

MILLIMAN REPORT

Analysis of insurers' Solvency and Financial Condition Reports

UK domestic medical insurers and IPMI markets

September 2021

Joanne Buckle, FIA
Natasha Singhal, FIA

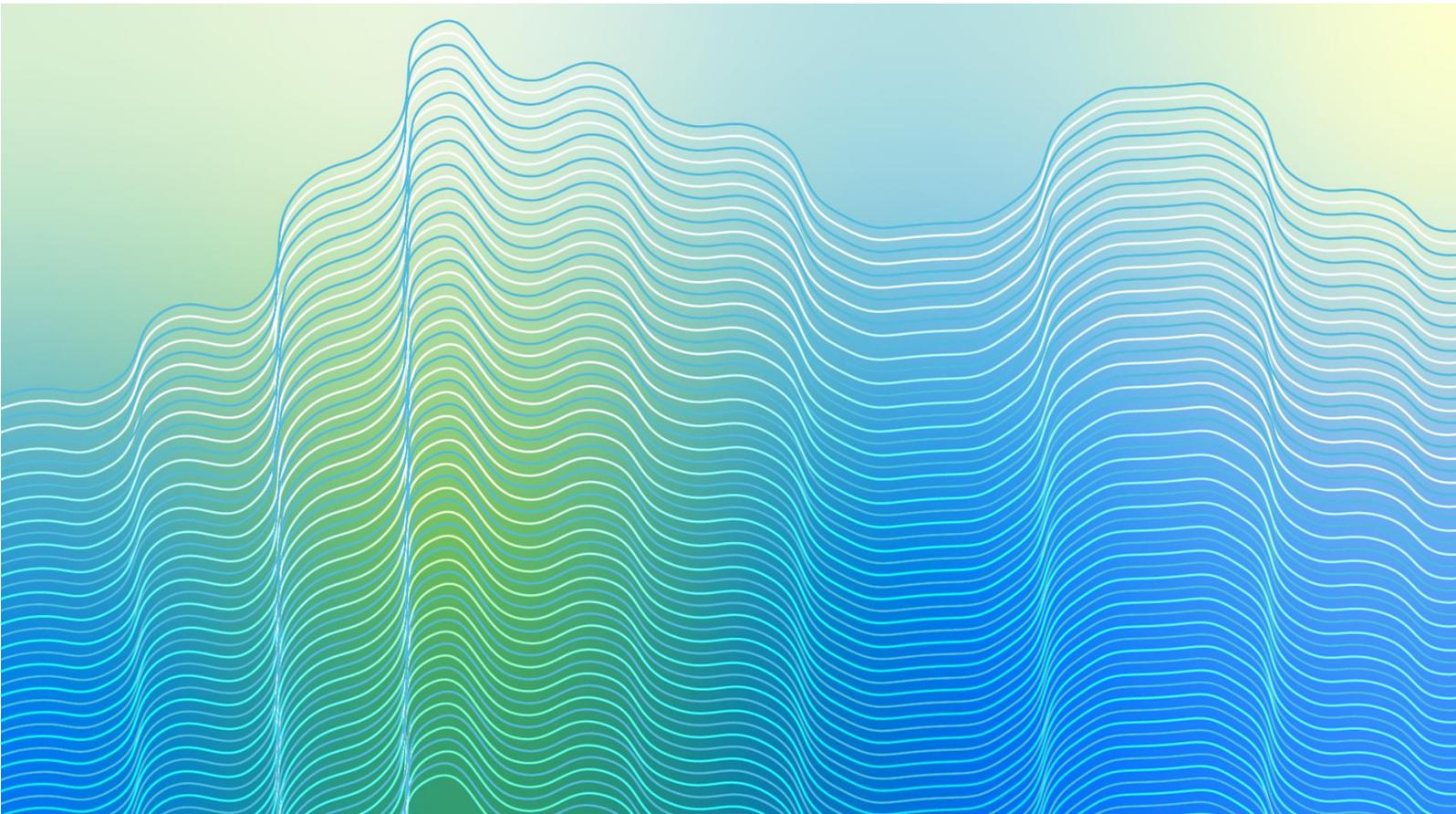


Table of contents

INTRODUCTION.....	1
BACKGROUND	1
HEALTHCARE SYSTEMS INCLUDED IN THIS ANALYSIS.....	1
COMPANIES INCLUDED IN THIS ANALYSIS	1
UNDERLYING DATA	2
IMPACT DUE TO COVID-19.....	2
INFORMATION INCLUDED IN THIS ANALYSIS.....	3
ANALYSIS.....	3
UNITED KINGDOM - DOMESTIC PMI BUSINESS	3
INTERNATIONAL PRIVATE MEDICAL INSURANCE	8
SUMMARY OBSERVATIONS.....	13
APPENDIX A: LIST OF SELECTED COMPANIES IN 2020 AND CORRESPONDING SOLVENCY COVERAGE RATIO	14

Introduction

BACKGROUND

Under Solvency II, European insurers are required to publish their Solvency and Financial Condition Reports (SFCRs). Five sets of SFCRs have been published, with the first publication for most entities occurring in May 2017, and the most recent in April/May 2021.

The SFCRs contain a significant amount of information, including details of the company's performance over the reporting period, system of governance, risk profile, valuation basis, and capital requirements. In addition, the SFCRs include several Quantitative Reporting Templates (QRTs) providing details of the company's financial position under Solvency II.

This analysis compares information provided in the QRTs and SFCRs and makes observations about the balance sheets and risk exposures of health insurers in specific markets.

HEALTHCARE SYSTEMS INCLUDED IN THIS ANALYSIS

We focus on health insurers with domestic medical insurance business in the United Kingdom (UK) and European insurers selling primarily international private medical insurance (IPMI) products.

The IPMI market focuses on private health insurance for expatriates. IPMI coverage provides beneficiaries with private health insurance outside of their home countries and is designed to provide seamless access to comprehensive international healthcare services on a regional or global basis. IPMI policies are typically purchased by employers for employees with long-term assignments out of their home countries, but some policies are also purchased on an individual basis. The benefits under such policies are generally comprehensive in nature and are not tied to a specific country or healthcare system. The premiums are risk-rated, and a key difference in coverage is whether treatments in the United States (US) are included or excluded.

COMPANIES INCLUDED IN THIS ANALYSIS

For this analysis, we have included insurers that primarily sell private medical insurance (PMI). The selection criteria are defined as follows:

- We include companies classified under Solvency II as non-life or composite insurers and exclude those classified as life insurers.
- We exclude UK insurers primarily selling health cash plan products.
- We include Solo companies and remove Group entities to avoid double-counting of companies.
- To ensure that the figures we include in our analysis mostly relate to PMI business, we include companies that have at least 90% of their gross written premium (GWP) listed as 'medical' line of business (LOB). Hence, we exclude insurers that sell high volumes in other lines of businesses such as motor insurance or property and casualty insurance (e.g., Aviva in the UK) because it is not possible to isolate the capital charges for PMI alone based on the information included in the QRTs. This rule was applied as a first pass filter in order to remove a large portion of companies that are not predominantly health insurers. However, there are some exceptions to this rule. We review each company individually and include some companies that do not meet the 90% threshold, either because they have such a large presence in the relevant market, or they are very close to meeting the 90% threshold.
- We include the following insurers in the UK domestic market analysis:
 - AXA PPP Healthcare Limited
 - Bupa Insurance Limited
 - Vitality Health Limited
 - Western Provident Association Limited
 - Civil Service Healthcare Society Limited (prior to 2020. CS Healthcare was acquired by Bupa Insurance Limited at the end of 2020 and hence did not produce a SFCR for year end 2020)

