

MILLIMAN RESEARCH REPORT

Analysis of non-life insurers' Solvency and Financial Condition Reports

European non-life insurers

Year-end 2019

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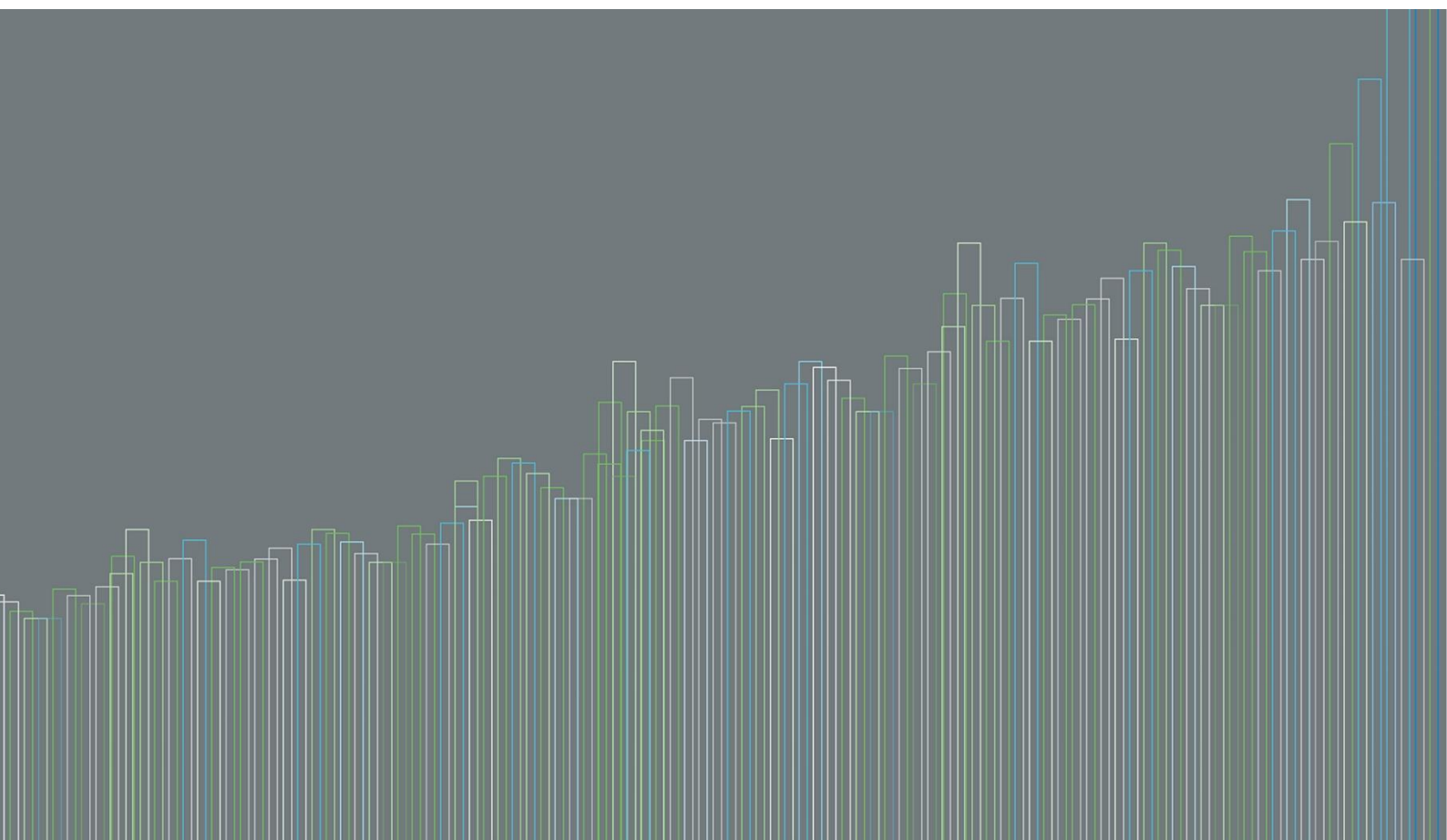


Table of Contents

INTRODUCTION.....	1
EUROPEAN MARKET COVERAGE	1
UNDERLYING DATA	2
COVID-19.....	2
ANALYSIS OF EUROPEAN NON-LIFE COMPANIES	3
SOLVENCY COVERAGE RATIOS: HOW DID THE EUROPEAN COMPANIES DO?	3
ANALYSIS OF SCR AND MCR: WHERE IS THE RISK?	6
ANALYSIS OF OWN FUNDS.....	7
ANALYSIS OF MAIN BALANCE SHEET ITEMS	8
ANALYSIS OF UNDERWRITING	11

Introduction

In 2020, (re)insurance undertakings across the EU published their fourth set of Solvency and Financial Condition Reports (SFCRs). These SFCRs were as at the 2019 year-end.

The analyses underlying this research report focus on the quantitative information contained in the Quantitative Reporting Templates (QRTs) within the SFCRs and draw conclusions from those about the balance sheets and risk exposures of European non-life insurers. Our focus is on solo entities rather than groups and we have included in this report comparisons of the data within the 2019 year-end SFCRs with that in the 2018 year-end SFCRs. This report follows our similar report from last year based on 2018 year-end SFCRs.

EUROPEAN MARKET COVERAGE

Our European analysis of the non-life market covers 884¹ companies from the 15 countries listed below, which, together, comprise almost £350 billion of gross written premium (GWP) and over £504 billion of gross non-life technical provisions. Our analysis includes some composite companies but only those writing predominantly non-life² business. In the table, below, we show the split of gross written premiums and gross technical provisions by country. For the gross technical provisions we have also included aggregated statistics, for pure non-life insurers (i.e. excluding health insurers and all composite insurers), published by the European Insurance and Occupational Pension Authority (EIOPA).³

COUNTRY	GROSS WRITTEN PREMIUM (£BN)	GROSS TECHNICAL PROVISIONS (£BN)	
	SAMPLE	SAMPLE	EIOPA (S.02.01)
AUSTRIA (AT)	8.6	6.4	6.6
BELGIUM (BE)	12.1	16.8	19.1
GERMANY (DE)	114.8	174.5	173.4
DENMARK (DK)	4.5	5.1	4.5
SPAIN (ES)	22.3	18.5	21.3
FRANCE (FT)	58.2	92.4	105.9
GIBRALTAR (GI)	4.2	4.7	
IRELAND (IE)	16.7	31.9	50.5
ITALY (IT)	25.0	38.1	40.0
LUXEMBOURG (LU)	8.9	14.2	31.3
NETHERLANDS (NL)	6.4	6.0	9.5
POLAND (PL)	8.7	8.1	7.8
ROMANIA (RO)	1.2	0.9	1.3
SWEDEN (SE)	9.6	11.1	9.6
UNITED KINGDOM (UK)	48.1	75.4	114.2



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

¹ In our review as at the 2018 year-end, we included 918 entities within our analysis, of which 757 companies remain in our sample as at the 2019 year-end. The sample as at year-ends 2018 and 2019 covered the same 15 countries.

