Mercer Global Pension Buyout Index

Q4 2021

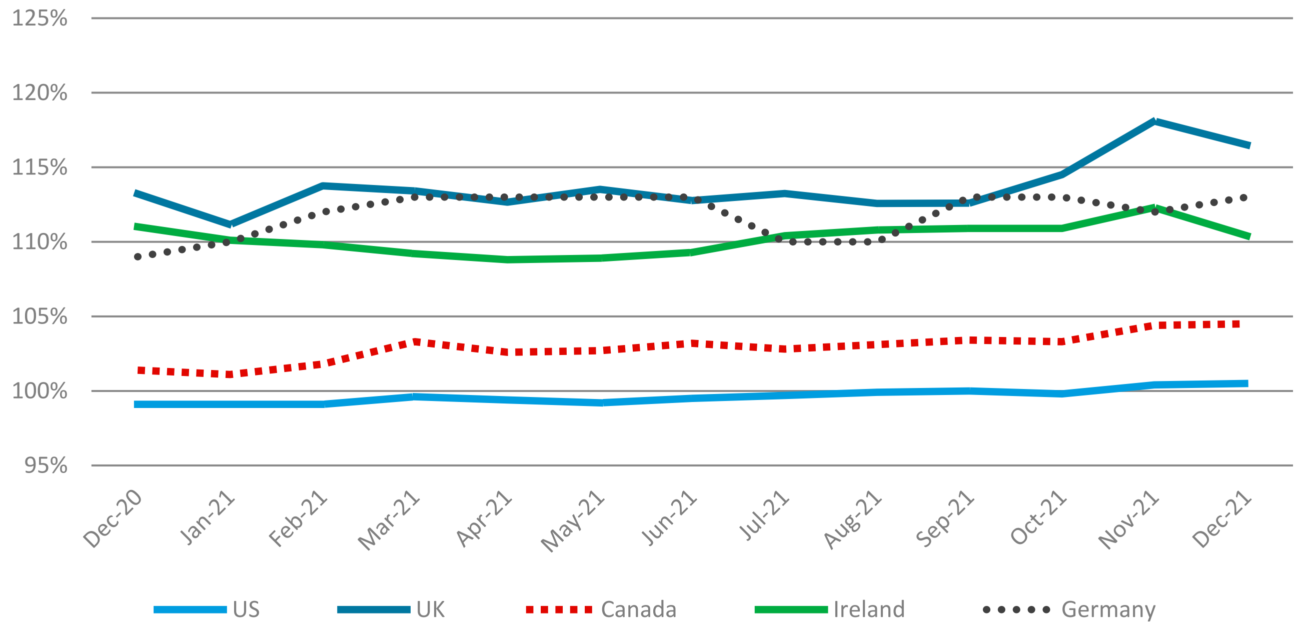
Mercer

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 notional 'Global' Index may be determined by taking the average price of pension annuity transactions, as a percentage of accounting liability, across the five countries and drawing upon information such as country market size. The notional 'Global' Index increased from 106.1% at 30 September 2021 to 107.6% at 31 December 2021.

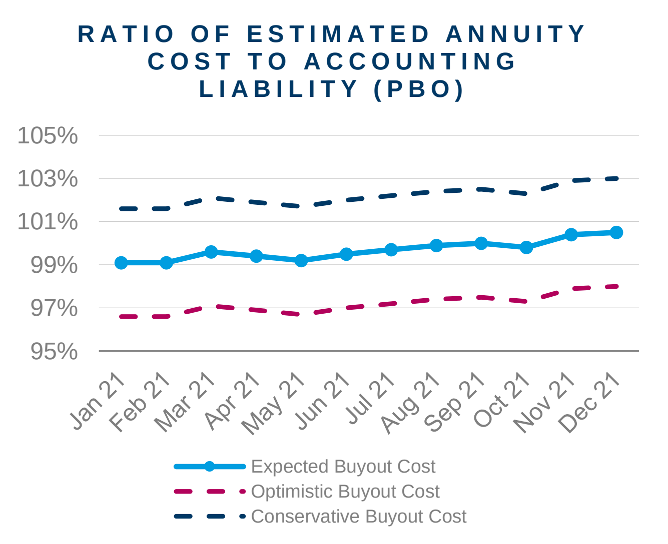
The regional indices in Germany and Ireland remained relatively flat throughout the quarter while the regional indices in both Canada and the US increased slightly. The UK Index also rose but its trajectory was more volatile than the other regions, exhibiting sharp rises in October and November before dropping in December.

