

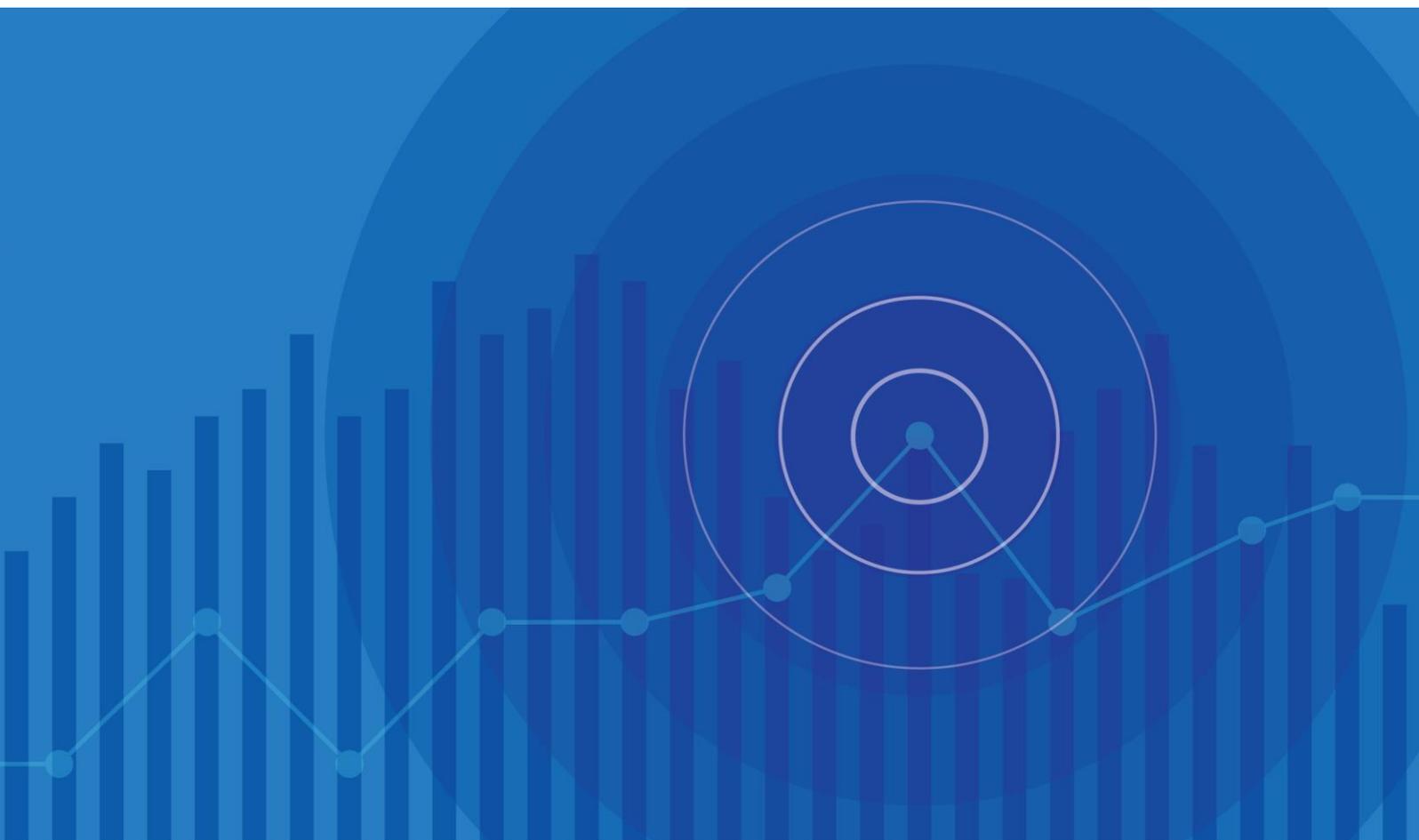
MILLIMAN RESEARCH REPORT

# Analysis of life insurers' Solvency and Financial Condition Reports Year-end 2018

European and UK life insurers

December 2019

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## Introduction

This report focusses on the Solvency and Financial Condition Reports (SFCRs) published in 2019 which refer to year-end 2018.<sup>1</sup> The SFCRs contain a significant amount of information on the insurance companies, including details on business performance, risk profile, balance sheet and capital position, amongst other things. Insurers are also required to publish a great deal of quantitative information in the public Quantitative Reporting Templates (QRTs) included within the SFCRs.

### EUROPEAN MARKET COVERAGE

Our analysis of the European life insurance market covers over 650 companies from 31 countries and one territory, representing approximately £736 billion (€824 billion<sup>2</sup>) of Gross Written Premium (GWP) and approximately £6,802 billion (€7,619 billion) of gross Technical Provisions (TPs). The countries and territories included in the analysis are:

- Austria (AT)<sup>ROE</sup>
- Belgium (BE)
- Bulgaria (BG)<sup>CEE</sup>
- Croatia (HR)<sup>CEE</sup>
- Cyprus (CY)<sup>ROE</sup>
- Czech Republic (CZ)<sup>CEE</sup>
- Denmark (DK)<sup>NOR</sup>
- Estonia (EE)<sup>CEE</sup>
- Finland (FI)<sup>NOR</sup>
- France (FR)
- Germany (DE)
- Gibraltar (GI)<sup>ROE</sup>
- Greece (GR)<sup>ROE</sup>
- Hungary (HU)<sup>CEE</sup>
- Iceland (IS)<sup>NOR</sup>
- Ireland (IE)
- Italy (IT)
- Latvia (LV)<sup>CEE</sup>
- Liechtenstein (LI)<sup>ROE</sup>
- Lithuania (LT)<sup>CEE</sup>
- Luxembourg (LU)
- Malta (MT)<sup>ROE</sup>
- Netherlands (NL)
- Norway (NO)<sup>NOR</sup>
- Poland (PL)<sup>CEE</sup>
- Portugal (PT)<sup>ROE</sup>
- Romania (RO)<sup>CEE</sup>
- Slovakia (SK)<sup>CEE</sup>
- Slovenia (SV)<sup>CEE</sup>
- Spain (ES)
- Sweden (SE)<sup>NOR</sup>
- United Kingdom (UK)

NOR – countries included in the Nordics category

CEE – countries included in the Central and Eastern Europe category

ROE – countries included in the Rest of Europe category

Our analysis is based on a sample of insurers that are primarily focused on selling life insurance business and, as a result, some composite companies have been excluded from the analysis. Reinsurers have been included in the analysis where their business has been deemed to be predominantly life reinsurance.

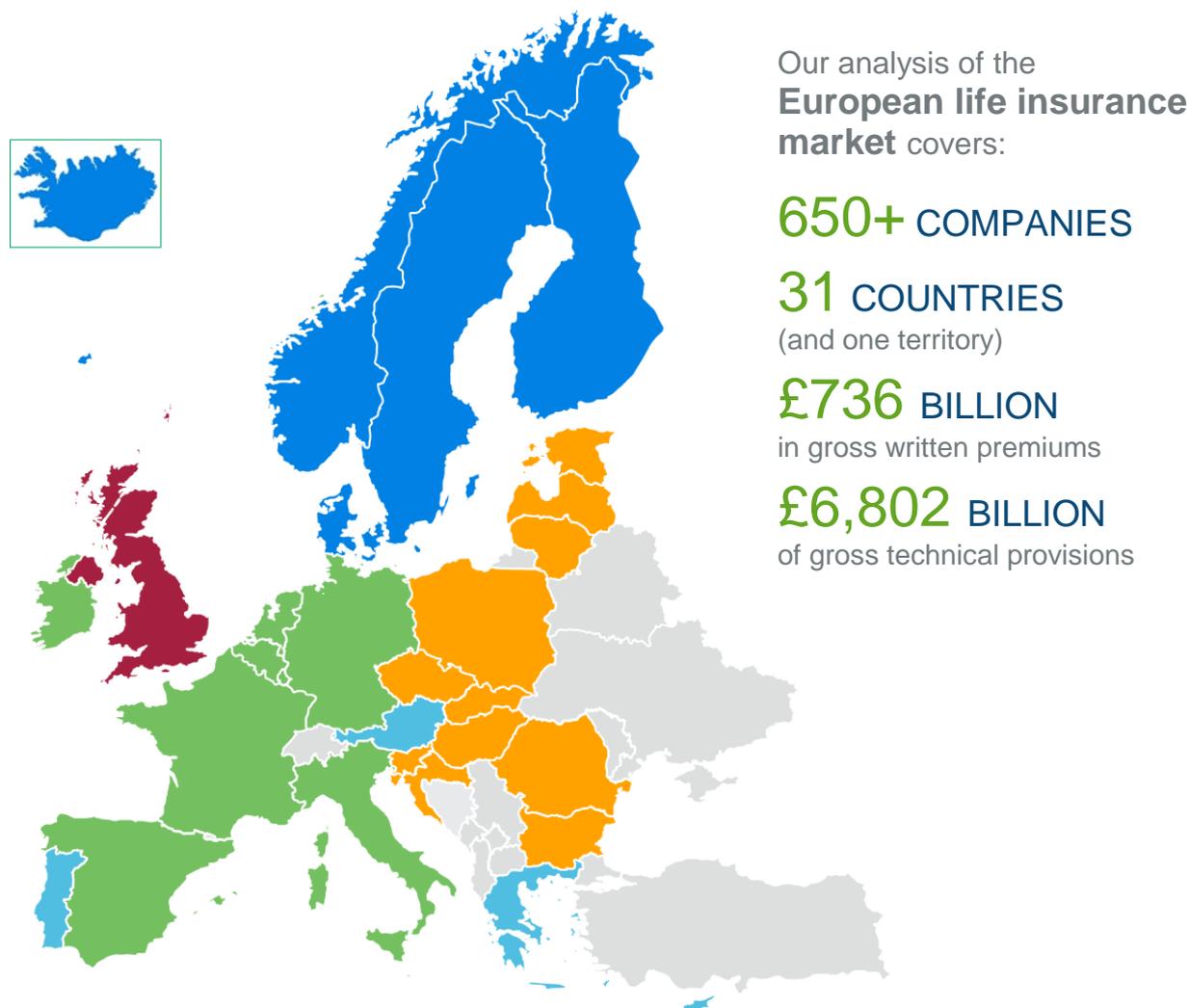
The charts and results in this report focus on nine of the largest European life insurance markets by the total volume of TPs. The top nine markets selected cover 88% of the total European life insurance market. The remainder of the nations are split into three categories: the Nordics (NOR), Central and Eastern Europe (CEE) and the Rest of Europe (ROE), which captures the remaining nations.

Figure 1 shows the geographical coverage of this report. The UK is highlighted in red and the remaining eight large European markets are shown in green. The remaining categories are shown as: dark blue for the NOR, orange for CEE and light blue for the ROE.

<sup>1</sup> These SFCRs are referred to as the year-end 2018 SFCRs throughout this report though the reporting date for some companies was not 31 December 2018.

<sup>2</sup> GBP: EUR exchange rate of 1:1.12.

FIGURE 1: EUROPEAN COUNTRIES INCLUDED IN THE ANALYSIS



#### UNDERLYING DATA

The analysis underlying this report focusses on the quantitative information contained in the public QRTs. Where relevant we have also studied the SFCRs to gain additional insights into some companies, in particular if they displayed characteristics that differed from market norms. Our focus is on solo entities rather than groups.

In carrying out our analysis and producing this research report, we relied on the data provided in the SFCRs and QRTs of our sample companies. We have not audited or verified this data or other information. 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. It should be noted that in some cases errors were spotted in the underlying data. We have made minor adjustments to the data to correct known errors such as inconsistencies between QRTs in order to better inform our analysis; however, we have not made any material changes to the underlying 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 informational 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 persons should consult qualified professionals before taking specific actions.

The data analysed in this report has been sourced from Solvency II Wire Data and companies' disclosed SCFRs. The data is available via subscription from: <https://solvencyiiwiredata.com/about>.

## FUTURE CHANGES

The Solvency II Directive requires a full review of the Solvency II rules by the end of 2020 (the 2020 review). As part of its Solvency II 2020 Review, the European Commission (EC) has issued a Call for Advice to the European Insurance and Occupational Pensions Authority (EIOPA) on the review of the Solvency II Directive.

One of the areas EIOPA has been asked to assess is the current supervisory reporting and public disclosure requirements, including the QRTs and the SFCR. At the time of publication EIOPA has an ongoing consultation with regards to proposed changes to the QRTs and SFCRs. These changes, if implemented, will have an impact on future SFCRs published and on the data contained within them.

The recommendations proposed by EIOPA are intended to ensure the SFCR remains fit-for-purpose by all stakeholders that use the document. Some of the highlights from the consultation in relation to the SFCR are:

- To take into account the needs of different stakeholders, and the different levels of expertise of professional and non-professional readers, EIOPA proposes to split the SFCR into two sections, that are addressed to:
  - **Policyholders** – This section must be short, limited in scope and easy to read, focusing on areas of Solvency II that are relevant to policyholders.
  - **Non-policyholders** – This section should broadly follow the current form of the SFCR and should target professional readers only. It should contain less information than currently provided in some areas, and more detailed, structured, harmonised information in others.
- In the section addressed to professionals, EIOPA proposes changes to require more complete quantitative information in the SFCR, potentially resulting in additional QRTs and/or narrative information on sensitivities and Own Funds variations over the year.
- EIOPA proposes changes to the external audit requirements of the SFCR, such that as a minimum the Solvency II balance sheet is subject to external auditing by a qualified auditor.
- EIOPA proposes that the SFCR is to be presented in a machine-readable format, and is considering options that would allow easy public access to all published SFCRs (e.g., creating a centralised repository).

