

HEALTH WEALTH CAREER

UK PENSIONS RISK TRANSFER MARKET REVIEW

MAY 2018



MAKE TOMORROW, TODAY





2018

EARLY SIGNS OF A BUSY YEAR

Favourable buy-in and buyout pricing, with attractive opportunities available to many schemes

...

Insurance capacity sufficient to meet demand, but resource constraints might bite

...

Very large insurer back-book transactions announced

Several bulk annuities in excess of £1 billion likely to transact

...

Higher demand for longevity hedging as confidence in reinsurer pricing and impact of recent mortality data grows

...

Continuing high interest in member options

2017

THE HIGHLIGHTS



Around 30 bulk annuities of over £100 million transacted (7 by Mercer)

...

£3.4 billion longevity swap completed – the largest since 2014

...

Two <£500 million longevity swaps completed (Mercer led over half of completed longevity swaps in 2017)

...

Business-as-usual transfer value activity very high

>£10 billion of bulk annuities transacted for fourth year in a row

...

No single bulk annuity transaction above £1 billion

...

Average ETV take-up over 30% for Mercer cases, with continuing high take-up for pension-increase exchanges

...

First longevity swap to buy-in conversion involving different provider (Mercer-led)

MEET THE TEAM

Mercer has a team of more than 50 experts in pensions risk transfer, including the following at partner and principal level.



Andrew Ward, Partner
UK Risk Transfer Leader



David Ellis, Partner
Head of UK Bulk Annuities



Suthan Rajagopalan, Partner
Head of UK Longevity Reinsurance



Simon Bramwell, Principal
Head of UK Longevity Analytics



John Martin, Principal
UK Member Options Expert



Jo Carter, Principal





Martyn Phillips, Principal



Leah Evans, Principal



Andrew Pugh, Principal



Chris Hawes, Principal



Maurice Speer, Principal



Patrick Lloyd, Principal



LEAD ADVISOR on **25%** of all UK bulk annuities above £50 million and involved in **40%** of all UK transactions by premium volume

...

LEAD ADVISOR on all **6 BUYOUTS OVER £1 BILLION** (each of which started life as a buy-in)

LEAD ADVISOR on **10 OF THE LAST 12** longevity swaps completed and involved in over **50%** of all swaps completed to date

...

IMPLEMENTED more than **100** member options exercises in last **3** years

FOREWORD



Andrew Ward, Partner
UK Risk Transfer Leader

Welcome to Mercer's 2018 UK Pensions Risk Transfer Market Report.

2017 was another busy, dynamic and exciting year for pensions risk transfer as demand for solutions continued to increase. Over £10 billion of bulk annuities was transacted for the fourth year in a row. We saw the largest longevity hedge transacted since 2014 and the first longevity swaps being converted to buy-ins, proving that swaps can be a stepping stone for further de-risking. Mercer has been at the forefront of much of this activity. As we enter the second quarter of 2018, although the market is very busy, bulk annuity pricing remains attractive for the right book of business, with new entrants to both the bulk annuity and reinsurance markets aiding competition.

At the same time, as transfer values remain high, scheme members have become more interested in their benefit options and trustees more willing to assist them in exploring these options.

This increased activity is a result of both improved funding levels and a sense for many schemes that they have moved on from “firefighting mode”, when technical provisions and deficit recovery were the major focal points to taking real strides to manage the risk for good. We are excited about helping trustees and sponsors on this journey.

In this report, we take a look at these topics in more detail and discuss our views on what we have seen so far in 2018 and how the rest of the year might play out.

BUY-INS AND BUYOUTS



MARKET STATUS:
Q2 2018



MARKET
REVIEW



GETTING THE
BEST DEAL



MERCER
PENSION RISK
EXCHANGE®

MARKET STATUS: Q2 2018

Buy-in and buyout pricing currently as strong as it has ever been, with attractive opportunities available to many schemes

...

Several >£1 billion deals likely to transact in 2018 (no individual deals of this scale in 2017)

...

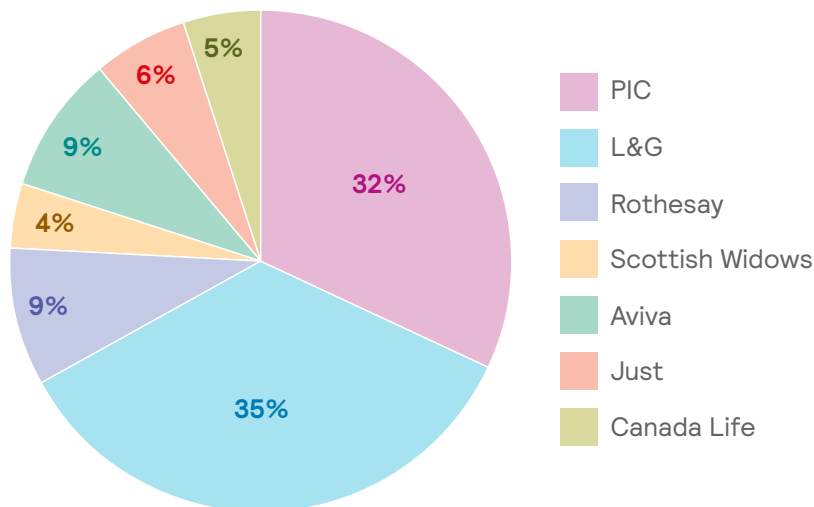
Market capacity for 2018: £25 billion to £30 billion (2017: around £12 billion of buy-ins and buyouts completed)

...

8 insurers active in the market

...

2017 MARKET SHARE



MARKET REVIEW



David Ellis
Head of UK Bulk Annuities

2017 was another strong year for bulk annuity transactions, with over £12 billion of liabilities being transferred to insurers and a range of structuring options implemented by trustees and sponsoring employers over the year. It was the fourth year in a row that activity levels have topped £10 billion, and the early indications in 2018 are that supply and demand levels are unlikely to drop off soon and, indeed, seem set to accelerate.

Bulk annuity pricing has remained sharp relative to scheme funding measures in 2017 and into 2018, against a backdrop of political and economic uncertainty. With new (Phoenix Life) and recent (Scottish Widows) entrants looking to do deals and build credentials, there is interest in completing bulk annuity transactions across all transaction sizes, from multi-billion insurer back books and full-scheme buyouts, to pensioner buy-ins in the tens of millions range. Although long-term market capacity will always be somewhat unknown (at least

relative to demand), obviously over the next few years, insurers' appetites for taking on DB pension scheme assets and liabilities will be strong.

These are exciting and interesting times in the bulk annuity arena. As ever, opportunities will likely come and go, as will capacity in the market, so it is important that trustee boards and sponsoring employers position themselves to spot opportunities and take advantage quickly.



REVIEW OF THE LAST 12 MONTHS

“Pricing remains keen, with the implied discount rate from bulk annuity pricing typically being offered at a reasonable margin above gilt yields.”

PRICING REMAINS KEEN, AS DOES DEMAND

Pricing remains keen, with the implied discount rate from bulk annuity pricing typically being offered at a reasonable margin above gilt yields. This may well mean that funding levels improve with the purchase of a bulk annuity (especially if gilts are used to pay the premium), and we saw this for several schemes over 2017. Consideration also needs to be given to other funding measures and the overall risk position, but any slowdown or price caution caused by 2016 events – such as the introduction of Solvency II and the Brexit referendum – appears to have been short-lived.

The margin over gilts that can be achieved varies with a number of factors, most obviously the duration of the liabilities to be insured, the spreads achievable on matching fixed-income assets (for example, corporate bonds) and insurer appetite for the book of business on the table. In 2017, we saw transactions for pensioners – and in some cases for pensioners and deferreds, too – completed at price levels well above gilts. With competition increasing, we see these levels prevailing through 2018.

Certain insurers are now much more eager to take on deferred liabilities than they have previously been

and are offering better pricing for schemes with a mixture of retired and non-retired members than they do for a stand-alone book of pensioners. By staying close to the market, current appetite and opportunities can be identified and acted upon.

CPI PRICING IMPROVES

Many pension schemes first started adopting the Consumer Price Index (CPI) inflation measure as the basis of (at least some) pension increases several years ago. With CPI being a lower measure of inflation than the previous measure (Retail Prices Index, RPI), this generally improved funding levels for those schemes. However, as index-linked government bonds are linked to RPI, insurers found it challenging to find assets that provided a reasonable hedge against CPI and to pass on the benefit in lower bulk annuity premiums.

