



Year-End 2022 Results – Life Insurers Solvency II Disclosures

Analysis Report for Year-End 2022

—
April 2023



Contents

Area	Page no.
Key Messages	3
Cover Ratios	4 – 6
Operating Capital Generation	7
YE22 Sensitivities	8 – 9
Asset Portfolio	10
Capital Optimisation Actions	11
Sustainability & Climate-Related Disclosures	12 – 13
Other Themes from Analyst Presentations	14
Adoption of IFRS 17	15
Appendix – New Business	17
Appendix – Covid-19: Considerations for Provisions	18
Appendix – Continuous Mortality Investigation (CMI)	19
Appendix – Cover Ratios	20 – 21
Appendix – Capital Generation	22
Contacts	23

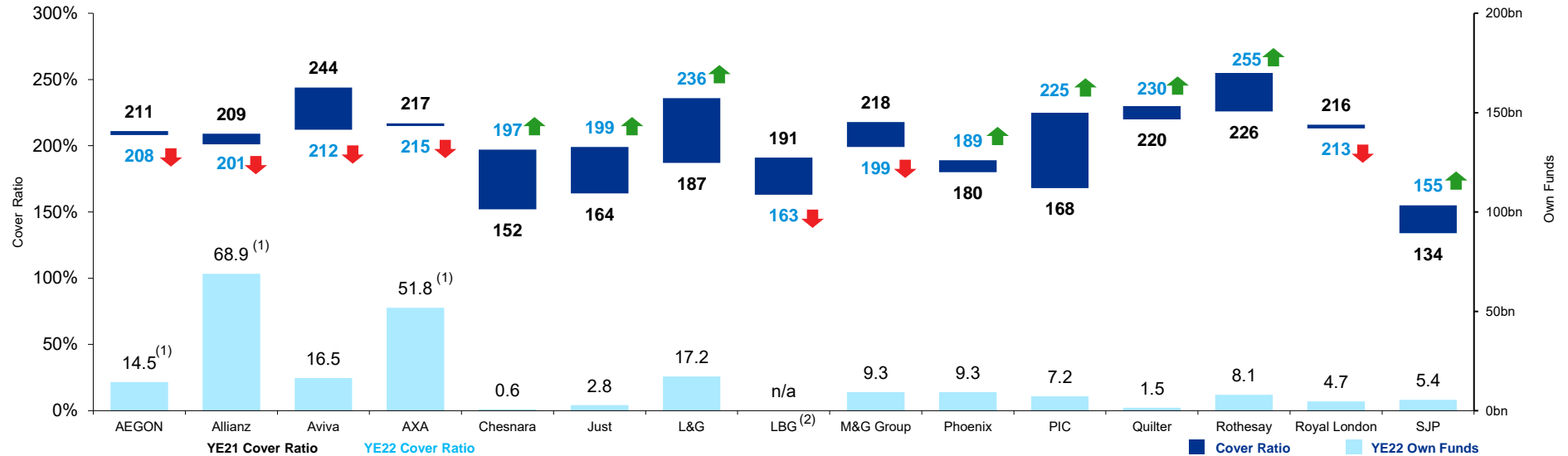
Key Messages

Solvency II Surplus Generation	<p>Comparing 2022 and 2021 annual reports we noticed that this year most firms (including Aviva, M&G, Phoenix and Rothsay) presented Analysis of SII Surplus consistently with FY21 disclosures. The exception was Just that disclosed movements in Own Funds and Cover Ratio in FY21 but presented movements in Cover Ratio only in FY22. The majority of firms have fewer number of steps shown in their Analysis of Surplus because certain drivers of surplus change have become less material in 2022 compared to 2021 (e.g., disposal of several markets for Aviva in FY21; L&G disclosed repayment of debt and Phoenix disclosed assumption and methodology changes in FY21).</p> <p>Several firms set targets for their SII surplus. For example, L&G's target for SII operational surplus generation less new business strain is to cumulatively exceed dividends paid over 2020-2024. In 2022 they created £0.3bn surplus over dividends and £0.7bn cumulatively as at YE2022. Three companies published SII VNB (Aviva, L&G, RLG). This metric has been stable over 2022 for all three companies. Other firms also published value of new business metrics but not on a SII basis (e.g. Phoenix's incremental new business long-term cash generation or Aegon's MCVNB).</p>
Cover Ratios	<p>Economic volatility and different firms' strategies led to a mix of outcomes in 2022. Due to the increased interest rates, economic variances were favourable for some companies (e.g. Aviva, Phoenix and RLG), whilst some (e.g. Allianz and AXA) experienced a negative impact due to the decline in equity markets. There has been a variety of other reasons for movement in Cover Ratio. For example, growth in the UK & Ireland Life business increased Cover Ratio for Aviva. Similarly, strong With-Profit results combined with higher return on annuity surplus and favourable longevity experience led to the improvements for M&G. Contrary, additional litigation provision for Allianz's Structured Alpha funds materially reduced their Cover Ratio.</p>
Dividends and Debt	<p>Most insurers declared 2022 dividends that are higher than their dividends in prior year. There were no material debt and equity raise among insurers in 2022. Quilter announced plans to raise subordinated debt in 2023. Aviva and Phoenix redeemed debt in 2022. Furthermore, Aviva approved £3.75bn return of capital to ordinary shareholders via B Share Scheme, Quilter, M&G and Allianz completed share buyback.</p>
Sensitivities	<p>Overall the sensitivity impacts were broadly stable between YE22 and YE21. Firms continued to use hedges against market risks. Hedging against interest rates to protect their Solvency II balance sheet created IFRS losses for several firms as interest rates rose in 2022. Addressing this issue, only Just reduced interest rate hedging in 2022 and became more sensitive to interest rate sensitivities compared to 2021. Aviva's sensitivity to market movements reduced and this was driven in significant part by the return of capital and debt reduction over 2022.</p>
Adoption of IFRS 17	<p>Firms started publishing IFRS 17 information in their year-end reports disclosing high-level methodology on level of aggregation, measurement models, discount rates, risk adjustment and transition measures. They also discussed impact assessment from adoption of IFRS 17 revealing "adjusted" IFRS equity attributable to shareholders, CSM as at transition date, the impact on equity and potential new KPIs.</p> <p>Firms confirmed that their current focus is on developing and embedding the operational capabilities and determining the transition balance sheet and comparatives required for 2023 reporting.</p>
Climate-Related Financial Disclosures	<p>In 2022 the UK made TCFD reporting mandatory from 6 April 2022 for over 1,300 of the largest UK-registered companies. We analysed five UK largest firms (Aviva, L&G, M&G, Phoenix and LBG) that published their Climate-Related Financial Disclosures addressing four key components of TCFD: governance, strategy, risk management and metrics and targets. All firms committed to reach Net Zero by focusing on decarbonising their investment portfolios, leading by example by reducing carbon emission as enterprises and engaging with customers, industry and governments on climate-related issues.</p> <p>PS21/24 is applicable first time in 2023 to certain life insurers and asset managers with AUM greater than £50bn. This requires TCFD reporting at both entity level and product level published by 30 June 2023. So far only Aviva has published entity level reporting for their five entities.</p> <p>All firms received independent external assurance for some of their climate-related metrics with Aviva being leading firm by the number of assured metrics and type of assurance.</p>

Cover Ratios

Solvency II Shareholder Cover Ratios (Own Funds over SCR)

This graph below shows the Solvency II Cover Ratios from YE21 to YE22 as disclosed in insurers YE22 announcements. It covers the larger UK and European insurers who had disclosed by 27 March 2022. Cover ratios have changed significantly for various insurers over 2022.



Source: KPMG analysis of Insurers YE22 disclosures

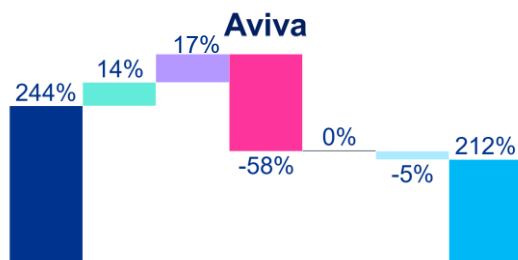
Note (1) : Own Funds expressed as GBP. Exchange Rate used for GBP/EUR as at 31 Dec 2022 is 1.13. (Source: KPMG FMU Jan 2023)

Note (2) : LBG refers to the Insurance, Pensions and Investments division of Lloyds Banking Group throughout the SII sections of this report.