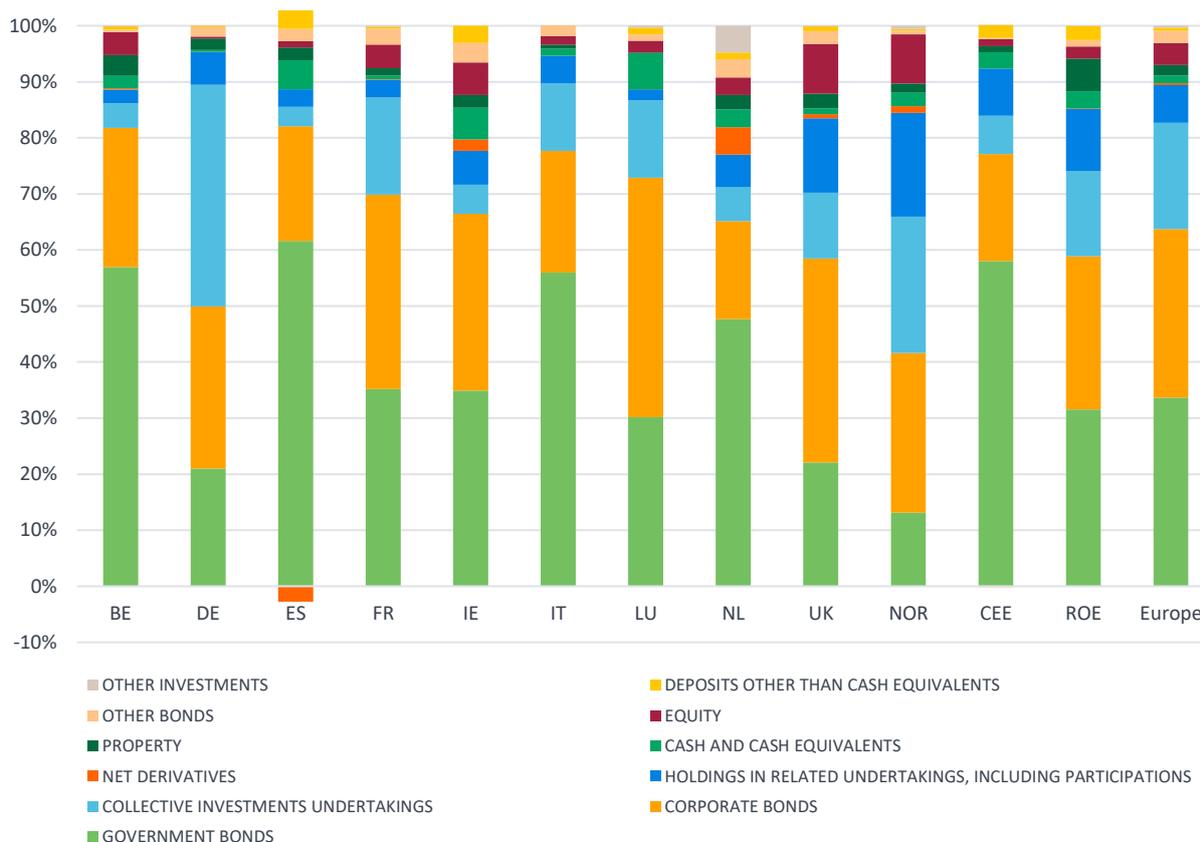
# Analysis of European life insurers

## Analysis of balance sheet

### ASSETS

The chart in Figure 2 shows the split of financial investments held by life insurers across European countries as at year-end 2018, with the total EU figures represented in the last bar on the chart, labelled as 'Europe.' This chart comprises financial investments classified as 'Investments (other than assets held for index-linked and unit-linked contracts)' and 'Cash and cash equivalents' on the Solvency II balance sheet.<sup>3</sup>

FIGURE 2: SPLIT OF NON-LINKED ASSETS ACROSS EUROPE



In general, investments in government bonds and corporate bonds make up the majority of financial investments on European life insurers' balance sheets. In aggregate, across our sample of European insurers, government bonds and corporate bonds make up 33% and 30% of total financial investments, respectively. Government bonds make up a significant proportion of investments in most of the countries, including over 70% of total investments in Spain as well as some countries in CEE (Hungary, Croatia and Romania).

GOVERNMENT AND CORPORATE BONDS  
account for **33% AND 30%**  
of **all financial investments**, respectively

<sup>3</sup> The liability side of derivatives is also included to give the net derivative position.

Investments in collective investment schemes is the next largest category accounting for a further 19% of total financial investments. In particular, the level of holdings is due to large volumes in Germany (39%) and to a lesser extent in the NOR (24%).

Holdings in related undertakings, including participations, make up only 7% of total financial investments, but make up a much higher percentage within the NOR (19%). This is driven by large holdings in related undertakings in the Danish market, accounting for 31% of all assets in Denmark.

The derivatives shown in Figure 2 represent the net derivative position. Based on the companies in our sample a few have net negative positions, meaning that on average the value of derivative liabilities is greater than the value of derivative assets on the Solvency II balance sheet. This is particularly prevalent in Spain.

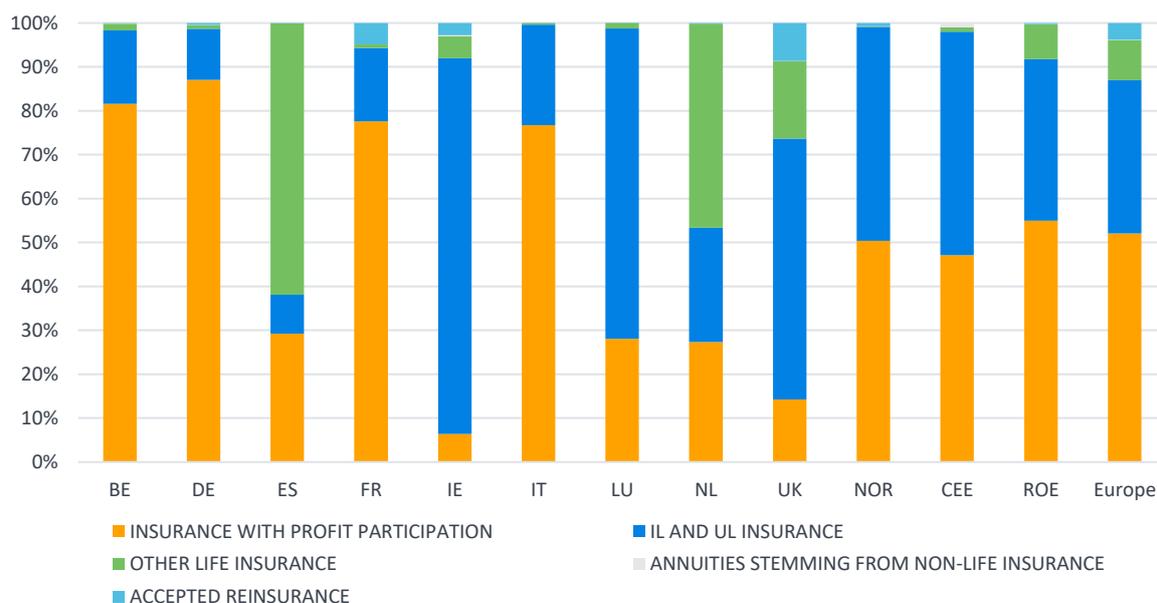
Cash and cash equivalents on average account for only 1% of the investments across European life insurers, however it is notable that this percentage is as high as 76% of total financial investments for the life insurers in Gibraltar.

The remaining asset classes, such as equity, property and other bonds, only total around 9% of all assets held by European life insurers.

## LIABILITIES

The chart in Figure 3 shows the split of TPs by line of business held by life insurers across European countries as at year-end 2018.

FIGURE 3: SPLIT OF TECHNICAL PROVISIONS BY LINE OF BUSINESS ACROSS EUROPE



**52%** OF TOTAL TPs for life insurers are  
**‘Insurance with Profit Participation’**

The TPs for many large European insurance markets including the Belgian, French, German and Italian markets, are dominated by 'Insurance With Profit Participation', whereas in the markets of Ireland, Luxembourg and the UK the TPs are predominantly in respect of 'Index-Linked (IL) and Unit-Linked (UL) Insurance' business. The markets in the NOR, CEE and ROE also show similar dominance by these two lines of business. As a result, these two lines of business represent the largest portion of TPs across Europe on average. In aggregate, across our sample of European countries, 'Insurance With Profit Participation' makes up over half of the total TPs for life insurers (52%). 'IL and UL Insurance' makes up the second-largest portion of TPs (35%).

'Other Life Insurance' (9%), which includes products such as non-profit annuities and traditional protection business, has the largest share of the market in only two of the individual countries considered in our analysis: the Netherlands and Spain.

'Accepted Reinsurance' (4%) makes up the bulk of the remaining TPs, while 'Annuities Stemming from Non-Life Insurance Contracts' accounts for less than 0.5% of total TPs.

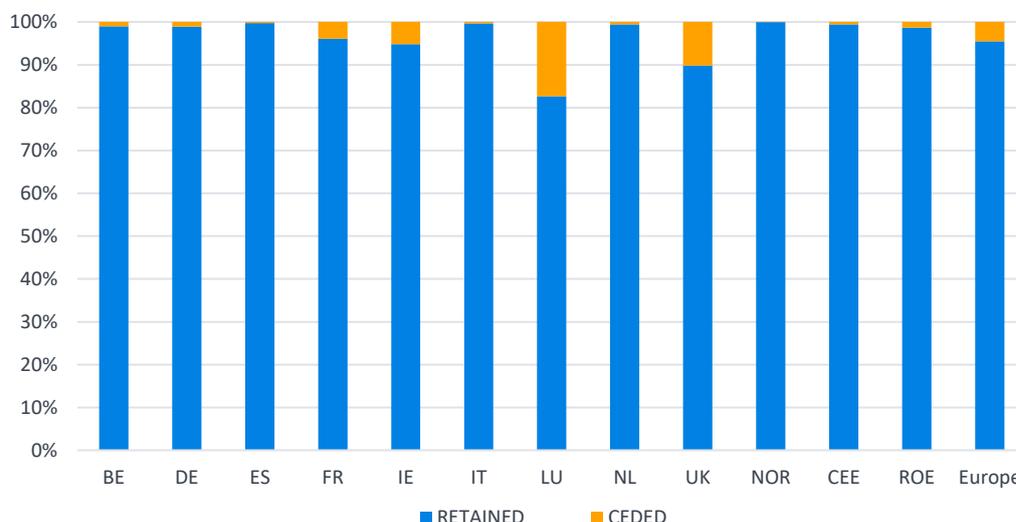
TPs in respect of 'Health Similar to Life Techniques' (HSLT) business have been excluded from Figure 3 as these lines of business are very small on average across the sample of companies considered in the analysis.

Since the previous set of SFCRs was published, the market shares of the five lines of businesses outlined above has remained relatively unchanged.

**REINSURANCE**

The chart in Figure 4 shows how the use of reinsurance varies across European countries as at year-end 2018. The ceded rates represent the difference in the Best Estimate Liability (BEL) gross and net of reinsurance recoverables.

**FIGURE 4: ANALYSIS OF USE OF REINSURANCE ACROSS EUROPE**



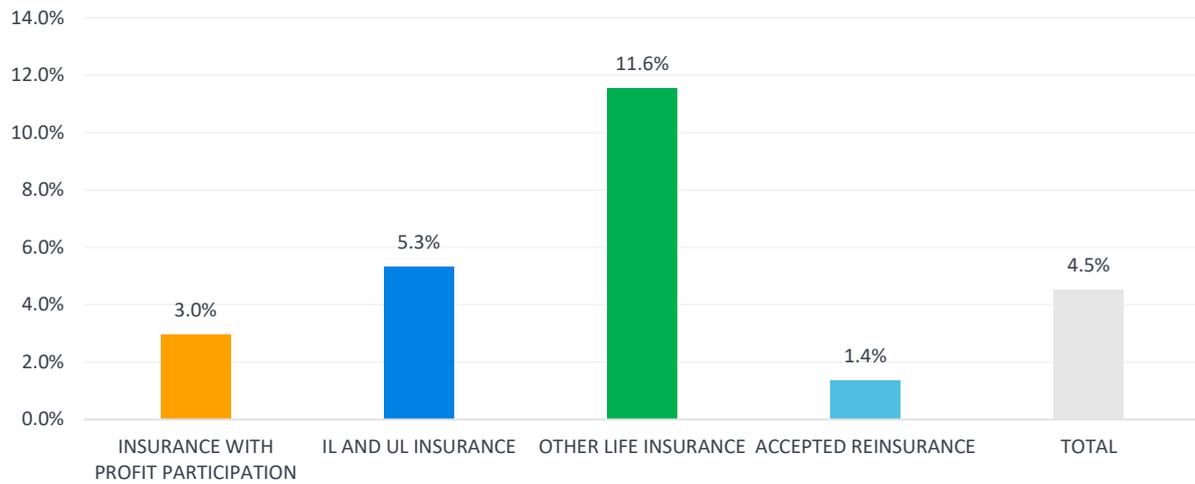
On average  
**4.5%** of the BEL of life insurers  
 is REINSURED ACROSS EUROPE

On average about 4.5% of the BEL is reinsured across Europe. This varies by country, with Luxembourg, the UK, France and Ireland being the more reliant on reinsurance than other markets. Overall, the percentage of the BEL that is reinsured has decreased since the last set of SFCRs were published (previously 6.1%).