Recently, with various asset classes, such as infrastructure debt and social housing, offering a CPI-linked return, several insurers were able to be more aggressive on their inflation assumptions. Significant reductions to RPI are often now priced into CPI-linked benefits, bringing insurers closer to scheme funding measures.



CONVERSION OF LONGEVITY SWAPS TO BUY-INS

2017 saw the first examples of longevity swaps being converted to buy-in contracts. This was done by Phoenix Group, which unwound its 2014 longevity swap for its own scheme and replaced it with a bulk annuity secured with its own group life insurer.

In an arguably more groundbreaking deal, Mercer advised a non-insurance sector client on the conversion of its longevity swap into a buy-in with a different fronting insurer. This particular client had received insufficiently attractive bulk annuity pricing in 2014, executed a longevity swap in 2015, then retested the market in 2016/17 and found materially improved terms on offer. In part, this was due to the longevity risk already insured. Although this type of flexibility is often talked about as part of the implementation process, it is satisfying to see the proof that this can be done in practice and may lead the way to other similar transactions. We expect that many clients will want to fully understand all the options for risk transfer before committing to a specific form of transaction, although longevity swaps can clearly act as a stepping stone to further de-risking as well as being a valid step in their own right.

INCREASED COMPETITION ACROSS THE SPECTRUM

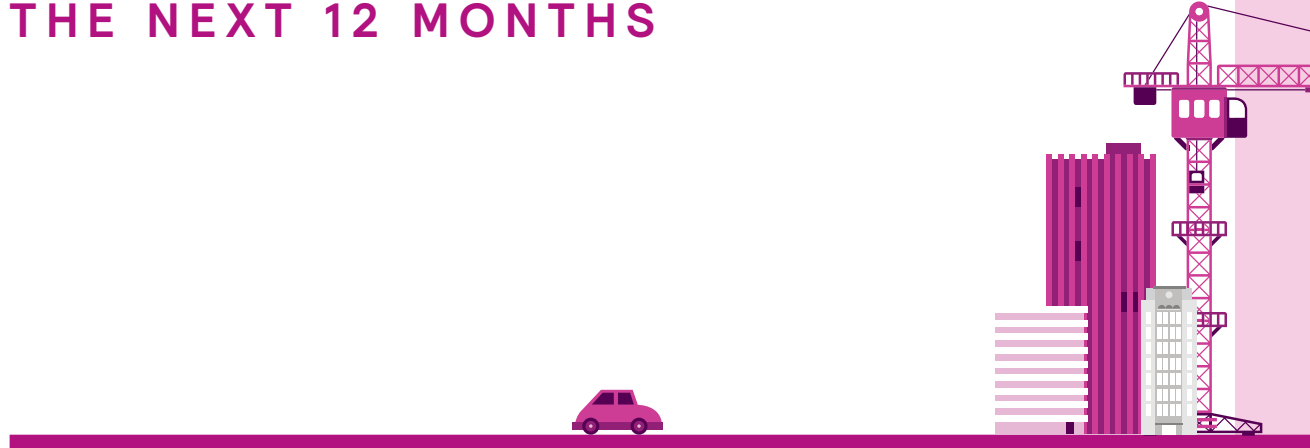
There are now eight insurers offering bulk annuity pricing in the UK pension de-risking market, with 2017 seeing the entrance of Phoenix Life to the market. All insurers are winning a number of deals.

With insurers reporting high activity levels and strong pipelines over the rest of 2018, getting the approach to market right from the outset is more important than ever. Although sufficient capital is available to deploy for the right deals at the right time, insurers are undeniably stretched and often need to prioritise their best opportunities. Any current resource constraints may indeed be people and team size, rather than capital. Keeping abreast of developments and establishing monitoring processes where possible will help achieve the best deal for schemes (see diagram on page 12).

“Longevity swaps can clearly act as a stepping stone to further de-risking as well as being a valid step in their own right.”



MERCER'S VIEW ON THE NEXT 12 MONTHS



Pricing will remain competitive, as insurers seek more innovative matching-asset portfolios

...

Several >£1 billion deals to use capacity and create localised “hotspots” in supply

...

Likely to see over £10 billion of pensions risk transferred for fifth year in a row; could hit £20 billion

...

Potential conversion of more longevity swaps into buy-ins

...

Insurance capacity sufficient to meet demand, but resource constraints might bite

...

More phased buy-ins, with schemes following up on initial transactions

...

Insurer back-book deals competing for capacity with pension schemes

...



GETTING THE BEST DEAL

MAXIMISE INSURER ENGAGEMENT

Demonstrate a clear rationale for the transaction to give confidence on deal certainty

OPTIMISE THE STRUCTURE

Liaise with insurers to understand appetite and views on favourable structure/tranches

ENSURE ROBUST GOVERNANCE

Establish framework to enable clear and agile trustee and company decision-making and realistic price expectations

PROVIDE ACCURATE DATA AND BENEFITS

From the outset, provide clean, recent and materially complete data, including for contingent spouses and, for larger schemes, death-experience data



MERCER PENSION RISK EXCHANGE®

Mercer approaches the insurance market through the award-winning Mercer Pension Risk Exchange® (MPRE), which provides pricing directly from insurers. This is real-life insurer pricing, not indicative pricing.

Insurers’ pricing and terms are based on detailed, transaction-quality, plan-specific disclosures covering not only the plan’s benefits and individual member-level data but also the plan’s wider commercial situation – the same information that is used when plans actually transact.

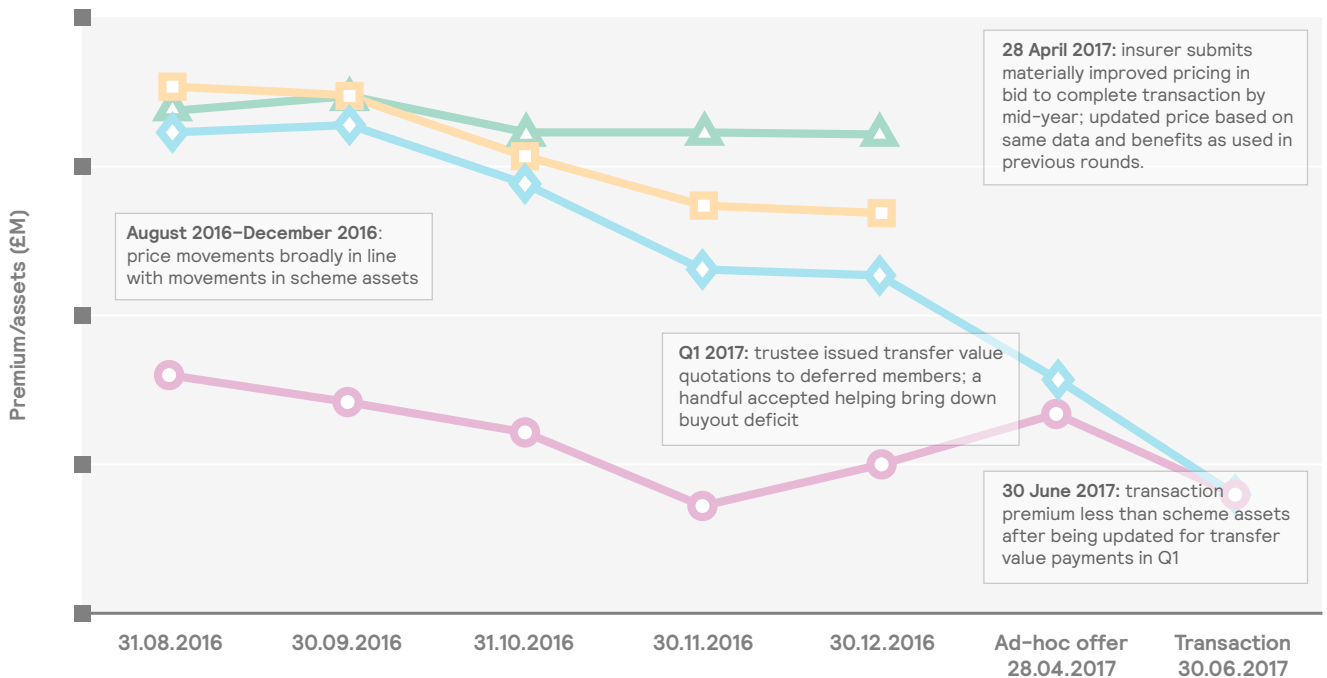
All insurers active in the UK bulk annuity market support the MPRE, and it works for all deal sizes and deal types (buy-ins, buyouts, medically underwritten bulk annuities, and so on). It can now also handle pricing and executing longevity swaps.

