MILLIMAN REPORT

Shareholder Value Reporting in Europe: Solvency II Based Metrics

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1. Executive summary

INTRODUCTION

In previous years we have commented on how we have observed a shift to companies publicly disclosing supplementary reporting metrics related to Solvency II. In this report we provide a summary of the Solvency II based metrics that a sample of over 20 companies disclosed as at year-end 2022 and consider whether the approaches adopted when determining these metrics have changed since year-end 2021.

Financial markets in 2022 experienced changes which have not been seen for decades, with sharply rising interest rates and high levels of inflation. Year-end 2022 results reflect how firms have weathered this storm and this report considers what key themes can be drawn from how firms in our sample have reported their performance over 2022 in this turbulent environment. As well as the more measurable impacts resulting from financial market movements, we have also considered potentially less quantifiable impacts such as new business growth and policyholder behaviour.

Following on from this, we consider a breakdown of the movement in Solvency II Own Funds over 2022, on an aggregate basis, for firms in our survey using their year-end 2022 results. This analysis categorises the movement into ‘high-level buckets’ which can be broadly grouped into two classes: anticipated and unanticipated items.

We then consider expanding this analysis to look at results from the previous five year-ends and see what, if any, conclusions can be made with regard to the anticipated items, noting that market performance over the past five years has seen significant fluctuations.

Finally, we touch upon recent 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 review of Solvency II in the UK, in particular by HM Treasury (**HMT**) and the Prudential Regulation Authority (**PRA**). We also briefly cover developments in International Financial Reporting Standards (**IFRS**) and Insurance Capital Standards (**ICS**) in relation to reporting on value metrics.

THEMES ARISING FROM YEAR-END 2022 RESULTS

Although the worst of the COVID-19 pandemic now seems in the rearview mirror, 2022 threw up new challenges mainly arising from the changes observed in the financial markets over the year. As well as the market impacts experienced by firms, the macroeconomic environment also had an impact on, for example, the cost of living which in turn had impacts on insurance product demand and offerings. It also created liquidity concerns in ‘run on the bank’ scenarios and had implications for lapse risk capital.

We consider how firms have reported their performance over 2022, looking at a number of different areas:

- Financial markets (including management actions related to asset portfolios)
- New business growth
- Strategic decisions
- Changes in policyholder behaviour impacting existing business e.g. lapse experience
- Assumption setting used in projections
- Payments to shareholders, including dividends and buybacks.

The economic outlook remains uncertain despite inflation rates falling and the financial markets steadying since year-end 2022. We shall revisit this in our analysis next year, and specifically how it may have impacted European insurers’ results.

YEAR-END 2022 RESULTS

In our previous publication, 'Shareholder Value Reporting in Europe – Solvency II Based Metrics'[1] (**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 2022 disclosures, we have found there to be no material changes in the approaches adopted by companies in our sample since year-end 2021.

We previously noted that, for our sample of companies, the level of disclosure remains greatest for companies headquartered in the Benelux region as well as a number of those headquartered in the UK. This is true of year-end 2022 disclosures.

In considering the value of the disclosed metric at year-end 2022 compared with 2021 for our sample companies, we note around two thirds 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, the percentage change varied considerably across sampled firms such that no general trend could be drawn year-on-year.

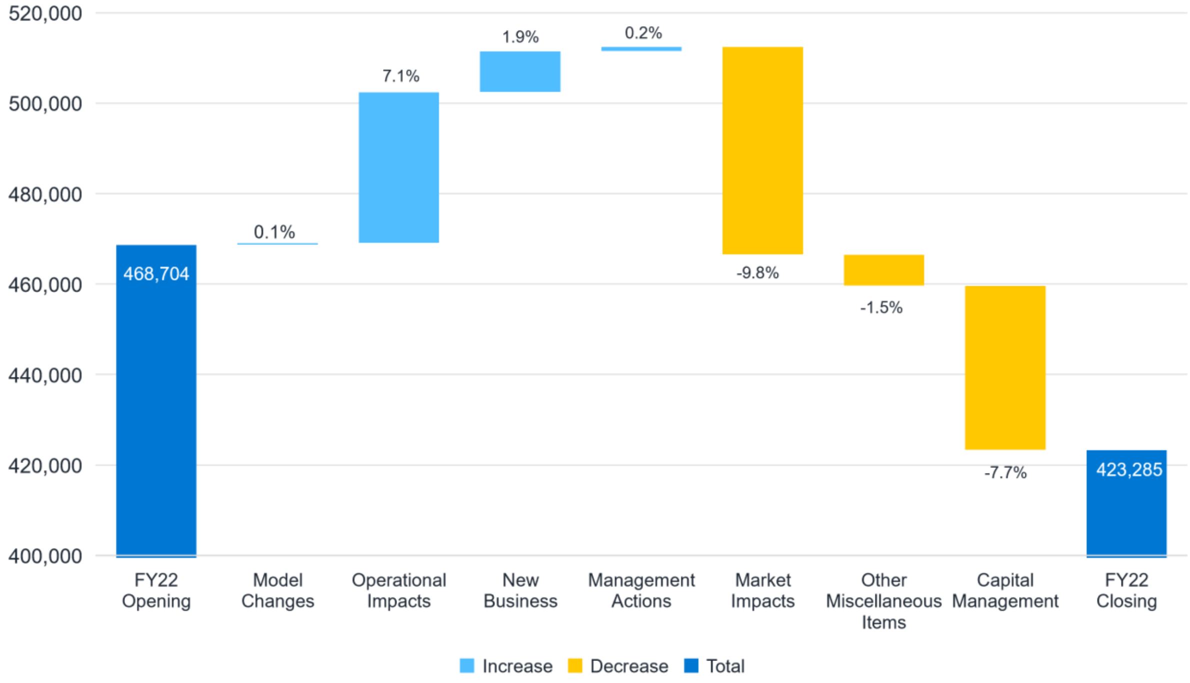
In nearly all cases for 2022, the metric was positive. The exceptions to this are SCOR and Achmea. For SCOR, in addition to the negative impact on its Operating Capital Generation arising explicitly from COVID-19, the firm reported a significant negative contribution arising from 'assumption changes and experience variances'. For Achmea, although it reported a positive contribution to capital generation from its operational activities and market developments, these aspects were more than offset by the negative impact of the non-economic assumptions.

As part of our analysis of firms' year-end 2022 disclosures, we also considered a breakdown of the movement in Solvency II Own Funds over 2022 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).

1 Burgess, S., Burston, D., Reynolds, S., & Wrobel, L. (November 2020). Shareholder Value Reporting in Europe – Solvency II-Based Metrics. Milliman Research Report. Retrieved 17 October 2023 from https://www.milliman.com/en-GB/insight/shareholder-value-reporting-in-europe-solvency-ii-based-metrics-november-2020.

FIGURE 1: AGGREGATE EVOLUTION OF OWN FUNDS OVER 2022 FOR COMPANIES IN OUR SAMPLE (EUR MILLIONS)



Note: 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 2022 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 arrive at the breakdown in Figure 1. However, in spite of these adjustments, the analysis provides a useful insight into the key drivers of firms' performance over 2022.

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 7.1% increase in Own Funds over 2022.

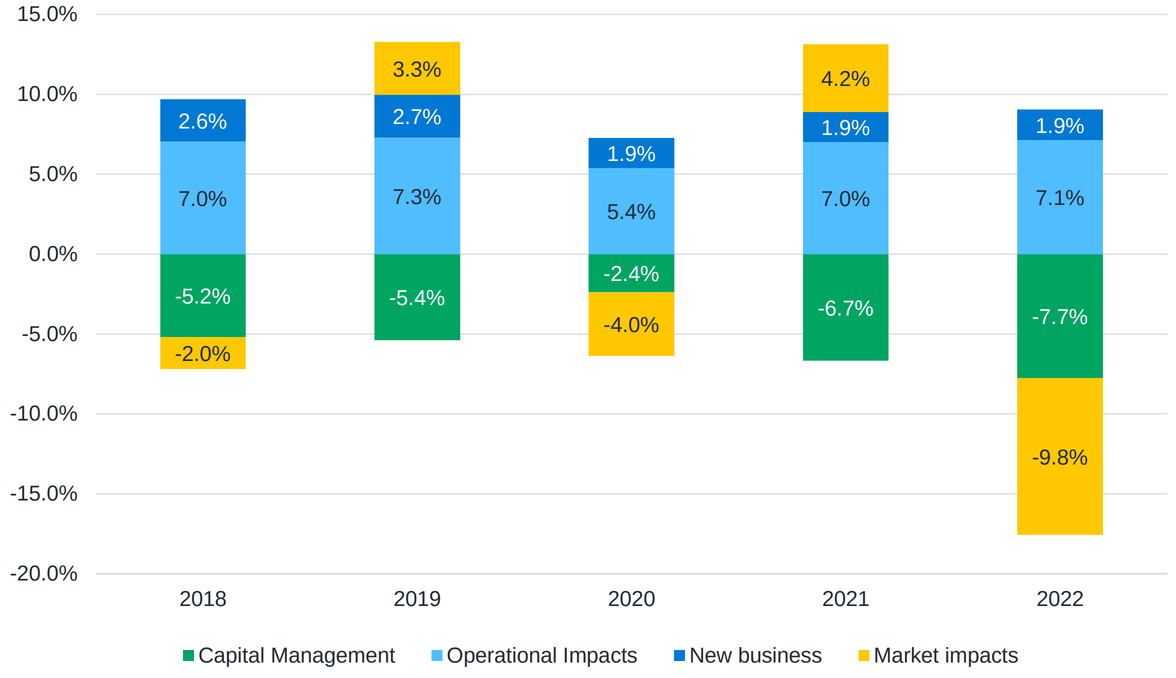
COMPARISON OF EXPERIENCE OVER RECENT YEARS

Expanding on the year-end 2022 movement in Own Funds analysis, we have considered how results over 2022 compare with recent years.

We have limited this expanded analysis to consider year-end 2018 to year-end 2022. Nearly every firm included in our survey disclosed a breakdown of Own Funds for each year of the analysis, and 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 five years:

- **Operational impacts**: The contribution to the movement in Own Funds from this item seems broadly stable year-on-year, with 2020 being lower than in other years – showing the impact of COVID-19. Companies commented that they saw the tail end of COVID-19 experience and there has not appeared to be a change in view on the long-term trends in mortality experience. We will monitor whether any changes in policyholder behaviour associated with rising interest rates will manifest in assumption changes or other operational impacts in 2023.
- **New business**: Before COVID-19 this item was contributing around 2.5% to the movement in Own Funds over the year. The pandemic led to many firms reporting a reduction in new business volumes in 2020. In 2021, whilst a number of firms reported an increase in new business volumes, 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. The contribution from new business in 2022 has remained at a level similar to 2020 and 2021, though, in contrast to 2021, the volumes have reduced and the margins increased in aggregate.
- **Market impacts**: Over the last five years, the observed impact fluctuations seem broadly in line with market performances for each year i.e. 2018, 2020 and 2022 markets typically performed poorly or were volatile, whereas 2019 and 2021 were more stable or showed signs of recovery compared with the prior year. The year 2022 has seen sharp rises in interest rates, which has resulted in high levels of uncertainty, significant increases in credit spreads and underperforming equity markets – this is reflected in the material negative market impact over 2022.
- **Capital management**: This item was broadly stable over the five-year period, except for 2020 as a result of COVID-19. In 2022, this item has been the highest to date in our analysis, which is due in part to improvements in the capital position of many companies, predominantly from the relative reduction in the Solvency Capital Requirements (**SCR**s) compared to the level of Own Funds (due to higher interest rates and lower asset values). This left companies at the top of the comfortable range for paying dividends.