It is important to note that the impact of reinsurance on the BEL may not always provide insight on the full impact of reinsurance on the Solvency II Balance Sheet. For example, a longevity swap could potentially lead to a slight increase in the BEL, but will be offset by a larger impact on the Solvency Capital Requirement (SCR) and RM.

The next figure shows the proportion of each line of business which is reinsured by European life insurers.

FIGURE 5: PERCENTAGE OF TECHNICAL PROVISIONS WITH REINSURANCE



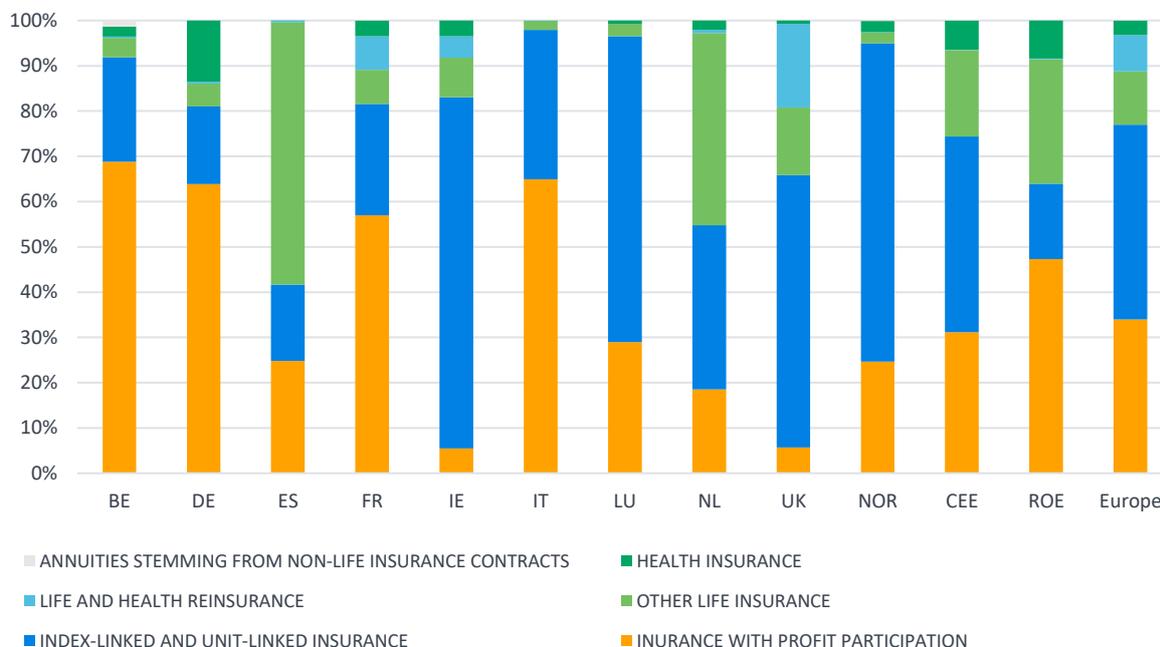
The line of business with the highest ceded level of reinsurance is 'Other Life Insurance' at 11.6%. This is more than double the second-largest ceded percentage, which is 'IL and UL Insurance' at 5.3%. 'Insurance With Profit Participation' and 'Accepted Reinsurance' reinsure 3.0% and 1.4%, respectively.

Overall, the European life insurance industry has reinsurance recoverables of 4.5% across all life TPs in our sample, falling from 6.1% in the previous set of SFCRs.

## Analysis of premiums

The chart in Figure 6 shows the split of GWP by line of business held by life insurers across European countries as at year-end 2018. GWP includes premiums payable on in-force business and on any new sales over the reporting period.

FIGURE 6: SPLIT OF GROSS WRITTEN PREMIUMS BY LINE OF BUSINESS ACROSS EUROPE



The split of premium volumes by line of business is broadly consistent with the split of TPs by line of business shown in Figure 3 above. On average across our entire sample, 'Insurance With Profit Participation' (34%) and 'IL and UL Insurance' (43%) make up the largest portions of premium volumes. There are notable differences in the Spanish and Dutch markets with 'Other Life Insurance' making up the majority of sales in these countries.

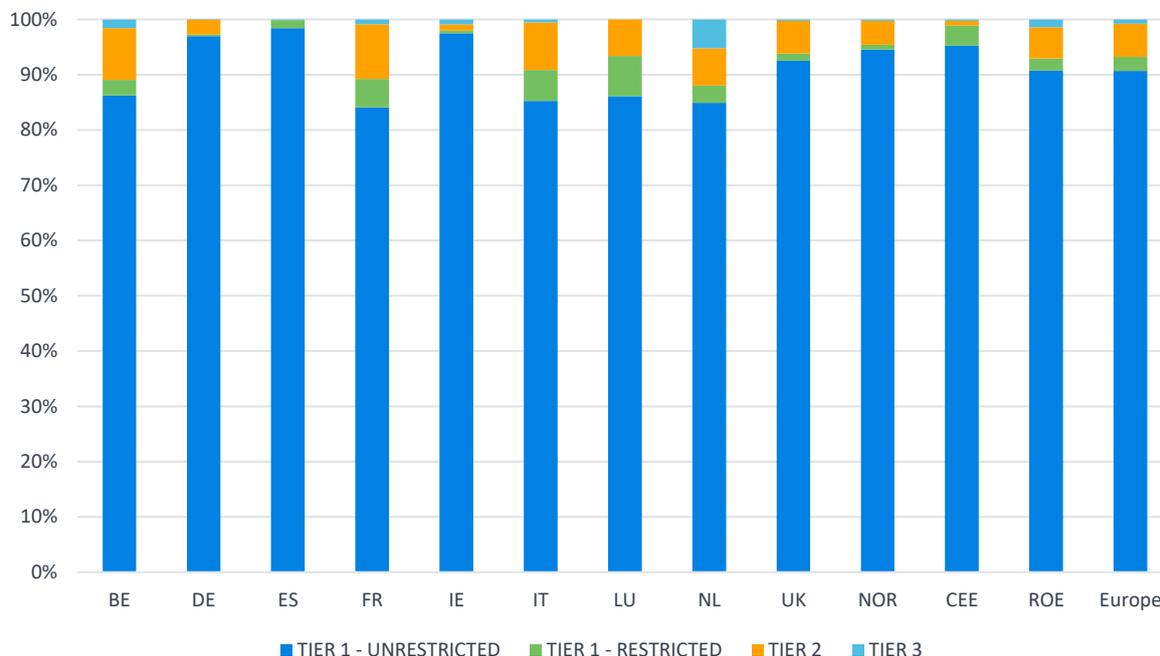
**'INDEX-LINKED & UNIT-LINKED INSURANCE'** **43%**  
accounts for the largest volume of gross written premiums

In the year-end 2017 SFCRs, 33% of GWP was attributable to 'Insurance With Profit Participation', while 47% was for 'IL and UL Insurance' showing that there has been little change in the proportion of these business types sold over the year.

## Analysis of own funds

The chart in Figure 7 shows the split of Own Funds across European countries as at year-end 2018.

FIGURE 7: SPLIT OF OWN FUNDS ACROSS EUROPE



The majority of Own Funds (91%) held by EU insurers in our sample are classified as Tier 1 unrestricted Own Funds. This is the highest form of capital in terms of quality and loss absorbency as defined under Solvency II. Whilst the split of Own Funds varies by country, in general the majority of European insurers have a very high portion of Tier 1 unrestricted Own Funds.

**91% OF OWN FUNDS** held by European life insurers are **UNRESTRICTED TIER 1**

Tier 1 restricted Own Funds make up 3% of Own Funds on average across Europe. Tier 2 Own Funds make up 6% of total Own Funds and Tier 3 Own Funds make up just 1% of total Own Funds on average.

There has been little to no change in the breakdown of the Own Funds by tier when compared to the previous set of SFCRs.

## Analysis of solvency coverage

The table in Figure 8 shows the weighted average solvency coverage ratios<sup>4</sup> for the Solvency Capital Requirement (SCR) and the Minimum Capital Requirement (MCR) across European countries.

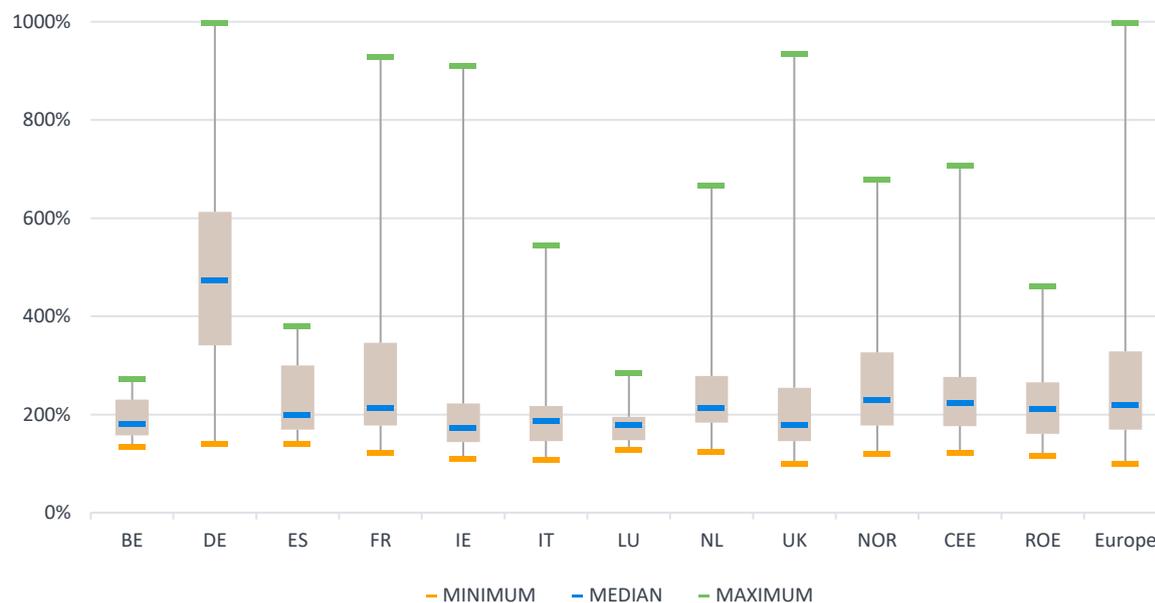
FIGURE 8: SOLVENCY COVERAGE RATIOS BY COUNTRY

	BE	DE	ES	FR	IE	IT	LU	NL	UK	NOR	CEE	ROE	EUROPE
RATIO OF ELIGIBLE OWN FUNDS TO SCR	206%	450%	215%	207%	179%	204%	170%	214%	154%	279%	234%	250%	226%
RATIO OF ELIGIBLE OWN FUNDS TO MCR	436%	1042%	505%	434%	482%	448%	466%	467%	532%	832%	686%	725%	577%

Overall, the average solvency coverage ratios for European life insurers is more than double the SCR requirement, with the weighted averages significantly in excess of the required solvency coverage ratio of 100% in all of the regions considered. The European average SCR coverage ratio is 226% (an increase on the previous year’s 218%), based on the companies included in our sample, and the average MCR coverage ratio is 577%.

The chart in Figure 9 shows the distribution of the SCR coverage ratio by country as at year-end 2018. The chart shows the maximum coverage ratio in green, the minimum in orange and the median in blue.

FIGURE 9: DISTRIBUTION OF SCR COVERAGE RATIO BY COUNTRY<sup>5</sup>



The average European SCR Coverage ratio for year-end 2018 is **226%**

<sup>4</sup> The weighted average solvency coverage ratios are calculated as the sum of all eligible Own Funds for all companies within our sample in a given region divided by the sum of all the SCR's.

<sup>5</sup> Note that we have excluded companies where the SCR coverage ratio exceeded 1,000% to allow the chart to be more readable. This excluded four companies in the UK, two in Germany and one in France.

Figure 9 shows that, for most countries, the distribution of SCR coverage ratios has a wide range, although this does depend on the number of life insurers included in the analysis for each country. The largest ranges are seen in the UK, Germany, France and Ireland, where the number of companies included in our analysis is high.

