2. The European insurance sector

The market-based Solvency II (SII) regime came into force in January 2016 and required insurance companies to align with new rules and standards.\(^\text{10}\)

In recent years, insurers had been taking actions to improve their solvency position, by e.g. accumulating specific reserves on their balance sheet as well as changing their product mix towards less capital-intensive products. The SII strengthens insurers’ risk management and introduces further harmonisation at the European level, thereby promoting a level playing field for all insurance companies in Europe.

The implementation of Solvency II was a major step forward to reinforce policyholder protection, especially in a period where insurance companies had to cope with challenges triggered by a difficult economic and financial environment, with persistent low interest rates questioning their solvency position and the sustainability of their promises and business models.

With SII, starting in January 2016 insurance undertakings are subject to a risk-based supervisory regime. SII rules stipulate the minimum amounts of financial resources that insurers and reinsurers must have in order to cover the risks to which they are exposed. Equally importantly, the rules also lay down the principles that should guide insurers' overall risk management so that they can better anticipate any adverse events and better handle such situations.

SII introduced economic risk-based solvency requirements across all EU Member States. These new solvency requirements are more risk-sensitive and more sophisticated than in the past, thus enabling a better coverage of the real risks run by any particular insurer. The new requirements move away from a crude "one-model-fits-all" way of estimating capital requirements to more entity-specific requirements. Solvency requirements will be more comprehensive than in the past and also take into account the asset-side risks.

Insurance companies need to disclose information in the "Quantitative Reporting Templates" (QRTs) to EIOPA and national supervisors for supervisory purposes. EIOPA makes use of this data for the first time in this financial stability report (FSR).

\(^{10}\) Solo data is used for country and business line analysis in this report. The data description section on page 66 gives more information on data used in this FSR.
**EIOPA is currently in the process of building a comprehensive information system based on the data collected under the new harmonized QRTs.** This creates a unique opportunity to improve the functioning of the internal market, in particular by ensuring a high, effective and consistent level of supervision, preventing supervisory arbitrage, guaranteeing a level playing field and ensuring a similar level of protection to all policyholders. On the other hand, the risk based approach represents an enormous opportunity to improve risk management over time, embeds a risk culture in the organisations and develop sustainable business models putting customers at the centre of the insurance company's strategy.

**Solvency II is a prudential regime based on risks and uses specific models to evaluate assets, liabilities and capital requirements for insurance companies.** It should be kept in mind though that Solvency II results differ when compared with results of the previous Solvency I regime. Hence, a full understanding of Solvency II needs to be developed over time.
2.1. Overview

This chapter provides an overview of the insurance undertakings subject to SII regulation and discusses some key aspects of the insurance market.\textsuperscript{11}

The size of insurance undertakings can be measured by total assets, TP (technical provisions) and GWPs (gross written premiums). Table 2.1 shows that for the largest undertakings in Europe (subject to Financial Stability reporting), total assets are more than EUR 92bn (EUR 50bn) in Q2 of 2016. Also, for the average (median) company, more than EUR 75bn (EUR 40bn) of insurers’ liabilities are TPs, i.e. contractual obligations to policyholders. Finally, the average (median) company, writes more than EUR 3bn (EUR 1.3bn) GWP in Q1. The table also shows the cross-sectional distribution of the discussed variables. The aggregate amounts (total of the sample) of total assets, TPs and GWP are shown in the last column of Table 2.1.

