MILLIMAN REPORT

Shareholder Value Reporting in Europe: Solvency II Based Metrics

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1. Executive summary

INTRODUCTION

Previously we have noted a shift in recent years to companies publicly disclosing supplementary reporting metrics related to Solvency II. Under a Solvency II Own Funds based metric, much (if not all) of the 'Value in force' or 'VIF' in the regulatory reserves or technical provisions is already accounted for in the 'Net Asset Value' or Solvency II Own Funds due to the use of best estimate assumptions in the value of best estimate liabilities (**BEL**).

In this report we provide a summary of the Solvency II based metrics that a sample of 21 companies disclosed as at year-end 2021 and consider whether and how the approaches adopted when determining these metrics have changed since year-end 2020.

Year-end 2021 results reflect the first full year since the emergence of COVID-19, and so we consider what key themes can be drawn from how firms in our sample have reported their performance over 2021 in a post-COVID-19 environment. This includes the more measurable impacts resulting not only from financial market movements but also from potentially less quantifiable impacts such as new business growth and policyholder behaviour.

Using year-end 2021 results, we also consider a breakdown of the movement in Solvency II Own Funds over 2021, on an aggregate basis, for firms in our survey. This analysis categorises the movement into 'high-level buckets' which can be broadly grouped into two classes: anticipated and unanticipated items. Expanding on this analysis we then consider results for the previous four year-ends and what, if any, conclusions can be made with regard to the anticipated items, noting that 2020 was an atypical year due to COVID-19 and that market performance over the past four years has seen significant fluctuations.

Finally, we consider regulatory developments in relation to Solvency II: the ongoing review of Solvency II (the **Solvency II 2020 Review**) by the European Insurance and Occupational Pensions Authority (**EIOPA**) as well as the UK Government's (in particular by HM Treasury (**HMT**) and the Prudential Regulation Authority (**PRA**)) review of Solvency II in the UK. We also briefly touch upon developments in International Financial Reporting Standards (**IFRS**) and International Capital Standards (**ICS**), specifically in relation to reporting on value metrics.

THEMES ARISING FROM YEAR-END 2021 RESULTS

The COVID-19 pandemic impacted many, if not all, industries across the globe over 2020. In general, the insurance industry had resilient solvency positions over 2020, as demonstrated in our previous shareholder value paper 'Shareholder Value Reporting in Europe – Solvency II Based Metrics'[1] (**2021 Shareholder Value Report**). That said, the pandemic did still throw up challenges for the insurance industry, with a number of areas impacted, including new business growth, claims patterns and policyholder behaviour as well as, more fundamentally, operational resilience.

We consider how firms have reported their performance over 2021 in this post-COVID-19 environment, looking at a number of different areas:

- New business growth
- Strategic decisions
- Changes in policyholder behaviour impacting existing business e.g. lapse experience
- Assumptions setting used in projections
- Longer term impacts on claims patterns emerging
- Financial markets (including management actions related to asset portfolios)
- Other management actions taken (i.e. excluding those in relation to asset portfolios)
- Dividends.

[1] Burgess, S., Reynolds, S. & Wrobel, L. (November 2021). Shareholder Value Reporting in Europe – Solvency II Based Metrics. Milliman Report. Retrieved 12 February 2023 from https://www.milliman.com/en-GB/insight/shareholder-value-reporting-in-europe-solvency-ii-based-metrics-2021.

It remains uncertain what the medium term and long term impacts of the pandemic may be to European insurers. For example, will the restoration to a sense of normality observed in 2021 bring with it a delayed impact in future years (e.g. a backlog of claims for sickness products, an increase in sickness claims due to the impact of long COVID), or can firms, as early indications from year-end 2021 results show, expect a return to pre-COVID-19 experience? Such trends may be difficult to unpack given increased political tensions e.g. the war in Ukraine and the subsequent increase in energy prices, as well as more recently the threat of an economic recession on the horizon for many countries across Europe. We may see how European insurers' results have been affected in our analysis next year.

YEAR-END 2021 RESULTS

In our previous publication, 'Shareholder Value Reporting in Europe – Solvency II Based Metrics'[2] (**2020 Shareholder Value Report**), we observed that companies had started to disclose Solvency II earning metrics such as 'Solvency II Capital Generation'. However, 'Solvency II Capital Generation' remains a nonstandard term, and many of the companies in our sample disclosed similar metrics with various names and slightly varying definitions (which were set out in that report).

Having reviewed year-end 2021 disclosures, we have found there to be no material changes in the approaches adopted by companies in our sample since year-end 2020.

We note that, for our sample of companies, the level of disclosure at year-end 2021 remained greatest for companies headquartered in the Benelux region as well as a number of those headquartered in the UK.

In considering the value of the disclosed metric at year-end 2021 compared with 2020 for our sample companies, we note that roughly half of the firms observed an increase in the amount of their capital generation metric over the year. For those reporting a reduction in the level of capital generated, we observed this to be typically in the range of -2% to -15%.

In nearly all cases, the metric remained positive in each year considered. The only exception to this is SCOR in 2021. In its disclosures, SCOR explicitly reports the impact of COVID-19 on its operating capital generation. Excluding this component[3], the firm's operating capital generation would have been positive in 2021.

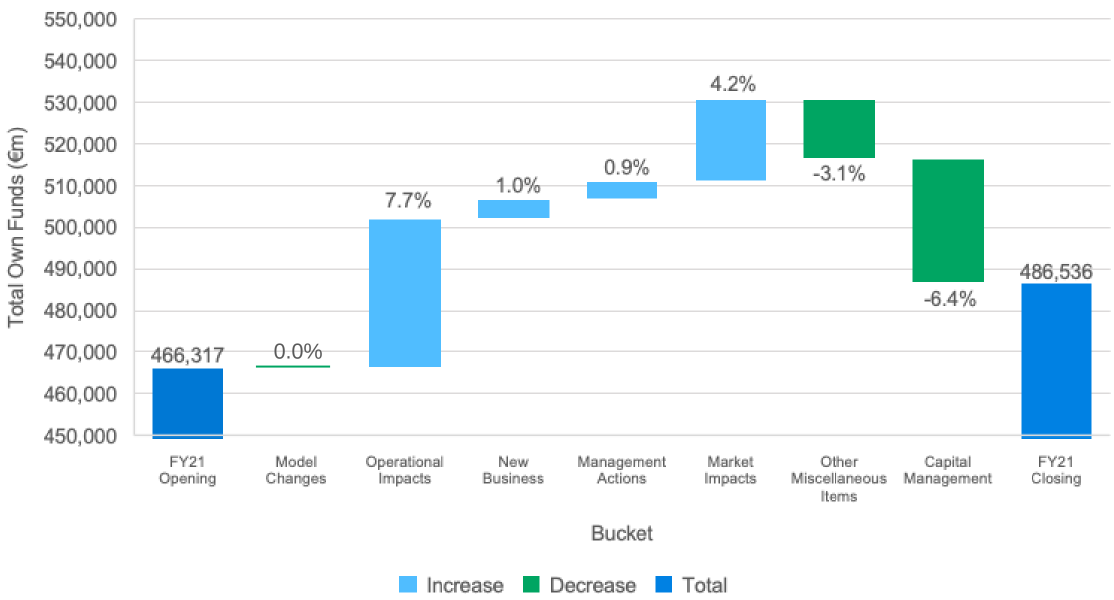
As part of our analysis of firms' year-end 2021 disclosures, we also considered a breakdown of the movement in Solvency II Own Funds over 2021 on an aggregate basis. In Figure 1 we set out our analysis based on the following 'high-level buckets':

- Model changes
- Operational impacts
- New business
- Management actions
- Market impacts
- Other miscellaneous items
- Capital management (which includes payment of dividends).

[2] Burgess, S., Burston, D., Reynolds, S., & Wrobel, L. (November 2020). Shareholder Value Reporting in Europe – Solvency II-Based Metrics. Milliman Research Report. Retrieved 12 February 2023 from https://www.milliman.com/en-GB/insight/shareholder-value-reporting-in-europe-solvency-ii-based-metrics-november-2020.

[3] SCOR reports that this component reflects COVID-19 updates (post-2020) for all currently expected excess claims.

FIGURE 1: AGGREGATE EVOLUTION OF OWN FUNDS OVER 2021 FOR COMPANIES IN OUR SAMPLE (EUR M)



Notes:

1. The majority of firms included in Figure 1 report results in euros. For the handful of other firms, we have converted results as at 31 December 2021 using publicly sourced exchange rates, which may introduce small currency differences.

Given the non-standardised nature of the disclosures around the movement in Own Funds across firms in our sample, a number of simplifications and judgements have been required to be made to arrive at the breakdown in Figure 1. However, in spite of these adjustments we think that the analysis provides a useful insight into the key drivers of firms' performance over 2021.

A key anticipated item of any movement in Own Funds over the year is 'Operational impacts'. Ideally 'Operational impacts' would provide some indication of the level of capital generation that arises 'naturally' from the existing business on the balance sheet at the start of the period. However, in the absence of the majority of firms in our sample disclosing this level of granularity when reporting the breakdown of movement in Own Funds, this category includes other items such as non-economic experience variances and non-economic assumption changes. Overall, 'Operational impacts' contributed a 7.7% increase in Own Funds over 2021.

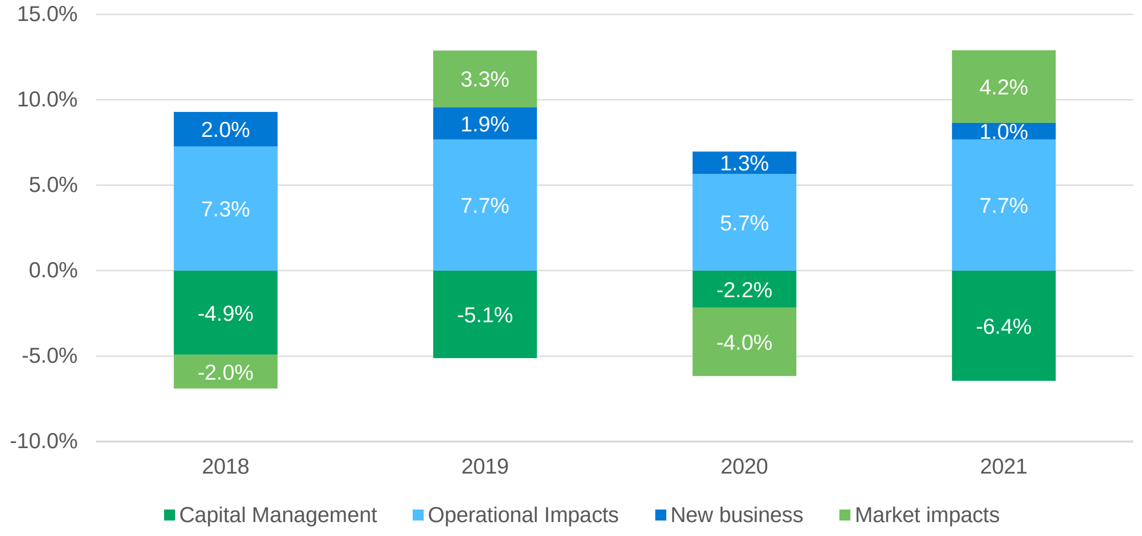
COMPARISON OF EXPERIENCE OVER RECENT YEARS

Expanding on the year-end 2021 movement in Own Funds analysis, we have considered how results over 2021 compare with recent years.

We have limited this expanded analysis to consider year-end 2018 to year-end 2021. As a result, nearly every firm included in our survey disclosed a breakdown of Own Funds for each year of the analysis, thereby making it more robust rather than being unduly influenced by a change in the firms being included year-on-year. We note that the criteria determining whether a firm has been included is solely driven by whether a firm discloses a sufficient level of detail in its public disclosures.

We have focused on the 'high-level buckets' of the movement in Own Funds which could be considered to be anticipated rather than those which are unanticipated. Figure 2 shows the results for the anticipated items.

FIGURE 2: EVOLUTION OF CAPITAL GENERATION DRIVERS FOR ANTICIPATED ITEMS



Looking at the results over the four years:

- **Operational impacts**: The contribution to the movement in Own Funds from this item seems broadly stable year-on-year. The exception to this is 2020, which may be a result of COVID-19.
- **New business**: Before COVID-19 this item was positively contributing around 2% to the movement in Own Funds over the year. The pandemic led to many firms reporting a reduction in new business volumes in 2020 and, whilst a number of firms have reported an increase in new business volumes in 2021, a number of them conversely reported a reduction in new business value margins, thus impacting the contribution of new business to the movement in Own Funds observed in 2021.
- **Market impacts**: Over the last four years, the observed impact fluctuations seem broadly in line with market performances for each year i.e. 2018 and 2020 markets typically performed poorly or were volatile, whereas 2019 and 2021 were more stable or showed signs of recovery compared with the prior year.
- **Capital management**: This item was broadly stable over the four-year period, except for 2020. The emergence of COVID-19 at the beginning of the year impacted the payment of dividends over 2020 and also resulted in a number of firms issuing new debt over the course of the year. Many firms chose to either suspend dividend distributions or postpone or reduce the dividend amount paid out compared with the originally declared amount, in light of regulators (such as EIOPA) providing advice and guidance for firms to take more prudent approaches to the distribution of profits in 2020. With such guidance no longer applying in 2021, the contribution from Capital Management in 2021 has reached a higher level than observed in 2018 and 2019. This may be due to postponed dividends from 2020 eventually being paid in addition to the dividend payments in respect of 2021.

