HEALTH WEALTH CAREER

MERCER GLOBAL PENSION BUYOUT INDEX

Q1 2019

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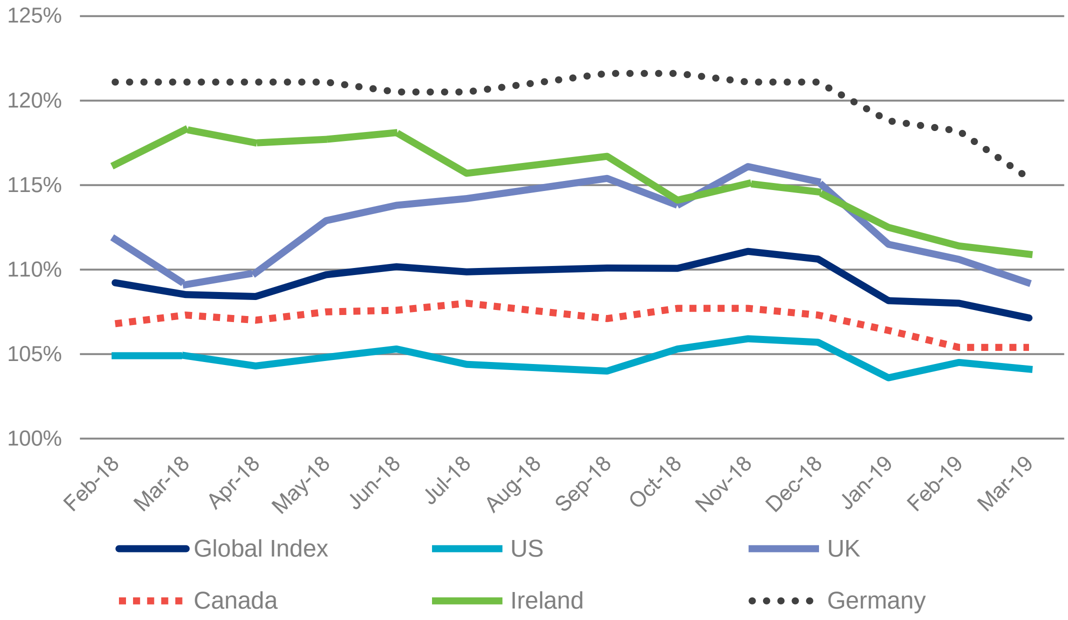
MERCER

EXECUTIVE SUMMARY

Mercer Global Pension Buyout Index monitors the general trend in the pricing of bulk pension annuity transactions in the US, UK, Canada, Ireland and Germany.

Pension risk transfer transactions increasingly involve an international element – for example, the sponsoring employer might be seeking to externalise pension risk in multiple countries. Pricing is subject to movements in global financial markets and domestic requirements for insurer reserving. However, country-specific pricing often trends in different directions due to domestic influences, leading to windows of opportunity in one country relative to another.

The chart shows estimated annuity prices from insurers as a percentage of accounting liability in the five countries monitored, for existing retirees in a sample defined benefit pension plan. This is based on up-to-date pricing information provided regularly by insurers in each country.



For example, where a line is at the 110% level, Mercer estimates the average price of a pension annuity transaction for current retirees to be broadly 10% higher than the equivalent accounting liabilities. The Global Index is represented by the solid line, showing the average price of pension annuity transactions as a percentage of accounting liability across the five countries and draws upon information such as country market size.

The Global Index decreased 3.5% during the first quarter of 2019, as a result of steep downward movements in the UK, Germany and Ireland indices combined with smaller decreases in the indices in the US and Canada.

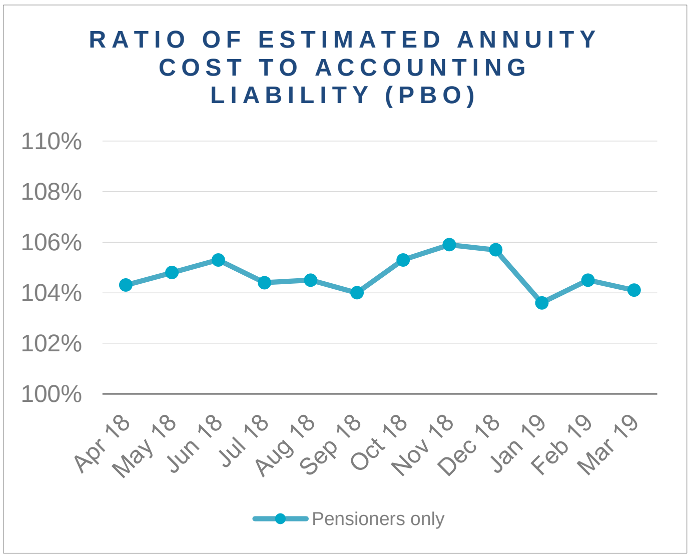
Pension liability has been measured according to local standards. As an example, the cost of insuring pension liabilities in the UK is higher than in the US (relative to accounting liabilities) partly because UK pension liabilities are commonly indexed for inflation and partly due to generous attaching spouses' pensions, both of which increase the liability duration. Insurers also charge an additional premium to take on inflation risk.