- We classify the following insurers as IPMI insurers due to the high volume of business in IPMI products:
 - Cigna Life Insurance Company of Europe (CLICE) (Belgium)
 - Cigna Europe Insurance Company (CEIL) (Belgium)
 - Aetna Insurance Company Limited (UK)
 - Globality S.A. (Luxembourg)
 - OOM Global Care N.V. (Netherlands)
 - Allianz Worldwide Partners Health & Life (France)
 - UnitedHealthcare Insurance Designated Activity Company (Ireland)
 - Aetna Health Insurance Company of Europe Designated Activity Company (Ireland)
 - Bupa Global Designated Activity Company (Ireland)

Note that a number of domestic UK medical insurers include IPMI business in their UK domestic solo entity. It was not possible to split this from the domestic health business and so we applied some judgement as to whether to include these medical insurers as UK domestic or IPMI market participants.

UNDERLYING DATA

The analysis underlying this report focuses on the quantitative information contained in the public QRTs. The data tool by Solvency II Wire Data Ltd., which contains comprehensive information from the QRTs, was used to produce the results included in this report.

Where relevant, we studied the SFCRs to gain some additional insights into certain companies, in particular if they displayed characteristics that differed from the market average.

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 the Solvency II Wire Tool. We did not audit or verify 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 did not find material defects in the data. It should be noted that, in some cases, errors were spotted in the underlying data. We made minor adjustments to the data and calculated certain parameters to make the information consistent across all the insurers. However, we did not make any material changes to the underlying data. We did not make 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 were 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.

Note that all the figures published in this report were converted into euros, by the Solvency II Wire Tool, using exchange rates as at each SFCR's valuation date.

IMPACT DUE TO COVID-19

In February/March 2020 the virus named SARS-CoV-2, commonly referred to as COVID-19, began to spread widely in mainland Europe. Reporting for year-end 2020 saw many insurers commenting on their approaches to monitor and assess the impact of COVID-19 in the year as it unfolded and the future outlook. All UK medical insurers and IPMI insurers commented on COVID-19 in their SFCRs, some with dedicated sections on the pandemic effects and others commenting on it throughout.

Most medical insurers experienced lower claims volumes over 2020. A key driver for this in the UK was private hospital facilities being re-purposed as spare capacity for the National Health Service (NHS) for the initial lockdown period of the pandemic. During this period, elective surgeries and other treatments were postponed as the country prepared for a wave of patients utilising hospital beds. Several insurers commented that they were expecting the costs of claims to increase in the long run to compensate for the reduced utilisation during 2020. They additionally noted that the deferred cost of treating undiagnosed or untreated illnesses after delays in elective treatment could more than offset any reduction in claims during the lockdown periods when access to care was limited. Some insurers commented that the effect of this could extend out as far as 2022.

INFORMATION INCLUDED IN THIS ANALYSIS

- **Distribution of assets and liabilities (investment):** This section focuses on the main types of assets and liabilities of health insurers reporting under Solvency II. Given the importance of investments and Technical Provisions within the balance sheet, both items were analysed in greater detail.
- **Solvency Capital Requirement (SCR) breakdown:** This section focuses on the breakdown of the SCR for each company assessed in this analysis during 2020.
- **Market share:** This section focuses on the split of the market share for the companies included in this analysis.
- **Solvency coverage ratios:** A list of all the companies included in the analysis appears in a table in Appendix A. The table shows the companies' SCRs in 2020 and 2019 and capital model types.

Analysis

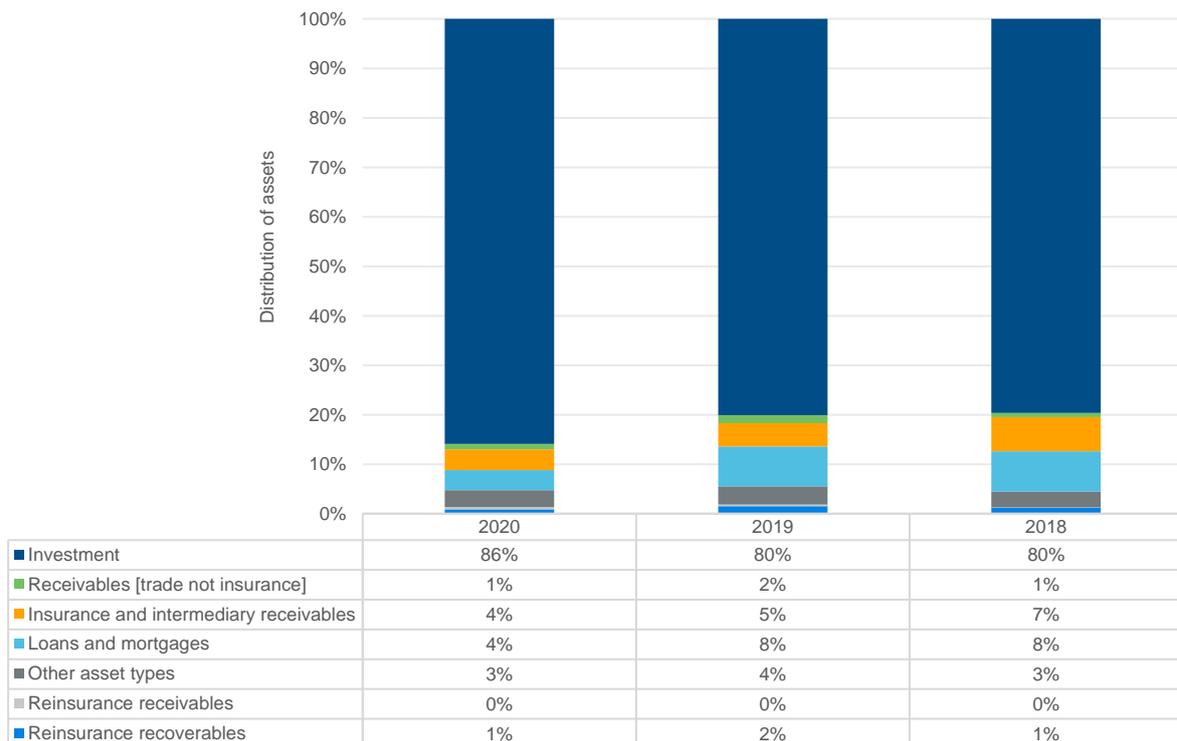
UNITED KINGDOM - DOMESTIC PMI BUSINESS

Distribution of assets

Investments form the majority of total assets across the UK as at year-end 2020. The overall proportion of assets in investments has increased by 6% from 2019 to 2020, with small decreases in other asset groups.

All of the companies analysed have greater than 80% of total assets in investments. Each company has differing splits of the remaining assets, with Bupa and AXA PPP having a significant proportion of their assets in loans and mortgages, whereas Vitality and Western Provident Association (WPA) have more of their assets in 'other asset types.'

