs and benefits of the deal, but also the strength of the insurer and its underlying risks. This risk is often addressed by collateralisation arrangements for longevity swaps.

Buy-ins

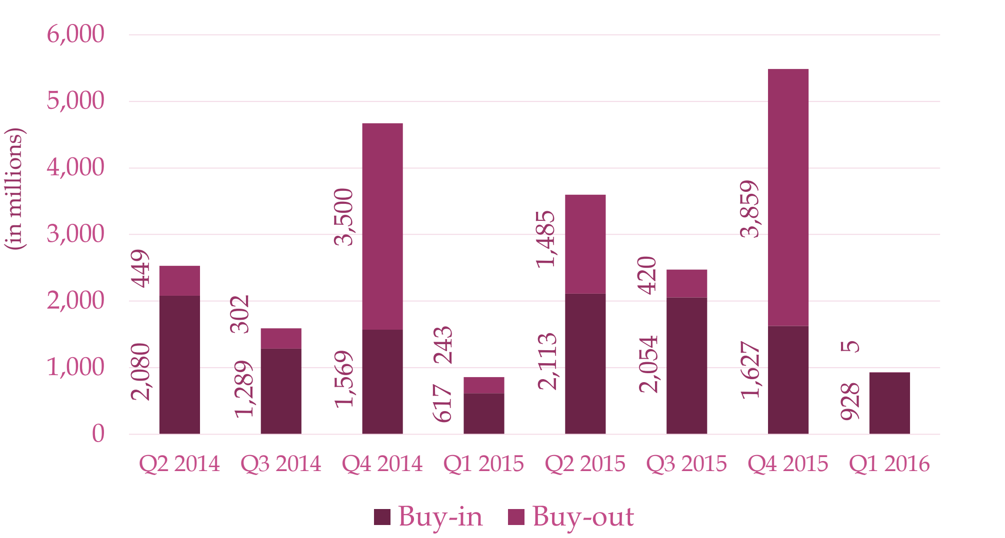
Buy-ins are essentially an insurance policy covering some or all of the scheme’s members. A buy-in policy is held by the scheme’s trustees alongside its other assets and requires that the insurer pays the value of these members’ benefits to the pension scheme as they come due, which the scheme then pays out to members. Where longevity swaps protect only against longevity risk, buy-ins transfer all risk from the trustees to the insurer, including investment, inflation and interest rate risk as well as longevity risk.

Since January 2016, in spite of the introduction of Solvency II, buy-ins are reported to have become a more affordable option for some schemes, particularly those looking to exchange gilts for a buy-in policy. This is largely attributable to a widening of corporate bond credit spreads (the difference between yields on gilts and corporate bonds).[18]

When considering a buy-in, trustees must assess whether the deal offers good value in terms of its cost in comparison to the risk re-

Chart 5: Value of buy-in and buy-out deals

PENSIONS POLICY INSTITUTE
PPI



Source: Hymans Robertson

duction it provides. They also need to consider whether it is affordable in terms of funding ratio to the liabilities of members who are not covered by the deal. The scheme sponsor may also want to consider whether the move could lead to higher costs for them in funding the deal.

Buy-outs

Like buy-ins, buy-outs transfer all relevant risks associated with some or all members from the scheme to an insurer. Whereas a buy-in involves the insurer paying liabilities to the scheme which then pays them to members, in a buy-out the insurer pays benefits directly to individual members, effectively removing those members from the pension scheme's books entirely.

The total value of buy-in and buy-out deals written in the 1-year period up to 31 March 2016 was around £12.5bn, with buy-ins totalling around £1bn more than buy-outs (Q2 2015—Q1 2016 Chart 5).

Growing complexity increases take-up of fiduciary services

As investment strategies have become complex, more schemes are using fiduciary management services whereby day-to-day investment decisions are outsourced, but with trustees retaining overall responsibility and oversight. Fiduciary services can help schemes get access to more diverse assets, can support the investment governance of the scheme and can prove more cost effective, particularly for smaller schemes. In a survey of 250 schemes, Aon reported that 45% of respondents had taken up fiduciary services, rising to 49% among smaller schemes. Take up is reported to have grown since 2011 when just 18% had taken up the service.[19]

Where next?

If there is one word that captures the trends in DB scheme asset management it is complexity. Today's trustees have to put in place and have oversight of strategies that are considerably more complex than their predecessors. The complexity derives from the need to manage deficits, reduce volatility, diversify the portfolio of assets, manage the changing cashflow needs of schemes and juggle the needs of the different stakeholders, in particular the members and sponsors.

