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PART 3/4

COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT REPORT

Accompanying the documents

Proposal for a Directive of the European Parliament and of the Council amending Directive 2009/138/EC as regards proportionality, quality of supervision, reporting, long-term guarantee measures, macro-prudential tools, sustainability risks, group and cross-border supervision

and Proposal for a Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of insurance and reinsurance undertakings and amending Directives 2002/47/EC, 2004/25/EC, 2009/138/EC, (EU) 2017/1132 and Regulations (EU) No 1094/2010 and (EU) No 648/2012

{COM(2021) 581 final} - {SEC(2021) 620 final} - {SWD(2021) 261 final}

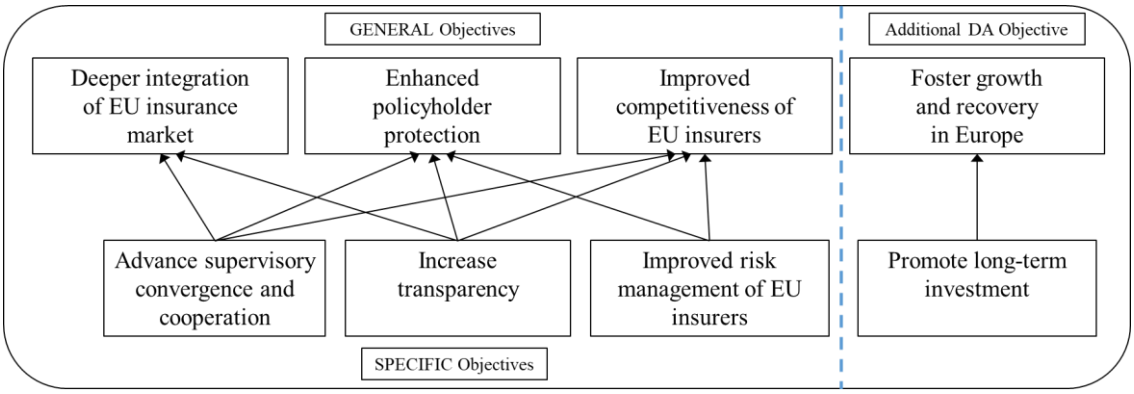
6. ANALYSIS AND ANSWERS TO THE EVALUATION QUESTIONS

6.1. Effectiveness

Summary assessment:

Overall, the current Solvency II Directive and Delegated Regulation have been broadly effective and achieved progress towards their overarching founding objectives, which were to facilitate the development of the Single Market in insurance services whilst securing an adequate level of policyholder protection. Nonetheless, some provisions or parameters may be outdated, and a number of issues have been identified in the implementation of their principles, in the adaptation to changing market conditions and in the supervisory convergence process, which limit their effectiveness. In particular, the volatility adjustment mechanism and the incentives for insurers' long-term investments have been identified as insufficient to achieve the objectives.

Figure 6.1-1: Effectiveness - General and Specific objectives - Summary



- **Has the Directive been overall effective in reaching its general objectives, i.e. to increase the EU insurance market integration, to enhance the protection of policyholders and beneficiaries and improve competitiveness of EU insurers?**

Three specific objectives had been set in order to facilitate these general ones: (i) to improve risk management, (ii) to increase transparency and (iii) to advance supervisory convergence and cooperation. When the framework is effective with regard to these objectives, it will logically also contribute to the general objectives. The degree of achievement of the general objectives is therefore assessed through the following:

6.1.1. To what extent has the Framework improved the risk management of EU insurers?

Solvency II incentives for better risk management – achievements in solvency position and reduced likelihood to fail

Since 2016 when it entered into application, the Solvency II Directive has provided a harmonised prudential framework for insurance and reinsurance companies in the EEA, merging and harmonising the piece-wise regulation that existed before. Applying common

rules in a harmonised framework (e.g. for the valuation of technical liabilities or reporting purposes) facilitated a level-playing field for the insurers and provided a better comparability for both policyholders and investors. In turn, it increased transparency and improved supervisory convergence, which contributed to a deeper integration of the EU insurance market.

To achieve progress in its primary objectives to enhance the protection of policyholders and beneficiaries and improve competitiveness of EU insurers required to reduce the likelihood of an insurer to fail (and to increase trust into the insurance companies).[1] And reducing the likelihood of an insurer to fail could not be achieved without sound risk management. Therefore, a key specific objective has been defined, i.e. to improve risk management practices among insurers.

Solvency II has improved the risk management of insurance companies thanks to the design of the framework, which includes several elements which are contributing to their better risk management. First, it is built on an overall risk-based approach (see section 2 - Description). The newly "risk-based" Solvency II framework has aimed at insurance companies being subject to effective solvency requirements based on the actual risks they are facing.[2,3] In addition, quantitative requirements in the first pillar are further strengthened by the provisions in the other pillars, including measures resulting from supervisors' risk assessment and insurers' own risk assessment and stress testing (pillar 2). Transparency rules in pillar 3 require further discipline to assess risks from insurers. Therefore insurers calculate their technical provisions based on the actual risks they face. As a result, the level of capital resources available to the insurer (own funds), measured as the "solvency ratio", goes up reflecting this better risk management.

With Solvency II, this "solvency ratio" has actually increased, which reflects the insurers' achieved success in improving risk management and related reliable financial health. This, even when taking account of the transitional measures meant to allow a smoother phasing out of earlier-written business. It is further detailed in the following paragraphs.

The new risk-based approach was accompanied with transitional provisions (for a period of maximum 16 years, i.e. ending on 1 January 2032),[4] aiming to allow a smooth phasing out of the business written before the entry into application of Solvency II. The objective is to ensure a smooth transition to the risk-based Solvency II regime for contracts concluded under the previous solvency regime, which might otherwise risk disturbing the insurance market. For pillar 1 in particular, the reasoning is the following. The risk-based nature of Solvency II

[1] As an illustration, a review published by KPMG in February 2020 on "insurance undertakings insolvencies and business transfers in Europe" concluded on the positive effects of prudential regulations introduced in Europe since 2001. In particular, the study noted that failures after 2001 have significantly reduced in numbers and concerned smaller companies, thereby creating less impact and affecting fewer creditors.

[2] The Solvency II structure and core functioning are explained in section 2: Description of the intervention.

[3] The approach under Solvency I was static. The solvency margin was calculated formalistically taking into account only the liabilities of the insurance company. Two insurers A and B with the same contracts and the same liability structure would have the same solvency margin. Insurer A could keep all his assets in cash, and insurer B could invest all his assets into risky assets. This would not have had any impact on the solvency margin, i.e. the solvency capital requirement under Solvency I.

[4] These transitional provisions were introduced via Omnibus II Directive.

against the background of low interest rates has a particular[5] impact on liabilities with a long duration, i.e. typically the liabilities of products with long-term guarantees. As the transitional measures are limited in time[6], linearly phasing out and applicable for insurance contracts concluded before the entry into application of Solvency II, insurance companies are not penalised for having offered products with long-term guarantees in the past.

The most widely used transitional measures are those for the calculation of technical provisions (TTP)[7]. The application of these transitional measures lead to a lower valuation of liabilities, and therefore of technical provisions. Ceteris paribus, it leads to an increase in the SCR ratio. In total, in the EEA (without the UK) 136 insurance companies are using the TTP.[8] These companies have a market share in technical provisions of 19 %. Without taking into account the TTP measures, the SCR ratio in the EEA decreases from 259 % to 247 %. While at first glance a 19 % market share on EEA level could suggest a "big impact" on the market, the decrease to a 247% SCR ratio seems to be negligible. However, the figures must not be interpreted isolated. If one considers only the insurance companies using the TTP measure, by removing the TTP their financial position would decrease the SCR ratio from 318% to 196%[9] at EEA level.

Therefore, to have a holistic picture of the impact of the transitional measures, one needs to assess: i) the national market share of companies using the TTF measures; ii) the impact itself the measures have on the SCR ratio; and iii) the level of the SCR ratio without the TTF measures. In Norway for example, insurers using the TTF measures represent a market share of around 80 % of technical provisions. However, the impact of removing the TTF measures on these insurance companies is a decrease of the SCR ratio from 254 % to 231 %. Which also means that the level of the SCR ratio despite the removal of the TTF measure is still at 231 %.

The number of companies not complying with the SCR without the TTP measures declined from 35 (beginning 2016) to 16 (end 2019)[10]. In the same period, the missing amount of eligible own funds to comply with the SCR without the transitional measures declined from 5.26 to 1.95 billion EUR. And the SCR ratio (without TTP measures) of the companies using the TTP measures rose from 124 % to 196 % in that period. These figures and statements from the supervisory authorities[11] suggest that the period during the application of the transitional measures was indeed used by the insurers concerned to facilitate the compliance

[5] The low interest environment implies that discounting with market-based rates instead of a (higher) flat risk curve impacts liabilities of longer durations in particular, as the discounting is done for each year of the expected cash flow (see also section 2: Description of the intervention).

[6] They are designed to phase out in a linear way over the transitional period of 16 years.

[7] The transitional provisions consist of transitional measures for the calculation of the risk-free rate (TRFR) and of measures for the calculation of technical provisions (TTP). In brief, the TRFR allow to use the risk-free rate used under Solvency I while the TTP allow to calculate the technical provisions according to Solvency I. In 2019, only 5 companies, in 3 countries, are using the TRFR. Thus, we will assess the impact of the use of TTPs only, as the same logic applies for TRFR.

[8] Data from EIOPA (2020), "LTG Report" (see list of ref.).

[9] These figures are mainly driven by the German market, as 59 of the 136 insurance companies are from Germany. The share of the German companies using the TTP measures in the EEA is 8 %.

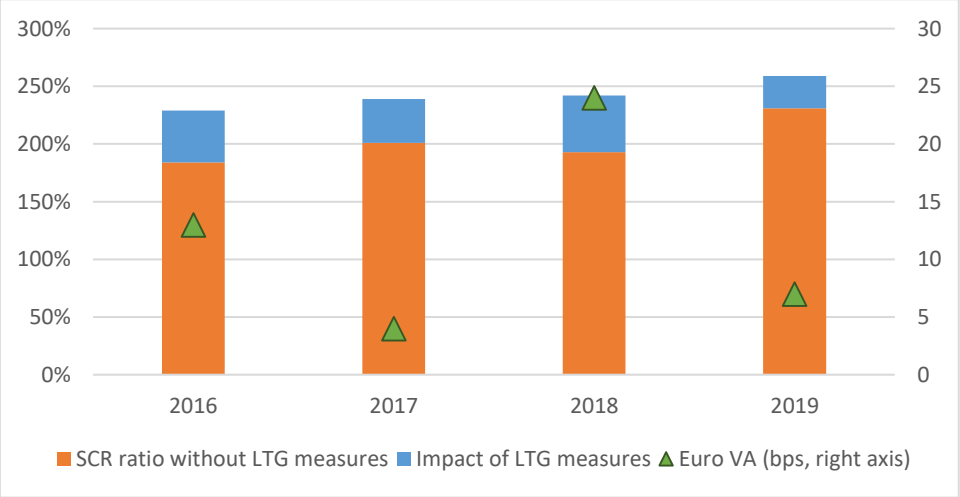
[10] The overall number of companies using the transitional measures remained stable after 2016 and varied between 159 and 169 until the end of 2018.