FIGURE 1: DISTRIBUTION OF ASSETS FOR FIRMS BASED IN THE UNITED KINGDOM



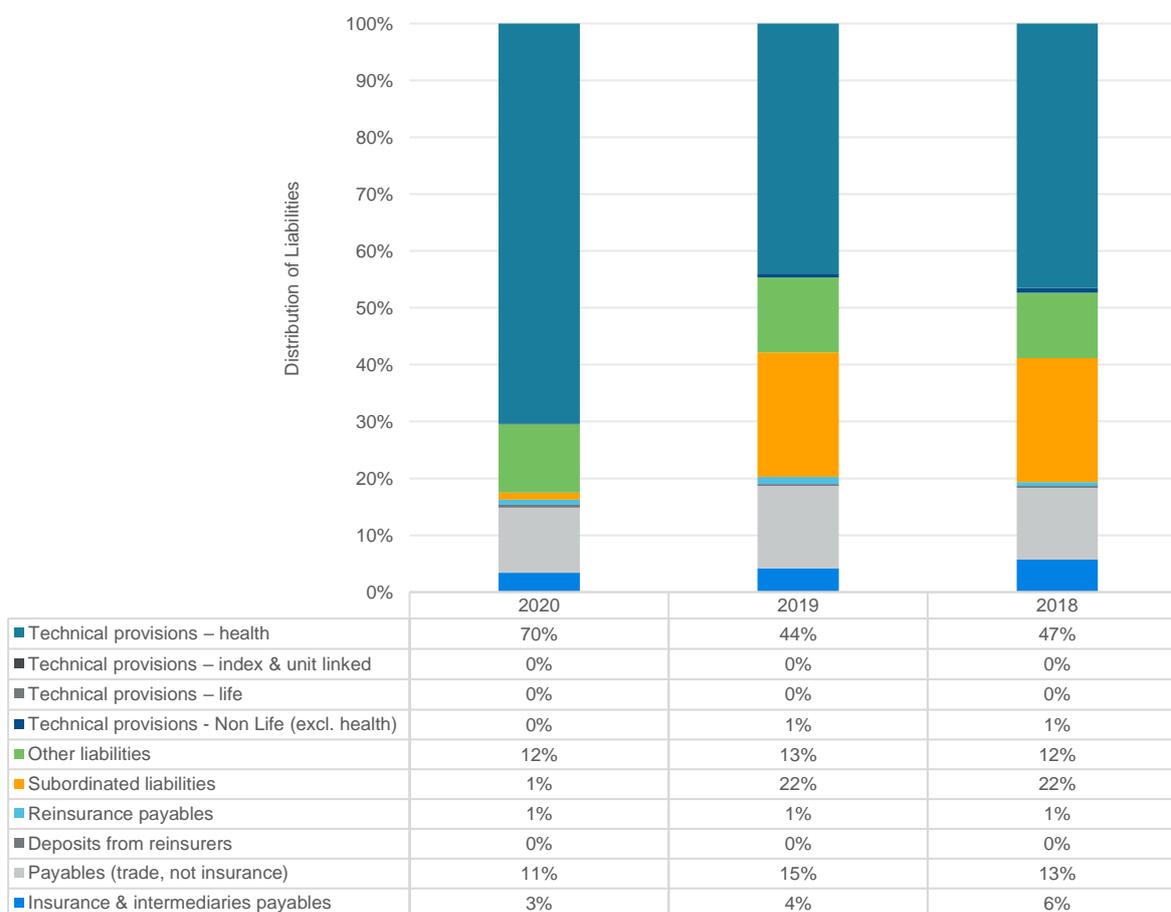
Distribution of liabilities

Technical provisions increased substantially from 2019 to 2020. As at year-end 2020, Technical Provisions make up more than 70% of Bupa and AXA PPP's liabilities in 2020, having previously made up approximately 45% to 50%. This reflects increased provisions for the deferred claims expected to occur after the year end due to the COVID-19 pandemic, as well as premiums expected after adjusting for potential premium rebates that Bupa and AXA PPP are offering members for the inability to use their benefits during the initial lockdown period of the pandemic.

The proportion of subordinated liabilities substantially reduced from 2019 to 2020, driven by Bupa which previously held just under 35% of liabilities here (approx. £400m). In 2020, Bupa held no subordinated liabilities as it fully repaid its subordinated loan in September 2020.

All companies, aside from Bupa, have a high proportion of liabilities in trade payables, with Vitality having the highest proportion at 39% as at year-end 2020, in line with previous years.

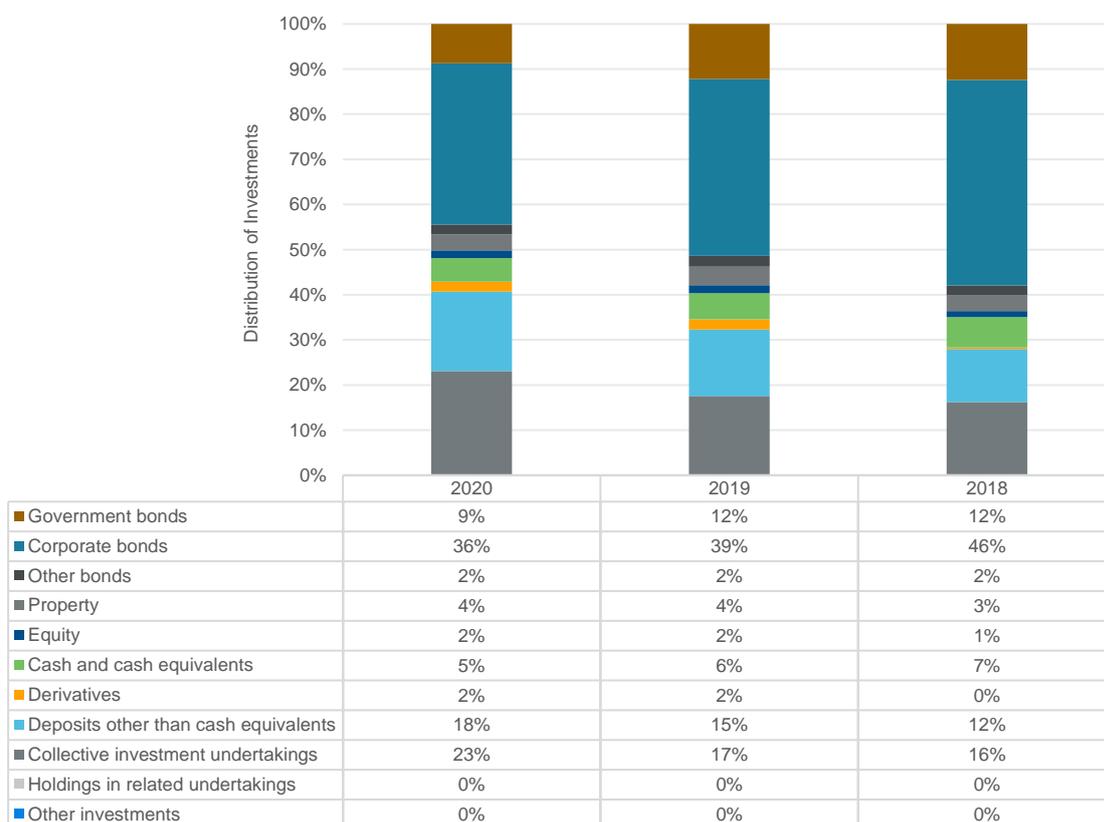
FIGURE 2: DISTRIBUTION OF LIABILITIES FOR FIRMS BASED IN THE UNITED KINGDOM



Distribution of investments

Around 46% of the total investments are attributed to bonds as at year-end 2020, compared with 52% in 2019. All other investments remain relatively stable from 2019 to 2020 with the exception of a small movement away from bonds into deposits other than cash equivalents, which sees a three-percentage-point increase and collective investment undertakings, which sees a six-percentage-point increase.