An important aspect that proved valuable in 2017 was the ability for insurers to make proposals outside a formal broking process. The case study below shows

an example of a client that enrolled on MPRE in 2016 and received regular pricing from three insurers for around six months. The trustee and sponsoring employer were not inclined to proceed, given the significant capital injection required above the scheme asset level to make a transaction work.

By May 2017, the client had started to consider proceeding with a pensioner-only deal. But one insurer took the opportunity to offer a time-limited reduction on the whole scheme price. As a result of having data and benefit specifications in a transaction-ready state, it was possible to conclude the deal by July 2017. In this example, the final deal was completed without the need for any capital injection from the sponsoring employer after a transfer value exercise provided a late improvement to funding levels.

This would not have been achievable if the scheme was not enrolled on MPRE.



LONGEVITY RISK



MARKET
REVIEW



2017 CASE
STUDIES



MORTALITY
ANALYTICS

MARKET REVIEW



Suthan Rajagopalan, Partner
Head of UK Longevity Reinsurance

“The recent period of reduced improvements is now fully reflected in reinsurer pricing, and we are seeing a lot of pent-up demand for longevity swap pricing. It is important to have an experienced advisor who can provide advice on reinsurance structures, reinsurer selection and contractual terms.”

*Eamon Loughnane, Head of European Reinsurance
Business Development Canada Life Reinsurance*

HEAVIER DEATH RATES IN ENGLAND AND WALES – A GOOD TIME TO TEST MARKET PRICING?

Many readers will be familiar with the annual release of the latest mortality projection models by Continuous Mortality Investigation (CMI).¹ A combination of subtle modelling adjustments and population data showing heavier-than-expected death rates over 2016 meant that the CMI_2016 model projected lower life expectancies than CMI_2015 (which itself predicted lower life expectancies than CMI_2014). There were again more deaths than expected in 2017, and the recently released CMI_2017 model shows even lower life expectancies. This slowing down of mortality improvements would now appear to be a trend rather than a blip, so for many schemes the key question will be, “What does the wider population experience mean for my membership?”

As the starting point for setting mortality assumptions for the majority of pension schemes, CMI_2016 and CMI_2017 have generally resulted in a reduction in funding liabilities. Although welcome relief for some schemes, it is also a sign of the ongoing risk and uncertainty in the area of life-

expectancy projections. Analogous to hedging long-term interest rates after they have risen, some trustees and sponsors are seeing the heavier death rates as an opportune time to test the longevity-hedging market, given the inevitable downward pressure on pricing, and potentially lock-in for some liabilities in 2018 and beyond.

Reinsurers may initially only place limited weight on recent general population mortality data and take a longer-term view on improvements generally, but recent data are reflected to some degree, and with more than 10 global reinsurers pricing, there is strong competition for any scheme seeking to hedge longevity risk.

¹ Research into mortality and morbidity experience by Institute and Faculty of Actuaries. See <https://www.actuaries.org.uk/learn-and-develop/continuous-mortality-investigation>.



Life expectancies from CMI_2017 and earlier versions (male)

AGE	25	35	45	55	65	75	85	95
CMI_2014	65.401	54.192	43.185	32.788	22.898	14.048	7.102	3.062
CMI_2015	65.123	53.908	42.895	32.506	22.609	13.788	6.957	3.009
CMI_2016	63.860	52.954	42.093	31.875	22.294	13.704	6.780	2.785
CMI_2017	63.641	52.720	41.824	31.638	22.094	13.566	6.718	2.760

Life expectancies from CMI_2017 and earlier versions (female)

AGE	25	35	45	55	65	75	85	95
CMI_2014	67.565	56.398	45.492	35.063	25.043	15.713	8.102	3.640
CMI_2015	67.243	56.065	45.163	34.737	24.700	15.406	7.931	3.567
CMI_2016	65.611	54.700	44.054	33.924	24.176	15.160	7.626	3.198
CMI_2017	65.469	54.555	43.901	33.764	24.013	15.033	7.570	3.180

Source: Institute and Faculty of Actuaries, *CMI Working Paper 105*, 2018

CARE NEEDED IN APPLYING GENERAL POPULATION DEATH RATES TO PENSION SCHEME MEMBERSHIP

The specific characteristics of a scheme's membership profile are always a key consideration. The CMI projection models discussed above are based on mortality rates for the whole population. Members of occupational pension schemes do not necessarily exhibit the same mortality characteristics as the wider population. For example, members receiving a pension may be wealthier and in better health than the average person. Although undoubtedly an important consideration in setting life-expectancy assumptions, care should be taken in blindly assuming that the trend being seen in the recent releases of the CMI projection models automatically applies to a pension scheme's membership.

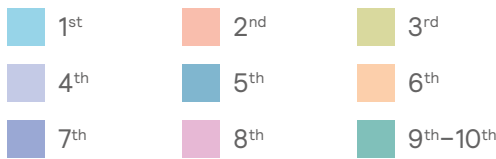
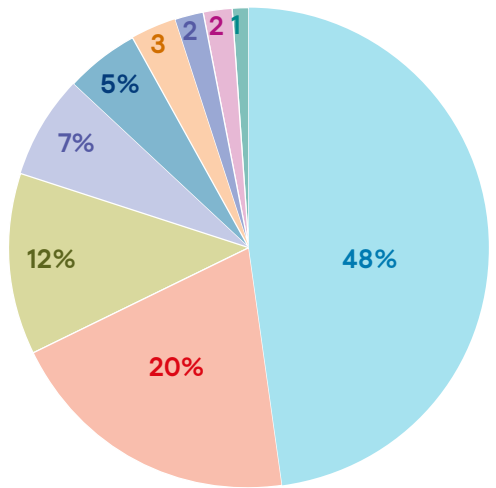
Then there is the question of the different characteristics within a scheme's membership. Concentration risk (the uneven distribution of pensioner longevity risk) is present in both white-collar and blue-collar pension schemes. The top 20% of pensioners typically represents 50% to 70% of the liability. Therefore, the financial impact of the top 20% of pensioners living longer than expected has roughly 2.5 to 3.5 times the financial impact that uniform liability amounts would have had.

As such, the potential longevity outcomes for the top deciles (and the associated drivers of life expectancy improvements relevant to them which are less likely to follow those of the general population) are key factors in assessing the cost vs benefit value-for-money assessment of pricing.

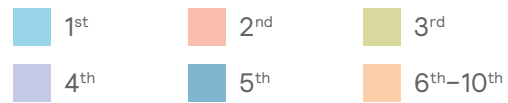
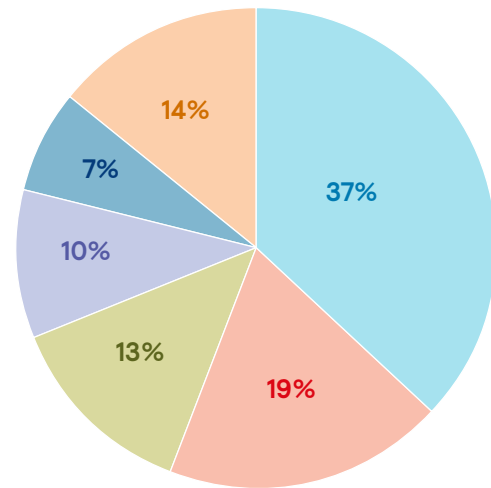


TYPICAL DISTRIBUTION OF LIABILITIES BY DECILE

Based on the White-collar scheme with Average Pension of £17,000 p.a.



Based on the Blue-collar scheme with Average Pension of £10,000 p.a.