² Undertakings identified as primarily health insurers have been removed from the analysis. For example, undertakings for which medical expenses accounted for more than 85% of their gross written premium were considered as health insurers and excluded from the European non-life analysis.

³ Annual aggregated balance sheet statistics for solo entities, as at year end 2019 https://www.eiopa.europa.eu/tools-and-data/insurance-statistics_en. The data has been converted from Euros to British pound sterling using the exchange rate 0.854752.

We note that the UK numbers quoted in the rest of this research 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 of its syndicates. We have excluded it from our study because of its size compared with the rest of the market, because much of its activities relate to insurance coverage outside of the UK, and because it contains significant reinsurance and retrocessional business. The Society of Lloyd's represents £37 billion of GWP and £58 billion of gross technical provisions (compared with a total £48 billion of GWP and £75 billion of gross technical provisions for the 104 UK solo companies that we have included within our analysis) and exhibits a solvency coverage ratio of 156% (made up of £28 billion of eligible own funds and £18 billion of SCR).

Our analysis as at the 2019 year-end covers 884 companies, of which 757 were included in our prior analysis. These companies accounted for more than 91% of the total GWP as at the 2018 year-end (and more than 91% of the total SCR). As at the 2019 year-end, they account for more than 95% of the total GWP (and more than 92% of the total SCR).

UNDERLYING DATA

In carrying out our analysis and producing this research 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/>. We have not audited or verified the data or other information within Solvency II Wire Data. 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 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 research 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 research report is not intended to guide or determine any specific individual situation, and readers should consult qualified professionals before taking specific actions.

Note that all of the figures published in this report are converted into British pound sterling (GBP), by Solvency II Wire Data, using exchange rates as at the report date of each SFCR.

COVID-19

On 20 March 2020, EIOPA published its recommendations on the implications of the COVID-19 pandemic for supervisory reporting and financial disclosure. While not requiring insurers to restate their end-2019 balance sheets, EIOPA recommended that insurers considered the pandemic as a 'major development' and that they publish appropriate information in their SFCRs on the effect of COVID-19 on their business. EIOPA did not, however, prescribe the possible format or extent of such disclosure.

As a result, different approaches have been taken by insurers to meet the disclosure requirements. These range from dedicated sections within the SFCR setting out both quantitative and qualitative assessments of the impact of COVID-19 in certain scenarios, to just a few lines giving a brief high-level description of the potential impact.

Analysis of European non-life companies

SOLVENCY COVERAGE RATIOS: HOW DID THE EUROPEAN COMPANIES DO?

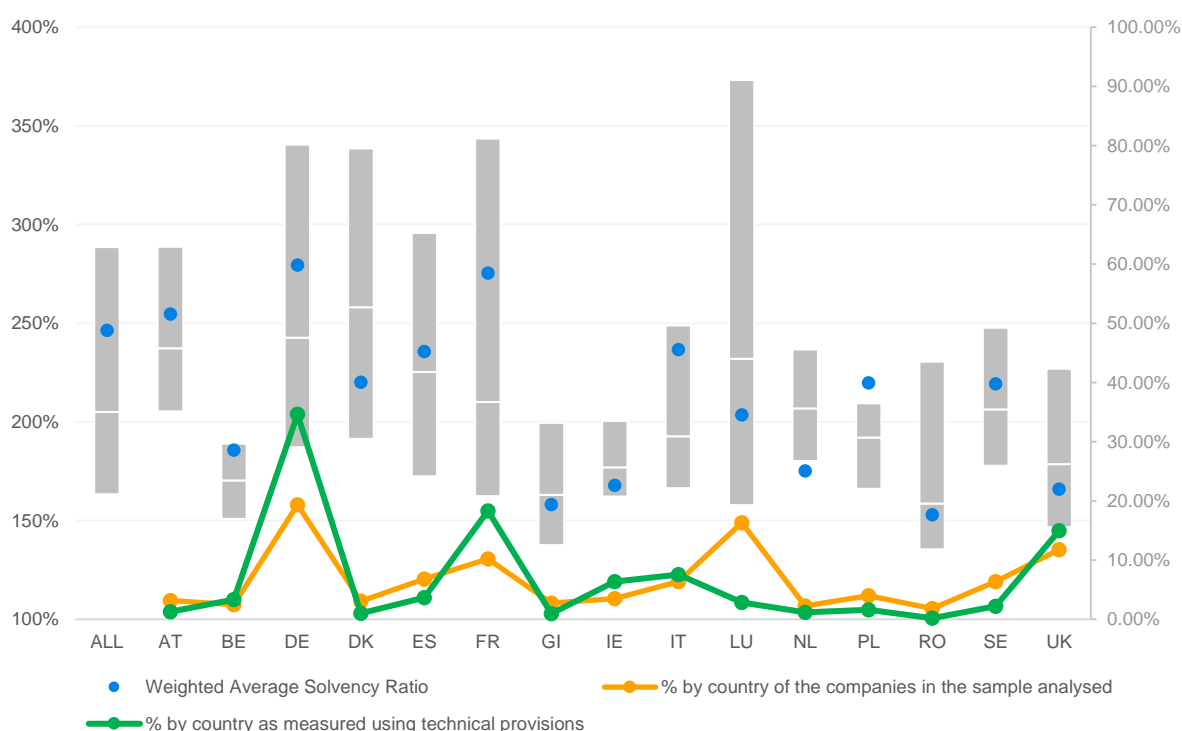
On an aggregated basis, as at the 2019 year-end, European non-life insurers that were within the sample that we analysed were sufficiently capitalised, with an average (weighted by eligible own funds) solvency coverage ratio of 246%. This is slightly lower than the equivalent figure of 256%, reported in the previous set of SFCRs as at the 2018 year-end.

Figure 1, below, shows how the average solvency coverage ratios are distributed throughout the 15 European countries included in our sample. It sets out the median, 25th and 75th percentiles and weighted average of the distribution of the solvency coverage ratios for the market as a whole and then separately for each country analysed. This shows that there is a wide range of solvency coverage ratios: on average, insurers in some countries that were included in our review, such as France and Germany, were very well capitalised, with average solvency ratios of over 275%.

We note that Luxembourg and France have a very wide distribution of solvency coverage ratios, whereas Belgium, Ireland, Netherlands, and Poland have much narrower distributions.