REGULATORY DEVELOPMENTS

At the time of writing this report, there remains uncertainty around the future of the regulatory landscape in Europe and the UK as a result of the ongoing Solvency II 2020 Review as well as the HMT and PRA reviews.

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

To add to the mix, developments around IFRS 17 and ICS are continuing which may also have an impact on the shareholder value metrics adopted by firms in future years, once they have developed further and then had the chance to be embedded into firms' practices and processes.

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.

After more than a year of negotiations, in July 2023, the European Parliament's Committee on Economic and Financial Affairs (**Econ**) approved the proposed amendments to the Directive. Member states shall adopt the reforms by 30 June 2025 and they should apply to insurers from 1 January 2026. However, these dates are not yet certain because the duration of the implementation period is part of the continued negotiations between the rapporteur and parliament.

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**)

Although the July 2023 approval provided more clarity, there are still ongoing negotiations and not all parameters are yet pinned down. Insurers may find it beneficial to consider the potential consequences that the suggested reforms may have.

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.

Following this, in December 2022, HMT published a policy statement on its implementation plan.

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**).

As part of its plans to legislate directly to implement certain parts of the Solvency II reform package, HMT set out its approach in draft Statutory Instruments (**SIs**), which brings forward reforms to the Risk Margin and certain aspects of the MA.

Those parts of the reform package not contained in legislation are intended to be implemented through changes to PRA rules and other policy material. The PRA is consulting on its approach to adapting Solvency II for the UK market in two tranches:

- Consultation Paper (**CP**) 12/23, which sets out the majority of the PRA's reform proposals, focuses on simplification, improving flexibility and encouraging entry[2].
- CP19/23, which covers reform proposals for life insurers relating to investment flexibility and the MA[3].

The consultation – with regards to CP12/23 – closed in September, except in the case of a number of administrative amendments to PRA rules, for which the deadline was July 2023. Subject to responses, the PRA expects to issue the final policy in relation to most of the proposals at around the end of the year. The consultation period – in relation to CP19/23 – closes in January 2024.

There still remains uncertainty 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

IFRS 17 came into force on 1 January 2023 and we have seen some companies report their full year 2022 results on an IFRS 17 basis. Companies have restated their opening balance sheets on an IFRS 17 basis, with the restatement date being 1 January 2022 so that a comparison of IFRS 17 profits can be made for the full year 2022. Most companies have stated that IFRS 17 does not impact their business operations, including areas such as cash flow, Solvency II, company key performance indicators (**KPIs**) and dividends, which suggests that companies will continue to focus on Solvency II and Operating Capital Generation style metrics.

Under IFRS 17, companies' shareholder equity has reduced due to the Contractual Service Margin (**CSM**) being recognised as a liability on the IFRS 17 balance sheet. Some companies have shown the CSM movement in 2022, breaking down the movement into new business, interest accretion, experience variance, assumption changes and CSM release. This provides more insight into how the future profits changed over the year. Some companies have also shown a bridge from the 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.

Although listed firms have started publishing their IFRS 17 results, there are still a considerable number of firms at an earlier stage of the process, such as overall planning and methodology review. Companies are also continuing to work on process improvement as they refine their approaches to reporting under the new accounting standard. 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.

Insurance Capital Standards

It will be a key year in 2023 for development of the new Insurance Capital Standards (**ICS**) being developed by the International Association of Insurance Supervisors (**IAIS**). Unlike 2021, in 2022 and 2023 (to date) there did not appear to be any public disclosures of ICS results for firms participating in the ICS trials.

In June 2023, the IAIS launched a public consultation on the candidate ICS as a prescribed capital requirement (**PCR**), which is the ICS as currently envisaged for implementation. Following consideration of submissions and comments from the consultation, the IAIS will release the resolution of the comments along with the finalisation of the ICS. The adoption of the ICS is currently planned for December 2024.

As ICS gains more traction in the next year or so it is likely within the next couple of years that financial analysts will start asking questions on firms' ICS positions.

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2 Milliman consultants have produced a summary of CP12/23: Ginghina, F., Patel, D. & Walker, S. (July 2023). CP12/23 – Review of Solvency II: Adapting to the UK insurance market. Milliman Briefing Note. Retrieved 18 October 2023 from https://uk.milliman.com/en-GB/insight/cp-12-23-review-solvency-ii-uk-insurance.

3 Milliman consultants have produced a summary of CP19/23: Ginghina, F., Patel, D., Booth, C., Bugg, R., Christy, N., Crowson, J. & Wrobel, L. (October 2023). CP19/23 – Review of Solvency II: Reform of the Matching Adjustment. Milliman Briefing Note. Retrieved 27 October 2023 from https://uk.milliman.com/en-GB/insight/cp19-23-review-of-solvency-ii-reform-of-matching-adjustment.

2. Introduction

In 'Shareholder Value Reporting in Europe – Solvency II Based Metrics'[4] (the **2022 Shareholder Value Report**) we discussed how the use of the level of Solvency II Own Funds (and its change over time) appears to have become a more widely publicly disclosed metric than an embedded value metric.

In this publication (in Sections 3 and 4 below) we consider the key themes arising from year-end 2022 results for the firms in our sample. We explore this for a number of different areas, such as the movement in financial markets over the year as well as new business and policyholder behaviour.

Following on from this, we set out whether the approaches adopted by companies when disclosing supplementary reporting metrics have changed over 2022 (since those previously reported in the 2022 Shareholder Value Report), as well as the change in the values of such metrics.

We then move on to explore, at an aggregate level, the movement of Solvency II Own Funds over the year for companies in our survey, and consider how this movement can be split into key drivers that may be expected to happen again in the future – for example, 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 presented in the previous section and consider results for the four year-ends prior (i.e. year-end 2018 to year-end 2021) for the firms in our sample. Using these results across the five year-ends, we then consider what, if any, trends can be identified for each of the key drivers, with particular focus on those drivers which can be considered to be 'anticipated'. Following on from this, we 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 results.

We end, in Section 6, with briefly considering how the regulatory landscape is changing – specifically with a focus on EIOPA's ongoing Solvency II 2020 Review as well the UK government's own review of Solvency II – because both reviews may have an impact on the metrics disclosed for both reporting and transaction purposes. We then briefly cover developments in IFRS reporting and ICS in relation to reporting on value metrics.

3. Themes arising from year-end 2022 results

Although the worst of the COVID-19 pandemic now seems in the rearview mirror, 2022 threw up new challenges mainly arising from the changes observed in the financial markets over the year. As well as the market impacts experienced by firms, the macroeconomic environment also had an impact on, for example, the cost of living which in turn had impacts on insurance product demand and offerings. It also created liquidity concerns in 'run on the bank' scenarios and had implications for lapse risk capital.

Year-end 2022 results reflect how firms have weathered this storm, and in this section we consider how firms in our sample have reported their performance over 2022.

In considering how firms have been impacted over 2022, we have evaluated a number of different areas. Specifically, we have considered:

- Financial markets (including management actions related to asset portfolios)
- New business growth
- Strategic decisions
- Changes in policyholder behaviour impacting existing business e.g. lapse experience
- Assumptions setting used in projections
- Payments to shareholders, including dividends and buybacks.

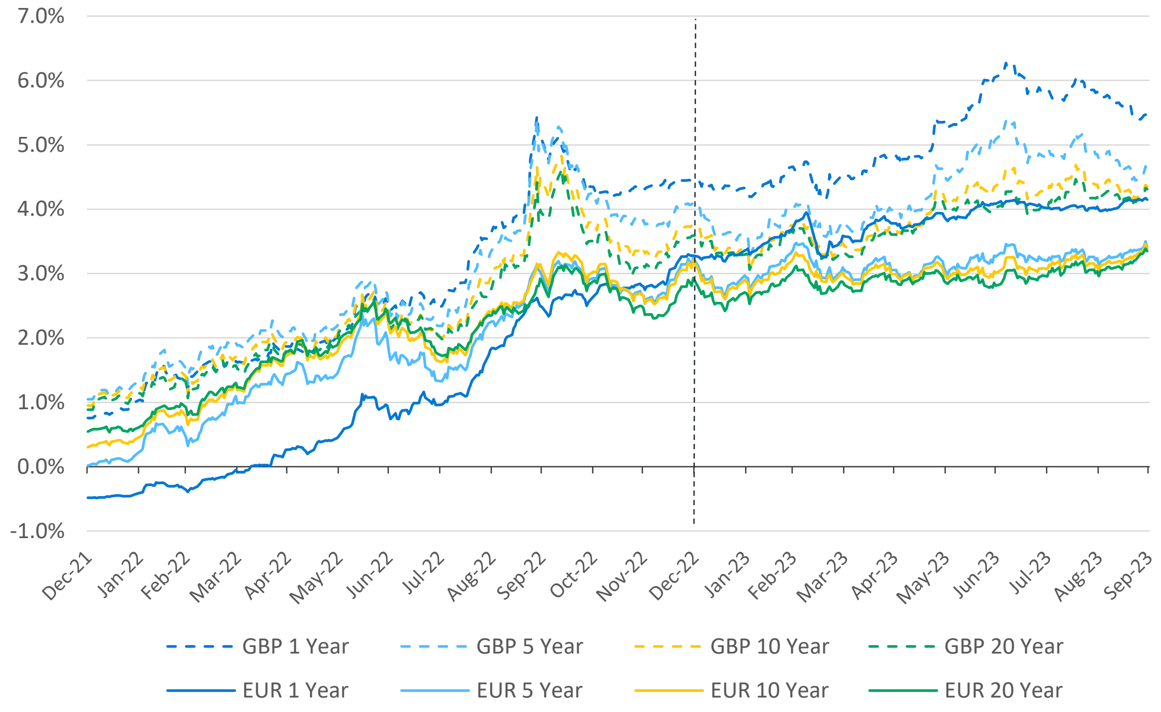
4 Burgess, S., Reynolds, S. & Wrobel, L. (March 2023). Shareholder Value Reporting in Europe: Solvency II Based Metrics. Milliman Report. Retrieved 18 October 2023 from https://uk.milliman.com/en-GB/insight/shareholder-value-reporting-in-europe-solvency-ii-year-end-2021.

FINANCIAL MARKETS

Financial markets in 2022 experienced changes which have not been seen for decades, with sharply rising interest rates and high levels of inflation. The sharp rise in interest rates changed the environment in which firms operate. There was a mixed set of impacts on companies' balance sheets and capital requirements, values of bond holdings and liabilities were reduced through higher discount rates, and also capital requirements were generally reduced[5]. High interest rates also created concerns for changes in policyholder behaviour – creating liquidity concerns for some firms as policyholders decided to withdraw their policies, which had further implications for the calculation of lapse risk capital.

Figure 3 to Figure 6 provide the movements in some of the key financial metrics over 2022 and since year-end 2022.