Table 2.1: Summary statistics in EUR mn

<table>
<thead>
<tr>
<th>Percentile</th>
<th>average</th>
<th>min</th>
<th>10th</th>
<th>25th</th>
<th>median</th>
<th>75th</th>
<th>90th</th>
<th>max</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>92,485</td>
<td>40</td>
<td>16,373</td>
<td>23,852</td>
<td>50,803</td>
<td>98,590</td>
<td>200,639</td>
<td>691,882</td>
<td>7,768,705</td>
</tr>
<tr>
<td>TP</td>
<td>75,243</td>
<td>25</td>
<td>12,014</td>
<td>18,466</td>
<td>40,981</td>
<td>81,066</td>
<td>163,942</td>
<td>560,032</td>
<td>6,320,445</td>
</tr>
<tr>
<td>GWP</td>
<td>3,214</td>
<td>3</td>
<td>355</td>
<td>879</td>
<td>1,386</td>
<td>2,964</td>
<td>7,273</td>
<td>36,061</td>
<td>269,982</td>
</tr>
</tbody>
</table>

Source: EIOPA (sample based on 84 insurance groups in EEA)

Reporting reference date 30/06/2016 for Total assets and TP and 30/03/2016 for GWP

Insurance companies do different types of activities such as life and non-life business and may insure directly or reinsure.\textsuperscript{12}

\textsuperscript{11} The 84 insurance groups represent approximately 77 per cent of total assets of insurers subject to Solvency II.

\textsuperscript{12} A further breakdown is by lines of business. The Implementing Technical standards define twelve lines of business for non-life companies in the reporting templates: 1) medical expense insurance 2) income protection insurance 3) workers’ compensation insurance 4) motor vehicle liability insurance 5) other motor insurance 6) marine, aviation and transport 7) fire and other damage to property insurance 8) general liability insurance 9) credit and suretyship insurance 10) legal expenses insurance 11) assistance and 12) miscellaneous financial loss. For life insurance companies, there are six lines of business 1) health insurance 2) insurance with profit participation 3) index-linked and unit-linked insurance 4) other life insurance 5) annuities stemming from non-life insurance contracts and relating to health insurance obligations and 6) annuities stemming from non-life insurance contracts and relating to insurance obligations other than health insurance obligations.
The share of life business for each individual undertaking is shown in the sample (Figure 2.1). Most insurance groups offer both life and non-life products. The business mix is slightly unbalanced towards life insurance business (with the median having a share of life business of 65 per cent).

*Figure 2.1: Gross Written Premiums (GWP) - Share life business in per cent*

Reinsurance is the process of multiple insurers sharing an insurance policy to reduce the risk for each insurer. The company transferring the risk is called the "ceding company"; the company receiving the risk is called the "assuming company" or "reinsurer."

The share of reinsurance business (in terms of gross written premium) for each individual undertaking is shown in the sample (Figure 2.2). Only six insurance groups have more than 20 per cent of the reinsurance companies' share.
Based on the geographical location of the subsidiaries each group can be classified into the categories domestic, European and global. From the groups that report to Solvency II, about 11 per cent are domestic, 22 per cent European and 67 per cent global.

The size of the insurance sector varies substantially across countries (Figure 2.3). Liechtenstein and Luxembourg rank highest when total assets are used; Bulgaria, Latvia, Lithuania and Romania rank lowest. The potential for growth is hence more likely in countries with a low rate of total assets as a share of GDP in per cent.

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13 The classification is based on total assets, where all activities and not only the insurance activities are considered. Note: if more than 90 per cent of subsidiaries’ total assets are within the country, the group is domestic. If more than 90 per cent of the subsidiaries total assets are out the EEA, the group is global. The remaining companies are EEA groups.

14 Listing of countries is in alphabetical order throughout the report.
The size of the insurance market and the business mix (i.e. life vs. non-life) varies substantially across countries as well (Figure 2.4). Also Liechtenstein and Luxembourg rank highest; Greece, Lithuania, Romania and Poland lowest.

The sale of life insurance products is particularly pronounced in countries with high household wealth and income. These markets often benefit from international customers. The price an insurance company can charge for a product or line of business is influenced heavily by supply and demand for the type of coverage on offer. Changes in tax rules, in legislation or in consumer preferences can herald a considerable shift away from traditional life insurance. Life insurance policies can be "pure insurance" products, savings products or a combination of both. The lines between products become increasingly blurred and some insurers might be better positioned than others to respond, by offering a product range which encompasses the broader financial services market. In fact, recently increased taxation on premiums or reduced tax incentives for long-term life and savings products contributing to declining premium growth were observed in some countries.
Life insurance contracts in some countries entail a market risk for the insurance company in case they offer policyholders a guaranteed rate of return. In order to meet these guarantees, the life insurance companies must choose in their asset and liability management an asset mix that is the most appropriate for both the structure and the characteristics of the associated liabilities, while establishing a balance between the risks on the investment portfolio and the expected rates of return.