FIGURE 3: DISTRIBUTION OF INVESTMENTS IN THE UNITED KINGDOM



SCR breakdown

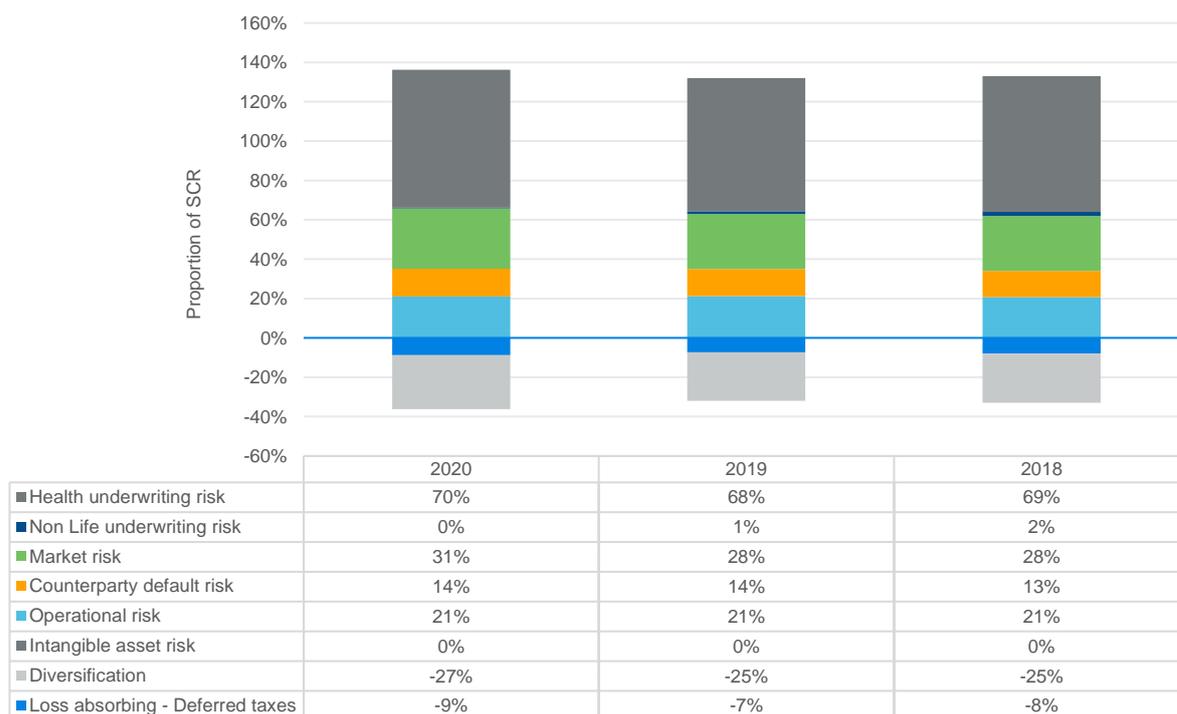
The SCR for the majority of health insurers is driven by the capital charge for health underwriting risk, with market risk and operational risk also making up large proportions of the SCR. In Figure 4 below, everything above the blue line represents a capital charge, such as health underwriting risk, market risk, and operational risk. Everything below the blue line represents a reduction to the SCR, e.g., for diversification benefits or the loss-absorbing capacity of deferred taxes. Overall, the distribution of the SCR is stable year-to-year, with some marginal movement between the modules.

For year-end 2020 we observe that health underwriting risk and market risk are usually the two highest proportions of the SCR, and at an overall level, both have a slowly increasing trend over the years.

Counterparty default risk is associated with multiple types of contracts such as reinsurance arrangements, securitisations and derivatives, receivables from intermediaries, policyholder debtors, cash at bank, deposits with ceding institutions, capital, initial funds, and letters of credit. All the insurers have a low exposure to counterparty default risk, which is consistent with their balance sheet positions, which tend to have lower levels of reinsurance recoverables and cash relative to other investments.

For most companies, operational risk forms a significant proportion of total SCR at year-end 2020. In the case of the UK, Bupa has a relatively high operational risk component of 27% of total SCR in 2020. AXA PPP is the only company to use a fully internal model for its calculations and has 21% of its SCR in the Operational Risk module (pre-diversification).

FIGURE 4: SCR BREAKDOWN FOR FIRMS IN THE UNITED KINGDOM

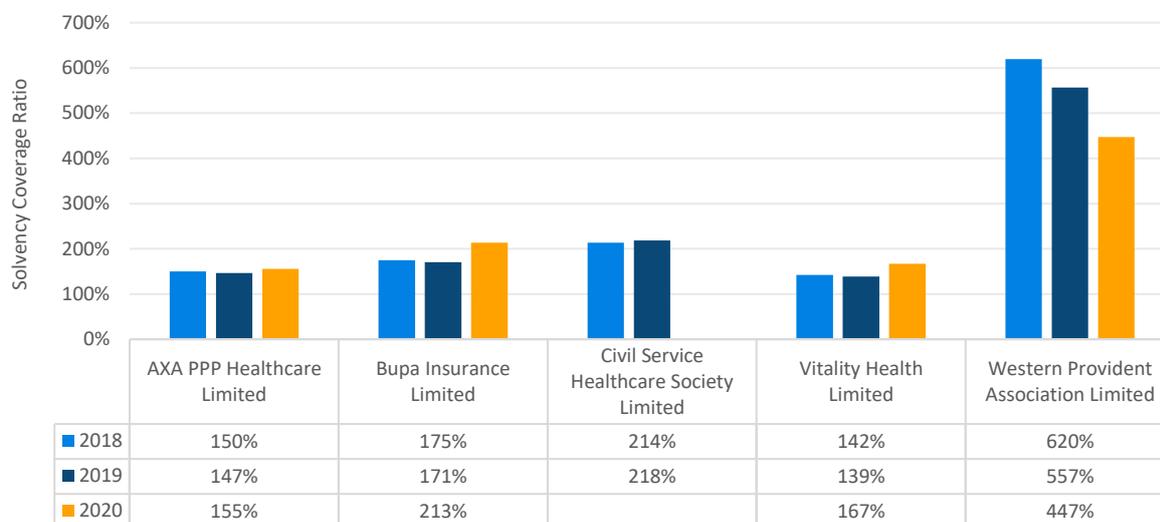


Solvency Coverage Ratio

All UK health insurers have SCR coverage ratios of over 150% in 2020, with Vitality and AXA PPP having ratios below 150% in 2018 and 2019. As at year-end 2020, the weighted average overall ratio is 198%, compared with 178% as at year-end 2019. This increase in weighted average solvency coverage ratio is driven by a significantly higher solvency ratio for Bupa, due to both an increase in eligible own funds as a result of the subordinated loan repayment in 2020 (which was only partially recognised under the Solvency II tiering restrictions) and a fall in the SCR.