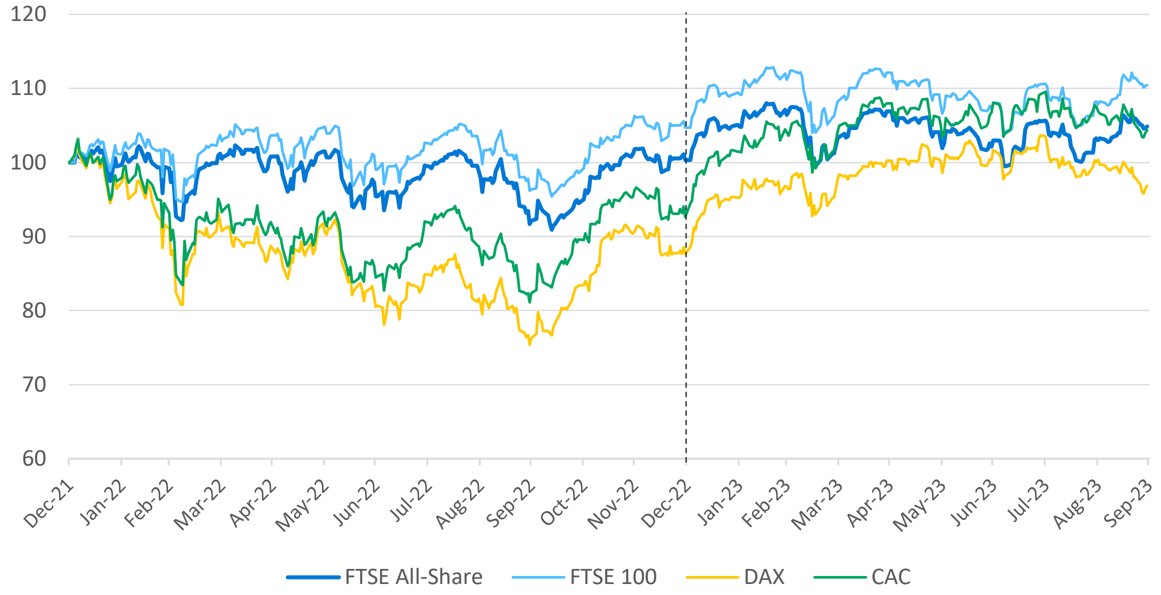
FIGURE 3: RECENT TRENDS IN GBP AND EUR LIBOR SWAP RATES



Source: Bloomberg.

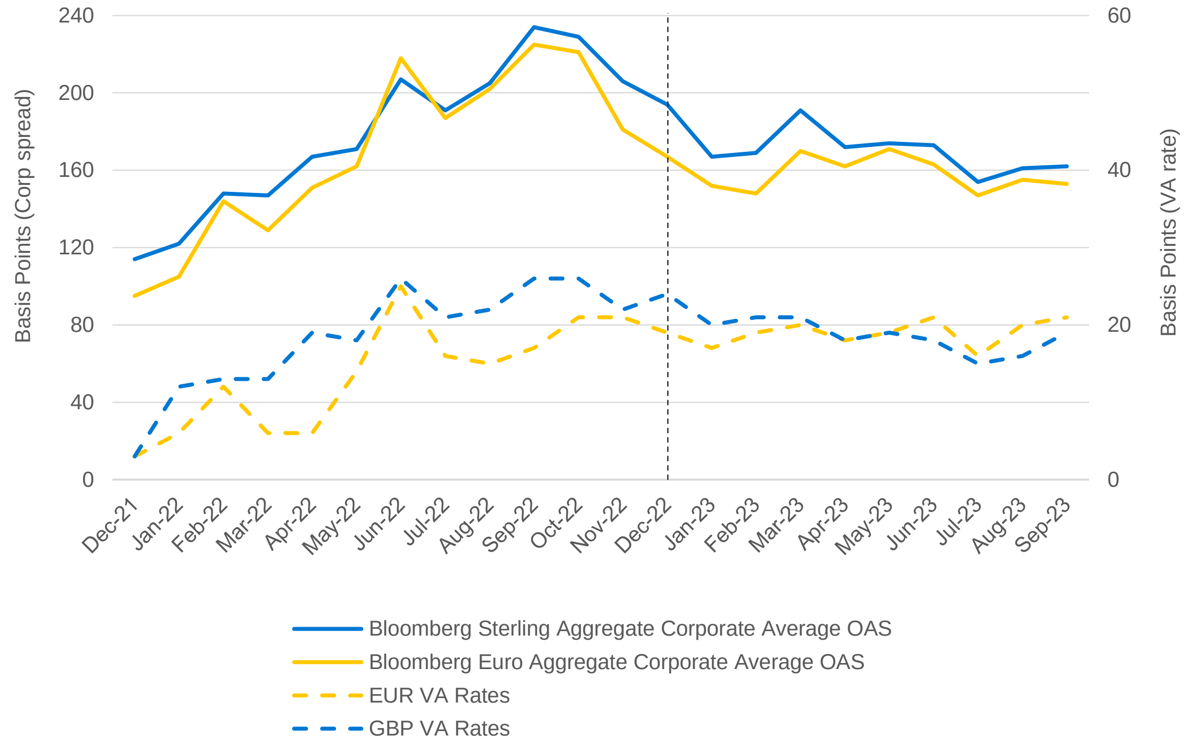
5 Milliman consultants have produced a white paper considering the impact of rising rates globally: Dattani, A., Dobiac, J., Sharon, D., van Delft, L., Harris, D., Donckers, S., Morgan, E., Hoshino, T. & Broens, J. (October 2023). Impact of rising interest rates globally: A blessing or a curse for the solvency position? Milliman White Paper. Retrieved 18 October 2023 from https://uk.milliman.com/en-GB/insight/impact-of-rising-interest-rates-globally-blessing-or-curse-solvency-position.

FIGURE 4: RECENT EQUITY MARKET PERFORMANCE



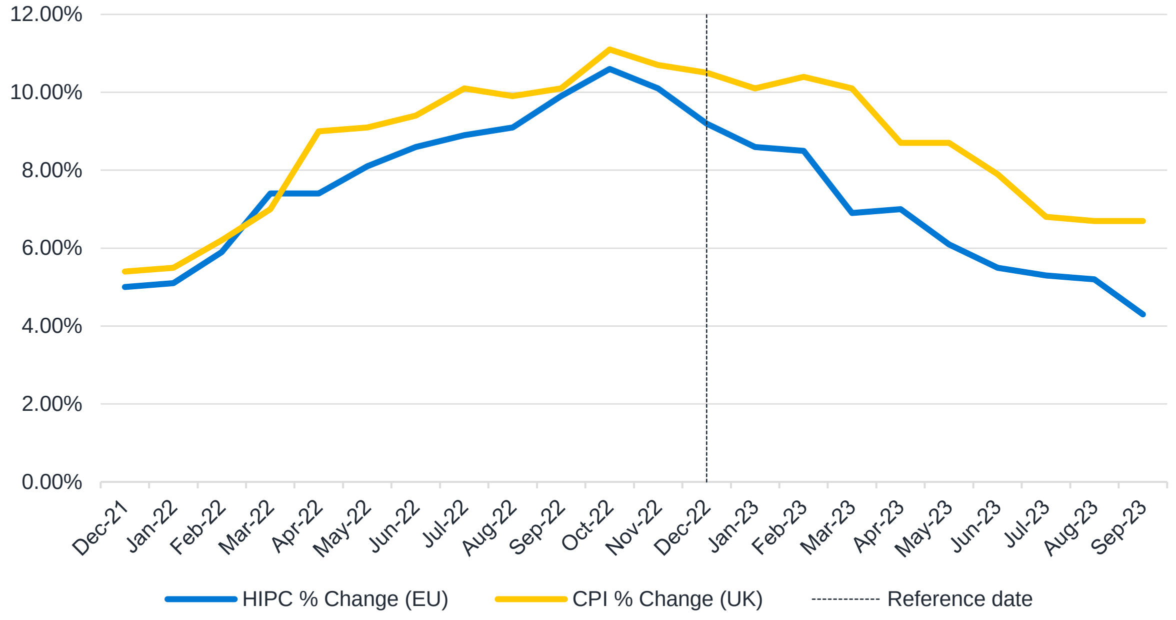
Source: Bloomberg.
Note: Indices above are the gross total return indices and have been rebased to 100 as at 31 December 2021.

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



Source: Bloomberg; Barclays and EIOPA.

FIGURE 6: RECENT TRENDS IN INFLATION



Source: ECB data Portal, Office for National Statistics (UK).

Interest rates rose rapidly during 2022, and have continued to rise at shorter durations since the year-end, reaching levels which have not been seen for over 15 years. Companies generally reported a negative impact on Own Funds from the rising interest rates offset by a material reduction in capital requirements.

Figure 4 shows that the European equity markets fell over the year, with some recovery towards the end of the year. Firms in our survey commented about unfavourable impact from these movements on their performance in 2022.

Credit spreads had been also increasing over most of 2022, before falling and then stabilising in 2023 (though at a level higher than at the beginning of 2022). The widening of credit spreads had a detrimental impact on companies' performance.

Inflation started rising towards the end of 2021 and kept rising throughout 2022, reaching its peak in the fourth quarter. Rising inflation generally had a negative impact on companies' performance, largely through the update to the inflation assumptions, particularly for property and casualty (**P&C**) business as rising inflation impacted not only expenses but projected and actual claims payouts.

NEW BUSINESS

Overall, over 2022, there was mixed experience for the firms in our survey with regard to both volumes and profitability of new business, as different markets reacted differently to rising interest rates and inflation and difficult economic conditions.

Some companies commented that the cost of living crisis made it challenging to sell new business, with sales of savings products being particularly impacted. On the other hand, some companies commented that the increase in interest rates made saving products and annuities more attractive and easier to sell. New business levels for protection products also improved for a number of companies, which may be associated with the COVID-19 pandemic raising awareness for and the importance of these products.

The majority of companies in our sample commented on the improved expected profitability of new business, which helped, despite the falling volumes, to keep the value of new business at a level similar to last year.

For example, Generali reported a decrease in new business levels, especially in Germany and Italy, which it attributed to globally tense political and economic conditions. However, the value of new business increased due to improved margins, from 4.52% to 5.35%, on a present value of new business premiums (**PVNBP**) basis. Generali attributed improvements in profitability to the significant increase of interest rates, the rebalancing of the business mix towards the most profitable protection and unit-linked business, and the continuous improvement of product features. Similarly, Aviva also reported a decrease in new business levels (as measured by PVNBP), due to lower bulk purchase annuities (**BPA**) volumes and higher discounting (from higher interest rates), but overall saw a higher value of new business than in 2021, driven by improved profitability across all lines of business. Phoenix also reported lower BPA premiums in 2022, offset by higher workplace pensions new business levels.

On the other hand, Zurich reported volumes of new business in 2022 that were similar to last year, but new business margins were lower, reportedly due to an unfavourable product mix and adverse economic impact mainly related to higher interest rates. Overall, this resulted in a lower value in new business in 2022.

STRATEGIC DECISIONS

Many firms in our survey reported on strategic decisions made over 2022 in line with their business plans.

A number of firms set out their intentions to increase their presence in specific markets. How this was achieved by the firms varied from more organic growth, e.g. through existing channels, to mergers and acquisitions (**M&A**).

For example, Groupama reported on its geographical expansion and growth in Central and Eastern Europe – specifically in Croatia, Slovenia and Romania – as well as in China. Similarly, Ageas reported on its expansion in the Indian life insurance market through the increased share as its joint venture Ageas Federal Life Insurance further developed its business in that market.