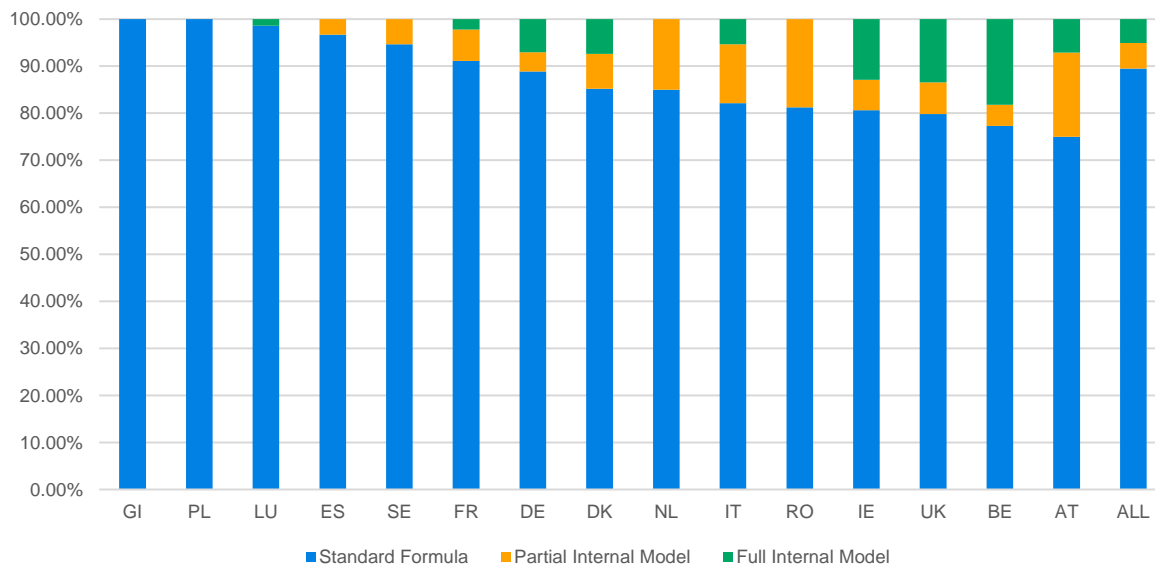
The notable variations across the European countries suggest that, in addition to the disparities among European markets (e.g., legislation, product offering, etc.), the underlying methodologies—or interpretations of the regulations—used to assess the capital requirements might differ from one country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

FIGURE 1: DISTRIBUTION OF THE SOLVENCY COVERAGE RATIOS BY COUNTRY



Not surprisingly, and as highlighted in Figure 2, below, 90% of the undertakings have used the Standard Formula (SF) to calculate their SCRs. At the two ends of the spectrum, all undertakings regulated in Poland and Gibraltar use only the Standard Formula whereas approximately 25% of undertakings regulated in Austria and Belgium, and approximately 20% of undertakings regulated in Ireland and the UK, use either a Partial Internal Model (PIM) or a Full Internal Model (FIM).

FIGURE 2: CAPITAL MODEL BY COUNTRY RANKED BY % OF COMPANIES USING SF



Our analysis has indicated that the weighted average of the solvency coverage ratios is lower for companies using a FIM (at 226%), compared to 262% for companies using SF and 241% for companies using a PIM. The weighted average solvency ratios for companies using the PIM and SF compare with the equivalent figures as at 2018 year-end (240% and 260%, respectively), whereas it is lower for companies using the FIM (263%), driven by a reduction in the solvency coverage ratios for the largest companies in Germany (in terms of eligible own funds and SCR). Using an internal model allows companies to capture their own specific risks not covered in the Standard Formula (e.g., pension risk, inflation risk, equity implied volatility, etc.) 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 3, below, shows the weighted average solvency coverage ratio for each country, split by the method used to calculate the SCR. For the countries in which at least one company used a full internal model, Germany, France, Luxembourg, and Austria are the only countries where the weighted average solvency coverage ratio for companies using the SF produced the highest percentage.

FIGURE 3: WEIGHTED AVERAGE SCR RATIOS⁴ BY SCR CALCULATION METHODS ACROSS EUROPE

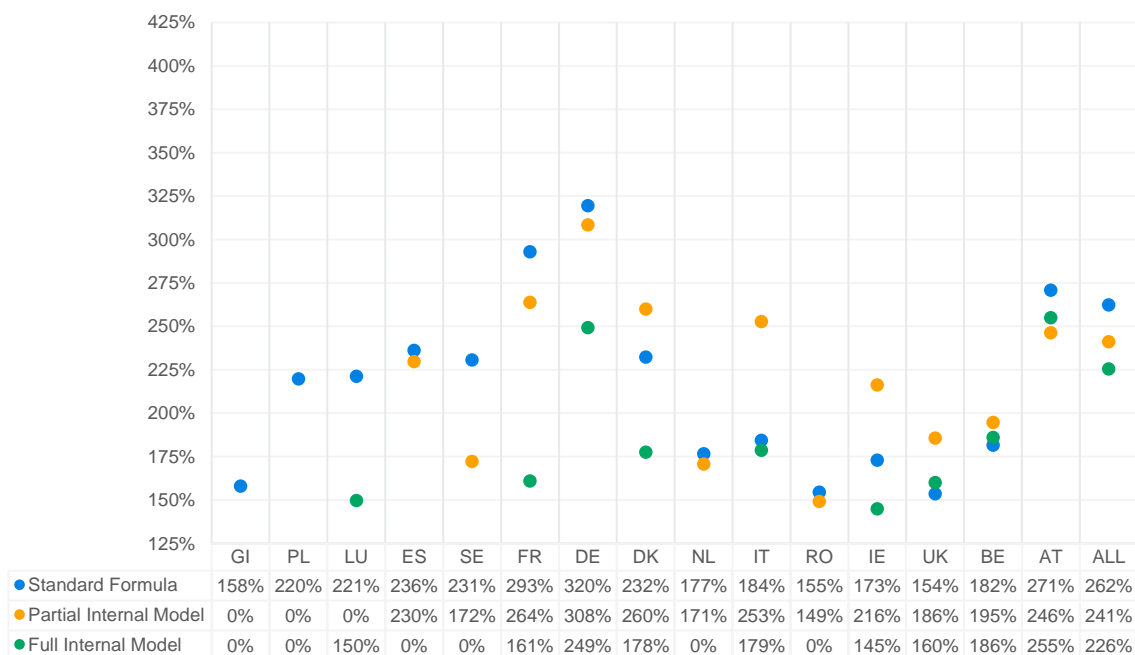
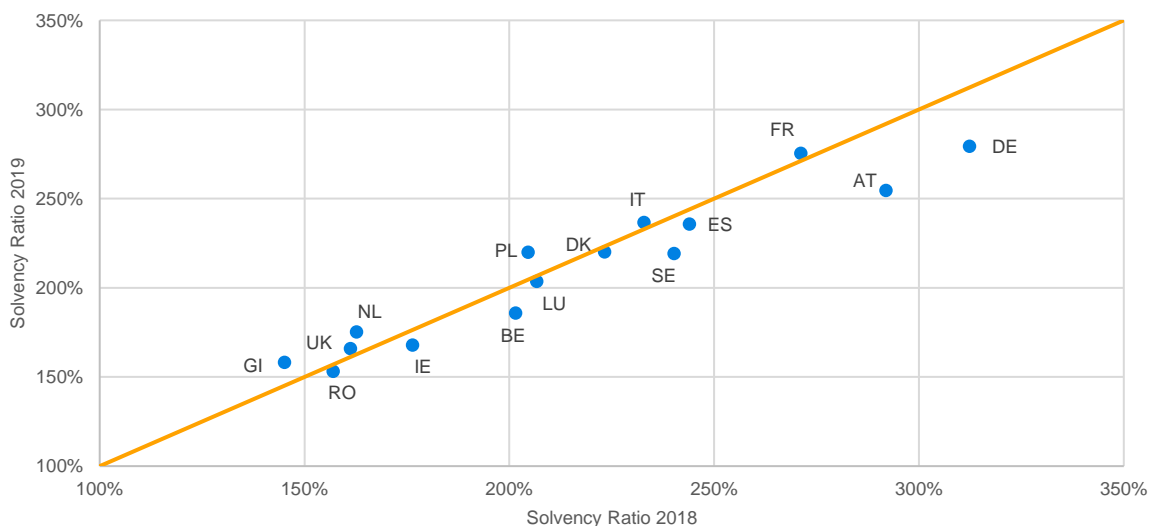


Figure 4, below, shows that, for all countries, the weighted average of the solvency coverage ratios as at the 2019 year-end remains similar to the equivalent figure as at the 2018 year-end (for those countries above the line, the weighted average of the solvency coverage ratios as at the 2019 year-end is greater than that as at the 2018 year-end, and vice versa for those below the line). The most material movements in the weighted average of the solvency coverage ratios are for Austria and Germany, reductions of 37% and 33%, respectively, driven in Germany by a reduction in the solvency coverage ratios for the largest companies.