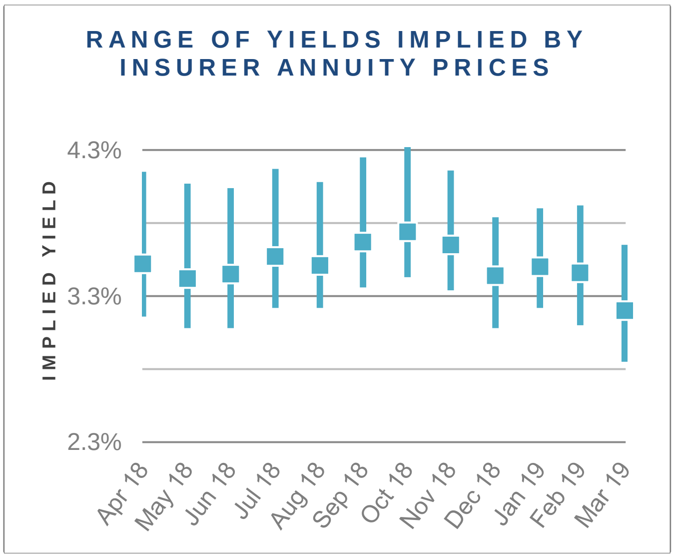
Mercer appreciates the assistance of more than 20 insurers, which provide pricing data every month to allow this report to provide a good indication of the trend in each country.

The information contained in this report is not based on information specific to your circumstances and approximations have been used. Past experience is no guarantee of future pricing and experience may vary for your plan.

UNITED STATES

The cost of a buyout had been decreasing a number of years ago relative to PBO accounting liabilities; however this relationship has remained relatively stable over the last couple of years. Price transparency allows for greater information from which a plan sponsor can act. The chart on the left shows the relative price to PBO using average pricing received from insurers, and the chart on the right shows the range of sample pricing received. At a single point in time pricing between insurers varies materially which may lead to a difference in cost of up to 10%.





At the end of March 2019, if the accounting liability in respect of plan pensioners only was US$100 million, the buyout cost would be broadly US $4.1 million higher, as compared to December where the cost would have been US $5.7 million higher.

When insurer pricing rates increase relative to discount rates used to calculate PBO, the premium for an annuity buyout decreases.

It should be noted that the above implied yield has decreased slightly less compared to corporate bond yields over Q1 2019, resulting in the slight decrease in the ratio shown in the chart above and to the left.

UNITED STATES MARKET NEWS

In mid-2015, Mercer launched [Mercer Pension Risk Exchange®](), a groundbreaking solution that both increases annuity price transparency by enabling plan sponsors to continuously monitor pricing and helps plan sponsors execute group annuity buyouts in a shorter timeframe and in a more competitive pricing environment. Given the current level of volatility, it is not surprising that we already have over 170 clients in the US, representing over US$21 billion of assets, signed up to Mercer Pension Risk Exchange to execute an annuity placement. Please see the infographic at the end of this report for more information.

With rates increasing and plan sponsors reaching PBGC caps, buyout activity has steadily increased. Pension risk transfer premiums exceeded $27 billion in 2018, according to the LIMRA report. Mercer continues to be a market leader role in pension de-risking transactions, advising plan sponsors and independent fiduciaries on over 40% of all deal volume transacted over the past three years, based on the 2016-2018 LIMRA reports and internal Mercer data.