Company	AEGON	Allianz	Aviva	AXA	Chesnara	Just	L&G	LBG	M&G Group	Phoenix	PIC	Quilter	Rothesay	Royal London	SJP
Currency	€	€	£	€	£	£	£	£	£	£	£	£	£	£	£
YE22 Own Funds	16.3	77.9	16.5	58.5	0.6	2.8	17.2	n/a	9.3	9.3	7.2	1.5	8.1	4.7	5.4
YE22 SCR	7.8	38.8	7.8	27.2	0.3	1.4	7.3	n/a	4.7	4.9	3.2	0.6	3.2	2.2	3.5
YE22 Surplus	8.5	39.1	8.7	31.3	0.3	1.4	9.9	n/a	4.6	4.4	4.0	0.8	4.9	2.5	1.9
YE21 Own Funds	19.4	86.0	22.2	62.0	0.6	3.0	17.6	n/a	11.4	11.9	6.7	1.6	8.3	5.2	5.3
YE21 SCR	9.2	41.2	9.1	28.6	0.4	1.8	9.4	n/a	5.2	6.6	4.0	0.6	3.7	2.4	3.9
YE21 Surplus	10.2	44.8	13.1	33.4	0.2	1.2	8.2	n/a	6.2	5.3	2.7	1.0	4.6	2.8	1.3
Solvency View	Reg	Reg	SH	Reg	Reg	Reg	Reg	SH	SH	SH	Reg	Reg	Reg	SH	Reg

Cover Ratios (Key Movements)

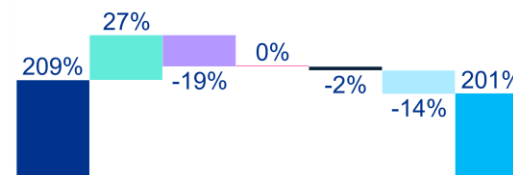
Analysis of the largest changes in cover ratio for life insurers are shown below. **LBG, Rothesay, PIC** and **SJP**, had significant change in cover ratio in 2022 ((28)%, 29%, 57% and 21% respectively) but their YE22 disclosures did not provide enough information to support the analysis shown below. For **Aegon, AXA, Quilter** and **RLG**, we haven't provided detailed analysis as the movements were small.



Total change: (32)%

- A capital return of £3.75bn to shareholders resulted in significant reduction in Solvency II coverage ratio by 41%. A further 17% reduction was caused by dividend and debt repayments causing a total reduction in coverage ratio of **(58)%**
- The impact of market movement primarily from increase in interest rates and wider credit spread led to an increase in coverage ratio of **17%**.
- Positive operating capital generation driven by growth in UK & Ireland Life business, partly offset by adverse impacts from reinsurance renewal across the general insurance business led to an increase in coverage ratio of **14%**.

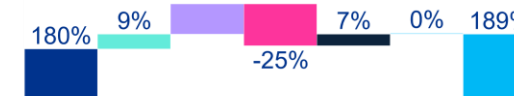
Allianz



Total change: (8)%

- The cover ratio was positively supported by a solid operating Solvency II capital generation despite growth related capital requirements for P/C business: **27%**
- The impact from unfavourable capital market developments such as: a decline in equity markets; a widening of credit spreads; high interest rate volatility; and market value losses on investments in Russian, Ukrainian and Belorussian bonds drove a reduction in the coverage ratio. This was compounded by a rise in inflation and partially offset by higher interest rates **(19)%**
- The impact of taxes and other changes, such as an additional € 1.9 bn provision for the Allianz GI U.S. Structured Alpha matter, also contributed to the decrease of the coverage ratio by **(14)%**

Phoenix



Total change: 9%

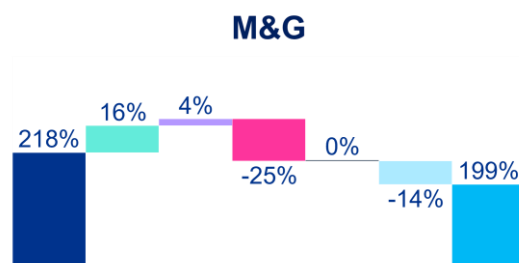
- Ongoing surplus emergence and release of capital requirement increased the coverage ratio by 16%, which was offset by **7%** due to new business strain from BPA premiums written.
- Despite significant market turbulence there was only a £(0.4)bn reduction in Solvency II surplus. This was due to a comprehensive hedging strategy, designed to minimise any adverse impact from economic variance. However, due to relative movements in OF and SCR, Phoenix's cover ratio increased by **18%**.
- Operating costs, dividends and interest reduced the coverage ratio by **16%**. Repayment of tier 3 bond from own cash resources further reduced coverage ratio by **9%**
- Primarily business as usual management actions added **7%** to coverage ratio

■ YE21 Coverage Ratio (%)
 ■ Operational Return
 ■ Non-operating return/Market movements
 ■ Dividends/debt payments/issuances
 ■ Management Actions
 ■ Other
 ■ YE22 Coverage Ratio (%)

Source: KPMG analysis of Insurers YE22 disclosures

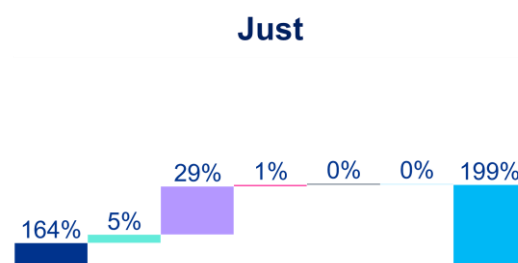
Note: Refer to "Appendix – Cover Ratios" for further details

Cover Ratios (Key Movements)



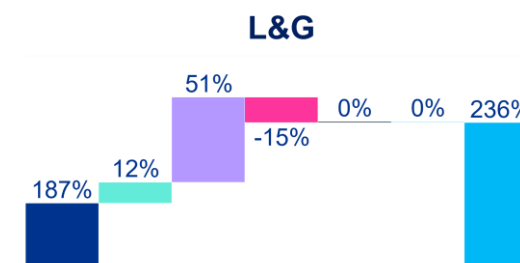
Total change: (19)%

- Payment of dividends, share buy back and other capital movements led to a decrease in coverage ratio of **(25)%**
- Increase in underlying capital generation due to strong With-Profit results, higher return on annuity surplus and strong longevity results, combined with management actions increased the coverage ratio by **16%**
- A reduction of **(14)%** primarily driven by tax



Total change: 35%

- Favourable economic variances driven by higher interest rates led to an increase in coverage ratio: **29%**
- Positive organic capital generation led to a further increase in the coverage ratio: **5%**



Total change: 48%

- Rising interest rates led to a positive change in investments which was partially offset by weaker asset markets. This, combined with the negative impact from the experience variances, assumption changes and other management actions increased cover ratio by **51%**
- Payment of dividend led to a reduction in the coverage ratio: **(15)%**
- Operational surplus generation due to growing in-force portfolio offset by new business strain, primarily reflecting UK PRT volumes, led to increase in cover ratio by **12%**.

■ YE21 Coverage Ratio (%)
 ■ Operational Return
 ■ Non-operating return/Market movements
 ■ Dividends/debt payments/issuances
 ■ Management Actions
 ■ Other
 ■ YE22 Coverage Ratio (%)

Source: KPMG analysis of Insurers YE22 disclosures

Note: Refer to "Appendix – Cover Ratios" for further details



Operating Capital Generation

Operating capital generation continues to be a focus for insurers at FY22. This typically includes New Business (NB), In-Force unwind, assumption changes and non-economic variance. Firms continue to report positive operating capital generation predominantly supported by unwind of In-Force business and management actions offset by new business strain.

The below summarizes some of the key themes observed in insurers' disclosure.

New Business Contribution to Capital Generation

New business disclosures vary amongst insurers, with inconsistent methodologies, making it difficult to present like-for-like results.

Capital generated from new business differs by firm, with some having favourable contribution and others having negative contribution. Notably, those who reported positive NB capital generation (i.e., negative new business strain) sold more asset management and savings, whilst insurers selling BPA and annuity products typically reports negative NB capital generation (i.e. positive new business strain).

BPA was a large proportion of new business volumes over the last year for **Just** and **L&G**, with both reporting an increase in new BPA business. **Phoenix** and **Aviva** reported lower BPA sales compared to 2021, but sales were still a material amount of total sales. **Phoenix** (as well as **M&G**) noted that they are expecting a large pipeline of BPA in 2023. For the fourth year in a row the UK PRT market secured more than £25 billion of retirement income

RLG increased new business sales for Individual Pensions and Workplace Pension schemes, with the latter growing by 29%, in part, because of a stronger UK employment market.