REGULATORY DEVELOPMENTS

At the time of writing this report, EIOPA has published its opinion on the Solvency II 2020 Review, with other parties involved in the legislative procedure now providing their initial responses.

This compares with HMT and PRA, which are reviewing the current application of Solvency II in the UK.

Both reviews may have an impact on the solvency regulations that apply to companies in Europe going forward and hence the metrics those companies disclose.

Solvency II 2020 Review

In December 2020, EIOPA published its opinion on the Solvency II 2020 Review.

Following proposals from EIOPA, in September 2021 the European Commission (EC) announced its proposals to reform Solvency II.

Over the summer of 2022, as part of the legislative procedure, the European Parliament and the Council of the European Union have provided their first response to the suggested reforms from the EC.

Three key topics worth noting as relevant to shareholder value reporting are:

- The extrapolation of the risk free interest rate curve
- The (dynamic) volatility adjustment (**VA**)
- The Risk Margin (**RM**)

As one might expect, given the number involved, the views of the parties differ in a number of areas.

We note that, at the time of writing, negotiations are ongoing. As a result, there is no view on the changes that will come into effect as a result of the review.

HMT Review

In November 2022, HMT published its response to the Solvency II consultation released earlier in the year.

This response summarises the responses received to the consultation, sets out the UK Government's final reform packages and outlines the plans for implementing it.

At the same time, the PRA published a Feedback Statement (FS 1/22) summarising responses received to its Discussion Paper 2/22.

Two key areas that are under review by HMT which we believe will impact shareholder value metrics are: the RM and the Matching Adjustment (**MA**).

In November 2022 the PRA produced Consultation Paper (**CP**) 14/22 concerning Solvency II reporting and disclosure requirements. The CP included a proposal to introduce new National Specific Templates (**NSTs**) on excess capital generation. This proposed new template is expected to provide visibility of current and future balance sheet volatility by key drivers, and will require such information to be in a standardised format. Whilst this NST is not expected to be publicly disclosed it could encourage firms more generally to adopt some level of standardisation. Furthermore, in time firms may release this information publicly given it has already been prepared by firms.

At present much uncertainty remains over what the future UK insurance regulatory landscape will look like, and the impact any changes may have on UK insurers. That said, it is likely that the impact of any changes brought on by the review will vary among individual firms within the industry.

IFRS 17

A number of initial IFRS 17 announcements have already been made by some companies. These announcements have highlighted a reduction in shareholder equity on an IFRS 17 basis, arising largely from the opening contractual service margin (**CSM**). The CSM holds back and releases over time the total expected profit under a contract, and hence it is expected that the opening IFRS 17 equity will be lower than the current IFRS equity. Early indications suggest that a number of European firms will not be changing their views on capital generation and value as a result of IFRS 17, but will continue to focus on Solvency II and operating capital generation style metrics.

As noted in the 2021 Shareholder Value Report, we expect both companies and analysts to show and consider an adjusted IFRS 17 balance sheet which removes the CSM liability in order to arrive at a more realistic adjusted shareholder equity value. We also expect companies to respond to the likely demand from analysts for a bridge from such adjusted IFRS 17 shareholder equity to the relevant group Solvency II Own Funds. Such bridges are likely to shed additional light on both the IFRS 17 and the Solvency II methods and assumptions and make for interesting discussions as to which is the most appropriate or realistic.

It is likely that thinking may further develop in this area, as firms get closer to full readiness for implementation in January 2023, before an industry consensus is reached.

ICS

It was a relatively quiet year in 2022 for the new ICS being developed by the International Association of Insurance Supervisors (**IAIS**). Unlike 2021, in 2022 there did not appear to be any public disclosures of ICS results for firms participating in the ICS trials.

However, it is likely within the next couple of years, probably not in significant numbers until after the implementation of IFRS 17, that financial analysts will start asking questions on firms' ICS positions.

2. Introduction

In the 2021 Shareholder Value Report we explored how the level of Solvency II Own Funds (and its change over time) has seemingly become a more widely publicly disclosed metric than embedded value.

In this publication (in Sections 3 and 4) we consider how the approaches adopted by companies when disclosing supplementary reporting metrics have changed over 2021 (since those previously reported in the 2021 Shareholder Value Report), as well as the change in the values of such metrics. We also look at key themes arising from year-end 2021 results, for the firms in our survey, in a number of different areas such as: new business, assumption setting and the movement in financial markets over the year. Finally, we consider, at an aggregate level, the movement of Solvency II Own Funds over the year for companies in our sample, and how this movement can be split into key drivers that could be expected to happen again in the future – such as the contributions of existing and new business – and those that may be considered to be one-offs e.g. model or methodology changes, or capital management actions such as the issuance or repayment of debt and payment of dividends.

In Section 5, we extend the movement in Own Funds analysis (set out in Section 4) to consider results for the three year-ends prior (i.e. year-end 2018 to year-end 2020) for the firms in our survey. Using results across the four year-ends, we consider whether any trends can be identified for each of the key drivers, with particular focus on those drivers which can be considered to be ‘anticipated’. We also estimate for each year-end a payout ratio and an expected capital generation metric based on the back-book and consider what conclusions can be drawn from these calculations.

Finally, in Section 6, we briefly consider EIOPA’s ongoing Solvency II 2020 Review, as well the UK government’s own review of Solvency II given the UK’s departure from the European Union. Both reviews may have an impact on the solvency regulations that apply to companies in Europe going forward and hence the metrics disclosed for both reporting and transaction purposes. We also touch on developments in IFRS reporting and ICS, specifically in relation to reporting on value metrics.

3. Themes arising from year-end 2021 results

The COVID-19 pandemic impacted many, if not all, industries across the globe over 2020. In general, the insurance industry had resilient solvency positions over 2020 as demonstrated in our shareholder value paper from last year. That said, the pandemic did still throw up challenges for the insurance industry, with a number of affected areas, including new business growth, claims patterns and policyholder behaviour, as well as, more fundamentally, operational resilience.

Year-end 2021 results reflect the first full year since the emergence of COVID-19. In this section we consider how firms in our sample have reported their performance over 2021 in a post-COVID-19 environment.

In considering how firms have been impacted over 2021, we have evaluated a number of different areas. Specifically, we have considered:

- New business growth
- Strategic decisions
- Changes in policyholder behaviour impacting existing business e.g. lapse experience
- Assumptions setting used in projections
- Longer term impacts on claims patterns emerging
- Financial markets (including management actions related to asset portfolios)
- Other management actions taken (i.e. excluding those in relation to asset portfolios)
- Dividends.

NEW BUSINESS

The majority of firms in our survey reported an increase in new business levels (sales/premium income) over 2021 compared with 2020, although a few firms did report a reduction in levels of new business over the year. For those firms reporting an increase in new business in 2021, a continued transition towards less capital intensive products was observed by some firms with reported growth in the sales (volumes) of unit-linked business as a contributing factor to their overall new business levels.

For those firms reporting an increase in new business levels, a number of them conversely reported a reduction in new business value margins i.e. business being written in 2021 is less profitable compared with that written in 2020.

For example, Legal & General reported its Solvency II new business margin reduced to 9.1% in 2021 from 10.6% in 2020 for its UK annuity business. However, the firm disclosed that 2020 benefitted from wider credit spreads and good asset sourcing during the pandemic, as well as longer duration schemes, and that the 2021 margin was greater than that in 2019 of 7.9%.

A number of firms reported the low-interest rate environment in the Eurozone or EEMA[4] as presenting a challenge in attracting new business. Moreover, Aegon reported its decision to stop selling variable annuities with significant interest rate sensitive riders. We note, however, as we reach the end of 2022 that the low-interest rate environment, as we have seen in recent years, may have come to an end (as shown in Figure 3 below). The impact of this on firms' results will become apparent once year-end 2022 results become available in 2023.

A number of the reinsurers in our survey reported that the COVID-19 pandemic environment continued to impact their sales activity, but conversely expressed an increase in customer awareness and/or interest in insurance solutions emerging which may provide new opportunities into 2022.

STRATEGIC DECISIONS

Many firms in our survey reported on strategic decisions made over 2021 in line with their business plans.

For example, Ageas reported growth in its sales of unit-linked business in Europe, where its transition towards less capital-intensive products continues. This is in line with a general shift in many countries in recent years away from capital-intensive business towards more capital efficient products.

A number of firms reported increased focus on their core business or the intention of simplifying the offering provided by the Group.

For example, Aegon reported on its ambition to narrow its strategic focus to markets and business opportunities in its core perimeter. As well as the firm's decision to stop selling variable annuities with significant interest rate sensitive riders, this has perhaps also been witnessed more recently in the second half of 2022, with Aegon's agreement to combine its Dutch pension, life and non-life insurance, banking, and mortgage origination activities with a.s.r[5].

Meanwhile, AXA reported on its ongoing Group simplification programme with disposals of Singapore, AXA Bank Belgium, Greece, the Gulf Region, India and Malaysia. In addition, the firm also disclosed its life in-force initiatives achieved in 2021 which included: a reinsurance transaction in Hong Kong, a transfer of statutory annuity reserves to its off balance sheet pension fund in Switzerland, and a sale of a legacy savings portfolio in Belgium. Together these initiatives resulted in a €8 billion reduction of reserves.

In many cases, for firms in our survey, such strategic decisions involved the sale of back-book business or the disposal of business units. Conversely, a number of firms reported on their success of growing their business via the acquisition of tranches of business or business units.

For example, Zurich reported on the planned sale of its Italian life and pension back book to GamaLife, which has reportedly been approved in early December 2022.

On the other hand, CNP reported on its agreement to acquire Aviva's Italian life insurance business, which was signed in March 2021 and completed in December 2021. This transaction has reportedly roughly doubled the firm's market share in Italy.

Similarly, Generali and NN Group each reported on transactions which are expected to grow their market presence in India, and in Poland and Greece respectively.

Overall, it does seem that firms are more keenly reviewing and revisiting their strategic approaches in order to identify and seize opportunities to grow their business or focus on core business lines and countries.

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[4] Eastern Europe, Middle East and Africa.

[5] Aegon (27 October 2022). Aegon to combine its Dutch operations with a.s.r. Press release. Retrieved 13 February 2023 from https://www.aegon.com/investors/press-releases/2022/aegon-to-combine-its-Dutch-operations-with-asr/

POLICYHOLDER BEHAVIOUR

In 2020, firms reported on how COVID-19 had an impact on policyholder behaviour in respect to existing business. For example, negative impacts such as the withdrawal of saver funds and premium reductions. Equally some firms observed positive impacts such as a reduction in lapses on protection business. More generally this could be categorised as a reduction in customer activity.

In 2021, many firms did not explicitly disclose details on policyholder behaviour in respect of existing business.

AXA reported that the lingering context of the COVID-19 pandemic brought about changes in the consumers' behaviour, with notably a less extensive use of personal cars due to the reduction of commutes to work and vacation travels. This increased the strong market pressure on pricing in motor individual business.

Aegon did report on changes anticipated in policyholder behaviour in relation to inflation. Specifically, that higher inflation and volatile economic growth towards the end of 2021 created uncertainty, which influences consumer behaviour. As a result, Aegon reported that it expected the risk of reduced purchasing power of households to increase and weaker demand for investment products in the years ahead.

Since year-end 2021, 2022 has seen the advent of war in Ukraine and an increase in energy prices, as well as more recently the threat of an economic recession on the horizon for many countries across Europe – for example, the Bank of England has predicted that the UK will enter a recession in late 2022[6]. Such factors may have an impact on policyholder behaviour when year-end 2022 results become available in 2023.

ASSUMPTION SETTING USED IN PROJECTIONS

Inflation also featured in the disclosures of a number of firms in our survey. Many firms reported an increase to the assumed level of future inflation made in 2021.

For example, Achmea reported changes in its noneconomic assumptions, which included increased expense inflation. These changes served to reduce Eligible Own Funds (**EOF**) at year-end 2021.

Athora Netherlands reported that it had updated its parameters for expense inflation risk, which had led to a decrease in its Solvency II ratio. However, the firm also disclosed that it had updated its model for expense inflation risk, which had led to an increase in its Solvency II ratio. Together[7], these changes led to a small decrease of the firm's Solvency II ratio.