FIGURE 4: CHANGE IN SOLVENCY COVERAGE RATIO

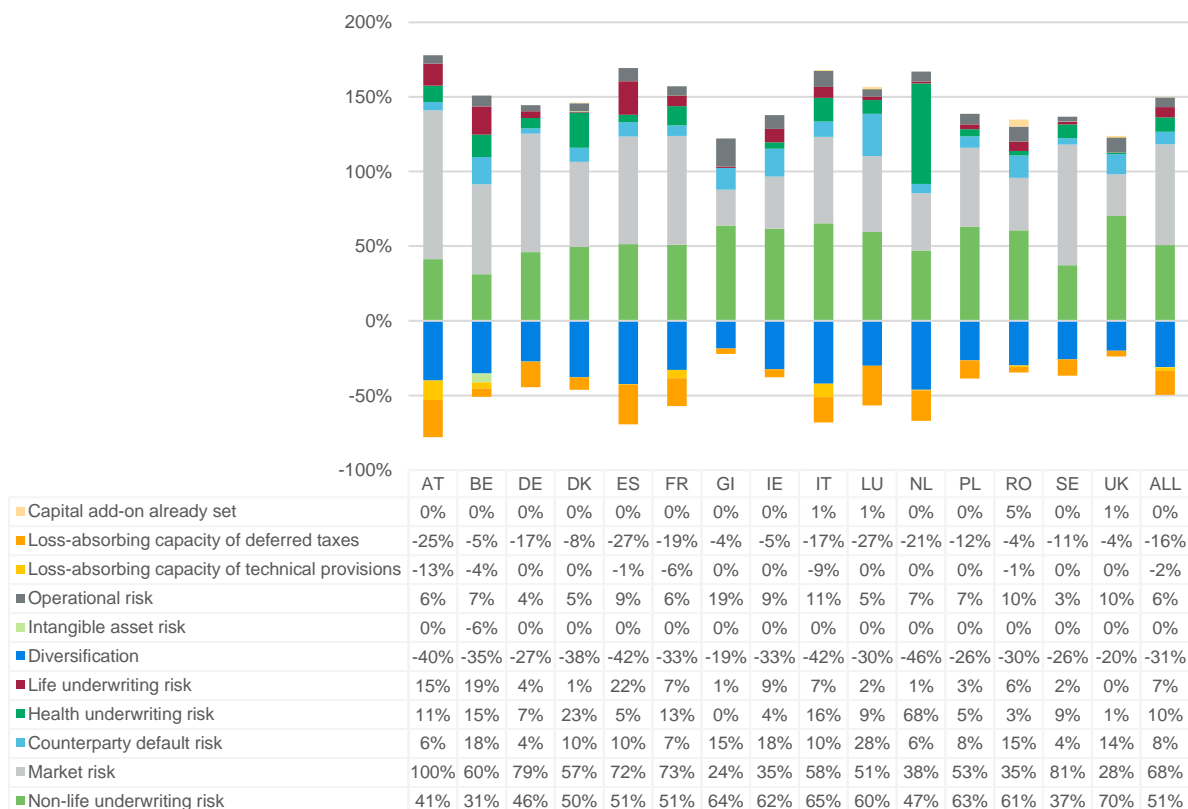


⁴ 0% means capital model not used.

ANALYSIS OF SCR AND MCR: WHERE IS THE RISK?

In Figure 5, below, we present the breakdown of the SCR, by country, for the insurers that calculated their SCRs using the SF.

FIGURE 5: SCR BREAKDOWN BY COUNTRY



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 as their predominant risk). Overall, the market risk SCR represents a substantial proportion of the SCR (68%) while the non-life underwriting risk represents 51%.

In Austria, Germany, and France, firms have a substantial portion of their investments allocated to collective investments and holdings in related undertakings including participations, which might explain the higher proportions of charge attributable to market risk in those countries.

In the Netherlands, the health underwriting risk is more important than the non-life underwriting risk, whereas in other countries, such as the UK and Gibraltar, the health risk component is almost non-existent. To some extent, this highlights differences among European countries in the types of product sold by non-life insurers, but it would also reflect the fact that, in some countries (such as the UK), there are stand-alone health insurance providers not included within our analysis of non-life insurers.

The significant contribution of life underwriting risk in Austria, Belgium, and Spain is a consequence of some of the large players in their markets being composite insurers (i.e., writing both life and non-life insurance). It possibly distorts the comparison but, because of the size of their non-life business relative to their markets, we have decided to keep these companies in our analysis.

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 6, below, insurers' own funds are considered to be of good quality, with 92% classified in Tier 1, although the proportions of Tier 1 own funds varied from country to country, from 82% to 99%.

FIGURE 6: STRUCTURE OF ELIGIBLE OWN FUNDS

	AT	BE	DE	DK	ES	FR	GI	IE	IT	LU	NL	PL	RO	SE	UK	ALL
ELIGIBLE OWN FUNDS TO MEET THE SCR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
TIER 1 - UNRESTRICTED	89%	85%	92%	95%	99%	95%	92%	95%	82%	95%	97%	91%	92%	94%	93%	92%
TIER 1 - RESTRICTED	2%	0%	1%	0%	0%	1%	1%	0%	6%	0%	0%	0%	2%	0%	0%	1%
TIER 2	9%	14%	6%	4%	1%	4%	7%	4%	11%	4%	3%	8%	3%	6%	6%	6%
TIER 3	0%	1%	1%	1%	0%	0%	0%	1%	1%	1%	0%	1%	3%	0%	1%	1%

In Figure 7, below, we look at the split of 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.