Ageas also announced its agreement regarding the sale of its French life insurance, savings and pension business to La Mutuelle Epargne Retraite Prévoyance Carac (**Carac**)[6]. The firm reported that this disposal aligns with its strategy to streamline its European portfolio and to concentrate on its core markets in the region.

Other firms such as AXA and ASR also reported on M&A activity.

- For example, AXA reported on its continued group simplification through the conclusion of disposals of business in Singapore and Malaysia, as well as the increase of its presence in Spain by entering into exclusive negotiations for the acquisition of the Groupe Assurances du Crédit Mutuel España to strengthen its P&C and health segments. The firm also reported on the sale of its closed life pension portfolio in Germany as part of its wider life and savings in-force initiative.
- Similarly, ASR reported on its strategic and transformational transaction with Aegon N.V. to combine its Dutch businesses to increase its market share in the Netherlands. This transaction covers all insurance activities, including mortgage origination and servicing operations, the distribution and services entities and the banking business of Aegon Nederland N.V. ASR reported that it is expected that the integration of the two companies will largely be completed three years after the transaction has been concluded.

A number of firms also reported on the increase of digitisation in the way they do business. For example, AXA announced the launch of a strategic programme to develop a digital commercial platform with the aim of better serving its commercial customers. Specifically, with this platform AXA aims to build an ecosystem of new services to tackle the evolving protection needs of corporate clients.

Also in 2022, Irish Life reported that it launched MyIrishLife, which it described as giving a digital ‘front door’ to the firm, to introduce new and existing customers to engagement opportunities. To achieve this the firm has partnered with a fintech company with a view to accelerating and developing a fully personalised digital advice journey for its customers to drive engagement.

6 On 25 September 2023, Ageas announced that all regulatory approvals have been obtained and that the transaction has been completed, from https://www.ageas.com/newsroom/ageas-completes-sale-its-french-life-insurance-activities.

With this shift towards digital business models – for example with the growing adoption of hybrid forms of work and communication as well as in the design of digital insurance solutions and cross-sector partnerships – digital technologies have become increasingly important for processes for (re)insurers as well as more widely across the financial services industry. With this in mind, the EU has developed the Digital Operational Resilience Act (**DORA**) as a new framework for ensuring the resilience of digital services in critical scenarios. Hannover Re has disclosed that it may need to adjust many internal processes in connection with the review of external IT service providers in order to implement the requirements. This may become an area of future development for many (re)insurers in the next few years as DORA will apply from 17 January 2025.

POLICYHOLDER BEHAVIOUR

Rising interest rates and challenging economic conditions are widely expected to impact policyholder behaviour in terms of product demand and persistency.

As discussed in the New Business section above, companies have been observing changing demand for savings products due to decreases in disposable income, but on the other hand the rising interest rates may have made it easier to write new business and reduced the cost of guarantees for back books of business.

Generali and BNP Paribas commented that they observed a moderate increase in lapse rates over 2022, whilst CNP and Munich Re reported that they have not experienced significant changes in surrender trends. Both BNP Paribas and Generali mentioned that the increase in lapse rates in 2022 did not lead to a stressed liquidity position. Generali mentioned that the monitoring of lapses has been further strengthened.

Overall, a number of companies reported an increase to their life underwriting capital requirement, due to the rise in interest rates increasing level of mass lapse capital. This may have been a driver of the increased interest in mass lapse reinsurance – according to InsuranceERM, out of the 20 mass lapse reinsurance deals done since Solvency II was introduced in 2016, five deals have been completed in 2022[7].

In the EIOPA risk dashboard, liquidity risk is given a medium rating, and indicates an increase to the median lapse rate to 3.8% in Q4 2022, compared with 3.4% a year before.

However, analysis of the Italian market by Associazione Nazionale fra le Imprese Assicuratrici (**ANIA**), an association of insurance companies in the Italian market, shows a further, more significant increase in average lapse rates in the first two quarters of 2023, from 6.71% at the end of 2022 to 8.85% in Q2 2023[8].

We will monitor the developments in this area, especially in the more affected French and Italian markets, and how they can impact companies operating in those markets.

ASSUMPTION SETTING USED IN PROJECTIONS

As set out in Figure 6 above, the financial markets experienced high levels of inflation in 2022 compared with recent years. Consequently, firms across the insurance industry have revisited their inflation assumptions during the year. However, such short-term fluctuations are not always problematic, if only considering longer-term assumptions in business projections, and rather it is the prospective economic outlook which is more significant.

A number of firms in our survey disclosed changes to their calculations as a result of the increase in inflation. For example, AXA reported on material changes to its assumptions in 2022 relating to the projection of inflation in P&C claims reserves. Similarly, Groupama reported that it took into account the effects of inflation with the creation of a specific additional provision for excess inflation on P&C insurance claims.

7 Cundy, C. & Geer, J. (20 June 2023). Mass policy surrenders remain a blight on Europe's life insurers. InsuranceERM. Retrieved 18 October 2023, from https://www.insuranceerm.com/analysis/mass-policy-surrenders-remain-a-blight-on-europes-life-insurers.html (sign-in required).

8 ANIA (2 September 2023). Trends. Retrieved 18 October 2023 from https://www.ania.it/documents/35135/671719/Newsletter+Vita+flussi+e+riserve_II+trim.2023.pdf/1fda5c5d-776e-716a-5497-76f4b850cef9.

The impact of inflation has also been considered when pricing new business. For example, SCOR disclosed that it has adopted more conservative inflation assumptions in its new business.

Where firms disclosed greater levels of granularity, we observed that assumption changes had one of the greatest impacts to the ‘operational impacts’ bucket as set out in Figure 12 (in Section 4 below).

PAYMENTS TO SHAREHOLDERS

As noted in our previous shareholder value paper the 2022 Shareholder Value Report, the majority of firms were ‘back on track’ in 2022 with respect to payment of planned dividends, after the prudent approach taken by companies (and encouraged by regulators) during the COVID-19 pandemic.

As discussed in previous sections, the macroeconomic conditions have been challenging in 2022 and this has impacted insurance companies’ profits. However, the majority of companies in our survey declared dividends higher than in previous years, following declared growing dividend programmes. As discussed in Section 4 below, despite the decrease in Own Funds in 2022, many firm’s capital coverage remained at or above that of the previous year due to an associated reduction in the SCR, which enabled the payment of dividends.

For example, SCOR reported that its solvency ratio is at the top of its optimal range and that solid capital position allowed it to pay dividends.

On the other hand, Achmea approved a non-distribution of dividends to ordinary shares at its 2022 Annual General Meeting, being the only company in our sample to not pay dividends over 2022. The proposal to not distribute a dividend was in line with the dividend policy, which is based on the net IFRS result, excluding the Dutch health insurance entities, and a series of solvency tests. The net result (excluding the Dutch health insurance entities) was negative over 2022, reflecting the challenging conditions in 2022 due to inflation and high climate related claims.

Continuing the trend of last year, a number of firms in our survey launched (or continued with previously announced) share buyback programmes in 2022.

For example, Generali announced in August 2022 the start of a share buyback programme of EUR 500 million, with the aim to make use of excess liquid funds accumulated during the three years 2019-2021 and not used for the purposes of capital redeployment. The 2022 share buy-back programme was completed in December 2022. In January 2023, Generali announced a further buyback programme which was completed in March 2023.

Other companies announcing share buyback programmes include AXA, Allianz, Munich Re, Aegon, ASR, NN, Zurich and Aviva.

Aviva, on top of a GBP 1 billion share buyback programme, also announced a GBP 3.75 billion capital return in line with its preference to return surplus capital regularly. The capital return to shareholders was a result of a successful divestment programme.

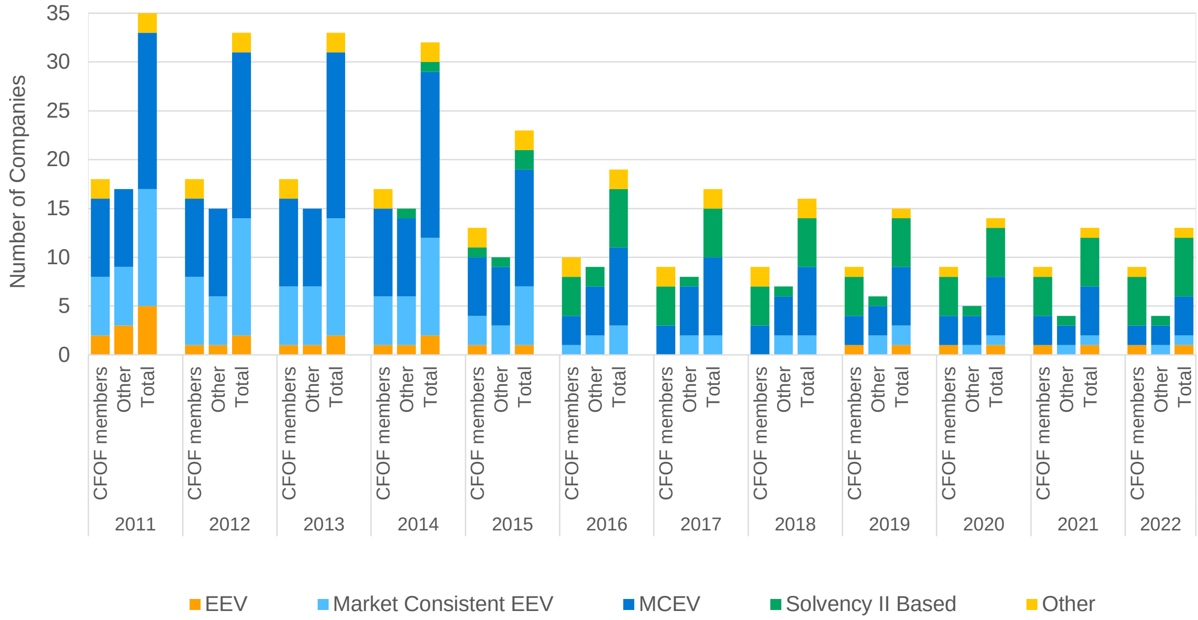
4. Year-end 2022 results

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 7, split between CFO Forum (**CFOF**) members and 'Other' companies, and split by different bases upon which embedded value is calculated.

FIGURE 7: EMBEDDED VALUE REPORTING PRINCIPLES AT YEAR-ENDS 2011-2022



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.

4. In its 2022 report, CNP disclosed that it has abandoned the MCEV standard in favour of the Solvency II and IFRS 17 standards. It is not entirely clear which framework is used to calculate its value metric. In Figure 7 CNP has been assumed to be 'Solvency II'.

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): Belgium, France, Germany, Italy, the Netherlands, Spain and the UK. 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 8.

FIGURE 8: 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[9]
▪ Groupe Groupama	▪ Zurich Insurance Group

Following on from the 2021 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
- Whether the approach adopted by firms in our sample has changed from year-end 2021 to year-end 2022
- 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 2022, including:
  - Market movements
  - Operational impacts
  - New business
  - 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 9 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.