The low interest rate environment fosters the evolution of business models towards unit-linked investments, shifting investment risks to policyholders. This changes the business model and increases competition between asset managers and insurers. In addition, the life insurance market may be on the verge of growth. Demographic changes coupled with low interest rates might lead to an increase in European households' long-term savings. If current trends continue, then the growth of unit-linked products may be even stronger.

The trend towards more unit-linked business is visible in the recent quarter (Table 2.5). This notwithstanding, these products are more complex to both manage and sell but the return is linked to the performance of global financial markets which
have slightly recovered in the first half of 2016. The insurance sector gradually lowers or even removes overall guarantees on returns in some countries. Consequently, risks related to longer-term returns on assets become largely allocated to policyholders.

Table 2.5: GWP-Life business: Unit-linked share

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Q1 (31/03/2016)</th>
<th>Q2 (30/06/2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th</td>
<td>0.03</td>
<td>1.04</td>
</tr>
<tr>
<td>25th</td>
<td>1.63</td>
<td>4.53</td>
</tr>
<tr>
<td>median</td>
<td>14.46</td>
<td>16.58</td>
</tr>
<tr>
<td>75th</td>
<td>32.11</td>
<td>34.98</td>
</tr>
<tr>
<td>90th</td>
<td>70.53</td>
<td>62.10</td>
</tr>
</tbody>
</table>

 average 22.34 24.92

Source: EIOPA, Reporting reference date: 30/06/2016

For life insurance companies the lapse rates have been growing to some extent for the median company (Table 2.6). Several insurance undertakings have introduced some penalties during stressed periods. The evolution of lapses will be monitored carefully by EIOPA in the current low yield environment.

Table 2.6: Lapse rate

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Q1 (31/03/2016)</th>
<th>Q2 (30/06/2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>25th</td>
<td>0.23%</td>
<td>0.41%</td>
</tr>
<tr>
<td>median</td>
<td>0.85%</td>
<td>1.20%</td>
</tr>
<tr>
<td>75th</td>
<td>1.79%</td>
<td>2.31%</td>
</tr>
<tr>
<td>90th</td>
<td>5.76%</td>
<td>5.37%</td>
</tr>
</tbody>
</table>

Source: EIOPA, Reporting reference date: 30/06/2016

Other liquidity monitoring tools include reporting requirements, supervisory on site and off site inspections. Insurance companies monitor their current liquidity situation and funding condition which in turn is monitored by the insurance
regulator in each country. In addition, Global Systemically Important Insurers (G-SII) have to develop Liquidity Risk Management Plans (LRMPs). Insurers using the Matching Adjustment (MA) or the Volatility Adjustment (VA) also have to develop a liquidity plan. In this context it should be mentioned that so far no significant liquidity pressure have been observed. Hence, the liquidity risk for insurance companies currently remains limited.

**In terms of technical provisions, life insurance is by far the largest item per business line** (Figure 2.7). The Solvency II Directive requires that insurance and reinsurance undertakings have processes and procedures in place that ensure the appropriateness, completeness and accuracy of the data used in the calculation of their TP.

*Figure 2.7: Technical Provisions (TP) - by business line in per cent*

![Figure 2.7: Technical Provisions (TP) - by business line in per cent](image-url)

*Source: EIOPA (sample based on 2600 solo undertakings in EEA)*

*Reporting reference date: 30/06/2016*
2.2. Profitability

Insurance companies face challenges arising from a prolonged period of low interest rates. This applies especially to undertakings with a material exposure to life insurance contracts with guarantees.