FIGURE 7: COMPONENTS OF OWN FUNDS

	AT	BE	DE	DK	ES	FR	GI	IE	IT	LU	NL	PL	RO	SE	UK	ALL
BASIC OWN FUNDS																
ORDINARY SHARE CAPITAL	3%	18%	3%	10%	14%	8%	14%	13%	11%	15%	1%	8%	60%	2%	26%	8%
SHARE PREMIUM ACCOUNT RELATED TO ORDINARY SHARE CAPITAL	9%	9%	15%	1%	8%	6%	20%	5%	16%	19%	29%	13%	27%	1%	17%	12%
SURPLUS FUNDS	2%	6%	0%	17%	1%	3%	4%	0%	0%	0%	0%	0%	0%	0%	3%	1%
RECONCILIATION RESERVE	86%	67%	82%	72%	77%	83%	62%	61%	73%	66%	70%	79%	11%	95%	53%	78%
OTHER BASIC OWN FUNDS	0%	0%	0%	0%	0%	0%	0%	21%	0%	0%	0%	0%	2%	2%	1%	1%
ANCILLARY OWN FUNDS																
LETTERS OF CREDIT AND GUARANTEES	100%	0%	0%		0%	2%	0%			73%	100%			7%	85%	27%
SUPPLEMENTARY MEMBER CALLS	0%	0%	100%		0%	98%	0%			27%	0%			38%	15%	67%
OTHER ANCILLARY OWN FUNDS	0%	100%	0%		100%	0%	100%			0%	0%			55%	0%	6%

ANALYSIS OF MAIN BALANCE SHEET ITEMS

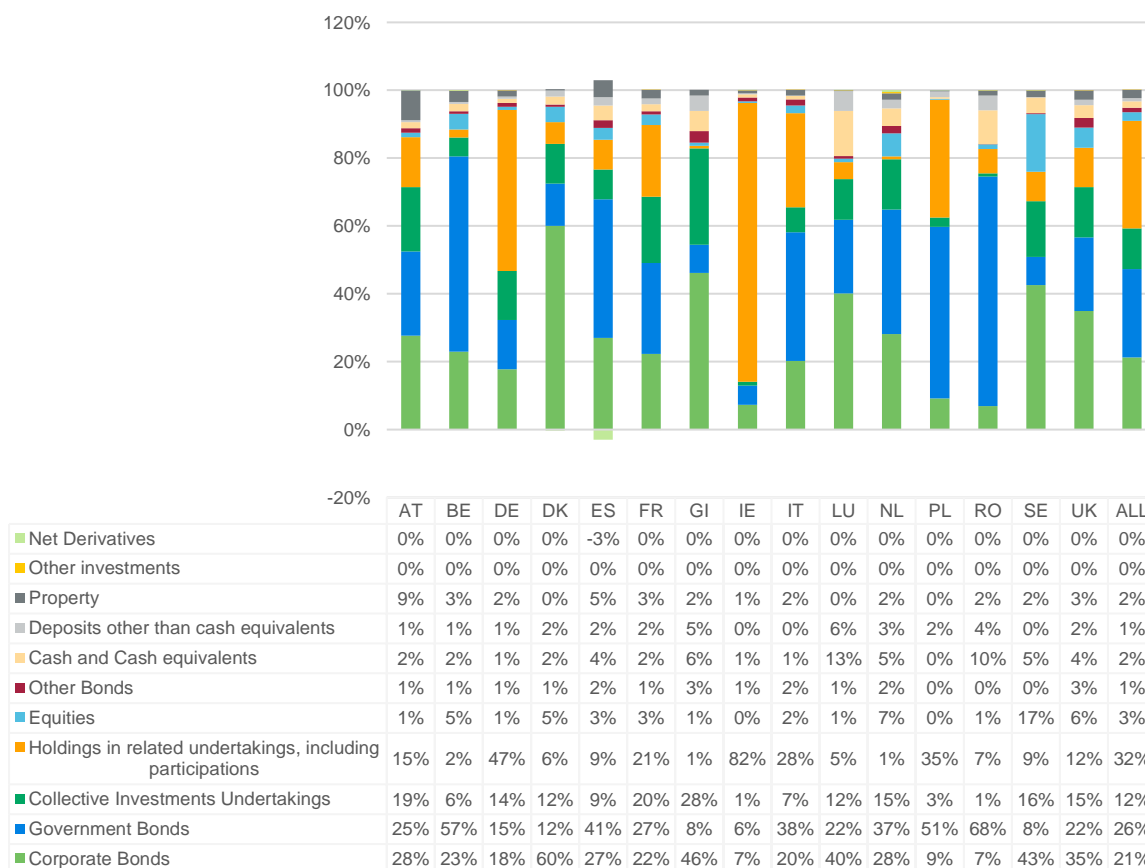
Assets

Across all countries, investments (i.e., money invested in assets, typically cash, bonds and other stock market traded instruments) form the majority of total assets in the balance sheet. Except for Gibraltar, Ireland, Luxembourg, Romania, and the UK, all countries have more than 70% of total assets in investments. These countries with lower percentages of assets in investments 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. For the UK, the deposits to cedants make a substantial proportion of the assets (30%) and relate almost exclusively to Aviva International Insurance Limited, which acts as an internal reinsurer for various companies within the Aviva Group. With Aviva International Insurance Limited omitted, the proportion reduces to a negligible figure just over 0%.

Figure 8, below, shows the breakdown of companies' investments (including cash) per country. Investments in bonds (both government and corporate) are prominent in many firms' portfolios, in most of the countries covered by the sample. Bonds are attractive to insurers due to the regular payment streams, which complement duration-matching strategies, reduced volatility, and the associated capital requirements relative to equities.

Germany and Ireland are exceptions to this in that holdings in related undertakings tend to dominate balance sheets and, in aggregate, make up 47% and 82% of the total investments. The figure for Ireland is distorted by Partner Reinsurance Europe SE, which recorded significant holdings in related undertakings, including participations, as at year-end 2019. We understand this included once-off corporate structures related to group strategy and international developments.

FIGURE 8: INVESTMENT BREAKDOWN, AGGREGATED BY COUNTRY



Technical provisions

Figure 9, below, shows that, for all countries, technical provisions constitute the largest liability in non-life insurers' balance sheets, making up approximately 78% of the total liabilities in aggregate. Of the 15 countries, Germany has the highest proportion of liabilities (37%) 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.