PLAUSIBLE STRUCTURAL LONGEVITY HEDGE SUPPLY AND DEMAND IMBALANCE IN THE MEDIUM AND LONG TERM

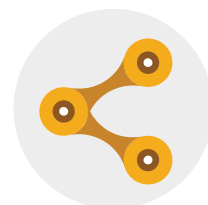
On the supply side, the roughly 10 transacting longevity reinsurers probably have an average annual capacity of around £4 billion each, which means we can probably see several years of £40 billion volumes. Most insurers active in the bulk annuity space fully hedge their longevity risk (due to Solvency II, which came into force on 1 January 2016) with the same reinsurers as pension schemes would transact longevity hedges with. As a result, the reinsurer pricing for hedging longevity risk feeds through into bulk annuity pricing at all times. In our view, this means that stand-alone longevity hedging will often be worth considering when looking at material-risk transfer transactions, as there may not be a case for handing assets to insurers that can be utilised in the scheme.

So as well as demand from insurers, what is the potential demand from pension schemes? Probably half of the £2 trillion (of liabilities of UK DB funds) will be deferred pensioners. Part of that will be taken out of the DB market through pensions freedoms and some will be taken as tax-free cash.

Even so, if current supply continues for, say, 10 years, there would be total capacity of around £400 billion. At these levels, there is still likely to be a structural longevity hedge supply-and-demand imbalance not dissimilar to that seen by the UK index-linked gilt market (whose size is £400 billion). Since the dawn of liability-driven investments in the mid-2000s when long-dated real yields were +1.5%, they now stand at around -1.5%.



OVERVIEW OF LONGEVITY HEDGE STRUCTURES



Option

TRADITIONAL

PASS-THROUGH

STREAMLINED

What is it?

- Insurance contract with a UK insurer acting as direct counterparty
- Reinsurance capacity accessed via a transparent broking process
- Contractual terms (including collateral) negotiated on a case-by-case basis

- Bespoke “captive” or insurer “pass-through” structure acts as intermediary
- Scheme directly exposed to reinsurers
- Traditional frontiers and consultants are now proposing “off the shelf” structures

- Contract with a UK insurer based on pre-agreed contractual terms
- Streamlined broking process involving a pre-agreed panel of reinsurers
- Uncollateralised

Transaction size

>£500 MILLION

>£1 BILLION

£50 MILLION-£1 BILLION

Benefits

- Tried and tested with insurer managing operation and collateral processes
- Access to UK PRA-regulated insurer and FSCS

- Reduction in intermediation costs for larger schemes
- More flexible in the event of future novation

- Tried and tested with insurer managing operation and collateral processes
- Access to UK PRA-regulated insurer and FSCS



NEW CAPTIVE SOLUTION BROUGHT TO MARKET

In 2017, the first longevity hedge transaction to use the Mercer Marsh captive solution was completed. This structure has been established by Mercer and its sister company Marsh to offer trustees a cost-efficient way to manage longevity risk. It operates using what is known as an incorporated cell structure, which broadly means that the “cell” owned by the pension scheme is a ring-fenced entity that sits under an umbrella arrangement operated by the captive manager (in this case Marsh). With the umbrella in place, other schemes now have access to a proven solution that will reduce the cost and increase the flexibility of hedging for larger schemes.

[MMC UK Pension Fund Undertakes £3.4bn Longevity Risk Transfer](#)

AWARD-WINNING STREAMLINED SOLUTION CONTINUES TO SEE FLOW OF BUSINESS

Two further longevity swaps were completed using “SmartDB”, Mercer’s unique streamlined solution, which brings the benefits of robust contractual terms and reinsurer competition to smaller schemes that otherwise would not be able to hedge the risk. This solution is the only proven option in the market for schemes of £400 million or less.

[Mercer SmartDB™: A Smarter Approach to Managing Longevity Risk](#)



2017 CASE STUDIES

Mercer advised on three longevity swaps (covering £4 billion) over the course of 2017, using a variety of the structures outlined above, and spoke to many other clients about the best time to approach the market for pricing. Pent-up demand in this area is evident.

LARGEST LONGEVITY-SWAP TRANSACTION SINCE 2014

The MMC UK Pension Fund completed a £3.4 billion longevity swap in July 2017, with the risk transferred to two reinsurers (Canada Life and Prudential Insurance Company of America) using a captive approach. This was the largest UK longevity swap completed since 2014 and the first placed through the Mercer Marsh longevity-captive solution.

The first longevity swap to utilise a captive solution was completed by BT in 2014, through a trustee-owned captive. The Mercer Marsh longevity-captive solution was developed for trustees who do not wish to take on the governance burden of managing their own captive insurer, but also have a desire to access the market capacity in an efficient way and maximise future flexibility; for example, to convert to a future bulk annuity. With the “off the shelf” captive solutions now available, similar structures are available to many schemes.

TWO MORE LONGEVITY SWAPS COMPLETED BELOW £500 MILLION

Until 2015, longevity swaps were exclusively available to schemes looking to hedge more than £500 million in pensioner liability. The market opened up to smaller schemes in 2014 with the introduction of Mercer’s streamlined longevity-hedging solution, SmartDB. The first streamlined longevity hedge transaction using this structure was completed in 2015, and five other deals have been completed since, including two transactions of around £300 million completed in 2017. Almost £1.5 billion in longevity risk has now been hedged in this manner.

One of the £300 million deals completed this year was for the Skanska Pension Fund, which saw the counterparty Zurich reinsure 75% of the longevity risk with SCOR and retained 25% itself.

“The trustee is pleased to take this opportunity to hedge longevity risk for its pensioners and their dependants. This transaction helps to improve the security of benefits for all members by removing the uncertainty of future costs to the fund arising from existing pensioners living longer than forecast. It also provides the added comfort of an established platform through which the trustee is able to hedge this risk. Mercer has done an excellent job in advising the trustee and sourcing this de-risking opportunity. It has helped to deliver an attractive outcome for the fund.”

Harvey Francis,
Chairman of the Trustee, Skanska Pension Fund



MERCER'S VIEW ON THE NEXT 12 MONTHS



Higher demand for longevity hedging as confidence grows around reinsurer pricing

...

Improved pricing from reinsurers who have struggled to meet targets over last 12 months

...

Insurance back-book longevity hedges continue to absorb capacity

...

Additional tranches added to existing longevity swaps

...

Schemes refining measurement and analysis of longevity risk

...

Schemes testing market to better understand nature and price of liabilities

...

Mercer remains the only advisor with a record of completing all types of transactions, with access to Marsh Mercer captive solution and SmartDB streamlined solution

...



MORTALITY ANALYTICS



Simon Bramwell, Principal
Head of UK Longevity Analytics

Insuring longevity risk — whether it's directly through a swap, bulk annuity or part of a more general liability transfer — crystallises the longevity that a scheme has been funding for. Nobody can predict future longevity without a crystal ball or pure luck — that's why insurance is attractive — but a view of the fair price should be more predictable. Insurers and reinsurers have been improving techniques to establish a fair price for longevity, and by making an equivalent assessment, trustees are able to analyse the price they are offered for transferring that risk.

Alignment with the latest mortality-modelling techniques minimises the chances of paying too much for insurance, or indeed not realising the attractiveness of a deal. For schemes with a longer-term plan to insure, even a small change in longevity assessment can give a different perspective on the viability of that plan and the future contributions required.

Thanks to what we know about the UK population experience of the last couple of years, longevity expectations are going down in general. However, the impact is not uniform across schemes and membership profiles — only an up-to-date assessment can tell you what this means for a particular scheme.

GEOGRAPHIC EFFECTS

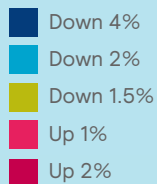
For over a decade, mortality analysts have acknowledged that the wide differences in mortality across the UK are not an appropriate basis for pension scheme funding. Although it's highly probable that an average Dorset resident will live longer than an average Glaswegian (by around 10 years according to the ONS), the differences reduce significantly if you have the knowledge that both are DB pensioners with similar income. As a result, postcode-based assessments were born — a way of predicting life expectancies based on much smaller geographic areas that reflect individuals' wealth and lifestyle, combined with other characteristics in scheme data such as retirement health status and pension income. For many years, postcode groupings have been considered the only geographic feature worth consideration.

As DB pension schemes mature and analytical techniques improve, we're learning more and more to help us assess life expectancies. In setting up Mercer's biennial pooled mortality model in 2016, we highlighted effects seen in Scottish mortality that cannot entirely be captured by postcode-groupings. Those otherwise-equivalent residents of Dorset and Glasgow do indeed show life-expectancy differences. We're looking at around one year rather than 10, but even that can mean a 5% difference in scheme liabilities in current markets.