Closure of schemes and the desire of sponsors to reduce the volatility evident on their balance sheets makes the job of the trustees harder and investment governance an increasingly important element of the role.

For the foreseeable future, trustees will need to balance the growth and de-risking elements of their investment strategies across a wide range of instruments and in an uncertain economic climate, made more difficult by Brexit and global trends towards protectionism.

If growth strategies succeed in helping funding positions improve, schemes are likely to shift further towards derisking. Demand for derisking instruments looks set to rise. However, issues of supply of suitable investment will continue to be an issue. Both the supply of suitable fixed-interest instruments and derivatives, and the capacity of the market to hedge longevity risks may limit schemes' ability to derisk.

Finally, as schemes mature, trustees and their managers will need to be active in ensuring that the scheme's cashflow matches the payment of pensions. The job of a DB scheme trustee seems unlikely to get easier for many years to come.

---

1. PPF Purple Book 2011 p.37 / PPF Purple Book 2016 p.14
2. As at 17 March 2017 http://shares.telograph.co.uk/indices
3. PPI 2017 *Defined Benefits: valuing and managing liabilities*
4. PPF Purple Book 2016 p.10
5. PPF Purple Book 2016 p.42
6. PLSA Annual Survey 2016
7. Schroders 2016 *Pension funds and index-linked gilts: A supply/demand mismatch made in hell* p.1
8. NAPF 2014 *DB run-off: The demand for inflation-linked assets* p.15
9. United Utilities Water 2016 *Changing the basis of indexation from RPI to CPI* p.1
10. PPF Purple Book 2016 p.67
11. DWP Green Paper 2017 *Defined benefit pension schemes: security and sustainability*
12. PLSA 2015 *Diversified Growth Funds: made simple guide* p.6
13. Capita 2016 *From office blocks to wind farms: pension scheme investments in real assets* p.2
14. Investment Property Forum 2010 *UK institutional investors: Property allocations, influences and strategies* p.12
15. Vanguard 2015 *Global trends in DB and DC plans: Key themes from our multi-national client survey* p.4
16. KPMG 2016 *Powering ahead: The current UK LDI Market*
17. Hymans Robertson 2016 *Buy-outs, buy-ins and longevity hedging Q1 2016* p.1
18. Barnett Waddingham 2016 *Longevity Swaps* p.16
19. Aon 2016 *Fiduciary Management Survey*

This Briefing Note was sponsored by Mercer. We are grateful to Mercer for their support in producing this research series on Defined Benefit (DB) pensions in the private sector. A full list of the Briefing Notes in this series is below:

MERCER
MAKE TOMORROW, TODAY

Briefing Note 86—Defined Benefits: Today and Tomorrow, is the first in the series and explores:

- A brief history of DB pension provision in the private sector in the UK;
- The complex set of factors behind the decline in DB provision;
- The challenges facing sponsors, trustees, government, regulators and members;
- The options available to sponsors, trustees, government and regulators to help schemes facing challenges.

Briefing Note 89—Defined Benefits: The role of Governance, is the second in the series and explores:

- The role of DB pension scheme trustees;
- The benefits of good governance and examples of good practice;
- The current gap between good and poor governance;
- The relationship between scale and governance; and
- Improving scheme governance.

Briefing Note 93—Defined Benefits: valuing and managing liabilities, is the third in the series and examines:

- The size, trend and shape of UK DB scheme liabilities;
- The mathematics of valuing today, liabilities that are due to be paid in the future;
- The particular impact of bond yields and longevity trends on pension scheme liabilities;
- Current mechanisms for controlling and de-risking liabilities;
- Calls for schemes to have more ability to manage liabilities and the issues raised by the Green Paper 'Security and Sustainability in Defined Benefit Pension Schemes'.

Briefing Note 94—Defined Benefits: managing assets and investment strategy, is the final Briefing Note in the series and considers:

- The scale and growth of DB scheme assets;
- How asset allocation has changed in recent years;
- The factors which are influencing DB scheme investment strategy;
- The different investment strategies at play in today's market;
- How trends may evolve in coming years.

For more information on this topic, please contact
Lauren Wilkinson, Policy Researcher
020 7848 4473 lauren@pensionspolicyinstitute.org.uk
www.pensionspolicyinstitute.org.uk