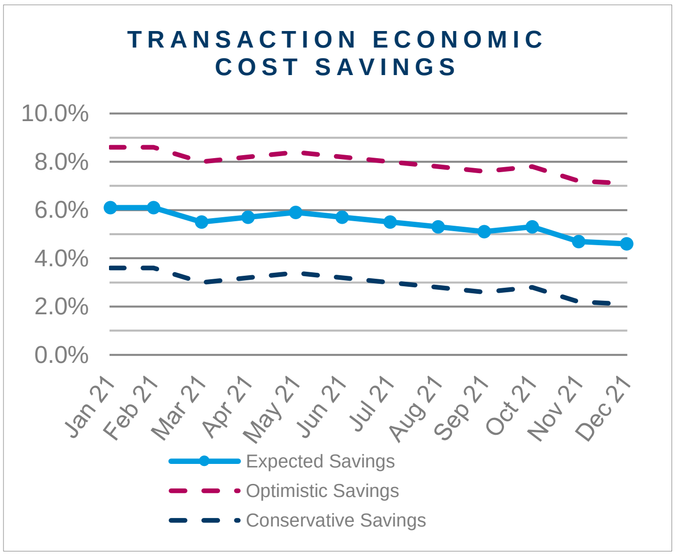
Pension liability has been measured according to local standards. As an example, the cost of insuring pension liabilities in the UK is higher than in the US (relative to accounting liabilities) partly because UK pension liabilities are commonly indexed for inflation and partly due to generous attaching 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 numerous insurers, who provide pricing data every month to allow this report to provide a good indication of the trend in each country.

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 pricing received from insurers. The chart on the right shows the potential economic savings a buyout generates, reflecting accounting liability and plan maintenance costs less the cost of a buyout.





At the end of December 2021, if the hypothetical buyout index accounting liability in respect of plan pensioners only was US$100 million, the buyout cost would be broadly the same.

Retaining these pensioners in the plan would incur future maintenance costs of $4.6 million. This includes future PBGC premiums, administrative costs, and investment costs. As such, a plan sponsor could potentially save a total of $4.6 million by executing this transaction in the baseline expected scenario.

United States Market News

- Buyout index liability discount rate increased by 11 basis points over the quarter.
- Buyout index annuity discount rate increased by 6 basis points, causing the hypothetical annuity price to decrease by slightly less than the accounting liability decrease over the quarter.
- Jumbo transactions continued to drive market volume in 2021, led by two transactions around $5 Billion each. Current estimates for 2021 are that market volume ended the year in the $38-$40 Billion range.
- Moving into 2022, expectations are for an increase in the number of plan terminations commencing, which will likely begin to close in 2023. Total volume will ultimately be driven by the jumbo deals that close throughout the year.
- Continued high levels of market transaction volume have driven ongoing expansion of the insurer market with two new entrants to the market in 2020 another in 2021 and potential for more in 2022. This additional competition has been a positive for plan sponsors looking to transact.