We have since found that insurers are starting to see similar geographic effects in their own data and have ways of reflecting them in their pricing. With more data still in our 2018 model – more than 6 million “life years” across 150 medium-to-large pension schemes – we can now drill down further. Evidence still favours Dorset over Glasgow, but also Sheffield over Manchester, Bristol over Cardiff. In all, we have determined five broad, evidence-backed geographical tiers to refine our postcode-based assessment.

Typical Liability Impacts:



IS YOUR BEST ESTIMATE THE BEST ESTIMATE?

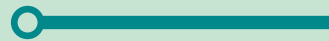
You need to answer a number of questions when considering whether and how to assess the longevity profile of your scheme membership:

- Do you know what your current membership profile can tell you about likely longevity, and when was this last assessed?
- Are your data reliable enough for an insurer to gain confidence in its own assessment, to give the insurer confidence to quote and stop it adding a safety margin onto your price?
- Are the techniques used in any previous studies the most appropriate for your size of scheme?
- If you're following views taken by other schemes or parties, how do you know they're correct, and right for you?
- Do you understand where any prudence margins lie in your funding assumptions, and whether they're an acceptable reflection of your longevity risk?

Pension scheme assets generally have an accepted theoretical price reflecting views of possible future events, albeit affected by supply and demand and liquidity effects. Evaluating a scheme's longevity characteristics is not much different – it just takes a little bit more digging to get there.



MEMBER OPTIONS



MARKET
REVIEW



CASE STUDY:
OLD MUTUAL GROUP

MARKET REVIEW



John Martin, Principal
UK Member Options Expert

It has been almost four years since the UK government announced that defined contribution pension scheme members would, in future, have flexible access to their pensions savings. Although many commentators predicted a flood of transfer-value requests in DB schemes as members sought to cash out their retirement benefits, this did not materialise in the months after the announcement.

However, with interest rates falling to record lows in 2016, transfer values soared and have remained high ever since. The level of transfer value interest and activity has certainly now picked up, and with regular press coverage about the flexible options available and many at-retirement flexibility processes firmly established, the momentum behind flexible retirement options is unlikely to ease. In some schemes, we even saw as much as 25% of deferred liabilities transferred out in 2017 alone – on occasion without any incentive to do so or financial advice being offered by the trustee or sponsor.

As members become more interested in their options, trustees are becoming more comfortable providing them with the information they need to review their options and financial advice to make a decision. Some law firms have even raised the question of trustees potentially failing in their duty to act in members' best interests if they do not take such an approach. This may seem a stretch to some, but the risks of

doing nothing were highlighted in late 2017 as the latest FCA review of transfer advice was published and horror stories of advisors aggressively targeting members of the Tata Steel pension scheme came to light. Trustees and sponsors clearly should, at the very least, have undergone a process to reach a view on the options members were given around the receipt of their benefits. This view need not be static – it may well be appropriate to regularly review member engagement and tailor the available options and processes accordingly. Many employers in particular have seen the potential benefit in widespread retirement education – it can be a powerful employee benefit that enables employees to make the most of their retirement impact while potentially helping the employer manage an ageing workforce and reduce pension scheme liabilities.

The high general level of interest is leading to more successful outcomes from bulk member options exercises, helping schemes to reduce risk, cost and/or achieve the ultimate de-risking goal of a buyout. We saw a significant increase in the take-up of enhanced transfer values (ETVs) in 2017, with average take-up exceeding 30% (having stuck below 20% for the previous few years). Pension increase exchanges (PIEs) remain popular, which is perhaps no surprise given the recent history of pension increases, and very recent evidence suggests this interest will remain despite rising



short-term inflation. The industry-wide “Code of Good Practice for Incentive Exercises” continues to provide a framework for trustees and employers to operate within.

However financial markets change over the next few uncertain years, member options are a key part of the de-risking toolkit for companies and trustees.

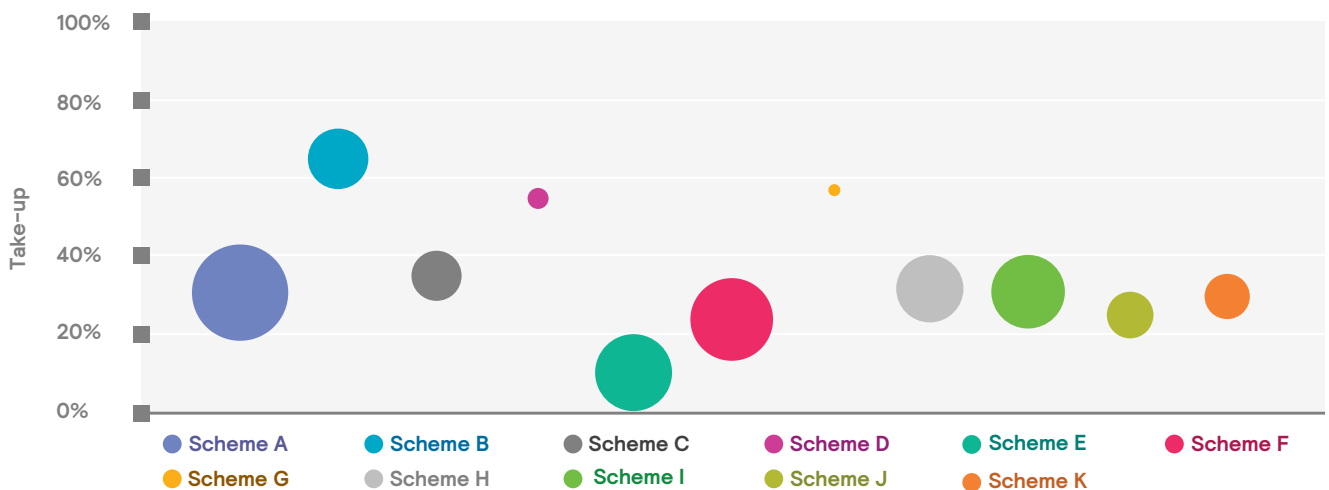
As demand for transfers and bulk exercises continues, pension scheme administrators may become stretched by the various demands placed on their resources. Trustees and sponsors should consider issues such as data-cleansing and automated calculations to ensure that they are able to take advantage of the member options opportunity.

HIGHLIGHTS FROM 2017

HIGH TAKE-UP OF ENHANCED TRANSFER VALUES

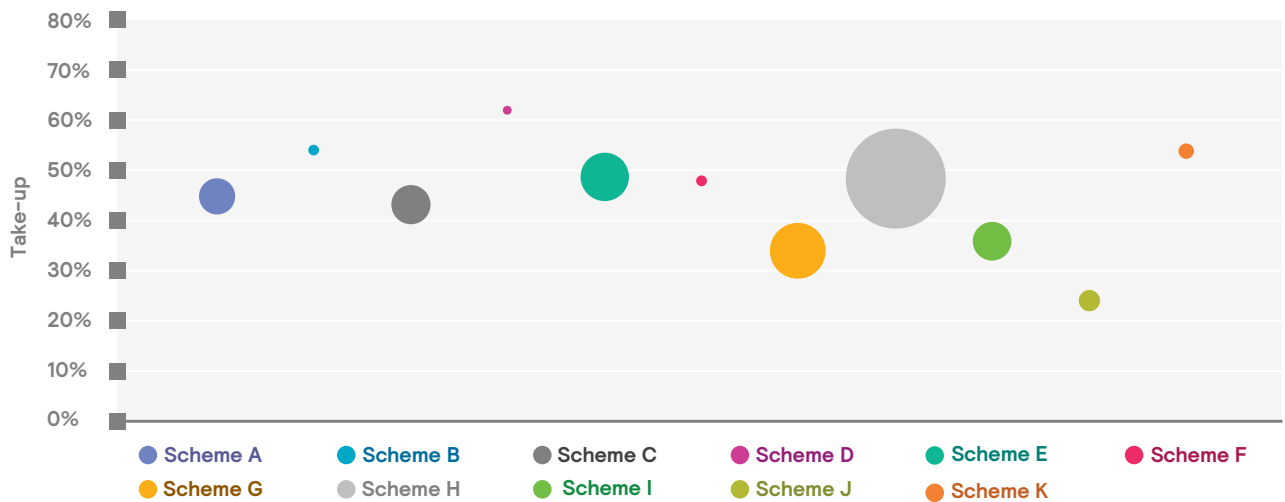
2017 saw the highest average take-up of ETVs across the exercises in which Mercer was involved. Average take-up was around 35% (in line with the typically highest take-up seen in any given year prior to 2017), and the highest take-up was in excess of 65%. Our view is that this was driven by a combination of the higher general transfer values and well-targeted offers.