Protection business volumes were lower than in 2021 for **Just**, **RLG** and **L&G**. **Aviva** reported growth in its group protection sales.

There was an increase in annuities and equity release sales for **Aviva** and **RLG**.

Company	2022			2021		
	New Business Measure (£bn)	VNB (£bn)	Margin	New Business Measure (£bn)	VNB (£bn)	Margin
Aviva	PVNBP: 33.3	0.8	2.3%	PVNBP: 35.6	0.7	1.9%
Just	GWP: 3.1	n/a	n/a	GWP: 2.7	n/a	n/a
L&G	PVNBP: 9.0	0.7	8.0%	PVNBP: 8.9	0.8	8.8%
PIC	Premium: 4.1	n/a	n/a	Premium: 4.7	n/a	n/a
RLG	PVNBP: 10.8	0.2	1.5%	PVNBP: 9.6	0.2	1.7%
Rothsay	Premium: 3.3	n/a	n/a	Premium: 3.0	n/a	n/a

Further details on new business metrics disclosed are in the appendix. Note: (1) 9.5bn related to discontinued operations not included

Assumption Changes, Non-Economic Variance

As part of the assumption setting process, firms continue to update assumptions to reflect recent experience. The table below shows a summary of assumption changes and experience variance mentioned in firms' 2022 disclosure.

Company	Assumption Changes & Experience Variance
Aegon	Overall adverse impact driven by charges from reinsurance rate increases, Policyholder behaviour and individual mortality assumptions.
Allianz	Adverse catastrophe experience and claims inflation for P&C business. Adverse expense experience across all lines of business
Aviva	Positive due to beneficial impact of longevity and expense assumptions
Just	Positive mortality experience for annuity portfolio was more than offset by increase in early redemptions within LTM. Positive overall impact from assumption changes almost entirely driven by changes in mortality assumptions.
L&G	Positive impact from mortality/morbidity assumption changes in Retail driven by routine longevity assumption changes, and in LGRI reflecting updates to UK longevity trend and spouse demography.
M&G	Favourable AvE experience with updates to longevity assumption contributing to operational returns.
Phoenix	Overall negative with positive impact from changes in longevity assumptions and negative impact from strengthening expense assumptions.

We continue to see positive mortality variance for annuities emerging during the post Covid-19 period but Covid-19 is not a significant driver of change in SII surplus in 2022. The CMI 2021 Model places zero weight on 2020 and 2021 data, and some firms have removed the impact of the COVID-19 pandemic from experience investigations.

Details about provisions, actions and assumption changes relating to Covid 19 are shown in the Appendix "Covid-19 – Considerations for Provisions".

Information about CMI updates are shown in Appendix "Continuous Mortality Investigation (CMI)".

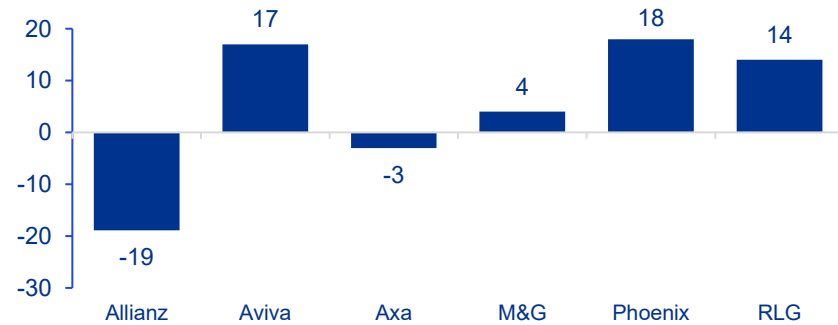
YE22 Sensitivities

The first graph shows the impact of economic variance, excluding operational capital generation and capital actions. The observed impact of economic variance on the coverage ratio has been mixed. **Allianz** had the highest negative impact primarily due to a steep decline in the equity markets, higher interest rate volatility and a decline in the market value of Russia/Ukraine investments while **Aviva** and **Phoenix** witnessed a positive impact. **Aviva** credit increased interest rates and wider credit spreads while **Phoenix** credit their hedging strategy.

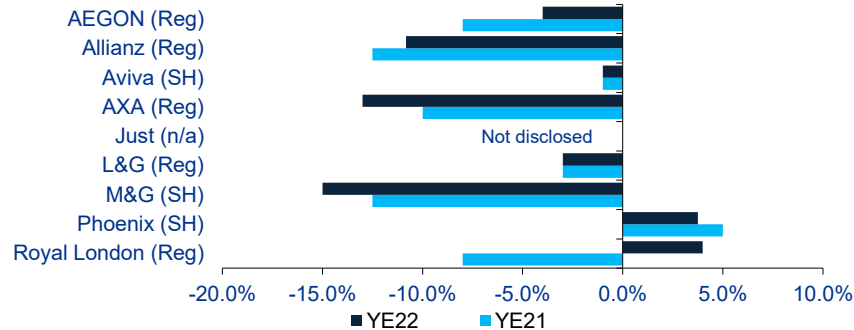
Varying degrees of stability are observed in sensitivity impacts, with some sensitivities more volatile than others. Interest rate sensitivities reduced for all companies except **Just**. **Just's** increase in interest rate sensitivity is the result of reduction in interest rate hedging in 2022. As a result of return of capital **Aviva's** sensitivity to economic movements reduced. **RLG's** change in interest rate sensitivity is due to hedging strategy.

Sensitivities are either the shareholder or regulatory cover ratio, denoted (SH) or (Reg) respectively. Where a sensitivity is not disclosed, (n/a) is used.

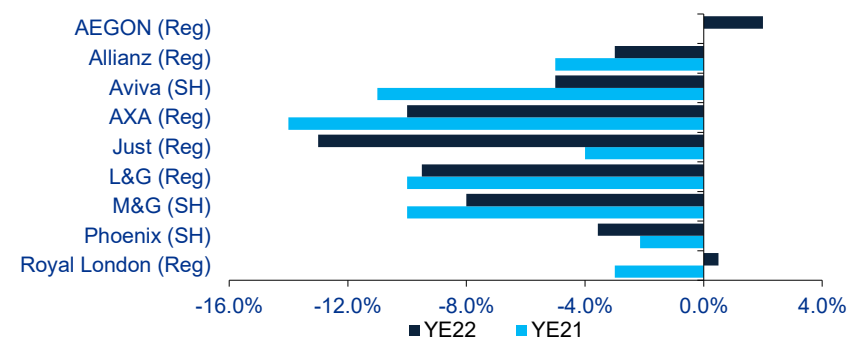
Cover ratio change from Economic Variance (c)



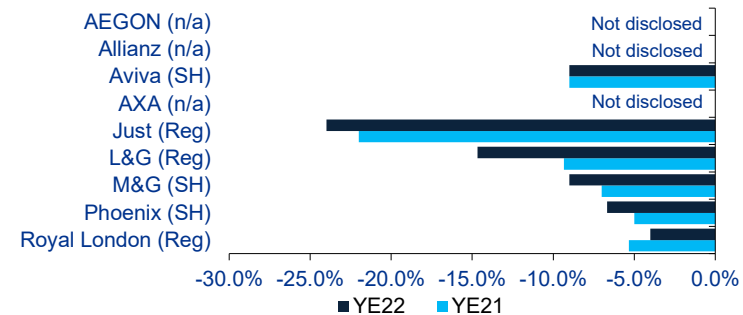
Equity: -25%



Interest Rate: -50bps



Property: -20%



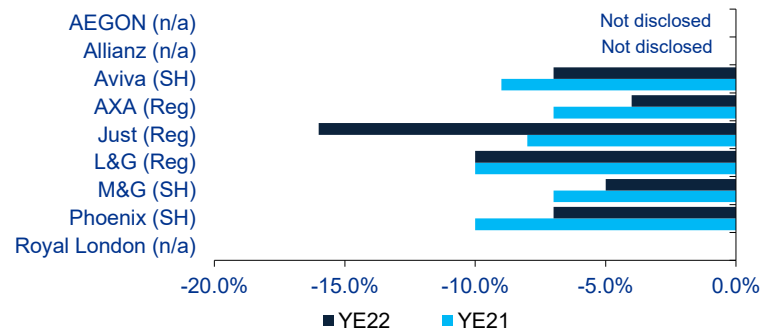
Note: (a) Linear interpolation on provided sensitivities were used where required to determine the impact of the stress.
 (b) TMTP is recalculated for the sensitivity.
 (c) This chart shows the non-operating return in the year. More detail on operating return can be found in the "Appendix – Capital Generation" section.
 (d) Zero value for sensitivity.