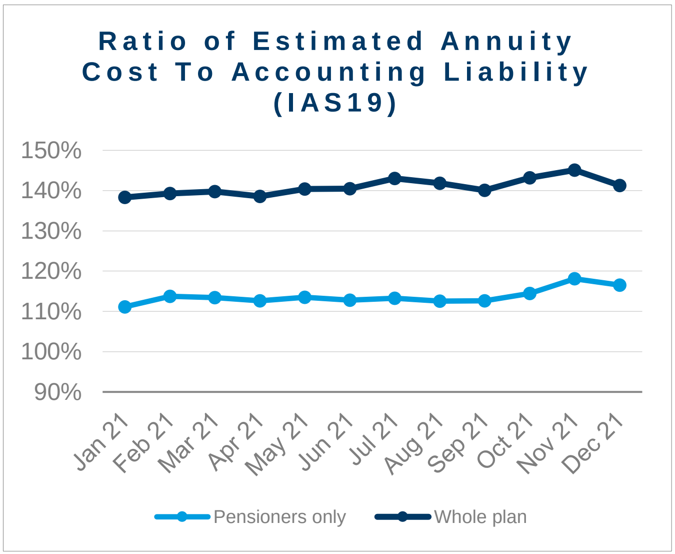
NOTES

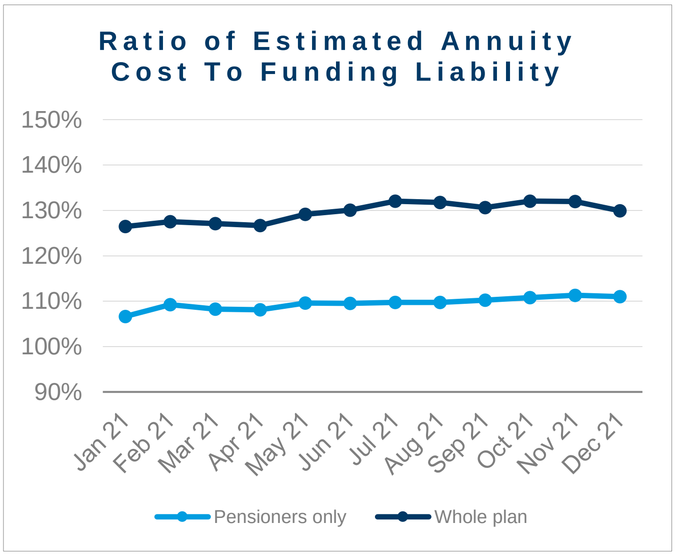
The charts are based on a set of liabilities with 750 participants, pension benefit obligations of US$100 million, cash flow duration of approximately 9 years, and discounted using the Mercer Yield Curve.

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. At a single point in time pricing between insurers varies materially which may lead to a difference in cost of up to 10%. It is important to note that 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 December 2021, if the plan had accounting liabilities in respect of all members of £100 million, the buyout cost would be broadly £41 million higher.

If the accounting liability in respect of plan pensioners only was £100 million, the buy-in cost of pensioners would be broadly £17 million higher.

At the end of December 2021, if the plan had typical funding liabilities (technical provisions) in respect of all members of £100 million, the buyout cost would be broadly £30 million higher.

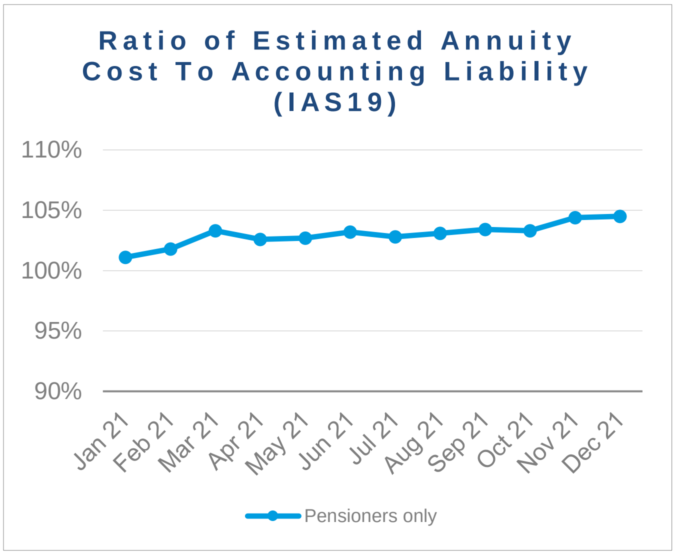
If the typical funding liability in respect of plan pensioners only was £100 million, the buy-in cost of pensioners would be broadly £11 million higher.