Take-up from a Sample of Mercer-led ETV Exercises in 2017
(Size of Blob Represents Scheme Size)



CONTINUED STRONG PIE TAKE-UP

PIE has continued to be a popular option, with the majority of exercises implemented over the last 12–18 months achieving over 40% take-up. More small schemes have also started implementing the option. A sample of exercises are shown in the chart below.



A FOCUS ON RETIREMENT EDUCATION

Mercer has assisted several very large clients this year in overhauling the way they talk to employees about pensions. Our assistance included designing intranet sites, running on-site workshops, preparing videos and arranging face-to-face financial advice sessions. A recent innovation includes issuing personalised videos when communicating with members. An example can be found at www.uk.mercer.com. Such activity has benefits for both HR and Finance: a well-valued employee benefit can lead to reduced pension cost and risk as more employees become aware of their options and transfer out of the pension scheme at retirement.

MEMBER OPTIONS USED TO REDUCE BULK ANNUITY COSTS

As Mercer has reported regularly over recent years, offering member options in advance of a buy-in or buyout can materially reduce the price paid for insuring pension scheme benefits. This remains true today, as set out in the case study on page 30. Whether the options offered are to remove small benefits from the scheme, transfer members to an alternative arrangement or reshape the pensions in payment, each one can help narrow the gap to full liability settlement. We would recommend that any scheme looking to secure a bulk annuity policy within a one- to two-year time frame reviews the feasibility of member options as part of the early project planning.



INCREASE IN FINANCIAL ADVISOR CAPACITY

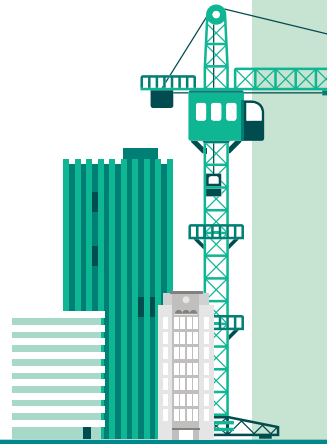
The increase in demand for bulk exercises has led to an increased burden on the large financial advisor firms that specialise in supporting employers and members in such exercises. Although capacity remains tight and careful planning is needed, particularly for exercises with 1,000+ members, we saw a number of new providers enter the market in 2017, both in terms of firms providing advice and in third-party firms supporting them with the transfer value analysis reports.

One exciting development we could see in 2018 is the breakthrough for true digital advice to members, which would reduce cost, improve processes and lead to greater consistency in advice given. We are aware of a number of solutions being developed in this space and think that 2018 could be the year they challenge traditional advice models.

MEMBER OPTION	DESCRIPTION	IMPACT
Trivial Commutation and Small Pots	Offers members with small pensions the option to exchange their pension income for a one-off cash payment	Reduces the long-term administration costs (often based on scheme membership number) and removes risk
At-retirement Choice / Retirement Flexibility (ReFlex)	Offers DB members a transfer value (TV) option to transfer their benefits at retirement – opening DC world flexibilities	Reduces scheme size and removes risk
Enhanced Transfer Value (ETV)	Offers an enhancement or uplift to the standard TV to deferred members transferring before or at retirement	Reduces scheme size and removes risk
Pension Increase Exchange (PIE)	Offer pensioners option of “reshaping” their pension by giving up non-statutory pension increases for a higher initial non-increasing pension	Removes risk and makes the scheme more attractive to insurers



MERCER'S VIEW ON THE NEXT 12 MONTHS



**Continuing high interest in
member options**

...

Breakthrough in digital advice

...

**Increased scrutiny from
the FCA following recent
coverage of rogue practices**

...

**Pressure on scheme
administrators**

...



CASE STUDY: OLD MUTUAL GROUP

01

OBJECTIVES

- Decided in summer 2016 to buy out two UK legacy pension schemes due to corporate restructure
- Set objective to buy out in 2017; preceded by member options exercises to reduce required capital injection
- Decided to run an ETV exercise in each scheme, and a PIE exercise in one scheme

02

PREPARATION AND INITIAL QUOTES

- Enrolled on Mercer Pension Risk Exchange in August 2016 to source insurer pricing
- Began planning to run member options exercises in early 2017
- Received initial insurer quotes in September 2016
- Calculated £40 million range in total potential buyout price
- Determined that lowest price was less than desktop estimates
- Decided to accelerate buyout process

04

MEMBER OPTIONS AND NEGOTIATION

- Confirmed credibility of lowest price through initial due diligence, and client set budget cap of £50 million for capital injection to transact
- Conducted material negotiations with prospective insurer and trustees in Q1 2017
- Sent ETV and PIE offers to members in January 2017, running to May
- Entered into exclusivity with chosen insurer in April 2017; included detailed price lock for two months to allow client to better hedge movements in price

03

TRANSACTION

- Judged member options to be very successful, with ETV take-ups of 35% and 55%, and also 55% of members accepting PIE offer
- Reduced capital injection by £15 million through member options
- Secured two “all risks” buy-in policies in June 2017 with a £30 million capital injection, combined with other negotiated price movements
- Expected buyout and wind-up completed late 2017



APPENDIX

LIST OF BULK ANNUITY AND LONGEVITY SWAP TRANSACTIONS

A. UK Bulk Annuity Transactions by Insurer (£ Million)*

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Market share 2008-2014/ 2015-2017
Aegon	124	155	26	0	0	0	0	0	0	0	1%/0%
Aviva	881	176	873	1,076	188	379	874	984	620	2,045	9%/10%
Canada Life	0	1	1	7	1	0	0	32	144	544	0%/2%
Just Retirement & Partnership	0	0	0	0	4	91	688	1,235	943	998	2%/9%
Legal & General (L&G)	2,101	1,380	999	1,517	1,056	1,317	5,971	1,977	3,339*	3,405	30%/25%
Phoenix Life									1,200	0	0%/3%
Pension Insurance Corporation (PIC)	1,665	1,095	703	651	1,469	3,745	2,567	3,811	2,530	3,704	25%/29%
Prudential	1,124	0	900	338	412	245	1,710	1,508	0	0	10%/4%
Rothsay Life	2,081	904	1,758	1,605	1,372	1,730	1,394	2,333	120*	960	23%/10%
Scottish Widows	0	0	0	0	0	0	0	400	1,474	645	0%/7%
Total	7,976	3,711	5,260	5,194	4,501	7,507	13,203	12,280	10,370	12,301	100%

* The above table shows the total premium paid to insurers by occupational pension schemes; it does not include insurer-to-insurer back-book premiums. During 2016, some £6 billion of Aegon's back-book annuity business was transferred to Rothsay Life and £3 billion to L&G. A further £2.5 billion of back-book annuities was acquired by Phoenix Group as a result of its purchase of Abbey Life at the end of 2016.

Due to consolidation within the bulk annuity market, the bulk annuity transactions written by AIG, MetLife Assurance Limited and Paternoster are now shown within Rothsay Life's figures. Transactions written by Lucida are similarly shown within L&G's figures. The figures for transactions written by Partnership and Just Retirement have been combined to reflect the merger of those two insurers.