[11] See also the LTG Reports by EIOPA (2018, 2019 and 2020).

with new requirements during the first years of application. Thus, the phasing out is a success.

Thus, with (and also mostly without) the transitional measures, the "solvency ratio", is an indication of the insurers' achieved success in improving risk management and related reliable financial health. Over the period 2016 to 2019, insurance companies' average solvency ratio has steadily increased and was in all years of that period more than twice as high as the level required by the Directive. Further, as reported in EIOPA's LTG Report 2020, the total number of companies breaching the SCR had decreased from 25 on 31 December 2017 to 17 on 31 December 2018. Without consideration of the UK, there were 12 on 31 December 2019, representing a market share of 0.01% (both in terms of gross written premiums and in terms of technical provisions). [12]

Figure 6.1-2 Average solvency ratio for EEA insurers[13]



Sources: EIOPA (2020) - Report on long-term guarantees measures and measures on equity risk (page 177) and Technical information relating to risk-free interest rate (RFR) term structures is used for the calculation of the technical provisions for (re)insurance obligations (link)

The fact that solvency ratios are so often well-above the 100% "regulated target" reflects the fact that insurers have actually integrated the requirements of all three "pillars" in their own target. Indeed, as explained in section 2 - *Description of the intervention* - capital requirements are only one dimension, though probably the most visible. Pillar 2 requires an ORSA, where the insurer undertakes its own "stress testing", integrating all foreseeable risks such as a volatile and uncertain economic outlook. The solvency ratios above 100% imply that insurers' own risk appetite sets levels of available capital which are more than sufficient to meet the quantitative requirements at a given point in time, but also in a forward-looking manner. Further, the reporting and disclosure requirements in pillar 3 fostering transparency, insurers also have to integrate into their own risk appetite their stakeholders' expectations

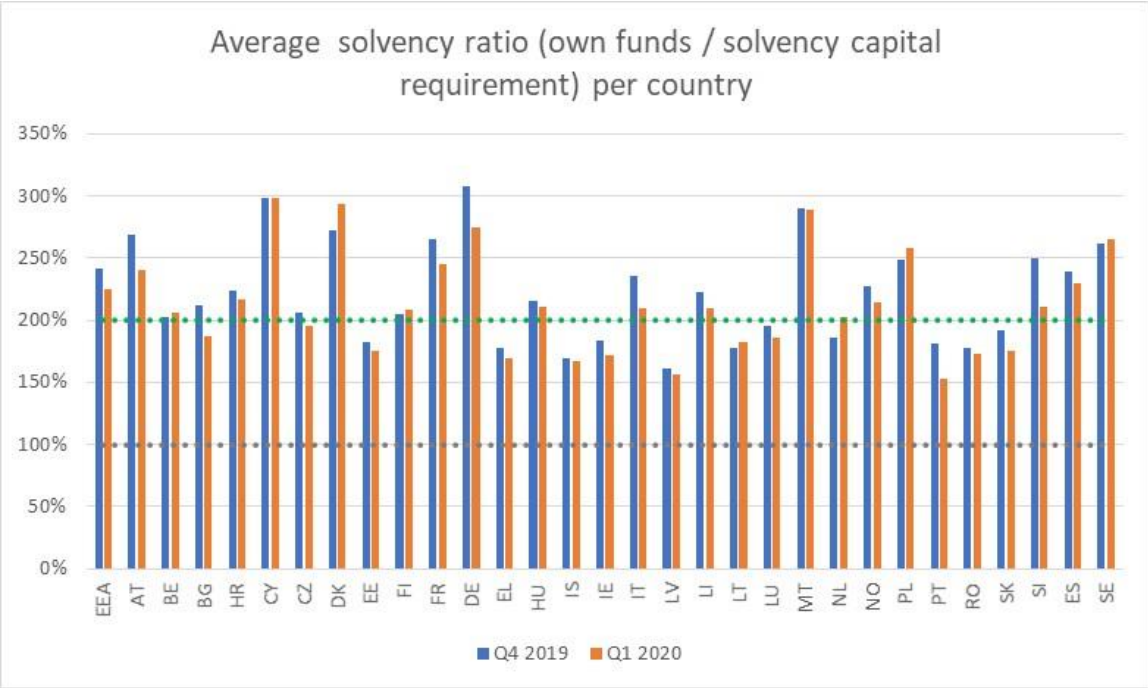
[12] Split as follows according to their type: 5 non-life insurance undertakings, 1 life insurance undertakings, 2 undertaking pursuing both life and non-life insurance activity and 4 reinsurance undertakings.

[13] In addition to average solvency ratios, the chart also plots the level of the volatility adjustment (VA) for the Euro on the right axis. While other LTG measures have shown a more stable impact over time, the impact of the volatility adjustment has varied in accordance with moves in the level of the volatility adjustment. To this end, the differences from year to year in the height of the blue bars are to a large degree driven by the movements of the volatility adjustments. The volatility adjustment for the Euro has the largest impact, because most of EEA insurers' liabilities are denominated in that currency.

(e.g. rating agencies), whose norm can increase with the actual ratios increasing. In brief, it shows how Solvency II strengthened not only insurers' resilience to shocks but also the robustness of their risk management.

Likewise, even with the losses stemming from the market turmoil triggered by the Covid-19 outbreak, insurers' capital resources remain on average more than twice as high as what corresponds to the capital requirements of the legislation. The graph below illustrates the decrease between the end of 2019 and the first quarter of 2020: the average ratio of insurers' capital resources over capital requirements decreased by 18 percentage points to 243%, representing a cumulative loss in excess capital of approximately EUR 131 billion. In the third quarter of 2020 the ratio had gone up to 246%.

Figure 6.1-3: Average solvency ratio per country



Source: EIOPA Statistics (own funds); the ratio is calculated by country as national aggregates of own funds to solvency capital requirements.

Conclusion: Based on all the consultation activities, reports and regular exchanges between the Commission services and the stakeholders, the good solvency performance of the sector and the decreased likelihood to fail are acknowledged, reflecting improved risk management practices. There are indeed numerous measures provided by the Solvency II framework to facilitate an enhanced risk management through harmonised and more accurate measurement of technical provisions. However, some of them have been identified as ineffective, or can give rise to diverse (sometimes problematic) effects depending on the economic situation and/or on the specificities of the national markets. To illustrate this, the volatility adjustment and the regulatory curve are detailed in the next subsections.

The volatility adjustment: insufficient mitigation, under- and overshooting

The Solvency II framework aims at providing a comprehensive set of measures that should allow insurers to operate an optimal risk management. The possibility to limit the impact of excessive volatility is part of these measures. Solvency II therefore includes several

optional regulatory mechanisms (so-called "long-term guarantee measures and measures on equity risk").[14] They are aimed at mitigating the impact of short-term market turmoil on insurers' solvency position. The volatility adjustment might be subject to prior approval by the NSA. In addition, there is a legal mandate set out in the Directive to review those measures (long-term guarantee measures and measures on equity risk).Indeed, reliance on market values, given that there are occasional high market price fluctuations, may imply high short-term volatility in insurers' assets – the value of which evolves with financial market movements – and liabilities (for instance, when asset values and asset returns decline, the cost for an insurer of providing a high guaranteed rate on a life insurance product increases significantly), hence in their solvency position. Limiting the impact of short-term volatility on insurers' solvency positions is therefore essential, in particular for life insurers, in order to allow them to conduct their business with the appropriate long-term perspective. Otherwise, they might reduce the continued supply of long-term insurance products with guaranteed minimum returns, and the long-term financing of the real economy. Mitigating short-term volatility also reduces the incentives for procyclical behaviour and the risk of fire sales which raise financial instability risks.[15] Further, excessive volatility in solvency ratios can also affect insurers' competitiveness, by generating more uncertainty. This uncertainty can restrain insurers from further expanding their business and activities internationally.

By the end of 2019, 25 % of insurance companies in 22 countries were using at least one of the existing "long-term guarantee measures", which represented 75% of the insurers' total amount of liabilities towards policyholders in the European market. However, nine countries have no insurer using such measures[16]. The most widely used "long-term guarantee measure" is precisely the "volatility adjustment"[17]. In 2019, 631 companies in 21 Member States were using it, i.e. 26% of insurance companies, holding 79% of all technical provisions in the EEA, as detailed in Figure 6.1-4 and Figure 6.1-5. This adjustment is mainly used for the valuation of life insurance obligations.

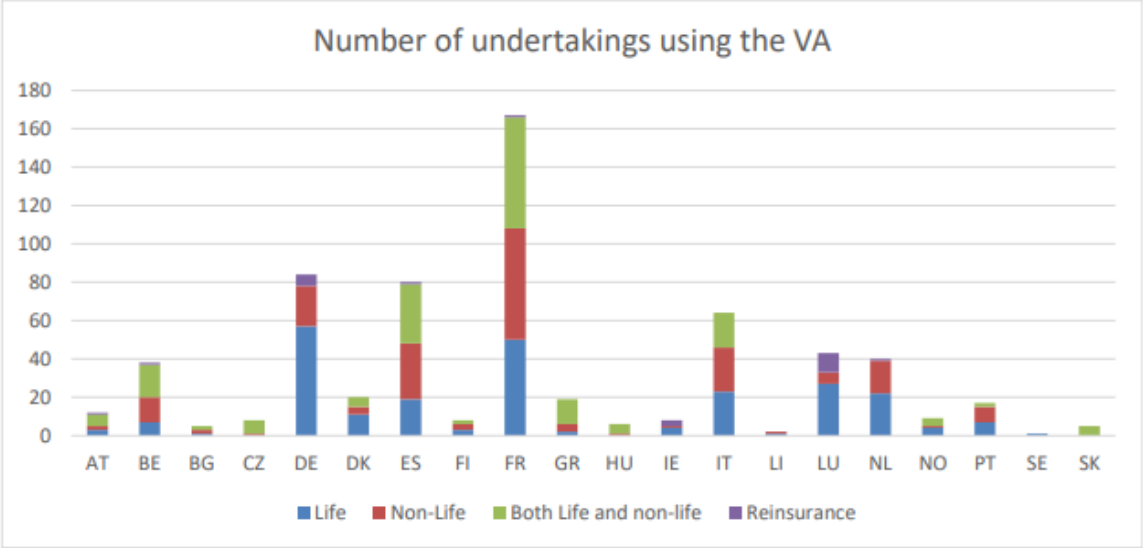
[14] The LTG measures are: the extrapolation of risk-free interest rates, the matching adjustment, the volatility adjustment, the extension of the recovery period in case of non-compliance with the Solvency Capital Requirement, the transitional measure on the risk-free interest rates and the transitional measure on technical provisions. The equity risk measures are the application of a symmetric adjustment mechanism to the equity risk charge and the duration-based equity risk sub-module. See also EIOPA's LTG Reports.