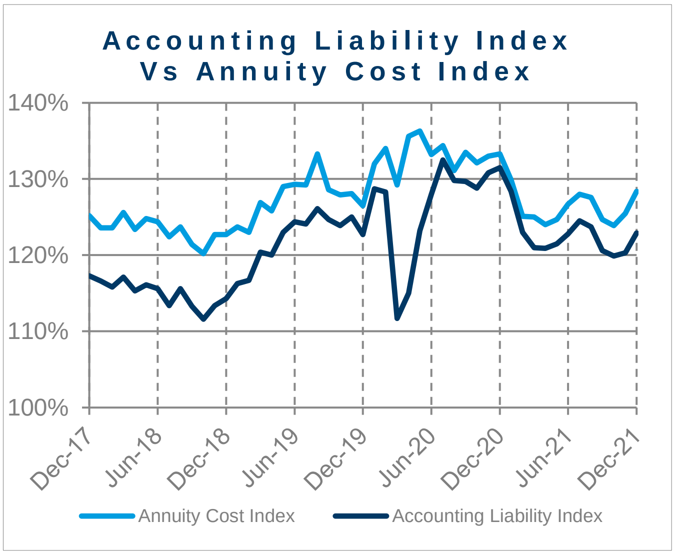
United Kingdom Market News

Total premium volumes for 2021 are expected to be c£30bn, compared to c£32bn in 2020 and c£43bn in 2019 (the largest annual volume to date). Despite the ongoing global pandemic, bulk annuity risk transfer remains firmly on the agenda for UK pension schemes, with demand expected to continue growing over the coming years.

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 fourth quarter of 2021, the Index increased by 1.1% to 104.5%. This implies that, at the end of Q4 2021, the cost of settling obligations through the purchase of annuities was 4.5% higher than the corresponding 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.

Annuity Cost Index

Yields on long-term federal bonds, assumed to back annuity purchases, decreased by approximately 26 bps throughout the quarter while annuity pricing over those same 3 months stayed relatively flat. The net result was an overall increase in estimated annuity costs of 3.0%.

Accounting Liability Index

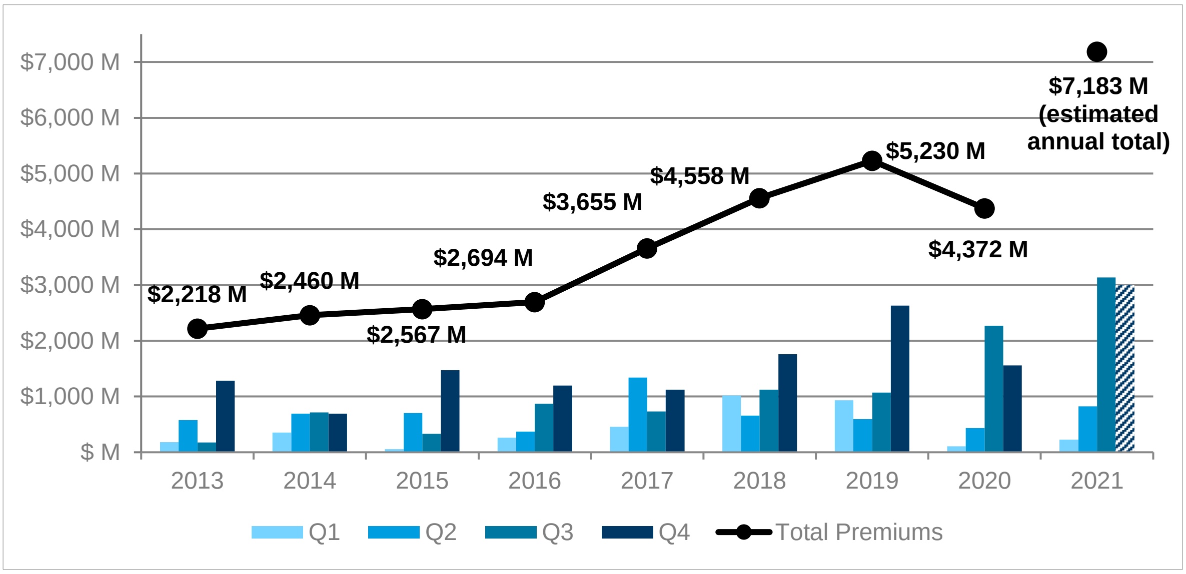
Credit spreads in long-term corporate bonds, assumed to back accounting liabilities, did not change in the fourth quarter of 2021. However, there was still an increase in accounting liabilities due to the drop in long-term rates. The decrease in rates had a more significant at the long end of the yield curve and the drop in long-term rates for accounting liabilities was approximately 17 bps. Consequently, accounting liabilities rose by 2.0%.

