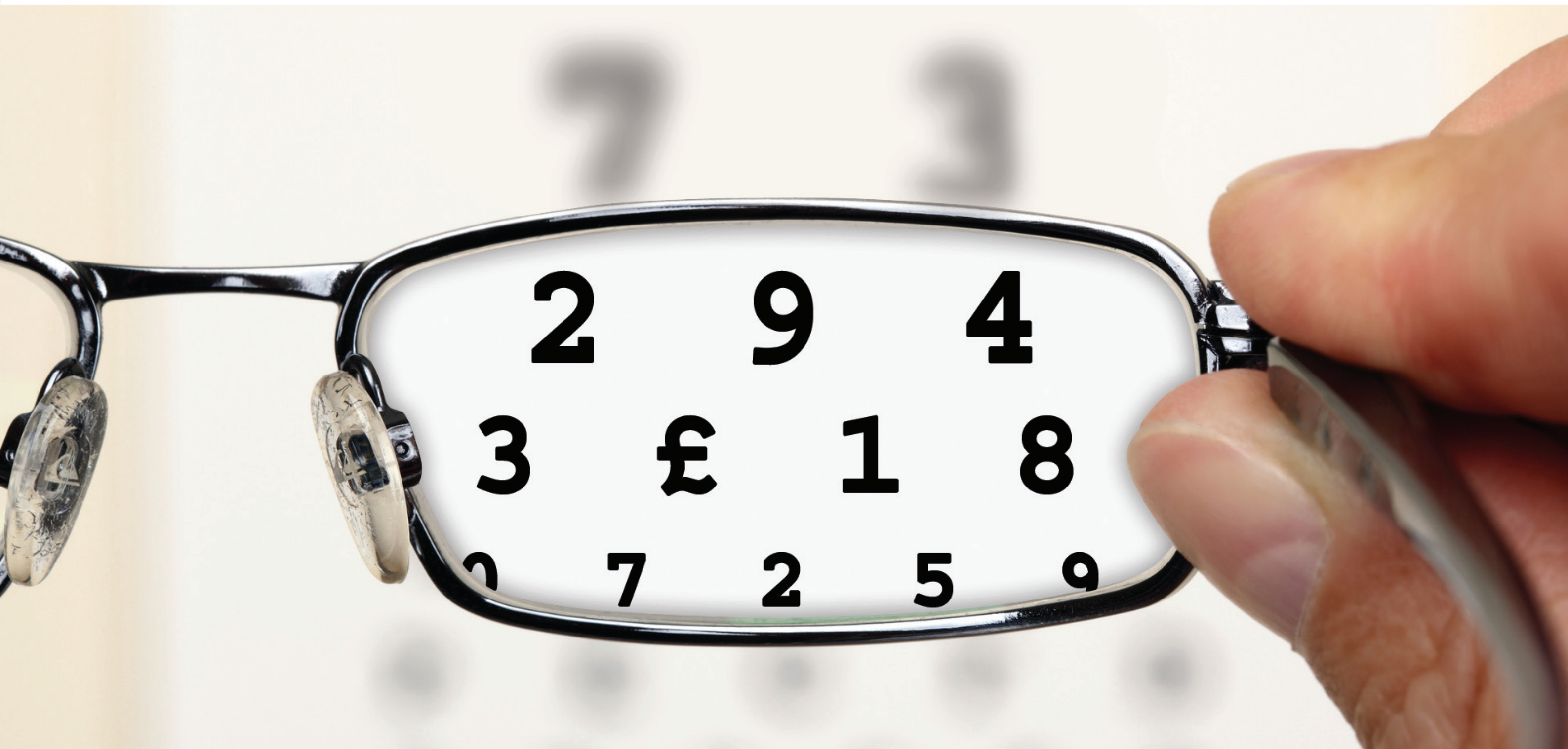
THE SOCIETY OF PENSION CONSULTANTS

# White Paper:
# VISION 2020

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## About SPC

SPC is the representative body for a wide range of providers of advice and services to work-based pension schemes and to their sponsors. SPC's Members' profile is a key strength and includes accounting firms, solicitors, life offices, investment houses, investment performance measurers, consultants and actuaries, independent trustees and external pension administrators. SPC is the only body to focus on the whole range of pension related services across the private pensions sector and, through such a wide spread of providers of advice and services. We do not represent any particular type of provision or any one interested body or group.

Many thousands of individuals and pension schemes use the services of one or more of SPC's Members, including the overwhelming majority of the 500 largest UK pension schemes. SPC's growing membership collectively employs some 15,000 people providing pension-related advice and services.