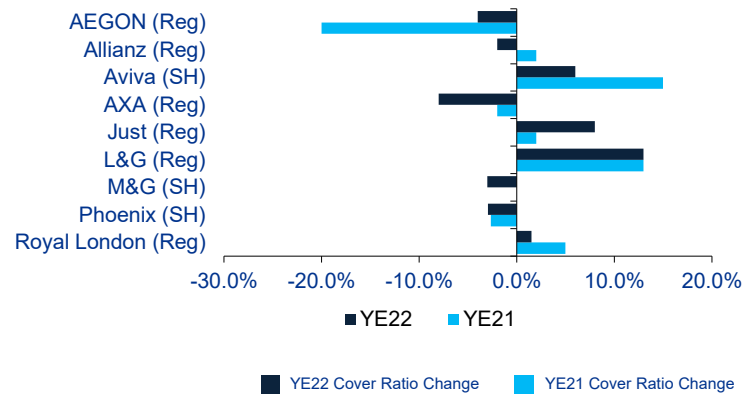
YE22 Sensitivities (cont.)

Insurers have also disclosed sensitivities to credit risk.

20% Portfolio Full Letter Downgrade



Corporate Bonds: +100bps



Note: (a) Linear interpolation on provided sensitivities were used where required to determine the impact of the stress.
 (b) TMTP is recalculated for the sensitivity.
 (c) Zero value for sensitivity.

Source: KPMG analysis of Insurers YE22 disclosures

Asset Portfolio

The table below gives an overview of the shareholders' asset portfolios disclosed in YE 2022 reports focusing on debt. The split by rating and industry exposure of the shareholders' debt portfolios has not materially changed over 2022. However, values of debt portfolios reduced in 2022 due to the significant rise in interest rates.

2022 saw limited downgrade and no default experience within insurers' asset portfolios.

YE22 Debt Portfolio		Aviva ⁽¹⁾	Just	L&G	M&G	Phoenix
Size YE22 (YE21)		£46.9bn (£63.7bn)	£13.9bn (£15.3bn)	£65.8bn (£79.9bn)	£14.0bn (£20.0bn)	£27.4bn (£35.9bn)
Split by Rating	% rated at least A	71% (67%)	50% (54%)	c.63% (c.66%)	78% (80%)	79% (81%)
	% sub inv. grade	<1% (<1%)	4% (3%)	1.4% (1.6%)	2% (2%)	2% (2%)
Split by Industry Exposure	% in utilities sectors	10% (10%)	16% (15%)	16% (15%)	n/a (n/a)	8% (8%)
	% in consumer services	13% (11%)	8% (9%)	19% (18%)	n/a (n/a)	9% (9%)
	% in industrial sectors	3% (3%)	18% (16%)	18% (18%)	n/a (n/a)	10% (10%)
	% in financial sectors	13% (10%)	19% (16%)	12% (12%)	n/a (n/a)	22% (19%)
	% in government sectors	47% (55%)	12% (16%)	12% (18%)	n/a (n/a)	27% (35%)
	% in other sectors	14% (11%)	27% (28%)	23% (20%)	n/a (n/a)	24% (20%)
Defaults		No Material Increase	None	None	None	None
Downgrades – full letter			9% (offset by upgrades of 8%)	Not provided	Not provided	Not provided
Downgrades – sub inv. grade			n/a (0.5%)	Not provided	Not provided	Not provided
YE22 Other Shareholder Assets		Aviva	Just	L&G	M&G	Phoenix
Equity Release Mortgages YE22 (YE21)		£7.8bn. (£9.7bn)	£5.3bn (£7.4bn)	£4.8bn (£6.9bn)	Not provided	£3.9 bn (£4.2bn)
Other assets excluding ERM		£23.7bn (£28.5bn)	£4.3 bn (£2.1bn)	£51.8bn (£24.3bn)	Not provided	£3.3 bn (£6.2bn)

Note: (1) Percentages based on corporate bonds and government bonds only

Source: KPMG analysis of Insurers YE22 disclosures

Capital Optimisation Actions

We have extracted capital optimisation actions implemented by firms in 2022.



M&A	<ul style="list-style-type: none"> • Aviva announce acquisition of Succession Wealth leading to 5% reduction in cover ratio. • In February 2022 Just completed the third sale of a Lifetime Mortgage portfolio (£1.6bn) to reduce SII balance sheet sensitivity to UK house prices. • M&G have completed acquisitions of responsAbility (£2.9bn AUM), Sandringham (£2.4bn AUM) and TCF (£0.1bn AUM). As a result of these acquisitions, Own Funds reduced by c.£200m • Phoenix announced acquisition of Sun Life Canada for £248m (completed in April 2023)
Assets	<ul style="list-style-type: none"> • Phoenix, L&G and Just stated that their asset allocation strategies led to positive operating variances. Asset allocation strategies included continued optimisation of matching adjustment portfolios and changing asset mix for new business.
Capital Management	<ul style="list-style-type: none"> • We continue to see the majority of insurers hedging against interest rates. • Just, M&G, Aviva and Phoenix actively hedged against interest rate risk exposure in 2021 to protect their SII balance sheets, but this created IFRS losses as interest rates rose in 2022. Just have reduced their interest rate hedges leaving their SII balance sheet more sensitive in to interest rate movements in 2022 but reducing the risk of related losses under IFRS. • Insurers continue to reinsure the majority of their longevity risk, through the use of longevity reinsurance or longevity swaps. 87% of PIC's gross longevity related reserves had been reinsured (2021: 85%). • Some firms are also hedging against specific risks. For example, Phoenix have invested in derivative instruments to hedge against equity risk and both Phoenix and L&G used currency hedging. Just hedge exposure to property risk via NNEG hedging, and Aviva hold a series of macro credit hedges to reduce their overall credit risk. M&G also hedge against equity risk related to their with-profits shareholder transfer.
Financing	<ul style="list-style-type: none"> • Quilter completed share buyback early in 2022 and announced plans to issue subordinated debt in 2023 to refinance existing £200m. • M&G completed £0.5bn share buyback scheme • Phoenix and Aviva repaid debt of £0.5bn each • Aviva completed the B Share Scheme to return £3.75b of capital to ordinary shareholders. • Allianz initiated share buyback of €2bn
Models	<ul style="list-style-type: none"> • L&G made reference to the approval of a submission of an internal major model change application to the PRA, but did not provide further details. • Just is planning to apply to the PRA to include PLACL SCR calculation onto their internal model.

Climate-Related Financial Disclosures

In 2021 UK regulatory framework started to incorporate the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). All UK premium-listed companies were required to report on a 'comply-or-explain' basis against the TCFD framework. In 2022 UK made TCFD reporting Mandatory from 6 April 2022 for over 1,300 of the largest UK-registered companies. This will include many of the UK's largest traded companies, banks and insurers, as well as private companies with over 500 employees and £500 million in turnover. We have taken a closer look at five UK larger firms (**Aviva, L&G, M&G, Phoenix, LBG**) to see how they addressed four key components of TCFD in their climate-related financial disclosures: governance, strategy, risk management and metrics and targets.

Governance

All companies disclosed the roles and responsibilities of their management committees when addressing climate-related issues. In 2022 **M&G** established Central Sustainability Office and Executive sustainability Committee to implement group-wide sustainability operating model. **All firms set climate-related/sustainability targets in their executive directors' remuneration.** **Phoenix** approved climate/ESG-related KPIs for their top-management's remuneration whilst **LBG** increased the weighting of climate performance measures in remuneration scorecard to 10%.

Strategy

4 out of 5 insurers emphasised commitment to a Net Zero by 2050; with Aviva targeting 2040. They are planning to achieve this by focusing on the transition, physical and litigation risk factors and related opportunities as well as by decarbonising their investment portfolios, leading by example reducing carbon emission as enterprises and engaging with customers, industry and governments on climate-related issues.

All 5 insurers run climate scenarios

All firms assessed the potential business impacts of future climate-related risks and opportunities on their investment portfolios under different scenarios of temperature rise by 2100, typically ranging from 1.5°C to 4°C, and different scenarios of global response to Net Zero target (e.g., 2°C rise by 2100, delayed response by 2030).

Aviva used 4 IPCC^(a) scenarios (1.5°C, 2°C, 3°C, 4°C) and aggregated them using its Climate VaR metric. This metric showed negative impact on **Aviva's** shareholder funds split by exposure type: Credit - 24%, Equities – 28%, Sovereign – 23% and Other (incl. Property and infrastructure) – 25%.