Given current market conditions, inflation may be a significant factor impacting 2022 results. As we noted in a recent Milliman paper[8], the overall impact of high inflation on an insurer's balance sheet is complex to predict, and depends on its asset holdings and business profile. This is something we plan to come back to as it pertains to shareholder value reporting once the year-end 2022 results become available.

In respect of changes to demographic assumptions, whilst the majority of firms in our survey refer to making updates over 2021, these updates appear more typically in line with business as usual (**BAU**) processes – i.e. as experience develops or as updated industry models become available and more widely adopted, e.g. the CMI model – rather than indicative of any specific trends.

We note that, in reference to its longevity assumptions, Phoenix reports that it made no adjustments to specifically allow for the impact of climate change on annuitant mortality. The impact of climate change on assumption setting a firm's mortality basis may become more prevalent in public disclosures as discussions and, in particular, research and evidence develops in this area.

Further to this, Phoenix also disclosed that its management performed a review of expense assumptions in light of the change in strategic direction of the Group, which resulted in a decrease in expense assumptions with an impact of £200 million.

[6] Bank of England (3 November 2022). Monetary Policy Report – November 2022. Retrieved 13 February 2023 from https://www.bankofengland.co.uk/monetary-policy-report/2022/november-2022.

[7] Results for these two components were reported by Athora Netherlands separately. We have assumed an additive relationship is applicable when determining the combined impact.

[8] The Milliman report 'History repeating itself?' discusses the return of high inflation and its implications for life insurers. It can be found here: https://www.milliman.com/en/insight/history-repeating-itself-high-inflation-and-implications-for-life-insurers.

Legal & General also reported that its expense allocations and projection methodology were refined when setting the unit cost for annuities. These changes, together with updates to unit cost expense assumptions to reflect the latest expectations for future expense levels and future expense inflation, led to a c. £130 million increase in the gross and net of reinsurance BEL.

Similarly to expense inflation, we expect the level and allocation of expenses may become an area of focus for firms in light of the economic outlook for 2023 and beyond. We plan to monitor this when year-end 2022 results become available in 2023.

LONGER TERM IMPACTS ON CLAIMS PATTERNS EMERGING?

In terms of disclosures around COVID-19 in year-end 2021 results, where this has been referenced by firms in our survey it has typically focused on more short-term impacts with potential longer term impacts still an area of uncertainty.

For example, SCOR reported that the impact of COVID-19 on the firm is predominantly arising from its exposure to US mortality. Whilst the firm reported that the US experienced a surge in COVID-19 deaths in the third quarter of 2021, it also noted that encouraging signs of improvement have been observed in early 2022 and reported that the rapid deployment of COVID-19 vaccination programmes around the world is expected to enable COVID-19 related mortality to significantly decrease (even though the virus could remain endemic). The firm also reported that many uncertainties remain in particular on vaccine efficacy, vaccine roll-out (including boosters), new variants, loss of sterilising immunity and behaviour. SCOR enacted a life retrocession in-force transaction in the second quarter of 2022 which has reduced the firm's share of US mortality business by about 20%. The transaction has already illustrated reduced volatility impact from US mortality, with parts of the additional COVID-19 claims being ceded under the quota share agreement. On the other hand, SCOR reported that that COVID-19 has had a positive impact on its longevity business, and it expects this will result in lower claims payments going forward.

M&G reported a continuing increase in mortality rates in 2021 due to the COVID-19 pandemic (compared with pre-pandemic levels), with significant deaths over Q1 2021. Whilst the firm reported that higher mortality experience may be expected to continue to some extent over the short term, particularly in relation to the annuitant population, it remains uncertain and the longer-term implications for mortality rates amongst the annuitant population are unknown at this stage. The firm disclosed that, for the purpose of calibrating current mortality and improvement rates, zero weight has been given to 2020 experience in line with broader industry approach. This is an area that the firm will continue to monitor and it is expected that this will be revisited ahead of year-end 2022.

Aviva disclosed that in 2021 there has been a reduction in the BEL, net of reinsurance recoverables, of £176 million, due to changes in longevity assumptions on both individual and bulk purchase annuities. These changes included the release of its explicit COVID-19 provision.

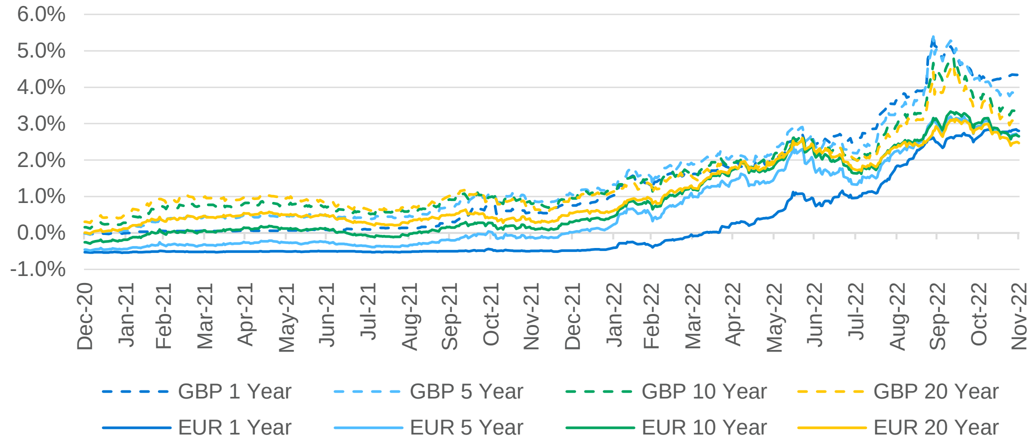
On the other hand, Legal & General reported that in 2021 total LGI[9] COVID-19 claims exceeded the prior year reserves by £79 million, and that the firm has further established a provision of £57 million for COVID-19 mortality impacts expected in 2022. Further to this, the firm disclosed that it did not recognise an explicit release from adopting CMI 2019. It reported that this was due to the uncertainty in the data created by COVID-19.

Financial markets

The volatility of the financial markets observed in 2020, mainly resulting from the uncertainty around the COVID-19 pandemic, was less pronounced in 2021. However, we note that there has been increased volatility since year-end 2021.

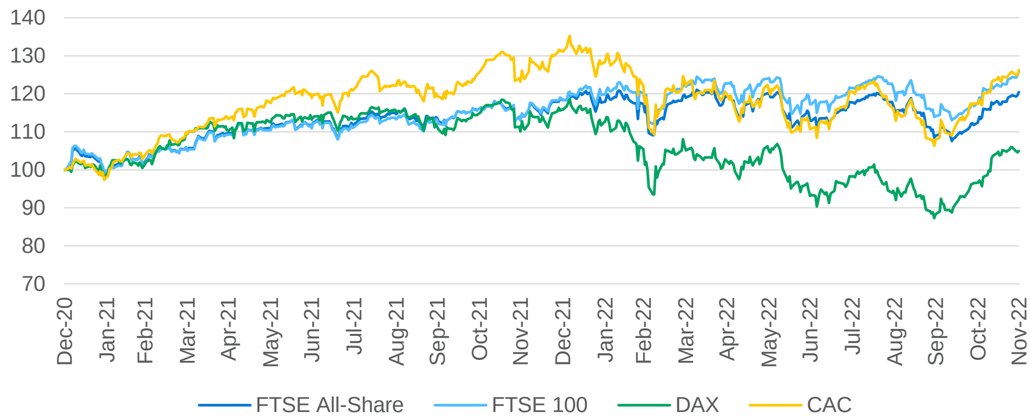
[9] Legal & General Insurance.

FIGURE 3: RECENT TRENDS IN GBP AND EUR LIBOR SWAP RATES



Source: Bloomberg

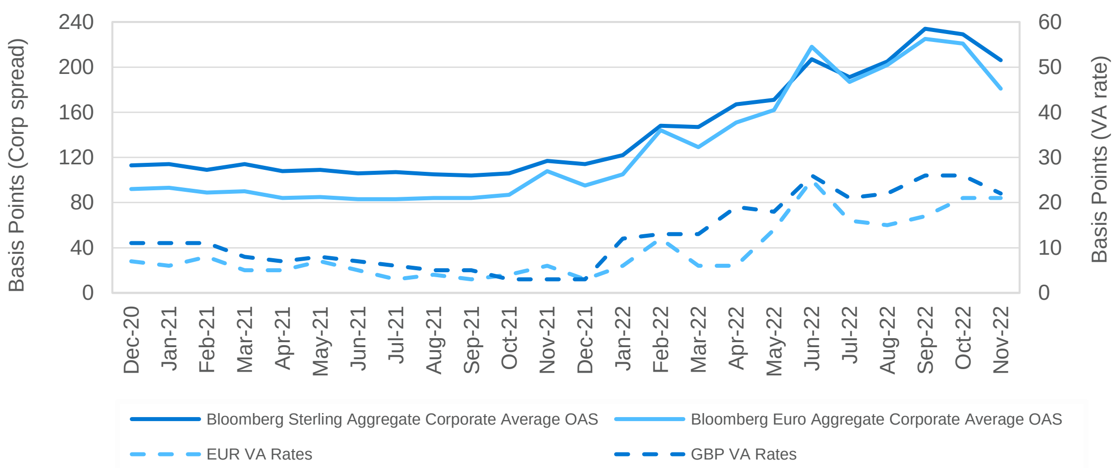
FIGURE 4: RECENT EQUITY MARKET PERFORMANCE



Source: Bloomberg

Note: Indices above are the gross total return indices and have been rebased to 100 as at 31 December 2020.

FIGURE 5: RECENT TRENDS IN CORPORATE SPREADS AND VA RATES (BPS)



Source: Bloomberg; Barclays and EIOPA

Figure 4 shows that there was a steady increase in European equity markets over the year. Firms in our survey reported that this had a largely favourable impact on their performance in 2021.

However, we note that since year-end 2021 there has been a fall in equity markets as well as increased volatility up to end November 2022. It is likely that these movements, together with the gloomy financial outlook, will impact the results of firms invested in equities. This will become apparent once year-end 2022 results become available in 2023.

In terms of interest rates, whilst noting that compared to historical levels interest rates remained persistently low over the year, there was a slight increase in rates by the end of 2021, leading to a largely positive impact on firms' performance at 2021 year-end. We note that since December 2021 rates have increased significantly and over a relatively short time period.

And finally, credit spreads shown in Figure 5 were broadly unchanged throughout 2021, although there was a slight up-tick by the end of December 2021. Firms reported differing impact of spreads depending on specific geographic regions. For example, there was a widening of government credit spreads in Italy, whereas other EU markets, as well as the US market, typically observed a narrowing of credit spreads. Since 2021 year-end there has been a widening of credit spreads.

OTHER MANAGEMENT ACTIONS (EXCLUDING THOSE RELATED TO ASSET PORTFOLIOS)

A number of companies in our sample provided detailed disclosures around specific management actions taken during 2021, other than those related to asset portfolios.

These included:

- Steering new business towards capital efficient products
- Improving asset and liability management (**ALM**)
- Achieving business synergies
- Adopting risk-mitigating measures, such as executing reinsurance transactions
- Securitisation of assets, e.g. equity release mortgages (**ERMs**)
- Other actions such as: methodology changes and other balance sheet efficiency actions.

Added to this, a number of firms in our survey also disclosed the issuance or repayment of debt over 2021.

For example, Aviva announced in March 2021 its intention to purchase up to £800 million of senior and subordinated debt securities in order to support its deleveraging strategy and redeploy the proceeds of Group disposals.

This contrasts with AXA, which announced in January 2022 the successful placement of €1.25 billion of subordinated notes due to institutional investors in 2042, to be used for general corporate purposes including the refinancing of part of its outstanding debt[10].

Athora Netherlands reported that it issued a €300 million subordinated Tier 2 capital instrument in April 2021. But in the same month it also reported that one of the Group's operating segments redeemed the outstanding €250 million of originally issued €400 million subordinated bonds due 2041. These offsetting movements meant that overall in the year the firm's subordinated debt balance had increased by around 10%.

DIVIDENDS

As noted in the 2021 Shareholder Value Report, one of the major areas where management took action as a result of COVID-19 related to the payment of dividends. This was against the backdrop of regulators, such as EIOPA, providing advice and guidance for firms to take more prudent approaches to the distribution of profits in 2020.

However, in 2021 the majority of firms in our sample were 'back on track' with respect to payments of planned dividends.

Further to this, a number of firms in our survey reported either the continuation or launch of share buyback programmes during 2021 as a complement to their dividend distribution.

[10] AXA reported that this includes the $850 million 5.5% undated subordinated notes to be redeemed in January 2022, following the notice of early redemption.

For example, Aviva announced in August 2021 a share buyback programme of £750 million in line with its strategic objective to return capital to shareholders. It announced in December 2021 the increase and extension of the share buyback programme to £1 billion.

BNP Paribas approved in September 2021 the launch of a share buyback programme of €900 million executed between November 2021 and February 2022.

And AXA approved in November 2021 the launch of a share buyback programme for up to €1.7 billion, with the intention to launch a further share buyback programme in 2022 for up to €0.5 billion.

