MILLIMAN RESEARCH REPORT

Analysing 2023 Solvency and Financial Condition Reports (SFCR) of non-life insurers in Europe

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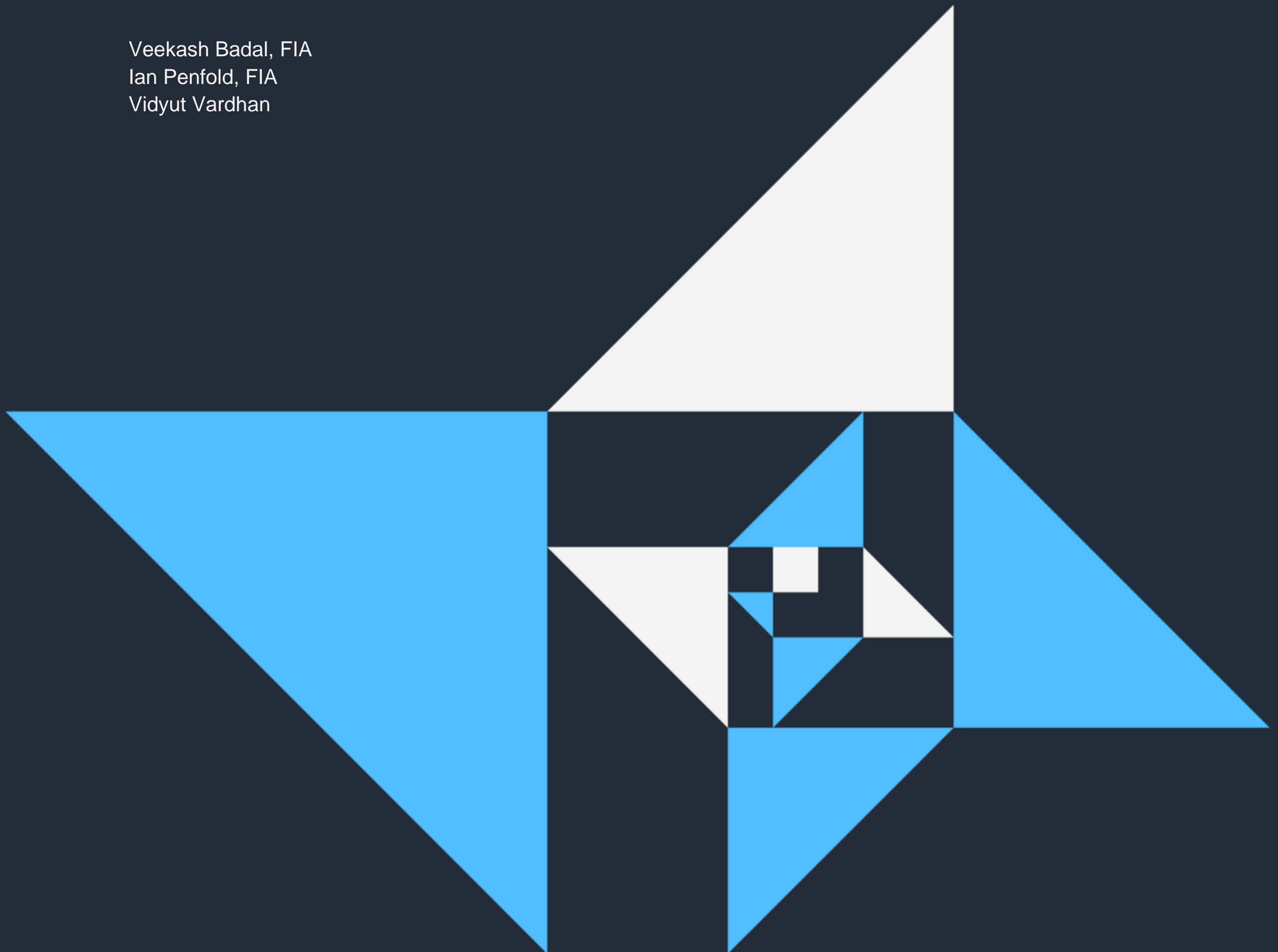
Veekash Badal, FIA
Ian Penfold, FIA
Vidyut Vardhan



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Executive summary

Based on our analysis of 795 solo companies that are both primarily non-life business and regulated in the EU, the UK or Gibraltar,[1] we have found that financial performance varied across countries and lines of business during the 2023 calendar year.

1. **The ratio of eligible own funds to the Solvency Capital Requirement (SCR)** decreased slightly, in aggregate, from 251% as at year-end 2022 to 250% as at year-end 2023. Luxembourgian companies saw the largest increase to their aggregate capital coverage ratio[2] whereas Polish companies saw the largest decrease.
2. The vast majority (88%) of undertakings in the analysed sample have used the **Standard Formula (SF)** to calculate their SCRs. However, at year-end 2023, only 55% of the total value of the **aggregated SCRs** were generated **using the SF.**
3. For companies whose SFCRs were both in our current analysis and our equivalent year-end 2022 analysis, **gross written premiums (GWP) increased** by 6% from last year, with increased premiums seen in each of our sampled 15 countries, apart from Ireland.
4. **The proportion of motor vehicle liability technical provisions has reduced, but only slightly in 2023.** The decrease from 2021 to 2022 was more significant. This is discussed in more detail, below.
5. **The proportion of fire technical provisions has grown in 2023.** This is discussed in more detail, below.

1. Note that, for the purposes of our analysis, we have treated the British Overseas Territory of Gibraltar as if it were a separate country.

2. The capital coverage ratio is defined as the eligible own funds to meet the SCR divided by the SCR.

Introduction

Following the year-end 2023, (re)insurance undertakings across the EU published their eighth annual set of Solvency and Financial Condition Reports (SFCRs). In this research report, we summarise and discuss key metrics from a large sample of those SFCRs, comparing the figures in the 2023 year-end SFCRs with their counterparts as at the 2022 year-end (and at earlier year-ends, where relevant).

We have also included (re)insurance undertakings that are regulated in the UK and Gibraltar in this analysis. Although the UK formally left the EU on 31 January 2020, it continues to operate an insurance regulatory regime that is essentially identical to Solvency II[3] (as does Gibraltar).

The analyses underlying this report focus on the quantitative information contained in the Quantitative Reporting Templates (QRTs) within the SFCRs, but we have also studied the text within the SFCRs in order to gain additional insights into various companies, in particular those that displayed characteristics that differed materially from the market average. Our focus has been on solo entities rather than groups.

In this report, we consider:

- The solvency position of the European market as a whole
- The components of the SCR
- The main Solvency II balance sheet items, including invested assets and technical provisions
- Key indicators of underwriting performance, such as loss ratios and expense ratios

We have used shortened versions of the names of the Solvency II lines of business in the report, listed in Appendix A.

EUROPEAN MARKET COVERAGE

Our European analysis of the non-life market covers 795[4] companies from the 15 countries listed below, which, in aggregate, account for £460 billion of GWP and £594 billion of gross non-life technical provisions.[5] The same countries were included in our 2022 report. Our sample as at the 2023 year-end contains 621 companies that were also included in our analysis as at the 2022 year-end. These companies account for approximately 90% of the total GWP and 87% of the total SCR in our 2023 report and accounted for approximately 93% of the total GWP and approximately 95% of the total SCR in our 2022 report. Our analysis includes some composite companies but only those writing predominantly non-life[6] business.

We note that the UK numbers quoted in the rest of this report exclude those relating to the Society of Lloyd's. The Society of Lloyd's produces a single publicly available SFCR, covering in aggregate all its syndicates. We have excluded it from our study because of its size compared with the rest of the EU and UK market, much of which relates to insurance coverage outside of Europe, and because it contains significant outwards reinsurance and retrocessional business. Therefore, it is very unrepresentative of the rest of the EU and UK business. The Society of Lloyd's represents £54 billion of GWP and £67 billion of gross technical provisions (compared with a total £57 billion of GWP and £68 billion of gross technical provisions for the 84 UK solo companies that we have included within our analysis) and exhibits a capital coverage ratio of 207% at year-end 2022 (£48 billion of eligible own funds and £23 billion of SCR).

3. Although, post-Brexit, the Bank of England initially adopted Solvency II wholesale within its regulation of insurers, it has since announced various planned changes, the first of which (including an amendment to the calibration of the risk margin within technical provisions) were implemented ahead of the 2023 year-end. It is likely that further changes will be implemented in due course. It should be noted that EIOPA has also proposed amendments to the existing Solvency II regime, although these have yet to be agreed and implemented by the EU.
4. In our review as at the 2022 year-end, we included 728 entities within our analysis.
5. Excluding the UK and Gibraltar, as they are not shown in the EIOPA statistics as at year-end 2023, the gross non-life technical provisions total £520 billion, approximately 88% of the total non-life technical provisions across the remaining thirteen listed countries.
6. Undertakings identified as primarily health insurers (e.g., those for which medical expenses accounted for more than 85% of their gross written premium) have been removed from the analysis.

In Figure 1, we show the split of GWP and gross technical provisions by country. For the gross technical provisions, we have also included aggregated statistics, for pure non-life insurers only (i.e., excluding health insurers and all composite insurers), as published by the European Insurance and Occupational Pensions Authority (EIOPA).[7]

FIGURE 1: GWP AND GROSS TECHNICAL PROVISIONS BY COUNTRY

	Gross Written Premium (£ BN)		Gross Technical Provisions (£ BN)	
Country[8]	**Sample**	**EIOPA (S.05.01)[9]**	**Sample**	**EIOPA (S.02.01)**
Austria (AT)	12.1	12.4	8.2	8.0
Belgium (BE)	16.7	26.2	20.0	28.3
Germany (DE)	131.5	167.5	165.8	216.0
Denmark (DK)	9.0	9.7	9.2	6.2
Spain (ES)	21.1	42.1	20.5	24.2
France (FR)	91.7	147.6	138.4	134.9
Ireland (IE)	25.7	47.0	40.9	63.9
Italy (IT)	34.5	37.9	50.2	41.6
Luxembourg (LU)	21.7	25.9	35.3	35.0
Netherlands (NL)	10.1	63.9	8.9	11.0
Poland (PL)	10.7	11.4	9.9	8.9
Romania (RO)	2.5	2.7	1.8	1.3
Sweden (SE)	10.9	12.1	11.2	10.1
EU countries outside sample	-	46.4	-	32.9
TOTAL EU	**398.0**	**652.9**	**520.4**	**622.4**
Gibraltar (GI)	5.0	-	5.6	-
UK (UK)	56.7	-	68.1	-
TOTAL	**459.7**	**652.9**	**594.1**	**622.4**

For some countries in Figure 1, the aggregated technical provisions of our sample companies exceed the total technical provisions for the whole of the non-life market as provided by EIOPA. This is because our sample also includes some composite companies and therefore includes some life business. Structured settlements, whereby claimants receive a series of payments over a period of time while they remain alive, are included as life liabilities (and not in the non-life technical provisions according to EIOPA).

Note that, in the tables and graphs below, we refer to each of the countries using the abbreviations shown in parentheses in the above table.

UNDERLYING DATA

In carrying out our analysis and producing this report, we relied on the data and information provided in the SFCRs and QRTs of our sample companies, as obtained from Solvency II Wire Data. The database tool is available via subscription from: https://solvencyiiwiredata.com/about/.

7. Annual aggregated balance sheet and gross written premium statistics for solo entities, as at year-end 2023. See https://www.eiopa.europa.eu/tools-and-data/insurance-statistics_en. The data has been converted from euros to British pounds sterling using the exchange rate €1 = £0.86839.

8. Gross technical provisions and gross written premiums for UK and Gibraltar are not available from EIOPA as at year-end 2023.

9. The aggregated non-life gross written premium figures published by EIOPA include Health not similar to Life.

We have not audited or verified the data or other information within Solvency II Wire Data or in the underlying SFCRs. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete. We performed a limited review of the data used directly in our analysis for reasonableness and consistency, and we have not found material defects in the data. We have not made any changes to the data to reflect additional information or changes following the reporting date.

This report is intended solely for educational purposes and presents information of a general nature. The underlying data and analysis have been reviewed on this basis. This report is not intended to guide or determine any specific individual situation, and readers should consult qualified professionals before taking specific actions.

We note that all the figures published in this report have been converted into British pound sterling (GBP) by Solvency II Wire Data, using exchange rates as at the report date of each SFCR. We also note that all but one of the SFCRs are as at 31 December 2023 (one SFCR is reported as at 30 June 2023).[10]

RUSSIA UKRAINE CONFLICT

As noted in our analysis last year, Russia's invasion of Ukraine resulted in financial and trade sanctions being imposed on Russia, which led to further upward pressure on inflation and to disruption to supply chains. As the conflict continues, those insurers that have material direct exposure to Russia or Ukraine may continue to experience significant claims, particularly in lines of business such as marine, aviation, transport, fire, political violence, cyber and trade credit. As well as this, the value of some insurers' assets continues to be affected, impacting the level of market risk and the total SCR.

MIDDLE EAST CONFLICT

Insurers in Europe have commented that the situation in the Middle East is exacerbating the pressures on the global economic and financial markets. Insurers have noted that they will assess and monitor potential exposures that they have, while those that have said their exposure is immaterial have said they will monitor for any indirect impacts.