FIGURE 9: SPLIT OF LIABILITIES BY COUNTRY

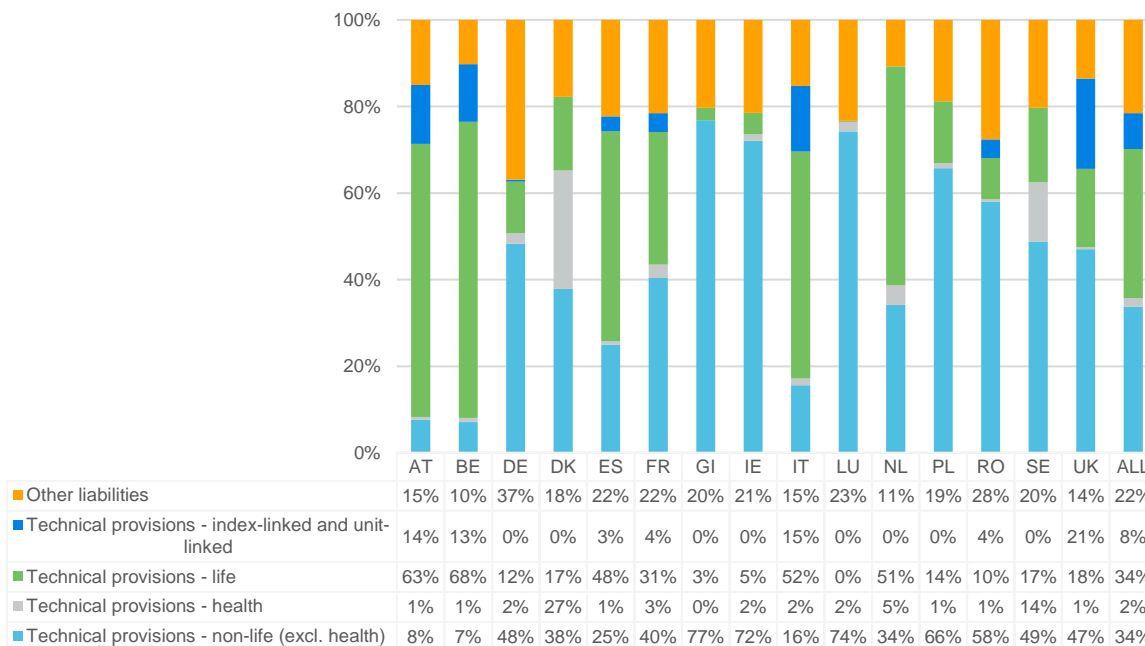


Figure 10, below, illustrates the split of gross technical provisions across the 15 European countries analysed as at the 2019 year-end. Germany, France, and the UK, on aggregate, make up 68% of the technical provisions, with the other 12 countries comprising much lower proportions of technical provisions.

FIGURE 10: SPLIT OF NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) GROSS TECHNICAL PROVISIONS BY COUNTRY

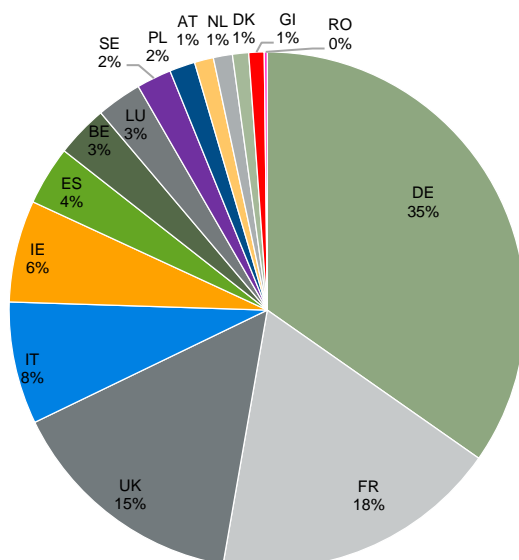
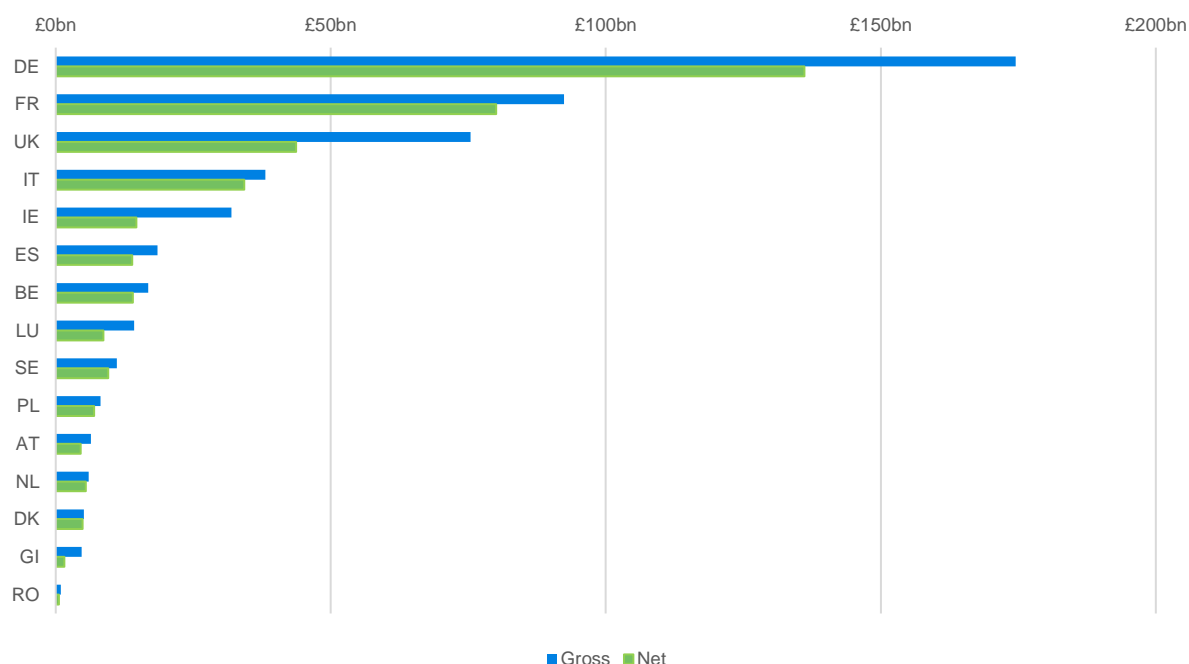


Figure 11, below, shows the non-life technical provisions, both gross and net of reinsurance, for each country as at the 2019 year-end.

FIGURE 11: GROSS AND NET NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) TECHNICAL PROVISIONS BY COUNTRY



The 884 insurers included in our sample have reserved over £504 billion of non-life technical provisions, gross of reinsurance, and almost £379 billion, net of reinsurance.

From Figure 12, below, we note that the liability lines of business account for 55% of insurers' total non-life best estimate. We also note that, across all countries, the proportion of non-life gross technical provisions for each line of business in 2019 remains almost identical to the proportion of non-life gross technical provisions during 2018.