The following table summarises the solvency coverage ratios of the UK health insurers from year-end 2018 to year-end 2020:

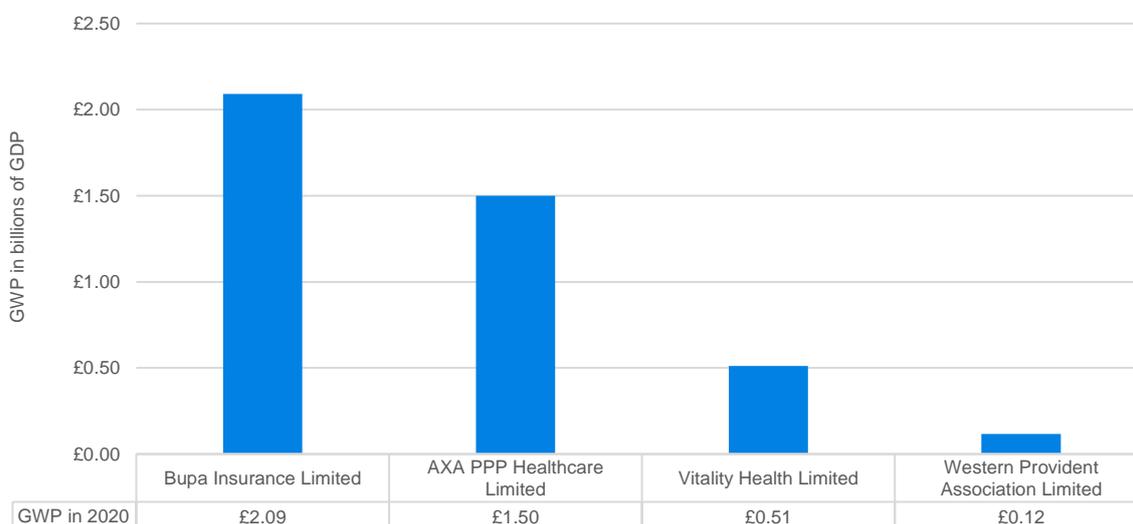
FIGURE 5: SOLVENCY COVERAGE RATIO BY UK PROVIDERS FROM 2018 TO 2020¹



Market share

In the UK, the PMI market is dominated by four major insurers: Bupa, AXA PPP, Aviva, and Vitality. We exclude Aviva from this analysis because the business is not split into a separate entity for health products and the medical GWP reported in Solvency II only makes up a small proportion of its total earnings. WPA is included as its medical GWP makes up the majority of its total earnings.

FIGURE 6: GROSS WRITTEN PREMIUMS (£ BILLIONS) BY PMI PROVIDERS IN THE UNITED KINGDOM, 2020



¹ In 2020 CSH was taken over by Bupa

INTERNATIONAL PRIVATE MEDICAL INSURANCE

Please note that the range of companies included in this report varies slightly from our previous SFCR reports. Namely, this year's analysis includes the following IPMI providers for all years for which there was data on the Solvency II Wire tool: Cigna Europe Insurance Company (CEIL), UnitedHealthcare Insurance DAC (UnitedHealthcare), Aetna Health Insurance Company of Europe DAC (Aetna Health), and Bupa Global DAC. Any material deviations in annual trends that relate to these three companies are highlighted through commentary.

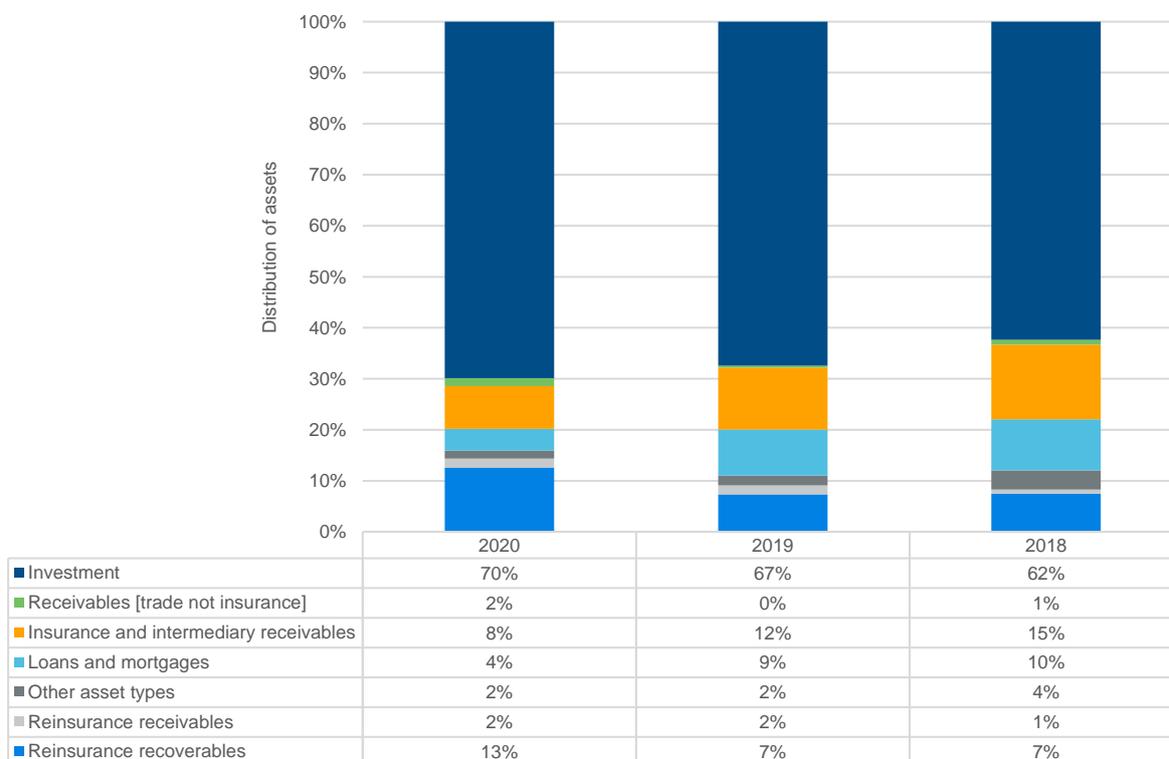
Distribution of assets

Investments form the majority of total assets across the IPMI companies, with the 2020 proportion being higher than 2019 due to increased investment holdings by Aetna Insurance Company Ltd. The proportion of assets held as reinsurance recoverables increased from 2019 to 2020, which is driven by a two-fold increase in Allianz's reinsurance recoverables and a new reinsurance arrangement in 2020. The proportion of assets held in investments, in aggregate, in the IPMI market is notably lower than the UK domestic medical insurance market.

Of the companies analysed, in 2020, Aetna Health, OOM, Bupa Global DAC, and UnitedHealthcare have over 92% of total assets in investments, and Aetna Insurance Company Ltd. has 87% of total assets in investments. The remaining companies, Allianz, Cigna CLICE, Cigna CEIL, and Globality, have between 63% and 73% of total assets in investments.

Each company has different allocations of its remaining assets, with Allianz holding a large proportion of assets in reinsurance recoverables and loans and mortgages, Cigna CLICE and CEIL holding more of their assets in either insurance receivables and reinsurance recoverables, and Globality holding more of its assets in insurance receivables and other asset types. Aetna Insurance Company Ltd. holds most of its other assets in insurance receivables.