Long-term interest rates as for example 10-year government bond yields remain historically low. The rising share of negative or low yielding debt securities and long periods of such low interest rates could potentially harm the insurance sector and render it more difficult to produce sufficient income to cover the current interest rate guarantees (i.e. the risk gradually materializes over time). Eventually insurance undertakings could struggle to generate adequate returns to meet their long-term liabilities.

**Maturing assets will have to be re-invested in order to match the cashflow profiles of all outstanding liabilities, exposing the insurer to reinvestment risk.** If the low interest rate environment were to persist for a long time, this reinvestment risk could materialise in the coming years, especially if the large unrealised capital gains on bond portfolios are used for payouts in the short-run. Also, if there is a lack of long-term (maturity over 10 years) fixed-income instruments, this can pose a risk from an asset-liability matching point of view for life insurance undertakings. Duration mismatches could be compounded by negative investment spreads, if yields on long-term bonds fall below investment returns that have been promised to policyholders. Such challenges have prompted concerns that by squeezing returns, negative rates could incentivise insurance companies to take on inappropriately risky assets.

**In order to protect themselves against the effects of low interest rates on the profitability, insurers need to boost returns.** Insurance companies have various tools to address the risks of persistently low interest rates. They can increase the duration of their assets in order to ensure a better duration match between assets and liabilities or they can alter the terms of new policies by lowering guarantees, thereby lowering liabilities. In some countries, insurance groups currently sell their life insurance subsidiaries or simply stop writing new business. The current low interest rate environment and increased life expectancy simply poses challenges for life insurance companies and pension funds that could worsen in the medium to long run. The impact of low interest rates is heavily dependent on the business model. It is expected to be the highest for small and medium sized life insurers with large
government bond portfolios and high guarantees to policyholders, especially where contracts embed a long time to maturity.

**In order to boost returns, insurance companies could also shift their asset allocation towards more illiquid assets and higher-yielding (but lower-quality) investments.** New business increasingly aims at reducing risk, as seen in the growth of unit-linked insurance or in the shift to more short-term life protection business or biometrical products. The maximum interest rates on insurance contracts are currently lowered in many countries in order to better reflect the current market conditions. In this environment insurance companies could be encouraged to excessive risk-taking, which could contribute over time to the formation of asset price bubbles. However, increases in house and equity prices have thus far remained moderate.

**Article 132 of Solvency II introduces the "prudent person principle" which determines how undertakings should invest their assets.** The absence of regulatory limits on investments does not mean that undertakings can take investment decisions without any regard to prudence and to the interests of policyholders.

**The net Combined Ratio remains low for the median company across business lines** (Figure 2.8). However, the motor insurance segment faces industry-wide pressures. In the short term, intense competition and higher expected claims are likely to continue to constrain profitability, but in the long term the motor sector may benefit from the usage of telematics data to help pricing the risk of a driver more accurately. On the other hand, the sector may face several challenges such as the introduction of driverless cars which will reshape the sector completely. Hence, the profitability of this segment may be scrutinised in the future.
In the current low yield environment maintaining profitability is getting more and more difficult as reflected by market returns (Figure 2.9). The downward trend, however, seems to have come to a halt in the last months, both for banks and insurance companies alike.

Source: Bloomberg; Last observation: 15/11/2016
Return on equity (ROE) dropped for the median from 11.4 per cent in 2014 to 10.5 per cent in 2015 (Figure 2.10). The long-term sustainability of the profitability needs to be monitored as the current low yield environment will eventually have a negative effect in the medium-to-long term for all business lines. Mainly affected will be life insurers with a large portion of endowment contracts with guarantees and non-life insurers with long-tail business lines.

Figure 2.10: Return on Equity (in per cent)

[Graph showing median RoE (%)]

Source: S&P Capital IQ, 148 insurance undertakings from 23 EEA countries

ROA did also drop slightly in 2015 (Figure 2.11). The median ROA dropped from 1.07 per cent in 2014 to 1.01 per cent in 2015.