L&G investigated the impact of each temperature scenario on its bond and equity portfolios. For bonds, they estimated cumulative amount downgraded to sub-investment grade by 2030, 2040 and 2050 split by industry sector. For the most severe presented scenario (2°C rise by 2100, actions to address climate change delayed by 2030) almost 20% of bond portfolio will be downgraded to sub-investment grade by 2050. Equity portfolio will lose 33% of its market value under this scenario.

For each of their five scenarios **Phoenix** projected impact on asset value for different asset classes by 2025, 2030 and 2050 (equity, property, government debt and corporate debt). As expected, the biggest losses in asset value across all scenarios demonstrated Property whereas the most resilient asset class was corporate debt.

M&G performed similar analysis to **Phoenix** for three scenarios, 2050 time horizon, debt and equity asset classes but for 11 different industry sectors.

LBG calculated NPV impact from NGFS^(b) Net Zero 2050 scenario on their lending portfolio. Results demonstrated that the majority of firms in the coal mining and oil and gas sectors would be severely impacted experiencing 60%-80% reduction in NPV by 2050.

4 out of 5 firms published / will publish Climate Transition Plan

Firms started publishing Climate Transition Plans discussing how they are addressing the risks and opportunities of the transition to Net Zero as investors and businesses. **Aviva** and **M&G** already published this document in March 2022. **Phoenix** is targeting May 2023 (it will be called Net Zero Transition Plan). This document is under development at **L&G** and expected to be released for shareholder vote at 2023 AGM

Note: (a) Intergovernmental Panel on Climate Change (IPCC)
(b) Network for Greening the Financial System

(c) Partnership for Carbon Accounting Financials
(d) Science Based Target Initiative

Climate-Related Financial Disclosures (cont.)

<p>Targets and Metrics</p>	<p><u>In 2022 all firms were on target to decarbonisation of their investment portfolios.</u> Aviva’s target to become Net Zero by 2040. In 2022 they invested £8.2bn in sustainable assets aiming for £6bn more by 2025. Committed £10bn from PH funds into lower carbon strategies. By 2025 Aviva Investors will invest £2.5bn in low carbon and renewable energy infrastructure. Phoenix and LBG declared the goal to decarbonise their portfolio. E.g., Phoenix’s target is to cut 50% emissions by 2030. In 2022 Phoenix invested c.£1.0bn in sustainable assets, targeting £10bn in direct investments in sustainable opportunities by 2026. L&G targets 70% of their portfolio to be aligned with Net Zero by 2030. M&G targets 50% reduction in carbon emission for each asset class by 2050.</p> <p><u>All firms use science-based targets measuring GHG emissions</u></p> <p>Firms use various metrics and targets to measure their progress towards Net Zero. Most of these metrics measure carbon emissions/intensity from themselves or assets that companies invest in. Some companies use more advanced metrics like Aviva’s climate VaR or implied portfolio temperature alignment metric measuring the global implied temperature rise if the whole economy had the same carbon budget over/undershoot level as firms’ investment portfolios (Aviva: 2.4°C, L&G: 2.7°C, M&G: 2.6°C). All firms use so called science-based targets measuring GHG emissions approved and validated by SBTi^(d) (Phoenix is waiting for validation of its portfolio alignment metric).</p> <p><u>All firms recognised that accuracy of data for calculating climate metrics is a big issue.</u> Aviva and Phoenix use PCAF^(c)-developed data quality metric ranging from 1 to 5 with the highest standard of disclosed and verified emissions scoring 1 whereas corporate emissions that are based on industry estimates score 5. Their scores are 2.2 and 1.9 respectively.</p> <p><u>Firms continued to engage with business and governments</u> to promote participation in reaching Net Zero. For example, M&G committed to engaging with the 40 biggest carbon emitters in their portfolios, to encourage them to set net zero targets, ideally SBT.</p> <p><u>All firms sought independent external assurance on their climate metrics.</u> Only Aviva got reasonable assurance for all climate metrics except temperature alignment and Climate VaR. All other firms got limited assurance for some of their metrics. L&G, M&G and Phoenix got limited assurance over some of their carbon footprint metrics. In addition, Phoenix got limited assurance over a few GHG emissions metrics for their investment portfolio.</p>
<p>Risk Management</p>	<p><u>All five companies have climate / ESG risk appetite statements. Only two published them</u></p> <p>As expected, all 5 companies include climate risks into their risk management framework and demonstrated how they identify, manage, monitor and report on their climate-related risk. All firms have climate / ESG risk appetite in place but only two published them in climate disclosures. For example, Aviva’s preference is to avoid transition and litigation risks, and limit physical risks whereas Phoenix stated that they are “...committed to being a leader on sustainability to help deliver our corporate purpose and to protect the long-term financial interests of our customers...”</p>
<p>PS 21/24 Update for 2023</p>	<p>PS21/24 is applicable first time in 2023 to certain asset managers with AUM greater than £50bn. This requires TCFD reporting at both entity level and product level published by 30 June 2023. <u>So far only Aviva has published entity level reporting</u> for their five entities: Aviva Life & Pensions UK Limited, Aviva Pension Trustees UK Limited, Aviva Administration Limited, Aviva Investors Global Services Limited and Aviva Investors UK Fund Services Limited.</p>

Note: (a) Intergovernmental Panel on Climate Change (IPCC)
 (b) Network for Greening the Financial System

(c) Partnership for Carbon Accounting Financials
 (d) Science Based Target Initiative

Other Themes from Analyst Presentations

The below highlights some of the themes observed from analyst presentations



Cash Generation

Future cash generation remains a key theme in analyst presentations with firms disclosing target cash generation over the medium-term horizon.

- **Aviva** is on track to deliver their cash remittance target of £5.4bn over 2022-2024. In 2022 cash remittances were up 11% to £1.8bn (2021: £1.7bn). They now expect to exceed Solvency II Own Funds generation target of £1.5bn by 2024 introduced in 2021 (2022: £1.6bn, 2021: £1.2bn).
- **Phoenix** introduced first ever target for organic growth: by 2025 incremental new business long term cash generation should grow from £1.2bn to £1.5bn (£0.5bn from fee-based business and £1bn from Retirement Solutions).
- In 2021 **M&G** introduced capital generation target of £2.5bn from 2022 to 2024. In 2022 the company is on track to achieve it with operating capital generation of £821m.
- **L&G** is on track to deliver five-year target: Solvency II operational surplus generation less new business strain is to cumulatively exceed dividends paid over 2020-2024. In 2022 they created £0.3bn surplus over dividends and £0.7bn cumulatively as at YE2022.



Solvency II Reforms:

- Some firms like **RLG**, **Phoenix**, **Just** and **M&G** mentioned that they are supportive of Solvency II Reforms. These firms recognised the uncertainty over when reforms would be implemented and what final rules could be, and highlighted it in the “Risk and uncertainties” sections of their reports.
- Only **RLG** mentioned that they expect an increase in capital cover ratio due to proposed reduction in risk margin, even though some of the benefits would be offset by reduction in TMTP. Most firms support broadening the eligibility requirements for the MA portfolio and are keen to engage with PRA and HMT consultations in 2023.



Cost Initiative

Cost efficiency continued to be a key focus in 2022.

- In 2021 **Aviva** upgraded their cost saving target to £750m gross of inflation across 2018-2024. Since 2018 they have achieved £327m of savings net of inflation and currently are on track of to meet this target.
- **Quilter** completed the Optimisation programme announced in 2018 achieving run-rate annualised cost saving of £65m. In 2022 they completed the initial phase of Business Simplification programme that delivered £23m of annualised cost-saving.
- **Just**. Following the end of a formal three year cost reduction programme in 2021, management expenses continue to be contained.
- **M&G** launched a transformation programme to drive simplification, unlock growth and deliver £200 million cost savings (gross of inflation) by end 2025

Adoption of IFRS 17

Firms started disclosing IFRS 17 information in their year-end disclosures. Some firms published IFRS 17 investor's presentations in Nov/Dec 2022 (**Aviva, L&G, M&G, AXA, Allianz** and **Just**). Most of the firms stated that their current focus is on developing and embedding the operational capabilities, determining the transition balance sheet and comparatives required for 2023 reporting. They confirmed that more information on this will be disclosed in interim reporting throughout the year (e.g., **Aviva, L&G, Just**: August 2023).

Presenting IFRS 17 information in YE disclosure firms focused on methodology, KPIs and impact assessment.