10. The rate of exchange for SFCR not reported as at 31 December 2023 may differ slightly from the rate stated in footnote 7.

Analysis of European non-life companies

CAPITAL COVERAGE RATIOS: HOW DID THE EUROPEAN COMPANIES DO?

On an aggregated basis, as at the 2023 year-end, European non-life insurers that were within our sample were very well-capitalised, with an average (weighted by eligible own funds) capital coverage ratio of 250%. This is slightly lower than the figure of 251% as at the 2022 year-end, but higher than the 245% as at the 2021 year-end.

Figure 2 shows how the average capital coverage ratios are distributed throughout the 15 countries included in our sample. It sets out the median, 25th and 75th percentiles, and the weighted average of the distribution of the capital coverage ratios, for the market as a whole and then separately for each country analysed. This shows that there is a wide range of capital coverage ratios. Insurers in some countries that were included in our review, such as Austria and Germany, were, on average, very well-capitalised, with average capital coverage ratios of over 270%. We illustrate in Figure 5 how the weighted average of the distribution of the capital coverage ratios have altered, by country, since our review as at the 2022 year-end.

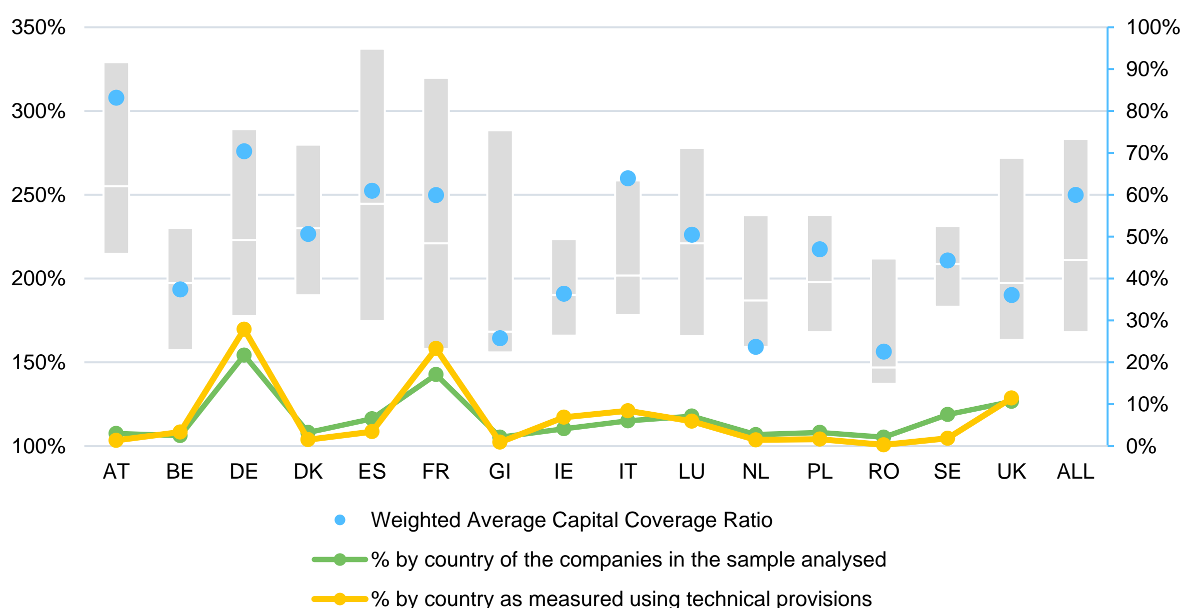
We note that, when considering the inter-quartile range of capital coverage ratios for each company, France, Germany, Spain and the UK have very wide inter-quartile ranges of capital coverage ratios, whereas Ireland and Sweden have much narrower inter-quartile ranges.

We also note that, for the Netherlands, the weighted average capital coverage ratio (159%) is well below the median (187%) as at year-end 2023. This implies that smaller insurers have much higher capital coverage ratios than larger insurers in the Netherlands. The two largest insurers in our sample of Dutch insurers in terms of gross written premiums in 2023 have capital coverage ratios of 143% and 144%, while two of the smallest insurers in our sample of Dutch insurers have capital coverage ratios of 220% and 242%.

For Italy, the weighted average capital coverage ratio (260%) is well above the median (202%) as at year-end 2023. This implies that larger insurers have much higher capital coverage ratios than smaller insurers in Italy. Three of the largest insurers in our sample of Italian insurers in terms of gross written premiums in 2023 have capital coverage ratios of 313%, 304% and 271%, while two of the smallest insurers in our sample of Italian insurers have capital coverage ratios of 113% and 146%.

The notable variations across the European countries suggest that, in addition to the disparities among European markets (e.g., legislation, product offering, etc.), the underlying methodologies—or interpretations of the regulations—used to assess the capital requirements might differ from one country to another.

FIGURE 2: DISTRIBUTION OF THE CAPITAL COVERAGE RATIOS BY COUNTRY[11]



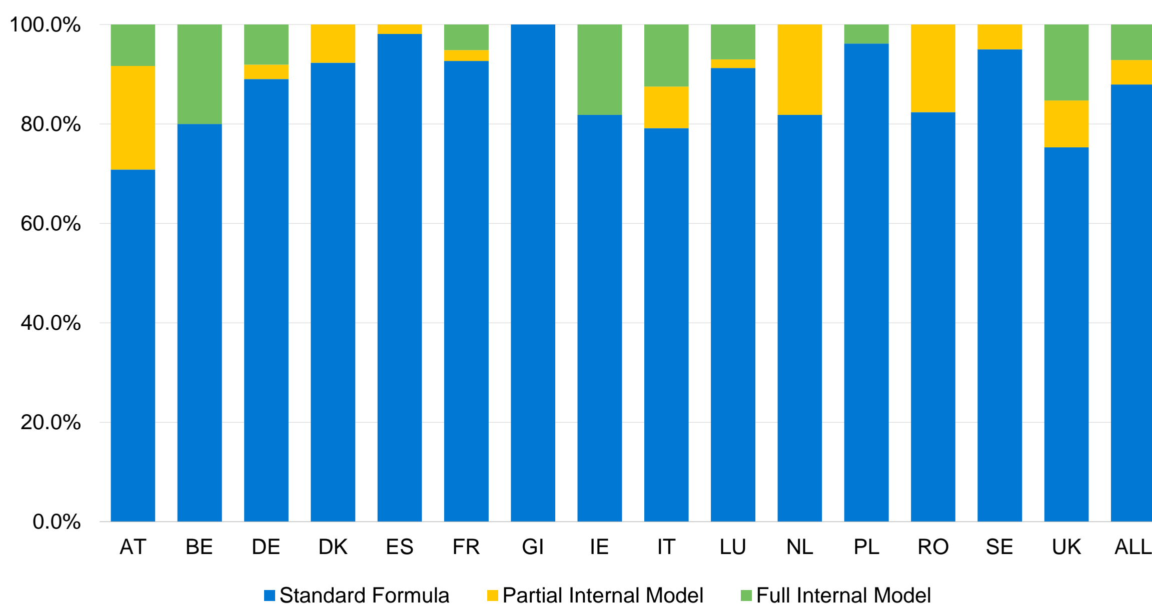
11. The grey bars in Figure 2 represent the inter-quartile range and the white lines represent the median.

Not surprisingly, and as highlighted in Figure 3, the vast majority (88%) of the undertakings in the analysed sample have used the Standard Formula (SF) to calculate their SCRs, compared to 87% of our 2022 year-end sample. However, at year-end 2023, only 55% of the total value of the aggregated SCRs were generated using the SF (compared to 53% as at the 2022 year-end). At the two ends of the spectrum, all undertakings regulated in Gibraltar use only the SF, whereas approximately 30% of undertakings regulated in Austria and approximately 25% of undertakings regulated in the UK use either a partial internal model (PIM) or a full internal model (FIM). Over the year we observe that:

- One undertaking in Germany and one undertaking in Austria moved from a FIM to the SF.
- One undertaking in Denmark, one undertaking in Belgium and one undertaking in Germany moved from a PIM to the SF.
- One undertaking in Luxembourg moved from the SF to a FIM.

As at year-end 2023, 13% of the total value of the aggregated SCRs were generated using a PIM and 32% using a FIM (compared with 14% and 32% as at the 2022 year-end). This, along with the company count on model use, highlights the fact that FIMs are primarily used by large companies and large groups. Our sample of insurers will generally include most, if not all, FIM and PIM users in each of the countries, as insurers that have published their SFCRs later (and hence have not been included within our sample group) tend to be smaller insurers, which are less likely to consider the additional costs of PIMs and FIMs to be worthwhile.

FIGURE 3: CAPITAL MODEL BY COUNTRY, RANKED BY % OF COMPANIES IN OUR SAMPLE

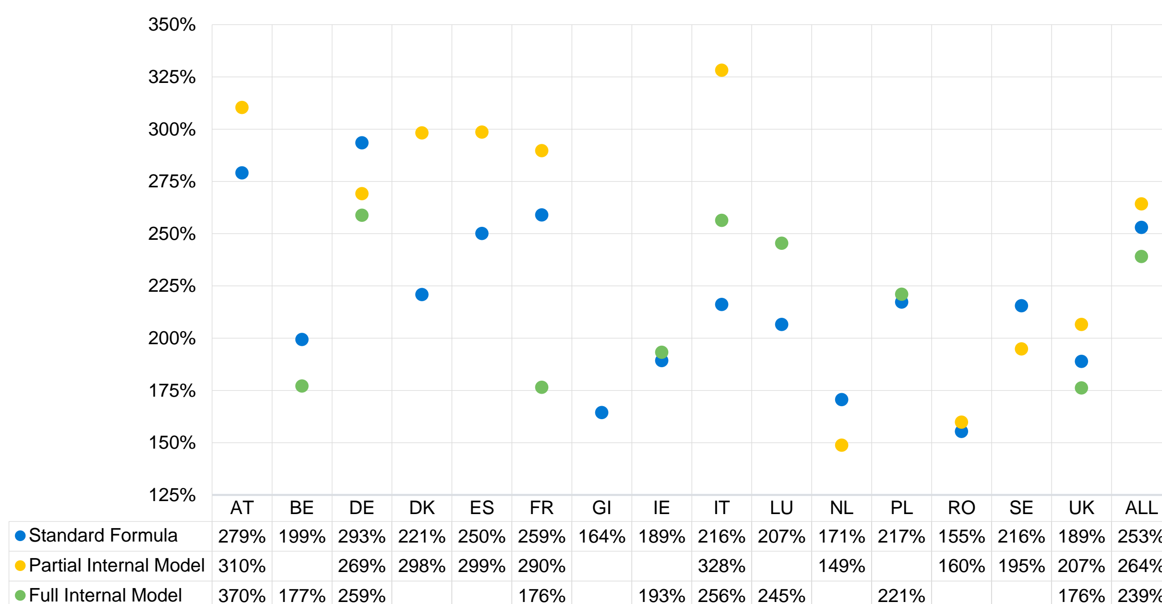


Our analysis has indicated that:

- The weighted average of the capital coverage ratios for companies using the SF is 253% as at year-end 2023, slightly lower than the figure as at year-end 2022 (255%).
- The weighted average of the capital coverage ratios for companies using a PIM is 264% as at year-end 2023, slightly higher than the figure as at year-end 2022 (260%).
- The weighted average of the capital coverage ratios for companies using a FIM is 239% as at year-end 2023, unchanged from the figure as at year-end 2022.

Using an internal model enables companies to capture specific risks that they face that are not covered in the SF (e.g., inflation risk) and to reflect better their risk and business profiles when assessing the SCR (e.g., mitigation from non-proportional outwards reinsurance, dependencies between risks, recognition of operating profits/losses within underwriting risk, etc.). Figure 4 shows the weighted average capital coverage ratio for each country, split by the method used to calculate the SCR. Of those countries in which at least one company used a FIM, the weighted average capital coverage ratio for companies using the SF was the highest in Belgium, France, Germany and the UK.