B. Largest Buyouts (Excluding Buy-ins) 2008–2017

Rank	Scheme name	Premium (£ million)	Type	Insurer	Date	Lead broker
1	TRW	2,500	Pensioners	L&G	Nov 2014	Mercer
2	Philips	2,400	All	PIC	Nov 2015	Mercer
3	EMI	1,500	All	PIC	Jul 2013	Mercer
4	Vickers (Rolls-Royce)	1,100	All	L&G	Nov 2016	Mercer
5	Thorn	1,100	All	PIC	Dec 2008	Mercer
6	T&N	1,100	All	L&G	Oct 2011	Mercer
7	Uniq	830	All	Rothesay Life	Dec 2011	LCP
8	Rank	700	All	Rothesay Life	Feb 2008	Mercer
9	MNOPF Old Section	680	All	Rothesay Life	Dec 2012	Towers Watson
10	Lehman Brothers	675	All	Rothesay Life	Apr 2015	PwC
11	NCR	670	All	PIC	Nov 2013	Towers Watson
12	Ferranti	600	All	Prudential	Jun 1999	Mercer
13	Undisclosed	534	All	PIC	Apr 2015	LCP
14	InterContinental Hotels Group	440	All	Rothesay Life	Aug 2013	Mercer
15	Powell Duffryn	400	All	Paternoster	Mar 2008	Aon

C. UK Bulk Annuity Transactions (Buy-ins and Buyouts) over £100 Million 2008–2017

Name	Size (£ million)	Type	Insurer	Date	Mercer lead broker
WPP	140	All	PIC	Dec 2017	Yes
Undisclosed	100	All	L&G	Dec 2017	
MNOFP (4/4)	490	Pensioners	L&G	Dec 2017	
Confidential	121	All	TBC	Dec 2017	Yes
Confidential	100	Pensioners	L&G	Dec 2017	
Undisclosed	250	All	L&G	Nov 2017	
Dock Workers	750	Pensioners	PIC	Nov 2017	
Confidential	175	Pensioners	Aviva	Nov 2017	
Smiths Group (Smiths Industries) (6/7)	207	Pensioners	Canada Life	Oct 2017	
Undisclosed	100	Pensioners	PIC	Sep 2017	
Pearson	600	Pensioners	L&G	Sep 2017	
Pearson	600	Pensioners	Aviva	Sep 2017	
Plumbing & Mechanical Services (UK) Industry Pension Scheme	570	Pensioners	L&G	H2 2017	
Undisclosed	200	Pensioners	PIC	Jul 2017	
Undisclosed	450	Deferreds	Rothesay Life	Jul 2017	
Confidential	178	All	Aviva	Jul 2017	Yes
Undisclosed	267	Pensioners	L&G	Jun 2017	
Confidential	685	Pensioners	PIC	Jun 2017	Yes
Undisclosed	570	Pensioners	L&G	Jun 2017	
Wolseley	590	Pensioners	PIC	Jun 2017	
Confidential	127	All	L&G	Jun 2017	Yes
Undisclosed	115	Pensioners	L&G	Apr 2017	Yes
Tullet Prebon	270	All	Rothesay Life	Apr 2017	
Confidential	102	All	Aviva	Apr 2017	
Confidential	123	Pensioners	Just	Apr 2017	
Monsanto	100	Pensioners	Scottish Widows	Mar 2017	
Undisclosed	260	Pensioners	Scottish Widows	Mar 2017	
3i	200	Pensioners	PIC	Mar 2017	
Cancer Research	250	Pensioners	Canada Life	Feb 2017	
Smiths Group (Smiths Industries) (6/7)	140	Pensioners	PIC	Jan 2017	
Phoenix Life	1,200	Pensioners	Phoenix Life	Dec 2016	
Vickers (Rolls-Royce)	1,100	All	L&G	Nov 2016	Yes

(cont'd)

Name	Size (£ million)	Type	Insurer	Date	Mercer lead broker
GKN	190	Pensioners	PIC	Nov 2016	Yes
Undisclosed	500	All	L&G	Nov 2016	
Smiths Group (TI Group) (5)	250	Pensioners	PIC	Oct 2016	
ICI Specialty Chemicals	140	Pensioners	PIC	Oct 2016	
ICI (11)	590	Pensioners	Scottish Widow	Sep 2016	
ICI (10)	390	Pensioners	L&G	Sep 2016	
Aggregate Industries (3)	135	Pensioners	JRP	Sep 2016	
Undisclosed	150	Pensioners	PIC	Sep 2016	
Pilkington	230	Pensioners	PIC	Aug 2016	
Land Securities	110	Pensioners	JRP	Jul 2016	
Undisclosed	160	Pensioners	L&G	Jun 2016	
ICI (9)	750	Pensioners	L&G	Jun 2016	
ICI (8)	630	Pensioners	Scottish Widows	Jun 2016	
Undisclosed	200	Pensioners	Scottish Widows	Apr 2016	
ICI (7)	330	Pensioners	L&G	Mar 2016	
Aon	890	Pensioners	PIC	Mar 2016	
VA Tech (Siemens) (2/2)	208	All	PIC	Dec 2015	Yes
TKW Group	300	All	Aviva	Dec 2015	Yes
Kingfisher	230	Pensioners (med)	L&G	Dec 2015	
Philips Pension Fund (4)	2,400	All	PIC	Nov 2015	Yes
Confidential – Project Angus	104	All	L&G	Nov 2015	Yes
Wiggins Teape	400	Pensioners	Scottish Widows	Nov 2015	
Confidential – Project Verona 2015 (3/3)	118	Pensioners	Just Retirement	Oct 2015	Yes
Confidential – Project Brussels	188	PPF rescue	PIC	Aug 2015	Yes
ICI Speciality Chemicals	219	Pensioners	Prudential	Aug 2015	
Civil Aviation Authority	1,600	Pensioners	Rothesay Life	Jul 2015	
ICI (6)	500	Pensioners	Prudential	Jun 2015	
ICI (5)	480	Pensioners	L&G	Jun 2015	
Alcatel-Lucent	300	Pensioners	Aviva	Jun 2015	
Lehman Brothers	675	All	Rothesay Life	Apr 2015	
Northern Bank	670	Pensioners	Prudential	Apr 2015	
Undisclosed	534	All	PIC	Apr 2015	
ICI (4)	500	Pensioners	L&G	Mar 2015	

(cont'd)

Name	Size (£ million)	Type	Insurer	Date	Mercer lead broker
Taylor Wimpey plc	206	Pensioners (med)	Partnership	Dec 2014	
Confidential – Project Rome	120	All	Rothesay Life	Dec 2014	Yes
Confidential – Project Golf	370	PPF rescue	Rothesay Life	Dec 2014	Yes
Aon Minet (3/3)	210	Pensioners	PIC	Nov 2014	
TRW	2,500	Pensioners	L&G	Nov 2014	Yes
ICI (3)	300	Pensioners	Prudential	Nov 2014	
Undisclosed	200	Pensioners	PIC	Nov 2014	
Uniac	129	Pensioners	L&G	Oct 2014	
Makro	185	All	Rothesay Life	Sep 2014	
Philips Pension Fund (3/4)	310	Pensioners	Prudential	Sep 2014	
Confidential – Project Shale (2/2)	124	Pensioners	Rothesay Life	Aug 2014	Yes
Undisclosed	170	Pensioners	PIC	Jul 2014	
Interserve	300	Pensioners	Aviva	Jul 2014	
Total	1,600	Pensioners	PIC	Jun 2014	
Philips Pension Fund (2/4)	304	Pensioners	Prudential	Jun 2014	
Western United Group Pension (3/3)	280	Deferreds	Rothesay Life	May 2014	
Church of England	100	Pensioners	Prudential	Mar 2014	
ICI (2)	600	Pensioners	Prudential	Mar 2014	
ICI (1)	3,000	Pensioners	L&G	Mar 2014	
Western United Group Pension (3)	111	Pensioners	Rothesay Life	Mar 2014	
GKN (1/2)	123	Pensioners	Rothesay Life	Jan 2014	
NCR	670	All	PIC	Nov 2014	
Undisclosed	220	All	PIC	Nov 2014	
TI Group (4)	170	Pensioners	PIC	Sep 2013	
JLT (1/2)	120	Pensioners	Prudential	Sep 2013	
InterContinental Hotels Group	440	All	Rothesay Life	Aug 2013	Yes
Philips Pension Fund (1/4)	484	Pensioners	Rothesay Life	Aug 2013	
Equitable Life	336	Deferreds	L&G	Jul 2013	Yes
EMI	1,500	All	PIC	Jul 2013	Yes
Cobham	280	Pensioners	Rothesay Life	Jul 2013	
Confidential – Project Victoria (1/2)	102	Pensioners	PIC	Apr 2013	Yes
First Quench	176	PPF rescue	PIC	Apr 2013	
Confidential – Project Green	255	All	L&G	Mar 2013	Yes
Smith & Nephew (main + exec schemes)	190	Pensioners	Rothesay Life	Jan 2013	
Undisclosed	100	Unknown	PIC	Dec 2012	