9 VidaCaixa, S.A.U. de Seguros y Reaseguros y Sociedades Dependientes (VidaCaixa).

FIGURE 9: 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 business as usual (**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 2022 DISCLOSURES

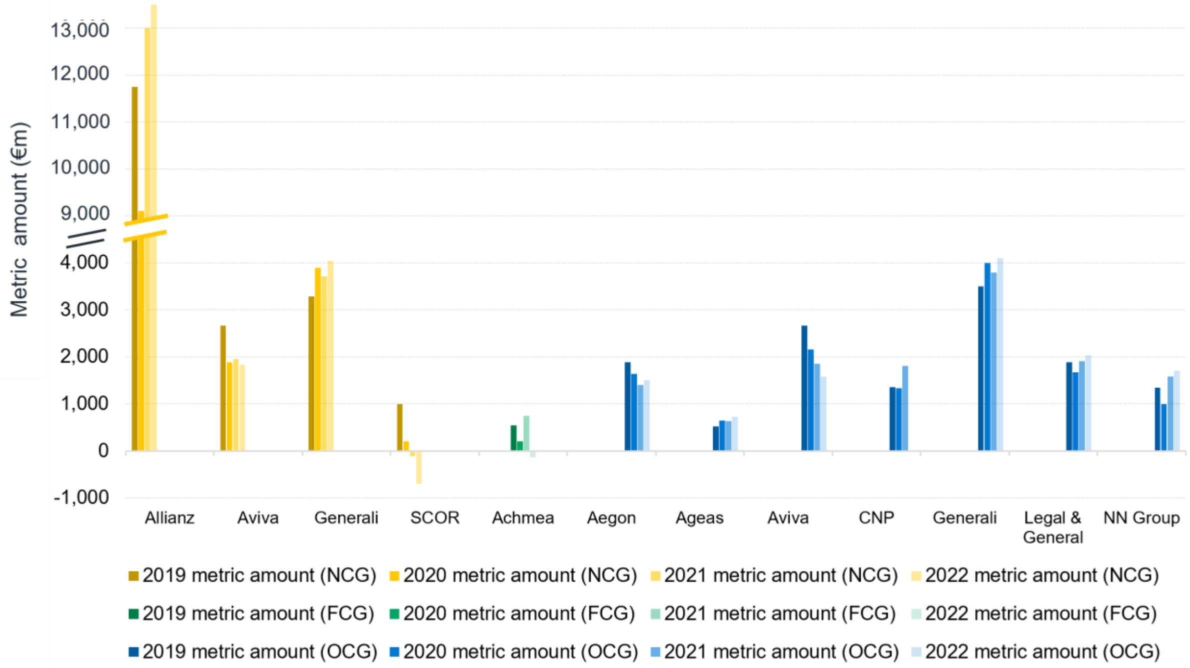
In the 2020 Shareholder Value Report, we set out the approaches taken by firms in our sample at year-end 2019. Having reviewed year-end 2022 disclosures, we have found no material changes in the approach adopted by companies in our sample over 2022.

We note that, for our sample of companies, the level of disclosure at year-end 2022 remains greatest for companies headquartered in the Benelux region as well as a number of those headquartered in the UK.

RESULTS AT YEAR-END 2022

In Figure 10, 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 9.

FIGURE 10: METRIC AMOUNT (IN EUR MILLIONS) DISCLOSED AT YEAR-END 2019, YEAR-END 2020, YEAR-END 2021 AND YEAR-END 2022



Notes:

1. The abbreviations in Figure 10 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 2022 metric, excluding the impact of COVID-19, amounted to EUR -352 million. However, once the impact of COVID-19 was included, it was reduced by EUR 351 million, to give an overall metric amount of EUR -703 million. This compares to its year-end 2021 metric, excluding the impact of COVID-19, of EUR 344 million. However, once the impact of COVID-19 was included, it was reduced by EUR 452 million, to give an overall metric amount of EUR -108 million. Similarly, SCOR reported its year-end 2020 metric, including the impact of COVID-19 (of EUR 615 million), to be EUR 200 million and an amount as at year-end 2019 of EUR 996 million, respectively.

Considering the data as a whole, we see that experience was mixed in 2022 which is similar to that experienced in 2021 (albeit there is variation at the firm level). That said, around two thirds 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, the percentage change varied considerably across sampled firms such that no general trend could be drawn year-on-year.

Allianz continues to report the largest amount of Normalised Capital Generation for firms in our survey, and also reported the largest year-on-year increase in the metric. This was largely due to an increase in the contribution from its life and health business.

In nearly all cases for 2022, the metric was positive. The exceptions to this are SCOR and Achmea.

In last year's report we noted that SCOR explicitly reports the impact of COVID-19 on its Operating Capital Generation in its disclosures and if this component were to be excluded it would have resulted in a positive metric in 2021. However in 2022, even if the impact of COVID-19 is excluded, the metric remains negative. Although SCOR reported a significant increase to the new business contribution in 2022 that contributes to the derivation of its Operating Capital Generation compared with that reported in 2021, it reported a significant negative contribution arising from 'assumption changes and experience variances'. In particular, it reported that unfavourable experience variances were driven mostly by excess P&C claims above expectations in 2022, as well as life and health late reported prior year claims and a prudent provision of mortality claims.

In the case of Achmea (shown in green in Figure 10), although it reported a positive contribution to capital generation from its operational activities and market developments, these aspects were more than offset by the negative impact of the non-economic assumptions. Achmea reported that these developments were mainly influenced by increased future inflation expectations in both its life liabilities and non-life liabilities and an increase in life expectancy.

In the next subsection, we consider a breakdown of the movement in Own Funds over 2022, which is a piece of information disclosed by most firms in our sample.

BREAKDOWN OF THE MOVEMENT IN OWN FUNDS OVER 2022

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 11, which has been reproduced from the 2020 Shareholder Value Report.

FIGURE 11: 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[10] on assets in excess of the best estimate liability (**BEL**) b. The expected real-world spread[11] 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)[12]
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[13]
11.	Capital management, such as the issuance and repayment of debt, share buybacks and dividends
12.	Closing adjustments

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

11 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.

12 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.

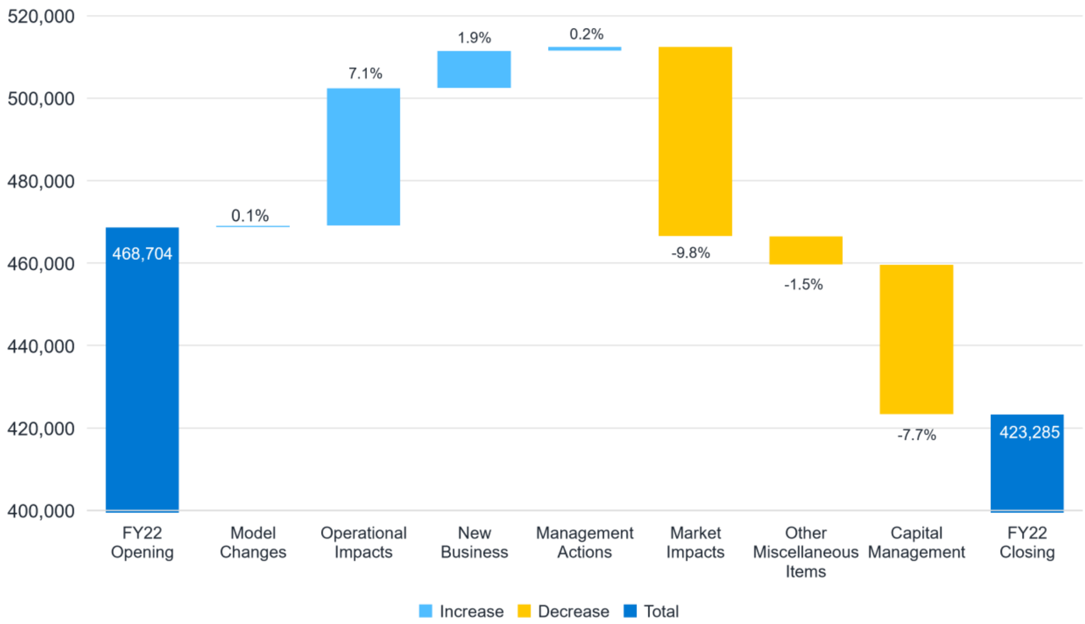
13 Shareholder transfers from with-profits funds may also be included for companies with participating business.

Similarly to previous years, we set out a breakdown of the movement in Own Funds over 2022 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 arrive at the breakdown in Figure 12. However, in spite of these adjustments, the analysis provides a useful insight into the key drivers of firms' performance over 2022 for 14 firms from our survey.

FIGURE 12: AGGREGATE EVOLUTION OF OWN FUNDS OVER 2022 FOR COMPANIES IN OUR SAMPLE (EUR MILLIONS)



Note:

1. The majority of firms included in Figure 12 report results in euros. For the handful of other firms, we have converted results as at 31 December 2022 using publicly sourced exchange rates which may introduce small currency differences.

It should be noted that the results shown in Figure 12 reflect a weighted average approach, i.e. firms in our sample that 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 that may have a smaller (relative) amount of Own Funds.

Figure 12 shows that total capital generation as measured by growth in Own Funds over the year, before capital distributions such as dividends, subordinated debt repayments and share buybacks, was a negative return of 1.9%, with negative market impact outweighing positive impacts from other sources. Capital distributions reduced Own Funds further by 7.7%.

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 2022

Model changes

In our categorisation this includes both model and methodology changes. Companies in our sample disclosed both negative and positive impacts, resulting in a small aggregate positive contribution.

Generali reflected a negative impact from regulatory changes, mainly stemming from extended modelling of investment management costs following the clarifications from local regulators and the changes required by the French regulator for the calculation of the PPE reserve[14].

Key drivers of the negative impact for Allianz were the reduction of the UFR by 15 basis points (**bps**) and the change in the approach to include the US subsidiaries.

Swiss Re implemented model changes which had a positive impact on the firm's available capital. The changes related to a new approach to financial market risk which distinguishes normal market conditions and financial crisis situations and improves the stability of the risk measure, and to methodology and calibration for the cyber risk.

AXA disclosed a positive impact from a favourable change in some EIOPA risk-free rates relating to the LIBOR transition and model improvements in France and Germany. These items were partially offset, similarly to Allianz, by a reduction in the UFR, and ineligibility of sub-debts issued by subsidiaries following a change in the interpretation of European regulations.

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)[15].

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 7.1% increase in Own Funds over 2022, similar to previous years (except for 2020 which was impacted by COVID-19).

The companies in our sample all disclosed a positive operational impact over 2022, with the exception of SCOR.

SCOR disclosed the following items in its movement analysis, which we categorised as operational impacts:

- Assumptions review and other
- COVID-19 impact
- Operating Capital Generation excluding COVID-19 (expected in-force contribution)
- Operating Capital Generation excluding COVID-19 (assumption changes and experience variances)

The overall negative operational impact is mainly driven by a material increase to P&C reserves to allow for the anticipated social and economic inflation as well as unfavourable P&C experience variances due to weather events. On the life and health side, the negative impact reflects further resilience built into assumptions in advance of IFRS 17, prudent provision of mortality claims, late reported prior year claims and a continued impact from COVID-19 (though on a smaller scale than in 2021).

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14 PPE stands for 'provision pour participation aux excedents', or 'provision for profit sharing'.

15 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.

Munich Re cited a positive operating impact from its expected in-force contribution alongside positive operating variances from in-force business, with major losses in P&C reinsurance being largely in line with expectation.