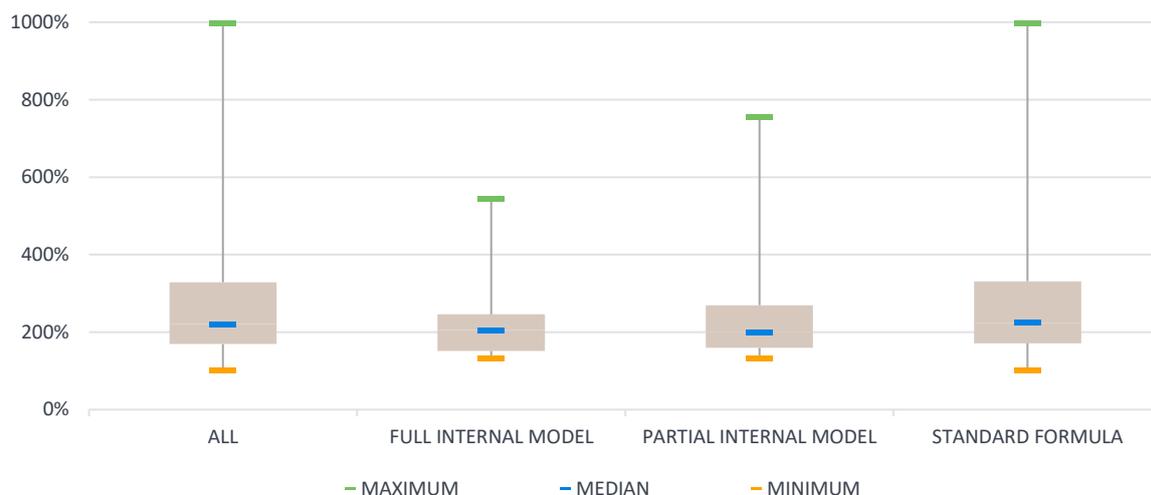
Germany has the highest median solvency coverage ratios in Europe at 474%. The second highest is Denmark at 326%, which is included as part of the NOR.

Based on the life companies included in our analysis, there were no insurers with an SCR coverage ratio below 100% as at year-end 2018. The average distribution at a European level shows a minimum SCR coverage ratio of life insurers of 100% for one company in the UK<sup>6</sup>. Figure 9 shows a maximum SCR coverage ratio of 997% (Germany), but this excludes seven companies that reported SCR coverage ratios in excess of 1,000% (four in the UK, two in Germany and one in France). The highest of these companies was from the UK and reported an SCR coverage ratio of 3,933%. The range of the SCR coverage ratios is comparable to that seen in the 2017 year-end SFCRs.

Out of the 659 companies included in our analysis 580 are companies that report under the Solvency II Standard Formula (88%). Of the remaining 79 companies (12%), 56 companies (9%) were using a Partial Internal Model (PIM) and 23 companies (3%) were using Full Internal Models (FIMs).

The chart in Figure 10 shows a split of the SCR coverage ratio distribution by SCR calculation type as at year-end 2018, with any undertaking-specific parameters (USP) companies included with the Standard Formula companies. The chart shows the maximum coverage ratio in green, the minimum in orange and the median in blue.

FIGURE 10: DISTRIBUTION OF SCR COVERAGE RATIOS BY SCR CALCULATION METHOD



In general, the distributions are broadly similar, with the PIM and FIM companies having slightly tighter distributions and slightly lower median SCR coverage ratios than the Standard Formula companies. It is difficult to draw any inferences from this but Figure 10 suggests that capital is more closely managed in companies with a PIM or a FIM than in those using the Standard Formula. This may be because internal model companies are more likely to be part of large insurance groups and therefore may more actively manage their capital. This is consistent with what was seen with the previous SFCR results.

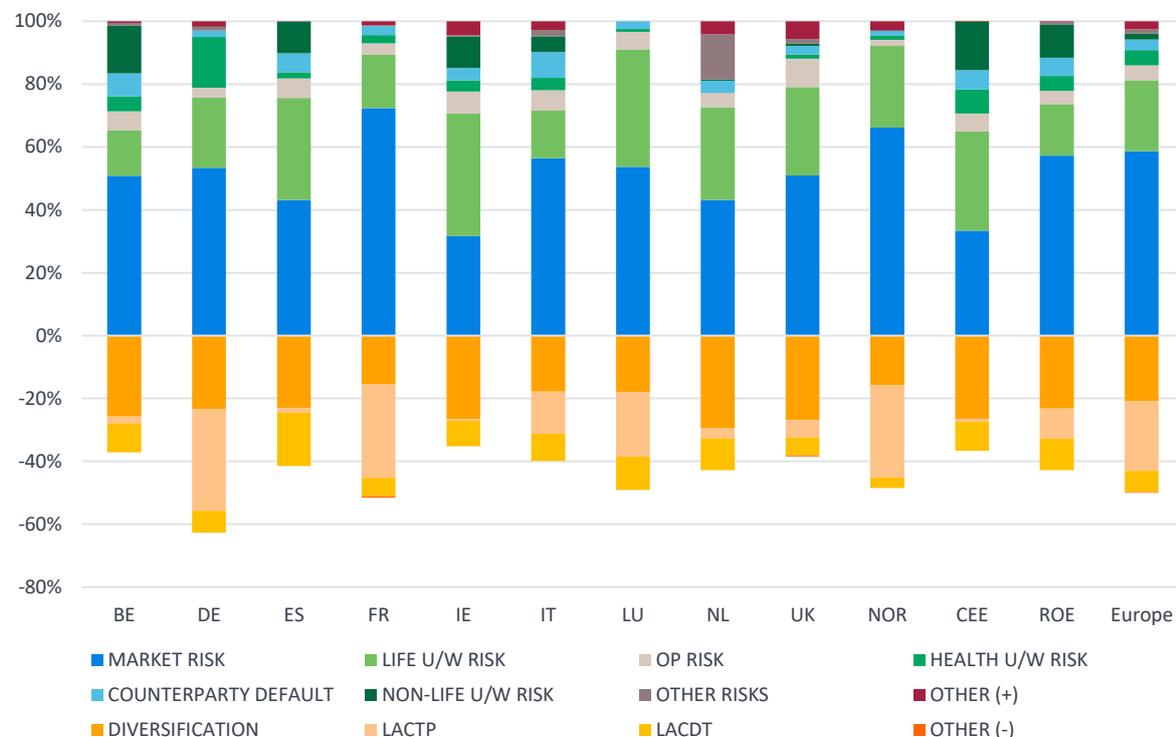
As in Figure 9, solvency coverage ratios in excess of 1,000% have been excluded from the chart. All seven companies in the sample with solvency coverage ratios in excess of 1,000% are classified as Standard Formula firms.

<sup>6</sup> This is due to the company restricting Own Funds such that the company's Own Funds equals its SCR.

## Analysis of SCR

The chart in Figure 11 shows the breakdown of the SCR by risk module for companies across Europe as at year-end 2018, with the European average represented in the last bar on the chart, labelled as 'Europe'.

FIGURE 11: BREAKDOWN OF SCR BY COUNTRY<sup>7</sup>



**21%** The **LEVEL OF DIVERSIFICATION** between risk modules of the SCR across Europe (on average)

On average across the EU, market risk makes up the highest proportion of the undiversified SCR (59%) for life insurers. Life underwriting risk makes up the second-largest portion (22%). For Spain and Ireland the highest proportion of the undiversified SCR is life underwriting risk, for all other regions shown it is market risk. This is similar to what was observed based on the year-end 2017 results.

The remainder of the undiversified SCR is mostly made up of operational risk (5%), health underwriting risk (5%) and counterparty default risk (3%). Non-life underwriting risk, other risks (including intangible asset risk and underwriting risk which has not been specified as life, non-life or health) and other positive adjustments account for around 2%, 1% and 3%, respectively.

In other countries such as Ireland, Belgium and countries in the CEE category,<sup>8</sup> some of the companies are reinsurers or composites and as such it was difficult to define the distinction between life and non-life companies. These regions display a greater proportion of their SCR held for non-life underwriting risk as a result.

<sup>7</sup> The amounts within this figure 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.

<sup>8</sup> In particular there is a high proportion of non-life underwriting risk in our sample in the Czech Republic, Croatia, Hungary, Slovenia and Slovakia.

The diversification of risk results in a reduction of 21% of the undiversified SCR on average across Europe. This is diversification between the risk modules and not within the risk modules (which is not disclosed in the SFCRs for many companies). The amount of benefit varies widely by country, with diversification benefit highest where there is a wider spread of risk exposure. For example, the Netherlands has the highest diversification benefit, reflecting the fact that Dutch insurers have a wide range of risk exposures across market risk, life underwriting risk, health underwriting risk and non-life underwriting risk, resulting in a reduction of 29%. This is closely followed by Ireland (27%), the UK (27%), Belgium (26%) and CEE (26%).

In addition to diversification benefits, there are two additional adjustments available to companies post-diversification:

1. Loss Absorbing Capacity of Technical Provisions (LACTP), which reflects the ability to reduce future discretionary benefits under stress scenarios.
2. Loss Absorbing Capacity of Deferred Tax (LACDT), which reflects the reduction in the future corporation tax payable under stress scenarios.

The LACTP<sup>9</sup> and the LACDT result in further reductions of 23% and 7%, respectively. LACTP is largest in Denmark<sup>10</sup> at 61% reduction, while LACDT is largest in Spain at 20%.

It's not surprising that many of the countries with high exposure to market risk are some of the countries with the largest portions of TPs in respect of 'Insurance With Profit Participation' (Belgium, Germany, France and Italy). The investment guarantees associated with these contracts result in a high exposure to market risk. Some of these countries also benefit from significant reductions as a proportion of the undiversified SCR reflecting the LACTP associated with 'Insurance With Profit Participation' business.

Unfortunately, due to the nature of the public disclosure requirements for PIMs and FIMs, it is not straightforward to make a direct comparison with Standard Formula firms to analyse the SCR breakdown by risk type, as the risk exposures captured in the internal models vary by company. Where reasonable we have mapped the risks resulting from the PIMs and FIMs into the Standard Formula structure for comparison in Figure 11.

The breakdown of the SCR has not changed significantly since the previous set of SFCRs were published.

<sup>9</sup> Some companies reported their other risk modules after the risk-mitigation generated by their LACTP. Where this has happened we have made an assumption that the LACTP is offsetting the market risk module and adjusted it to be pre-LACTP.

<sup>10</sup> Included within the NOR. The second highest LACDT is found in Norway which is also included in the NOR.

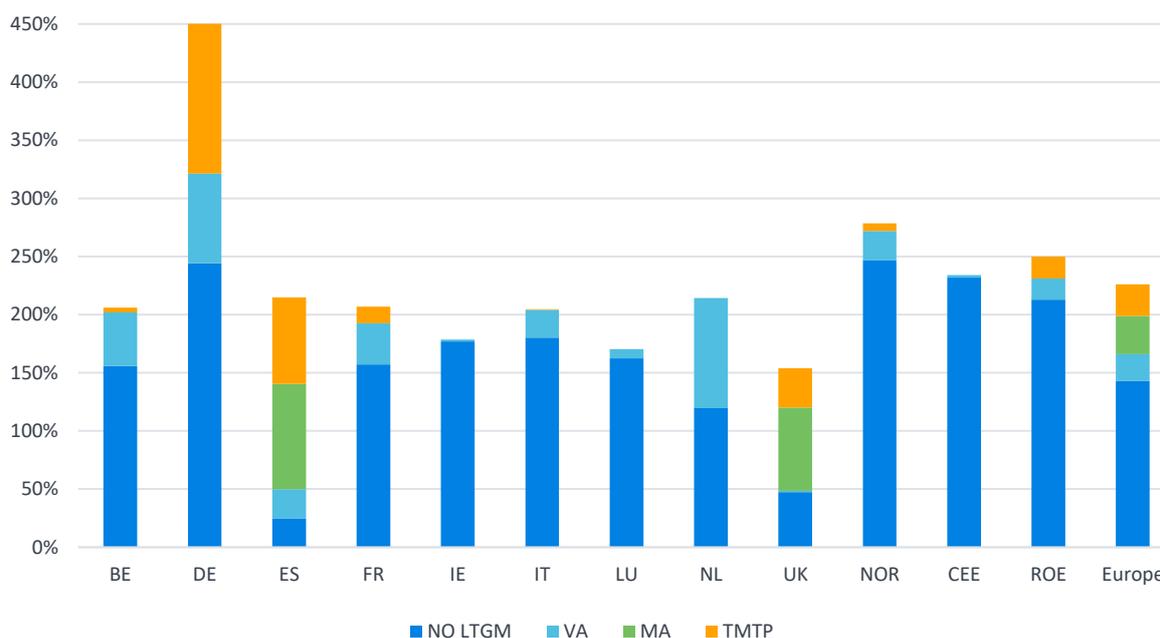
## Long-term guarantee measures

A number of European life insurers in our sample use long-term guarantee measures (LTGMs). The measures that are available to insurers and that are discussed in this report are the:

- Matching Adjustment (MA)
- Volatility Adjustment (VA)
- Transitional Measures on Technical Provisions (TMTP)

The chart in Figure 12 shows the breakdown of the SCR coverage ratio by the different LTGM and non-LTGM components (as at year-end 2018) for each of the regions analysed in this report. The total across all companies in our sample is also shown.