(cont'd)

Name	Size (£ million)	Type	Insurer	Date	Mercer lead broker
Tate & Lyle (1/2)	347	Pensioners	L&G	Dec 2012	
MNOPF Old Section (3/3)	680	All	Rothesay Life	Dec 2012	
Undisclosed	122	Unknown	PIC	Nov 2012	
Western United Group Pension (1/3)	115	Pensioners	Rothesay Life	Nov 2012	
General Motors	230	All	Rothesay Life	Oct 2012	
Undisclosed	140	Unknown	Prudential	Aug 2012	
Undisclosed	250	Pensioners	L&G	Jul 2012	
Aon Minet (2/3)	100	Pensioners	PIC	Jul 2012	
Cookson (1/2)	320	Pensioners	PIC	Jul 2012	
Gartmore	162	All	PIC	May 2012	
West Midlands Integrated Transport Authority	272	Pensioners	Prudential	Apr 2012	Yes
SR Technics	198	PPF rescue	PIC	Apr 2012	Yes
DENSO Marstons	200	All	PIC	Mar 2012	
Undisclosed	103	Pensioners	PIC	Mar 2012	
Undisclosed	227	Pensioners	Aviva	Dec 2011	
Undisclosed	111	All	Aviva	Dec 2011	
Uniq	830	PPF rescue	Rothesay Life	Dec 2011	
Smiths	150	Unknown	Rothesay Life	Dec 2011	
Confidential – Project Magenta	149	All	MetLife	Nov 2011	Yes
Meat & Livestock Commission	150	Pensioners	Aviva	Oct 2011	
T&N	1,100	PPF rescue	L&G	Oct 2011	Yes
TI Group (3)	150	Pensioners	Rothesay Life	Sep 2011	
Law Society (2/2)	236	Deferreds	MetLife	Jun 2011	Yes
Undisclosed	122	Unknown	L&G	May 2011	
London Stock Exchange	158	Pensioners	PIC	May 2011	
Home Retail Group	278	Pensioners	Prudential	May 2011	
Industrial Training Board	152	Pensioners	PIC	Apr 2011	
Confidential – Project PenCap	210	All	CEL	Jan 2011	
Undisclosed – Banking sector	185	Pensioners	Aviva	Dec 2010	
GlaxoSmithKline	900	Pensioners	Prudential	Nov 2010	
TBC	220	Pensioners	L&G	Sep 2010	
Next	124	Pensioners	Aviva	Aug 2010	
Alliance Boots	320	All	PIC	Aug 2010	
MNOPF Old Section (2/3)	100	Pensioners	Lucida	May 2010	
Undisclosed – Engineering sector	104	Pensioners	Aviva	Mar 2010	

(cont'd)

Name	Size (£ million)	Type	Insurer	Date	Mercer lead broker
Aggregate Industries (1)	210	Pensioners	PIC	Feb 2010	
Confidential – Project Tahoe (1/3)	102	Pensioners	MetLife	Jan 2010	Yes
Cadbury	500	Pensioners	PIC	Dec 2009	
CDC	370	All	Rothsay Life	Nov 2009	Yes
DENSO Midlands	136	All	PIC	Sep 2009	
MNOPF Old Section (1/3)	500	Pensioners	Lucida	Sep 2009	
Dairy Crest – 2nd transaction	150	Pensioners	L&G	Jun 2009	
Aon Minet (1/3)	150	Pensioners	MetLife	Jun 2009	
Confidential (retail sector)	220	Pensioners	L&G	Mar 2009	
Leyland DAF	230	All	PIC	Jan 2009	
Thorn	1,100	All	PIC	Dec 2008	Yes
Dairy Crest – 1st transaction	150	Pensioners	L&G	Dec 2008	
Cable & Wireless	1,050	Pensioners	Prudential	Sep 2008	
The Pensions Trust	225	Pensioners	Paternoster	Sep 2008	
TI Group (2)	250	Pensioners	Paternoster	Sep 2008	
West Ferry Printers	130	Pensioners	Aviva	Sep 2008	
Ofcom	150	Pensioners	L&G	Jul 2008	
Delta	451	Pensioners	PIC	Jun 2008	
Weir Group – 2nd transaction	110	Deferreds	L&G	Apr 2008	Yes
BBA	270	Pensioners	L&G	Apr 2008	I
Industry Wide Scheme	160	Pensioners	L&G	Apr 2008	
Friends Provident	350	Pensioners	Aviva	Apr 2008	
TI Group (1)	250	Pensioners	L&G	Mar 2008	
Powell Duffryn	400	All	Paternoster	Mar 2008	
M-Real Corporation (UK Paper)	180	All	L&G	Mar 2008	Yes
Morgan Crucible	160	Pensioners	Lucida	Mar 2008	
Rank	700	All	Rothsay Life	Feb 2008	Yes

D. UK Scheme Longevity Swap Transactions 2008–2017

Name	Size (£ million)	Date	Reinsurer/counterparty	Mercer lead broker
MMC UK	3,400	Sep 2017	Canada Life and PICA (via captive)	Yes
British Airways	1,600	Sep 2017	Canada Life and Partner Re (via captive)	
Skanska	300	Jul 2017	Smart DB (Mercer)/Zurich Assurance/Scor	Yes
SSE	800	Jun 2017	Legal & General	
Undisclosed	900	Dec 2016	Legal & General	Yes
Undisclosed	300	Dec 2016	Smart DB (Mercer)/Zurich Assurance/Swiss Re	Yes
Undisclosed	50	Oct 2016	Smart DB (Mercer)/Zurich Assurance/Pacific Life Re Yes	Yes
Pirelli (2 schemes)	600	Aug 2016	Smart DB (Mercer)/Zurich Assurance/Pacific Life Re Yes	Yes
Manweb (Scottish Power)	1,100	Jul 2016	Abbey Life	Yes
Undisclosed plan	750	Dec 2015	Undisclosed	Yes
Undisclosed plan	90	Dec 2015	SmartDB (Mercer)/Zurich Assurance	Yes
RAC	600	Nov 2015	Scor	Involved
Scottish & Newcastle	2,400	Sep 2015	Friends Life (Aviva)/Swiss Re	Involved
AXA	2,800	Jul 2015	Reinsurance Group of America	
ScottishPower	2,000	Feb 2015	Deutsche Bank/Abbey Life	Yes
MNOPF	1,500	Jan 2015	Pacific Life Re	
Phoenix Group	900	Aug 2014	Reinsurance Group of America	Involved
BT	16,000	Jul 2014	Prudential (USA)	
Aviva	5,000	Mar 2014	Munich Re/Scor/Swiss Re	
Carillion	1,200	Dec 2013	Deutsche Bank	Yes
BAE (2/2)	1,700	Dec 2013	L&G	
AstraZeneca	2,500	Dec 2013	Deutsche Bank/Abbey Life	
British Airways (3/3)	280	Dec 2013	Goldman Sachs/Rothesay Life	
Bentley	500	May 2013	Deutsche Bank/Abbey Life	Involved
BAE (1/2)	3,200	Feb 2013	L&G	
LV=	800	Dec 2012	Swiss Re	
Akzo Nobel	1,400	May 2012	Swiss Re	
British Airways (2/3)	1,300	Dec 2011	Goldman Sachs/Rothesay Life/Pacific Life Re	
Pilkington	1,000	Dec 2011	L&G/Hanover Re	
Rolls-Royce	3,000	Nov 2011	Deutsche Bank/Scor	Involved

(cont'd)

Name	Size (£ million)	Date	Reinsurer/counterparty	Mercer lead broker
ITV	1,700	Aug 2011	Credit Suisse/Pacific Life Re	Involved
Pall	70	Jan 2011	JP Morgan	Yes
British Airways (1/3)	1,300	Jun 2010	Goldman Sachs/Rothesay Life	
BMW	3,000	Feb 2010	Deutsche Bank/Abbey Life	
County of Berkshire	750	Dec 2009	Swiss Re	
CDC	400	Nov 2009	Goldman Sachs/Rothesay Life	Yes
RSA	1,900	Jul 2009	Goldman Sachs/Rothesay Life/Pacific Life Re	
Babcock	1,200	Feb 2009	Credit Suisse	Involved

Source: www.artemis.bm/library/longevity_swaps_risk_transfers.html and Mercer analysis

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