## List of abbreviations:

**BoE** Bank of England
**DB** Defined Benefit
**DC** Defined Contribution
**MFR** Minimum Funding Requirement
**PPP** Public Private Partnership
**PFI** Private Finance Initiative
**QE** Quantitative Easing
**SPC** The Society of Pension Consultants

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# President's foreword

After more than 5 decades of activity, UK pension schemes have built up a significant asset value – collectively a value of the order of £1trillion. A collective asset value of that size has the potential for significant impact upon the economy.

Currently around 60% of that value is invested in equities, but as the traditional final salary schemes mature (a process that is accelerating rapidly as schemes cease granting new benefits for members) the need to shift assets into less volatile areas grows. This trend is well under way.

Through our members, we at SPC have been observing this trend for some time, and recently concluded that although the potential for disruption of the economy is likely to be significant, it was neither particularly well quantified nor understood.

The need better to understand the implications has been given new impetus by the current economic situation, and the shadows cast by the Solvency II and Basel III requirements. Consequently, members of SPC's Investment Committee embarked upon a research project to answer some of these difficult questions

This paper is the result; we hope it is a useful contribution to collective knowledge in this area. It is the first time that SPC has undertaken a project of this type. Tantalisingly, the underlying research has identified many more unanswered questions; I am sure that my successor, Roger Mattingly, will continue SPC's pursuit of the answers.

**Kevin LeGrand**
PRESIDENT

# SPC Vision 2020 Executive Summary

- The trend towards derisking will result in the bulk of DB pension assets being invested in bonds by 2020.
- DB liabilities amount to 155% of the sterling investment-grade bond market and 274% of the long-dated bond market.
- If only 60% of UK pension liabilities had an inflation link these liabilities would account for over 400% of the long-dated inflation-linked bond market.
- Factoring in deficit contributions, this shift could result in a demand for long-dated bonds of up to 12% of the overall market each year, up to 15% of the long-dated bond market and, conservatively up to 35% of the long-dated inflation-protected bonds market.
- The mismatch of excessive demand to supply means that the value of long-dated bond yields is likely to fall significantly over the next 8 years widening pension deficits.
- UK Plc will ultimately not be able to afford to fund the ever increasing deficits exclusively through bonds and will need to find alternative ways of derisking their pension scheme.

SPC calls on the UK Government to:

- Review valuation methodologies to recognise the liability matching characteristics of infrastructure or property 'cash flow' assets.
- Consider the requirements of pension schemes in future regulation and in the structuring and funding of large infrastructure projects.
- Provide supportive tax structures and impose no unwarranted additional regulatory costs to be imposed on derivative markets.

# SPC Vision 2020

UK pension schemes are moving their assets from equities to bonds. This is no revelation as it has been happening at least since the introduction of the Minimum Funding Requirement (MFR) back in 1997.

However, the introduction of scheme specific funding has further focussed Defined Benefit (DB) trustee boards on the ultimate end game: securing their closed pension schemes' liabilities with an insurance company. With this in mind most pension trustees are putting derisking 'flight paths' into action. These flight paths are a medium term plan to move the pension scheme holdings into matching assets, namely bonds. Once invested in bonds, the funding of these plans should be stable and, hopefully, during the implementation of the derisking strategy, full funding on a bond basis will also have been achieved.

At the start of 2000, the typical pension scheme had over 70% invested in equities; by 2011 this was down below 60%. With more stringent funding requirements pushing schemes to bond based funding and the pressure on finance directors to get pension schemes off their balance sheet, by 2020, the bulk of defined benefit pension scheme assets could be invested in bonds if trustees successfully implement their derisking strategies. This scenario is the basis of this paper.

The Society of Pension Consultants (SPC) has been giving considerable thought to the implications of this scenario. The assets of DB pension schemes amount to some £1 trillion, a considerable amount of money to all be moving in one direction (namely out of equities and into bonds). The implications of this are considered below. We also consider the funding implications of running a pension scheme that is largely invested in bonds.

### Can the bond market absorb pension schemes' demand?

Data from SPC Member Firms shows that DB liabilities amount to some 155% of the sterling investment grade bond market, but even more shockingly some 274% of the long-dated (over 10 year) bond market. Of course, the majority of pension scheme liabilities have some inflation linkage (final salary schemes promise benefits linked to salaries that will increase typically with inflation, deferred member pensions have a link to inflation in the way they are revalued between a member leaving the scheme and retiring and large parts of pensions in payment are linked to inflation).