FIGURE 4: WEIGHTED AVERAGE CAPITAL COVERAGE RATIOS[12] BY SCR CALCULATION METHODS ACROSS EUROPE

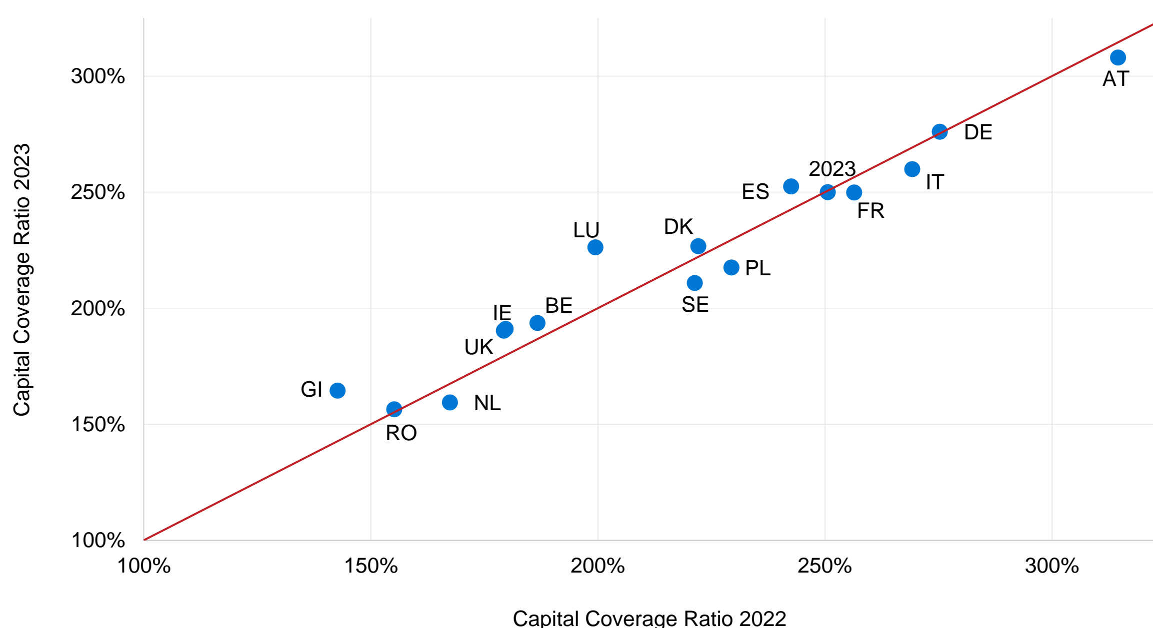


	AT	BE	DE	DK	ES	FR	GI	IE	IT	LU	NL	PL	RO	SE	UK	ALL
Standard Formula	279%	199%	293%	221%	250%	259%	164%	189%	216%	207%	171%	217%	155%	216%	189%	253%
Partial Internal Model	310%		269%	298%	299%	290%			328%		149%		160%	195%	207%	264%
Full Internal Model	370%	177%	259%			176%		193%	256%	245%		221%			176%	239%

Figure 5 compares the weighted average of the capital coverage ratios for each country as at the 2023 year-end with the figure as at the 2022 year-end (for those countries above the line, the weighted average of the capital coverage ratios as at the 2023 year-end is greater than that as at the 2022 year-end, and vice versa for those below the line). This shows that the weighted average of the capital coverage ratios has increased since year-end 2022 for nine countries. By far the most material increase in the weighted average of the capital coverage ratios is for Luxembourg, with a movement of +27%. Gibraltar had the second largest increase of +22%, whereas Poland experienced by far the largest decrease of -12%. Below, we provide a more detailed explanation of these movements.

12. A blank cell means that such a capital model was not used by any of the sample companies in that country.

FIGURE 5: CHANGE IN CAPITAL COVERAGE RATIO FROM 2022 TO 2023[13]



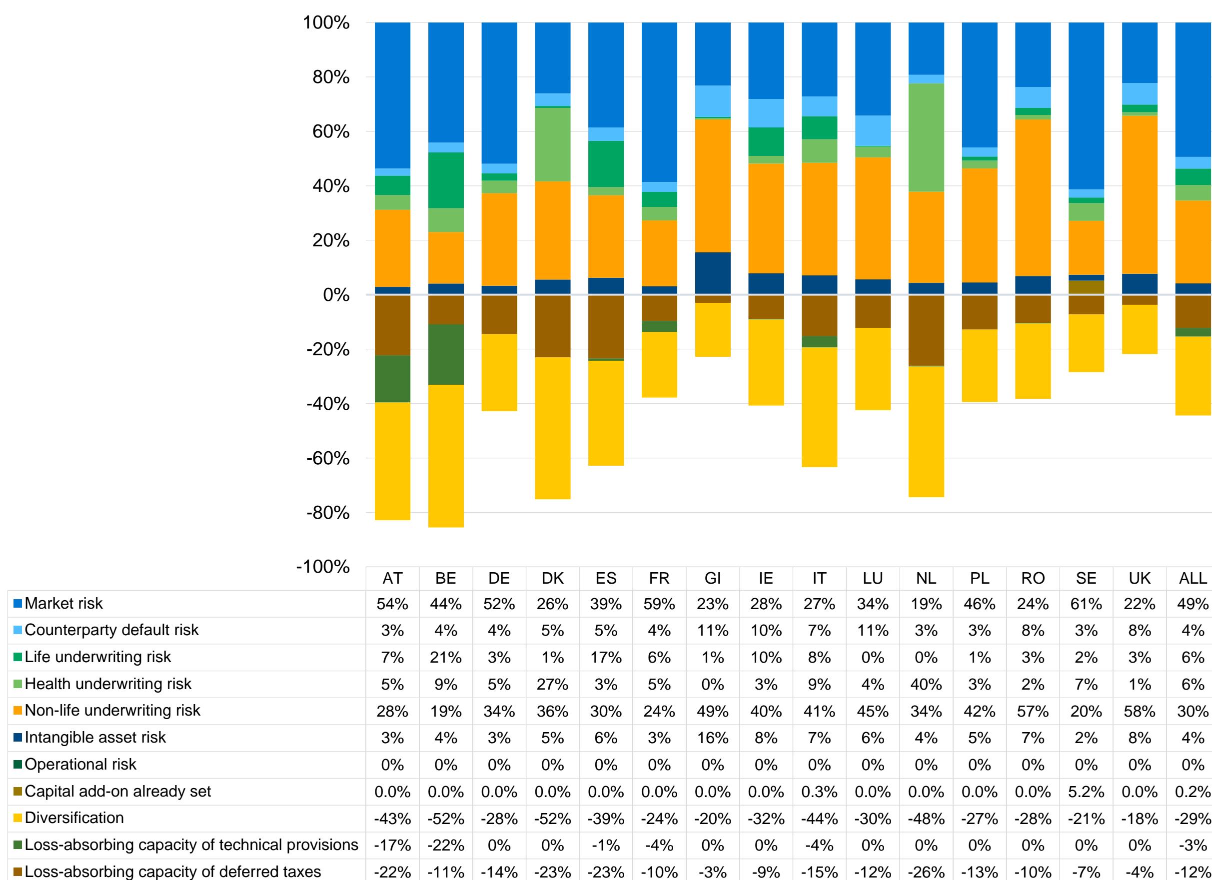
- **Luxembourg**: The three largest companies from Luxembourg in our sample saw increases to their capital coverage ratios in 2023.
  - AIG Europe SA's capital coverage ratio increased by 28% (from 169% as at year-end 2022 to 196% as at year-end 2023), driven by an increase in the eligible own funds and a decrease in the SCR.
  - Swiss Re International SE's capital coverage ratio increased by 37% (from 336% as at year-end 2022 to 373% as at year-end 2023), driven by an increase in eligible own funds.
  - Liberty Mutual Insurance Europe SE capital coverage ratio increased by 89% (from 171% as at year-end 2022 to 260% as at year-end 2023), driven by an increase in eligible own funds (due to an improvement in the other comprehensive income and favourable movement in the EIOPA yield curve impacting the discounting credit benefit) and a decrease in the SCR (driven by the company changing its capital model from the SF to a FIM).
- **Gibraltar:** By far the largest Gibraltarian company, Admiral Insurance (Gibraltar) Limited, saw an increase to its capital coverage ratio of 22% in 2023 (from 133% as at year-end 2022 to 156% as at year-end 2023), primarily driven by an increase in eligible own funds.
- **Poland:** PZU, the largest non-life insurer in Poland, saw a 29% decrease to its capital coverage ratio in 2023 (from 267% as at year-end 2022 to 238% as at year-end 2023). This was mainly driven by an increase in the market risk charge due to two factors (equity risk became less significant and concentration risk became more significant).

13. In Figure 5, the capital coverage ratio for the UK is 179% for 2022 and 190% for 2023, while for Ireland the capital coverage ratio is 180% for 2022 and 191% for 2023. Due to the close proximity of these respective countries on the above graph to one another, the relevant dots in Figure 5 overlap each other.

ANALYSIS OF SCR AND MCR: WHERE IS THE RISK?

In Figure 6, we present, country by country, the breakdown by risk component of the aggregated SCRs for the insurers that calculated their SCRs using the SF.

FIGURE 6: SCR BREAKDOWN BY COUNTRY[14]



	AT	BE	DE	DK	ES	FR	GI	IE	IT	LU	NL	PL	RO	SE	UK	ALL
Market risk	54%	44%	52%	26%	39%	59%	23%	28%	27%	34%	19%	46%	24%	61%	22%	49%
Counterparty default risk	3%	4%	4%	5%	5%	4%	11%	10%	7%	11%	3%	3%	8%	3%	8%	4%
Life underwriting risk	7%	21%	3%	1%	17%	6%	1%	10%	8%	0%	0%	1%	3%	2%	3%	6%
Health underwriting risk	5%	9%	5%	27%	3%	5%	0%	3%	9%	4%	40%	3%	2%	7%	1%	6%
Non-life underwriting risk	28%	19%	34%	36%	30%	24%	49%	40%	41%	45%	34%	42%	57%	20%	58%	30%
Intangible asset risk	3%	4%	3%	5%	6%	3%	16%	8%	7%	6%	4%	5%	7%	2%	8%	4%
Operational risk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Capital add-on already set	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	5.2%	0.0%	0.2%
Diversification	-43%	-52%	-28%	-52%	-39%	-24%	-20%	-32%	-44%	-30%	-48%	-27%	-28%	-21%	-18%	-29%
Loss-absorbing capacity of technical provisions	-17%	-22%	0%	0%	-1%	-4%	0%	0%	-4%	0%	0%	0%	0%	0%	0%	-3%
Loss-absorbing capacity of deferred taxes	-22%	-11%	-14%	-23%	-23%	-10%	-3%	-9%	-15%	-12%	-26%	-13%	-10%	-7%	-4%	-12%

Market risk and non-life underwriting risk are the biggest risk areas for non-life firms across Europe (with 14 of the 15 countries analysed presenting either of these risks as their predominant risk), with the remainder of the undiversified SCR mostly made up of counterparty default risk, life underwriting risk, health underwriting risk and intangible asset risk. Overall, market risk and non-life underwriting risk represent a substantial proportion of the undiversified SCR.

- As at year-end 2023, market risk represents 49% of the undiversified SCR, unchanged from the proportion observed as at year-end 2022 and virtually equivalent to the proportion observed as at year-end 2021 (48%).
- As at year-end 2023, non-life underwriting risk represents 30% of the undiversified SCR, similar to, although lower than, the proportion observed as at both year-end 2022 and year-end 2021 (31%).

In Austria, Germany and Sweden, firms have substantial portions of their investments allocated to collective investments and holdings[15] in related undertakings including participations (48%, 68% and 56%, respectively, compared to 47%, 68% and 40% as the 2022 year-end), which largely explains the higher proportions of charge attributable to market risk in those countries.

14. The amounts within Figure 6 are as a percentage of the total of the capital requirement for each risk module, including operational risk (the undiversified SCR). Each element has been calculated as the sum across the companies within the region.

15. Holding refers to either an insurance holding company or a mixed-activity insurance holding as defined in Article 212(1)(b) of Directive 2009/138/EC. The definition is available at https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:335:0001:0155:en:PDF

In the Netherlands, the health underwriting risk is larger than the non-life underwriting risk, whereas in other countries, such as the UK and Gibraltar, the health risk component is almost non-existent. This highlights that, in some countries (such as the UK), health cover is mostly provided by standalone health insurance providers that are not included within our analysis of non-life insurers, whereas in the Netherlands it is mostly written by insurers who also write non-life business.

The significant contribution of life underwriting risk in Belgium and Spain is a consequence of some of the large providers of non-life cover in those markets being composite companies, i.e., they also write life insurance business. Because of the size of their non-life business relative to their markets, we have decided to keep these companies in our analysis, despite the potential distortion to our analysis caused by also including the data relating to life covers. Structured settlements, whereby claimants receive a series of payments over a period of time while they remain alive, are also a cause for some life underwriting risk within ostensibly non-life insurers.

The diversification of risk results in a 29% reduction of the undiversified SCR on average across Europe, higher than the level of diversification observed at year-end 2022 (28%) but lower than the equivalent proportion as at the 2021 year-end (31%). This is diversification between the risk modules and not within the risk modules (which most of the companies do not disclose in their SFCRs). The amount of benefit varies widely by country, with diversification benefits highest where there is a wider spread of risk exposure. Belgium and Denmark have the highest diversification benefit (52%) reflecting the fact that insurers there have a wide range of risk exposures across market risk, non-life underwriting risk and life underwriting risk. Other markets with high levels of diversification include the Netherlands (48%), Italy (44%) and Austria (43%).

In addition to the diversification benefits, there are two additional adjustments available to companies after diversification:

- Loss absorbing capacity of technical provisions, which reflects the ability to reduce future discretionary benefits under stress scenarios. This results in a reduction of 3%, similar to the reduction observed as at year-end 2022 (2%) and identical to the reduction observed as at year-end 2021.
- Loss absorbing capacity of deferred taxes, which reflects the reduction in the future corporation tax payable under stress scenarios. This results in a reduction of 12%, unchanged from the reduction observed as at year-end 2022 but lower than the 14% observed as at year-end 2021.