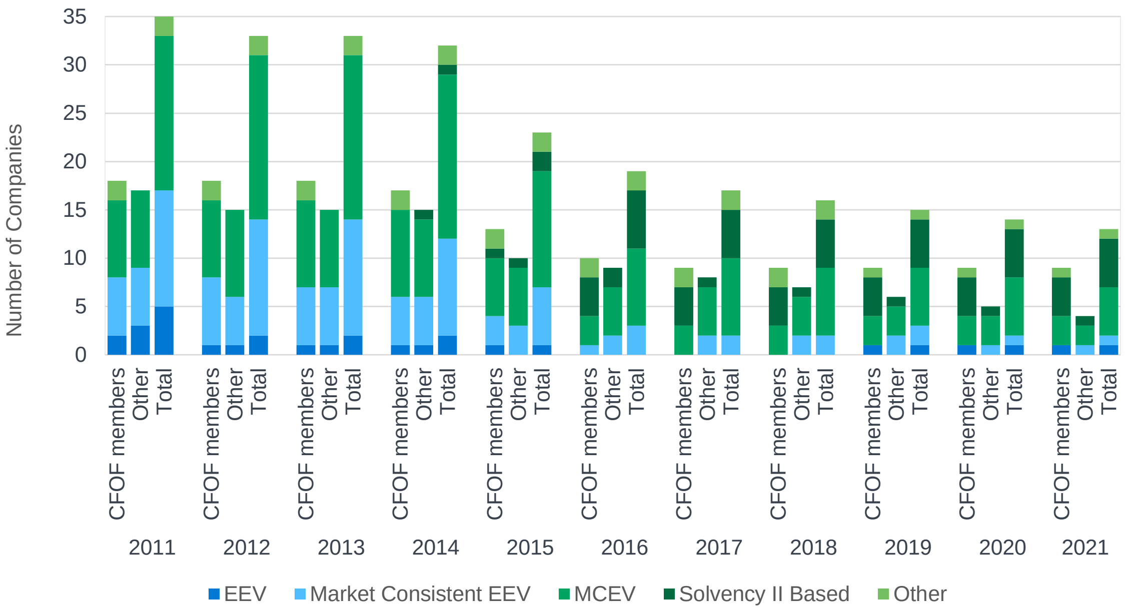
4. Year-end 2021 results

BACKGROUND

As detailed in our previous shareholder value related publications, since the implementation of Solvency II at the end of 2015 and start of 2016, there has been a decline in the number of companies in Europe publicly disclosing embedded value, although this decline seems to have stabilised in recent years.

This can be seen in Figure 6, split between CFO Forum (**CFOF**) members and 'Other' companies, and split by different bases upon which embedded value is calculated.

FIGURE 6: EMBEDDED VALUE REPORTING PRINCIPLES AT YEAR-ENDS 2011-2021



Notes:

1. Swiss Re does not report explicitly under either European Embedded Value (EEV) or Market Consistent Embedded Value (MCEV) Principles but under a framework called Economic Value Management (EVM) and has been classed as 'Other'.
2. Following the demerger of M&G from Prudential plc., Prudential reported under solely EEV Principles in 2019 (where previously it was classed as 'Other' due to adopting a market consistent approach for a specific tranche of UK business).
3. We note that Zurich no longer publicly discloses a stand-alone embedded value report at 2021 year-end, although it remains included in its annual report.

As a result of this decline in the reporting of embedded value in Europe, we have instead focused on value and capital generation disclosures in recent years.

In this section, we have focused on the value/capital generation disclosures of just over 20 companies in the European market, which span the following countries (based on their headquarters): the Netherlands, Belgium, Germany, Italy, France, the UK and Spain. In selecting these companies, we have focused on group companies and the bigger players which operate in the insurance industry in Europe. These firms are shown in Figure 7.

FIGURE 7: FIRMS CONSIDERED IN OUR SAMPLE

▪ Achmea B.V.	▪ Gruppo Unipol
▪ Aegon N.V. Group	▪ Hannover Re Group
▪ Ageas SA/NV	▪ Legal & General Group plc
▪ Allianz Group	▪ M&G plc
▪ ASR Nederland	▪ Mapfre Group
▪ Assicurazioni Generali S.p.A.	▪ Munich Re Group
▪ Athora Netherlands N.V. (previously VIVAT N.V.)	▪ NN Group N.V.
▪ Aviva plc	▪ Phoenix Group Holdings
▪ AXA Group	▪ SCOR Group
▪ BNP Paribas Cardif Group	▪ Swiss Re Group
▪ Groupe CNP Assurances	▪ VidaCaixa[11]
▪ Groupe Groupama	▪ Zurich Insurance Group

Following on from the 2020 Shareholder Value Report, this section of the paper is split into three parts:

- A recap on the Solvency II related metrics (other than the level of Solvency II Own Funds or Solvency II Coverage Ratio) that companies in our sample chose to disclose in their supplementary disclosures as at year-end 2019 (covered in our previous report)
- Whether the approach adopted by firms in our sample has changed from year-end 2020 to year-end 2021
- A look at the movement in the disclosed metric over the year and, where possible, provide a discussion of common themes for evolution of the metric over 2021, including:
  - Operational impacts
  - New business
  - Market movements
  - Management actions
  - Dividends/capital management.

As part of this research the main sources of information for each company were the company's annual report, analyst presentations or other investor communications and its Solvency and Financial Condition Report (**SFCR**).

SOLVENCY II RELATED METRICS DISCLOSED BY COMPANIES IN OUR SAMPLE

In the 2020 Shareholder Value Report, we observed that companies have started to disclose Solvency II earning metrics such as 'Solvency II Capital Generation'. However, 'Solvency II Capital Generation' remains a nonstandard term, and as at year-end 2019 many of the companies in our sample disclosed similar metrics with various names and slightly varying definitions.

Figure 8 shows four potential capital generation metrics which we have defined, although we note that none of our sample of companies disclosed 'Own Funds Generation' as a key Solvency II based earnings metric, possibly because it may be considered more of a solvency metric.

[11] VidaCaixa, S.A.U. de Seguros y Reaseguros y Sociedades Dependientes (**VidaCaixa**).

FIGURE 8: POTENTIAL CAPITAL GENERATION METRICS

Capital Generation Metrics	Full Amount	Part of Amount
No Allowance for SCR	Own Funds Generation	Normalised Capital Generation
Allowance for SCR	Free Capital Generation	Operating Capital Generation

The definition of these terms can be found in the 2020 Shareholder Value Report, but in brief:

- **Normalised Capital Generation**: Relates to the change in the level of Solvency II Own Funds that is related to BAU activities and factors which can be controlled or influenced by management over the reporting period. The associated impact on capital requirements, i.e. the Solvency Capital Requirement (**SCR**) is not considered.
- **Free Capital Generation**: Relates to the change in the level of Solvency II Own Funds over and above the SCR, over the reporting period. The level of capital may or may not include a target buffer in line with the company's risk appetite or capital management policy. Where this buffer is included, this metric may indicate the increase in the amount of capital over the period that could be paid out as a dividend.
- **Operating Capital Generation**: Combines parts of both 'Normalised Capital Generation' and 'Free Capital Generation'. That is, the change in the level of Solvency II Own Funds over and above the SCR that is related to BAU activities and factors which can be controlled or influenced by management, over the reporting period. As with 'Free Capital Generation', the level of capital may or may not include a target buffer in line with the company's risk appetite or capital management policy.

UPDATE ON APPROACH TAKEN BASED ON YEAR-END 2021 DISCLOSURES

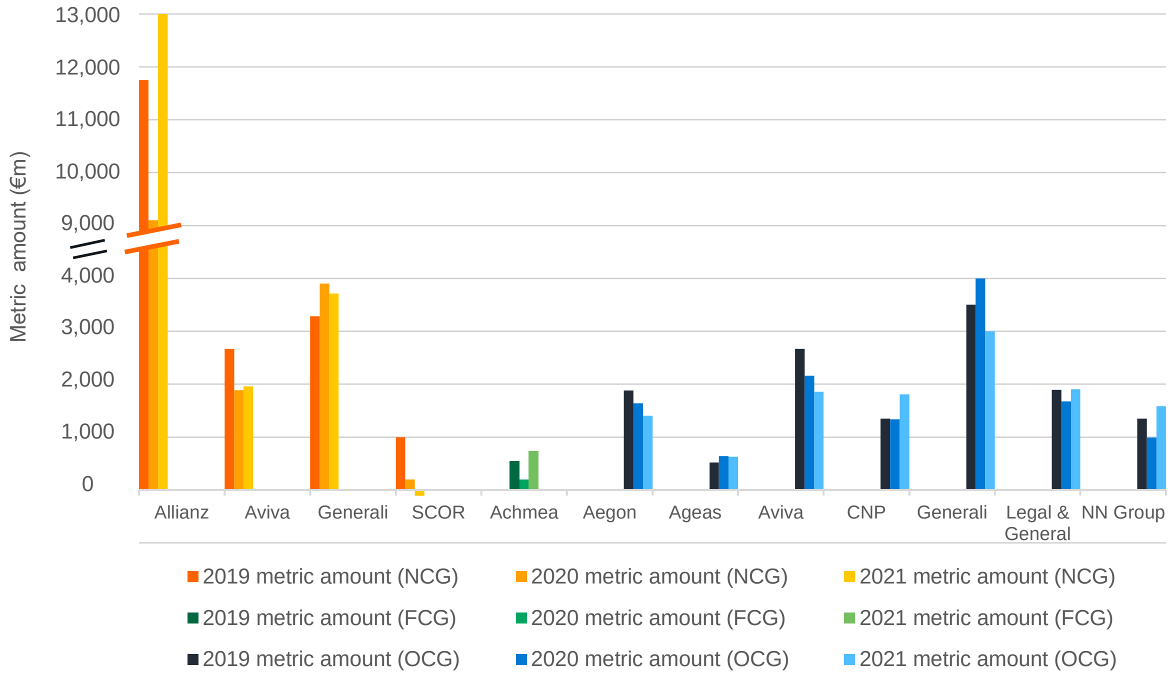
In the 2020 Shareholder Value Report, we set out the approaches taken by firms in our sample at year-end 2019. Having reviewed year-end 2021 disclosures, we have found there to be no material changes in the approach adopted by companies in our sample over 2021.

We note that, for our sample of companies, the level of disclosure at year-end 2021 remains greatest for companies headquartered in the Benelux region as well as a number of those headquartered in the UK.

RESULTS AT YEAR-END 2021

In Figure 9, we consider the disclosed metric over the year across our sample companies. The companies have been grouped into the three categories of capital generation metric as set out in Figure 8.

FIGURE 9: METRIC AMOUNT (IN EUR M) DISCLOSED AT YEAR-END 2019, YEAR-END 2020 AND YEAR-END 2021



* For Generali's operating capital generation (in blue), we have backsolved the result shown for 2021.

Notes:

1. The abbreviations in Figure 9 are as follows: Normalised Capital Generation (NCG); Free Capital Generation (FCG); Operating Capital Generation (OCG).
2. Whilst Allianz did not disclose an amount of its OCG metric as at 31 December 2020, it did disclose that the metric had reduced in size by 12% at year-end 2020, compared with the year-end 2019 amount.
3. SCOR disclosed that its year-end 2021 metric, excluding the impact of COVID-19, amounted to €344 million. However once the impact of COVID-19 was included, this reduced by €452 million, to give an overall metric amount of -€108 million. This compares to its year-end 2020 metric, including the impact of COVID-19 (of €615 million), of €200 million and an amount as at year-end 2019 of €996 million, respectively.

Considering the data as a whole, we see that experienced was mixed in 2021 compared with 2020. Roughly half of the firms observed an increase in the amount of their capital generation metric over the year, with the other half observing a reduction. For those reporting a reduction in the level of capital generated, we observed this to be typically in the range of -2% to -15%.

With respect to Generali's normalised capital generation metric (shown in orange in Figure 9), whilst the firm observed a growth of the Life business contribution in 2021, this was offset by the contribution from the Holdings and Financials segment, which includes interest costs on subordinated debt, and from the Non-Life technical result which was smaller than in 2020. In terms of Generali's operating capital generation (in blue), rather than disclosing the value of this metric in 2021, the firm disclosed instead that it had overachieved its 2019-2021 goal of having a cumulative capital generation of greater than €10.5 billion. In the absence of any further granularity, the value shown in Figure 9 for this firm has been backsolved using this data, but could actually have been greater.

In the case of Aviva's operating capital generation (in blue), the firm reported that the reduction was largely as a result of discontinued operations, due to disposals in 2020 and 2021, and its operating capital generation from continuing operations increasing by 9%.

In nearly all cases, the metric remained positive in each year considered. The only exception to this is SCOR in 2021. In its disclosures, SCOR explicitly reports the impact of COVID-19 on its operating capital generation (see Figure 9, note 3 above). Excluding this component, the firm's operating capital generation would have been positive in 2021.