On a broad measure, if just 60% of the UK pension liabilities had an inflation link, this would equate to 400% of the long-dated inflation-linked bond market.

A staged shift to bonds from now until 2020 could result in a demand for long-dated bonds of c.8% of the overall market each year, c.10% of the long-dated bond market or, if just half of the demand for bonds is funnelled to long-dated inflation protected bonds, 15% of that market each year. Adding in deficit contributions could bring the total demand figures to 12%, 15% and 35% respectively.

(These figures are derived from an estimate of the corporate pension scheme assets still 'return seeking,' an amount in the order of £600 billion combined with the pension deficits that corporate pension scheme sponsors are attempting to plug with cash payments, estimated by SPC Member Firms to be about £1 trillion in total).

Clearly these are unfeasible numbers. If pension schemes continue to derisk without taking a step back and considering the implications of this excess demand, the extremely poor value in long-dated bonds will not improve and could even get worse.

Pension schemes place a value on their liabilities with reference to the prevailing bond yields. As the excess demand continues for bonds, prices are driven up and yields down. These reductions in yields place ever higher values on pension liabilities and mean that pension schemes are chasing their tails, opening ever larger deficits that require further investment in bonds that cause the yields they use to calculate their liabilities, to fall further. This directly impacts on UK Plc, which ultimately has to fund the deficits emerging. The tail is only caught once these schemes are all funded and invested on a bond basis at great expense.

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## What is Quantitative Easing (QE) and how does it hurt pension schemes?

Reducing borrowing costs stimulates the economy by encouraging capital investment. In order to try to head off recession as we headed into the 'credit crunch' the Bank of England (BoE) rapidly cut base rates. However, the BoE can only set short term rates. Lowering short term rates should in turn lower longer dated borrowing costs (i.e. bond yields), however the transition mechanism that causes long-dated interest rates to fall on the back of base rate cuts only works for a limited time, and stops as base rates approach zero.

With base rates already at 0.5% and the UK economy flagging, the BoE had to consider other ways to bring down longer dated yields to stimulate the economy. It felt it had little choice but to introduce its QE programme, a large part of which is about lowering longer dated interest rates.

In essence QE involves granting BoE accounts in exchange for bonds, which is effectively buying bonds with new money. The additional demand for bonds raises their prices and suppresses their yields. From a pension scheme perspective the BoE is competing as a buyer of bonds and the downward pressure it is placing on bond yields hurts pension schemes by increasing the value that must be placed on their liabilities. This leaves them with greater deficits that must be reflected on their sponsors' balance sheets.

QE also risks causing inflation, which erodes the value of fixed pension payments and increases the cost of providing inflation linked payments.

## Why trustees must consider the alternatives to bonds

The affordability of investing in bonds needs to be considered by pension scheme trustees. While trustees may feel it is not their place to 'time' their trades, neither should trustees press naively on with staged derisking programmes without considering the alternatives.

SPC Member Firms can help their clients consider alternative ways of derisking their pension schemes that are cost effective. It is clear that government bonds (gilts) are excessively expensive and, with the extent of the potential demand from pension schemes (not to mention further QE), may become even more so. Inflation-linked bonds do not offer a real yield and any yield on conventional gilts could easily be eroded by inflation. When the Treasury considered the issuance of 100 year bonds it is telling that they sought to issue nominal bonds despite inflation bonds looking more attractive at the target inflation rate – a hint that the Treasury is not convinced that long term inflation will not exceed targets.

Additionally, given the Eurozone crisis and the failure of the UK economy to meet the growth targets on which the Government's fiscal austerity measures were based, the UK Government is facing the very real prospect of a downgrade. Its debt can no longer be considered a 'risk-free asset', which makes the stretched valuations particularly unappealing and highlights the need for pension schemes to diversify the assets they hold to attempt to match their liabilities. The Eurozone crisis is a timely reminder that European government debt is not a risk free asset but UK Government debt has been (and is being) seen as a relatively safe haven further suppressing yields.

## Alternatives to bonds

A pension liability is a series of future payments linked partially to an inflation index. Secure inflation-linked cash flows match such real pension liabilities. Inflation-linked cash flows are available from sources other than inflation-linked bonds.