Canadian Global Pension Buyout Index

The decrease in rates affected annuity costs more than accounting liabilities. As estimated annuity costs increased more than accounting liabilities in the quarter, the Index rose from 103.4% to 104.5%.

Canada Market News

With another $3B in volume in Q4, the total for 2021 ended up at approximately $7B – besting the previous record high set in 2019 by over 30%. 2022 threatens to be just as active with several larger transactions already in the pipeline.



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

Corporate bond yields rose c. 25-30bps during Q4 2021, whilst Core Eurozone Government bond were flat over the quarter. As a result, over 2021 as whole, both Core Eurozone Government bond and Corporate bond yields were c. 30-40bps above levels at the end of 2020.

The rising corporate and government bond yields over 2021 have resulted in a fall in the value of scheme's bonds assets and a reduction in their accounting liabilities relative to their positon at the beginning of the year. This has led to:

1. Annuity premiums remaining attractive relative to core Eurozone Government bonds (held as assets by most Irish Pension Schemes) with annuity costs remaining c. 5% lower than the funding liability for a scheme holding core Eurozone Government bonds at the of 2021.
2. Accounting liabilities (valued using corporate bond yields) increasing relative to annuity costs and the gap between accounting liability and annuity prices narrowing as a result.

Opportunity

In spite of significant volatility during 2021, annuity costs are back to the attractive levels seen at the end of 2020 relative to core Eurozone Government bonds. Therefore, schemes holding such bonds to match pensioner liabilities still have an opportunity to exchange their core Eurozone Government Bonds for an annuity policy. This would improve cashflow matching and add a longevity hedge, while still realizing a funding gain.

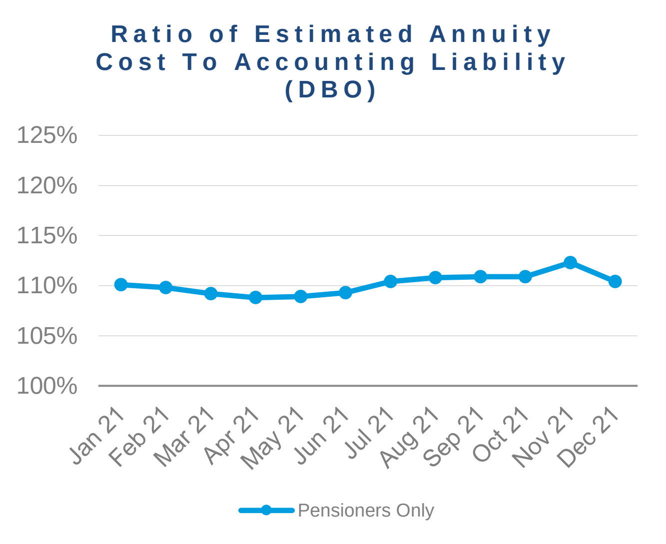
For any schemes that are under hedged (e.g. assets have a lower exposure to interest rates than the pensioner liabilities) the increase in interest rates over 2021 will have improved funding levels, which would put them in a better position relative to the end of 2020.