Similarly to 2021, Generali presented a considerable level of granularity in breaking down its operational impact, citing positive Own Funds generation for life and non-life business and a negative contribution from holdings and financials. The contribution from non-economic variances was also negative, partially driven by the conservative update to surrender assumptions in France, the going concern reserve in Germany, the nonrecurring holding expenses and the contingent liabilities set aside within the group IFRS balance sheet.

Similarly to Generali, AXA also disclosed positive Own Funds generation from life and savings and P&C, and a negative impact from holding, banking and asset management, along with a negative operating variance mainly driven by the decrease in surplus funds in France.

New business

This category reflects the impact on Own Funds of writing new business over 2022.

Overall, ‘New business’ contributed a 1.9% increase in Own Funds over 2022 from the opening position (noting that some firms in our sample would include new business as part of a wider item in its movement in Own Funds, typically ‘Operating Impacts’).

As discussed in Section 3 of this report above, although the majority of firms in our survey reported a decrease in new business levels over 2022 compared with 2021, a number of them also reported an increase in new business value margins, i.e. business being written in 2022 is more profitable compared with that written in 2021.

Generally, firms in our survey reported levels of new business contribution to Own Funds similar or somewhat higher compared to last year’s, with SCOR being a notable exception, which reported a material increase from EUR 658 million to EUR 1,108 million.

Other reinsurers in our survey (those who disclose this metric) also reported an increase in the contribution to Own Funds from new business, although to a lesser extent.

As last year, Phoenix reported new business strain driven by the BPA transactions it completed. It includes a recognition of the Risk Margin and reflects the assets received on day 1.

Management actions

A couple of companies in our sample provided disclosures around specific management actions taken during 2022.

Overall ‘Management actions’ contributed a 0.2% increase in Own Funds over 2022 from the opening position.

Phoenix Group continued to implement a range of management actions over 2022, which increased Own Funds, with the most significant items relating to Matching Adjustment fund optimisations, deployment of assets into US liquid credit to take advantage of relative spread widening and continued illiquid asset origination activity.

Allianz disclosed a negative immaterial impact from management actions in 2022, which was a combination of a favourable impact driven by the new partnership with Voya Investment Management and the integration of Finanzen.de into Clark, and an unfavourable impact driven by a change in transferability deductions of surplus funds and the net deferred tax asset (**DTA**) that followed from the changes in the SCR related to management actions at Allianz Lebensversicherungs-AG, Allianz Private Krankenversicherungs-AG, and Allianz of America inc.

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 previously in this paper, the majority of firms disclosed a negative impact on their Own Funds over 2022 owing to market movements, with SCOR being the only exception. Not surprisingly, overall 'Market impacts' contributed a 9.8% decrease in Own Funds over 2022, reflecting the deteriorating macroeconomic conditions of 2022. The negative market impact for the companies in our sample ranges from -20.6% to -2.6% of the opening Own Funds.

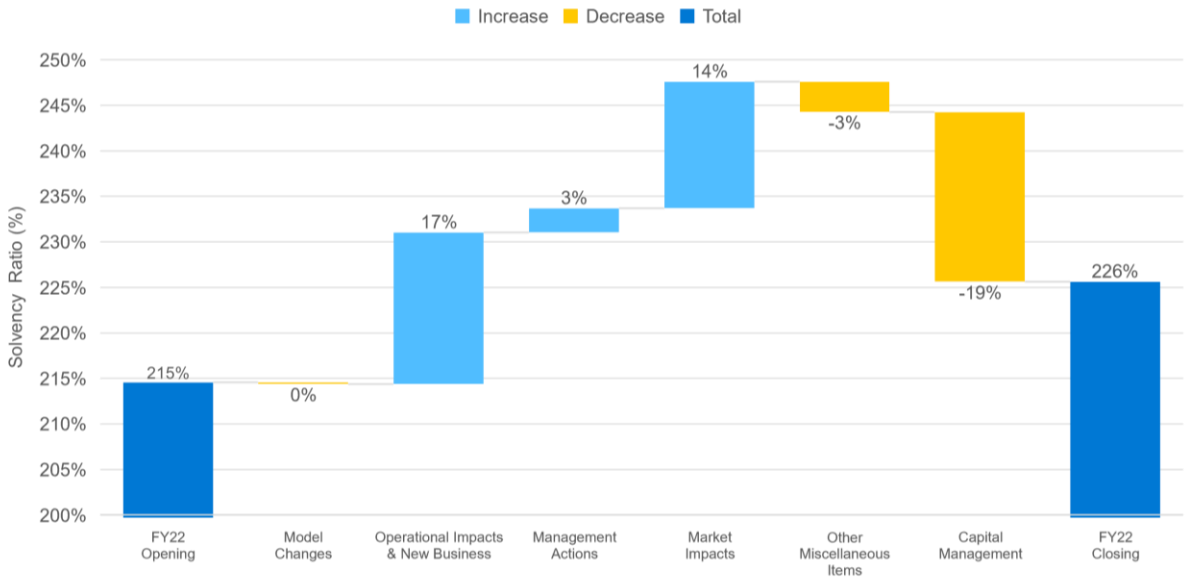
Generally, companies in our sample attributed negative market impacts to credit spreads widening, lower equity market performance, currency fluctuations, increases to interest rates and increases in interest rate volatility, though the foreign exchange (**FX**) impact was favourable for some.

Some companies disclosed a split of the market impact by drivers. For example, AXA split its total market impact into equity, equity implied volatilities, interest rates, interest rate implied volatilities, credit spreads widening, inflation, VA and FX impact. The impact on capital generation from the increase in interest rates, VA and FX was positive, but not enough to outweigh the negative impacts from other drivers in the list.

SCOR attributed a positive market impact on capital generation to increasing interest rates and USD appreciation, while also commenting that a high-quality fixed income portfolio with short duration enabled it to benefit faster from rising interest rates.

In a similar fashion to the analysis presented in Figure 12 above, we have analysed the breakdown of the movement in solvency ratio. As can be seen from Figure 13, despite the market impacts being the largest driver behind the decrease in Own Funds, they have also served to reduce the SCR for the companies in our sample, at a proportionally higher rate than the Own Funds reduction. This has led to an increase in the weighted average solvency ratio of the firms. On average, the market impact category was the largest driver for the increase in solvency ratio for companies in our sample. The decrease in SCR is largely attributed to high interest rates.

FIGURE 13: AGGREGATE EVOLUTION OF SCR COVERAGE OVER 2022 FOR COMPANIES IN OUR SAMPLE



Other miscellaneous items

In our categorisation this includes such items as tax, holding company expenses, pension scheme impacts, M&A activity, and portfolio and business transfers.

This category has not been a significant driver of the Own Funds change this year compared with the last year – in 2021, M&A activity was the main contributor in this category, while there has not been significant M&A activity over 2022.

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. 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 2022.

As discussed in previous sections, despite the overall trend of a reduction in Own Funds over 2022, solvency ratios improved for the majority of the firms in our sample (and where there was a reduction in the solvency ratio, the year-end solvency ratio remained strong), which allowed companies to announce dividends at a similar, or even higher, level than in 2021.

On top of that, the majority of firms announced (or continued) share buy-back programmes.

Dividends and share buybacks form the majority of the capital management impact, which on aggregate for the companies in our sample reduced Own Funds by 7.7% – the highest payout over recent years.

Despite the unfavourable macroeconomic impact, companies continued to pay dividends in line with their policies and many announced commitments to progressive dividend policies.

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 2022. More specifically, we have considered how results over 2022 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 disclosures since year-end 2017, 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 2022, 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 14 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 14: NUMBER OF FIRMS INCLUDED IN MOVEMENT IN OWN FUNDS ANALYSIS

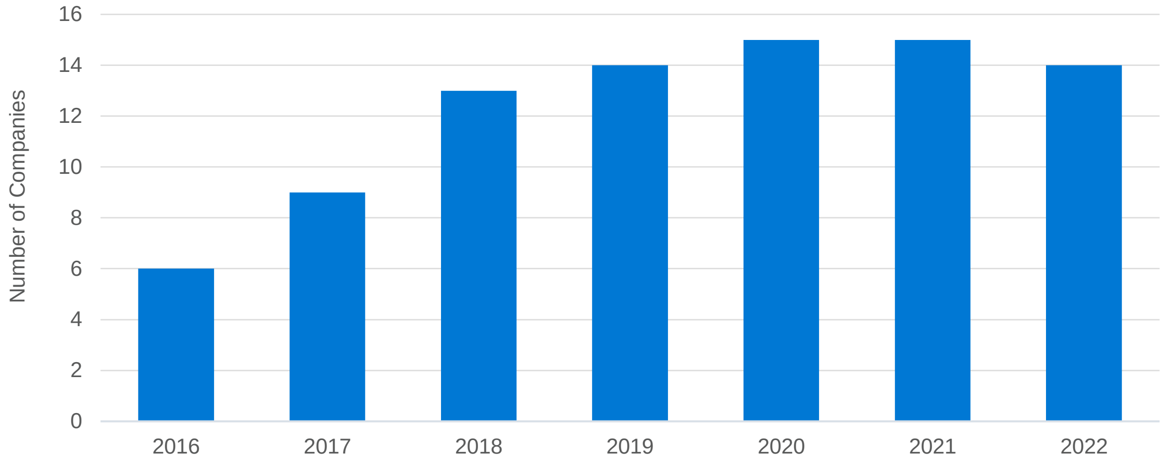
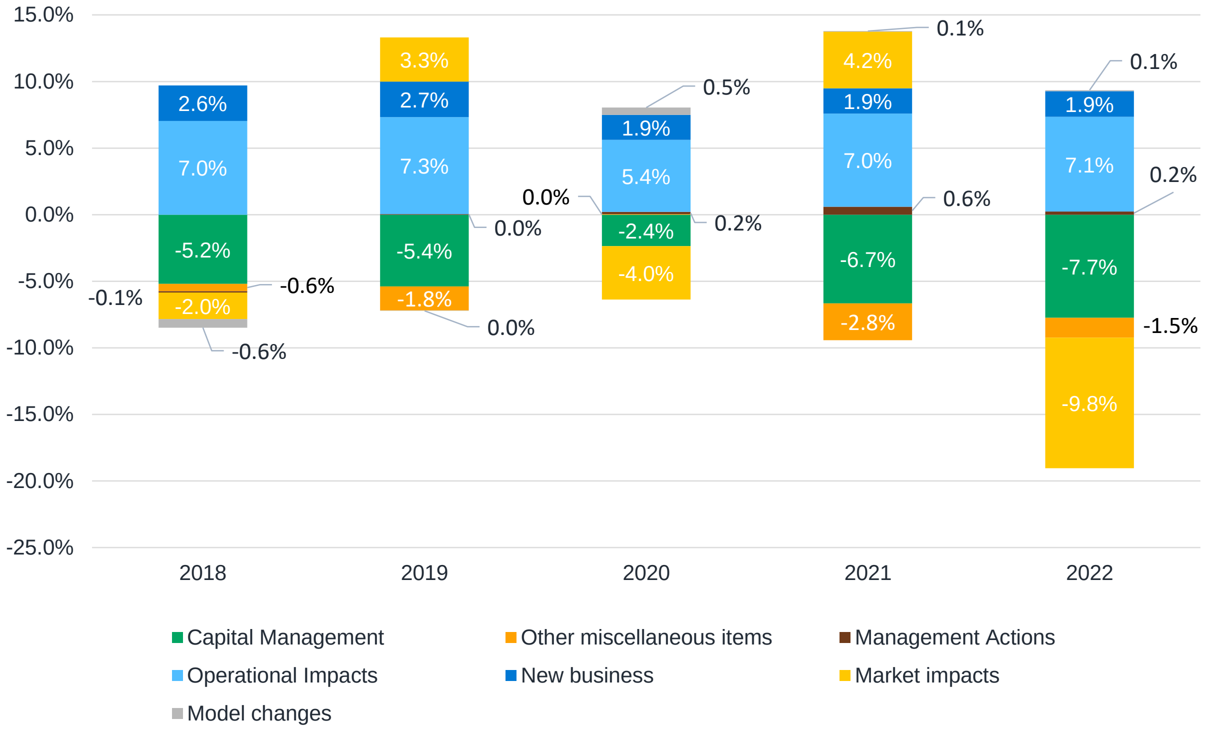


Figure 15 shows the combined results for year-end 2018 to year-end 2022, split according to the seven 'high-level buckets' set out in Section 4 above.