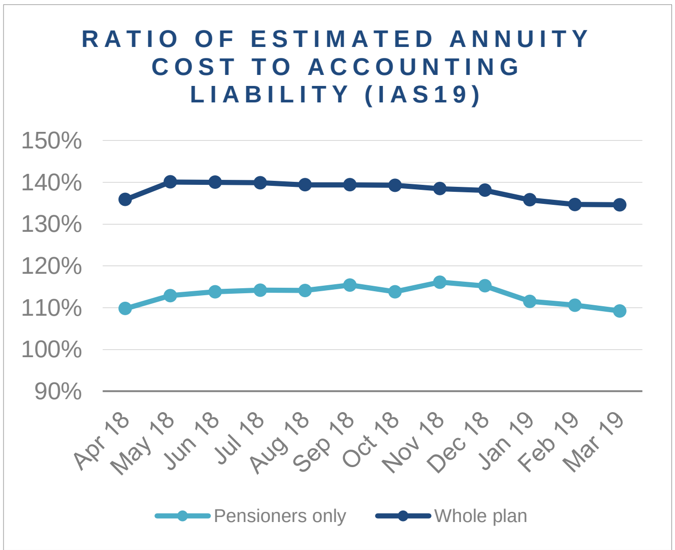
NOTES

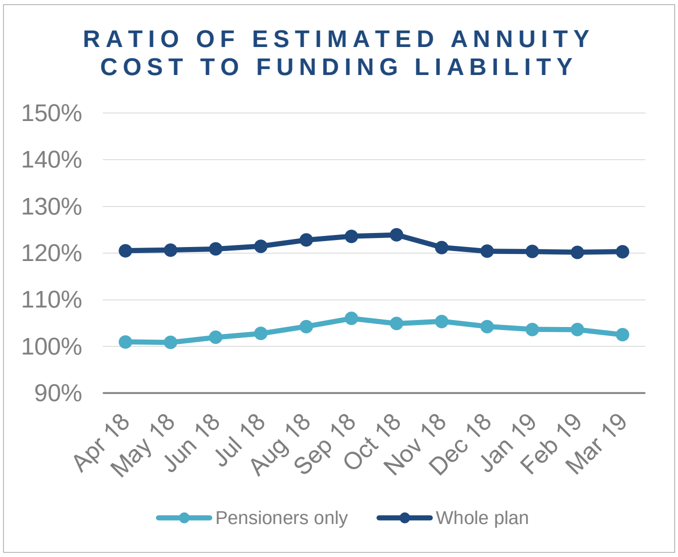
The chart on the left is based on a set of liabilities with pension benefit obligations of US$50 million, cash flow duration of 9 years, and discounted using the Mercer Yield Curve.

The figures in the charts should be used as an indication of the market pricing for annuity placements; actual pricing received will depend on plan-specific factors such as plan provisions, size, and age of the population. It is important to note that some of the insurers who provide pricing do not reflect mortality sensitivity in their illustrative rates, or benchmark to a standard table.

UNITED KINGDOM

The charts track the cost of a buyout and buy-in of a representative pension plan against accounting and typical funding liabilities. The plan has pensioner and non-pensioner liabilities, with a weighting towards pensioners. Pensioner and non-pensioner members receive a mixture of flat and increasing pensions in payment, commensurate with an “average” UK pension plan.





At the end of March 2019, if the plan had accounting liabilities in respect of all members of £100 million, the buyout cost would be broadly £35 million higher.

If the accounting liability in respect of plan pensioners only was £100 million, the buy-in cost of pensioners would be broadly £9 million higher.

At the end of March 2019, if the plan had typical funding liabilities (technical provisions) in respect of all members of £100 million, the buyout cost would be broadly £20 million higher.

If the typical funding liability in respect of plan pensioners only was £100 million, the buy-in cost of pensioners would be broadly £3 million higher.