[15] 22% of respondents (36% if we exclude those who did not have an opinion) to the Commission's public consultation consider that the current Solvency II framework does not promote procyclical behaviours. Similar percentages can be observed among both insurance stakeholders and consumers/citizens/NGOs. Regarding public authorities, views are more balanced as 50% of them believe that the framework appropriately mitigates volatility and prevents procyclical behaviour.

[16] Estonia, Croatia, Island, Lithuania, Latvia, Malta, Poland, Romania and Slovenia. Source: *Report on long-term guarantees measures and measures on equity risk (2019)* – EIOPA.

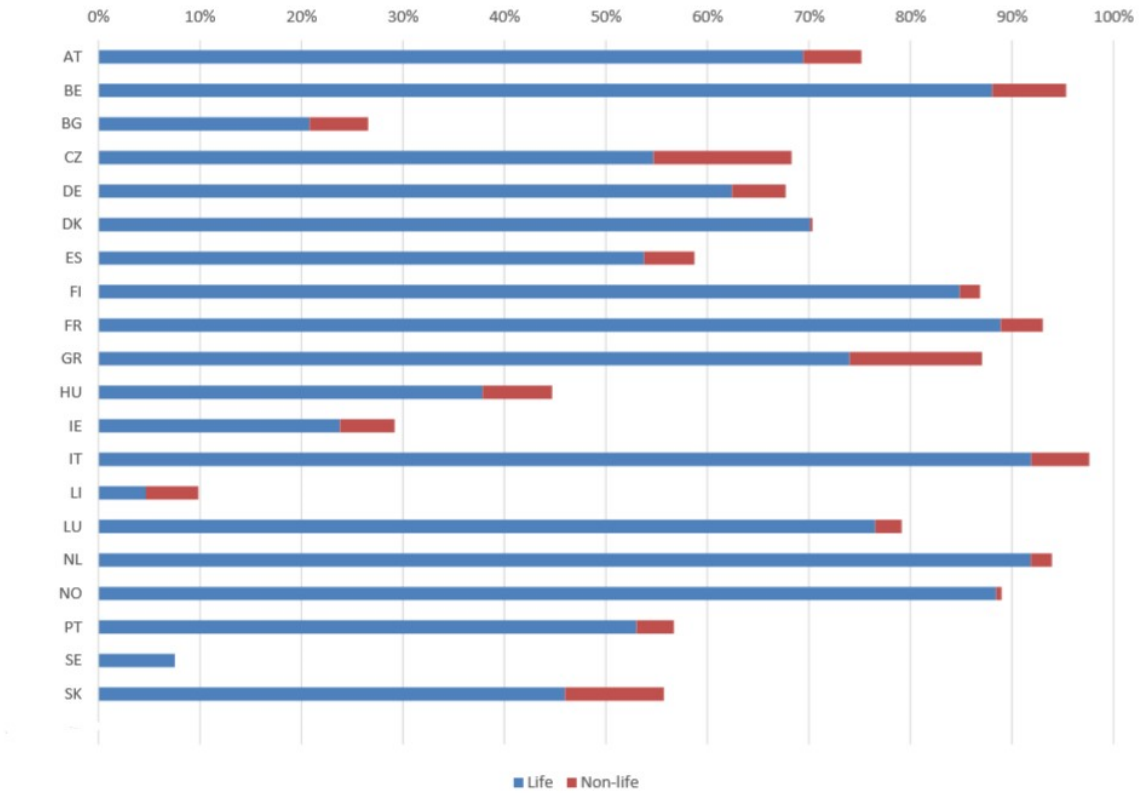
[17] It consists in an adjustment to the regulatory risk free interest rate curves used to value technical provisions, which aims at mitigating the impact of both short-term spread increases for a given currency (so-called "currency volatility adjustment") and national-specific spread crises in a given country (so-called "country volatility adjustment") on insurers' capital resources. The volatility adjustment is therefore expected to avoid excessive volatility in insurers' solvency positions in times of spread markets turbulence.

Figure 6.1-4: Volatility adjustment: number of users per EEA country – 2019



Source: LTG Report, EIOPA 2020.

Figure 6.1-5: Use of volatility adjustment – National market shares – 2019



Source: LTG Report, EIOPA 2020.
Note: the national market share of the insurer is expressed in technical provisions amounts.

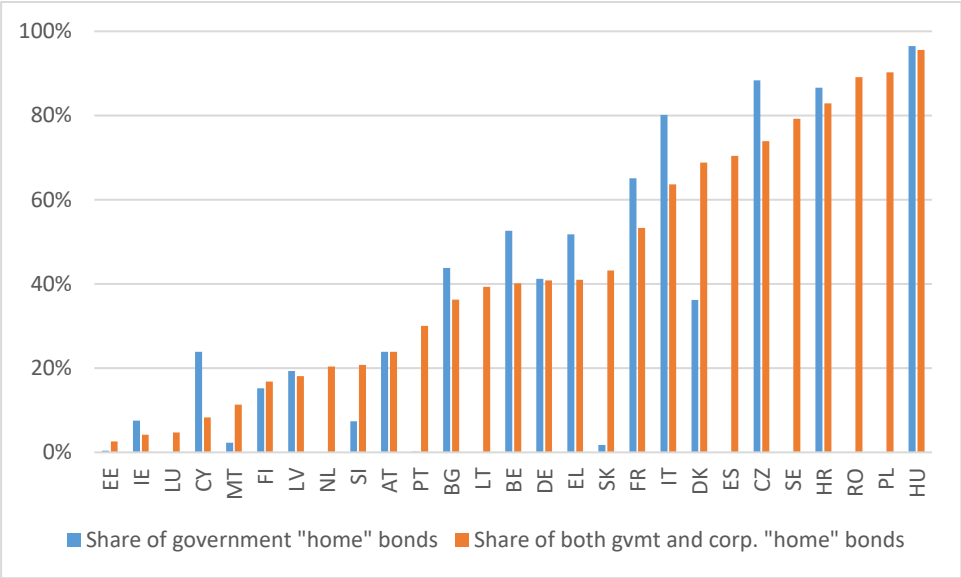
It seems however that the currently designed volatility adjustment may not be sufficient, as the Covid-19 outbreak recently illustrated. The crisis has generated heightened volatility in financial markets, drops in stock markets, and rises in spreads. Solvency positions proved then to be very volatile over very short periods, in particular during March 2020, thus illustrating shortcomings in the ability of the existing regulatory tools in limiting the impact of artificial market turmoil on insurers' capital resources. As mentioned above, when the short-term volatility in insurers' solvency becomes excessively high, it fosters short-termism

in insurers' underwriting and investment activities, and is claimed to drive insurers to shift a large part of the risk to policyholders (via the distribution of unit- or index-linked products), and to divest from real assets supporting the European economy. 38 of the 73 participants to the public consultation confirm this concern, while only 11 participants reply that Solvency II appropriately mitigates the impact of short-term market volatility.

Illustrating this issue, a big national market has reported the volatility in the average solvency position of a representative sample of its life insurance market (including application of the VA). Starting from a ratio of eligible own funds to capital requirements of around 210% on 31 December 2019, the ratio had decreased by 106 pp until 16 March 2020, then increasing again by 57 pp by the end of the same month, i.e. 31 March 2020. Which meant an overall decrease of only 49 pp.

In addition, there is also a country-specific component of the volatility adjustment. It is introduced to take into account the possible "home bias" insurers' bond portfolio is subject to. It means that insurers often invest a lot (or mainly) in bonds of their home Member State. As shown on Figure 6.1-6 below, for 12 Members States more than half the amounts invested in government and/or corporate bonds are "home investments". For some of them, the proportion goes up over 80%.

Figure 6.1-6: Home bias - Q2 2020



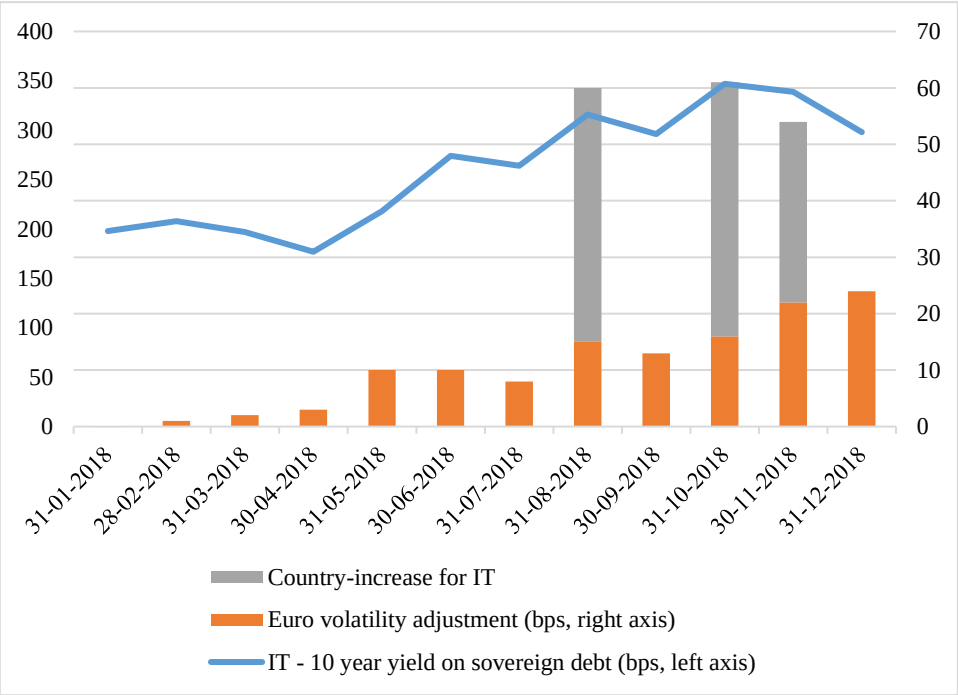
Source: EIOPA Statistics (Asset exposures - Q2 2020), Commission Services.

When such a Member State is subject to more volatile spread movements than the rest of the Euro Area, the sole "currency volatility adjustment" (i.e. the one applicable to all euro-denominated liabilities) is not sufficient in mitigating spread volatility. In other words, the current conditions for the activation of the country-specific component[18] of the volatility adjustment may create "cliff effects" in periods where the spreads of a single Member State

[18] The country component is activated whenever the country risk-corrected spread (computed on the basis of a country reference portfolio) is higher than 85 bps and is at least twice the currency risk-corrected spread (computed on the basis of the currency reference portfolio). When those two conditions are met the size of the volatility adjustment is increased by the difference between the risk-corrected spread calculated at national level and twice the risk corrected spread calculated at currency level.

fluctuate around the trigger point and alternate between situations of activation and non-activation of the component. It is especially true for insurers located in Southern countries with higher spreads. This cliff effect is illustrated in Figure 6.1-7 for the fluctuation of the volatility adjustment throughout the year 2018. Movements in the yields on Italian sovereign debt caused the country component to be activated in three out of 12 months during that year. There were significant jumps in the level of the VA when the country component was activated or deactivated. The non-activation of the country component can lead to undershooting effects in countries where the spreads on investments increase to a larger extent than the spreads on the currency reference portfolio[19], which may also prevent the measure to achieve its intended objective of a countercyclical measure.