FIGURE 7: DISTRIBUTION OF ASSETS FOR IPMI FIRMS



Distribution of liabilities

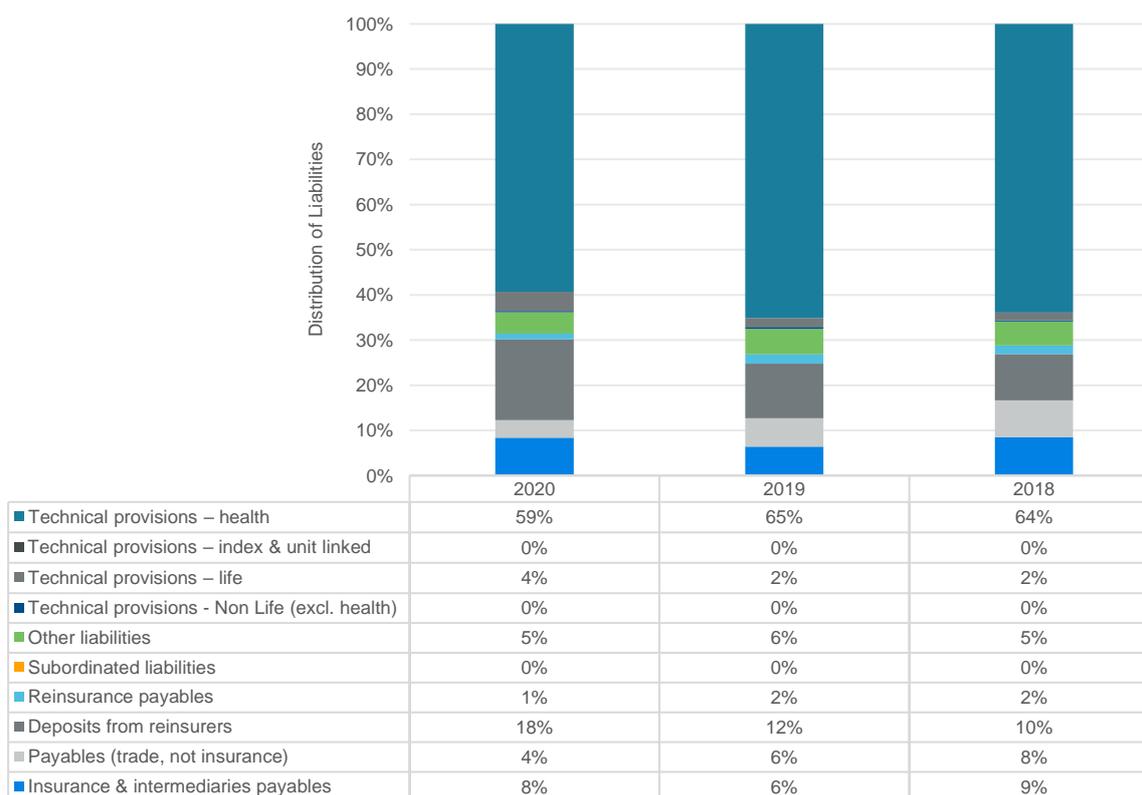
Technical Provisions make up the largest liability on all of the insurers' balance sheets, but their relative proportions vary considerably. Unlike the UK domestic health market, there is a decreasing proportion of liabilities allocated to Technical Provisions from 2019 to 2020. This is driven by Allianz, which saw a 20-percentage-point fall in liabilities allocated to Technical Provisions, partly offset by a 15-percentage-point increase in liabilities allocated to deposits from reinsurers and driven by a new reinsurance arrangement in 2020, where Allianz ceded 50% of its health covers as noted in its SFCR.

Allianz, Bupa Global DAC, and Globality have close to 65% of their liabilities attributed to health Technical Provisions at year-end 2020. Globality's remaining liabilities are spread fairly evenly over other liabilities and payables (trade and insurance), whereas Allianz has its liabilities concentrated in deposits from reinsurers, and Bupa Global DAC has its liabilities concentrated in other liabilities.

Cigna CLICE and CEIL and Aetna Health have fewer than 50% of their liabilities attributed to health Technical Provisions, with the majority of the remaining in deposits from reinsurers and insurance payables. The remaining liabilities for Aetna Health were attributed to payables (trade, not insurance) and other liabilities. Aetna Insurance Company Ltd. has almost 100% of its liabilities in Technical Provisions.

OOM and UnitedHealthcare both have 69% of liabilities attributed to health Technical Provisions as at year-end 2020, with OOM having the rest in insurance payables and UnitedHealthcare having the rest in trade payables.

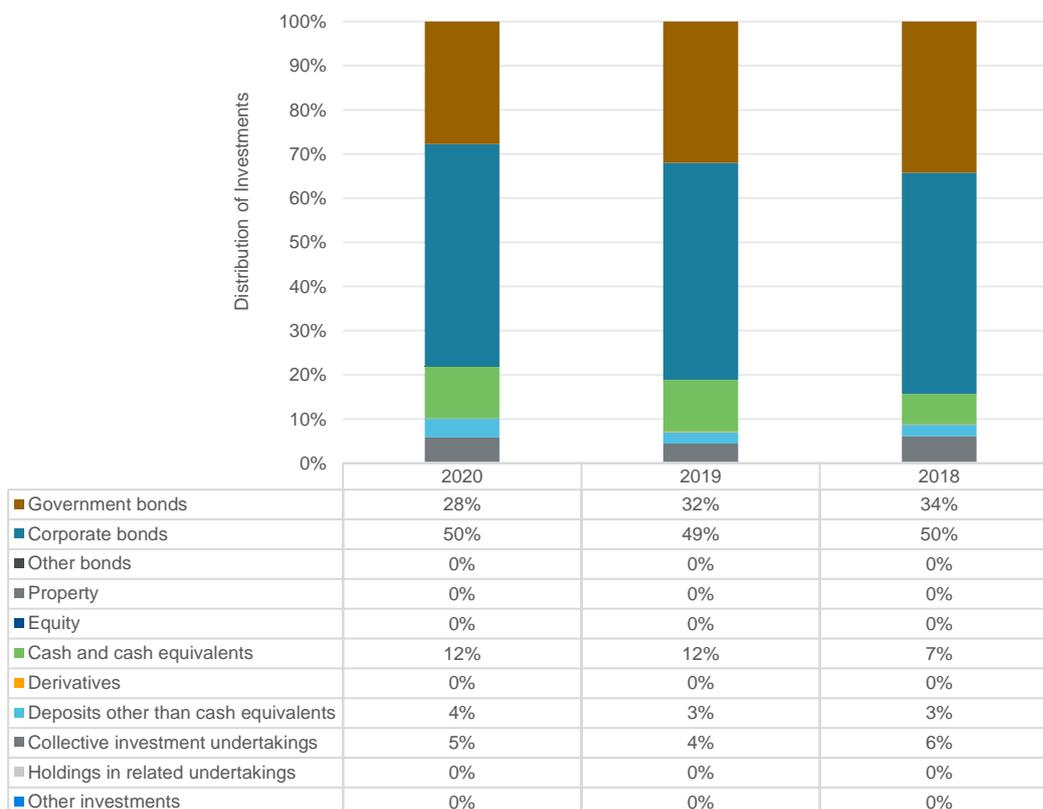
FIGURE 8: DISTRIBUTION OF LIABILITIES FOR IPMI FIRMS



Distribution of investments

Overall, IPMI insurers tend to invest the majority of their assets in bonds, though some insurers hold a large amount in cash and cash equivalents. IPMI insurers tend to have a higher proportion of investments in bonds when compared with UK domestic health insurers at year-end 2020. There is no significant movement from year-end 2019 to year-end 2020 in the distribution of investments.