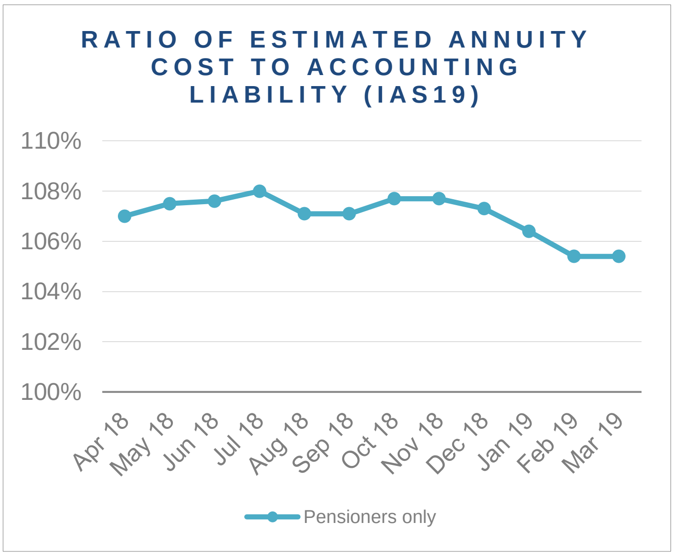
UNITED KINGDOM MARKET NEWS

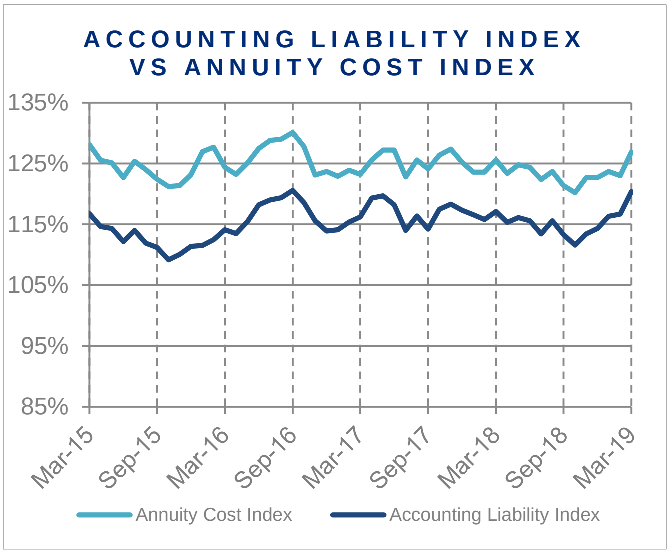
Total premium volumes for 2018 were £24bn, which is the highest annual premium volume ever written (the previous highest being c£13bn back in 2014). There were four individual transactions exceeding £1bn during 2018, including one for £4.4bn, which was the largest single UK bulk annuity deal to date. In addition to this 'regular' bulk annuity business, it was announced in March 2018 that Prudential plc had sold around £12bn of its annuity portfolio to Rothesay Life (this being the largest ever UK insurer “back book” annuity business transaction).

So far, 2019 is proving to be another very busy year, with the prospect of new records being set. Despite continuing uncertainty around the UK’s departure from the EU, to date there have been few signs that this is having any noticeable impact on the buoyant bulk annuity market.

CANADA

The charts track the movement in the cost of a group annuity as a percentage of the associated accounting liabilities for a representative sample group of retirees.





During the first quarter of 2019the Index decreased by nearly 2%, falling from 107.3% at the end of December 2018 to 105.4% at the end of March 2019. This implies that, at the end of Q1 2019, the cost of settling obligations through the purchase of annuities was just over 5.4% higher than the accounting liability.

It is also important to consider the absolute cost of settling plan obligations. This can be best accomplished by looking at the movement of each component of the index in isolation. To do so, we look at the yields of long -term government bonds, which drive annuity pricing, and compare them to the yields on AA corporate bonds, which are used to calculate accounting liabilities.

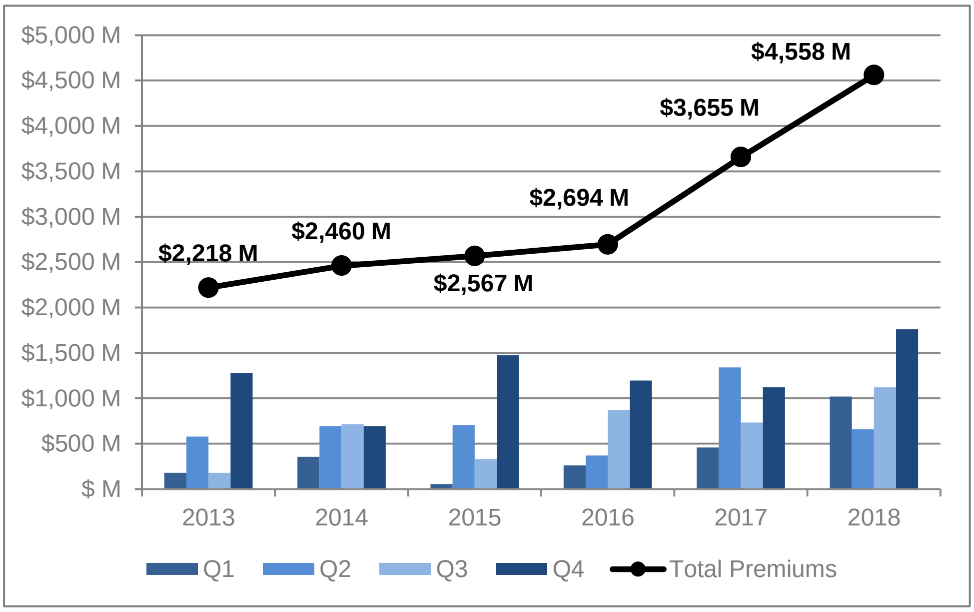
Following a small drop in January and an offsetting increase in February, yields on long-term federal bonds, assumed to back annuity purchases, dropped by nearly 30 basis points in the month of March. This led to an overall increase in the estimated cost of annuities by roughly 4.2% for the first 3 months of the year.