Capital add-ons

Overall, on average, capital add-ons represent 0.2% of the total undiversified SCR and 0.3% of the total diversified SCR, both of which were the same value as at the 2022 year-end. Our analysis has indicated that:

- As at year-end 2023, two companies from Italy, Crédit Agricole Assicurazioni and Vera Assicurazioni S.p.A. had capital add-ons (those add-ons totalling roughly £16 million, or €18.9 million), which is the same number as at year-end 2022 (at which time the add-ons totalled roughly £14 million, or €15.7 million).
- As at year-end 2023, just one company from Sweden, Försäkringsbolaget PRI Pensionsgaranti ömsesidigt had capital add-ons (totalling £503 million, or SEK 6,455 million)—the same company as at year-end 2022 had £496 million worth of capital add-ons (or SEK 6,251 million)

In most cases where a company reports a capital add-on, it is because the SF is not perceived to capture, fully and/or appropriately, some of the risks to which the company is exposed. Crédit Agricole Assicurazioni, which applies its undertaking-specific parameter (USP), has also decided to include a capital add-on (defined as a conservative margin) until the conclusion of the authorization process for the extension of the perimeter of USP application. Vera Assicurazioni has included a capital add-on (defined as a conservative margin) by using the USP approach to consider the inappropriateness of the risk profile of the entity compared to the one underlying the Standard Formula approach.

ANALYSIS OF OWN FUNDS

Own funds are divided into three tiers based on quality: Tier 1 capital is the highest ranking with the greatest loss-absorbing capacity, such as retained earnings and share capital; Tier 2 funds are typically composed of hybrid debt; and Tier 3 typically comprises deferred tax assets. As shown in Figure 7, insurers' own funds are considered to be, on average, of good quality, with 93% classified in Tier 1, which is unchanged from the figure as at the 2022 year-end. In Figure 7, the proportions of Tier 1 own funds vary from country to country, from 86% to 99%.

FIGURE 7: STRUCTURE OF ELIGIBLE OWN FUNDS[16]

	AT	BE	DE	DK	ES	FR	GI	IE	IT	LU	NL	PL	RO	SE	UK	ALL
Tier 1 unrestricted	91%	86%	92%	83%	99%	88%	86%	92%	85%	92%	95%	93%	90%	98%	92%	91%
Tier 1 restricted	1%	0%	2%	6%	0%	4%	0%	1%	4%	0%	2%	0%	1%	0%	1%	2%
Tier 2	7%	13%	6%	11%	1%	8%	13%	6%	10%	8%	2%	7%	7%	1%	5%	7%
Tier 3	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	3%	0%	2%	0%

In Figure 8, we have split the basic and ancillary own funds by type. We note that, for all countries excluding Romania, basic own funds mainly comprise the reconciliation reserve. For Romania, ordinary share capital is the largest component of basic own funds (42% as at year-end 2023 compared with 54% as at year-end 2022). For Gibraltar, share premium account related to ordinary share capital is the largest component of basic own funds (53% as at both year-end 2023 and year-end 2022).

FIGURE 8: COMPONENTS OF OWN FUNDS[11]

BASIC OWN FUNDS	AT	BE	DE	DK	ES	FR	GI	IE	IT	LU	NL	PL	RO	SE	UK	ALL
Ordinary share capital	2%	20%	3%	9%	12%	9%	16%	26%	9%	17%	1%	6%	42%	1%	26%	8%
Share premium account related to ordinary share capital	11%	8%	14%	1%	9%	14%	53%	7%	11%	26%	15%	9%	11%	1%	18%	13%
Surplus funds	1%	6%	0%	114%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	1%
Reconciliation reserve	86%	66%	83%	-24%	79%	77%	30%	66%	80%	57%	84%	85%	46%	98%	53%	78%
Other basic own funds	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%

ANCILLARY OWN FUNDS	AT	BE	DE	DK	ES	FR	GI	IE	IT	LU	NL	PL	RO	SE	UK	ALL
Letters of credit and guarantees	0%	47%	3%		0%	0%	51%	69%		34%	40%			0%	85%	28%
Supplementary member calls	100%	53%	96%		61%	100%	0%	0%		34%	0%			100%	10%	61%
Other ancillary own funds	0%	0%	2%		39%	0%	49%	31%		31%	60%			0%	5%	11%

Denmark's aggregate reconciliation reserve is negative and the aggregate surplus funds is significant. This is because Tryg Forsikring A/S, the largest insurer in Denmark, holds a negative reconciliation reserve of over £3 billion and holds surplus funds of over £4 billion (for clarification, this is held in the home currency, Danish krone).

16. Due to rounding, values in the columns may not add up to 100%.

ANALYSIS OF MAIN BALANCE SHEET ITEMS

Assets

Across all countries, investments (typically cash, bonds and other stock market-traded instruments) form the majority of total assets in the balance sheet. Most countries (exceptions being Belgium, Gibraltar, Ireland, Luxembourg, Sweden and the UK) had more than 70% of total assets in investments, as can be observed in Figure 9. Those countries with lower percentages of assets in investments, with the exception of Belgium, Sweden and the UK, exhibit a greater proportion of reinsurance recoverables (over total assets), which is not unexpected, given the extensive use made of reinsurance in those countries that domicile numerous captives. The UK percentages shown in Figures 9 and 10 are distorted by Aviva International Insurance Limited, which acts as an internal reinsurer for various companies within the Aviva Group and does not report any reinsurance recoverables as part of its assets. With this company removed, the proportion of assets in investments would be 63% as at year-end 2023 (compared with 63% as at year-end 2022), and the proportion of reinsurance recoverables over total assets would be 22% as at year-end 2023 (compared with 21% as at year-end 2022).

FIGURE 9: PROPORTION OF ASSETS IN INVESTMENTS AS AT YEAR-ENDS 2022 AND 2023

	Year-end 2022	Year-end 2023
AT	75%	76%
BE	66%	64%
DE	77%	77%
DK	88%	84%
ES	76%	77%
FR	76%	73%
GI	44%	44%
IE	46%	45%
IT	78%	75%
LU	51%	53%
NL	74%	74%
PL	83%	83%
RO	71%	74%
SE	82%	60%
UK	41%	41%
ALL	71%	70%

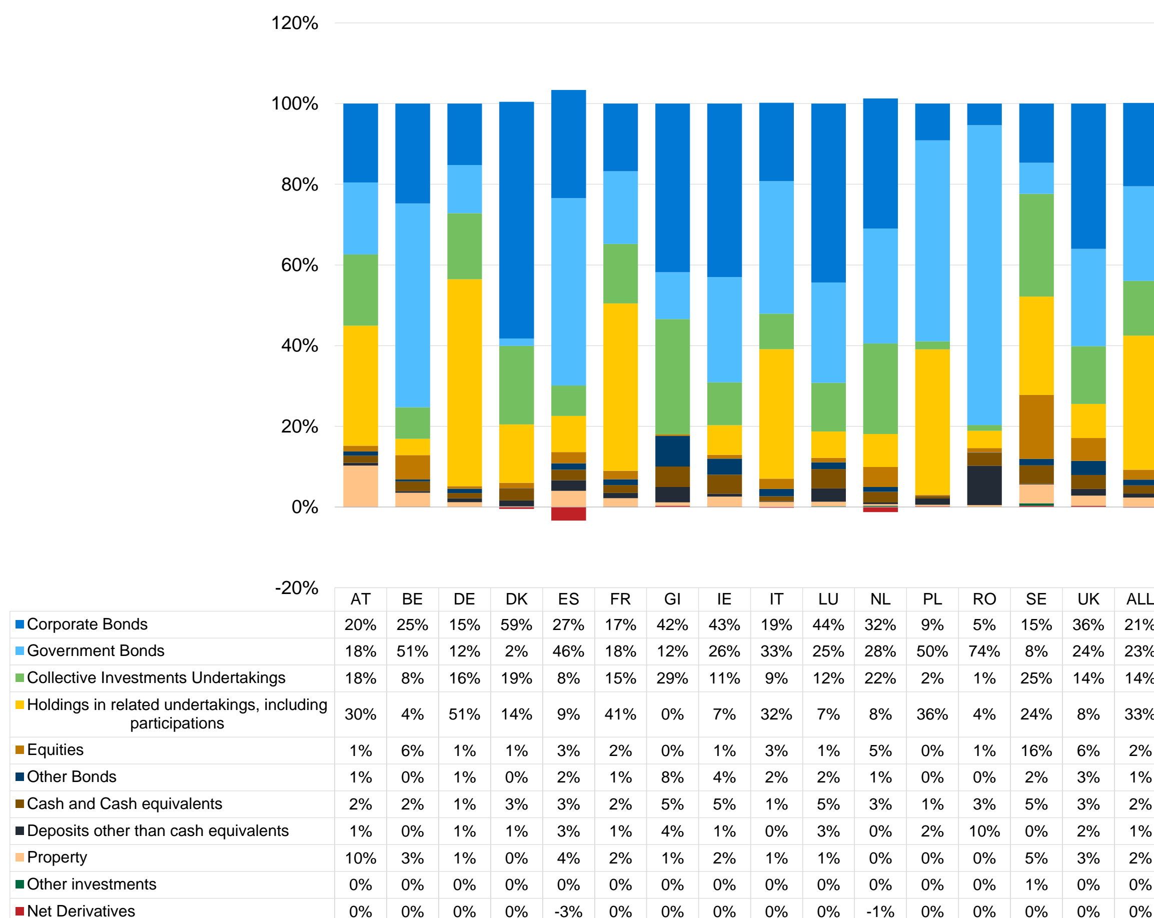
FIGURE 10: PROPORTION OF REINSURANCE RECOVERABLES OVER TOTAL ASSETS AS AT YEAR-ENDS 2022 AND 2023

	Year-end 2022	Year-end 2023
AT	3%	2%
BE	2%	2%
DE	9%	9%
DK	3%	3%
ES	6%	6%
FR	7%	7%
GI	45%	44%
IE	35%	35%
IT	2%	3%
LU	29%	27%
NL	5%	4%
PL	8%	9%
RO	11%	8%
SE	6%	6%
UK	13%	14%
ALL	8%	8%

Figure 11 shows the breakdown of companies' aggregate investments (including cash) per country. Investments in bonds (both government and corporate) are prominent in many firms' portfolios across most of the countries covered by the sample. Bonds are attractive to insurers due to their regular payment streams, which complement duration-matching strategies, reduced volatility and the associated capital requirements, relative to investing in equities.

Holdings in related undertakings dominate the balance sheets in Germany and, in aggregate, make up 51% of the total investments, slightly higher than the proportion of 50% as at year-end 2022. This is driven by size of the largest German companies in our sample, whose assets will dominate and who have sizeable investments in the industry around the world. Other countries, such as Austria, Italy and Poland also have significant proportions of holdings in related undertakings of over 30% as at year-end 2023. For Austria and Germany in particular, this ties in with the larger proportions of market risk, mentioned earlier.