## Infrastructure

There has been much coverage of the interest sovereign wealth funds are showing in UK infrastructure, the China Investment Corporation and the Abu Dhabi Investment

Authority among them. The Government has encouraged investment in UK infrastructure as a way to promote growth and is unable to fund such projects on its own balance sheet. Therefore there should be plenty of opportunities for pension schemes to invest in infrastructure through Public Private Partnerships (PPPs). To this end, the Government has entered into a Memorandum of Understanding with certain UK pension schemes (including the National Association of Pension Funds and the Pension Protection Fund) to support additional investment in infrastructure.

Projects, such as toll roads, are an ideal alternative to inflation-linked government bonds (once the initial construction phase has been completed) in that they can offer secure inflation-linked payments. In November last year the UK Government announced plans to reform the Private Finance Initiative (PFI) but with an improved model.

Currently few but the very largest pension schemes make such investments so the challenge is for such opportunities to be made more accessible to small and medium sized schemes. SPC supports these recent initiatives and hopes that they will translate into meaningful and cost effective solutions that allow all pension schemes, regardless of size, to invest in PPPs.

## Property

Property generally is an area where long term secured cash flows can be accessed and, while pension scheme investment in property has historically focussed on commercial property investment, social housing is an area that could particularly benefit from pension scheme investment. On 21 November 2011 the Government published "Laying the Foundations", its latest housing strategy paper. Welcoming the paper, the National Housing Federation nevertheless described the additional 3,250 affordable homes as a 'drop in the ocean' and called for a public investment of £1 billion, matched by £8 billion from housing associations in order to build 66,000 shared ownership homes. There must be scope for pension schemes to provide some of this finance, while also generating the sort of cash flow profile they need.

While infrastructure and property assets generating low risk cash flows seem an attractive 'win-win' for pension schemes and the UK economy, the problem with such 'alternative' investments is that the way they are valued within a pension scheme may not be consistent with the way the liabilities are valued, resulting in reported funding volatility that hits the employer sponsor's balance sheet. This is because, under pension accounting rules, assets are marked to market, while AA bond yields are used to value liabilities. This causes a mismatch and ignores the true characteristics of such matching assets which are closely aligned to pension liabilities. For pension schemes to be incentivised to invest in these asset classes therefore, these accounting anomalies need to be removed.

## The derivative market

Derivative instruments can mimic bond exposure. While usually priced in accordance with the bond market anomalies can exist that make this market more attractively priced. If this market offers a cheaper hedge of pension liabilities, this should be exploited. Daily collateralisation in the Over the Counter swap market offsets credit risks, arguably making these derivatives a less risky investment than sovereign debt. A further advantage of swaps has been that no initial capital is required to enter a contract. The contracts are simply marked to market as they move in and out of the money. This enabled pension schemes to hedge unwanted interest rate risks while still investing in return seeking assets. Unfortunately for pension schemes this 'capital light' position is coming under threat, with a move to central clearing and more onerous capital requirements for banks not clearing centrally. This will further force pension schemes out of return seeking assets and into bonds and cost UK plc.

## The implications for the UK Equity market

Data from SPC Member Firms shows that the de-risking of pension schemes could result in annual sales of UK equity of over 1% per annum. While this is a much less frightening statistic than some touched on in this report, this should still sound a precautionary note for UK equity investors as the year-on-year sales pressure is not immaterial. Although pension schemes now hold more of their assets in overseas equity, they are a relatively small part of this global market so their influence on the UK market will be more marked.

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## Pension schemes should be given more tax breaks

In recent years pension funds have seen attacks on their tax exempt status. There is Gordon Brown's well documented 'raid' on pensions when he took away their ability to reclaim ACT in 1997 and, although not defined as a tax, the Pension Protection Fund Levy is an indirect source of risk transfer financing for the Government.

While a shift to lower risk assets is in the best interests of pension scheme members, as there is less risk to the funding of their pension scheme, the reduction in return means that less of the cash to pay benefits can be expected from future investment income. This in turn means the sponsoring company therefore must stump up more cash now, which is reflected in lower liability discount rates, higher liability valuations and deterioration in scheme funding levels.

The financial strain of a move to fixed income on sponsoring employers is often a barrier to pension scheme derisking. Given the fact the UK economy benefits from pension fund demand for bonds (it is cheap financing for capital investment), the UK Government should consider ways to provide a financial incentive to sponsoring employers to encourage pension funds to derisk in this way. Pension fund supply of capital has the same impact on the long end of the yield curve as the QE programme, but without the same potential inflation pressures.