During the same 3 month period, yields on corporate bonds, assumed to back accounting liabilities, moved in much the same way only that they were also subject to movements in corporate credit spreads as well. A narrowing of spreads by about 10 basis points in January and then again by another few basis points in February before widening slightly in March resulted in an overall increase in accounting liabilities of just over 6% throughout the quarter.

The net result was an increase in the estimated cost of annuities relative to accounting liabilities in January, leading to a 90 basis point fall in the Index from 107.3% to 106.4%. In February, an increase in the estimated cost of annuities while accounting liabilities decreased led to another drop in the Index, this time by 110 basis points all the way to 105.3%. In March, the estimated cost of annuities were more sensitive than the accounting liabilities to the steep decrease in long-term rates which more or less offset the slight widening of corporate spreads in the month and the Index remained more or less flat at 105.4%. Overall, the 1.9% decrease in the Index in Q1 2019 has brought it to a relative low, matching April 2017 as the lowest point since 2014.

CANADA MARKET NEWS

After 6 consecutive record highs, the group annuity market in Canada shows no signs of slowing down. An estimated $700M in new premiums were secured in Q1 2019, which would trail only 2018 as the most active start to the year. Increased interest in annuities from larger plans combined with aggressive annual sales targets from Canadian insurers as well as the emergence of new reinsurers in the space provide a strong indication that the market is expected to continue to grow over the coming years.



With over 345 plans having enrolled as of March 2019, the Mercer Pension Risk Exchange® has established itself as a global tool to help clients meet their de-risking objectives in an efficient and cost-effective manner. Nearly US$80B of plan liabilities have been committed to the platform and over US$26B has been successfully secured with insurers. In Canada, 47 transactions have been secured through the Exchange with total premiums of approximately C$2.4B.

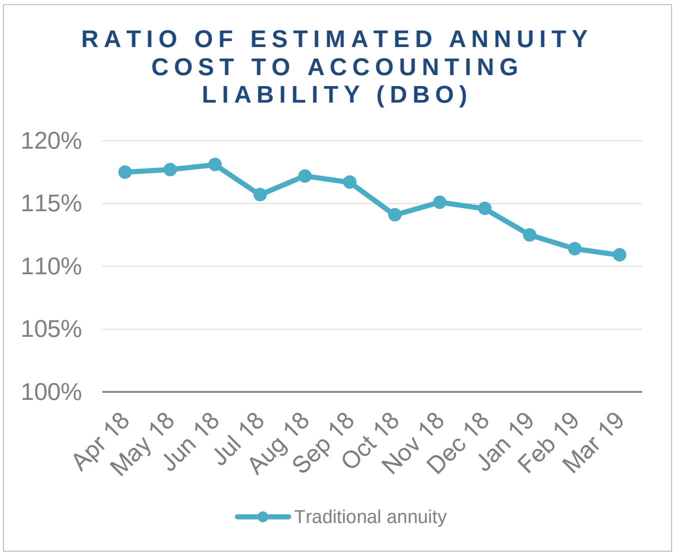
NOTES

The Index is based on an estimate of settling non-indexed pension obligations through the purchase of annuities and an accounting discount rate based on a proprietary model developed by Mercer to assist our clients with selection of the discount rates used for the purpose of corporate financial reporting. It is provided for a sample group of non-indexed retired members and is only intended to illustrate general trends. The actual premium can vary significantly for individual plans based on a number of factors that may include:

- The plan's benefit structure and timing of its anticipated benefit payments.
- The demographic profile of the plan's participants.
- Market conditions prevailing at the time benefits are distributed and annuities purchased.
- Insurer appetite and capacity for a transaction.
- Which employees, if any, receive and accept an offer to take a lump sum instead of an annuity.