FIGURE 11: INVESTMENT BREAKDOWN, AGGREGATED BY COUNTRY

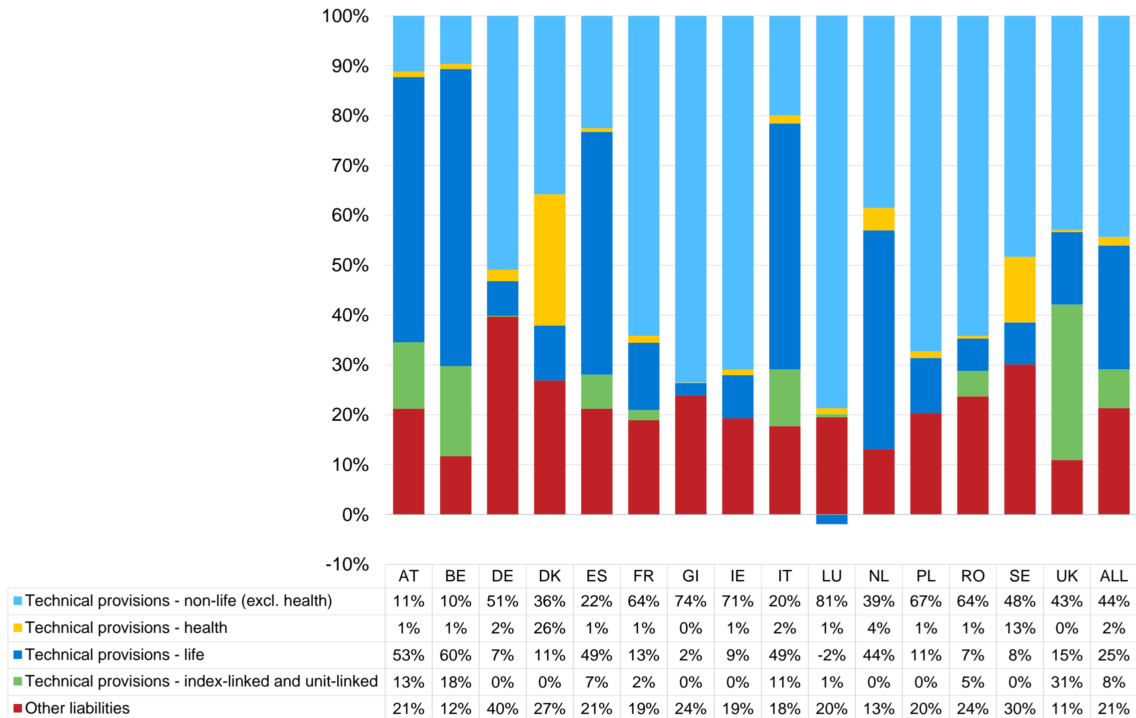


	AT	BE	DE	DK	ES	FR	GI	IE	IT	LU	NL	PL	RO	SE	UK	ALL
Corporate Bonds	20%	25%	15%	59%	27%	17%	42%	43%	19%	44%	32%	9%	5%	15%	36%	21%
Government Bonds	18%	51%	12%	2%	46%	18%	12%	26%	33%	25%	28%	50%	74%	8%	24%	23%
Collective Investments Undertakings	18%	8%	16%	19%	8%	15%	29%	11%	9%	12%	22%	2%	1%	25%	14%	14%
Holdings in related undertakings, including participations	30%	4%	51%	14%	9%	41%	0%	7%	32%	7%	8%	36%	4%	24%	8%	33%
Equities	1%	6%	1%	1%	3%	2%	0%	1%	3%	1%	5%	0%	1%	16%	6%	2%
Other Bonds	1%	0%	1%	0%	2%	1%	8%	4%	2%	2%	1%	0%	0%	2%	3%	1%
Cash and Cash equivalents	2%	2%	1%	3%	3%	2%	5%	5%	1%	5%	3%	1%	3%	5%	3%	2%
Deposits other than cash equivalents	1%	0%	1%	1%	3%	1%	4%	1%	0%	3%	0%	2%	10%	0%	2%	1%
Property	10%	3%	1%	0%	4%	2%	1%	2%	1%	1%	0%	0%	0%	5%	3%	2%
Other investments	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Net Derivatives	0%	0%	0%	0%	-3%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%

Technical provisions

Figure 12 shows that, for all countries, technical provisions constitute the largest liability in non-life insurers' balance sheets, making up approximately 79% of the total liabilities in aggregate, which is lower than the figure of 75% as at the 2022 year-end. Of the 15 countries, Germany has the highest proportion of liabilities allocated other than to technical provisions, these other liabilities being dominated by pension benefit obligations, subordinated liabilities, deferred tax liabilities, and financial liabilities other than to credit institutions (40% as at year-end 2023, identical to the figure as at year-end 2022). This is driven by size of the largest German companies in our sample. We note that non-life liabilities comprise more than 50% of the total liabilities for just seven countries in our sample and approximately 50% for one of the countries in our sample. Countries that have a higher proportion of life liabilities generally contain more composite insurers in our sample. We also note that almost all of the index-linked and unit-linked assets in the UK are held by Aviva International Insurance Limited (73% of their net written premium for long-term business is for unit-linked or index-linked business). The negative life technical provisions for Luxembourg are driven by Swiss Re Europe S.A. No explanation was provided in the SFCR.

FIGURE 12: SPLIT OF LIABILITIES BY COUNTRY



	AT	BE	DE	DK	ES	FR	GI	IE	IT	LU	NL	PL	RO	SE	UK	ALL
Technical provisions - non-life (excl. health)	11%	10%	51%	36%	22%	64%	74%	71%	20%	81%	39%	67%	64%	48%	43%	44%
Technical provisions - health	1%	1%	2%	26%	1%	1%	0%	1%	2%	1%	4%	1%	1%	13%	0%	2%
Technical provisions - life	53%	60%	7%	11%	49%	13%	2%	9%	49%	-2%	44%	11%	7%	8%	15%	25%
Technical provisions - index-linked and unit-linked	13%	18%	0%	0%	7%	2%	0%	0%	11%	1%	0%	0%	5%	0%	31%	8%
Other liabilities	21%	12%	40%	27%	21%	19%	24%	19%	18%	20%	13%	20%	24%	30%	11%	21%

Figure 13 illustrates the relative size of gross non-life technical provisions across the 15 European countries analysed as at the 2023 year-end. In Figure 13, we include all companies that were available on Solvency II Wire Data (1,308 companies versus the 795 companies in our sample) to ensure that we capture the whole non-life market, as otherwise the proportion would be understated for countries where composites dominate. Germany, France, Ireland, Italy and the UK, in aggregate, make up 80% of the non-life technical provisions, slightly higher than the 75% as at the 2022 year-end.

FIGURE 13: SPLIT OF NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) GROSS TECHNICAL PROVISIONS BY COUNTRY

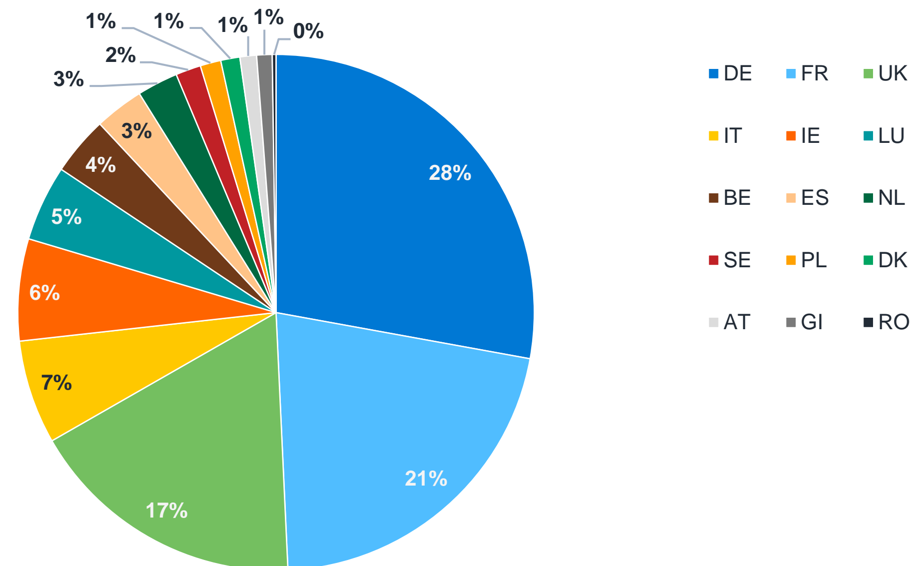
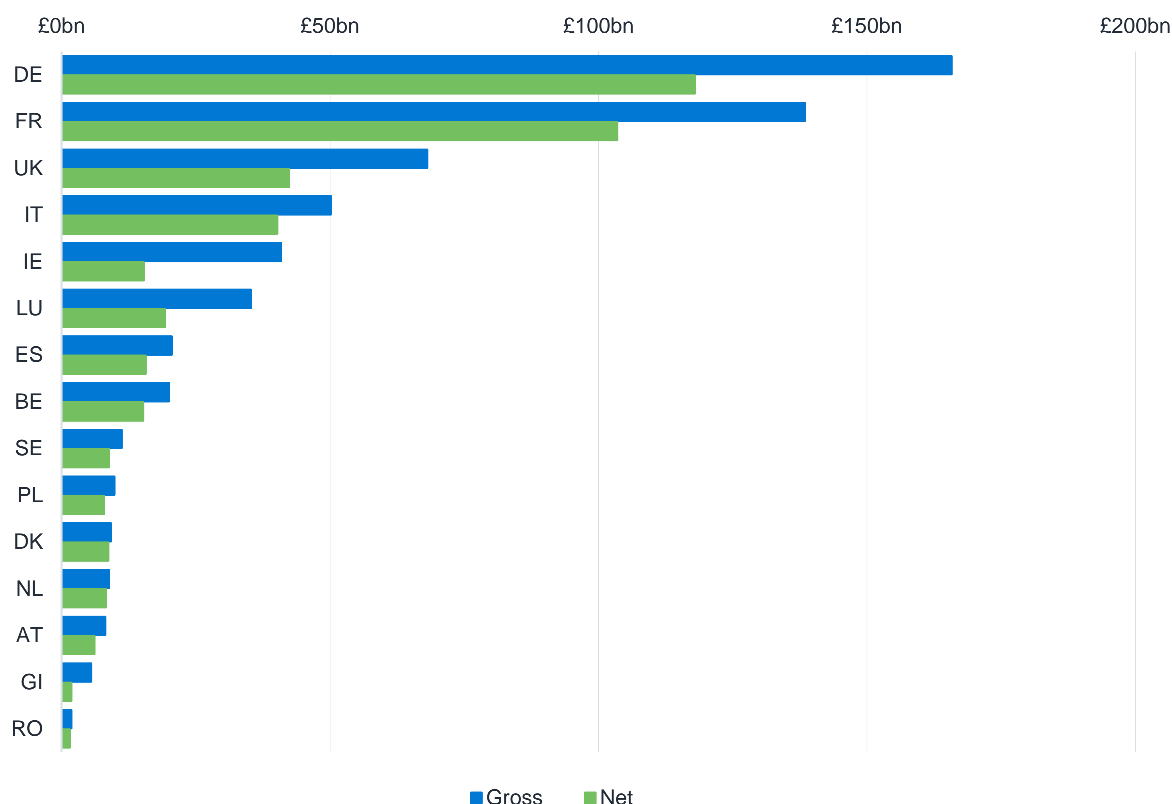


Figure 14 shows the non-life technical provisions, both gross and net of reinsurance, for each country as at the 2023 year-end.

FIGURE 14: GROSS AND NET NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) TECHNICAL PROVISIONS BY COUNTRY



As at the 2023 year-end, the 795 insurers included in our sample have £594 billion of non-life technical provisions, gross of reinsurance, and £413 billion, net of reinsurance.

Figure 15 shows how the proportions have moved over the past five years by line of business. By and large, these proportions have been relatively stable, save in respect of the motor vehicle liability and fire lines.

- The proportion of motor vehicle liability technical provisions has reduced year-on-year from 27.6% as at year-end 2019 to 23.6% as at year-end 2023, The decrease between 2020 and 2021 was primarily driven by COVID-19 and the related national restrictions, as the volume of claims reported to insurers decreased (and hence the technical provisions decreased) following reduced road usage. The decrease from 2021 to 2022 is likely due to myriad factors. A key factor is that road usage and driving habits have not yet returned to pre-COVID levels, partially a hangover from the pandemic restrictions and partially a result of inflation in motoring costs reducing the amount of discretionary motoring. We note that the decrease from year-end 2022 to year-end 2023 is only 0.2 percentage points.

- The proportion of fire technical provisions (which comprises 'fire and other damage to property') has grown from 17.3% as at year-end 2019 to 22.2% as at year-end 2023. This may be attributed to the business interruption technical provisions related to the pandemic and an increase in the frequency and severity of extreme weather events. Across Europe, rainfall, storms and flooding continued to affect property lines of business in 2023, as indicated by the following two examples:
  - In Italy, the precipitation was nearly eight times the historical average during the May 2023 flooding and seven times the historical average during the flooding that took place in November 2023. The gross technical provisions for fire in Italy increased from £6.1 billion as at year-end 2022 to £10.6 billion as at year-end 2023.
  - In France, in November 2023, storms and heavy rain caused flood damage, with the estimated insurance costs around €550 million. The gross technical provisions for fire in France increased from £30.9 billion as at year-end 2022 to £34.9 billion as at year-end 2023.

From Figure 15 we also note that the two liability lines of business account for 49% of insurers' total non-life technical provisions, unchanged from the figure as at year-end 2022.