In the next subsection, we consider a breakdown of the movement in Own Funds over 2021, which is a piece of information disclosed by most firms in our sample.

BREAKDOWN OF THE MOVEMENT IN OWN FUNDS OVER 2021

In the 2020 Shareholder Value Report, we proposed an 'ideal' breakdown in Solvency II earnings metrics to help explain the key drivers of a firm's performance. This is shown in Figure 10, which has been reproduced from the 2020 Shareholder Value Report.

FIGURE 10: SUGGESTED IDEALISED TEMPLATE FOR THE BREAKDOWN IN CAPITAL GENERATION METRIC

1.	Opening adjustments
2.	Existing business contribution, split into:
	a. The expected real-world return[12] on assets in excess of the BEL
	b. The expected real-world spread[13] on assets backing the BEL (including the impact on the BEL)
	c. The impact of the unwinding of the Ultimate Forward Rate (**UFR**) / UFR drag
	d. The release of the Risk Margin (on existing business)
	e. The impact of run-off of the Solvency II transitionals (on existing business)
3.	New business contribution
4.	Impact of management actions (typically relating to actions taken with respect to the SCR such as reinsurance, hedging etc.)
5.	Financing costs
6.	Changes to operating / non-economic assumptions
7.	Operating / non-economic experience variances (where the variances are with reference to the expected return/spread levels in 2a and 2b above)[14]
8.	Changes to non-operating/economic assumptions, including UFR, VA etc.
9.	Non-operating / economic experience variances
10.	Other items, including tax, holding company expenses, pension scheme impacts, merger and acquisition activity, portfolio and business transfers[15]
11.	Capital management, such as the issuance and repayment of debt, share buybacks and dividends
12.	Closing adjustments

Based on the information disclosed by firms in our sample, it has not been possible to fill out this 'ideal' breakdown. Instead, in Figure 11 we set out a breakdown of the movement in Own Funds over 2021 for companies in our sample on an aggregate basis in order to identify which factors had the most material impact and potentially also the most widespread impact across firms split into the following 'higher-level buckets':

- Model changes
- Operational impacts
- New business
- Management actions
- Market impacts
- Other miscellaneous items
- Capital management (which includes payment of dividends).

Given the non-standardised nature of the disclosures around the movement in Own Funds across firms in our sample, a number of simplifications and judgements have been required to be made to arrive at the breakdown in Figure 11. However, in spite of these adjustments we think that the analysis provides a useful insight into the key drivers of firms' performance over 2021.

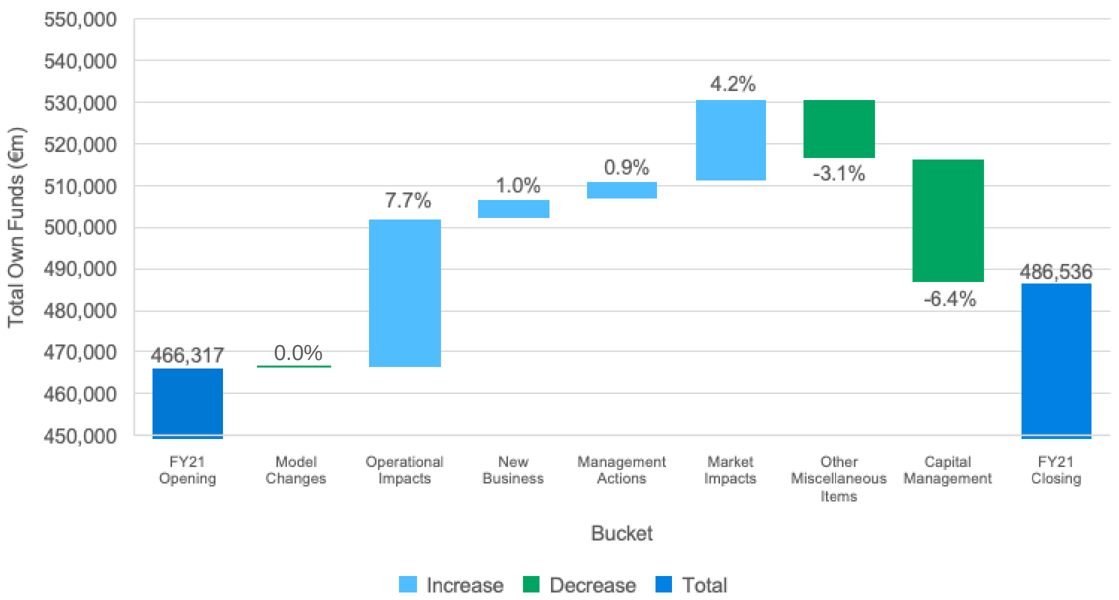
[12] If possible, details of the expected real-world returns assumptions should be disclosed.

[13] This expected real-world spread is the expected return over the risk free rate used in the calculation of the BEL so would include the volatility adjustment and matching adjustment, if they are relevant for the company.

[14] Some companies (and even the PRA) have suggested grouping the impact of changes in operating assumptions and operating variances into one source but we believe that splitting them out, where possible, provides useful additional information.

[15] Shareholder transfers from with-profits funds may also be included for companies with participating business.

FIGURE 11: AGGREGATE EVOLUTION OF OWN FUNDS OVER 2021 FOR COMPANIES IN OUR SAMPLE (EUR M)



Note:

1. The majority of firms included in Figure 11 report results in euros. For the handful of other firms we have converted results as at 31 December 2021 using publicly sourced exchange rates which may introduce small currency differences.

It should be noted that the results shown in Figure 11 reflect a weighted average approach, i.e. firms in our sample which have a larger Own Funds amount (and hence potentially may have a larger contribution to the high-level buckets) have a greater weight in the results compared to those firms which may have a smaller (relative) amount of Own Funds.

Figure 11 shows that total capital generation as measured by growth in Own Funds over the year, after capital distributions such as dividends and subordinated debt repayments, was 4.3%.

The sections below provide further details of the items reported by companies in our sample in each of the categories listed above.

COMMON THEMES FOR BREAKDOWN OF THE MOVEMENT IN OWN FUNDS OVER 2021

Model changes

In our categorisation this includes both model and methodology changes. Achmea, Aegon and Swiss Re reported changes in this area which had a nontrivial impact and disclosed a further level of granularity.

Achmea made two changes in its methodology with regard to the inclusion of Capital Requirements Directive (**CRD**) entities (i.e. Achmea Bank) in the solvency information of the company. Furthermore, in September 2021, De Nederlandsche Bank (**DNB**), the Dutch Central Bank, issued a good practice document and Q&A related to the treatment of mortgage saving products under Solvency II. Using these documents, Achmea reclassified and remeasured the elements related to the mortgage saving insurance contracts, which had a negative impact on Eligible Own Funds (i.e. served to reduce EOF).

Aegon reported model and assumption changes from the impact of the annual lowering of the ultimate forward rate (UFR) from 3.75% to 3.60%, as well as positive model and assumption changes driven by an increased loss absorbing capacity of deferred taxes (**LACDT**) factor for Aegon Levensverzekering N.V. (NL Life).

Swiss Re reported that one major model change had been implemented in respect of inflation risk. More specifically, the firm reported that its model had been improved to capture this risk more comprehensively. The impact of this change served to increase the firm's available capital.

Operational impacts

The following components could be included under ‘Operational impacts’:

- The impact of the unwinding of the UFR / UFR drag
- The release of the RM (on existing business)
- The impact of run-off of the Solvency II transitionals
- Changes to operating / non-economic assumptions
- Operating / non-economic experience variances (where the variances are with reference to the expected real-world return/spread levels)[16].

It would be most useful for firms to provide some indication of the level of capital generation that arises ‘naturally’ from the existing business on the balance sheet at the start of the period. The majority of firms in our sample did not disclose this level of granularity when reporting the breakdown of movement in Own Funds. Therefore, the ‘Operational Impacts’ category includes other items such as non-economic experience variances and non-economic assumption changes.

Overall ‘Operational impacts’ contributed a 7.7% increase in Own Funds over 2021. Section 5 of this report sets out how this result compares to that experienced in the last few years.

Of the firms in our sample, Generali presented the greatest level of granularity. It disclosed the following items in its movement analysis, which we have categorised as operational impacts:

- Normalised Own Funds generation (split between Life, Non-Life, and Holdings & Financials)
- Operating non-economic variances
- Other non-economic variances.

The total amount of normalised Own Funds generation meant that in aggregate operational impacts provided a positive contribution in Generali’s movement of Own Funds during 2021.

In its year-end 2020 disclosures, Phoenix also presented an increased level of granularity compared with other firms in our sample. However, in its year-end 2021 disclosures the firm has presented one item in its analysis of movement in EOF which relates to operational impacts. This may be due to one component, e.g. the movement in RM and Transitional Measure on Technical Provisions (**TMTP**), significantly outweighing the other items previously included which comprised: demographic experience variances (including changes to assumptions), and non-life earnings, or may be a move by the company to be more aligned with the presentation of this aspect by other firms in the market.

The majority of firms in our sample disclosed a positive contribution to Own Funds as a result of operational impacts, but it was negative for a handful of firms.

For SCOR, this item includes the impact of COVID-19. This reflects post 2020 updates for all excess claims currently expected by the firm which has served to reduce its EOF.

Achmea reported a negative contribution from changes to non-economic assumptions which served to outweigh the contribution from other items in this category. The firm reported that the developments in the non-economic assumptions were related to the revision of the inflation curve, revised expense assumptions, an adjustment in mortality assumptions, lapse assumptions and subsequent diversification effects.

[16] Considering the impact of each of these components (in isolation) on Own Funds: the impact of the unwinding of the UFR / UFR drag and the impact of the run-off of the Solvency II transitionals would be expected to reduce Own Funds; the release of the RM would be expected to increase Own Funds; and, changes to operating / non-economic assumptions and operating / non-economic experience variances could serve to either increase or reduce Own Funds.

New business

This category reflects the impact on Own Funds of writing new business over 2021.

Overall ‘New business’ contributed a 1.0% increase in Own Funds over 2021 from the opening position.

A number of firms in our sample reported new business included as part of a wider item in its movement in Own Funds. Where the firm also separately disclosed its value of new business, we have deducted this amount from the relevant item in our analysis (typically ‘Operating Impacts’) in order to more accurately reflect the firm’s contribution in Figure 11.

As discussed in Section 3 of this report, although the majority of firms in our survey reported an increase in new business levels over 2021 compared with 2020, a number of them also reported a reduction in new business value margins i.e. business being written in 2021 is less profitable compared with that written in 2020.

However, for all firms considered in Figure 11 (except Phoenix), this category provided a positive contribution to Own Funds.

In the case of Phoenix, the firm reported that the new business result was primarily driven by the Bulk Purchase Annuity transactions completed. It includes a recognition of the Risk Margin and reflects the assets received on day 1.

Management actions

A number of companies in our sample provided detailed disclosures around specific management actions taken during 2021.

Overall ‘Management actions’ contributed a 0.9% increase in Own Funds over 2021 from the opening position.

Allianz disclosed that it adopted risk-mitigating measures including, but not limited to, life back-book reinsurance transactions in the US, Switzerland and France. The most notable reinsurance transactions were those by Allianz Life US. This component reflects around 80% of the total contribution by all firms to movement in Own Funds from management actions.

Other management actions which Allianz disclosed adopting during 2021 (which were also adopted in 2020) included:

- Steering new business towards capital efficient products
- Reducing the average guarantees in its new traditional business to -0.19%, which has resulted in a reduction of the average guarantees of its in-force from 1.85% in 2020 to 1.76% in 2021
- Introducing products with less dependency on market interest rates, with a view to reducing interest rate sensitivity
- Increasing pricing agility
- Improving asset and liability management (ALM).

The impact of some of these items may be reflected elsewhere in the analysis e.g. new business, rather than under this category.

Phoenix Group implemented a number of management actions in 2021. Specifically, it disclosed that it undertook:

- Integration synergies: internal model harmonisation of two legacy models and associated actions.
- Origination activity to source illiquid assets, which delivered a closer matching of cash flows for its annuity business.
- Asset risk management: included no-negative-equity guarantee hedging and credit risk management actions.
- Credit rating upgrade: reduction in SLIntl[17] counterparty risk exposure to Standard Life Assurance Limited (SLAL) following a credit rating upgrade by Fitch Ratings of the Phoenix Group in July 2021.
- ERM securitisation: securitisation of equity release mortgages into special purpose vehicles (**SPV**) to allow inclusion in a matching adjustment fund.
- Other actions such as: methodology changes and other balance sheet efficiency actions.

[17] Standard Life International - Milliman (January 2021). EIOPA Opinion on the Solvency II 2020 Review. Milliman Briefing Note. Retrieved 13 February 2023 from https://www.milliman.com/-/media/milliman/pdfs/2021-articles/1-11-21-sii-2020-eiopa-opinion.ashx.