FIGURE 12: BREAKDOWN OF SCR COVERAGE RATIO BY LONG-TERM GUARANTEE MEASURE



Over

**50%** of German companies in our report apply the **TMTP**

Figure 12 shows that different countries place different levels of reliance on the various LTGMs. The VA is the most widely used measure, affecting 22 of the 32 countries in our sample, including

all of the largest markets we have shown in the chart. It has the largest impact in the Netherlands, where it increased the SCR coverage ration by 95 percentage points on average. In general, usage of the VA is lower in countries where prior approval by the regulator is required, such as the UK and Ireland. Approval is also required in Denmark, however, there is a high VA usage there (contributing 60 percentage points of the SCR coverage ratio). There are also substantial VA impacts in Germany (77 percentage points), Belgium (46 percentage points) and France (35 percentage points). Higher take-up in countries such as Germany and the Netherlands could be due to the possibility of using the Dynamic Volatility Adjustment (DVA). The DVA is currently not reported separately to the non-dynamic VA and as such as not been separated out in our analysis.

The TMTP is being used in 12 of the countries, based on our sample. The SCR coverage ratio in Germany is 129 percentage points higher on average due to the use of the TMTP, the highest impact of any country in our sample. Over 50% of the German companies in our report apply the TMTP, with some showing very large benefits from its use. The other countries that receive the most significant increase from using the TMTP are Portugal (45 percentage points), the UK (34 percentage points) and Finland (27 percentage points).

The MA is the least frequently used LTGM, with visible impacts being seen by insurers in the UK and Spain (in Spain it is primarily used on legacy business). It contributes 72 percentage points and 53 percentage points to each country's SCR coverage ratio, respectively, based on the companies in our sample.

There are a number of countries where no companies use the LTGMs; Estonia, Croatia, Iceland, Latvia, Lithuania, Malta, Poland, Romania and Slovenia, as well as Gibraltar, based on the companies included in our sample. Meanwhile in Bulgaria, Cyprus, Hungary, Ireland, Liechtenstein, Sweden and Slovakia take up has been low with only a small number of companies using the VA (contributing less than five percentage points to the solvency coverage ratio).

When comparing the results in this report to the previous SFCR reports, in general we see there has been an increase in the benefit received for using the LTGMs. These increases are likely due to:

- MA has increased due to a widening of credit spreads over the year.
- VA has also risen in many countries in line with an increase in the VA rates. For example the Euro VA rates have increased from four basis points (bps) to 24bps and the Danish Krone VA rates have increased from 30bps to 45bps over the year.
- These are slightly offset by the TMTP benefits reducing by one-sixteenth as they run off, however some of these have been impacted by recalculations of the measure, where required.

## Conclusion

European life insurers typically favour government and corporate bonds as investment categories, investing over 60% of their total assets (excluding index-linked and unit-linked assets) in these categories, on average.

The mix of life insurance business varies across Europe, with many markets (including Belgium, France, Germany and Italy) dominated by 'Insurance With Profit Participation' business, while the market in other countries (such as Ireland, Luxembourg and the UK) is predominantly in respect of 'IL and UL Insurance' business.

However, despite the different business mix, overall European life insurers had high levels of solvency cover relative to the minimum required capital based on the disclosures in the year-end 2018 SFCRs, with an average SCR coverage ratio of 226%. This represents an improvement on the year-end 2017 SFCRs, which had an average SCR coverage ratio of 218%.

Own Funds are predominantly invested in Tier 1 unrestricted Own Funds (91%), which is the highest form of capital in terms of quality and loss absorbency as defined under Solvency II.

For most countries the largest constituent parts of their undiversified SCRs are market risk, with life underwriting risk being the second largest component. Diversification and LACTP represent the largest reductions to the SCR.

The LTGMs are used to different extents in each country, with the VA the most widely used. However, in countries where the TMTP or the MA, or indeed both, are used, they generally have much higher impacts on the SCR coverage ratio than the VA. The benefit from the LTGMs to the solvency coverage has increased since year-end 2017.



The average European SCR coverage ratio has **IMPROVED** over the year **from 218% to 226%**

## Analysis of UK life insurers

### UK MARKET COVERAGE

Our analysis is based on 83 life insurance companies authorised in the UK for 2018 (87<sup>11</sup> for 2017). This sample includes domestic companies selling within the UK market only and a small number with cross-border sales. The companies chosen for this report are all mainly life insurers and reinsurers, including mutual societies, annuity writers, bulk purchase annuity providers and closed-book consolidators.

The reduction in the number of companies is due primarily to consolidation in the market leading to some companies in our 2017 report merging over the course of 2018.

The 83 companies in the UK section of our report represent approximately £253 billion (€284 billion) of GWP and approximately £1,803 billion (€2,020 billion) of gross life TPs, which is estimated to be around 99% of all gross life TPs in the UK. Appendix 1 contains a list of all the UK companies included in our analysis.

Our analysis of the UK life insurance market covers:

**83** LIFE INSURERS

**£253** BILLION  
of gross written premiums

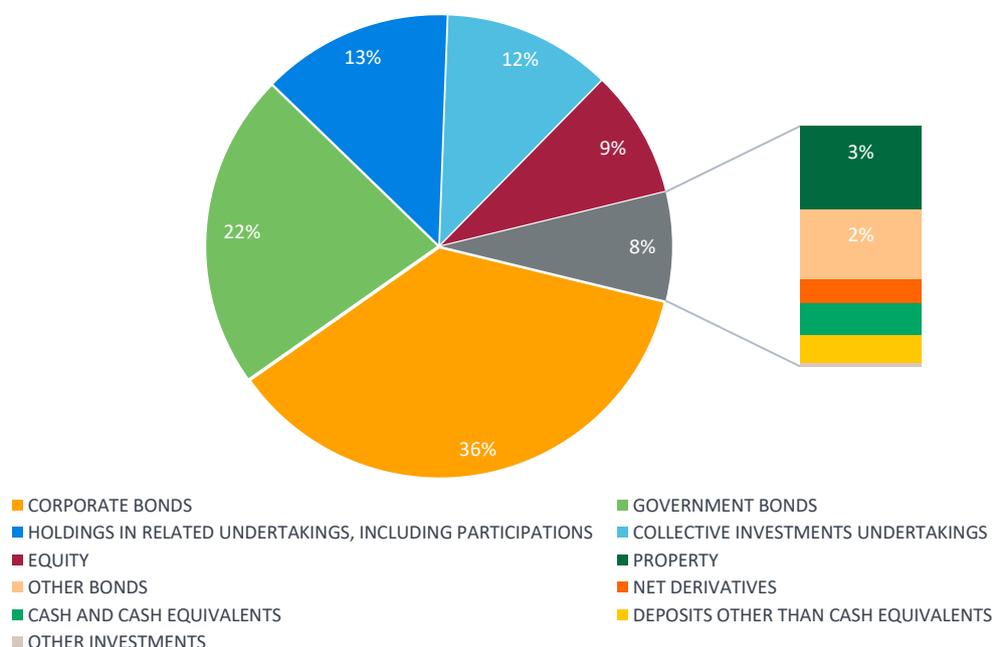
**£1,803** BILLION  
of gross technical provisions

## Analysis of balance sheet

### ASSETS

The asset side of the balance sheet for the average UK life company as at year-end 2018 is primarily comprised of financial investments. The breakdown of non-linked financial investments for the UK life insurance market based on our sample of companies is shown in Figure 13.

FIGURE 13: SPLIT OF NON-LINKED FINANCIAL INVESTMENTS BY ASSET CLASS<sup>12</sup>



Outside of the 'Assets Held for IL and UL Contracts', UK life insurers are heavily invested in bonds, with a focus on investment in corporate bonds (36%) over government bonds (22%). The remainder of investments is concentrated in holdings in related undertakings (13%), collectives (12%) and equity (9%). There has been very little change in the proportions invested in each asset category since the year-end 2017 SFCRs.

<sup>11</sup> The number of companies in our sample has decreased over the year. This is due to consolidation of some companies within the market (such as Friends Life and Aviva) as well as adding and removing some smaller companies based on availability of their SFCRs.

<sup>12</sup> Does not include 'Assets held for Index-Linked and Unit-Linked Contracts'.

Holdings in related undertakings come almost entirely from five of the largest insurers: Aviva, Prudential, Royal London, Phoenix Group<sup>13</sup> and AEGON Scottish Equitable, which combined make up 94% of this category. Other insurers exhibit a greater concentration in government and corporate bonds as well as collective investments undertakings in the absence of such exposures to related undertakings.

**LIABILITIES**

The chart in Figure 14 shows the breakdown of the total UK life insurers' TPs between the Solvency II lines of business, gross of reinsurance, as at year-end 2018.

**FIGURE 14: SPLIT OF TOTAL UK LIFE INSURERS TECHNICAL PROVISIONS BY PRODUCT GROUPS**

The UK life insurance market is dominated by **INDEX-LINKED AND UNIT-LINKED INSURANCE**, accounting for

**59%** OF TECHNICAL PROVISIONS

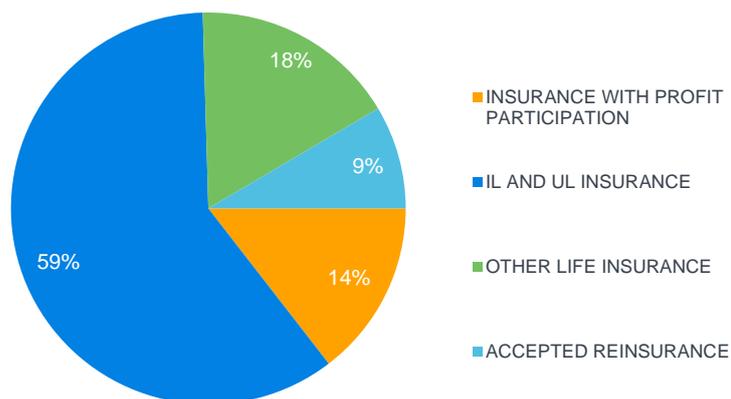
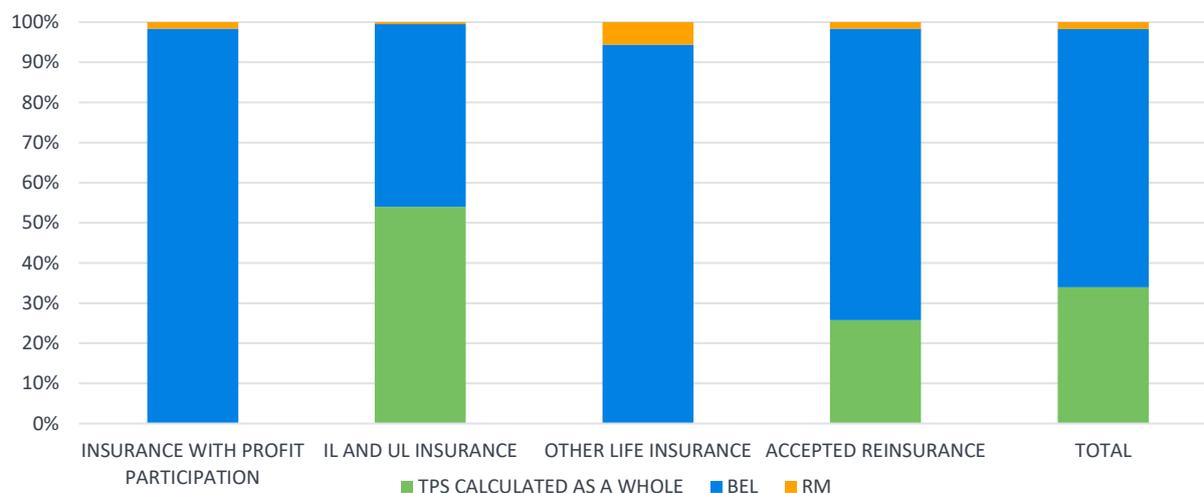


Figure 14 shows that the majority of UK life insurers' TPs are made up of 'IL and UL Insurance' (59%). 'Other Life Insurance', 'Insurance With Profit Participation' and 'Accepted Reinsurance' are the other significant product classes, at 18%, 14% and 9%, respectively. 'Annuities (Related to Health Insurance)' accounts for less than 0.02% of the total TPs and is not shown on the chart.

Overall, the total value of life TPs in our sample has shrunk from £1,879 billion at year-end 2017 to £1,804 billion at year-end 2018.

The TPs can be broken down further. A breakdown of the TPs for BEL, Risk Margin (RM) and 'TPs Calculated as a Whole' is shown in Figure 15, split by the Solvency II lines of business.

**FIGURE 15: SPLIT OF TECHNICAL PROVISIONS FOR EACH PRODUCT GROUP**



<sup>13</sup> Phoenix Group includes the acquisition of Standard Life during 2018.