FIGURE 15: NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) GROSS TECHNICAL PROVISIONS BY LINE OF BUSINESS AS AT EACH YEAR-END 2019-2023

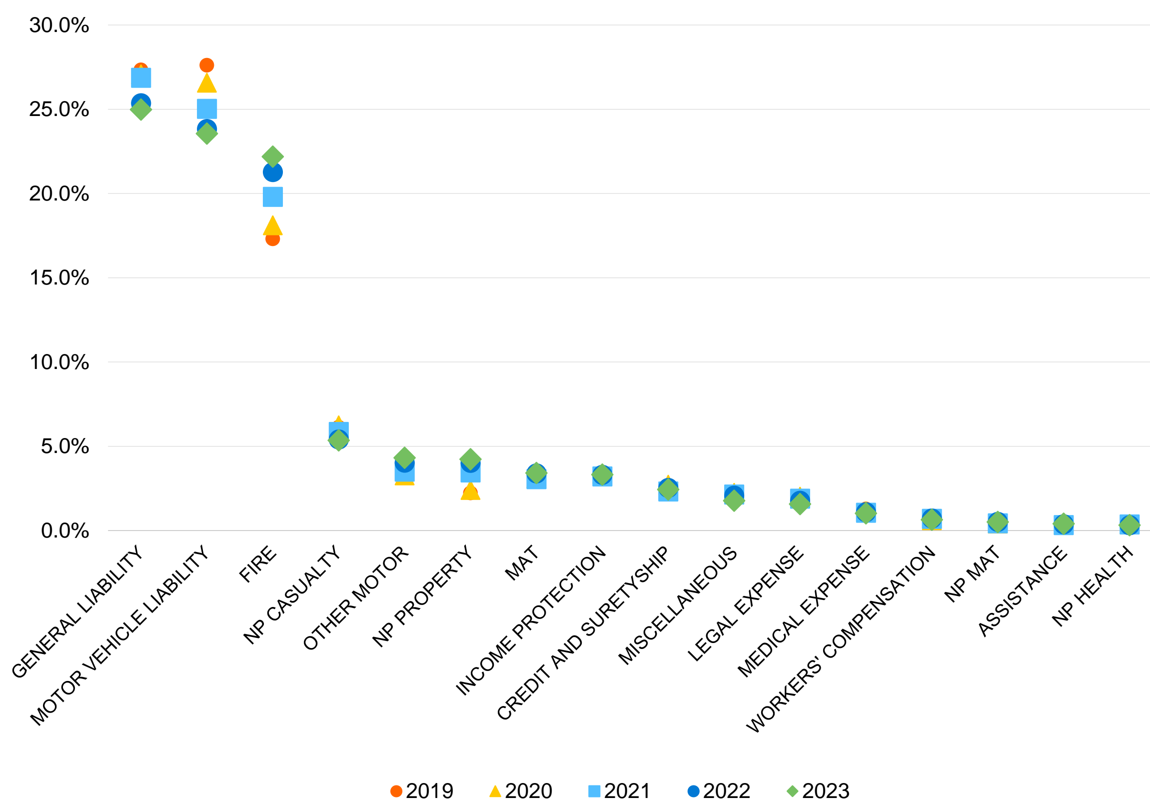
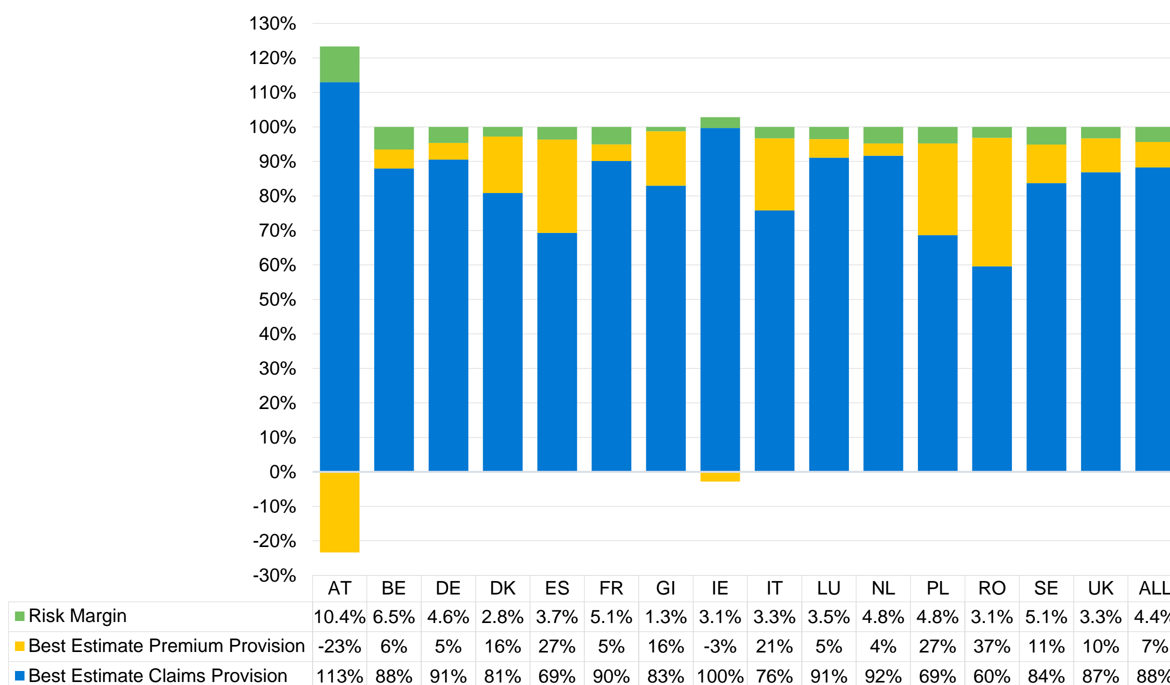


Figure 16 shows the composition of the non-life technical provisions across the 15 countries as at the 2023 year-end. We observe that, in aggregate, claims provisions make up 88% of the gross technical provisions (slightly lower than the figure reported as at the 2022 year-end, 89%).

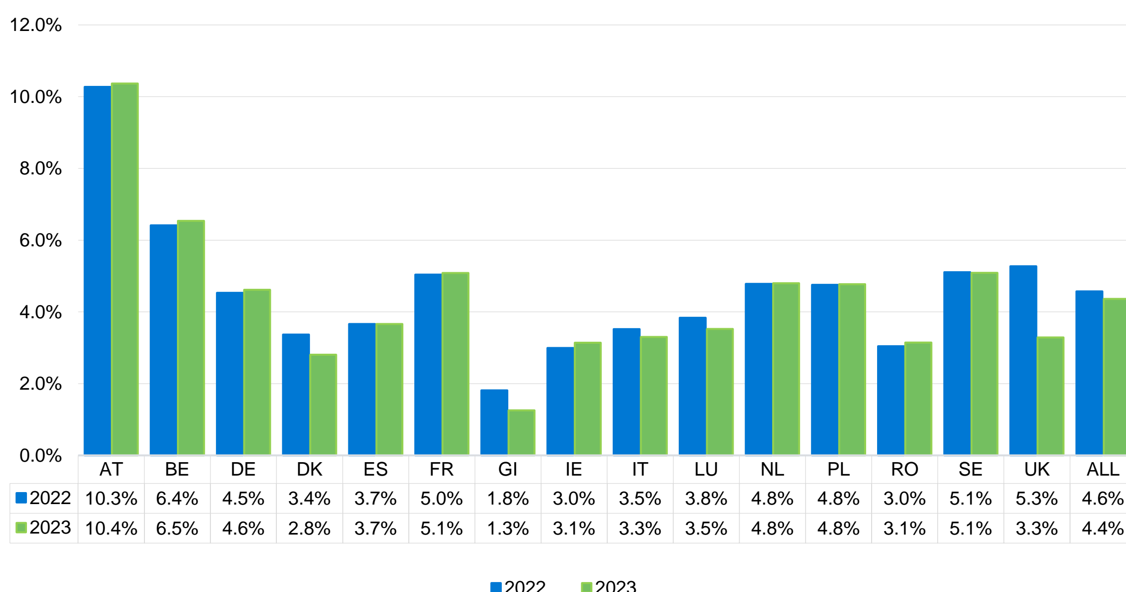
FIGURE 16: COMPONENTS OF NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) NET TECHNICAL PROVISIONS



We observe that premium provisions are negative for Austria and Ireland. Part of the reasoning for this may be that, in aggregate, firms regulated there expect their unearned and bound but not incepted business to be profitable.

In Figure 17, we show the share of the technical provisions that is attributable to the risk margin, by country, as at both the 2022 and 2023 year-ends.

FIGURE 17: RATIO OF RISK MARGIN TO GROSS TECHNICAL PROVISIONS BY LINE OF BUSINESS AS AT YEAR-ENDS 2022 AND 2023

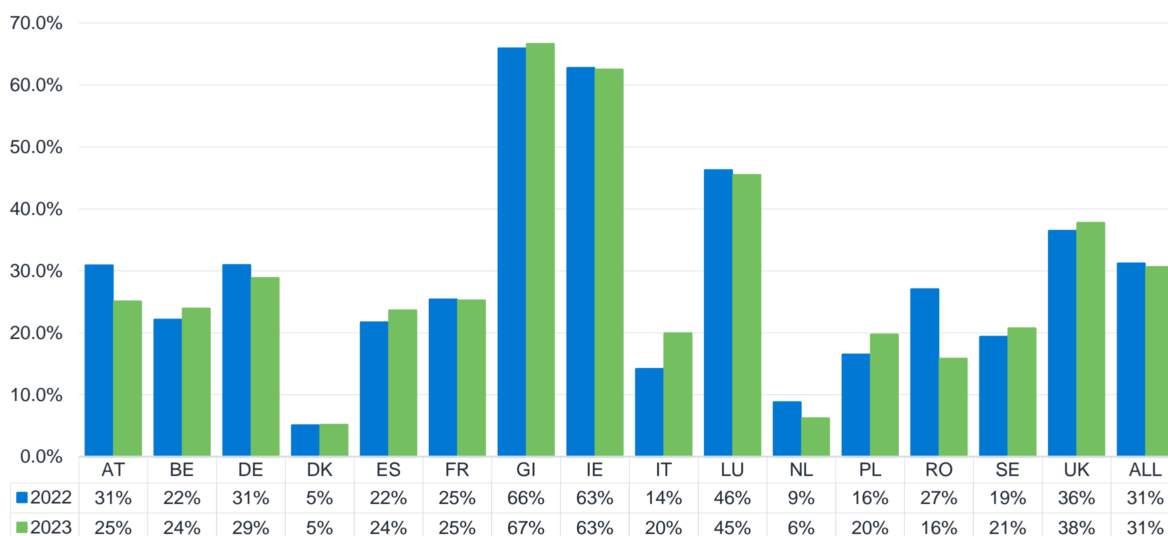


We note that, for more than half of the countries in our sample, the risk margin has increased from year-end 2022 to year-end 2023. However, the largest decrease was seen in the UK (a reduction of 2%). This reduction is not surprising given that the cost of capital rate used to calculate the risk margin reduced from 6% to 4%. This is also the driver of the reduction observed in Gibraltar.

Insurers in Austria appear to hold large risk margins relative to those held over the average in the other 14 countries. The non-life underwriting SCR is relatively high in Austria, compared to other countries in Europe, which contributes to a higher risk margin. In contrast, the aggregated risk margins in Denmark, Gibraltar, Ireland and Romania are the lowest across the countries in our sample. The lower aggregated risk margin in Romania is largely driven by the higher risk-free rates compared with those in other EU countries. Gibraltar has the lowest risk margin in proportion to the total gross technical provisions, which may be due to the high levels of outwards reinsurance, given the risk margin is calculated on a net basis.

Figure 18 shows how the reinsurance recoverables have changed between the 2022 and 2023 year-ends as proportions of the gross technical provisions across all countries in our sample. We observe that, for more than half of the countries in our sample, the proportions have increased, with Italy and Poland experiencing the largest increases (5.8% and 3.2%, respectively).

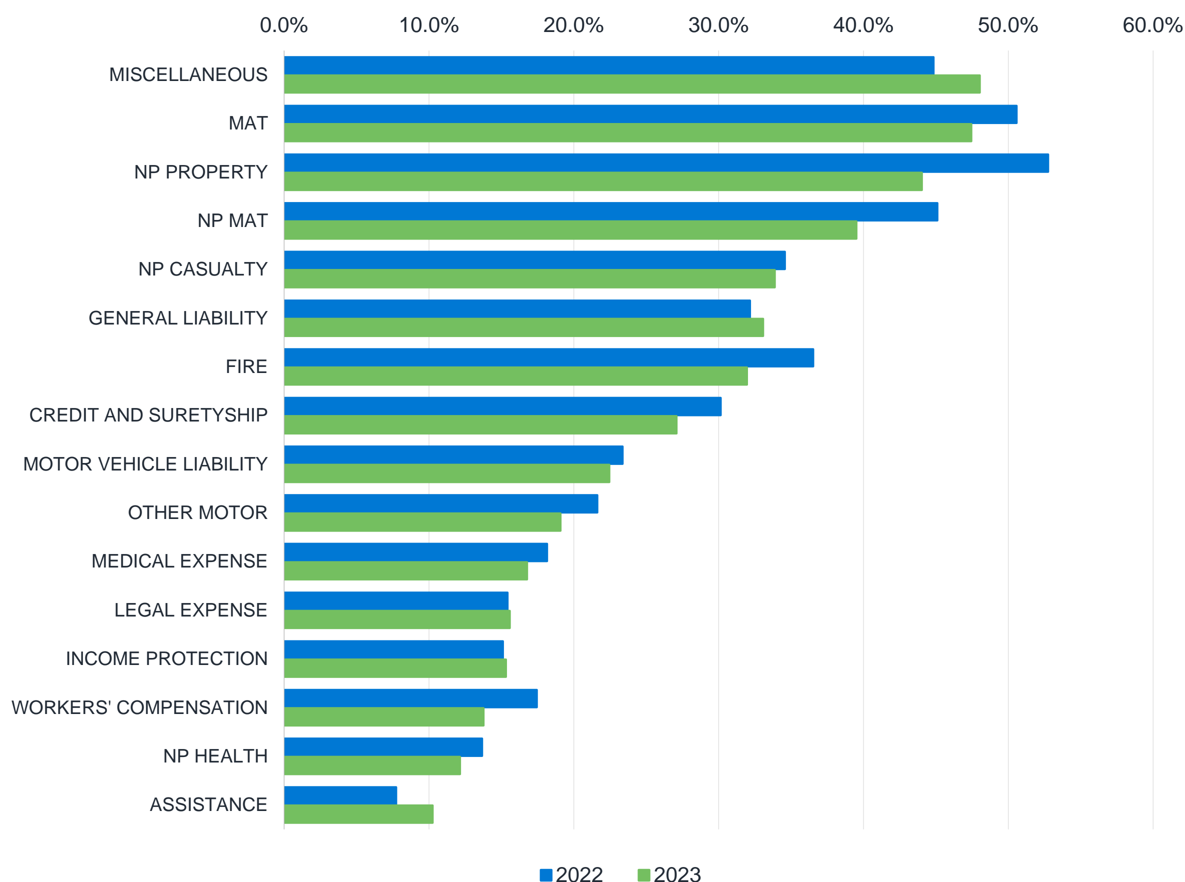
FIGURE 18: REINSURANCE RECOVERABLES AS A PERCENTAGE OF GROSS TECHNICAL PROVISIONS BY COUNTRY AS AT YEAR-ENDS 2022 AND 2023



The countries with the highest proportional usage of reinsurance are Gibraltar and Ireland (67% and 63%, respectively). This is similar to the position as at year-end 2022, with the ceded proportions being almost unchanged from the year-end 2023 proportions. The significant proportion of reinsurance in Gibraltar, Ireland and Luxembourg is driven by their markets having high proportions of captives. Additionally for Gibraltar, many of the motor insurers cede large proportions of their business as quota share, enabling them to write much larger volumes without having to provide additional capital, and hence to benefit from economies of scale. Denmark has the lowest proportional usage of reinsurance at approximately 5%, similar to that as at year-end 2022.