IRELAND

The chart shows the relative cost of a buyout of pensioner liabilities of a sample defined benefit plan versus the equivalent liabilities on a company accounting basis.



At the end of March 2019, if the Plan had accounting liabilities in respect of pensioners only of €100 million, the cost of a traditional annuity would be broadly €11 million higher, compared with €15 million higher at 31 December 2018.

IRELAND MARKET NEWS

While the cost of purchasing annuities for pensioners increased over Q1 2019, the additional cost of annuities relative to accounting liabilities actually reduced as a result of falling corporate bond spreads. This is reflected in a fall in our annuity buy-out index shown above.

- Core Eurozone bond yields fell significantly over Q1, leading to an increase in our estimate of the cost of buying out pensioner liabilities with annuities from an insurance company.
- Corporate bond yields & spreads (which drive a company's accounting liabilities) also fell over the quarter resulting in a decrease in accounting liabilities over the same period.

Q1 2019 also proved to be a particularly strong quarter for pension schemes on the asset side with positive returns on equity portfolios (MSCI World Index returned 14.7% over the first three months of the year) and bond portfolios returns were also generally positive.

Activity in the bulk buyout market in Ireland has historically been driven predominately by of pension plans wind-ups rather than strategic derisking projects. Under Irish legislation, an annuity must be purchased for pensions in payment at scheme wind-up. However, in late 2017, Danske Bank entered into a ground breaking transaction with Irish Life, to whom it transferred €335m of its Irish DB liabilities. This deal was the largest of its kind in Ireland, and also set a precedent for using insurance strategically as part of ongoing risk management in a well-funded scheme.

NOTES

The index is provided for a sample mature pensioner population and is indicative only. The benefits secured (and valued as an accounting liability) are flat pensions, with no increases in payment.

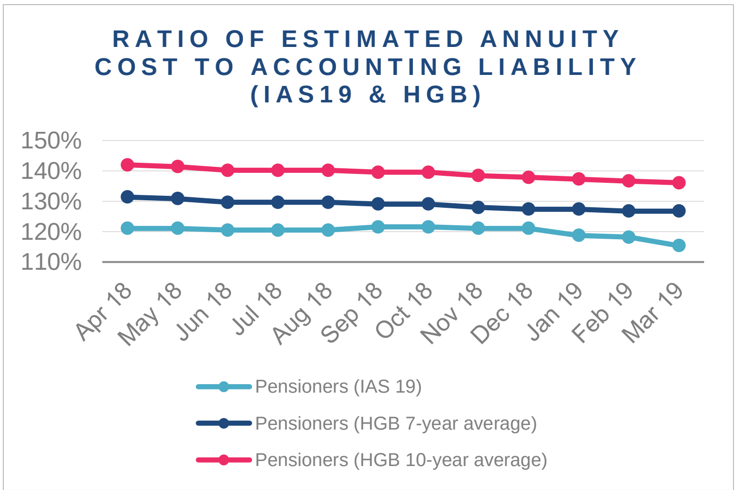
The price differential identified above will also be affected by the nature of the assumptions adopted for the accounting disclosures.

The accounting liabilities are valued using the Mercer Yield Curve, which is used by leading Irish and multinational companies to set their discount rate for accounting purposes.

The index does not make any allowance for buyout costs for active or deferred members.

GERMANY

In Germany, a true buy-out of liabilities is not generally possible as the purchase price is treated as taxable income for the beneficiaries except in the case of the wind-up of the sponsoring company. Here we focus on so-called reinsurance, where the future promised pension payments are insured. The German pension reinsurance market is based on with-profits policies. It is usually not possible to insure future indexation – in general, it is assumed that the with-profits bonuses will broadly compensate for the required level of future indexation, but exact indexation matching is not possible. The accounting liabilities in the table below reference a sample retiree population and are shown on an IFRS basis and the old and new German GAAP ("HGB") basis. The new German GAAP uses a 10-year average of the discount rate (previously a 7-year average was used).



At the end of March 2019, if the plan's accounting liabilities under local German GAAP (HGB) in respect of pensioners was €100 million, the buyout cost would be broadly €36 million higher (compared with €38 million higher at 31 December 2018). Under the previous HGB basis, using the 7-year average rate, the buyout cost would have been broadly €27 million higher at both 31 December 2018 and 31 March 2019.