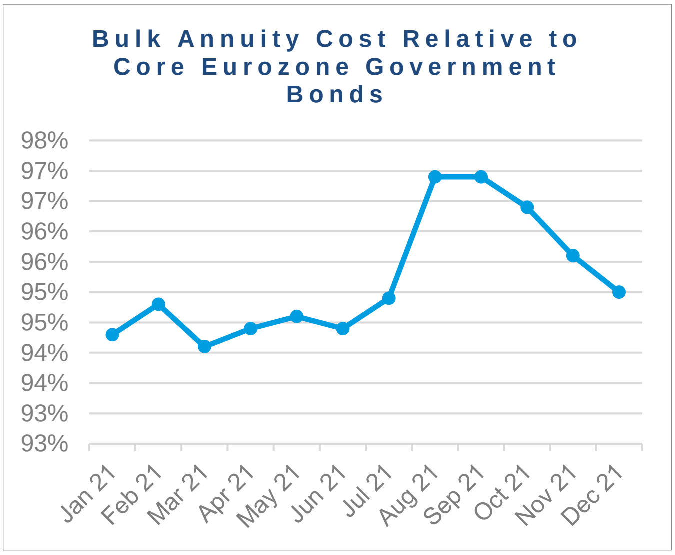
While it is not possible to predict the future direction of interest rates, or of credit spreads, these movements and their impact on the affordability of a bulk annuity transaction underlying the importance of being able to identify market opportunities to transact and being prepared to transact quickly when these opportunities do appear.

Bulk Annuity Index

The two charts below track the cost of a buyout or buy-in annuity policy for a representative pension plan against

1. The equivalent accounting liabilities shown on a company's balance sheet
2. The equivalent cost of funding those benefits through the scheme by investing in core Eurozone Government bonds.





At the end of December 2021, if the sample pension scheme had accounting liabilities in respect of pensioners of €100 million, the cost of a traditional annuity would be broadly €10 million higher.

At the end of December 2021, if a Pension scheme held €100 million of Core Eurozone Government bonds in respect of pensioners, the cost of a bulk annuity would be broadly €5 million lower, generating a funding saving for the scheme.

Ireland Market News

The life assurance companies active in the Irish market use a mix of core and semi-core Eurozone Government bonds as well as corporate bonds and other income generating assets to price annuity policies. Movements in these underlying assets over time can increase or decrease the attractiveness of a bulk annuity transaction for a Scheme or Sponsor relative to the assets held by the Scheme or the accounting liability booked by the Sponsor.

The cost of an annuity policy will also be influenced by the level of activity in the market and hence the ability to generate competitive tension between insurers. **The timing of a transaction will be one of the most important decisions that Trustees and scheme sponsors need to make, this has been reinforced by the volatility in annuity pricing experiencing over the last two years.**

Activity in the bulk annuity market in Ireland has picked up over the last 2-3 years. This has been driven mainly by schemes that have made good progress towards de-risking their investment strategy and are starting to consider bulk annuity transactions as the next stage in this de-risking journey. These schemes have viewed pensioner buy-ins as an attractive investment opportunity, allowing them to take advantage of attractive annuity pricing without an associated negative P&L impact for their sponsor.