FIGURE 9: DISTRIBUTION OF INVESTMENTS FOR IPMI FIRMS



SCR breakdown

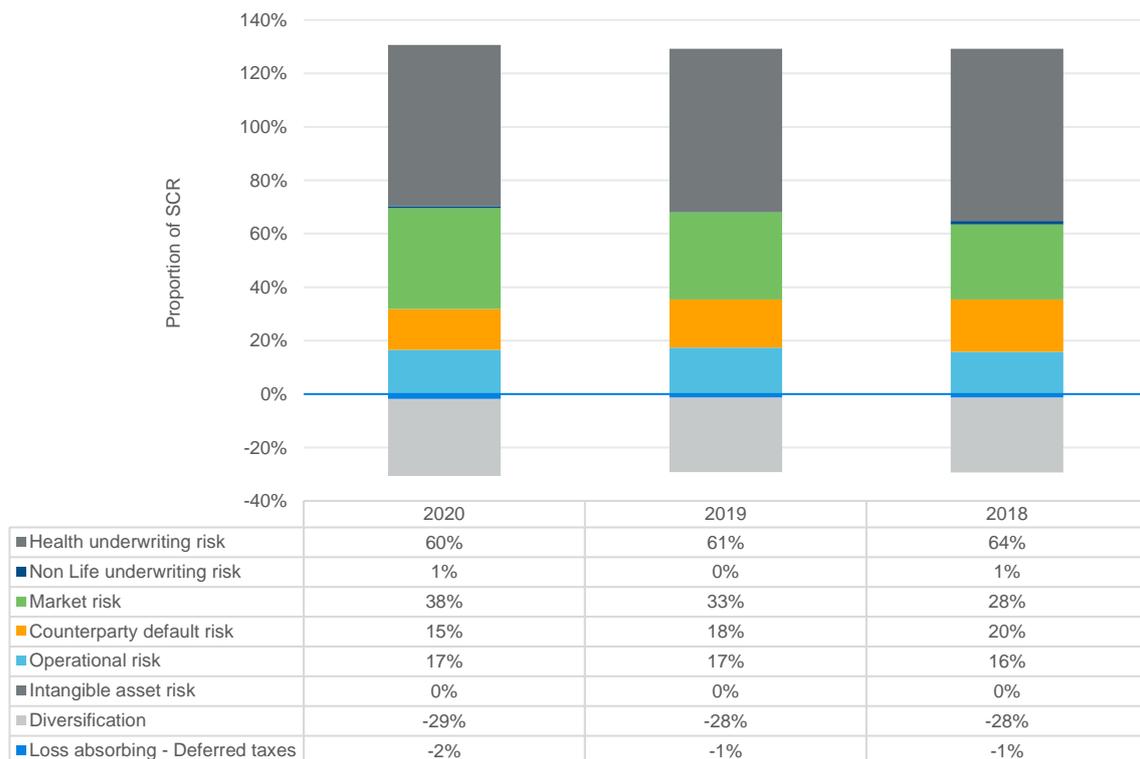
The SCR for the majority of IPMI health insurers is driven by the capital charge for health underwriting risk, with market risk, operational risk, and counterparty default risk also making up large proportions of the SCR. As in the UK analysis, in Figure 10, everything above the blue line represents a capital charge, such as health underwriting risk, market risk, and operational risk. Everything below the blue line represents a reduction to the SCR, e.g., for diversification benefits or the loss-absorbing capacity of deferred taxes.

We observe that health underwriting risk and market risk are usually the two highest proportions of the SCR. There is a small fall in the proportion of SCR attributed to health underwriting risk from 2019 to 2020, and a larger increase over the same period for market risk at an overall level. Both are driven by similar changes in the proportion of Allianz capital attributed to each category. OOM has the largest proportion (87%) in market risk of all IPMI companies.

Counterparty default risk is associated with multiple types of contracts such as reinsurance arrangements, securitisations and derivatives, receivables from intermediaries, policyholder debtors, cash at bank, deposits with ceding institutions, capital, initial funds, and letters of credit. Insurers have a range of 3% to 22% of their SCR in counterparty default risk, and Cigna CLICE is an outlier with 32% of its SCR in counterparty default risk. Cigna CLICE notes in its SFCR that external counterparty default risk considers cash at bank exposures, external reinsurance arrangements, and receivables from policyholders and intermediaries.

For Allianz, Bupa Global DAC, and Cigna CLICE, operational risk forms approximately 20% of total SCR, whereas for other insurers it is between 0.3% and 12%. Aetna Health holds 0.3% of its SCR for operational risk as at year-end 2020, having only started writing business from October 1, 2020, after the end of the Brexit transition period.

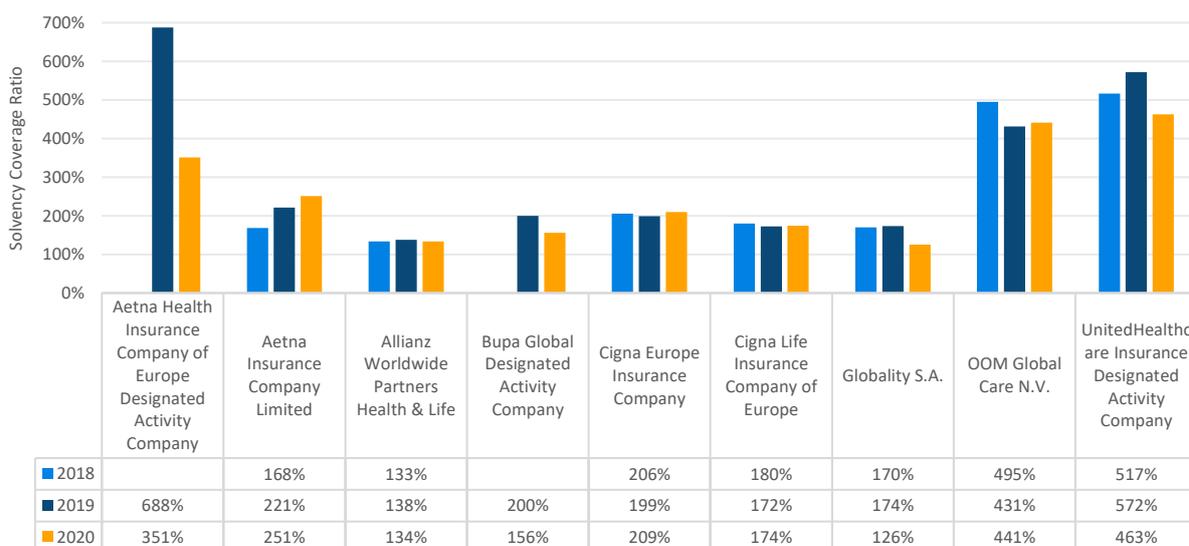
FIGURE 10: SCR BREAKDOWN FOR IPMI FIRMS



Solvency Coverage Ratio

The solvency coverage position of the IPMI health insurers is strong, with the majority of the IPMI insurers considered in this report having a coverage ratio in excess of 150% at year-end 2020. The weighted average ratio is 176% for year-end 2020, compared with 178% for year-end 2019.