Market impacts

The following components could be included under 'Market impacts':

- Expected real-world return on assets in excess of the BEL
- Expected real-world spread on assets backing the BEL (including the impact on the BEL)
- Changes to non-operating/economic assumptions, including the impact of any changes to Solvency II parameters provided by EIOPA such as the UFR or VA
- Non-operating / economic experience variances.

As discussed in Section 3, the majority of firms observed a positive impact on their Own Funds over 2021 owing to market movements over the year. However, a handful of firms did disclose a negative contribution arising from market impacts over 2021. Overall 'Market impacts' contributed a 4.2% increase in Own Funds over 2021.

The majority of firms in our sample disclosed market impacts aggregated under one item, except for AXA, Allianz and Swiss Re.

In the case of AXA, it split out market impacts between: equity and real estate performance; interest rates; change in inflation rates; and currency impacts. Allianz split market impacts between: foreign exchange (FX) movements; interest rates and credit spreads; and other economic changes. Finally, Swiss Re broke down this component of the analysis into: economic earnings and 'interest rate, volatilities and FX impact'.

Other miscellaneous items

In our categorisation this includes such items as: tax, holding company expenses, pension scheme impacts, merger and acquisition activity, and portfolio and business transfers.

For example, Munich Re and Achmea disclosed an item in their movement analyses of Own Funds over 2021 in respect of a change in eligibility restrictions which served to impact Own Funds at year-end 2021. For Munich Re this item served to reduce Own Funds, whereas the change increased Achmea's Own Funds at year-end 2021. This is not really a source of capital generation itself and more an adjustment to the level of Own Funds that can be recognised for solvency purposes.

This category has been materially impacted in 2021, due to Allianz's mergers and acquisitions (**M&A**) activity over the year – specifically the acquisition of Aviva Poland and Allianz Australia General Insurance Limited (formerly Westpac) – as well as a provision for the AllianzGI US Structured Alpha matter, without an offsetting tax impact in Group Own Funds due to transferability restrictions. Removing these items would change the contribution from a -3.1% decrease in Own Funds over 2021, from the opening position, to a -1.9% decrease.

Ageas and Aegon disclosed exceptional and one-time items, respectively, which we have included in this category. Ageas reported that this item related to the impact of exceptional weather events, whereas Aegon reported that one-time impacts were driven by updates to the regulatory factors that determine required capital, and the impact of actions taken to reduce mortality risk.

Capital management

In our categorisation this includes capital management actions such as the issuance and repayment of debt, share buybacks and payment of dividends, as well as the payment of financing costs (such as interest on outstanding debt).

For Aviva and Phoenix, this item also includes corporate centre costs and, corporate and head office costs incurred in the year, respectively. In the case of Aviva this was aggregated with other debt costs, whereas Phoenix's disclosures allowed this item to be quantified separately from its debt interest and dividend costs. Both firms reported, in aggregate, that this category provided a negative contribution to the movement of Own Funds during 2021.

Overall, the majority of firms did not make reference to the issuance of new debt over the course of 2021, which would lead (all else being equal) to an increase in their solvency ratios. Allianz did refer to the 'net impact from the issuance, repurchase and redemption of subordinated debt in 2021', but we note that this impact was negative and hence served to reduce Own Funds.

As noted in our 2021 Shareholder Value Report, based on information disclosed by late 2021 the majority of firms in our sample were 'back on track' with respect to payments of planned dividends. Typically firms only tend to propose future dividend payments up to six months before the planned payment date, and therefore it is difficult to make a judgement on whether firms have 'caught-up' on dividend payments in late 2021 and 2022 – which were previously planned for 2020 distribution e.g. due to previous guidance by regulators, such as EIOPA, to adopt a more prudent approach to the distribution of profits in 2020 no longer applying in 2021 – or whether payments made in late 2021 and 2022 represent a 'new normal'. We consider in Section 5 the contribution of capital management to the movement in Own Funds reported each year by firms in our survey over the last four year-ends, which includes the consideration of dividend payments.

5. Comparison of experience over recent years

In this section we expand on the movement in Own Funds analysis set out in Section 4, which looked at the breakdown in isolation over 2021. More specifically, we have considered how results over 2021 compare with recent years.

Although Solvency II was implemented on 1 January 2016, the level of disclosures as well as the quality of disclosures by firms in our survey has greatly increased since year-end 2016 and year-end 2017. In particular, providing a breakdown of the movement in Own Funds was far less common in year-end 2016 disclosures for firms in our survey compared with year-end 2021 disclosures, where it has now become more commonplace. Furthermore, the level of granularity within the movement of Own Funds has increased in more recent years compared with earlier analyses at year-ends 2016 and 2017.

As a result, in expanding our analysis to include previous years' experience we have limited it to considering year-end 2018 to year-end 2021, so that nearly every firm included in our survey disclosed a breakdown of Own Funds for each year. This makes the expanded analysis more robust in that it is not unduly influenced by changes in the number of firms being included year-on-year.

Figure 12 shows the number of firms included in each year's analysis. The criteria determining whether a firm has been included is solely based on whether a firm discloses a sufficient level of detail in its public disclosures i.e. a movement in Own Funds over the year of sufficient granularity.

FIGURE 12: NUMBER OF FIRMS INCLUDED IN MOVEMENT IN OWN FUNDS ANALYSIS

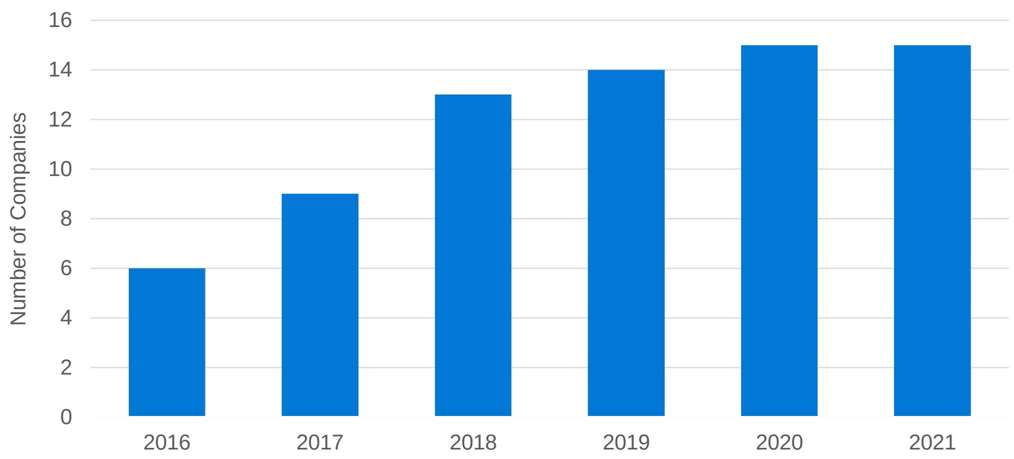
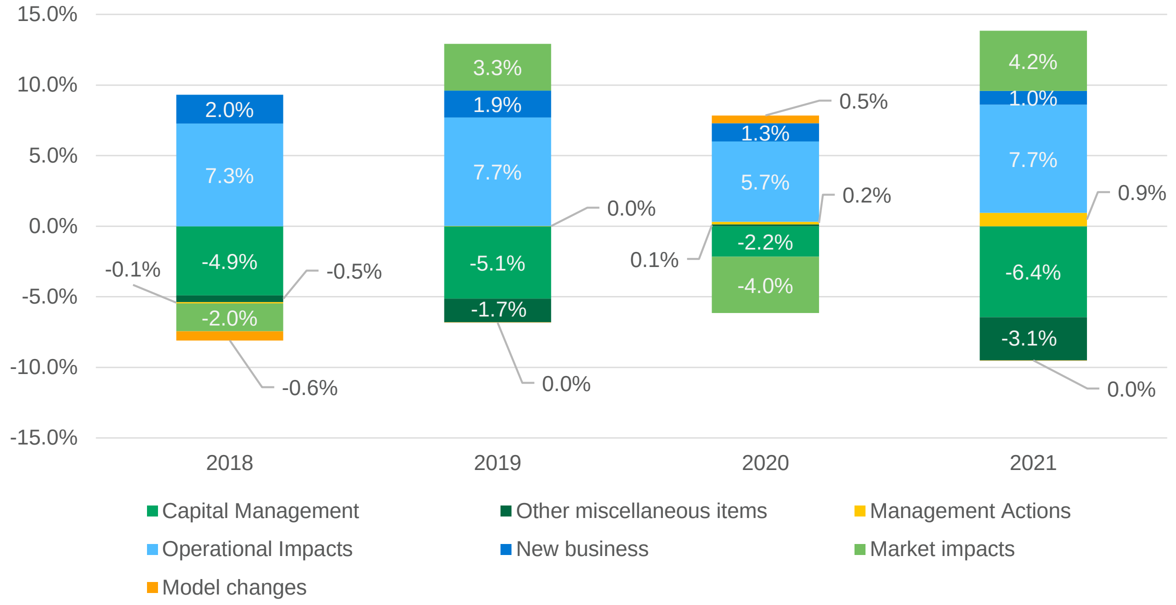


Figure 13 shows the combined results for year-end 2018 to year-end 2021, split according to the seven 'high-level buckets' set out in Section 4.

FIGURE 13: EVOLUTION OF CAPITAL GENERATION DRIVERS



Looking at the results over the four years:

- **Operational impacts**: The contribution to the movement in Own Funds from this item seems broadly stable year-on-year. The exception to this is 2020, which may be as a result of COVID-19. For example, the impact of COVID-19 has been explicitly disclosed by SCOR and has been included in its contribution to operational impacts (see Note 3 to Figure 9).
- **New business**: Before COVID-19 this item was positively contributing around 2% to the movement in Own Funds over the year. As discussed in our report last year, the pandemic led to many firms reporting a reduction in new business volumes in 2020 and, as mentioned in Section 4, whilst a number of firms have reported an increase in new business volumes in 2021, a number of them conversely reported a reduction in new business value margins i.e. business being sold is less profitable than previously, thus impacting its contribution to the movement in Own Funds observed in 2021.
- **Market impacts**: Over the last four years, the observed impact fluctuations seem broadly in line with market performances for each year i.e. 2018 and 2020 markets typically performed poorly or were volatile, whereas 2019 and 2021 were more stable or showed signs of recovery compared with the prior year.
- **Capital management**: This item was broadly stable over the four-year period, except for 2020. As discussed in our report last year, the emergence of COVID-19 at the beginning of the year impacted the payment of dividends over 2020 and also resulted in a number of firms issuing new debt over the course of the year. Many firms chose to either suspend dividend distributions or postpone or reduce the dividend amount paid out compared with the originally declared amount, in light of regulators (such as EIOPA) providing advice and guidance for firms to take more prudent approaches to the distribution of profits in 2020. With such guidance no longer applying in 2021, the contribution from Capital Management in 2021 has reached a higher level than what was observed in 2018 and 2019. This may be due to postponed dividends from 2020 eventually being paid in addition to the dividend payments in respect of 2021.
- **Management actions**: Whilst the impact from this item is variable year-on-year, overall it has a small impact each year. In 2021 the contribution from this item was more material to the movement in Own Funds, mainly due to the contribution from Allianz. The result for 2021 was discussed further in Section 4.
- **Model changes**: Whilst the impact from this item is variable year-on-year, overall, it has a small impact each year.
- **Other miscellaneous items**: The impact from this item is variable year-on-year. This may be expected given that this category includes M&A activity. Whilst typically it has a relatively small impact each year, in 2021 the contribution from this item was more material to the movement in Own Funds. The result for 2021 was discussed further in Section 4.

Based on results shown in Figure 13, we have calculated the implied total return 'pre-dividend' and 'post-dividend' in Figure 14. The 'pre-dividend' return has been calculated including all items set out in Figure 13, except for the effect of capital management. This has been assumed to be a proxy for a pre-dividend position. The 'post-dividend' return has been calculated including all seven items, i.e. including capital management.

FIGURE 14: TOTAL RETURN IMPLIED BY CAPITAL GENERATION DRIVER ANALYSIS

TOTAL RETURN	2018	2019	2020	2021
'Pre-dividend'	6.1%	11.2%	3.8%	10.8%
'Post-dividend'	1.2%	6.1%	1.7%	4.3%

The implied 'pre-dividend' total return varies over the four-year period considered, with the volatility arising largely from the contribution of market impacts.

As mentioned in Section 4, there are elements of the movement in Own Funds which are anticipated and those which are unanticipated.