Figure 6.1-7: Levels of the 10-year yield on Italian sovereign debt and fluctuation of the Italian VA in 2018



Sources: EIOPA (Technical information relating to risk-free interest rate (RFR) term structures is used for the calculation of the technical provisions for (re)insurance obligations and ECB (long-term interest rate for convergence purposes, Italy).

On the other hand, under certain conditions, the current volatility adjustment mechanism can also lead to unexpected stability or even improvements in the solvency position of other insurers, during crises such as the Covid-19 outbreak. Indeed the effect of the volatility adjustment can be so strong that it overcompensates all other losses that insurers have incurred, leading to an actual improvement in the solvency position. Such effects raise supervisory challenges, as appropriate risk measurement may be hindered under stressed situations. In practice, some insurance groups in at least three different Member States (the Netherlands, Belgium and Finland) have reported that they experienced an increase in their solvency position (measured as the ratio of capital resources to capital requirements) of between 10 and 41 percentage points from 31 December 2019 to 31 March 2020 – a period

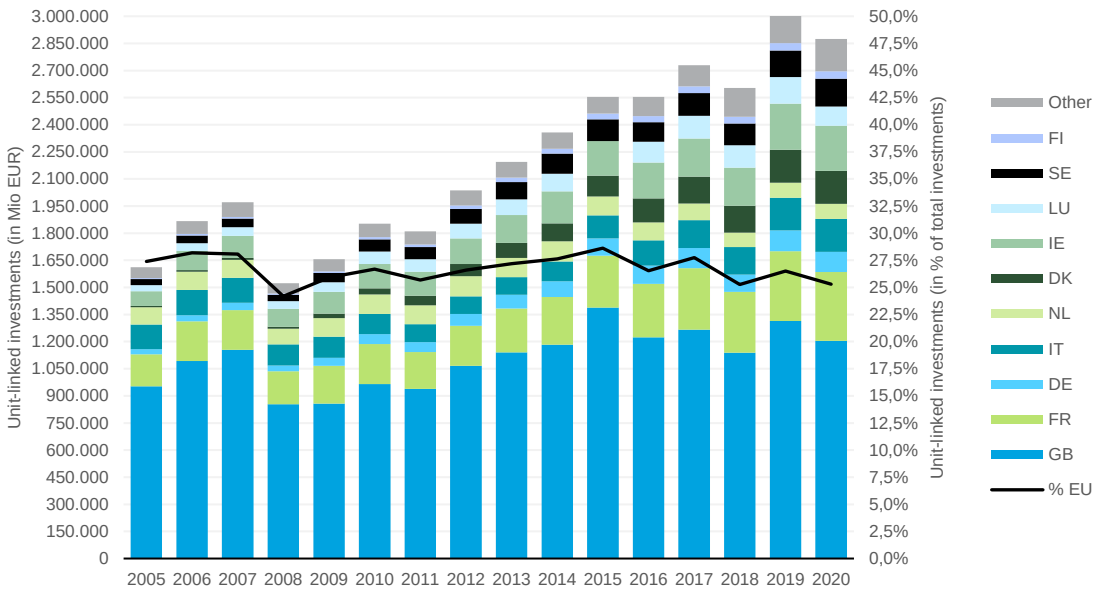
[19] According to analysis performed by the Italian Association of Insurers, fluctuations around the trigger point of the country component have been observed in Italy in the period between May and June 2018.

over which the deteriorated market conditions was expected to lead to a deterioration in solvency positions. According to EIOPA, during the first quarter of 2020, 10% of insurers companies participating to the data collection exercise (the sample represented € 4.030 billion of liabilities towards policyholders) experienced such a situation.

What is the mechanism leading to this "overshooting"? Many external and internal factors have an impact on the solvency position of insurance companies. However, regulatory risk-free interest rates and, where applied, the volatility adjustment (VA) are an important driver of the solvency positions. The VA reflects the movements of risk-adjusted credit spreads of the average investments of insurers with liabilities in the relevant currency. An individual insurer may have investments that are very different from the average for a given currency. An insurer's liabilities may also react to changes in interest rates in a weaker or stronger way than the average investments to changes in credit spreads. Those aspects may lead to discrepancies between a particular insurer's loss on the investment portfolio caused by the spread widening from December 2019 to March 2020 and the decrease of the technical provisions over the same period. In the examples referred to above, it is likely that the insurance groups apply the VA and were investing in assets less affected by spread widening than the average fixed income portfolio (the one determining the level of the VA for the Euro Area). The volatility adjustment might therefore have translated into a reduction of the technical provisions that was larger than the loss on the investments. The combination of both effects would be an increase in the regulatory own funds and, thus, the solvency position.

Finally, over the recent years, insurers in some countries have favoured the supply of insurance products where the investment risk is shifted to policyholders instead of traditional life insurance products with guarantees. As shown on Figure 6.1-8, they do this via the distribution of unit-linked or index-linked products, with prospects of potential higher returns coupled with a higher risk for policyholders, who are often not fully aware of the risks entailed. Some stakeholders claim that the Solvency II framework, with an excessive volatility, has incentivized this risk shifting. Still, while excessive volatility is an observed weakness of the framework (as just detailed), it is difficult to show a direct causality to the product shifting. And even among insurers that responded to the Consultation, only about 16% fully confirm this statement, while about 77% reply that the framework has incentivised the shift but is not the most important driver.

Figure 6.1-8: Trends of unit-linked investments across the EU for the period 2005-2020Q3

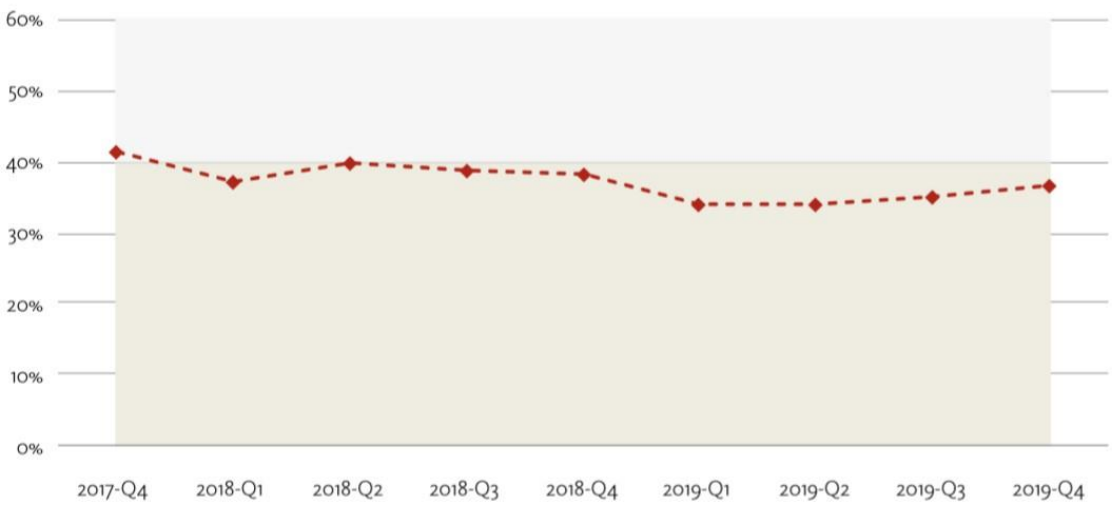


Source: EIOPA Solvency I and Solvency II statistics, Deloitte-CEPS analysis, Commission analysis.

Note: The ten most important EU Member States in terms of amounts are shown separately, covering 95.8% of the total over all EU Member States at 2018Q1. The remaining EU Member States are clustered. Note that in 2015 there is a missing value for Luxembourg.

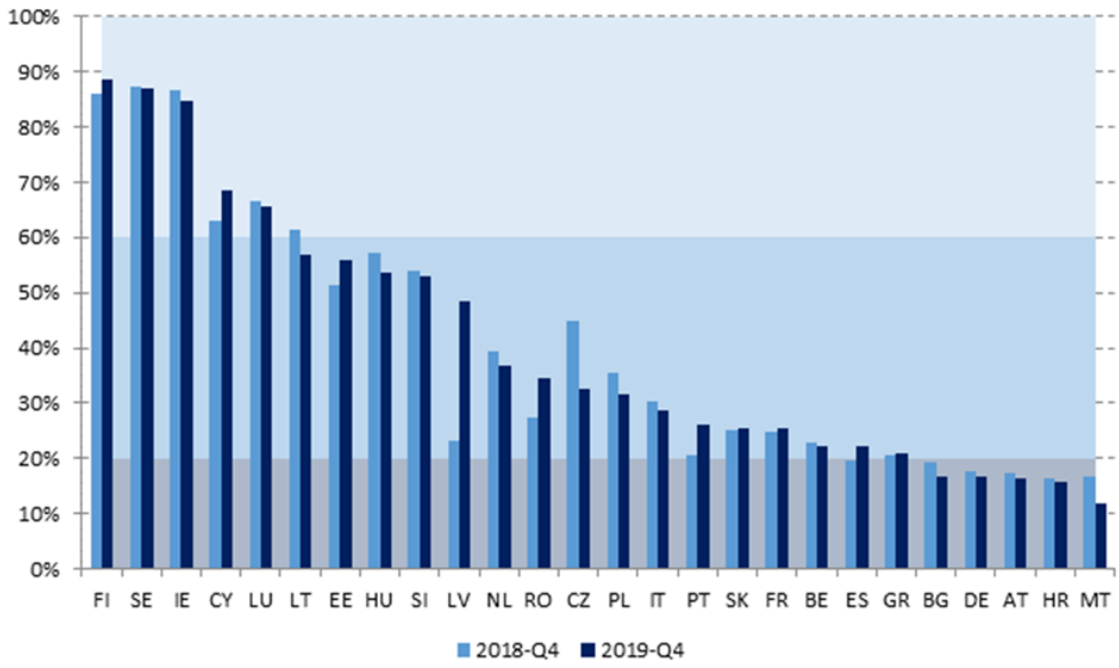
In addition, when looking at the evolution of the share of unit-linked business in terms of gross written premiums (GWP), over the period of 2017 to 2019 it does not allow for any strong conclusion, as there is no sufficient evidence to identify a clear trend. The share of unit-linked investments remained rather stable over this recent period. The overview of Member States (see Figure 6.1-10) also shows that there are substantial national differences regarding the share of unit-linked business so that Solvency II does not appear as the main driver.

Figure 6.1-9: GWP - Unit-linked share trend



Source: EIOPA (2020), LTG Report, p.25

Figure 6.1-10: Unit-linked as share of GWP-Life business across countries



Source: EIOPA Statistics (QRS). Data on Denmark is missing.