Methodology	<p>Some firms (Aviva, Phoenix, L&G, M&G, Just, Allianz) included high-level details of their IFRS 17 methodology on contracts in scope, level of aggregation, measurement models, discount rates, risk adjustment, transition measures etc.</p> <p>Aviva, Phoenix and Allianz confirmed that they will leverage their Solvency II capabilities in calculation of risk adjustment.</p>																																												
KPIs	<p>Several firms confirmed that adoption of IFRS 17 won't have impact on strategy, financial framework KPIs and sustainability of dividends (Phoenix, L&G, AXA).</p> <p>Allianz introduces new KPI for Life/Health business. Besides the operating profit and the return on equity, the IFRS 17 New Business Value will be one of the main KPIs. No specific KPIs were introduced for P&C and combined ratio remained the main KPI that will be based on gross instead of net earned premiums as under IFRS 4.</p> <p>Some firms also reported that financial leverage ratio would reduce as they intend to include the CSM as part of equity capital in the respective denominators, in addition to shareholders' equity (e.g., Allianz, AXA and M&G)</p>																																												
Impact Assessment	<p>Some firms presented impact assessments from implementation of IFRS 17 as at transition date (1 January 2022) mainly disclosing the impact on equity attributable to shareholders and CSM as at transition date. This information is summarised in the table below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #0056b3; color: white;">Measure</th> <th style="background-color: #0056b3; color: white;">Aviva</th> <th style="background-color: #0056b3; color: white;">Phoenix</th> <th style="background-color: #0056b3; color: white;">L&G</th> <th style="background-color: #0056b3; color: white;">M&G</th> <th style="background-color: #0056b3; color: white;">Just</th> <th style="background-color: #0056b3; color: white;">Allianz</th> <th style="background-color: #0056b3; color: white;">AXA</th> <th style="background-color: #0056b3; color: white;">AEGON</th> </tr> </thead> <tbody> <tr> <td>CSM @ 1-Jan-22</td> <td>£4.2-£4.9bn</td> <td>£2bn</td> <td>£11.2bn</td> <td>Not presented</td> <td>£0.9-£1.1bn</td> <td>€57.8bn</td> <td>€34bn</td> <td>€9.2bn</td> </tr> <tr> <td>Equity attributable to SH @ 1-Jan-22</td> <td>£16.3-£17bn</td> <td>£5.8bn</td> <td>£5.0bn</td> <td>£6.8bn</td> <td>Not presented^(a)</td> <td>€65.6bn</td> <td>€55.0bn</td> <td>€11.7bn</td> </tr> <tr> <td>Equity attributable to SH @ 31-Dec-21^(b)</td> <td>£19.2bn</td> <td>£5.8bn</td> <td>£10.5bn</td> <td>£5.3bn</td> <td>£2.1bn</td> <td>€84.2bn</td> <td>€75.0bn</td> <td>€24.3bn</td> </tr> </tbody> </table> <p>Transition CSM from the above table were presented on different bases. Net of tax CSM was presented by Aviva, Just and Aegon whilst others disclosed before tax CSM. In addition, Phoenix and Allianz presented CSM net of reinsurance.</p> <p>Phoenix mentioned that impact on shareholder's equity is expected to be broadly neutral and that its CSM would run off at 6-8% rate per annum. L&G and Aviva explained drivers of the difference between IFRS4 and IFRS 17 equity in their YE disclosures.</p> <p>SJP doesn't have material exposure to insurance business reported under IFRS 17 and confirmed that its adoption is not expected to have a material impact on alternative performance measures used by the Group. Therefore, impact assessment was not presented. Financial results of RLG are prepared under UK GAAP and are therefore not subject to implementation of IFRS 17.</p>									Measure	Aviva	Phoenix	L&G	M&G	Just	Allianz	AXA	AEGON	CSM @ 1-Jan-22	£4.2-£4.9bn	£2bn	£11.2bn	Not presented	£0.9-£1.1bn	€57.8bn	€34bn	€9.2bn	Equity attributable to SH @ 1-Jan-22	£16.3-£17bn	£5.8bn	£5.0bn	£6.8bn	Not presented ^(a)	€65.6bn	€55.0bn	€11.7bn	Equity attributable to SH @ 31-Dec-21 ^(b)	£19.2bn	£5.8bn	£10.5bn	£5.3bn	£2.1bn	€84.2bn	€75.0bn	€24.3bn
Measure	Aviva	Phoenix	L&G	M&G	Just	Allianz	AXA	AEGON																																					
CSM @ 1-Jan-22	£4.2-£4.9bn	£2bn	£11.2bn	Not presented	£0.9-£1.1bn	€57.8bn	€34bn	€9.2bn																																					
Equity attributable to SH @ 1-Jan-22	£16.3-£17bn	£5.8bn	£5.0bn	£6.8bn	Not presented ^(a)	€65.6bn	€55.0bn	€11.7bn																																					
Equity attributable to SH @ 31-Dec-21 ^(b)	£19.2bn	£5.8bn	£10.5bn	£5.3bn	£2.1bn	€84.2bn	€75.0bn	€24.3bn																																					

Note: (a) Post-tax impact on accumulated profit of the Group as at transition date was estimated as decrease of £0.9-1.1bn
 (b) Under IFRS 4

01

Appendices

Appendix – New Business

New business disclosures vary amongst insurers making it difficult to present like for like results. Mainly, the methodologies to calculate the value of new business may not be consistent. The table below aims to capture the value of new business (VNB) broadly and the present values of new business premiums (PVNBP) sold over 2022 for UK business amongst insurers.

Insurer	Disclosure	VNB/PVNBP = Margin															
Aviva	Aviva disclosed a VNB of £767m (FY21 £668m) and a PVNBP £33,300m (FY21 £35,600m) for its UK and Ireland life business over 2022. Lower PVNBP was driven by lower BPA volumes of £4,400m (FY21 £6,200m) and higher discounting of future premiums in Wealth and Protection & Health as a result of higher interest rates.	767/33,300 = 2.3%^(a) (FY21: 668/35,600 = 1.9%)															
L&G	<p>L&G disclosed contribution of new business for its LGR UK annuity and protection business. Details are as follows:</p> <table border="1"> <thead> <tr> <th>Business</th> <th>VNB (£m)</th> <th>PVNBP (£m)</th> </tr> </thead> <tbody> <tr> <td>UK Annuity</td> <td>635 (FY21 635)</td> <td>7,438 (FY21 7,016)</td> </tr> <tr> <td>UK Protection</td> <td>82 (FY21 149)</td> <td>1,512 (FY21 1,883)</td> </tr> <tr> <td>Total</td> <td>717 (FY21 784)</td> <td>8,950 (FY21 8,899)</td> </tr> </tbody> </table> <p>Contribution from new business has decreased by circa 9% since 2021, driven by a shorter duration in UK annuity business and changes in expense ratio, market conditions and movements in product mix in the UK Protection business.</p>	Business	VNB (£m)	PVNBP (£m)	UK Annuity	635 (FY21 635)	7,438 (FY21 7,016)	UK Protection	82 (FY21 149)	1,512 (FY21 1,883)	Total	717 (FY21 784)	8,950 (FY21 8,899)	717/8,950 = 8.0%^(b) (FY21: 784/8,899 = 8.8%)			
Business	VNB (£m)	PVNBP (£m)															
UK Annuity	635 (FY21 635)	7,438 (FY21 7,016)															
UK Protection	82 (FY21 149)	1,512 (FY21 1,883)															
Total	717 (FY21 784)	8,950 (FY21 8,899)															
Royal London Group	<p>RLG disclosed contribution from new business as per the below table:</p> <table border="1"> <thead> <tr> <th>Business</th> <th>VNB (£m)</th> <th>PVNBP (£m)</th> </tr> </thead> <tbody> <tr> <td>Pensions</td> <td>126 (FY21 108)</td> <td>9,333 (FY21 7,966)</td> </tr> <tr> <td>Protection</td> <td>11 (FY21 39)</td> <td>1,037 (FY21 1,251)</td> </tr> <tr> <td>Annuities & Other</td> <td>26 (FY21 17)</td> <td>406 (FY21 371)</td> </tr> <tr> <td>Total</td> <td>163 (FY21 164)</td> <td>10,776 (FY21 9,588)</td> </tr> </tbody> </table> <p>The increase is mainly driven by new business growth in "Workplace Pensions" by 29% owing to higher levels of recruitment activities. "Protection" business sales fell by 17% due to increasing competition in a broadly stable market over 2022. Contribution from new business overall has remain unchanged since 2021.</p>	Business	VNB (£m)	PVNBP (£m)	Pensions	126 (FY21 108)	9,333 (FY21 7,966)	Protection	11 (FY21 39)	1,037 (FY21 1,251)	Annuities & Other	26 (FY21 17)	406 (FY21 371)	Total	163 (FY21 164)	10,776 (FY21 9,588)	163/10,776 = 1.5% (FY21: 164/9,588 = 1.7%)
Business	VNB (£m)	PVNBP (£m)															
Pensions	126 (FY21 108)	9,333 (FY21 7,966)															
Protection	11 (FY21 39)	1,037 (FY21 1,251)															
Annuities & Other	26 (FY21 17)	406 (FY21 371)															
Total	163 (FY21 164)	10,776 (FY21 9,588)															
Aegon	Aegon disclosed for its MCVNB of EUR 526 mil (FY21 EUR 538 mil) over 2022.	N/A															
Just	Just did not disclose VNB or PVNBP. Interestingly, they provided a table showing the expected undiscounted future emergence of Solvency II surplus arising from 2022 new business in excess of 100% of SCR over 50 years from the point of sale. It shows the initial Solvency II capital strain in 2022 with positive surplus thereafter.	N/A															
Phoenix	Phoenix disclosed Long-Term Cash Generation (LTCC) of £1.2bn which represents the operating companies' cash generation that is expected to arise in future years as a result of new Open business transacted in the current period.	N/A															