If the plan accounting liabilities under international accounting standards (IFRS) in respect of pensioners was €100 million, the buyout cost would be broadly €15 million higher (compared with €21 million higher at 31 December 2018).

GERMANY MARKET OPPORTUNITIES

- There is no minimum funding requirement in Germany, and many retirement obligations remain unfunded. Increasingly we do see companies funding their retirement benefit obligations, and there are now tax incentives (and an 80% reduction in the insolvency protection premium) available in case that benefits are funded using a "*Pensionsfonds*"
- For the DAX30 constituents, the funding level disclosed in the published accounts rose from 63% to 68% during 2017 (Plan Assets of €260billion compared to Liabilities of €380billion)
- Reinsurance is commonly used for deferred compensation plans, which offer a tax-incentivised method of saving for retirement with higher limits on contributions than other methods available as a private individual.

NOTES

The illustrations are based on values used by German life insurers, public information and a representative sample of a retiree population. Due to the applied approximation method the Index is not suitable for any company - and plan-specific pricing.

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MARSH & McLENNAN COMPANIES

MERCER PENSION RISK EXCHANGE™

A GROUNDBREAKING APPROACH TO PENSION RISK MANAGEMENT

Many defined benefit plans are now closed to new employees, but these plans still represent significant obligations for the company to manage alongside its on-going business. In addition to the company specific situation, economic factors are also driving up the demand for annuity transactions; however, the annuity marketplace can be hampered by long execution timelines and lack of price transparency. A plan sponsor requires robust information on the financial position of the company's pension plan, needs an understanding for how key financial metrics are developing over time, and values customized pricing information. This information must be accurate, up-to-date, and easily accessible.

CURRENT BULK ANNUITY MARKET CHALLENGES

UNPREDICTABLE MARKET

Each deal is unique and attracts different insurers. Deal pricing can vary dramatically

PRICE VOLATILITY

Pricing fluctuates over time but is not visible to plan sponsors.

LACK OF PRICING TRANSPARENCY

Obtaining a price can be difficult and time consuming. Plan sponsors often don't know the price at which they should execute an annuity transaction.

MERCER PENSION RISK EXCHANGE™

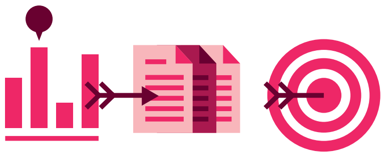
WHAT IS IT?

- Access to regular pricing from insurers in order to asses the true market price of a deal.
- Helps sponsors execute a deal in a more competitive price environment and in a shorter time frame than is currently possible.
- Allows plan sponsors to prepare data and documents in advance, enabling them to proceed quickly when the time is right.
- Online and mobile-optimized solution that gives sponsors and trustees access to valuable information anytime and anywhere.

WHAT IS IT FOR?

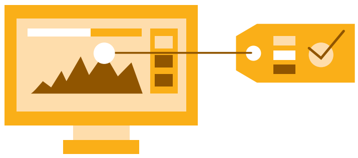
- PLAN TERMINATIONS
- BUYOUTS
- BUY-INS

HOW DOES IT WORK?



READINESS

Mercer's systematic and disciplined approach finalizes all data and documents well in advance of the transaction, enabling swift execution. We advise on target price levels and plan metrics that should be monitored, and we establish triggers upon which to act.



DYNAMIC MONITORING

Our pricing platform allows insurers to submit regular bids for specific plans. This enables sponsors to continuously monitor their unique price and specific plan metrics and to execute when market conditions are optimal.

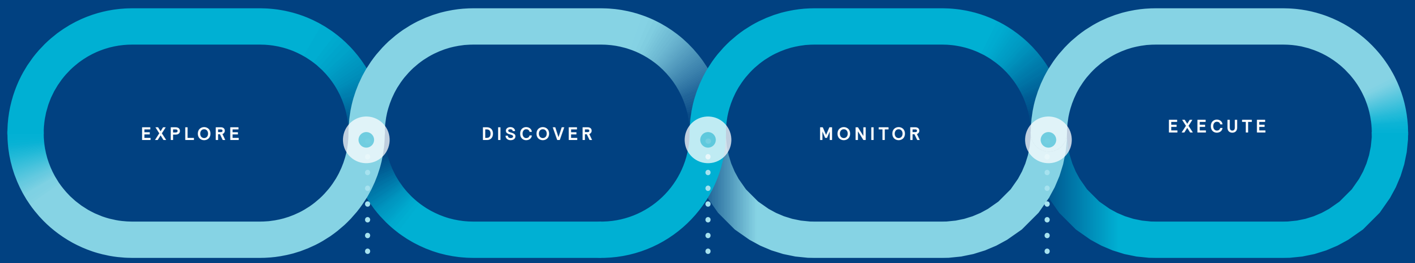
EXECUTION SUPPORT

Provides fiduciary training and insurer due diligence to support the final auction, insurer selection, and transition of responsibilities to the insurer, all while enhancing participant security.