Figure 2.11: Return on Assets (in per cent)

[Graph showing median RoA (%)]

Source: S&P Capital IQ, 148 insurance undertakings from 23 EEA countries
2.3. Solvency

The Solvency II framework implies a completely different approach to assessing the solvency of insurance undertakings as compared to the Solvency I regime that was applicable up to the beginning of 2016. Following the introduction of Solvency II, several insurance companies have been taking measures to improve their capital positions and optimize their asset and liability profile. In Europe, solvency concerns can arise for European life insurers due to guaranteed policy pay-outs exceeding investment yields, and long asset liability duration mismatches. In order to properly consider an insurance undertaking’s solvency position, it is necessary to evaluate its assets and liabilities.

Before Solvency II came into force, insurance companies built up their capital positions (Figure 2.12). In the two years prior to the introduction of Solvency II, insurance undertakings built up capital.

Figure 2.12: Total Equity (in EUR mn)

Source: S&P Capital IQ, 148 insurance undertakings from 23 EEA countries

Insurance companies are required to hold eligible own funds at least equal to their respective Solvency Capital Requirement (SCR) at all times in order to avoid supervisory consequences with various levels of severity. A common reference is to measure the amount of assets over liabilities. Insurance companies must have own funds available to cover any unexpected losses that might incur. Own funds therefore ensure that policyholders’ claims against the insurers are covered.
even under adverse circumstances. The solvency of an insurance company is deemed sufficient if the level of own funds meets at least the required solvency margin (own funds requirements).

**An adequate level of capital will ensure proper protection of the policyholders and beneficiaries.** Insurance companies should calculate the SCR at least once a year according to the standard formula or by applying a (full or partial) internal model. The SCR calculated on the basis of the standard formula is the sum of the Basic Solvency Capital Requirement, the capital requirement for operational risk and the adjustments for the capacity to absorb unexpected losses of technical provisions and deferred taxes.

**Under the Solvency II regime, total assets and liabilities have to be calculated at market or market-consistent values, with a company’s own funds being defined as the difference between the assets and liabilities at market value.** Therefore, the estimated value of the technical provisions will be high, when market interest rates are low. Insurance companies’ liabilities are mainly technical liabilities (for which market values as such are not available). The value of these reserves is arrived at by calculating the present value of the incoming and outgoing cashflows on the basis of the discount rate. This discount rate is a risk-free rate on the basis of market swap rates with maturities of up to 20 years, currently extrapolated to the ultimate forward rate of 4.2 per cent for maturities beyond 20 years.\(^{15}\)

**As of June 2016, all of the insurance groups reported sufficient SCR coverage** (Figure 2.13). The SCR coverage ratio for the median non-life insurance company is 210 per cent and is approximately equal for life companies (209 per cent) and for undertakings pursuing both life and non-life business (201 per cent). While the sector overall seems well positioned for Solvency II capital requirements, the analysis of the solvency margins also revealed that some insurance companies, typically smaller ones, in some European countries were not adequately capitalised.

\(^{15}\) See chapter 2.4 in this report for more information on regulatory developments
As of June 2016, the SCR coverage ratio by country was sufficient for the EEA average (Figure 2.14). However, the 10th per centile of Malta, Poland and Romania is loss making at country level.
In order to smooth the transition towards the new regulatory framework, Solvency II has put in place transitional measures.

**Most undertakings made use of both transitional measures and volatility adjustments in their ratio calculations.** This means that some insurance companies, with the consent of the supervisory authority, may apply transitional measures that extend the period of adaptation to the Solvency II requirements for as long as 16 years. Also, volatility stemming from interest rate changes is an impediment to comparing individual SCR ratios. Detailed knowledge about the assumptions underlying the ratios is a prerequisite to gauging the financial strength based on Solvency II results. Insurers put transitionals in place for derisking balance sheets and increasing capital.
Several LTG and transitional measures have been introduced in Solvency II in order to allow a smooth transition. This could lead to a gradual increase of solvency needs (as the effect of the transitional measures is gradually lowered over time).