FIGURE 12: NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) GROSS TECHNICAL PROVISIONS BY LINE OF BUSINESS

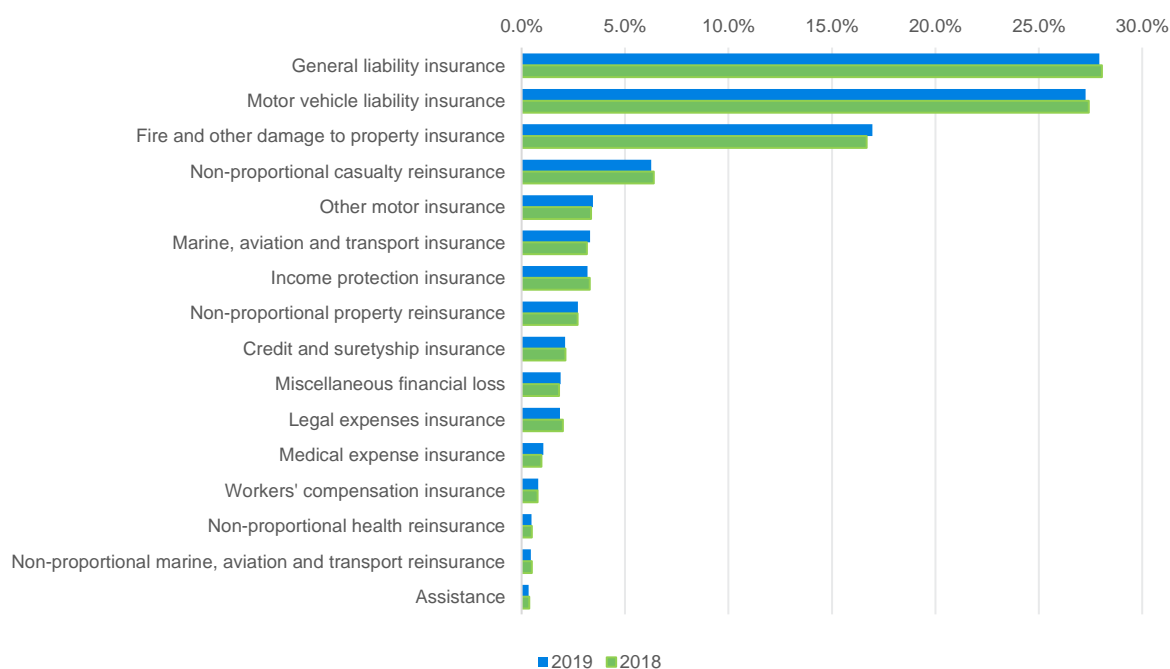
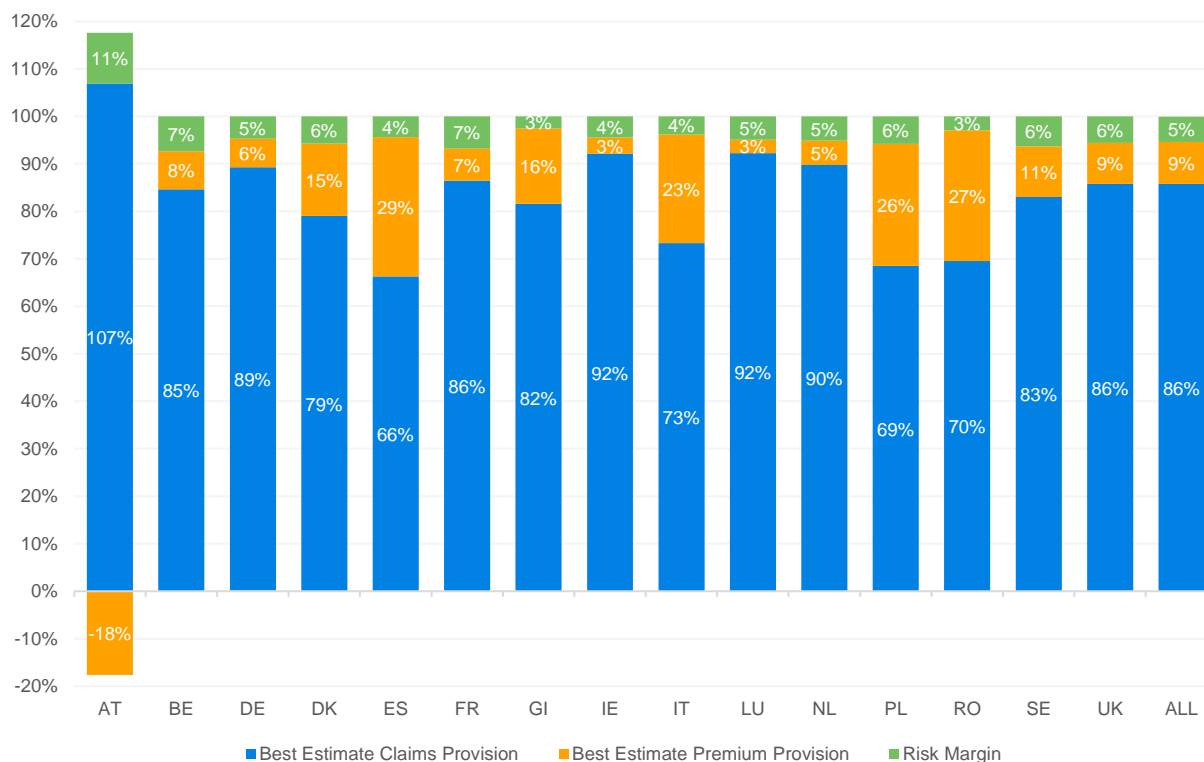


Figure 13, below, shows the composition of the non-life technical provisions across European countries as at the 2019 year-end. We observe that, in aggregate, claims provisions make up 86% of the gross technical provisions.

We observe that premium provisions are negative for Austria, implying that, in aggregate, firms regulated there expect unearned and bound but not incepted business to be profitable. Premium provisions comprise higher-than-average proportions in Spain, Romania, Poland, and Italy.

The share of the technical provisions attributable to the risk margin is broadly consistent among countries, with an average proportion of 5% of the gross technical provisions (noting a high proportion of 11% for Austria).

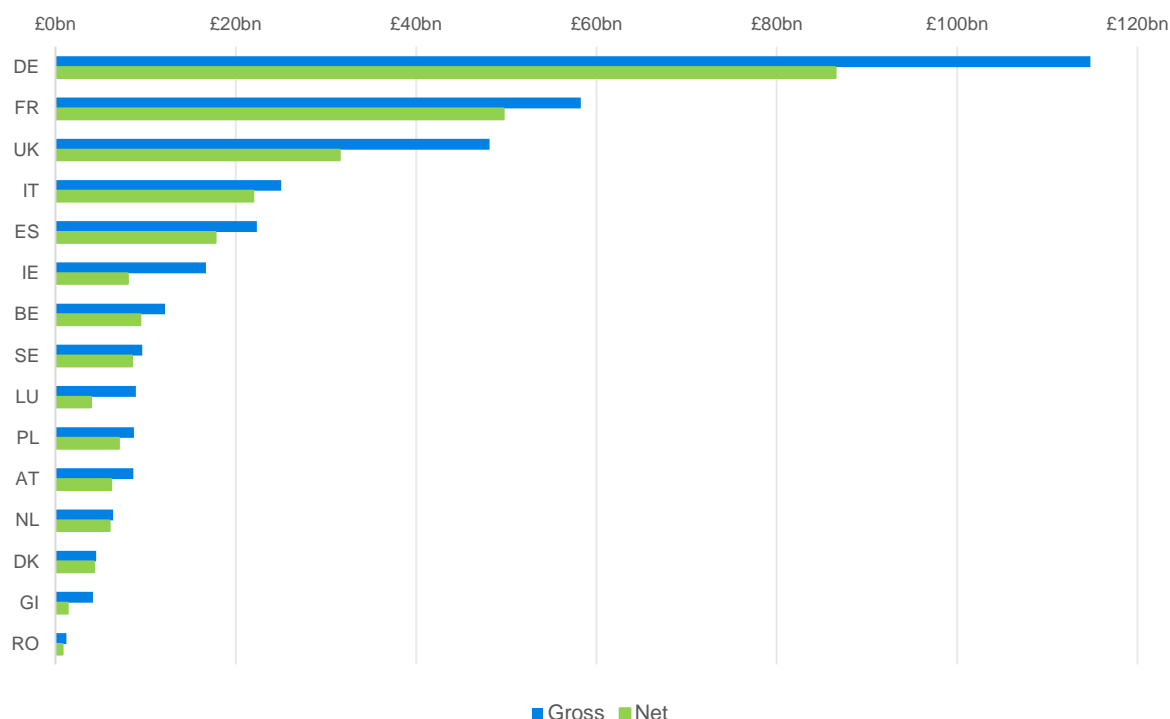
FIGURE 13: COMPONENTS OF NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) NET TECHNICAL PROVISIONS