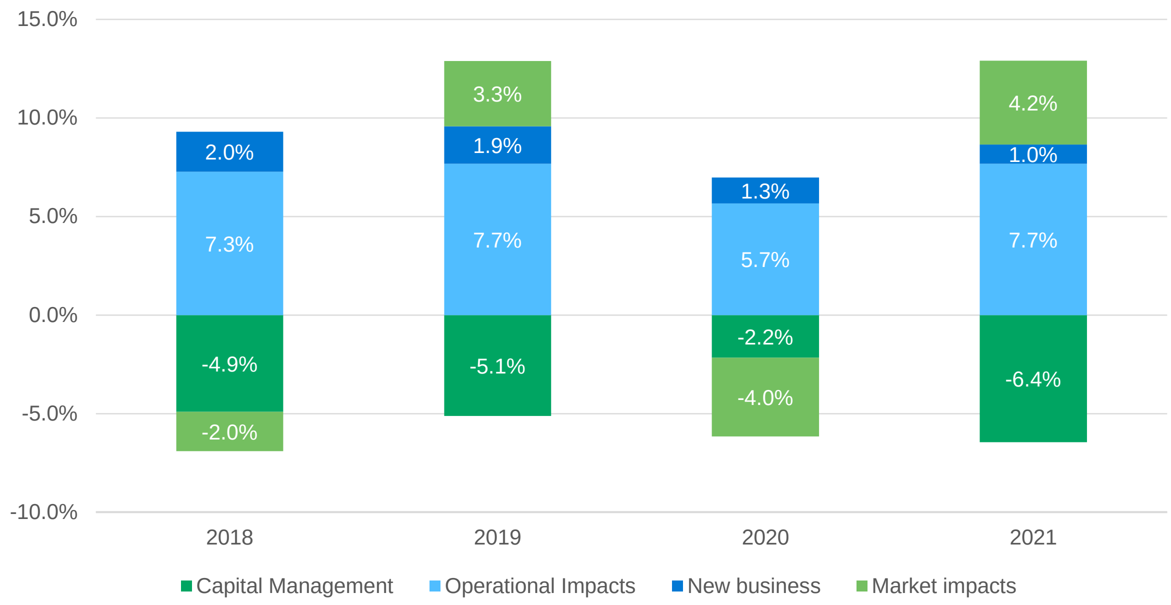
In terms of the seven 'high-level buckets' set out in Section 4, Figure 15 shows the judgement we have made.

FIGURE 15: CATEGORISATION OF HIGH-LEVEL BUCKETS INTO ANTICIPATED VERSUS UNANTICIPATED

CATEGORY	ANTICIPATED / UNANTICIPATED?	REASONING
Model changes	Unanticipated	Typically modelling changes are not anticipated year-on-year
Operational impacts	Anticipated	A contribution from the operations of existing business to Own Funds would be anticipated
New business	Anticipated	If a firm is open to new business, some contribution to Own Funds would be anticipated
Management actions	Unanticipated	Typically all of the actions taken by management throughout the year cannot be anticipated at the start of the year
Market impacts	Anticipated	Although the exact impacts will be unknown at the start of the year, a contribution from market movements would be anticipated
Other miscellaneous items	Unanticipated	Typically miscellaneous items are not anticipated year-on-year
Capital management	Anticipated	Although some components of capital management may be unanticipated, there may be some that can be anticipated e.g. payment of dividends

Figure 16 shows the results, as shown in Figure 13, but only for the anticipated items (as classified in Figure 15).

FIGURE 16: EVOLUTION OF CAPITAL GENERATION DRIVERS FOR ANTICIPATED ITEMS



Based on these four 'anticipated' drivers, we have considered whether the 'dividend payout' can be estimated as a function of the earnings made over the year i.e. considering the capital management driver as a function of the other three drivers.

Looking at results for 2018 and 2019 in Figure 16, the results for the two years are very similar for each driver, except for the market impacts driver. This suggests that market impacts may have a limited bearing on the level of dividend being paid out.

Based on results shown in Figure 16, we have calculated a payout ratio as: Capital management contribution / (Operational impacts + New business) i.e. ignoring market impacts. In using this approach, the effect of capital management has been assumed to be as a proxy for the payment of dividends.

In addition, we have considered the expected capital generation based on the back-book alone i.e. ignoring new business. In considering this metric we looked at what 'one-off' items could be removed from the 'Operational impacts' bucket, along with market returns over the period, to derive an estimate. In adopting this approach we recognise that there is a high degree of subjectivity as well as limitations given the level of disclosure of firms' results, which also varies across firms in our survey. Results for these metrics are shown in Figure 17.

FIGURE 17: PAYOUT RATIO AND EXPECTED CAPITAL GENERATION BASED ON BACK-BOOK

ITEM	2018	2019	2020	2021
Payout ratio	53%	54%	31%	74%
Expected back-book capital generation	8.8%	9.5%	8.0%	10.4%

Results in Figure 17 show that, over the four-year period considered, the payout ratio is around 50% if we average the results in 2020 and 2021, which serve to offset each other. As mentioned above, it is expected that the emergence of COVID-19 and the subsequent after-effects have served to impact the ratios in 2020 and 2021 i.e. the extra restrictions that were placed on firms in terms of paying dividends in 2020, which were lifted by year-end 2021. This will become clearer as more data becomes available e.g. year-end 2022 results. We aim to monitor this going forward.

In addition, the expected capital generation based on the back-book varies from around 8.0% to 10.5% over the four-year period. It seems like high single digits or low double digits may be the norm. However, looking to the future, this may change due to the economic environment and if solvency rules change (e.g. in light of the Solvency II 2020 Review and/or the HMT review).

6. Regulatory developments

In this section, we provide a brief summary of recent regulatory developments, focusing mainly on how they may shape shareholder value reporting going forward. More specifically, we consider:

- EIOPA's Solvency II 2020 Review
- Reviews by the UK Government, in particular HM Treasury (HMT), and the PRA, of the current application of Solvency II in the UK.

Lastly, we shall consider developments in IFRS reporting and International Capital Standards (ICS).

We note that these topics are more generally considered in other Milliman papers and shall indicate where this is the case.

Solvency II 2020 Review

The Solvency II 2020 Review process is now well under way.

Whilst we note that firms domiciled in the UK will not be bound by the outcome of this review, UK-based firms which form part of an EU-based Group will need to provide results on a Solvency II basis to the Group and, as a result, the outcome of this review process will be relevant to such firms. Any divergence in approach in the final outcome between the Solvency II 2020 Review and HMT/PRA reviews, e.g. in the calculation of the Risk Margin, may introduce added complexity for such firms.

In December 2020, EIOPA published its opinion on the Solvency II 2020 Review. Milliman produced a briefing note summarising EIOPA's proposals, entitled 'EIOPA Opinion on the Solvency II 2020 review'[18].

Following this, in September 2021 the European Commission (EC) announced its proposals to reform Solvency II[19].

Over the summer of this year, as part of the legislative procedure, the European Parliament – a rapporteur[20] as well as other Members of the European Parliament (MEPs)[21] – and the Council of the European Union[22] have provided their first response to the suggested reforms from the EC.

As one might expect, given the number of parties involved, the views of the parties differ in a number of areas. We note that, at the time of writing, negotiations are ongoing. As a result, there is no view on the changes that will come into effect as a result of the review.

Milliman has produced a briefing note[23] which details the current publicly disclosed views of the parties involved with respect to four key topics. Namely:

- The extrapolation of the risk free interest rate curve
- The (dynamic) Volatility Adjustment (VA)
- The Risk Margin (RM)
- Sustainability.

[18] Milliman (January 2021). EIOPA Opinion on the Solvency II 2020 Review. Milliman Briefing Note. Retrieved 13 February 2023 from https://www.milliman.com/-/media/milliman/pdfs/2021-articles/1-11-21-sii-2020-eiopa-opinion.ashx.

[19] More information about the proposed amendments by the EC is available at: https://finance.ec.europa.eu/publications/insurance-rules-review-encouraging-solid-and-reliable-insurers-invest-europes-recovery_en.

[20] On 6 June 2022, The European Parliament's rapporteur on the Solvency II reform has published a draft report concerning the EC's proposal, which is available at: https://www.europarl.europa.eu/doceo/document/ECON-PR-732668_EN.pdf. Markus Ferber is the rapporteur of the European Parliament for the update of the Solvency II Directive.

[21] On 1 August, other Members of the European Parliament published three documents with over 600 amendments to the EC's proposal, which is available at: https://www.europarl.europa.eu/committees/en/econ/documents/latest-documents.

[22] On 17 June 2022, the Council of the European Union published its position (General Approach) on the Commission's proposal for the Solvency II Directive, which is available at: https://www.consilium.europa.eu/en/press/press-releases/2022/06/17/solvency-ii-council-agrees-its-position-on-updated-rules-for-insurance-companies/

[23] https://uk.milliman.com/en-gb/insight/interim-score-of-the-solvency-ii-reforms.

The briefing note also provides some background and the expected timelines in respect of the legislative process.

We provide a brief summary of views in relation to three key areas which are relevant to shareholder value reporting. For more detailed information, please see the briefing note on the disclosed views in full.

Extrapolation of the risk free interest rate curve

- The EC, European Parliament and the Council of the European Union all follow the direction of EIOPA's proposal for a change to the methodology used to extrapolate the risk free interest rate curve.
- The exact parametrisation (in particular 'alpha'[24], the parameter that determines the 'speed of convergence' between market rates at the last liquid point (**LLP**)[25] to the Ultimate Forward Rate (UFR), and the choice of LLP/first smoothing point) and the mechanism, if any, for transitioning to the new extrapolation methodology have not been established.
- The proposal of the rapporteur – to set 'alpha' at 20% and have the first smoothing point at 20 years for the euro – would have modest implications whereas the proposal of the other MEPs[26] would be more significant.
- All else being equal (and ignoring any phasing in), this change in euro yield curve will impact the BEL and Own Funds for business denominated in euros.
- Under proposals for a longer first smoothing point and an alpha of 10% or lower, the changes in extrapolation would lead to material exposures to longer tenors. This may require insurers to rethink their hedging strategies.
- While the potential phase in period would dampen the initial impact, capital generation – and hence long term solvency – would still come under pressure if long term swap rates remain below the current UFR. This pressure has, however, become slightly less with the rate increases over 2022[27]. The possible mandatory external disclosure of solvency, without phasing in, initially proposed by EIOPA might also give analysts and investors a new metric to focus on.
- As mentioned in the 2021 Shareholder Value Report, the inclusion of additional yield curve parameters and the phasing in of the changes will likely make movement analyses more complex, with more potential sources of variance. This may mean that a greater amount of expert judgement will need to be applied when determining how to categorise the drivers of movements in Own Funds.

(Dynamic) Volatility Adjustment

- Both the European Parliament and the Council of the European Union have made amendments to the proposal of the EC. The common theme is that spread mismatches[28] are expected to be reduced in general, in particular to address the VA overshooting in times of stress.
- In respect of solvency the revisions are expected, on aggregate, to provide a one-off impact to Own Funds and there may be some winners and losers. This differentiation is caused by the dependency of the new VA towards the composition of an insurer's fixed income portfolio and liability characteristics. Under real-world valuation approaches the impact is likely only be one of timing[29].
- Together with the other proposed VA changes, a reduction of the VA offset (currently benefiting insurers) is expected.
- For internal model firms that use the dynamic volatility adjustment, a newly proposed prudency principle that is contested by some MEPs, it could result in an increase in SCR thereby increasing the cost of holding capital.

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[24] Milliman consultants have produced a paper entitled 'Solvency II 2020 Review – EIOPA's final opinion' which summarises the effects of changes to the speed of convergence on the discount curve and the introduction of the speed of convergence drag, which can be found here: https://www.milliman.com/en-GB/insight/solvency-ii-2020-review-eiopas-final-opinion.

[25] It should be noted that this terminology is set to change under the proposals and will be called the 'first smoothing point'.

[26] Proposals from other MEPs show that there does not seem to be consensus on the parameter alpha (proposals: 5%, 10%, 18% and 20%), the first smoothing point (some MEPs propose 30 years as a minimum) and the end of the transitional period (proposals: 1 January 2029, 1 January 2030, 1 January 2032, no transitional period).

[27] Milliman consultants have produced a paper entitled 'The new interest rate environment: Back to normal? – Part 1' which looks at an assessment of the increased interest rate environment and its implications for liability discounting. It can be found here: https://www.milliman.com/en-GB/insight/new-interest-rate-environment-back-to-normal.

[28] That is, the mismatch between movements in the VA used to discount the liabilities (currently derived based on the spreads of a reference portfolio) and movements in the spread on the assets an insurer is using to back its liabilities.

[29] Under a real-world valuation approach, the value from the expected spread over the risk free rate on the assets backing the BEL would be included. Therefore, any change in the VA that impacts the BEL would be offset by a change in the spread over (risk free rate + VA) earned on the assets backing the BEL.

Risk Margin

- There seems to be consensus between the lawmaking bodies on potential changes to the RM mechanism. The proposals of all parties would result in a reduction of the level of RM, although the extent of the reduction differs.
- As mentioned in the 2021 Shareholder Value Report, a potential reduction in RM may at initial glance look like a source of value at the time zero (i.e. when the change is implemented). However, in reality the RM would have been expected to unwind naturally over the duration of the business. Therefore, a revised approach introduces a change in timing of the gain (by bringing it forward) rather than being a true source of value and may lead to a slight increase to valuations under real-world valuation approaches via a reduction in the cost of capital in relation to RM.