Conclusion: The most widely used "long-term guarantee measure", namely the volatility adjustment, does not sufficiently/appropriately mitigate short-term volatility, still leaving room for short-termism in insurers' underwriting and investment activities or, when overshooting, for unexpected supervisory challenges.

<u>Regulatory curve: not adapted to the current low interest rate environment</u>

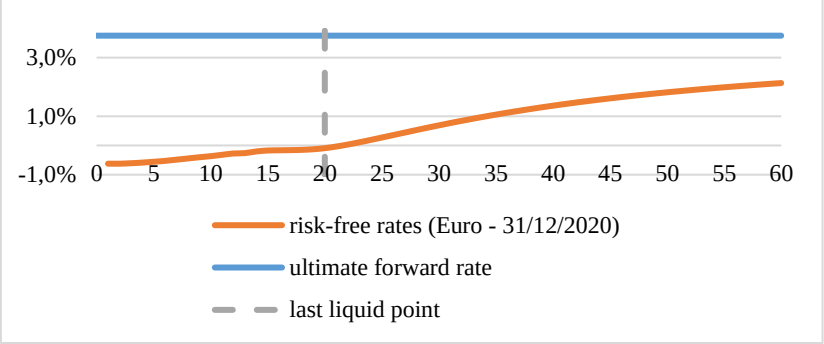
Insurers have to value their liabilities towards policyholders prudently. As described in Section 2 – *Description of the intervention*, to this end, Solvency II requires that they make projections of all future cash in- and out-flows that they will have to pay and receive, and to calculate the "present value" (i.e. to discount those cash-flows) using regulatory "risk-free interest rate curves" (per currency) that are in general adopted by the Commission on a quarterly basis[20].

According to Solvency II, regulatory risk free interest rates should generally be based on market data. However, insurance contracts can cover obligations to pay benefits very far into the future, and in the case of life-long benefits they can imply cash-flows up to more than 100 years into the future. But market data is not available for such long maturities. Proxies have to be used, hindering the adequacy of the liabilities valuation, and therefore leading to misestimating the insurers' solvency position. For the case of the euro, the regulatory risk-free interest rates are based on euro-denominated interest rate swap rates up to a maturity of 20 years (the so-called "last liquid point"). As indicated in Figure 6.1-11, beyond 20 years regulatory interest rates are "extrapolated" and have to converge towards a so-called "ultimate forward rate" (UFR) which was set at 3.75% during 2020 and is currently set at

[20] According to article 77e (2) of the Solvency II Directive the Commission may adopt implementing acts setting out these curves. Although this is not an obligation but only an option for the Commission, the Commission adopts these implementing acts regularly.

3.6% (since 1 January 2021). This means that market information beyond maturities of 20 years merely influence the annual updates of the UFR and thus the UFR itself is almost completely ignored when defining the rates used to value long-term liabilities.

Figure 6.1-11: Extrapolation of risk-free interest rates for the Euro (31/12/2020)

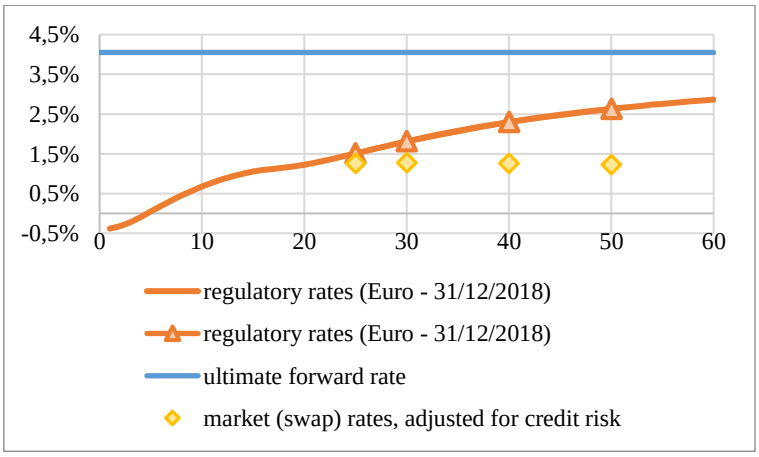


Source: EIOPA (Technical information relating to RFR term structures is used for the calculation of the technical provisions for (re)insurance obligations (link).

In practice, and in particular in the current low-yield environment, there may be a certain inconsistency between the regulatory rates beyond a maturity of 20 years as calculated according to the current Solvency II rules and the actual market rates for equivalent maturities. For instance, for maturities above 33 years, the regulatory risk-free interest rates were exceeding the actual yield on 100-year maturity Austrian sovereign bonds issued in June (0.85%), with Austria being rated slightly below the highest sovereign rating categories. Furthermore, market interest rates can be observed via (fixed to float) interest rate swaps.

Figure 6.1-12 compares such market rates with extrapolated rates for data pertaining to the year-end of 2018 and shows that market rates can be at levels significantly below the extrapolated rates.

Figure 6.1-12: Comparison of extrapolated interest rates and market rates derived from interest rate swaps (Euro, 31/12/2018)



Source: EIOPA (Technical information relating to risk-free interest rate (RFR) term structures is used for the calculation of the technical provisions for (re)insurance obligations) and Information request to insurance undertakings from the EEA in the context of the Long-Term Guarantees Report 2019.

In brief, in the current low interest rate environment, because market information for maturities above 20 years are currently not taken into account, the regulatory interest rate curve used to value insurance liabilities can lead to underestimating insurers' liabilities and overestimation of their solvency position. If this is the case, it would limit prudential

incentives and might even imply that insurers under-reserve for their future obligations, which would put at risk their ability to pay policyholders' claims over the long term.

Conclusion: The assessment shows how the framework works to enhance risk management practices of the insurers, and limit the likelihood that they fail. Indeed, achieving both the competition and policyholders' protection objectives requires that insurance companies are subject to effective solvency requirements based on the actual risks they are facing. Beside the "risk-based" principle, the framework also relies on full market-based valuation of insurers' assets and liabilities, which allows monitoring the impact of economic and financial conditions on insurers' solvency in real time and on an ongoing basis. This double principle (risk-based/market-based) has fostered better risk management behaviours and outcomes, as reflected in the high level of solvency ratios of insurers. However, some of the numerous measures aiming to facilitate this enhanced risk management have been identified as ineffective, or give rise to diverse effects depending on the economic situation and/or on the specificities of the national markets.

6.1.2. To what extent has the framework increased transparency?

Transparency needs both the harmonisation of calculation methods, solvency standards and supervisory methods, and the access to harmonised data. The section above has shown that the Solvency II framework has fostered better risk management behaviours, in particular by harmonising the valuation methods and therefore the information reported to the supervisory authorities. The section 6.1.3 below assesses the development of supervisory convergence.

As regards the information to the supervisors and in particular to the policyholders, the Solvency II framework, pillar 3, requires the yearly publication of a "solvency and financial conditions report" (SFCR), which did not exist before. The SFCR is "codified" to a certain extent with several elements which are fully standardized (in particular quantitative data) which also facilitates comparability. Comparability and consequent transparency have been made possible by the harmonization of the valuation methods for technical provisions, as well as the definition of risk-sensitive solvency standards. In addition, the disclosure to all types of external stakeholders ((prospective) policyholders, creditors, investors, rating agencies, etc.), further facilitates comparability between the different insurers. From the point of view of insurers, comparability and transparency improve the level-playing field, and promote a better integrated insurance market[21]. Further, enhanced transparency and consequent comparability is a key dimension of customers' information and also trust in the insurance market, thereby also supporting the functioning of the internal market. Transparency (and, of course, information disclosure) partially palliates the asymmetry of information between stakeholders and the insurance company. It empowers policyholders to make more informed decisions, and it incentivises better risk management through the "pressure" implied by visibility. The outcome of the Commission's public consultation[22] hints to the "trust" dimension as being even more important than the information one, and even though NGOs and consumers are not fully convinced that the reading is insightful for them, they are still

[21] While it is also key for supervisors to be provided with such comparable data, in order to improve supervisory convergence. This dimension is detailed in the next subsection (6.1.3).

[22] See also the Consultation's outcome on the "Have your Say" page related to Solvency II.

60% stating that all insurers should publish a SFCR on a yearly basis. Still, there could be a question of the appropriateness of the current format, which the evaluation details in section 6.2 on efficiency.

Conclusion: In addition to the harmonisation of calculation methods, solvency standards and supervisory methods assessed in section 6.1.1 and 6.1.3, transparency requires sufficient access to such harmonised data. The yearly publication of a SFCR required by the Solvency II Directive provides such access and consequent better comparability, which incentivises better risk management, supports policyholders' information and trust and is therefore beneficial to the functioning of the internal market. Yet, for smaller insurers in particular, the proportionality of such disclosure requirements can be questioned. This issue is also addressed in section 6.2 (efficiency).

6.1.3. To what extent has Solvency II advanced supervisory convergence and cooperation?

A principle-based framework

Solvency II empowers the European Insurance and Occupational Pensions Authority (EIOPA) to have a key role in prudential supervisory convergence and cooperation. As a member by default of all colleges of supervisors – permanent cooperation structures between supervisory authorities of the different entities of a given insurance group and the group supervisor – EIOPA supports a common approach to risk-assessment and information sharing, complemented by relevant non-binding tools (notably, guidelines). EIOPA acts as a "binding mediator" on key decisions on group supervision, including on internal models, when disagreements arise between supervisory authorities. While there has not been any case of such binding mediation so far, the existence of this mechanism incentivises supervisory authorities to cooperate and converge in the way they exercise supervision.

The Article 242 Report[23] by EIOPA concluded that there had been a substantial progress in the convergence of practices of NSAs in matters of group supervision and supervision of cross-border issues. Notwithstanding those improvements made in the supervisory convergence, the expected outcome is not reached yet, and challenges would remain, as also noted the Article 242 Report. One source of such challenges is that Solvency II is a "principle-based" framework, as opposed to a rule-based framework; it sets out general guiding principles without always specifying with a great level of details how to apply them in practice. The advantage of this approach is that it leaves some leeway in the implementation by firms and supervisors. Indeed, the flexibility can help to ensure a more tailor-made application of the rules that takes into account the specificities of each company, and the nature, scale and complexity of its risks.

In some areas though, the lack of prescriptiveness, for instance in relation to the assumptions governing the calculation of insurers' liabilities towards their clients, leads to material legal gaps or uncertainties, which can raise issues of inconsistent application of the rules and of level-playing field within the EU. In the case of internal models it can raise issues of

[23] EIOPA (2017), Report to the European Commission on the Application of Group Supervision under the Solvency II Directive.

comparability.[24] Indeed, while insurers that use an internal model must ensure that it captures all material risks to which the insurer is exposed, Solvency II also prohibits that Member States and supervisory authorities prescribe methods for the calibration of internal models. Hence, on the one hand the methodological freedom for internal model calibration allows to capture very specific risks and to reflect the particular situation of a company. On the other hand, it also implies that insurers can use very different methods and that their outcomes are difficult to compare. Due to this lack of comparability, the supervision of these insurance companies is more demanding than the supervision of insurers that calculate their SCR with the standard formula. Likewise, the comparison of prudential disclosures by insurers is more difficult where at least one insurer uses an internal model than between standard formula users only. This being said, contrary to what is discussed in the banking sector, in the course of the consultation process no stakeholder has reported a severe issue neither regarding the very nature of the internal models, nor regarding their level.