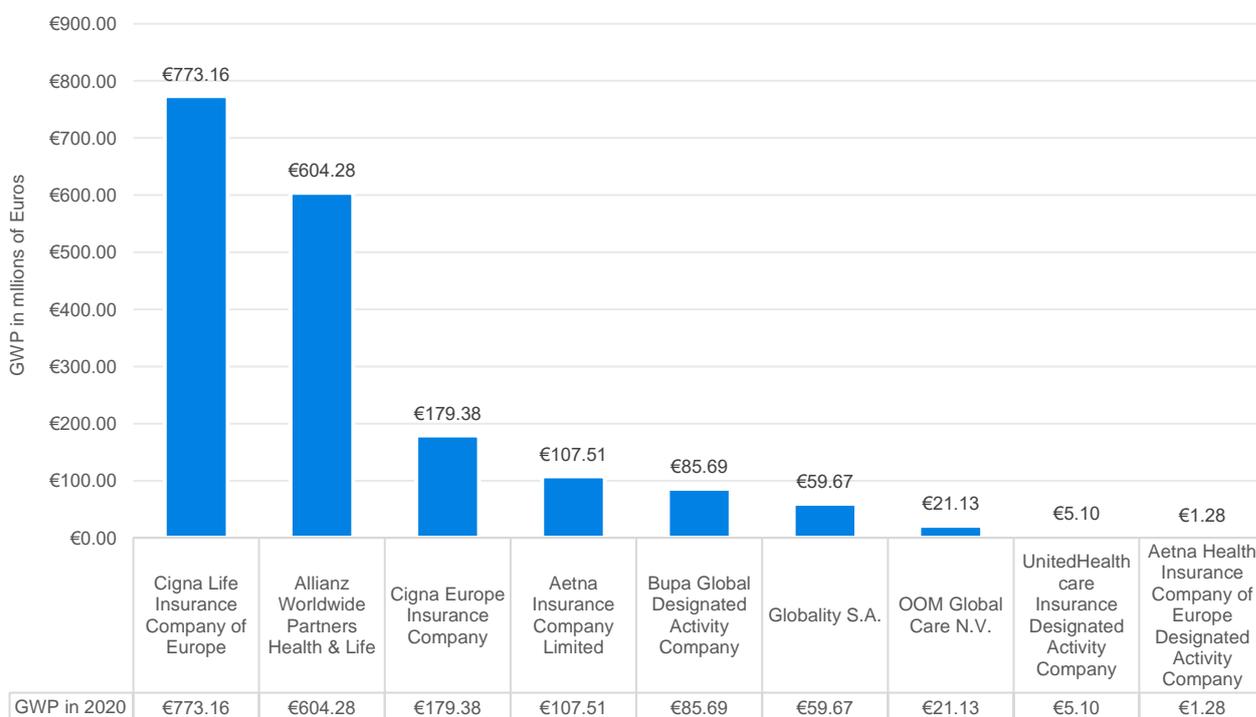
FIGURE 11: SOLVENCY COVERAGE RATIO BY IPMI PROVIDERS FROM 2018 TO 2020



Market share

The IPMI ‘market’ is currently dominated by five major providers: Cigna CLICE, Allianz, Cigna CEIC, Aetna Insurance Company Ltd., and Bupa Global DAC. UnitedHealthcare and Aetna Health are newer entrants to the market and currently have a lower portion of sales.

FIGURE 12: 2020 GROSS WRITTEN PREMIUMS BY IPMI INSURER



Summary observations

The majority of investments in both the UK domestic health and IPMI markets are held as some form of a bond (e.g., government, corporate) or otherwise in collective investment undertakings. Recent trends suggest some small reduction in bond holdings in favour of more investments in collective investment holdings.

Most liabilities for both market segments are Technical Provisions, which increased as a proportion of liabilities for the UK domestic market as at year-end 2020 compared with year-end 2019. This reflects potential delayed claims and premium rebate offers by some of the UK domestic PMI providers to compensate for reduced access to services during the COVID-19 pandemic. The proportion of liabilities as Technical Provisions has decreased in the IPMI segment from 2019 to 2020, largely driven by a decrease in liabilities classed as Technical Provisions by Allianz following the company entering into a new reinsurance arrangement.

Bupa Global DAC notes in its in SFCR that COVID-19 increased remote-access services, and that a number of services were uninterrupted, such as maternity and chronic conditions. Other insurers report a reduction in utilisation as a result of the pandemic and the expectation of a 'bounce back,' the level and timing of which is uncertain. The Cigna IPMI subsidiaries have a dedicated COVID-19 section in their SFCRs, which provides detail on the impact of COVID-19 on their business, performance, governance, and risk profile. Cigna IPMI subsidiaries mention that due to their longer-term modelling, COVID-19 has not materially impacted their Technical Provisions, with revenues from reduced utilisation partially offset with targeted financial support delivered through premium rebates, premium, and copay waivers.

Within the SCR, health underwriting risks and market risks are still the largest risk exposures of health insurers, based on the split of the SCR components, with the proportion of the SCR in each increasing slightly from 2019 to 2020 for the UK domestic market. Operational risks and counterparty default risks are also significant risk exposures for health insurers. Diversification benefits are significant for all the health insurers reviewed.

Overall, UK health insurers included in the sample are in strong positions at year-end 2020, with a weighted average SCR coverage ratio of 198%, which is higher than the weighted average SCR coverage ratio in 2019 of 178% for the same set of companies. The weighted average SCR coverage ratio for IPMI providers is 176% in 2020 over all companies, compared with a weighted average 2019 SCR coverage ratio of 178%.



Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

[milliman.com](https://www.milliman.com)

CONTACT

Joanne Buckle
joanne.buckle@milliman.com

Natasha Singhal
natasha.singhal@milliman.com

Appendix A: List of selected companies in 2020 and corresponding solvency coverage ratio

Note that certain companies do not have a populated model type or solvency coverage ratio.

FIGURE 13: SELECTED COMPANIES AND SOLVENCY COVERAGE RATIO IN 2020 AND 2019

COUNTRY	COMPANY NAME	SOLVENCY COVERAGE RATIO (2020)	SOLVENCY COVERAGE RATIO (2019)	CAPITAL MODEL TYPE
IPMI	Aetna Insurance Company Limited	251%	221%	Standard Formula
IPMI	Aetna Health Insurance Company of Europe DAC	351%	688%	Standard Formula
IPMI	Allianz Worldwide Partners Health & Life	134%	138%	Standard Formula
IPMI	Bupa Global DAC	156%	200%	Standard Formula
IPMI	Cigna Europe Insurance Company	209%	199%	Partial Internal Model
IPMI	Cigna Life Insurance Company of Europe	174%	172%	Partial Internal Model
IPMI	Globality S.A.	126%	174%	Standard Formula
IPMI	OOM Global Care N.V	441%	431%	Standard Formula
IPMI	UnitedHealthcare Insurance DAC	463%	572%	Standard Formula
UK	AXA PPP Healthcare Limited	155%	147%	Full Internal Model
UK	Bupa Insurance Limited	213%	171%	Standard Formula (with Undertaking Specific Parameters)
UK	Civil Service Healthcare Society Limited	NA	218%	Standard Formula
UK	Vitality Health Limited	167%	139%	Standard Formula
UK	Western Provident Association Limited	447%	557%	Standard Formula