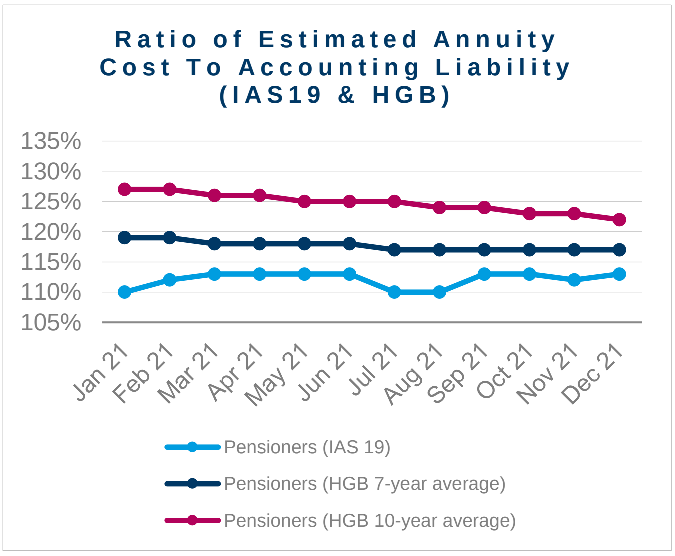
However, the deterioration in pricing seen during the middle of 2021 resulted in a significant drop in market activity during the year. This could result in increased insurer appetite through Q1 2022 with the potential for improvements in pricing as insurers reduce their margins, in addition to the improvements in pricing already seen because of the return to more favourable market conditions at the end of 2021.

NOTES

The index is provided for a sample mature pensioner population and is indicative only. The benefits secured (and valued as an accounting liability or using AAA Eurozone interest rates) 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 and benefit projections in particular pensioner longevity as well as the nature of the scheme’s benefits and membership, and insurer commercial pricing decisions.

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 insurance contract is based on an insurance tariff with 0.9 % guaranteed interest rate. This interest rate will decrease in the near future. 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 December 2021, if the plan's accounting liabilities under local German GAAP (HGB) in respect of pensioners were €100 million, the buyout cost would be broadly € 22 million higher (compared with € 24 million higher at end of September 2021). Under the previous HGB basis, using the 7-year average rate, the buyout cost would broadly € 17 million higher at end of December 2021 (compared with €17 million higher at end of September 2021).

If the plan accounting liabilities under international accounting standards (IFRS) in respect of pensioners were €100 million, the buyout cost in December 2021 would be broadly €13 million higher (compared with €13 million higher at end of September 2021).

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, but there are no tax incentives in case of an external funding.
- In addition many companies in Germany already closed or close their existing DB plans and implement a DC oriented plan. In this context companies often use insurance contracts or investment funds to fund these new liabilities and often link the resulting benefit (as far as possible in Germany) to the investment return.
- Nevertheless we see an 80% reduction in the insolvency protection premium in case that benefits are funded using a "Pensionsfonds".

- For the DAX30 constituents, the funding level disclosed in the published accounts was decreased from 66% in 2019 to 61% in 2020 (Plan Assets of €252 billion compared to Liabilities of €410 billion).
- Reinsurance is commonly used for salary sacrifice plans, which offer a tax-incentivised method of saving for retirement with higher limits on contributions than other methods available as a private individual.
- In the insurance market there is a strong trend to lower the guarantees. Insurance companies currently still grant the paid-in contributions for existing contracts at the start of retirement; the guarantee level for new contracts will be reduced in the future. This offers the opportunity to invest more profitably and thus ultimately still offer an attractive retirement pension.

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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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.

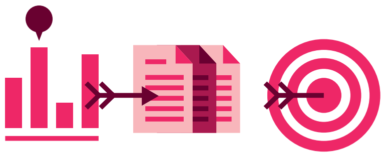
WHAT IS IT FOR?

- PLAN TERMINATIONS
- BUYOUTS
- BUY-INS

MAKE TOMORROW, TODAY

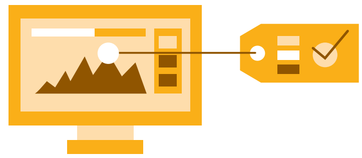
MERCER

HOW DOES IT WORK?



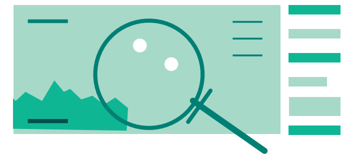
READINESS

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.