FIGURE 15: EVOLUTION OF CAPITAL GENERATION DRIVERS



Looking at the results over the five years:

- **Operational impacts**: The contribution to the movement in Own Funds from this item seems broadly stable year-on-year, with 2020 being lower than in other years – showing the impact of COVID-19. Companies commented that they saw the tail end of COVID-19 experience and there has not appeared to be a change in view on the long-term trends in mortality experience. We will monitor whether any changes in policyholder behaviour associated with rising interest rates will manifest in assumption changes or other operational impact in 2023.
- **New business**: New business contribution is similar to the previous two years. As discussed above, the volumes, especially for savings products, decreased compared with 2021, but the margins have improved in aggregate.
- **Market impacts**: Over the last five 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. In 2022 we have seen a year of sharp rises in interest rates, significant increases in credit spreads and falls in equity markets for some regions. This is reflected in the material negative market impact over 2022, the most material of all the categories, and also the most significant negative market impact over the last five years. Despite the material negative impact on Own Funds, market movements were favourable to companies' SCR coverage ratios. The favourable impact on the solvency ratio in 2022 (see Figure 13) was similar to the one observed in 2021, whilst 2020 observed a significant detriment to solvency ratios due to market movements, of over 25%, on aggregate, for the firms in our sample.
- **Capital management**: This item has also been the highest to date in our analysis, with capital generation allowing companies to sustain their target levels of dividends. It also reflects that the capital position of many companies has improved because of a significant reduction in the SCR (due to higher interest rates and lower asset values), leaving many companies at the top of the comfortable range for dividend payout.
- **Management actions**: Whilst the impact from this item is variable year-on-year, overall it has a small impact each year. In 2021, management actions contributed more materially to the movement in Own Funds, mainly due to the contribution from Allianz in 2021 as a result of a reinsurance transaction. In 2022, the impact from this item has returned to the relatively low levels that were witnessed prior to 2021.
- **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. There has been a drop-off in M&A activity in the European insurance market in 2022 and, as a result, the impact from this item in 2022 was not significant.

Based on results shown in Figure 15, we have calculated the implied total return 'pre-dividend' and 'post-dividend' in Figure 16. The 'pre-dividend' return has been calculated including all items set out in Figure 15, 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 16: TOTAL RETURN IMPLIED BY CAPITAL GENERATION DRIVER ANALYSIS

TOTAL RETURN	2018	2019	2020	2021	2022
'Pre-dividend'	6.4%	11.5%	4.0%	11.0%	-1.9%
'Post-dividend'	1.2%	6.1%	1.7%	4.3%	-9.7%

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

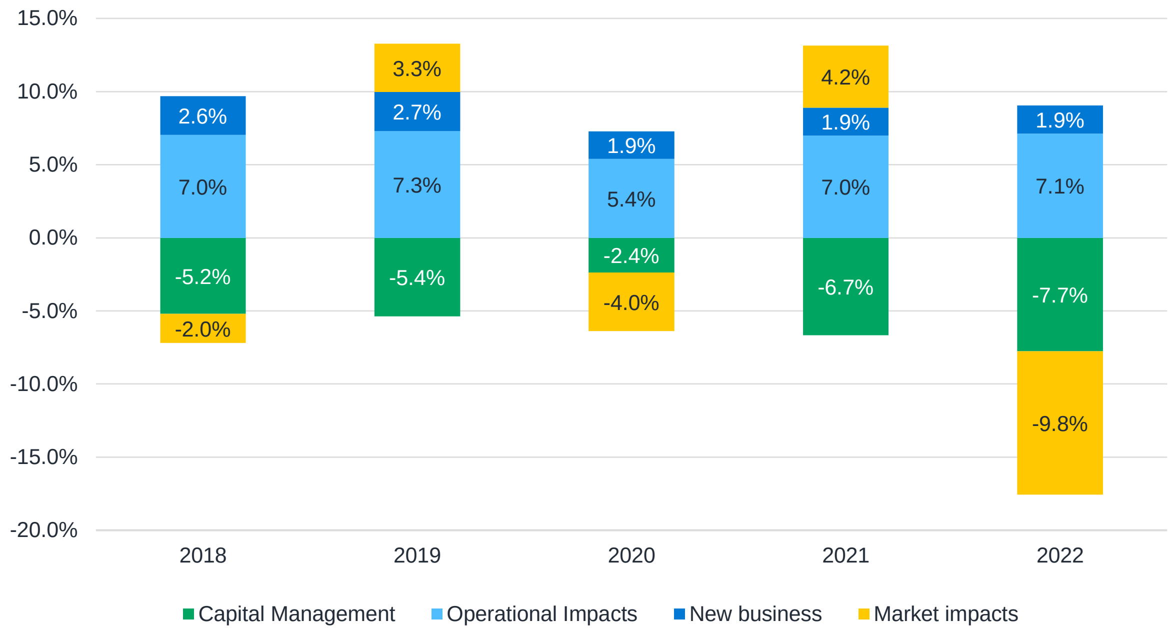
In terms of the seven 'high-level buckets' set out in Section 4 above, Figure 17 shows the judgement we have made.

FIGURE 17: 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 18 shows the results, as shown in Figure 15, but only for the anticipated items (as classified in Figure 17).

FIGURE 18: 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.

In last year's analysis we suggested that market impacts may have a limited bearing on the level of dividends being paid out and 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 had been assumed to be 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 which '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 expanded for 2022 are shown in Figure 19.

FIGURE 19: PAYOUT RATIO AND EXPECTED CAPITAL GENERATION BASED ON BACK-BOOK

ITEM	2018	2019	2020	2021	2022
Payout ratio	54%	54%	33%	75%	86%
Expected back-book capital generation	8.6%	9.2%	7.7%	9.7%	10.7%

Results in Figure 19 show that, over the period 2018 to 2021, the payout ratio is around 50% (if we average the results in 2020 and 2021, which we thought could be considered to offset each other due to the extra restrictions that were placed on firms in terms of paying out dividends in 2020). However, 2022 looks like an exceptional year so far, with payout ratios materially exceeding the ones observed in recent years. As discussed earlier, firms paid dividends at a level similar or higher than in previous years, as sharp rises in interest rates increased solvency ratios for many firms, which allowed them to pay dividends in line with their capital management policies. We will monitor this going forward, as the trends and companies' approaches to dividends will become clearer.

In addition, the expected capital generation based on the back-book varies from around 8.0% to 10.5% over the five-year period, so it appears that 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 in the European Insurance market, 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 by 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 Insurance Capital Standards (**ICS**).

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

EIOPA SOLVENCY II 2020 REVIEW

EIOPA's 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 the 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[16]. Following this, in September 2021 the European Commission (EC) announced its proposals to reform Solvency II[17]. Over the summer of 2022,

16 Milliman (January 2021). EIOPA Opinion on the Solvency II 2020 Review. Milliman Briefing Note. Retrieved 19 October 2023 from https://www.milliman.com/-/media/milliman/pdfs/2021-articles/1-11-21-sii-2020-eiopa-opinion.ashx.

17 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.

as part of the legislative procedure, the European Parliament – a rapporteur[18] as well as other Members of the European Parliament (MEPs)[19] – and the Council of the European Union[20] provided their responses to the suggested reforms from the EC. As one might expect, given the number of parties involved, the views of the parties differed in a number of areas.

Milliman previously produced a briefing note[21] detailing the 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.

After more than a year of negotiations, in July 2023, the European Parliament's Committee on Economic and Financial Affairs (Econ) approved the proposed amendments to the Directive with 55 votes in favour of the rapporteur's draft report and three against[22]. The EC, the Council of the European Union and the European Parliament are now carrying out trilogue negotiations on the final text. Member states shall adopt the reforms by 30 June 2025 and they should apply to insurers from 1 January 2026. However, these dates are not yet certain because the duration of the implementation period is part of the continued trilogue negotiations.

We provide a summary of proposals in relation to three key areas relevant to shareholder value reporting.

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 parametrisation – in particular 'alpha'[23], the parameter that determines the 'speed of convergence' between market rates at the last liquid point (LLP)[24] to the Ultimate Forward Rate (UFR) – and the mechanism, if any, for transitioning to the new extrapolation methodology have not been established.
- In the July 2023 update, Econ inserted a requirement that the extrapolation of the euro should start at 20 years, as it does now. This, along with the rapporteur's proposal of setting 'alpha' at 20%, should have modest implications compared to the proposals of the other MEPs[25] which would have more significant impacts.
- 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.
- As mentioned in the 2022 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.

18 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.

19 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.

20 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/.

21 Broens, J., Rappange, D., van Rooijen, M. & Ruisaard, M. (August 2022). Interim Score of the Solvency II Reforms. Milliman Briefing Note. Retrieved 19 October 2023 from https://uk.milliman.com/en-gb/insight/interim-score-of-the-solvency-ii-reforms.

22 On 27 July 2023 the ECON committee of the European Parliament published its proposals at https://www.europarl.europa.eu/doceo/document/A-9-2023-0256_EN.html.

23 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.

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

25 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).

(Dynamic) Volatility Adjustment

- The common theme is that spread mismatches[26] 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 to be one of timing[27].
- 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 could result in an increase in SCR, thereby increasing the cost of holding capital.

Risk Margin

- There is consensus between the lawmaking bodies on potential changes to the RM mechanism, resulting in a reduction to the level of RM. Econ agreed with the Commission’s proposal to develop the ‘lambda’ approach for the RM calculation, which should reduce the volatility of the RM and account for the time dependency of risks.
- In the RM calculation, the cost-of-capital assumption is a key parameter. The Commission previously set this at 6%, via the Solvency II delegated acts, and has proposed dropping it to 5%. Econ went further, agreeing to a figure of 4.5%.
- As mentioned in the 2022 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.

  Also, for firms which make use of the transitional measures on technical provisions (**TMTP**), any release in RM will be (partly) offset by a reduction in TMTP.

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.

Although the July 2023 approval provided more clarity, there are still ongoing negotiations and not all parameters are pinned down yet. Insurers may find it beneficial to consider the potential consequences that the suggested reforms may have.

HMT REVIEW

HMT published its Solvency II consultation in April 2022 and subsequently its response[28] in November 2022, summarising the feedback received and setting out the UK government’s final reform package. Following this, in December 2022, HMT published a policy statement[29] on its implementation plan.