'TPs Calculated as a Whole' are only significant for 'IL and UL Insurance' business and 'Accepted Reinsurance' accounting for 54% and 26% of TPs, respectively. The 'TPs Calculated as a Whole' under the 'Accepted Reinsurance' category is a result of 11 providers with large proportions of 'IL and UL Insurance' business. Notably this proportion has decreased significantly over the year, and in particular there was a large reduction in Blackrock Life's 'TPs Calculated as a Whole' under the 'Accepted Reinsurance' category. This is primarily due to the transfer of funds from Blackrock's (re)insurance life fund structure into other fund structures, such as Authorised Contractual Schemes (ACS). This means the assets and corresponding TPs no longer appear as 'Accepted Reinsurance' on Blackrock Life's balance sheet, but are instead held in separate funds within the wider Blackrock group.

'TPs Calculated as a Whole' contributes a relatively large proportion (34%) of the overall TPs due to the significance of UL funds under management within the UK's TPs. The proportion of 'TPs Calculated as a Whole' has increased since year-end 2017. It should be noted that not all firms with UL funds report the unit-linked liabilities within 'TPs Calculated as a Whole' and instead report it within the BEL figure.

The BEL makes up more than 40% of the TPs for every product group, including 64% of the total insurance market, while the RM ranges from only 0.5% of 'IL and UL Insurance' TPs to 5.6% of 'Other Life Insurance' TPs.

The table in Figure 16 shows the RM as a proportion of TPs for each Solvency II line of business as at year-end 2018.

**FIGURE 16: RATIO OF RISK MARGIN TO TECHNICAL PROVISIONS BY PRODUCT GROUP**

	RM/TP %
INSURANCE WITH PROFIT PARTICIPATION	1.6%
IL AND UL INSURANCE	0.5%
OTHER LIFE INSURANCE	5.6%
ACCEPTED REINSURANCE	1.7%
TOTAL	1.7%

The average ratio of **Risk Margin** to **Technical Provisions** is **1.7%**

The RM for 'IL and UL Insurance' is the smallest proportion of TPs, which could be due to the majority of risks being passed onto policyholders, thus leading to a lower RM.<sup>14</sup> 'Other Life Insurance' has the most significant RM at 5.6% of TPs. This category incorporates all other product types, including annuities and protection business, for which the RM is relatively high compared to the other product categories. This is due, in part, to the particularly long duration of annuity liabilities and the relatively small BEL for protection business.

Across our sample of UK companies and across all lines of business, the RM is about 1.7% of TPs. This is very similar to the results at year-end 2017. More generally the breakdown of the BEL by product type has shown little change since the year-end 2017 SFCRs.

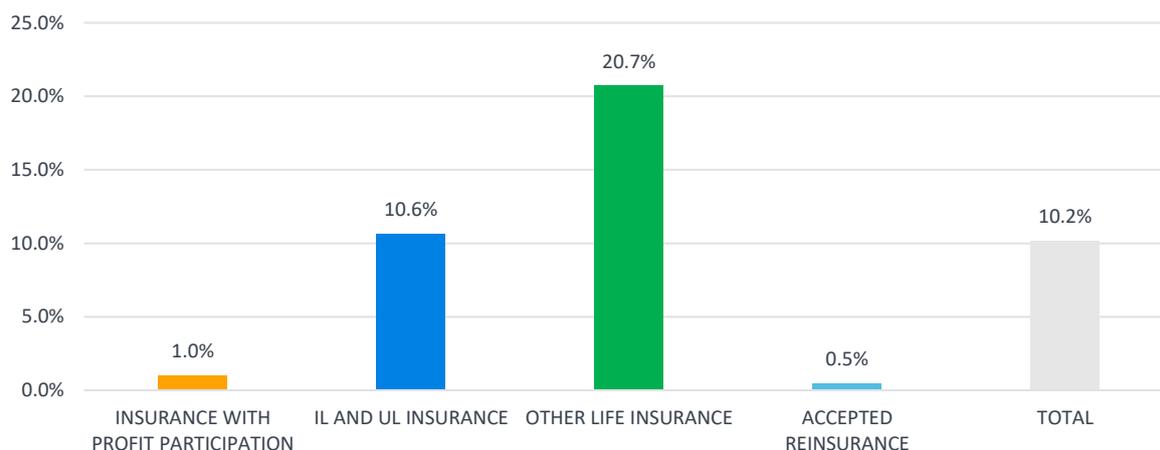
## REINSURANCE

Reinsurance is widely used by UK life insurers, with reinsurance recoverables of 10.2% of life TPs across the 83 life insurers.

Figure 17 shows the reinsurance recoverables as a percentage of the TPs for each of the main Solvency II lines of business as at year-end 2018, alongside the total ceded percentage for UK life insurers as a whole.

<sup>14</sup> It is noted that for companies writing multiple lines of business there may be an element of subjectivity in how they allocate the RM across the different lines of business.

FIGURE 17: PERCENTAGE OF TECHNICAL PROVISIONS WITH REINSURANCE



The line of business with the highest ceded level of reinsurance is 'Other Life Insurance' at 20.7%. This is almost double the second largest, which is 'IL and UL Insurance' at 10.6%, although due to the size of this market the value of total recoverables for 'IL and UL Insurance' products is actually much higher than for 'Other Life Insurance' (£114 billion against £66 billion). The smallest percentage is 0.5% for 'Accepted Reinsurance'.

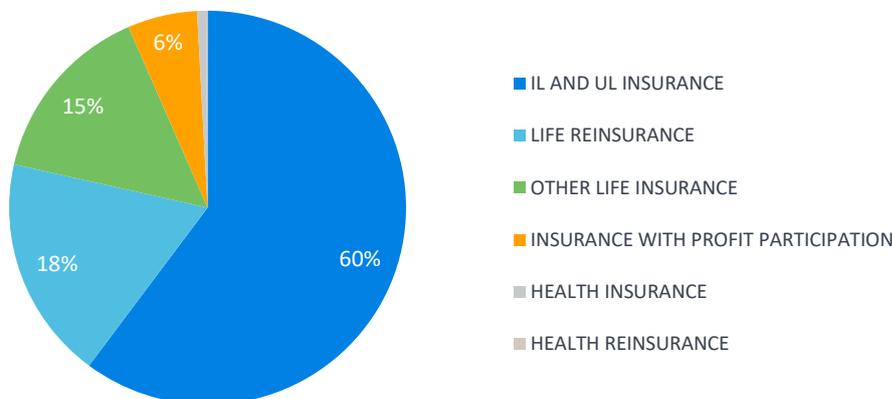
Overall, the UK Life industry has **REINSURANCE RECOVERABLES** of around **10.2%** of Total TPs

Overall, the industry has reinsurance recoverables of around 10.2% across all life TPs. This is the same proportion as at year-end 2017 and suggests that there has been overall little movement in the proportion of UK life TPs that are reinsured.

## Analysis of premiums

Due to the long-term nature of life insurance business, the profile of the current book of business for many companies may be quite different from the products currently sold. The largest share of the market for the UK companies in our sample is 'IL and UL Insurance', making up 60.2% of GWP in 2018.

FIGURE 18: SPLIT OF GROSS WRITTEN PREMIUMS BY LINE OF BUSINESS



The rest of the GWP is made up of 18.3% 'Life Reinsurance', 14.9% 'Other Life Insurance', 5.7% 'Insurance With Profit Participation', and less than 1% in both 'Health Insurance' and 'Health Reinsurance'.

This split has changed since the year-end 2017 results where 'IL and UL Insurance' accounted for almost 70% and 'Life Reinsurance' accounted for around 10%.

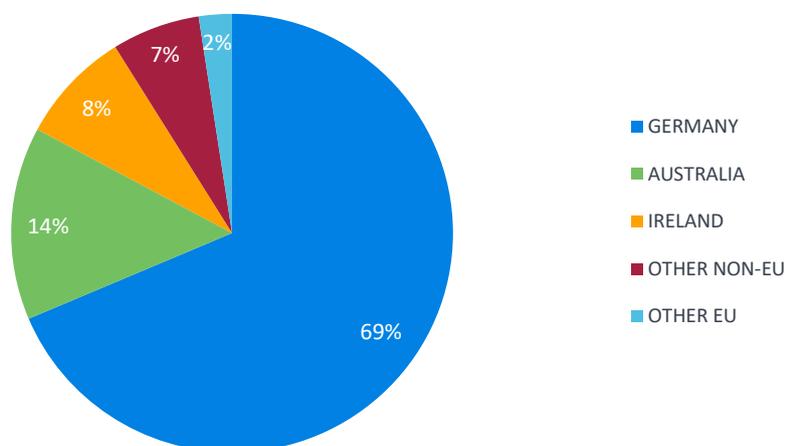
The total volume of GWP increased, based on the companies in the sample from £209 billion (€234 billion) during 2017 to £253 billion (€284 billion) during 2018.

There are some insurers selling overseas through their UK companies. The chart in Figure 19 shows a rough breakdown of the cross-border sales by country for 2018.



GROSS WRITTEN PREMIUMS for life insurance have **GROWN** over the year

FIGURE 19: CROSS-BORDER SALES BY COUNTRY BY GROSS WRITTEN PREMIUMS



Germany accounts for the majority of cross-border sales from the UK at 69%. This is almost all due to Standard Life which has a large volume of premiums coming from their German business. This business has subsequently been transferred to Standard Life International domiciled in Ireland.

The bulk of the remaining overseas sales are to Australia (14%) and Ireland (8%). The rest has been grouped into two categories. 'Other EU' countries account for 2% of total GWP (the largest shares of this are sales into France and the Netherlands). The remainder is 'Other Non-EU' (7%), which contains cross-border sales to the countries outside of the EU (with the exception of Australia). The largest contributors to this category are premiums from South Korea, Hong Kong and Japan.

Overall, the value of cross-border sales out of the UK has roughly halved since that reported in the 2017 year-end SFCRs (£1.27 billion in 2018 vs. £2.44 billion in 2017). This is likely due to the UK's exit from the EU and companies taking measures to ensure they are able to continue their business interests in the case of changes to passporting arrangements. Companies have been setting up companies in other EU states, notably Ireland, and using these as hubs for their EU business. It is expected that the cross-border sales out of the UK will decrease further by the year-end 2019, especially given the transfer of Standard Life's cross-border business mentioned above.

As a result of this reduction in cross-border sales out of the UK the proportions of the sales have changed since the year-end 2017 SFCRs. In particular the portion of cross-border sales relating to German business has increased from 42% to 69% while the proportion attributable to Irish business has fallen from 43% to only 8%. In absolute terms there has been a fall in the volume of business sold into Germany and it is only due to the significant decline in business sold into other countries that cross-border sales into Germany dominates.

The data for Figure 19 was produced using QRT S.05.02.01. This QRT was not publicly disclosed by all firms covered in this report. Where QRT S.05.02.01 was not disclosed it has been assumed that the firm did not carry out any cross-border sales during 2018.

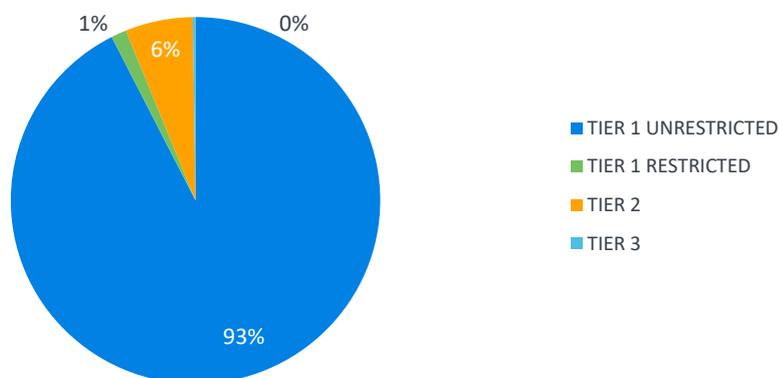


The value of  
**CROSS-BORDER  
 SALES**  
 has  
**reduced**  
**significantly**  
 over the year

## Analysis of own funds

The chart in Figure 20 shows the split of Own Funds by tier for all UK life companies in our sample as at year-end 2018.

FIGURE 20: SPLIT OF ELIGIBLE OWN FUNDS BY TIER



**93%** of own funds for UK life insurers is held in **Tier 1 Unrestricted Capital**

Figure 20 shows that the majority of capital for Own Funds is being held in the highest-quality Tier 1 unrestricted capital. Overall, 93% of UK life insurers' Own Funds are being invested in this highest-quality capital.

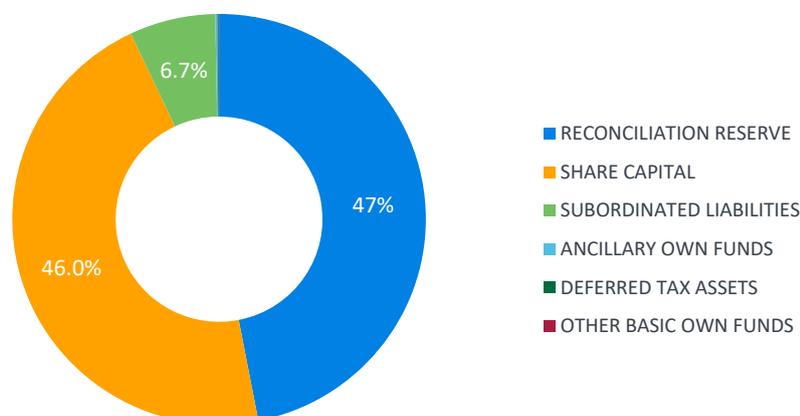
Tier 1 restricted capital and Tier 2 capital make up 1% and 6% of the total Own Funds, respectively. Tier 2 is used by only some of the companies in the sample, with the five largest users of Tier 2 capital accounting for over 75% of the total. The types of companies that tend to invest in Tier 2 capital

tend to be the largest companies in the market and also the mono-line annuity providers. Tier 2 capital is primarily made up of subordinated debt and preference shares.