The same uncertainties arise for the provisions regarding supervisory actions in case of a breach of SCR or of MCR[25] (supposed to trigger, under some conditions, either a recovery or a resolution process). It is illustrated in more detail by the series of issues identified in the context of cross-border activities and as regards group supervision[26,27]. These issues are reviewed in the next two subsections.

These uncertainties may hinder the development of the internal market. And in case of failure, they may give rise to situations where the policyholders are unevenly protected depending on their country of residence or the country in which they have contracted the policy.[28] Indeed, national resolution regimes are mostly incomplete and uncoordinated. Further, the patchwork of national insurance guarantee schemes[29], which are expected to act as a safety net to pay policyholders' claims or continue their insurance cover in the event of their insurer's insolvency[30], can leave some policyholders without any protection, or in a

[24] As mentioned above in the description of the Solvency II system, supervisors may approve the use of a partial or full internal model for the calculation of the solvency capital requirement. At the end of 2019, insurance companies using a partial or full internal model made up around 32% of the EEA insurance market in terms of insurers' liabilities towards policyholders[24].

[25] In response to the Commission's Call for Advice, EIOPA's Opinion clearly identified the different issues raised by the supervisory divergences in assessing and monitoring the insurance companies' obligations as to the (likely) breach of MCR (see EIOPA's Background Analysis and Background Impact Assessment, Sections 6, EIOPA 2020).

[26] It implies for instance that the current design of the framework does not allow addressing the national inefficiencies in cross-border supervision, as EIOPA's powers remain limited in this aspect and the access to prudential information by the host supervisor proves to be difficult in the absence of clear-cut legal provisions.

[27] See also EIOPA Reports on group supervision (2017, 2018).

[28] As illustrated by some recent failures of insurance companies which operated mainly outside the country where they were initially granted authorisation (e.g. from Malta, Denmark, Liechtenstein, Cyprus).

[29] See table in annex 13.1 of EIOPA's background analysis (EIOPA, 2020), which provides an overview of the existing national schemes and other mechanisms across the Member States.

[30] Generally speaking, disorderly failure of a life insurer may cause material financial loss for policyholders on their savings and pensions products. With regard to non-life insurance, losses to policyholders or beneficiaries mainly result from outstanding claims at the moment of failure, and can lead to significant social hardship. Given the typical structure of its liabilities, the failure of an insurance company can often result in policyholders having to bear losses either because the failed insurer is unable to meet its payment obligation in due time or by accepting a restructuring of their contracts, including possibly the haircut of their claims in resolution.

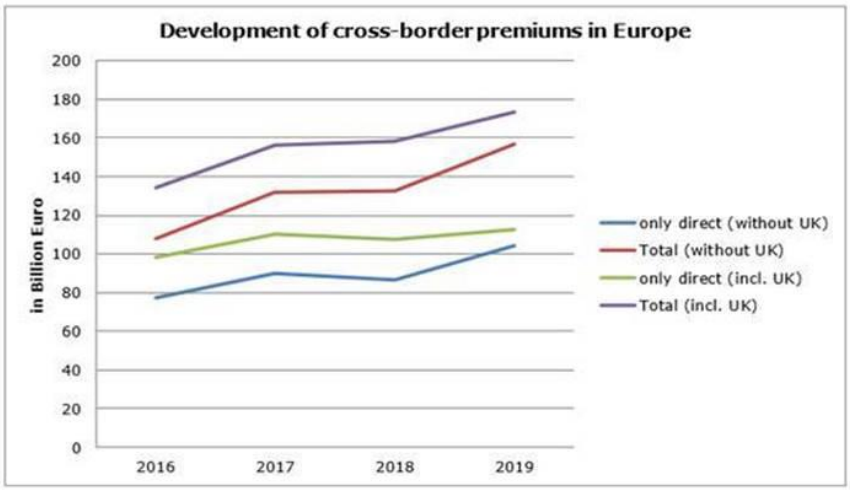
legal uncertainty, as clear responsibilities cannot be ascertained in a reasonable period of time.

Cross-border

One particular topic of concern for a well-integrated insurance market is the supervision of cross-border activities by insurance and reinsurance companies. The harmonised requirements under Solvency II aim to ensure uniform levels of policyholder protection throughout the Union. Under this pre-requisite, insurers that have obtained a licence to operate in one EU Member State under Solvency II rules are allowed to operate in any other Member State (the so-called "EU passporting" system), which should facilitate cross-border activities.

The current share of cross-border business in total business (direct and indirect) is indeed substantial in European Economic Area (EEA) countries: almost 11% in 2019 (amounting to EUR 173 billion) and slightly but consistently rising every year since 2016[31], which seems a positive signal of its development. For six EEA countries (Estonia, Ireland, Latvia, Liechtenstein, Luxembourg and Malta), over 50% of their business is carried out outside the home country. This increased cross-border activity in the EU internal market makes strong, close and timely collaboration between insurance supervisory authorities necessary for effective supervision.

Figure 6.1-13: Development of written premiums in cross-border activities in Europe



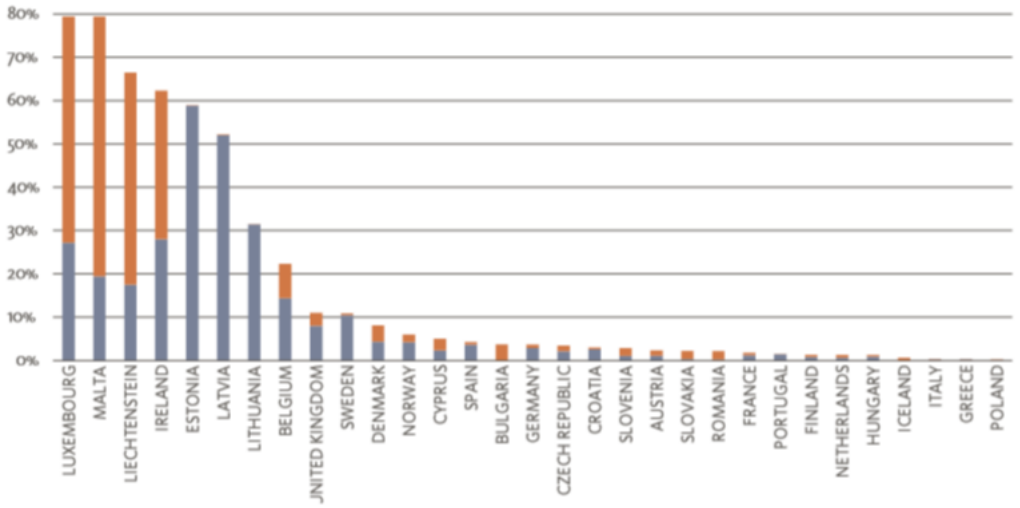
Source: EIOPA (2020d).

In comparison, in terms of the gross written premiums (GWP), there is slightly more non-life than life business done on a cross-border basis and overall there is an equal split between FoS

[31] EIOPA (2020d), "*Peer Review on EIOPA's Decision on the collaboration of the insurance supervisory authorities*".

and FoE business[32]. However, in the countries with a majority of their business outside their jurisdiction, the activity is mainly done on FoS basis[33].

Figure 6.1-14: Importance of cross-border business - 2019



Source: EIOPA (2020d).

Note 1: in blue: FoE; in orange: FoS.

Note 2: the vertical axis shows the percentage of direct insurance business outside the home country, as a percentage of the total GWP.

Solvency II provides that the prudential supervision of those firms operating cross-border is the responsibility of the national supervisory authority where the insurer is headquartered and has therefore been granted a license ("home" supervisor). However, it requires strong cooperation with the supervisory authorities of the other countries where the insurer is operating ("host" supervisors) to avoid regulatory arbitrage and to ensure a consistent level of protection for policyholders across the EEA, regardless of the company's head office. However, as Solvency II promotes a "risk-based" supervision, there could be an incentive for a supervisory authority to give lower priority (and therefore lower resources) to the supervision of insurers whose main activity is outside the local market, as risk management drives the supervisory authority to put more emphasis on the market where more risk lies.

A Special Report[34] of the European Court of Auditors (ECA) on EIOPA's supervisory convergence activities between 2015 and 2017 – therefore encompassing a period during which Solvency II applied – also noted that "systemic weaknesses in the current supervisory system for cross-border business remain". More recently, the International Monetary Fund, as part of one of its Financial Sector Assessment Programs, referred to "considerable shortcomings in the supervisory framework" of some Member States. This can affect citizens' trust in the European insurance industry and is detrimental to the Single Market for insurance services. In cross-border supervision in particular, EIOPA has actually played a key role in promoting supervisory convergence. In addition, its powers were recently

[32] The acronyms refer to activities undertaken under the Freedom of Services (FoS) principle, i.e. the right to pursue business directly in another Member State, or under the Freedom of Establishment (FoE) principle, i.e. the right to establish a branch in another Member State.

[33] EIOPA (2020d).

[34] ECA (2018), Special Report n.29.

strengthened[35], allowing the Authority to establish, on its own initiative, "cooperation platforms"[36] aiming to foster information exchange and coordination between the home and host supervisors. EIOPA also developed supervisory tools that contributed to substantial progress in convergence of supervisory practices. However, its enhanced role may prove insufficient to ensure a high-quality convergent supervision across Member States, and closing gaps may not always be achieved solely through non-binding tools. In addition, the lack of data sharing between supervisory authorities may hinder the effective supervision of insurers operating on a cross-border basis.

In the current form of the Solvency II framework, there is no clear way to address deficiencies in national frameworks for cross-border supervision, as EIOPA's powers remain limited and the access to prudential information by host supervisor proves to be difficult in the absence of clear legal provisions. This, notwithstanding the fact that EIOPA is in charge of ensuring supervisory convergence, and contributes to the coordination of the supervision of cross-border activities. When the lack of proper cooperation between Home and Host Member States leads to the inability to carry proper supervision, it entails risks for policyholders, as has been explained above.

The following structural issues have been identified[37] in the cross-border area, some of which are related to prudential supervision:

1. Access to information:
   - Lack of timely information exchange: the lack of timely information exchange between the home and the host supervisors, in particular in case of deteriorated financial condition, generally prevents supervisory intervention at an early stage, and is therefore detrimental to policyholder protection. In addition, host supervisors are sometimes facing difficulties in obtaining timely information regarding conduct of business or specific product information from foreign insurers, as under current rules they have to rely on the intermediation of the home supervisory authority. Another issue is related to cases where an insurer decides to significantly change its business model and to operate mainly on a cross-border basis. In such situations, no specific information exchange is required with the host supervisor of the country where the company decide to operate.
   - Lack of knowledge inherent to the nature of the necessary information: Home supervisors generally have limited understanding of foreign national laws, regulations and insurance products. Such an understanding is however necessary to ensure that insurers prudently value their liabilities towards policyholders in foreign countries. On the other hand, host supervisors, who have a better understanding of their local market, receive no prudential

[35] On the 2019 review of the European System of Financial Supervision, see the European Commission's Press Corner at this link.