Source: Economic disclosures for Year-End 2022

Note: (a) VNB/PVNBP Margin calculation not included in insurer's disclosure, calculation made from available information
(b) VNB/PVNBP Margin calculation not included in insurer's disclosure specifically for UK only business however combined and solved above



© 2023 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

Appendix – Covid-19: Considerations for Provisions

<p>Direct Provisions</p>	<p>Just and L&G explicitly stated additional provisions for Covid-19 in 2022, whilst Aegon released their previous additional provision;</p> <ul style="list-style-type: none"> • Aegon released the remaining reserve set up in 2020 for claims that are IBNR due to the Covid-19 pandemic. • L&G state “A new prudent provision of \$40m (£32m) has been included in the results to allow for the uncertainty of Covid and flu over the remainder of winter.” • Just have considered the possible impact of the COVID-19 pandemic on its mortality assumptions and “an allowance for future effects of COVID-19 has been implemented through a combination of using the latest CMI 2021 improvement model and applying an overlay to increase short term mortality rates but which tapers to zero in the long-term”
<p>Risk Mitigation Actions</p>	<p>A reduction in Risk Mitigation activity related to Covid-19 has been observed;</p> <ul style="list-style-type: none"> • Most firms did not explicitly state any specific risk mitigation actions directly related to COVID-19 • L&G noted that “during 2022 the direct impact of the pandemic on both economic and credit performance has reduced, resulting in the release of all material judgements required specifically to capture COVID-19 risks”.
<p>Operational Resilience</p>	<p>Aviva, Phoenix and Rothesay reference operational risk specifically relative to Covid-19,</p> <ul style="list-style-type: none"> • Aviva noted “We have contingency plans which are designed to reduce as far as possible the impact on operational service arising from mass staff absenteeism, travel restrictions and supply chain disruption caused by a pandemic”. • Phoenix mentioned that “whilst many potential exposures to COVID-19 can now be effectively mitigated, a large-scale loss of colleagues due to illness or incapacity, in the UK or globally, is more challenging to resolve in the short-term as there remains uncertainty around the efficacy of vaccines against future COVID-19 variants.” • Rothesay reflect on the change from last year stating “Through the COVID-19 pandemic, Rothesay and our strategic business partners have demonstrated operational resilience.
<p>Demographic Assumption Changes</p>	<p>The impact of the pandemic on Demographic assumptions mentioned by Aegon, Aviva, L&G, M&G, PIC and Rothesay are in line with broader industry approach of applying zero weight to pandemic experience</p> <ul style="list-style-type: none"> • Aegon stated that it is “too early to predict what the long-term impacts from COVID-19 on demographics will be.” • Aviva have assessed “the judgement applied by management in excluding 2020 and 2021 data from the experience investigation due to the distorting impact of the COVID-19 pandemic.” • L&G stated “there was insufficient certainty in more recent data to revise long-term assumptions in response to emerging claims experience relating to the effects of the pandemic, with the exception of certain short-term allowances in protection contracts” • M&G also stated “no weight has been given to 2020 or 2021 experience in calibrating mortality assumptions” • PIC state that “The impact of Covid-19 has also been removed from the derivation of current mortality rates.” • Rothesay acknowledge the lack of clarity around the impact of COVID-19 and “In valuing our insurance and reinsurance assets and liabilities we have not made any changes to our long-term mortality assumptions to allow for the impact of COVID-19”

Source: Economic disclosures for Year-End 2022

Appendix – Continuous Mortality Investigation (CMI)

Most insurers have adopted CMI 2021 for YE22 reporting, with the exception of **Royal London, M&G and L&G**. With the exception of Phoenix and M&G, companies calibrations of the CMI Model remain largely similar to previous year calibrations

Mortality rates in 2021 (in England and Wales) remained substantially higher than in 2019 with a large proportion attributed to COVID. As a result, the CMI placed zero weight on 2020 and 2021 data. A calibration giving full weight to all years would have shown substantial falls in projected mortality improvements which CMI considered would have been in excess of what most users considered reasonable.

Firm	CMI Model	Long-Term		Sk		Additional Notes
		Male	Female	Male	Female	
Phoenix	2021 (2020) ⁽¹⁾	1.50% (1.70%)	1.2% (1.20%)	Not Stated	Not Stated	The most recent Continuous Mortality Investigation 2021 projection tables
Rothsay	2021 (2020)	1.70% (1.70%)	1.70% (1.70%)	7.5 (7.5)	7.5 (7.5)	Rothsay apply bespoke tapering of long-term rate of improvements between ages 70 and 120 compared to the core tapering between ages 85 and 110.
Zurich	2021 (2020)	Not Stated	Not Stated	Not Stated	Not Stated	The UK business use CMI 2021, updated from CMI 2020, for mortality projection, with plan specific adjustments. The Swiss based business use a CMI model adapted for Swiss mortality with a long-term trend rate of 1.25%.
Aviva	2021 (2019)	1.50% (1.50%)	1.50% (1.50%)	7.25 (7.25)	7.25 (7.25)	Aviva applies an uplift to initial improvement rates of 0.15% for males and 0.20% for females, tapering to zero between ages 90 and 110. This is the same approach as taken for YE21.
Just	2021 (2019)	*Not Stated	*Not Stated	7 (7)	7 (7)	Just applies an uplift to initial improvement rates of between 0% and 0.25% depending on product. The same approach was taken for YE21. *The YE22 IFRS long-term rates are 2.00% and 1.75% for males and females respectively. We also note that at YE21, the margin between best estimate and IFRS assumptions was 0.5%.
Royal London	2019 (2019)	1.50% (1.50%)	1.50% (1.50%)	7 (7)	7 (7)	Royal London applies adjustments to the initial improvement rates of between -0.25% to 0.1%, with the adjustment varying by product. This corresponding range of adjustments for YE21 was 0% to 0.35%.
PIC	2021 (2019)	Not Stated	Not Stated	Not Stated	Not Stated	Mortality assumptions are derived using the Continuous Mortality Investigation ("CMI") 2021 mortality improvements.
M&G	2020 (2019)	*1.6% (1.75%)	*1.6% (1.5%)	7.25 (7.50)	7.75 (8.00)	M&G applies an uplift of up to 0.45% to the initial improvement rates. The uplift varies by age and gender and is reduced at all ages relative to 31 December 2021. *The long-term rate reflects the removal of the prudent margin used for IFRS reporting per report and accounts.
L&G	2020 (2019)	1.5% (1.5%)	1.0% (1.0%)	7.5 (7.5)	7.5 (7.5)	The initial rates of mortality improvements are further adjusted to reflect socio-economic class.
LBG	2021 (2020)	*Not Stated	*Not Stated	7.25 (7.25)	7.25 (7.25)	LBG applies uplifts to the initial improvement rates of 0% for males and 0.2% females (0.3% and 0.4% for males and females respectively for YE21). *The YE22 report and accounts only sets out the IFRS assumptions for the long-term rates.

Note: (1) In the first six columns of this table information in brackets represents version of CMI model or parameters of CMI model used for YE2021 reporting

Source: Economic disclosures for Year-End 2022



Appendix – Cover Ratios

Approaches to analysis of Solvency SCR coverage over 2022 varied greatly between insurers reflecting the diverse set of circumstances individual to each entity. Further inconsistencies arise as insurers disclose on either regulatory or shareholder view of solvency. This renders like for like comparisons difficult and open to some interpretation. However, the broad categories of movements are similar and therefore, through analyst interpretation and judgement only, the various stepped movements contained within the disclosure can be allocated to 5 broad categories. The Starting and Closing SCR coverage ratios are consistent with the disclosures. Details of approach to allocation are contained in the appendices.