Over time the capital structures of UK Plc may shift from equity towards debt to fit with the demand from UK pension schemes. This would offset the sale pressure and help provide the supply pension schemes need if enough high quality corporate bonds were issued, but in the meantime, the alternative cash flow assets described above, must provide at least some of the investment solution. UK and other corporates need to be persuaded that the factors that made the cult of the equity so attractive when raising capital in the past surely need to be reassessed.

## Funding a pension scheme investing primarily in bonds and other cash flow assets

Funding a pension scheme primarily with bonds and cashflow generative assets (such as property or infrastructure) requires a significant financial commitment from the schemes' sponsors. In order to fund to this level, the sponsor (and the Trustees) are giving up the expectation of higher return from riskier assets. They do so in order to introduce greater certainty in their ability to pay future pensions and to benefit from lower balance sheet volatility.

Funding at this level may also come with some discord from shareholders who would rather capital was employed to enhance shareholder return.

However, as schemes continue to derisk supported by sponsors and employ a larger percentage of bonds and other cashflow generative assets, coupled with schemes maturing as they close to accrual, buy-out and securing pensions under an insurance contract become more achievable.

This certainty for pensions is a benefit to the State in itself and the State should consider how it can reward pension schemes for their contribution to economic activity as well as easing State reliance for the pensioner population.

In the years to come the Government will need pension schemes to buy the bonds it issues as it unwinds QE. The Government must make its issuance attractive to pension schemes in terms of duration and yield.

Equally, the Government would like schemes to invest in PPP infrastructure projects but these have to be attractive to those schemes and not just from a yield perspective. If the Government wants to use pension scheme assets to help it finance the country then it needs to make sure that pension schemes are rewarded for this.

## Actions required to resolve the derisking dilemma

This report highlights the trend within UK pension schemes towards investing in bonds and the implications associated with it. It also touches upon some solutions to the key problems. However, these are imperfect solutions unless we see change. SPC hopes to see the following changes in order for pension schemes to derisk more effectively:

- A review of valuation methodology to recognise the liability matching characteristics of infrastructure or property 'cash flow' assets. Accounting and funding valuation both price liabilities on the basis of bond yields, but there are different drivers to the market value of alternative assets (they will not be subject to the same credit risks and they are subject to the liquidity premium). As a result, holding these assets introduces volatility to funding levels and the sponsor's balance sheet. Practical solutions might be:
  - The netting off of the cash flows generated by the asset portfolio against liabilities (perhaps permissible for cash flow assets with AA or better credit characteristics)
  - The use of a discounted cash flow approach to value the assets, rather than reference to a market value.
- Regulation needs to recognise that pension schemes do not necessarily require liquidity and that pension schemes should be able to benefit from the liquidity premium. The requirement for pension schemes to invest predominantly on a recognised exchange will force them to continue to derisk primarily into bonds and restrict their use of infrastructure and property cash flows.
- An increase in gilt issuance, and particularly index linked gilt issuance, at the long end.
- Government backed, big ticket infrastructure projects need to be structured in such as way as to offer accessible, low risk inflation-linked cash flows for all schemes, regardless of size.
- Supportive tax structures and no unwarranted additional regulatory costs to be imposed on derivative markets.

### Insurance company pricing of pension scheme buy-out and buy-in business

As more schemes close to future accrual, buy-outs and buy-ins are derisking approaches some pension funds may choose to take and are the end game for most schemes.

In a buy-out transaction, an insurance company takes on the pension liability and responsibility for paying pensions in return for the payment of a premium by the pension scheme whereas in a buy-in the insurance company provides scheme trustees with an asset which pays cashflows that match the covered liabilities exactly, again in return for a premium.

Under either scenario, benefits are protected by the strong capital reserve requirements for insurance companies which require the insurance company to hold high quality bonds. Consequently, the pricing of these contracts makes little allowance for risk.

However, the reserving, and consequently the pricing basis, may be more attractive than a full gilts basis if the insurance company takes a small amount of credit for longevity risk. In this situation, a scheme funded on a gilts basis (which may also have a stronger longevity reserving basis) may be able to afford to secure a buy-out of the benefits.

Affordable buy-outs may push more sponsors to target a buy-out funding level for some or all of the liabilities in order to secure pensions, take the scheme off the balance sheet and remove the costs of administration, valuation and funding once and for all.

As the buy-out market grows, more and more schemes will effectively come under the Solvency regime – currently a hot topic but something that over (a long) time may be achieved if the cult of bonds continues.

For a scheme that is funded on a government bond basis, buy-out may also be attractive for the other cost saving it brings, including the Pension Protection Levy and pension administration costs.