[36] "Collaboration platforms" are cooperation structures aiming to strengthen the exchange of information and to enhance collaboration between the relevant supervisory authorities where an insurance or reinsurance company carries out, or intends to carry out, cross-border activities. See "Decision on the collaboration of the insurance supervisory authorities", EIOPA, 30 January 2017 (link).

[37] See COM (2019) and EIOPA (2018) reports on group supervision.

information, and the review of the governance and risk management systems of a foreign insurer is not in their remit.

2. Regulatory arbitrage opportunities:
   - "Fit and proper" requirements: in accordance with the Solvency II requirements, supervisory authorities need to ensure that the Board Members of an insurance company are of good repute and integrity (i.e. that they are "proper"), and that they collectively have the professional qualifications, knowledge and experience to prudently manage an insurance company (i.e. that they are "fit"). In practice, due to the principle-based nature of the framework, some individuals who were not considered "proper" in one Member State (e.g. for being under investigation for fraud or other crimes) can manage to be approved as Board Members by the supervisory authority of another Member State, by relying on the lack of information exchange and communication gaps between authorities.
   - Authorisation process: Other examples of regulatory arbitrage opportunity relate to the authorisation process. Some insurance firms, which were not granted authorisation to operate by the supervisory authority of one Member State manage to be authorised in another one, with the intention to operate exclusively or almost exclusively in the Member State that originally refused the authorisation. Regulatory arbitrage is also detrimental to the trust in the Single Market for insurance services.
3. Limited reporting requirements on cross-border activities: the Solvency II Directive only refers to the reporting of "statistical information on cross-border activities" which have to be shared by the Home supervisor with the other supervisory authorities concerned. However, the Directive does not refer to reporting of "prudential data" which could meet the prudential needs of both the home and host supervisors.
4. Not fully effective decision-making process within collaboration platforms: by the end of 2018, 9 collaboration (also called "cooperation") platforms were operational with the involvement of 19 national supervisory authorities. However, due to the complexity of certain supervisory issues, NSAs may fail to reach a common view on how to address them, with limited role for EIOPA in the legislation.[38]
5. In case of insurer failure: Currently, the insurance sector is not covered by any European legislation on insurance guarantee schemes (IGS), unlike the banking[39] and securities[40] sectors. The resulting patchwork of national guarantee schemes (where they exist) does not adequately cover the losses for policyholders and beneficiaries if the risk materialises, or does not ensure a sufficient continuation of their coverage. In 2019[41], 17 Member States operate one or more IGS(s). Of those, eight Member States (and Norway) cover both life and (selected) non-life policies insurance; five Member

[38] Within these collaboration platforms, the 2017 "Peer Review on EIOPA's Decision on the collaboration of the insurance supervisory authorities" identified divergent practices among NSAs in a number of areas. See the Peer Review Report for more details.
[39] Directive 2014/49/EU, ref.
[40] Directive 97/9/EC, ref.
[41] See background analysis supporting EIOPA's Advice (EIOPA 2020), Annex 13.1: https://www.eiopa.europa.eu/sites/default/files/solvency_ii/eiopa-bos-20-750-background-analysis.pdf.

States cover (selected) non-life insurance only; and another four Member States cover life insurance policies only. This means that under the current conditions, not all policyholders in Europe benefit from the protection of an IGS and that, where they do, policyholders with similar policies would not necessarily enjoy the same degree of protection in the event of liquidation. This patchwork also lacks a clear attribution of duties and liabilities between the potentially responsible parties, sometimes even within a single member state. It is obviously detrimental to public trust in the single market for insurance services.

Group supervision

Compared to the previous regime, Solvency II introduced a more robust framework of group supervision, as it lays more emphasis on the supervision of insurance groups that are treated as single economic entities. The Directive assigns a key role to a "group supervisor", while recognising and maintaining an important role for the supervisory authorities of the individual insurance entities.

Supporting the legal mandate set in the Directive to review the group supervision dimension, a report by the European Commission to the European Parliament and the Council[42] concluded that the framework of group supervision is robust, laying emphasis on capital management and governance, and allowing for a better understanding and monitoring of risks at group level.

In particular, Article 242(2)(b) of the Solvency II Directive required an assessment regarding the practices in centralised group risk management[43]. This assessment might also have included a discussion on a group support[44] regime as widely discussed in the development of the Solvency II regime[45]. However, both the Commission and EIOPA[46] came to the conclusion that there were no cases of centralised group risk management and no clear benefits for groups to apply such a regime. It was not supported either to have a discussion on a group support regime in the near future, taking into account that the responsibility remains with the solo supervisors.

Against this background, the Commission's public consultation[47] asked stakeholders to provide their views on specific aspects related to group supervision. First, the clear majority

[42] Report from the Commission to the European Parliament and the Council on the application of Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking and pursuit of the business of Insurance and Reinsurance (Solvency II) with regard to group supervision and capital management within a group of insurance or reinsurance undertakings (link).

[43] A regime for supervising groups with centralised risk management where the risk management processes and internal control mechanism of the parent company cover the subsidiary. A centralised risk management is subject to supervisory approval (Article 237 of the Solvency II Directive).

[44] The group support concept seeks to facilitate capital management by groups, essentially by a) allowing under certain conditions a parent company to use declarations of group support to meet part of the Solvency Capital Requirement of its subsidiaries, and b) introducing derogations to some Articles on solo supervision, where appropriate.

[45] See COM(2008)0119 (link) and Report of the Committee on Economic and Monetary Affairs of the European Parliament on this proposal of 16 October 2008 (A6-0413/2008) – see at this link.

[46] See COM (2019), EIOPA (2018).

[47] Commission's public consultation available at this link.

of stakeholders (42%[48]) found it not acceptable to waive solo supervision for entities belonging to an insurance group, even under "strengthened" supervision of the group as a whole. All respondents from public authorities answered in this sense.[49] The question implicitly included the above mentioned concept of "group support", which signals that stakeholders are clearly in favour of an appropriate capital allocation within the group and its entities. Second, industry stakeholders largely support alleviating regulatory requirements for intra-group outsourcing, conditioned to the existence of a centralized group risk management. On the contrary, a vast majority of public authorities oppose such a proposal.

The reports around Article 242 mentioned above[50] further indicated that due to legal uncertainties, some areas of the framework may not ensure a harmonised implementation of the rules by groups and supervisory authorities, with potential detrimental impacts on level-playing field and policyholder protection. Areas where remaining issues have been identified include:

1. Scope and mixed groups: Uncertainties in the determination of the scope of group supervision and the supervision of mixed groups combining banking and insurance companies (financial conglomerates);
2. Limited powers in some Member States over unregulated parent holding companies;
3. Third-country headquarters: Shortcomings and inconsistencies in the supervision of insurance groups whose parent company is headquartered in a third country, with the risk of uneven level-playing field in Europe between such international groups and EEA groups;
4. Solvency position calculation: Lack of clarity and legal uncertainties regarding the approaches and rules governing the calculation of the solvency position of an insurance group, in particular when the group also has subsidiaries located outside the EEA which are not subject to Solvency II on an individual basis;
5. System of governance: Wide margin of interpretations regarding requirements on the system of governance of insurance groups, which are not fully specified in the Solvency II Directive, but simply defined as a *mutatis mutandis* application of the provisions that apply to solo insurers.

Conclusion: The Solvency II framework has enhanced supervisory convergence, relying on more standard requirements, more transparency and supervisory cooperation. However, some legal uncertainties still arise in matters where there is some methodological freedom, such as in the case of internal models. In addition, policyholder protection is still uneven. This makes it necessary to further improve cooperation, in particular including regular information exchange, to set clear and effective preventive measures, allow for early identification of potential issues and optimally address potential failures. Given the increased cross-border insurers activities, this also implies that the framework deserves effective last-resort safety nets. As for group supervision, the framework has been assessed as robust, laying emphasis on capital management and governance, and allowing for a better

[48] Of those expressing an opinion, vs 11% who agree on it.

[49] The few participants that supported the above statement were invited to provide additional details, but did not use this opportunity.

[50] See COM (2008)0119, Report of the Committee on Economic and Monetary Affairs of the European Parliament on this proposal of 16 October 2008 (A6-0413/2008), COM (2019), EIOPA (2018).

understanding and monitoring of risks at group level. However, legal uncertainties in some areas of the framework may not ensure a harmonised implementation of the rules by groups and supervisory authorities, with potential detrimental impacts on level-playing field and policyholder protection.

- **Has the framework been effective in achieving its additional objective to foster growth and recovery? More specifically:**

6.1.4. To what extent has the Solvency II framework promoted better allocation of capital resources?

Long-term investment is key to provide stable capital in order to finance tangible assets (for instance, energy, transport and communication infrastructures, industrial and service facilities, housing and climate change and eco-innovation technologies) as well as intangible ones (such as education, research and development) that boost growth, innovation and competitiveness. Many of these investments have wider public benefits, since they generate greater returns for society as a whole by supporting essential services and improving living standards. With assets under management worth more than 9 billion euros in investments, the insurance sector remains a mainstay of the European financial industry and among the largest institutional investors. They can contribute to the long-term investment objectives. However, they have been retrenching from long-term assets over the last twenty years, and the share of their investments in the real economy and infrastructure has remained limited[51]. The Figure 6.1-16 below illustrates this trend in equity investments.