ANALYSIS OF UNDERWRITING

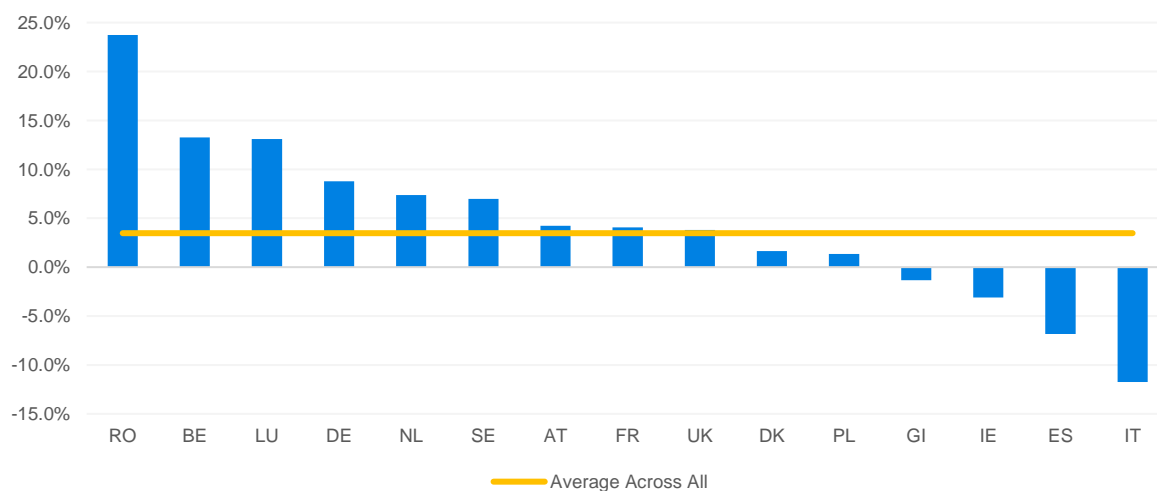
In 2019, our sample of European non-life insurers wrote almost £350 billion of non-life premiums, gross of reinsurance, with a net of reinsurance amount of more than £262 billion. Figure 14, below, shows the gross and net non-life written premiums for each country. We note that both the gross and net non-life written premiums for Luxembourg have almost doubled since the previous year due to the inclusion of companies that have been set up in Luxembourg following the Brexit vote, such as AIG Europe S.A.

FIGURE 14: GROSS AND NET NON-LIFE WRITTEN PREMIUMS BY COUNTRY



In Figure 15, below, we observe that four out of the 15 countries display a substantial decrease in their GWP between 2018 and 2019 (Spain, Italy, Ireland, and Gibraltar). The data underlying Figure 15 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. This is most noticeable for Spain (where the proportion of composite insurers is high) – Figure 15 shows a fall of 6.8% in non-life premiums in 2019 relative to 2018, whereas other indicators suggest that purely non-life premiums actually increased by over 3%, the figures underlying Figure 15 being affected by a large reduction in the savings market in Spain.

FIGURE 15: 2018-2019 GROWTH IN NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) GROSS WRITTEN PREMIUMS BY COUNTRY⁵



⁵ For this chart we have only included companies where we have SFCRs in both 2018 and 2019—this is a total of 757 companies.

In Figure 16, below, we show the gross and net of reinsurance loss ratios (incurred claims / premiums earned) by country for the 2019 financial year.

FIGURE 16: GROSS AND NET NON-LIFE (INC. HEALTH SIMILAR TO NON-LIFE) LOSS RATIOS BY COUNTRY

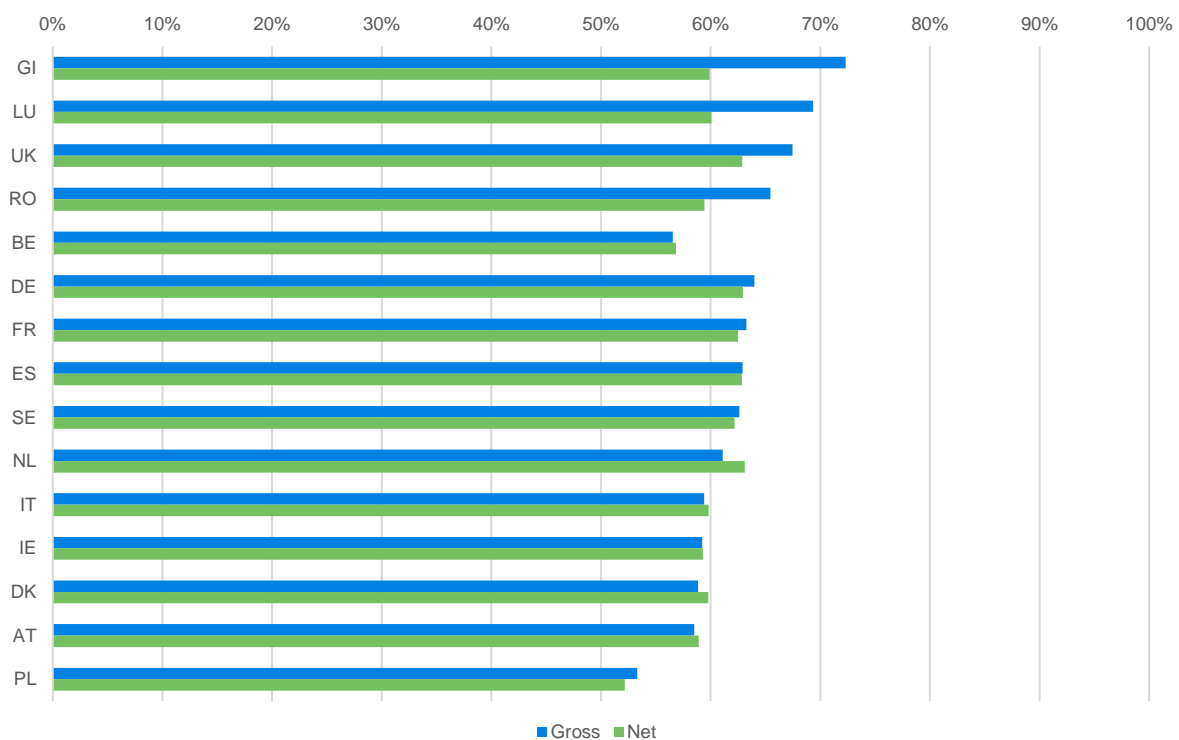


Figure 16 also indicates that, in most cases, the purchase of reinsurance covering the 2019 year made economic sense (in addition to protecting against extreme events), with the net of reinsurance loss ratios being lower than the gross loss ratios for nine out of the 15 countries analysed.



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