Figure 19 shows the reinsurance recoverables as a proportion of the gross technical provisions for each Solvency II line of business, across all countries included in our sample, as at both the 2022 and 2023 year-ends.

FIGURE 19: REINSURANCE RECOVERABLES AS A PERCENTAGE OF GROSS TECHNICAL PROVISIONS, BY LINE OF BUSINESS AS AT YEAR-ENDS 2022 AND 2023



We note that, for 11 of the lines of business in our sample, the ceded level of reinsurance has decreased from year-end 2022, whereas for the other five, the level increased (in total across all lines the proportion remained at approximately 31%, as was shown in Figure 18). We note in particular:

- The largest decrease was seen in NP property. This line of business decreased from 52.8% as at year-end 2022 to 44.0% as at year-end 2023. The majority of this movement comes from decreases to reinsurance recoverables in Germany over the last year.
- The largest increase was seen in miscellaneous. This line of business increased from 44.8% as at year-end 2022 to 48.0% as at year-end 2023. The majority of this movement comes from increases to reinsurance recoverables in Poland over the last year.

ANALYSIS OF UNDERWRITING

As noted in our Introduction, in 2023 our sample of European non-life insurers wrote almost £460 billion of non-life premiums, gross of reinsurance (more than £317 billion, net of reinsurance). Figure 20 shows the non-life GWP and NWP for each country for 2023. Note that the categorisation relates to the domicile of the insurer, but the premiums could relate to business written internationally. For example, the data for Germany includes that of several entities writing international reinsurance business.

FIGURE 20: 2023 GROSS AND NET NON-LIFE WRITTEN PREMIUMS BY COUNTRY

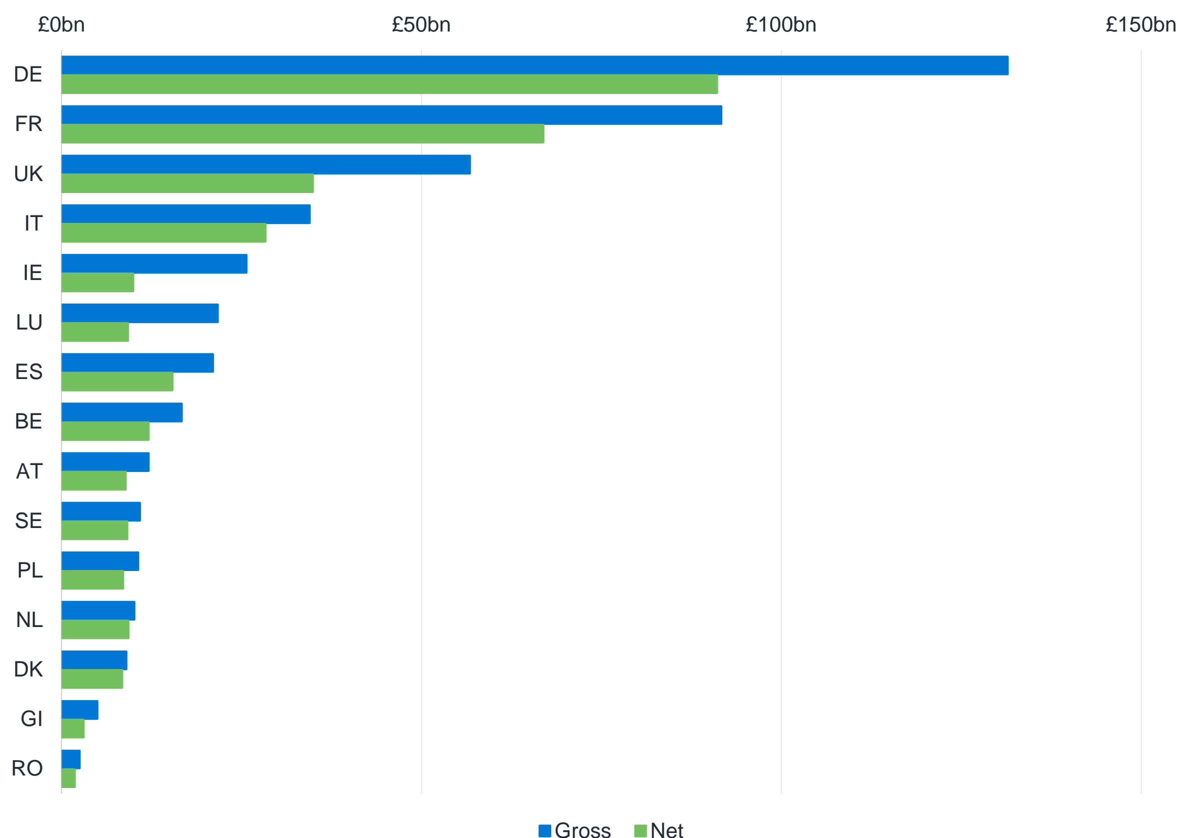
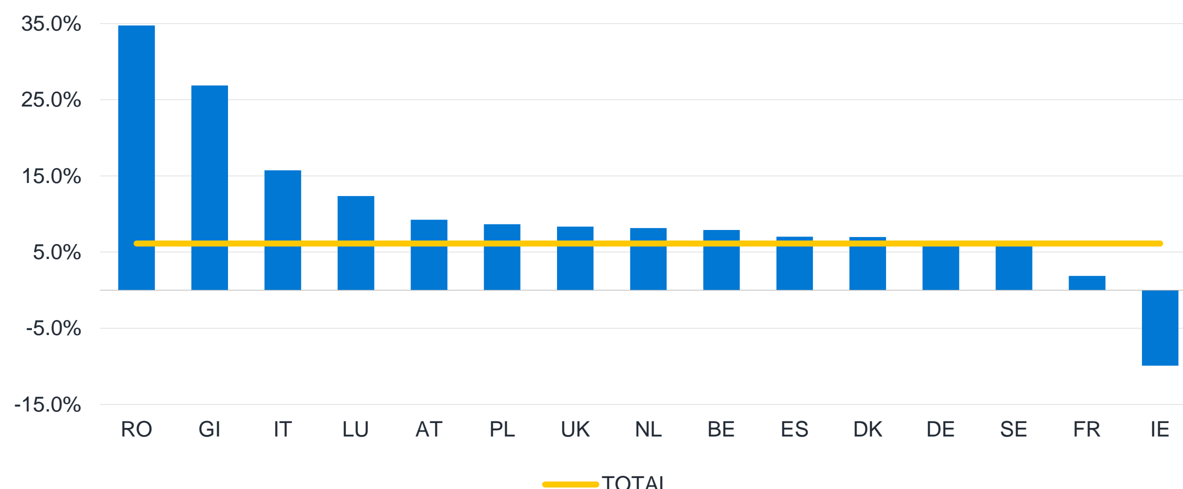


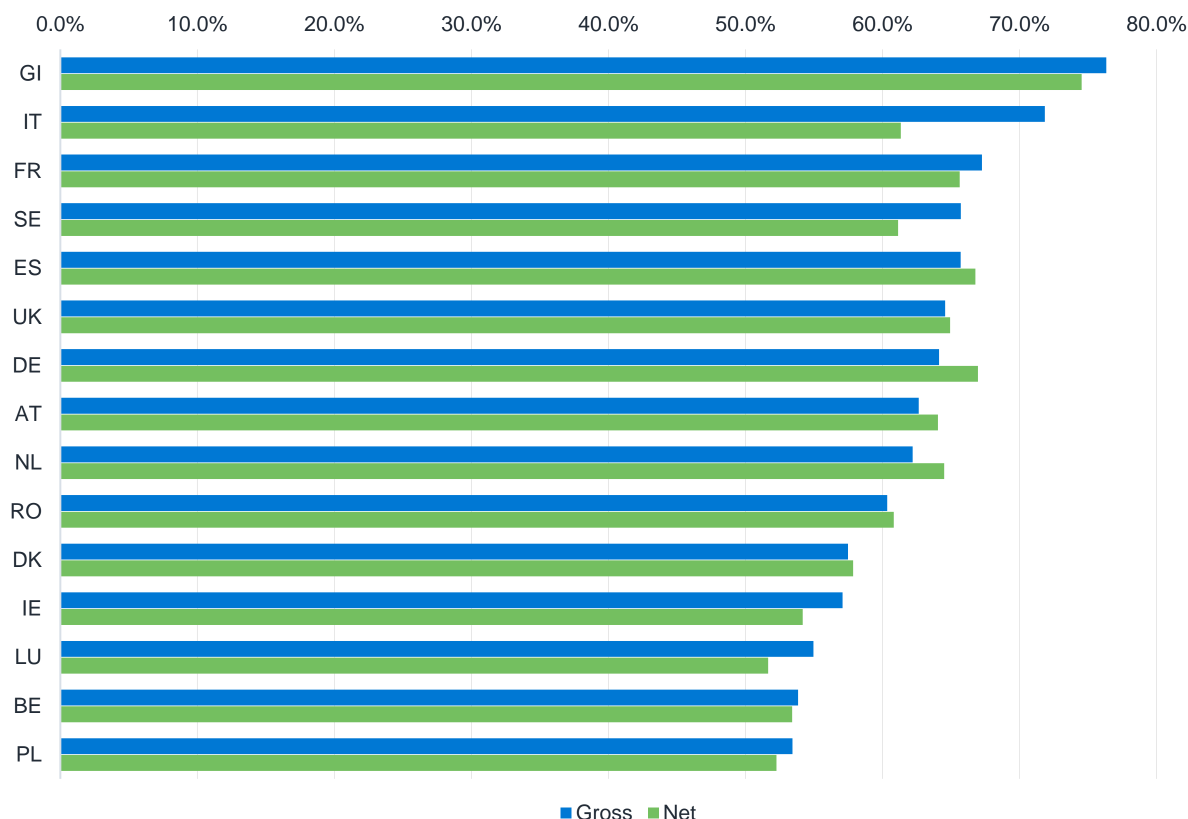
Figure 21 shows the change in non-life GWP between 2022 and 2023. We observe that 14 countries experienced an increase in GWP between 2022 and 2023, and that the average premium growth in this sample is around 6%. The data underlying Figure 21 is derived mostly from pure non-life insurers. However, it also includes data relating to composite insurers that primarily write non-life business. In such cases, the life component of the premiums, although relatively small, could distort the picture. We note that, in aggregate, companies in our sample from Ireland reduced their GWP by nearly 10%. This was primarily driven by a drop in premiums from the largest insurer based in Ireland in our sample, Zurich Insurance plc, and is due to the transfer of the business from Ireland to Germany. While this loss makes a big difference to the Irish statistics, it doesn't have a significant impact on the German statistics due to the much larger size of the German insurance market. Conversely, Romania and Gibraltar have seen premium increases of 35% and 27%, respectively. This could reflect the dominance of the motor business in those markets, business that has been struggling to achieve profitability and that has been recently subject to heightened claims inflation pressures, leading to insurers pushing up premium rates materially.

FIGURE 21: 2022-2023 GROWTH IN NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) GROSS WRITTEN PREMIUMS BY COUNTRY[17]



In Figure 22, we show the loss ratios (incurred claims/premiums earned), both gross and net of reinsurance, by country for the 2023 financial year. The loss ratios shown are on a calendar-year basis, and therefore reflect both the loss ratios for the risks exposed during the calendar year and the impact of any strengthening or weakening of the outstanding claims reserves relating to prior years' exposure. For all countries combined, the gross and net of reinsurance loss ratios were 64%.

FIGURE 22: GROSS AND NET NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) LOSS RATIOS BY COUNTRY



17. For this chart we have only included companies for which we have SFCRs in both 2022 and 2023—this is a total of 621 companies.