MERCER PENSION RISK EXCHANGE™ SUPPORTS YOU THROUGH EACH STEP OF THE ANNUITY PLACEMENT PROCESS

MERCER PENSION RISK EXCHANGE PROCESS

There are four components of the process. We work with clients to understand the services that are most applicable to their current situation, and timeline to execute a transaction. Our approach provides increasing financial certainty as a client moves through the purchase process.



EXPLORE

- Understand market appetite and competitiveness
- Assess trends over time
- Determine timing / strategy to proceed with a transaction

DISCOVER

- Prepare insurer RFP and plan data
- Gather preliminary annuity quotes from insurers
- Establish financial metrics to monitor
- Start fiduciary education

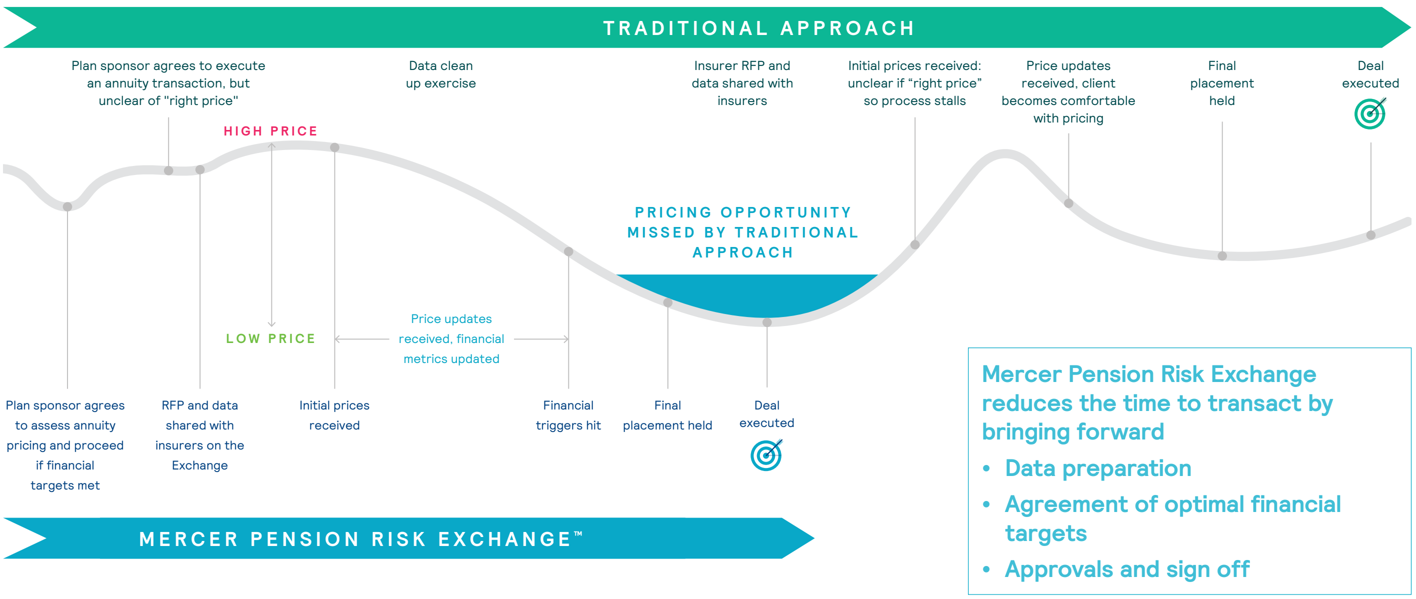
MONITOR

- Monitor annuity pricing against financial metrics
- Complete fiduciary education and insurer due diligence

EXECUTE

- Hold final placement auction
- Select insurer and transfer premium
- Commence post deal transition

TIMELINE



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