As part of its plans to legislate directly to implement certain parts of the Solvency II reform package, HMT set out its approach in draft statutory instruments (SIs)[30], which brings forward reforms to the RM and certain aspects of the Matching Adjustment (MA).

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26 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.

27 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.

28 HMT (November 2022). Review of Solvency II: Consultation – Response. Retrieved 19 October 2023 from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1118359/Consultation_Response_-_Review_of_Solvency_II_.pdf.

29 HMT (December 2022). Building a Smarter Financial Services Framework for the UK: Policy Statement. Retrieved 19 October 2023 from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1122734/Building_a_smarter_financial_services_framework_for_the_UK_.pdf.

30 HMT (22 June 2023). Draft Insurance and Reinsurance Undertakings (Prudential Requirements) Regulations. Retrieved 19 October 2023 from https://www.gov.uk/government/publications/draft-insurance-and-reinsurance-undertakings-prudential-requirements-regulations.

Those parts of the reform package not contained in legislation are intended to be implemented through changes to PRA rules and other policy material. The PRA is consulting on its approach to adapting Solvency II for the UK market in two tranches:

- Consultation Paper (CP) 12/23[31], which sets out the majority of the PRA's reform proposals, focusses on simplification, improving flexibility and encouraging entry.
- CP19/23[32], which covers reform proposals for life insurers relating to investment flexibility and the MA.

The consultation – with regards to CP12/23 – closed in September, except in the case of a number of administrative amendments to PRA rules, for which the deadline was July 2023. Subject to responses, the PRA expects to issue the final policy in relation to most of the proposals at around the end of the year. The consultation period – in relation to CP19/23 – closes in January 2024.

We have set out below a summary of the UK government's final reform packages and key proposed changes in CP 12/23. For further detail, Milliman produced a briefing note[33] outlining the proposals.

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 several 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 to enable a modified cost of capital approach to the RM calculation.
- Maintain the existing methodology and calibration of the fundamental spread for the MA, while allowing for the use of notched ratings.
- Broaden the MA 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.

The RM

As mentioned under the EIOPA Solvency II 2020 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 2022 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.

31 PRA (29 June 2023). CP12/23 – Review of Solvency II: Adapting to the UK Insurance Market. Retrieved 19 October 2023 from https://www.bankofengland.co.uk/prudential-regulation/publication/2023/june/review-of-solvency-ii-adapting-to-the-uk-insurance-market.

32 PRA (28 September 2023). CP19/23 – Review of Solvency II: Reform of the Matching Adjustment. Retrieved 27 October 2023 from https://www.bankofengland.co.uk/prudential-regulation/publication/2023/june/review-of-solvency-ii-adapting-to-the-uk-insurance-market.

33 Patel, D., Ginghina, F. & Walker, S. (July 2023). CP12/23 – Review of Solvency II: Adapting to the UK Insurance Market. Milliman Briefing Note. Retrieved 19 October 2023 from https://uk.milliman.com/en-gb/insight/cp-12-23-review-solvency-ii-uk-insurance.

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:

- Investment flexibility – widening the range of assets which may be held in MA portfolios
- Liability eligibility – allowing the MA to be applied to a wider range of insurance products
- Credit ratings under the MA – including removing the limit on the MA arising from sub-investment grade assets (**SIG assets**), clarifying risk management requirements for SIG assets and converting expectations on internal credit assessments to requirements
- MA Permissions, Breaches and Consequential Rule changes – including a new MA eligibility condition to demonstrate compliance with the Prudent Person Principle (**PPP**), streamlining the MA application process for certain assets and increased proportionality for breaches of MA conditions
- Attestation – introducing the requirement for fundamental spread (**FS**) and MA attestation
- Assumptions underlying the MA
- Matching Adjustment Assets and Liability Information Return (**MALIR**) data collection – formalising regulatory data requests on the MA through a new template
- Notching – increased granularity in the FS, including notching where appropriate.

For further detail, Milliman produced a briefing note[34] outlining the proposals.

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[35], 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.

34 Ginghina, F., Patel, D., Booth, C., Bugg, R., Christy, N., Crowson, J. & Wrobel, L. (October 2023). CP19/23 – Review of Solvency II: Reform of the Matching Adjustment. Milliman Briefing Note. Retrieved 27 October 2023 from https://uk.milliman.com/en-GB/insight/cp19-23-review-of-solvency-ii-reform-of-matching-adjustment.

35 Bank of England (7 November 2022). CP14/22 – Review of Solvency II: Reporting Phase 2. Retrieved 19 October 2023 from https://www.bankofengland.co.uk/prudential-regulation/publication/2022/november/review-solvency-ii-reporting-phase-2.

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[36], 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 17

IFRS 17 came into force on 1 January 2023 and we have seen some companies disclosing their full year 2022 results on an IFRS 17 basis in the year-end 2022 results. Most companies affected have now published their first set of interim results during 2023. The majority have stated that IFRS 17 does not impact their business operations, including areas such as cash flow, Solvency II, company KPIs and dividends, which suggests that companies, currently, will continue to focus on other metrics such as Solvency II and Operating Capital Generation style metrics.

IFRS 17 introduces new balance sheet items which companies (that adopted IFRS 17) now must calculate. They include the Contractual Service Margin (CSM) and Risk Adjustment (**RA**), both of which are held as liabilities on the IFRS balance sheet and calculated on inception of a contract.

- The CSM represents the unearned profit of a contract as the company provides services in the future and is calculated so that profit is zero on day 1 of the contract.
- The RA is a part of the fulfilment cash flow and is the adjustment equal to the entity's required compensation for bearing uncertainty in underlying cash flows from non-financial risks.

Under IFRS 17, companies' shareholder equity has reduced due to the CSM being recognised as a liability on the IFRS 17 balance sheet. 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, all else being equal, will be lower than the current IFRS equity. Since the CSM is seen as a store of future value, some companies have shown an "adjusted shareholder equity" which adds the CSM liability back into shareholders equity to provide a more complete reflection of shareholder value. In companies' disclosures so far, companies have generally reported an adjusted shareholder equity under IFRS 17 similar to or higher than the shareholder equity under IFRS 4. This adjustment to add the CSM back into shareholders equity is one which analysts have said they would expect to see and to compare against the level of Solvency II Own Funds.

Some companies have shown the CSM movement in 2022, breaking down the movement into new business, interest accretion, experience variance, assumption changes and CSM release. This provides more insight into how the future profits changed over the year.

The analysis of change of the CSM also provides new metrics for companies to present their results. Some examples companies have chosen to present in their half year results are below:

- Adding the total change in CSM to the IFRS 17 operating profit to present the operating value in that period
- Measuring the release of CSM as a proportion of the 'Pre-Release close' CSM
- Measuring the new business CSM as a ratio of the CSM in-force release

Some companies have also shown a bridge from the 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.

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

Whilst companies and investors start to get more comfortable with the results under IFRS 17 we may see certain IFRS 17-related metrics becoming more harmonised, which will improve comparability of results across the insurance industry and perhaps companies including IFRS 17 related metrics in their future goals.

With respect to their implementation of IFRS 17, there have been some differences in choices made by companies in the areas below:

- **Measurement model**: The default choice is to use the General Measurement Model for life companies, although some companies will have elected to use the Premium Allocation Approach (**PAA**) although this option is more suited to short-term business. A variable fee approach (**VFA**) can also be adopted for participating contracts such as unit-linked business.
- **Discount rates**: Companies have a choice of ‘bottom-up’, or ‘top-down’ approaches or a hybrid approach.
- **Risk adjustment**: A confidence level approach can be used to determine an appropriate level, and some companies may opt for a cost of capital approach instead. Those that do not use a confidence level approach will be required to disclose the equivalent confidence level, however.
- **Transition approach to calculate the opening CSM**: Many companies will use the full retrospective approach (**FRA**) where possible, typically for more recent business where there is good quality of recent data. Where data is not available, a modified retrospective approach (**MRA**) will be used, which allows for simplification to the FRA or the Fair Value Approach (**FVA**), which utilises the IFRS 13 definition and is more suited to older business.

So, whilst harmonising disclosures across the industry will be beneficial, users of such metrics will need to be aware of how differences in approaches may contribute to any differences in metrics between companies.

INSURANCE CAPITAL STANDARD

New ICS being developed by the International Association of Insurance Supervisors (IAIS) makes 2023 a key year of development. Unlike 2021, in 2022 and in 2023 (to date) there did not appear to be any public disclosures of ICS results for firms participating in the ICS trials.

The goal for the current phase of ICS development is the delivery of a capital standard that is fit for implementation by supervisors. The implementation of the ICS is being 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.

In June 2023, the IAIS launched a public consultation on the candidate ICS as a PCR, which is the ICS as currently envisaged for implementation. The IAIS held a public webinar at the end of June 2023 to summarise the latest updates to the ICS and to take questions from participants. Following consideration of submissions and comments from the consultation, the IAIS will release the resolution of the comments along with the finalisation of the ICS. The adoption of the ICS is currently planned for December 2024.

One of the key updates in the candidate ICS is the recognition of the use of Internal Models for the calculation of the ICS capital requirement, subject to the approval of the relevant GWS. This is seen as a good fit with the existing Solvency II framework in the UK/EU. Other changes to the candidate ICS compared with ICS version 2.0 are in respect of the following areas:

- **Valuation**: Adjustments to the eligibility criteria for liabilities to be allocated to the middle bucket, recognition of multiple portfolios within the same currency for the middle bucket, contribution of non-fixed income assets to the spread adjustment, introduction of a term structure for spreads, and introduction of a modulation factor to limit the impact of the spread adjustment.
- **Capital resources**: Introduction of a limit to the recognition of minority interests, and adjustments to some eligibility criteria for Tier 1 limited and Tier 2 instruments.

- **Capital requirement**: Update to the non-default spread risk, minor update to the calibration of life risks, differentiated treatment for investments in eligible infrastructure debt and equity, and introduction of a counter-cyclical adjustment for equity risk.
- **Tax**: Simplified approach to the recognition of tax effect on the ICS capital requirement.
- **Other methods**: Use of internal models for the calculation of the capital requirement, and use of Supervisory Owned and Controlled Credit Assessments (**SOCCA**) for unrated exposures in the credit risk calculation.

In March 2023, following public consultation of the draft criteria in 2022, the IAIS released the final comparability criteria to assess whether the Aggregation Method (**AM**) provides comparable outcomes to the ICS. That is, essentially, what criteria should be used to assess whether the US book value based approach (i.e. the AM) produces results that are comparable with the (non-US) market value based approach that is used in ICS[37]. The comparability assessment itself is scheduled to begin in Q3 2023.

As noted in our 2022 Shareholder Value Report, the key differences between ICS and Solvency II are (and remain) in respect of the following areas:

- **Risk Margin**: This is calculated using a Margin on Current Estimate (**MOCE**) approach under ICS. The calculation of the MOCE for life insurance business is based on the 85th percentile of a normal distribution.
- **Capital requirement**: 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 in the calculation approaches adopted e.g. the calculation of the interest rate risk and spread risk components of the capital requirement.
- **Matching Adjustment / Volatility 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, then the ICS balance sheet may be adopted as the basis for transactions going forward, particularly where such transactions are cross border.

37 See https://www.iaisweb.org/uploads/2023/03/final-aggregation-method-comparability-assessment-criteria.pdf.

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