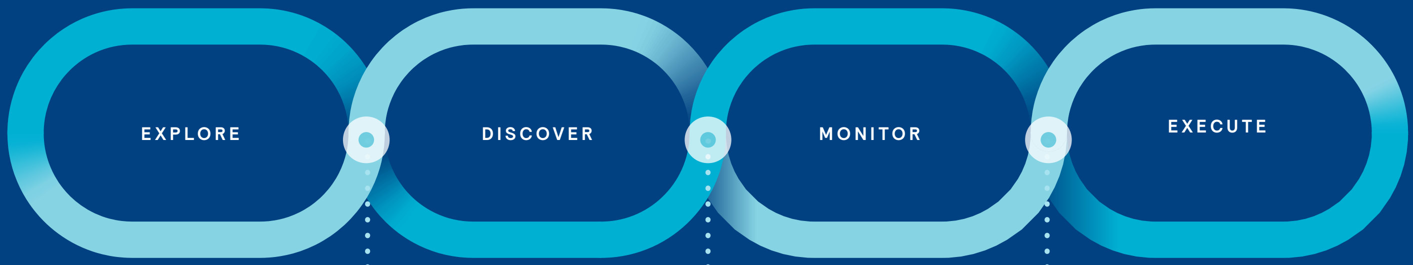
EXECUTION SUPPORT

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

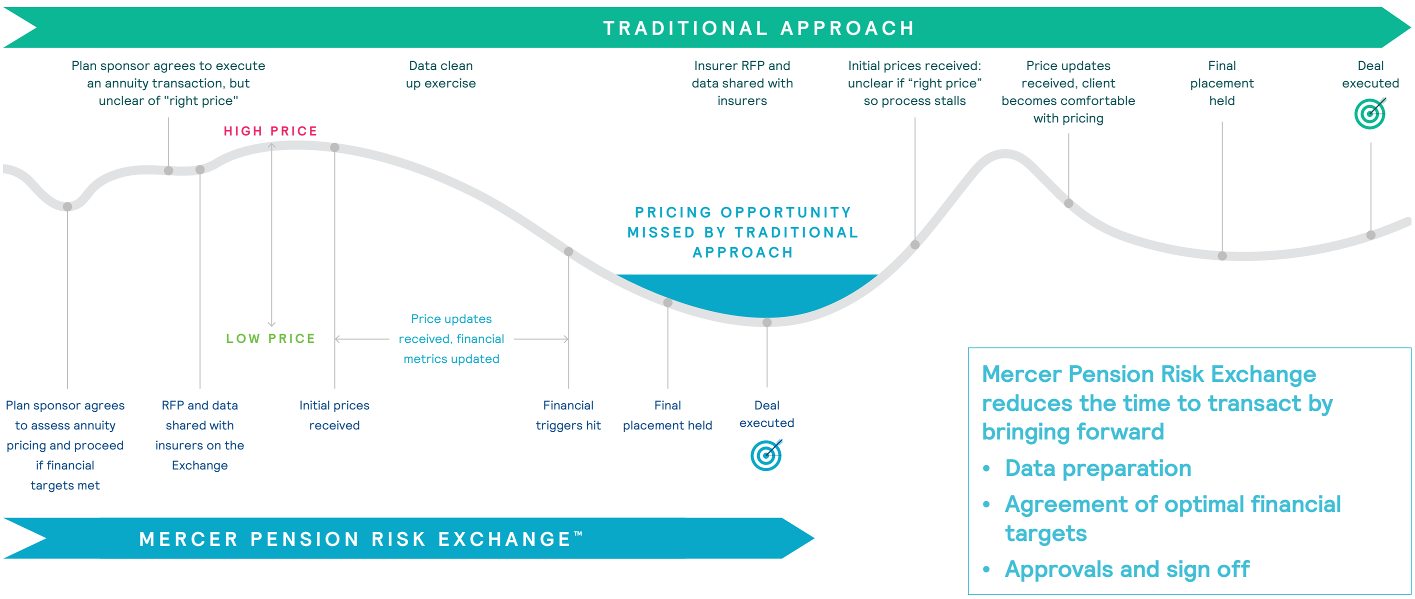
MONITOR

- 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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