There is a very small amount of Tier 3 capital, which is less than 1% of the total. There was little change to the split of Own Funds when compared to the year-end 2017 SFCRs.

Figure 21 shows the components of the Own Funds as at year-end 2018.

FIGURE 21: COMPONENTS OF OWN FUNDS



Own Funds within UK life insurers primarily consist of the 'Reconciliation Reserve' (47%) and 'Share Capital' (46%). Own Funds in 'Subordinated Liabilities' contributes 7% of the total.

In the UK life market, 'Deferred Tax Assets', 'Ancillary Own Funds' and 'Other Basic Own Funds' are all very small, making up less than 0.3% of the entire Own Funds when combined.

The breakdown of the components was broadly the same as for the previous set of SFCRs.

The breakdown of the 'Reconciliation Reserve' is also available from the SFCRs and is shown in the chart in Figure 22. The 'Reconciliation Reserve' is constructed from the 'Excess of Assets over Liabilities', with deductions made for 'Own Shares', 'Foreseeable Dividends', 'Other Basic Own Fund Items' and 'Adjustments' (for restricted Own Funds items in respect of MA portfolios and ring-fenced funds).

FIGURE 22: BREAKDOWN OF THE RECONCILIATION RESERVE



The breakdown of the 'Reconciliation Reserve' is very similar to that seen for the year-end 2017 SFCRs, including 'Own Shares' having no impact on the Reconciliation Reserve. The total value of 'Excess Assets over Liabilities' decreased over the year, with the other components showing similar proportional decreases.

## Analysis of solvency coverage

The weighted average SCR coverage ratio for our sample of UK life insurers from the year-end 2018 SFCRs was 154%, based on figures from companies' public QRTs. This is well in excess of the 100% coverage required, showing that many companies are choosing to hold excess capital to provide security and stability. This is, however, noticeably lower than the European average in our sample of 226%, suggesting that UK insurers on average had less available capital than their counterparts across Europe. This is consistent with what was seen in the previous sets of SFCRs.

The weighted average MCR coverage ratio for UK life companies was 532% from the second set of SFCRs. This is a very high ratio and shows that the MCR is very small compared to the level of capital that insurers are actually holding. It is again lower than the European average of 577%, but the difference is smaller than that for the SCR.

The weighted average MCR as a percentage of the SCR was 28%. This indicates that for the average company the linear MCR is calculated within the limits of 25% to 45% of the SCR, i.e., that the cap or floor is not biting for all companies, but that it is likely very close to the 25% floor for many companies.

The table in Figure 23 compares the UK to the European average solvency coverage ratios.

FIGURE 23: AVERAGE SCR AND MCR COVERAGE RATIOS

	UK AVERAGE	EUROPEAN AVERAGE
RATIO OF ELIGIBLE OWN FUNDS TO SCR	154%	226%
RATIO OF ELIGIBLE OWN FUNDS TO MCR	532%	577%
MCR AS A % OF THE SCR	28%	37%

### THE WEIGHTED AVERAGE SCR COVERAGE RATIO

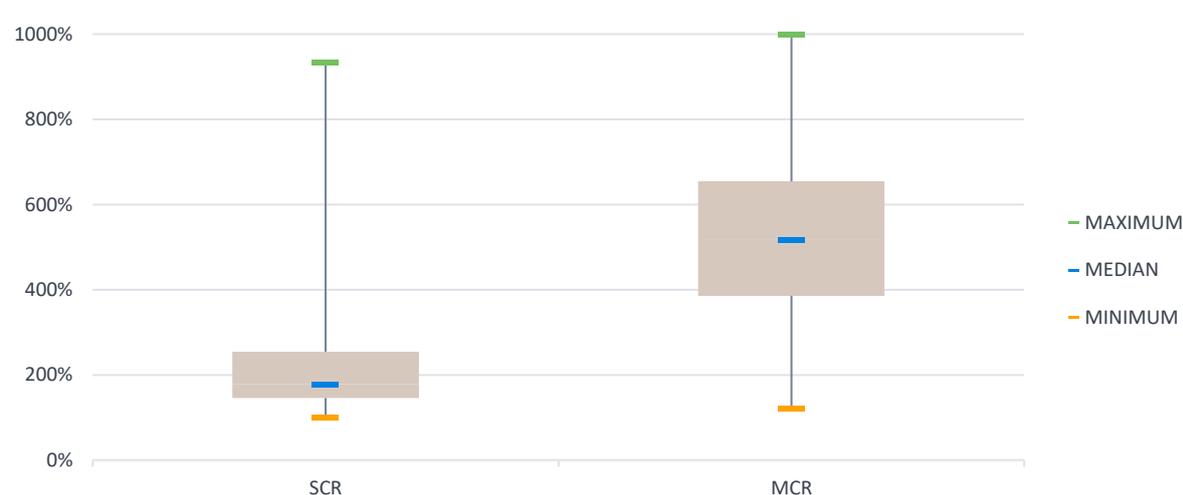
for UK life insurers was

**154%**

which is lower than the EU Average of **226%**

The distribution of the SCR and MCR ratios is shown in Figure 24.

FIGURE 24: DISTRIBUTION OF AVERAGE SCR AND MCR COVERAGE RATIOS



The SCR coverage ratios for UK life insurers are displayed in the box-and-whisker diagram in Figure 24. The solvency coverage has a broad spread ranging from 100% to 3,933% for the companies in the sample. It should be noted that the four companies with SCR coverage ratios of 1,000% or greater have been removed from the diagram to make it more readable. Half of the companies have an SCR coverage ratio that falls between 146% and 255%. This is a reasonably narrow range considering the overall spread of coverage ratios. It is also notable that the upper quartile makes up almost the entirety of the range.

The MCR coverage ratio has a range that is smaller in size (122% to 2,076%) than the SCR coverage ratio, however this has been limited to 1,000% to allow the chart to be readable. It has a lower maximum and higher minimum. Half of the companies have an MCR coverage ratio that falls between 386% and 654%, which is a larger interquartile range than shown by the SCR.

The distribution of the SCR and MCR has not changed significantly since the year-end 2017 SFCRs.

A number of UK life insurers use either PIMs or FIMs. Of the 83 insurers in our analysis, there are 13 PIM users and seven FIM users, with the remaining 63 using the Standard Formula (SF).

The table in Figure 25 shows the average SCR coverage ratio for companies aggregated by their SCR methodologies (SF, PIM and FIM) as at year-end 2018.

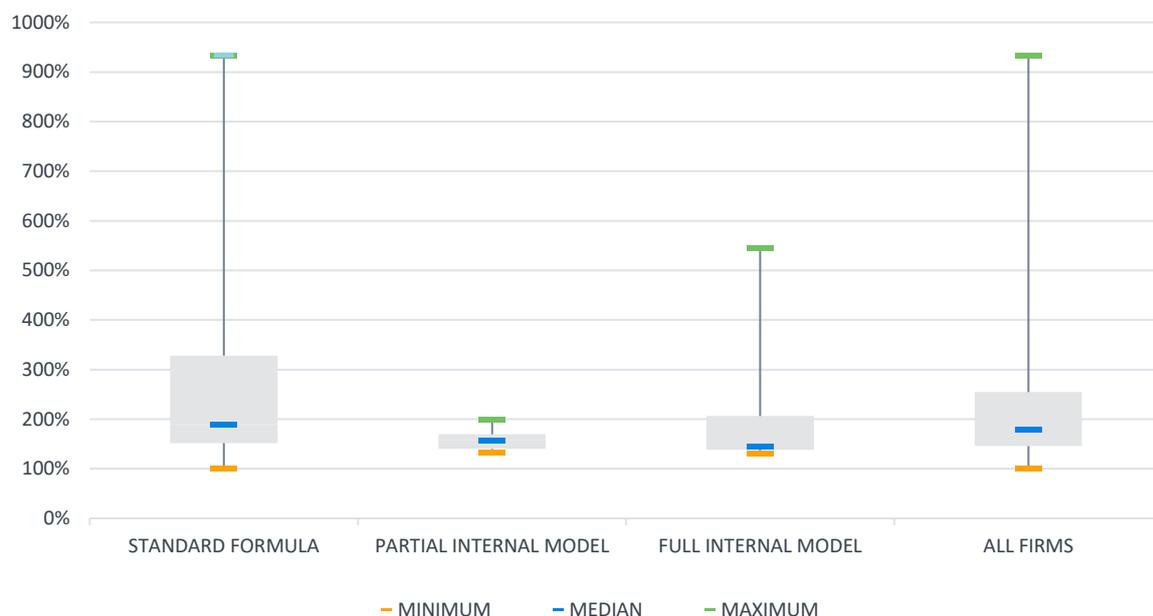
**FIGURE 25: AVERAGE SCR FOR STANDARD FORMULA, PARTIAL INTERNAL MODEL AND FULL INTERNAL MODEL FIRMS**



The weighted average SCR coverage ratio for companies using a PIM is the highest at 155%, followed closely by those using the SF at 154%. The lowest weighted average solvency coverage ratio is that for companies using a FIM at 149%, however this is not significantly lower than the other categories.

The distribution of the SCR coverage ratios for each of the three different methodologies shows greater differences between them. The chart in Figure 26 shows the distributions as at year-end 2018.

**FIGURE 26: DISTRIBUTION OF SCR FOR INTERNAL MODEL FIRMS VERSUS STANDARD FORMULA<sup>15</sup>**



<sup>15</sup> The scale has been amended to only reach 1,000% coverage ratio because when the highest values, which are in excess of a 1,000% coverage ratio, are included, they make the rest of the chart more difficult to read. This limit on the scale only excludes four Standard Formula firms (Churchill Insurance, Liverpool Victoria Life Company, Standard Life Assurance Company 2006 and Trafalgar Insurance).

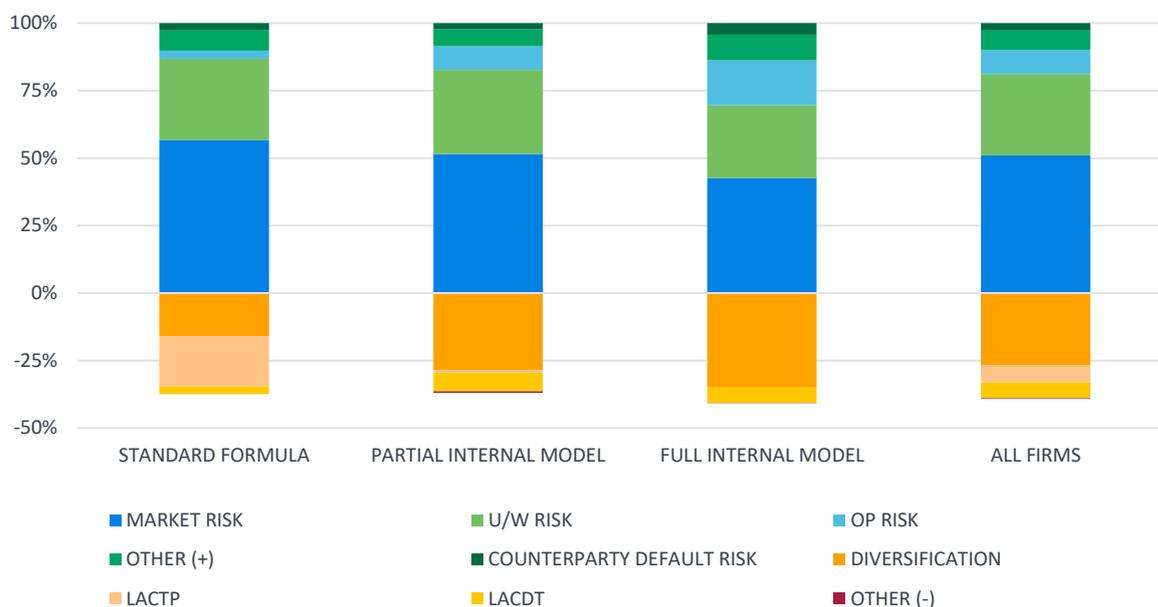
The SCRs for internal model firms, PIM firms in particular, have a smaller range than the Standard Formula firms. Many of the companies using a PIM in our sample tend to be part of a group and the result suggests that companies within a group manage their capital more actively and do not hold significant surplus capital at the subsidiary level. In contrast, the FIM firms in our sample tend to be more specialized in the products they offer and business they sell, e.g., mono-line annuity companies. These are not necessarily a group and so may not manage capital as actively. The specialist nature of the companies may make it easier for them to apply for a FIM compared to large companies selling (or having sold) a diverse range of products subject to a variety of risks.