Operational surplus generation covered the dividend paid for all insurers in 2022.

Movement	Description in Disclosure YE2022	Insurer	Cover ratio change (%)
Operating Returns	Operating SII earnings	Allianz	27
	Operating capital generation	Aviva	14
	Operational surplus generation	L&G	24
	New Business	L&G	-12
	Organic capital generation	Just	1
	Longevity	Just	4
	New business strain	Phoenix	-7
	Surplus emerging and release of capital requirements	Phoenix	16
	Organic capital generation	M&G Group	16
Non-operating return/Market movements	Market Impact	Allianz	-19
	Non-operating capital generation	Aviva	17
	Operating Variances & M&A	L&G	51
	Market Movements	L&G	
	Interest rates	Just	30
	Property	Just	-1
	Economics	Phoenix	18
	Market movements	M&G Group	4

Insurer	Total change in coverage ratio (%)	Solvency view
Allianz	-8	Regulatory
Aviva	-32	Shareholder
L&G	48	Regulatory
Just	35	Regulatory
Phoenix	9	Shareholder
M&G Group	-19	shareholder

Source: KPMG – Disclosures YE2022

Appendix – Cover Ratios (cont.)

Movement	Description in Disclosure YE2022	Insurer	Cover ratio change (%)
Dividends/debt payments/issuances	Dividends	Aviva	-10
	Debt repayments	Aviva	-7
	Capital Return	Aviva	-41
	External dividends	L&G	-15
	Other movements	Just	1
	Financing, dividends, pensions and corporate costs	Phoenix	-16
	Debt repayment	Phoenix	-9
	Dividends & capital movements	M&G Group	-25
	Management actions	Capital management/management actions	Allianz
	Management actions	Phoenix	7
Other	Regulatory/model changes	Allianz	-3
	Tax/other	Allianz	-11
	Acquisitions	Aviva	-5
	Other	Phoenix	0
	Other movements	M&G Group	-4
	Tax	M&G Group	-10

Insurer	Total change in coverage ratio (%)	Solvency view
Allianz	-8	Regulatory
Aviva	-32	Shareholder
L&G	48	Regulatory
Just	35	Regulatory
Phoenix	9	Shareholder
M&G Group	-19	shareholder

Source: KPMG – Disclosures YE2022

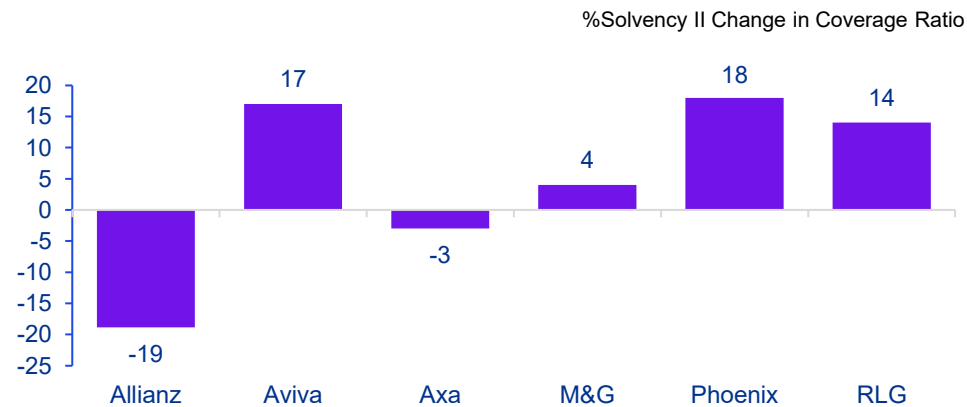
Appendix – Capital Generation

2022 was a year of economic turbulence with record high inflation since 1980s reaching 11% in October. The Bank of England base rate increased from 0.1% in December 2021 to 4.25% at the time of writing.

Overall, life insurers experienced positive operating capital generation with mixed cover ratio impact from economic variance. Impact from capital deployed to shareholders through dividends or buyback or debt repayments is shown under “Other” and, as expected, has negative impact on cover ratio.

We observed a mixed economic variance for insurers analysed. **Allianz** experienced a negative outlook due to steep decline in equity market and high interest rate volatilities while **Aviva** and **Phoenix** experienced a positive outlook due to higher interest rate.

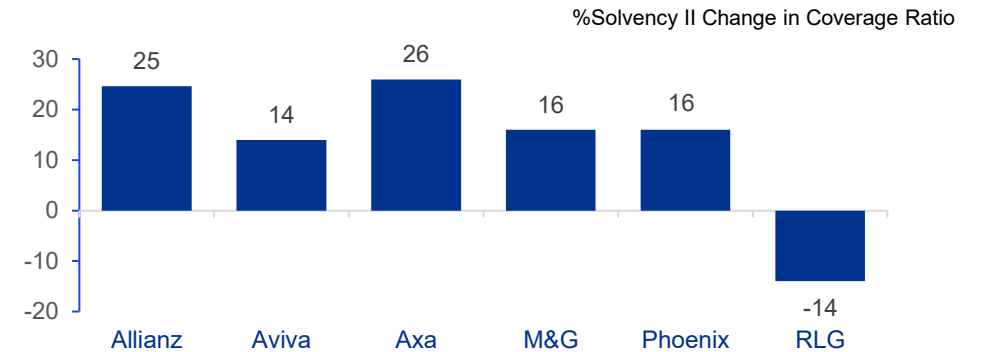
Economic Variance



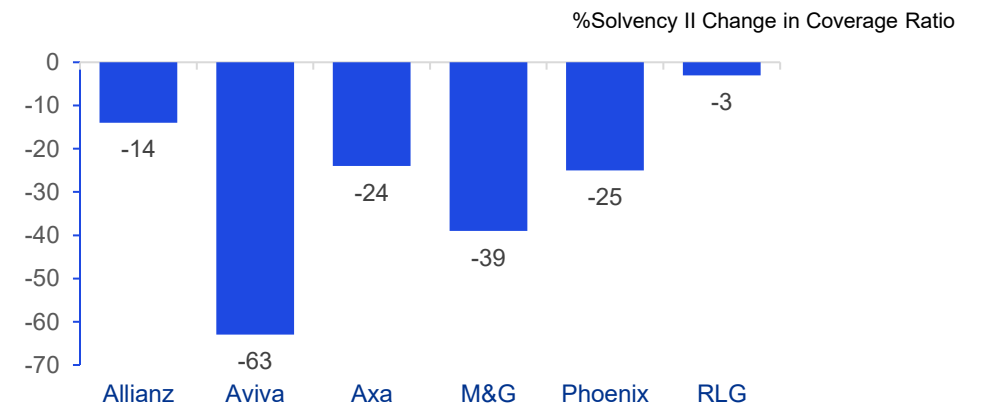
Note: (a) Varying levels of details and inconsistencies in disclosures amongst insurers restricts like for like comparisons and accuracy.

Source: KPMG – Disclosures YE2022

Operating Capital Generation(a) (including NB and Action)



Other



Contact us

For a fuller discussion on the content of the insurer's disclosures and how they may impact your firm please get in touch with your usual KPMG contact. Listed below for your information are the Partners and Directors of the KPMG UK Life Actuarial practice:



Trevor Jones

Partner

T: +44(0) 207 311 5874
E: trevor.jones@kpmg.co.uk



Richard Care

Partner

T: +44(0) 207 694 2890
E: richard.care@kpmg.co.uk



Daniel Hurley

Partner

T: +44(0) 161 246 4764
E: daniel.hurley@kpmg.co.uk



Meshali Chotai

Director

T: +44(0) 791 954 0372
E: meshali.chotai@kpmg.co.uk



James Isden

Director

T: +44(0) 207 311 5311
E: james.isden@kpmg.co.uk



Harvard Lee

Director

T: +44(0) 131 527 6858
E: harvard.lee@kpmg.co.uk



Lucia Lumsdon

Director

T: +44(0) 207 694 3307
E: lucia.lumsdon@kpmg.co.uk



Patrick Rowland

Director

T: +44(0) 207 311 6153
E: patrick.rowland@kpmg.co.uk



Some or all of the services described herein may not be permissible for KPMG audited entities and their affiliates or related entities.



kpmg.com/uk

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organisation.

Document Classification: KPMG Public

CREATE: CRT148142A