On the other hand, the use of the transitional measures or volatility adjustments reduces the comparability of Solvency II results. A deterioration in equity markets could result in a number of potential issues impacting capital. These could arise in the form of credit defaults and equity impairments. Widening credit spreads are not a problem per se, but, if seen to a major extent, these issues could hit capital materially as they increase the denominator of the Solvency II ratio (i.e. capital requirements) and decrease the numerator (i.e. available capital). In such a scenario, Solvency II ratios could decline faster than the rates suggested in reported sensitivities, as the latter tend to only reflect spread movements. There is some uncertainty about how companies would cope with a stress situation.

2.4. Regulatory developments

After the entry into force of Solvency II on 1st January 2016, insurance and reinsurance undertakings have started to report to their National Competent Authorities (NCAs) according to the new regime. The templates for the submission of information to the supervisory authorities according to Solvency II have been amended by Commission on 20th October 2016 in order to make the necessary adaptations following the amendments of the Solvency II Delegated Regulation adopted in April 2016; in particular the templates have been amended in order to ensure that supervisors collect all the relevant information concerning qualifying infrastructure investments made by insurance and reinsurance undertakings as well as investments in European Long-Term Investment Funds (ELTIFs) and equities traded on multilateral trading facilities (MTFs).

On 9th September 2016 Commission has adopted the implementing technical standards (ITS) with regard to the procedures for the application of the transitional measure for the equity risk sub-module in Article 308b (13) of the Solvency II Directive. Since the transitional measure applies to equities purchased on or before 1 January 2016, the IT'S refer to the procedure to be followed by insurance and reinsurance undertakings for the appropriate identification and documentation of those equities.
Furthermore, on 11th October 2016 Commission has adopted the ITS with regard to the allocation of credit assessments of external credit assessment institutions to an objective scale of credit quality steps. For the purposes of the calculation of the solvency capital requirement, credit assessments of external credit assessment institutions (ECAIs) are allocated to an objective scale of seven credit quality steps, from zero to six.

In April 2016, EIOPA published a Consultation Paper on the methodology for deriving the Ultimate Forward Rate (UFR) and its implementation. EIOPA will provide an update of the UFR at the end of December 2016.

Furthermore, EIOPA published changes to the relevant financial instruments used to derive the Risk Free Rate (RFR). EIOPA will implement these changes for the calculation of the RFR at the end of December 2016.

As part of the process of post-evaluation of the new insurance supervisory regime, EIOPA has received on 18th July 2016 a call for technical Advice from the Commission for the review of the Solvency Capital Requirement (SCR) standard formula. This call has two priorities: simplifications and proportionate application of the SCR requirements as well as the removal of technical inconsistencies, i.e. recalibration of certain risks and other technical issues. The Commission have requested the technical advice of EIOPA in preparation of the review of the Solvency II Delegated Regulation which is expected to be carried out in 2018.

Following the adoption of the Insurance Distribution Directive (IDD) in January 2016, EIOPA published on 13th April 2016 the Preparatory Guidelines on Product Oversight and Governance arrangements (POG). Insurers (manufacturers of insurance products) and distributors need to follow these arrangements, including requirements such as the appropriate identification of the group of consumers for whom each product is designed (the “target market”). Also products are aligned with the relevant interests and objectives of the target market in this context as is the usage of appropriate distribution channels. The preparatory Guidelines provide early guidance and support NCAs and market participants with the implementation of POG requirements in preparation for formal requirements provided for in the Directive and to be further specified in the delegated acts.
In this regard, EIOPA received from the Commission on 24th February 2016 a request for technical advice on possible delegated acts concerning the IDD. These delegated acts are expected to be approved in 2017 including provisions regarding POG as well as conflicts of interest, inducements, assessment of suitability and appropriateness and reporting.