The distribution of the SCR coverage ratios is reasonably similar to that seen in the year-end 2017 SFCRs.

## Analysis of SCR

We analysed the various SCR components for companies using the SF, a PIM or a FIM, along with the sample of companies as a whole, in order to calculate the average contribution to the SCR for each sub-module as at year-end 2018.

FIGURE 27: AVERAGE SCR BREAKDOWN OF SCR BY SF, PIM AND FIM<sup>16</sup>



**MARKET RISK** is the largest risk to UK life insurers, contributing **49%** of the undiversified SCR

Figure 27 shows that life insurers in the UK are primarily exposed to market risk, contributing 57% of the undiversified SCR for SF firms, 52% for PIM firms and 32% for FIM firms. Market risk contributes 49% to the undiversified SCR on average across all companies included in our sample.

Underwriting risk for UK life insurers contributes 30%, 31% and 27% of the undiversified SCR for SF, PIM and FIM firms, respectively, with the vast majority coming from life underwriting risk. The remainder of the underwriting risk comes from health underwriting risk from health insurance provided by UK life insurers and non-life underwriting risk from the composite insurers with a majority of life insurance business.

Counterparty default risk is the only other risk that contributes to the Basic Solvency Capital Requirement (BSCR). It makes up only 3%, 2% and 4% of the undiversified SCR for SF, PIM and FIM firms, respectively, implying that it is not as significant as either market risk or underwriting risk.

Operational risk only contributes 3% to the undiversified SCR for SF firms, but adds 9% and 17%, respectively, to PIM and FIM firms. This result is not unexpected as operational risk is often included within internal models, when companies decide that the factor-based approach prescribed by the SF does not appropriately reflect their risk exposures.

<sup>16</sup> The amounts within this figure 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 for a specific SCR calculation method.

The diversification benefit for the UK life insurance market is large, giving a reduction of 16% of the undiversified SCR for SF firms, 29% for PIM firms and 35% for FIM firms. This is the diversification between the risk modules<sup>17</sup> and not between the various sub-modules within the risk modules. The higher diversification benefits for PIM and FIM firms suggest a departure from the SF method of aggregation, thus increasing the ability of the different risks to offset one another.

In addition to diversification, benefits adjustments are made for LACTP and LACDT. The published results suggest that UK insurers are heavily utilising the LACTP adjustment, resulting in an average reduction of 23% of the undiversified SCR for SF firms. In reality, only 25 insurers are using the adjustment, with one insurer accounting for 59% of the entire LACTP of UK life insurers. Only two insurers using LACTP adjustment do not use the SF and instead use a PIM, giving a reduction of only 1% to the undiversified SCR for PIM firms as a whole.

There are 48 companies using the LACDT adjustment, but the overall impact is much smaller, only allowing for a reduction of the undiversified SCR for the SF, PIM and FIM of 3%, 7% and 6%, respectively.

Other adjustments have been split into net increases and net decreases to the SCR. Net increases, 'Other (+),' contributes 7% of the undiversified SCR across all companies, while net decreases, 'Other (-),' gives a reduction of less than 1% of the undiversified SCR across all companies.

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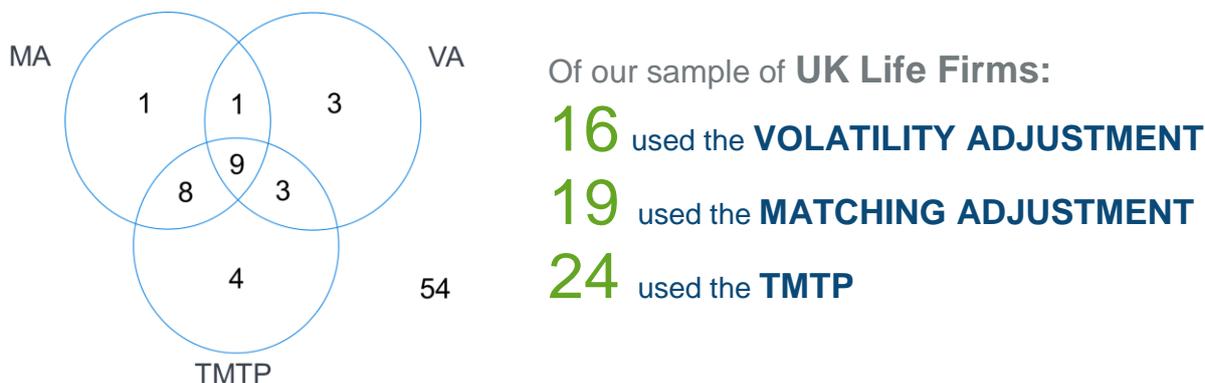
<sup>17</sup> Excluding the operational risk module for SF firms which is not diversified with the other risk modules. The operational risk for PIM and FIM firms may be diversified with the other risk modules.

## Long-term guarantee measures

A significant number of UK life insurers use the LTGMs included in the analysis for this report.

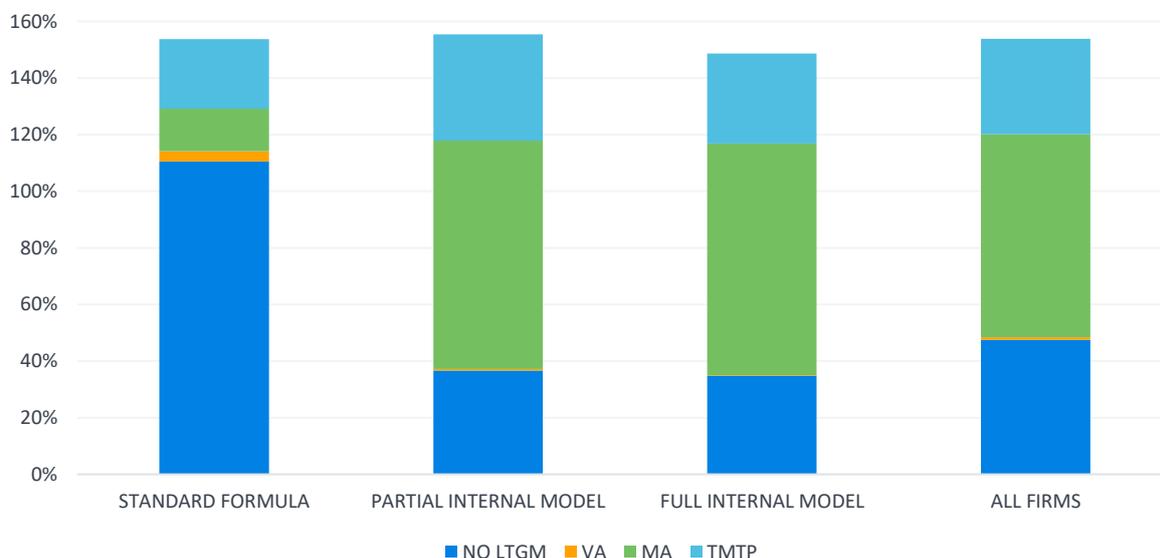
Of the companies in our sample, 16 are using the VA, 19 are using the MA and 24 are using the TMTP as at year-end 2018, with some companies using combinations of the LTGMs as shown in the Venn diagram in Figure 28. Of the UK life companies in our sample, 54 did not use any of the LTGMs. There have been minimal changes in LTGM usage over the year.

FIGURE 28: NUMBER OF COMPANIES USING LONG-TERM GUARANTEE MEASURES



The chart in Figure 29 shows the breakdown of the SCR coverage ratio by each LTGM and the result if no LTGMs were applied as at year-end 2018. The breakdown is shown for SF, PIM and FIM firms, alongside the total across all companies.

FIGURE 29: BREAKDOWN OF SCR COVERAGE RATIO BY LONG-TERM GUARANTEE MEASURE



The general picture seen in Figure 29 is that companies using PIMs and FIMs have similarly high levels of reliance on LTGMs and this drives the results for all firms as, in general, the companies using PIMs and FIMs tend to be the largest companies. A number of the companies using a FIM are the mono-line annuity providers. Companies using the SF in general have the least reliance on LTGMs.

The MA makes up the largest proportion of the SCR coverage ratios for FIM and PIM firms, on average accounting for 72 percentage points in total SCR coverage ratio for companies in the UK. This is highest for the FIM firms, at 82 percentage points, which is most likely due to the mono-line annuity providers in this group using the MA to allow for the matching of their long-term liabilities with illiquid assets.

The TMTP is the next-largest LTGM adding on average 34% to the solvency coverage ratio across all companies. The TMTP has proven to be popular in the UK, especially amongst annuity providers, primarily because of the relatively high RM for annuity business compared to other business.

The VA has the lowest impact across all categories, with only very small impacts on SF or PIM firms. On average it contributes around 1% to the SCR coverage ratio across all companies. This is similar to the VA impact shown in the year-end 2017 SFCR results.

Reliance on the LTGMs increased on average since the year-end 2017 SFCRs, however the SF firms overall reduced their reliance on LTGMs.

## Conclusion

UK life insurers disclosed healthy results in the year-end 2018 SFCRs, with an average SCR coverage ratio of 154%. No insurers in this report had a coverage ratio of less than 100%, but some had extremely high ratios, depending on a wide range of factors. The Matching Adjustment (MA) and the Transitional Measures on Technical Provisions (TMTP) continue to be popular in the UK, leading to significant increases in the SCR coverage ratio for some companies. Usage of the Volatility Adjustment (VA) remains relatively low in the UK, comparative to other European countries.

'IL and UL Insurance' business continues to be the dominant product grouping for UK life insurers, when measured by volume of TPs, reinsurance ceded and gross written premiums.

The volume of gross written premiums sold by UK life insurers on a cross-border basis into other countries has decreased significantly over the year, potentially due to preparations for the UK exiting the EU.

The most significant risks to UK life insurers are market risk and underwriting risk, which is consistent with what is being seen across Europe. LACTP contributes significantly to the SCR of UK life insurers.

Own Funds are primarily invested in Tier 1 unrestricted Own Funds (over 90%), which is the highest form of capital in terms of quality and loss absorbency as defined under Solvency II. The rest is kept as lower-level capital and is primarily held by the largest companies.

UK life insurers have  
an **Average**  
**SCR Coverage Ratio** of  
**154%**

## Appendix 1: UK life companies included in the analysis

1. Abbey Life Assurance Company
2. Aberdeen Asset Management Life & Pensions
3. ACE Europe Life
4. AEGON Scottish Equitable
5. AIG Life
6. AioiNissay Dowa Life Insurance of Europe
7. Assurant Life
8. Aviva International Insurance
9. Aviva Investors Pensions
10. Aviva Life & Pensions UK
11. BlackRock Life
12. Canada Life
13. Churchill Insurance Company
14. Cirencester Friendly Society
15. Countrywide Assured
16. Covéa Life
17. Dentists' and General Mutual Benefit Society
18. Dentists' Provident Society
19. Ecclesiastical Life
20. Equitable Life Assurance Society
21. Exeter Friendly Society
22. Family Assurance Friendly Society
23. FIL Life Insurance
24. Forester Life
25. Hodge Life Assurance Company
26. Holloway Friendly
27. HSBC Life (UK)
28. Inceptum Insurance Company
29. Independent Order of Odd Fellows Manchester Unity Friendly Society
30. Integralife UK
31. Invesco Perpetual Life
32. JPMorgan Life
33. Just Retirement
34. Kingston Unity Friendly Society
35. Legal & General Assurance (Pensions Management)
36. Legal & General Assurance Society
37. Liverpool Victoria Friendly Society
38. Liverpool Victoria Life Company
39. London General Life Company
40. Managed Pension Funds
41. Metropolitan Police Friendly Society
42. MGM Advantage Life
43. Mobius Life
44. National Deposit Friendly Society
45. Old Mutual Wealth Life & Pensions
46. Old Mutual Wealth Life Assurance
47. Omnilife Insurance Company
48. Pacific Life Re
49. Partnership Life Assurance Company
50. Pension Insurance Corporation
51. Phoenix Life
52. Phoenix Life Assurance
53. Police Mutual Assurance Society
54. Prudential Pensions
55. Railway Enginemen's Assurance Society
56. ReAssure
57. Reliance Life
58. Rothesay Life
59. Sanlam Life & Pensions UK
60. Schroder Pensions Management
61. Scottish Friendly Assurance Society
62. Scottish Widows
63. Sheffield Mutual Friendly Society
64. St James's Place UK
65. Standard Life Assurance
66. Standard Life Assurance Company 2006
67. Standard Life Pension Funds
68. Suffolk Life Annuities
69. Sun Life Assurance Company of Canada (UK)
70. The Ancient Order of Foresters Friendly Society
71. The National Farmers Union Mutual Insurance Society
72. The Prudential Assurance Company
73. The Rechabite Friendly Society
74. The Royal London Mutual Insurance Society
75. The Shepherds Friendly Society
76. Threadneedle Pensions
77. Trafalgar Insurance
78. Transport Friendly Society
79. UBS Asset Management
80. Unum
81. Vitality Life
82. Wesleyan Assurance
83. Zurich Assurance



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