The ceded loss ratios are higher in Italy (119.8%), Sweden (89.2%) and Gibraltar (78.8%), implying that reinsurers in those countries did badly, with the lowest ceded loss ratio observed in the Netherlands (35.6%).

We show in Figures 23 and 24 the gross and net of reinsurance loss ratios for all countries over the last four years. The grey lines indicate the GWP and NWP for the countries as a proportion of the total GWP and total NWP.

FIGURE 23: GROSS LOSS RATIOS BY COUNTRY FOR YEAR-ENDS 2020-2023

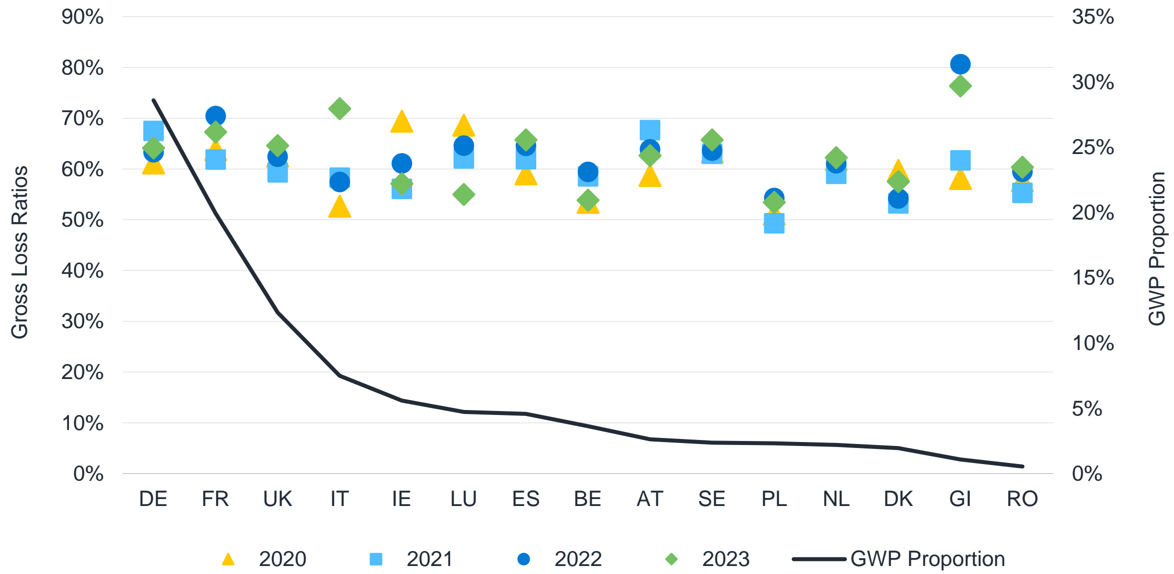
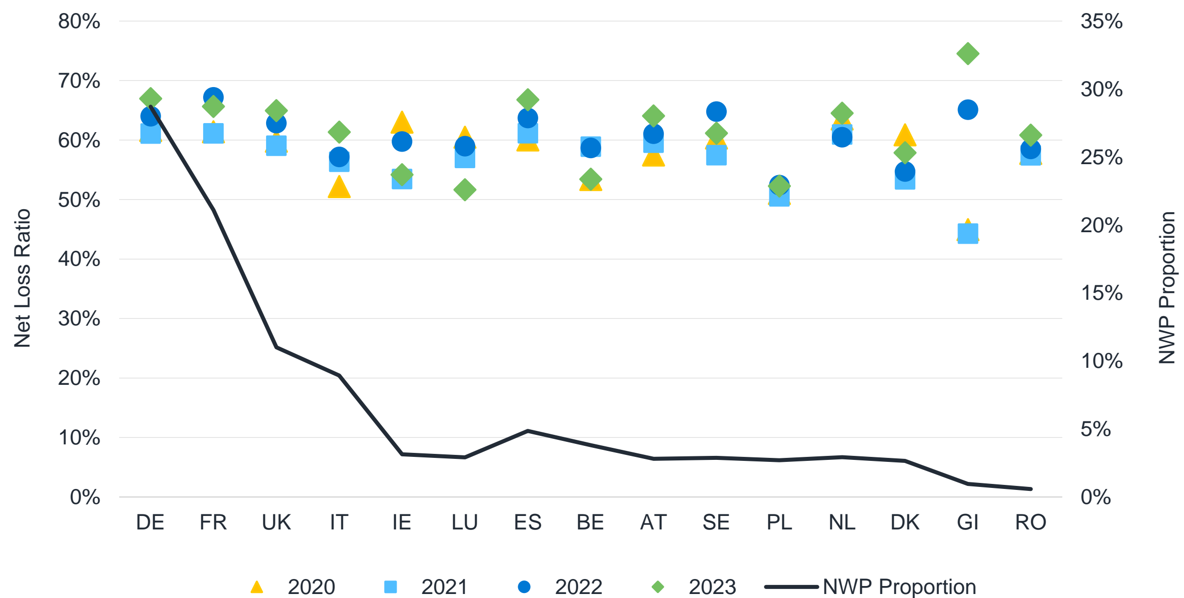


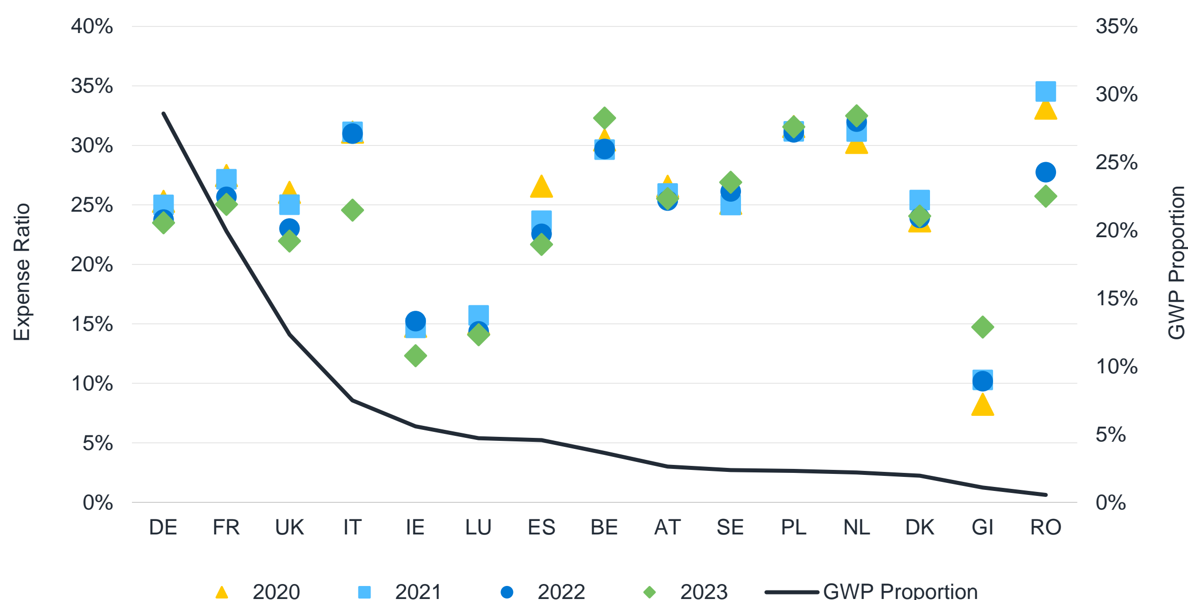
FIGURE 24: NET LOSS RATIOS BY COUNTRY FOR YEAR-ENDS 2020-2023



Figures 23 and 24 show that, in general, the loss ratios have been fairly consistent over the last four years for most countries included in our sample. As one would expect, the countries that have the larger volumes of premiums have, in general, seen less volatility in their loss ratios over the last four years than have many countries with smaller volumes of premiums. Intuitively, one would also expect volatility in loss ratios to be less net of reinsurance than gross of reinsurance; however, in some countries (most notably Denmark and Sweden), the opposite appears to be the case.

We show in Figure 25 the average expense ratios for all countries over the last four years. The grey line indicates the GWP for the countries as a proportion of the total GWP.

FIGURE 25: AVERAGE EXPENSE RATIOS BY COUNTRY FOR YEAR-ENDS 2020-2023



Similar to the loss ratios above, the expense ratios have, on the whole, been fairly consistent over the last four years for all countries included in our sample, although the experience of Gibraltar and Romania has been more volatile than that of the other countries.

The significant increase observed in 2023 for Gibraltar was driven by Admiral (Gibraltar). Their expense ratio increased from 10% to approximately 22% and expenses increased from £198 million in 2022 to £520 million in 2023 (the gross earned premium increased from £2.0 billion in 2022 to £2.3 billion in 2023). The expenses incurred in 2022 were broadly in line with the expenses incurred in 2021 (£189 million). Further information on this movement was not available in the SFCR report.

Figure 25 also shows that the expense ratios are generally between 20% and 35% for all the countries included in our sample, with the exception of Gibraltar, Ireland and Luxembourg, where the expense ratios are consistently below 20% (and for Gibraltar below 10%). We are aware that several companies in our sample outsource to third parties certain administrative and claims handling tasks and pay for these services by policy at the point of sale, their premiums then being recorded net of these charges.

Figure 26 shows the average operating margin for each country between the 2020 and 2023 year-ends. We defined the operating margin as (net earned premium – net claims incurred – expenses incurred) / (gross earned premium). We note that the operating margin as defined includes movements in prior year reserves (part of the net claims incurred) but does not include investment income.

FIGURE 26: OPERATING MARGINS BY COUNTRY FOR YEAR-ENDS 2020-2023

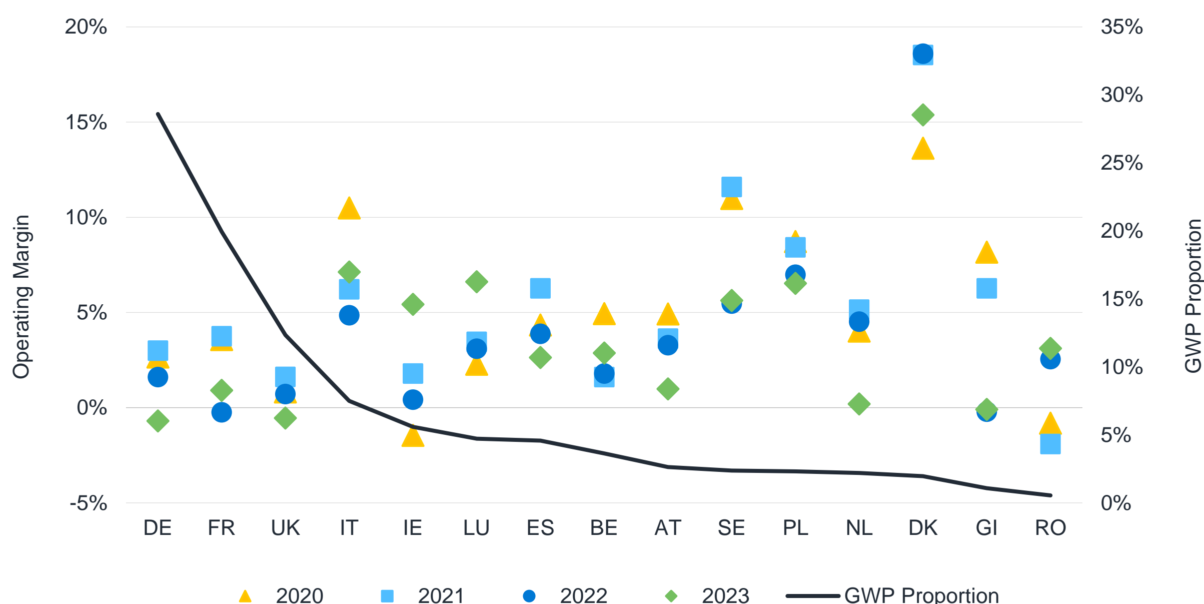


Figure 26 demonstrates that, in most years and in most of the 15 countries, the non-life business, in aggregate, has been operating profitably. We note that, in general, the profit margins in the largest markets are small, reflecting intense market competition.

The volatility shown in the operating margins is broadly a product of the volatility shown above in the loss ratios and expense ratios.

Appendix A: List of Solvency II lines of business

FULL NAME	SHORT NAME USED IN THIS REPORT
Assistance	Assistance
Credit and suretyship insurance	Credit and suretyship
Fire and other damage to property insurance	Fire
General liability insurance	General liability
Income protection insurance	Income protection
Legal expenses insurance	Legal expenses
Marine, aviation, and transport insurance	MAT
Medical expense insurance	Medical expense
Miscellaneous financial loss	Miscellaneous
Motor vehicle liability insurance	Motor vehicle liability
Non-proportional reinsurance accepted / Casualty	NP casualty
Non-proportional reinsurance accepted / Health	NP health
Non-proportional reinsurance accepted / Marine, aviation, transport	NP MAT
Non-proportional reinsurance accepted / Property	NP property
Other motor insurance	Other motor
Workers' compensation insurance	Workers' compensation

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milliman.com

CONTACT
Veekash Badal
veekash.badal@milliman.com

Ian Penfold
ian.penfold@milliman.com

Vidyut Vardhan
vidyut.vardhan@milliman.com

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