  Also, for firms which make use of the TMTP, the potential release in RM described above would be offset to some degree by the change in the TMTP amount.

Given the point of views coming from the four parties (EIOPA, EC, the Council and MEPs), insurers may find it beneficial to consider the potential consequences that the suggested reforms may have. In particular, where views differ, or are not yet fully clear, insurers may like to consider multiple potential scenarios as well as gauging their likelihood.

The devil will be in the detail. For extrapolation of the risk free interest rate curve and the RM, the parameters are not pinned down, leading to a range of possible outcomes. Whereas for the (dynamic) volatility adjustment, the views appear to have converged (although some elements are still being debated), which would allow insurers to prepare.

The implications of the Solvency II 2020 Review may be far reaching. However, it is likely that there will be variation experienced by individual firms within the industry such that there will be winners and losers.

HMT REVIEW

HMT published its Solvency II consultation in April 2022. This consultation closed in July 2022, and in November 2022 HMT published its response[30].

This response summarises the feedback received to the consultation, sets out the UK Government’s final reform packages and outlines the plans for implementing it.

At the same time in November 2022, the PRA published a Feedback Statement (FS 1/22) summarising responses received to its Discussion Paper 2/22[31].

We have set out below a brief summary of the UK Government’s final reform packages included in the response published in November.

Final reform packages

HMT has considered the case for reform and has analysed the expected impacts of a variety of options put forward during 2021 and the first half of 2022 (including a number of proposals by the PRA). In particular, HMT will legislate as necessary to:

- Ensure the RM is changed to reduce the RM for long-term life insurance business by 65%, including Periodic Payment Orders, and for general insurance business by 30%, under economic conditions at the time of writing, and enable a modified cost of capital approach to the Risk Margin calculation.
- Maintain the existing methodology and calibration of the fundamental spread for the MA, while allowing for the use of notched ratings.
- Broaden the matching adjustment eligibility criteria to include assets with highly predictable cash flows, subject to adjustments to the fundamental spread allowance and safeguards to be implemented by the PRA.

We consider these items below with reference to shareholder value reporting.

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[30] HMT (November 2022). Review of Solvency II: Consultation – Response. Retrieved 13 February 2023 from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1118359/Consultation_Response_-_Review_of_Solvency_II_.pdf.

[31] Bank of England (17 November 2022). FS1/22 – Potential Reforms to Risk Margin and Matching Adjustment within Solvency II. Retrieved 13 February 2023 from https://www.bankofengland.co.uk/prudential-regulation/publication/2022/november/fs1-22-potential-reforms-to-risk-margin-and-matching-adjustment-within-solvency-ii.

THE RM

As mentioned under the EIOPA Solvency II Review section above, any potential reduction in the RM as a result of an alternative approach being proposed or adopted may lead to changes in the cost of the RM i.e. have a timing effect but will not in itself be a true source of value.

The MA

As mentioned in the 2021 Shareholder Value Report, the use of the MA across Europe is mostly concentrated in firms domiciled in the UK and Spain.

Therefore, whilst the MA may not be a key element of the EIOPA Solvency II 2020 Review, the conclusion from the PRA's review on the MA will be a key topic of interest to many firms in the UK insurance market which make use of this long-term guarantee measure.

Although HMT has decided to leave the design and calibration of the fundamental spread as it stands, it has set out some modifications to the calculation. Namely:

- Increase the risk sensitivity of the current fundamental spread approach to allow different notched allowances to be made within major credit ratings (for example, different allowances for assets rated AA+ or AA- compared with AA)
- Broaden the liabilities eligible for the MA
- Remove the sub-investment grade cap applied to the MA
- Increase flexibility in the treatment of MA applications and breaches.

It remains unclear whether these changes will essentially only have a timing effect or will more fundamentally alter market participants' views of the MA in general.

However, it is likely that there will be variation experienced by individual firms within the industry such that there will be winners and losers.

Other reform measures

In addition, HMT will support the PRA both by ensuring it has the powers necessary to take forward certain additional measures and by being clear that it supports the PRA's use of these measures to hold insurers to account in maintaining safety and soundness and policyholder protection. The additional measures include: to require insurers to participate in regular stress testing exercises prescribed by the PRA to test insurers' resilience to scenarios the PRA will set out (rather than relying on voluntary participation), and to allow the PRA to publish individual firm results.

It has been noticeable in companies' SFCRs over the last two to three years that additional stresses have been disclosed (e.g. 20% credit rating downgrades, additions of both up and down credit spread stresses). However, an additional challenge in the market is insurers' participation in some of the stress and scenarios run by the PRA, more recently the '2022 Data Collection Exercise' (**DCE**) run by the PRA earlier this year, which has seen a number of insurers that were invited to participate not providing data to the PRA.

Currently the practice adopted by the PRA for published stress and scenario data is to anonymise a firm's results. It is unlikely that allowing the PRA to publish a firm's own results (without such anonymisation) will be well received by firms in the UK insurance industry. For example, some firms submit stress and scenario results based on extrapolations or simplified results because of practical limitations e.g. time constraints. In this case, a firm may not want such results to be available publicly where the limitations and the potential impact they may have on the results are not fully understood by the reader.

At this stage, it is hard to predict how the suite of proposed amendments made by HMT will impact the UK insurance industry in aggregate. However, it is likely that the impact will vary by firms at an individual level of any changes brought on by the review.

CP14/22 – Review of Solvency II: Reporting phase 2

In November 2022 the PRA produced CP14/22[32], setting out its proposals to streamline significantly a number of current Solvency II reporting and disclosure requirements for insurers, and to improve the collection of data in a small number of areas where reporting is currently not tailored appropriately to the features of the UK insurance sector, or to the PRA's supervisory needs.

This included a proposal to introduce new National Specific Templates (NSTs) on excess capital generation to help understand the changes in a life firm's balance sheet from one period to the next. Whilst these NSTs are not expected to be disclosed publicly, and also would only be required for larger firms[33], it could be a catalyst for firms more generally to adopt some level of standardisation in variance analysis.

The PRA expects that the proposed new template on excess capital generation will provide visibility of current and future balance sheet volatility by key drivers. Furthermore, by having the information in a standardised format from the largest life firms, the PRA expects the information to enhance its efficiency in the identification of firms' reliance on future management actions and model changes, assessment of the affordability of planned dividends, and detection of firms at risk of model drift.

It will be interesting to see whether, in the future, firms choose to publish this NST publicly if the proposals go ahead.

IFRS

As noted in the 2021 Shareholder Value Report[34], IFRS 17 comes into force from 1 January 2023 and we will soon begin to see some actual interim quarterly and half-year results on an IFRS 17 basis. Companies have had to restate their opening balance sheets on an IFRS 17 basis, with the restatement date being 1 January 2022 so that a prior year comparison of IFRS 17 profits can be made. We have now seen a number of announcements from companies in relation to their opening IFRS 17 positions, and more are to be expected over the next few months. There remain some contentious issues – for example the run-off approach for the Contractual Services Margin (CSM) in respect of annuity in payment business. However, the majority of companies appear now to have reached a landing on their intended IFRS 17 approaches and methods. We expect some fine tuning of approaches to continue, quite possibly until the first full year results are published in respect of 2023.

Some of the initial IFRS 17 announcements already made by some companies have highlighted the reduction in shareholder equity on an IFRS 17 basis, arising largely from the opening CSM. The CSM holds back and releases over time the total expected profit under a contract, and hence it is expected that the opening IFRS 17 equity will be lower than the current IFRS equity. As noted in the 2021 Shareholder Value Report, we expect both companies and analysts to show and consider an adjusted IFRS 17 balance sheet which removes the CSM liability in order to arrive at more realistic adjusted shareholder equity values. We also expect companies to respond to the likely demand from analysts for a bridge from such adjusted IFRS 17 shareholder equity to the relevant group Solvency II Own Funds. Such bridges are likely to shed additional light on both the IFRS 17 and the Solvency II methods and assumptions and make for interesting discussions as to which is the most appropriate or realistic. Early indications suggest that a number of European firms will not be changing their views on capital generation and value as a result of IFRS 17, but will continue to focus on Solvency II and operating capital generation style metrics.

One eagerly awaited component of the IFRS 17 results is the confidence level which applies to the Risk Adjustment (which is the IFRS 17 equivalent of the Solvency II Risk Margin). Companies have to disclose this confidence level, making it an obvious target for benchmarking and comparison. We may well see some companies adjusting their chosen or derived confidence levels over the first year or so of IFRS 17 as they see what their competitors and peer companies are doing in this area.

ICS

It was a relatively quiet year in 2022 for the new ICS being developed by the International Association of Insurance Supervisors (IAIS). Unlike 2021, in 2022 there did not appear to be any public disclosures of ICS results for firms participating in the ICS trials.

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[32] Bank of England (7 November 2022). CP14/22 – Review of Solvency II: Reporting Phase 2. Retrieved 13 February 2023 from https://www.bankofengland.co.uk/prudential-regulation/publication/2022/november/review-solvency-ii-reporting-phase-2.

[33] The NST on excess capital generation would apply to life firms writing non-unit linked premiums exceeding £1 billion on an annual basis.

[34] Burgess, S. et al. (November 2021), op cit.

In January 2022, the IAIS hosted the first ICS Global Roundtable of Supervisors, which provided an opportunity for supervisors to discuss the experience of assessing the reference ICS and additional reporting amongst fellow supervisors (both home and host).

The goal for the current phase of ICS development (v.2.0 approved in November 2019) is the delivery of a capital standard that is fit for implementation by supervisors. The implementation of the ICS will be conducted in two phases:

1. A five-year monitoring period (2020 to 2024) during which the ICS will be used for confidential reporting to the group-wide supervisors (**GWS**) and discussion in supervisory colleges.
2. Implementation of the ICS as a group-wide prescribed capital requirement (**PCR**).

The performance of the ICS will be assessed during the monitoring period, so that the ICS adopted as a PCR will be a global supervisory tool that builds mutual understanding and a common language for discussions amongst group-wide and host supervisors.

During the monitoring period, there have been limited changes to the reference ICS, in line with the intent of the monitoring period, which is to be a period of stability for the reference ICS. However, the IAIS continues to collect supplementary data on targeted areas of the ICS to inform future discussions on ICS as a PCR in advance of the 2023 public consultation. The feedback received during the monitoring period will be used to further improve the ICS.

The end of April 2022 marked the midpoint of the ICS monitoring period with the launch of the 2022 ICS confidential reporting package to volunteer groups. This begins the third year of the five-year monitoring period. It is also an important milestone as the information collected up to and including this year will greatly inform the public consultation on the ICS as a PCR, which will be launched midyear 2023.

To facilitate ICS discussions within supervisory colleges during the monitoring period, each year the IAIS provides each GWS with a package of materials that includes a report (or dashboard) of ICS results for its volunteer groups (those groups participating in ICS confidential reporting – they may be Internationally Active Insurance Groups (**IAIGs**) or other interested groups), guidance material to understand the report, and questionnaires to solicit feedback on the performance of the ICS, including any challenges with applying the specifications. The 2022 ICS confidential reporting package was made publicly available by the end of June for interested stakeholders.

In June 2022 the IAIS issued a consultation (results not yet published) on 'draft criteria that will be used to assess whether the Aggregation Method provides comparable outcomes to the Insurance Capital Standard'. That is, essentially, what criteria should be used to assess whether the US book value based approach (the Aggregation Method (**AM**)) produces results that are comparable with the (non-US) market value based approach that is used in ICS[35]. Following consideration of comments on the draft criteria, the IAIS will finalise the criteria that will be used to assess whether the AM provides comparable outcomes to the ICS. This assessment is scheduled to begin in Q3 2023.

As noted in the 2021 Shareholder Value Report, the key differences between ICS and Solvency II are in respect of the following areas:

- **Risk Margin**: This is calculated using a Margin on Current Estimate (**MOCE**) approach under ICS. We note that one part of the PRA's Quantitative Impact Study (**QIS**) asks firms to calculate their RMs using a similar MOCE approach under one scenario.
- **Capital requirement**: For example, there are a number of differences in the stresses applied in the derivation of the capital requirement under ICS – e.g. mortality and longevity stresses – when compared with Solvency II, as well as the calculation approach adopted e.g. the calculation of the interest rate risk and spread risk components of the capital requirement.
- **Discounting**: We note the ICS risk free curve remains LIBOR based (for now).
- **Matching Adjustment**: Under ICS a bucket approach is used.

If firms elect to determine their value metrics using an approach more closely aligned to ICS in future, it is likely that the ICS balance sheet may be adopted as the basis for transactions going forward.

[35] See https://www.iaisweb.org/2022/06/public-consultation-on-draft-criteria-that-will-be-used-to-assess-whether-the-aggregation-method-provides-comparable-outcomes-to-the-insurance-capital-standard/.

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