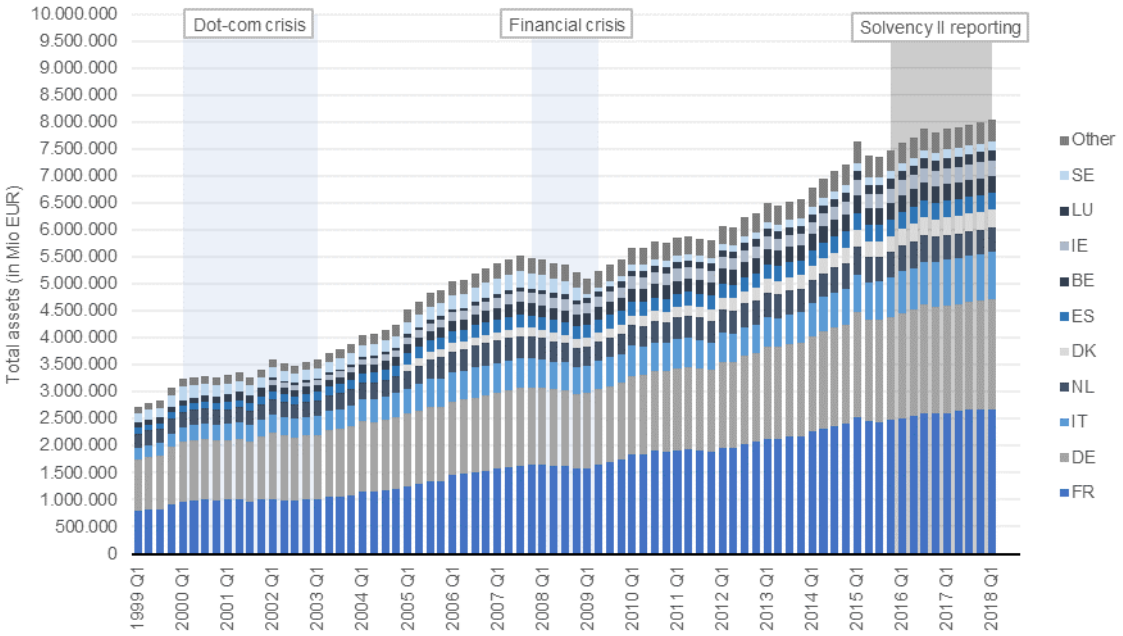
A main objective of the Solvency II Directive was therefore to facilitate a better allocation of capital resources at firm level, at industry level, and within the EU economy, through the alignment of regulatory requirements with economic reality. This was expected to "*result in a decrease in the cost of raising capital for the insurance sector, and possibly also for the EU economy as a whole, through the role of the insurance industry as an institutional investor*"[52]. More efficient allocation of capital within the economy was also expected to promote financial stability.[53] The Figure 6.1-15 below shows that insurers' total investments have indeed increased, and continued to increase after the entry of application of the Solvency II framework.

[51] From a prudential perspective, a long-term perspective encompasses the possibility for insurers to avoid forced selling under stressed market conditions.

[52] SEC(2007) 870, section 4.2.

[53] In the same vein, the 2020 Capital Markets Union Action Plan ("A Capital Markets Union for people and businesses-new action plan", COM/2020/590 final) underlined again the instrumental role that insurers can play in the "re-equitisation" and long-term financing of the European economy.

Figure 6.1-15: Total investments of the EU insurance market (incl. unit-linked investments)



Source: ECB QSA dataset and Deloitte-CEPS analysis

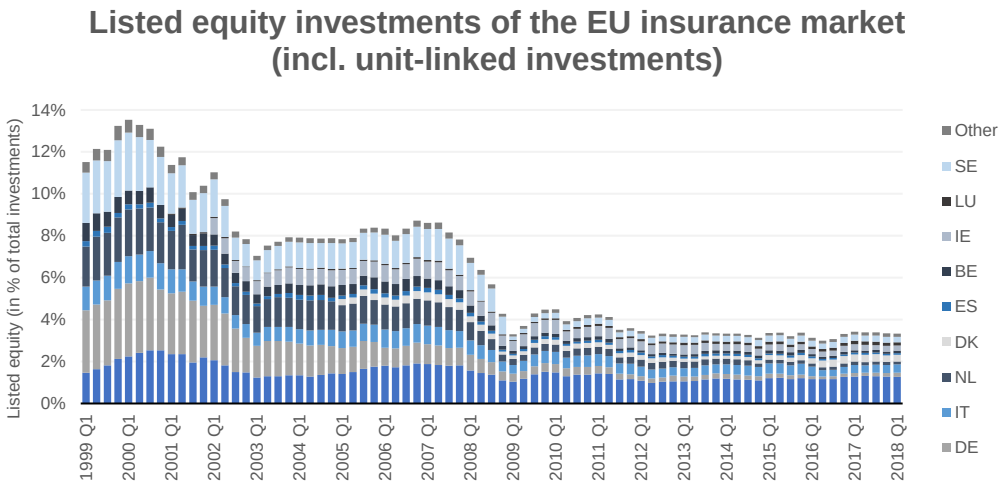
Note: *The ten most important EU Member States in terms of amounts are shown separately, covering 95,1% of the total at 2018 Q1. The remaining EU Member States are clustered ('Other'). For Denmark, the observation period only starts at 2005 Q1, for Ireland the observation period only starts at 2002 Q1 and for Luxembourg the observation period only starts at 2001 Q1.*

Insurers do provide a lot of debt financing.[54] However, despite the observed increase in the amounts invested, it seems that not all types of investments have gained interest. Based on EIOPA's statistics, insurers are already largely investing in long maturity debt, bonds and loans (more than two third of their investment portfolio), which is consistent with the long-term nature of insurers' liabilities (notably life business) characterised by stable and regular cash outflows.

But the proportions of investments in equities on the contrary are rather stagnating. As illustrated in the below figure (Figure 6.1-16), the entry into application of Solvency II in 2016 has not led to a reversal of the long-lasting downward trend in equity investments by insurance companies, here illustrated by the time series of the percentage of insurers' investments allocated to listed equity.

[54] However, in order for businesses (in particular small and medium-sized companies) to expand or grow, they also need to avoid being too much indebted and thus need capital financing. This is all the more the case in the context of the ongoing Covid-19 crisis where businesses in several countries had access to grants and loans, but are now facing high level of indebtedness while facing strong uncertainty in terms of economic outlook.

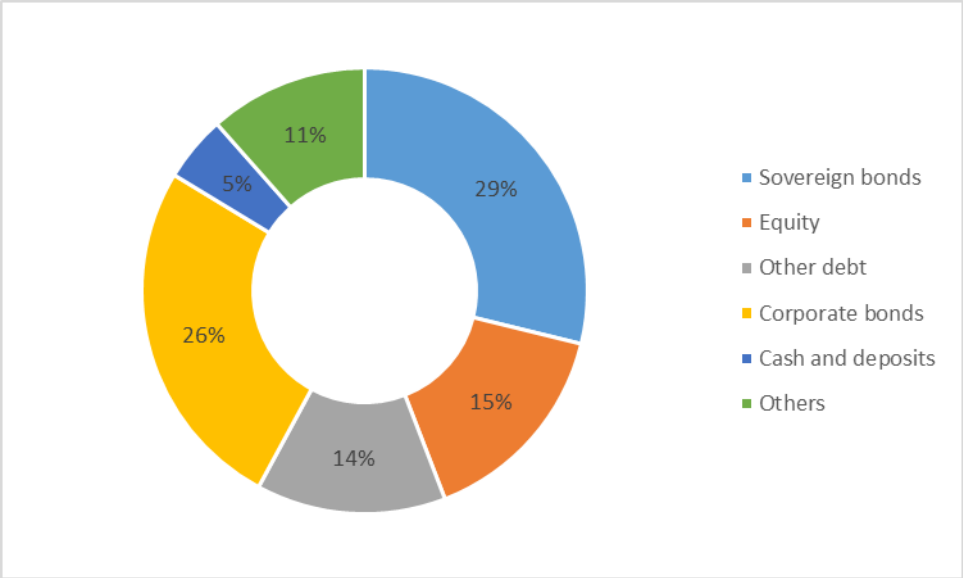
Figure 6.1-16: Listed equity investments of the EU insurance market



Source: Deloitte-CEPS study.

It also signals that equity is not gaining any comparative advantage in the eyes of the investing insurer. In the first quarter of 2020, investments in equity represented about 15% of insurers' total investments, from 16% two years before[55].

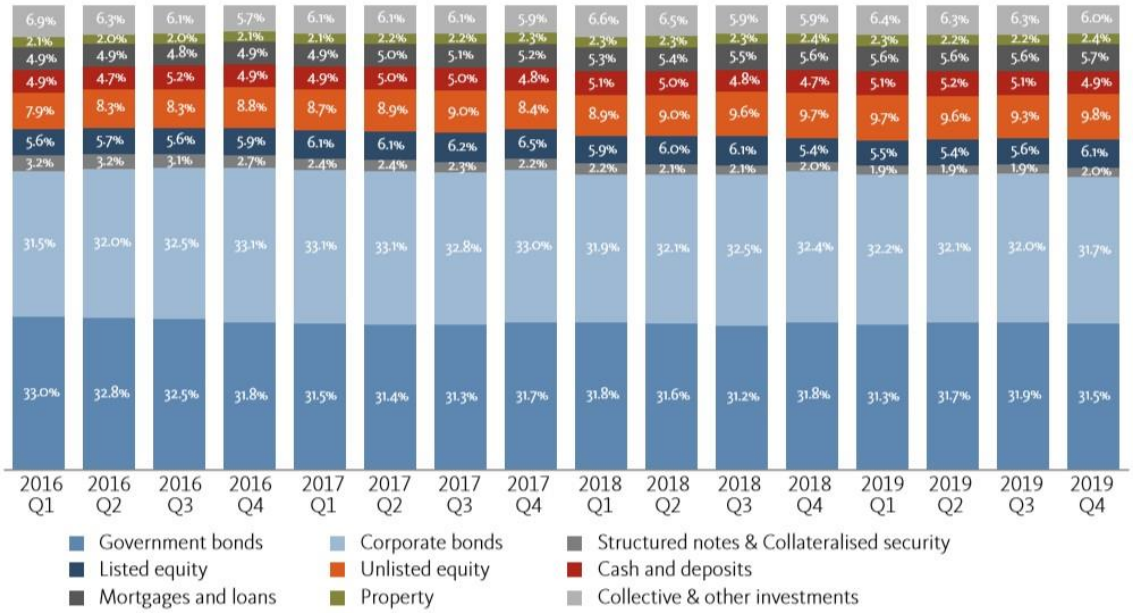
Figure 6.1-17: Total portfolio composition of the EEA insurance sector – Q1 2020



Source: Commission services – EIOPA statistics (S.06.02).

[55] Source: EIOPA's Statistics (S.06.02): total direct investment in equity and trough CIU, excluding investment relating to unit- or index-linked insurance products. There has been a long-term trend to reduced equity ownership by insurers. In particular, the share ownership of insurers and pension funds dropped from more than 25% of the EU stock market capitalisation in 1992 to 8% at the end of 2012.

Figure 6.1-18: Investment split in the EEA insurance market - 2016-2019



Source: EIOPA (2020c), p.15

Note: Look-through approach applied. Assets held for unit-linked business are excluded. Equities include holdings in related undertakings.

What can be the reasons for insurers' investment in equities to remain limited? First, once again, Solvency II is a "risk-based" framework. Based on quantitative evidence (e.g. historical price and volatility behaviour of financial assets), it defines capital requirements according to the risk over a one-year horizon.[56] Higher capital requirements on investments are therefore applied to assets which are deemed more volatile and/or riskier, for instance equity. Risk measures are currently not adjusted even where the intention is to hold bonds until maturity and stocks for any foreseeable future. It also means that even if the share of equity investments is limited to around 15%, equity risk represents more than 40% of capital charges for market risk under the standard formula (according to insurers' reporting to supervisory authorities). As a result, the requirements provide lower incentives for insurers to invest in equity, although such investments can contribute to the sustainable economic recovery and long-term growth in the EU. Indeed, insurers have an important role as providers of capital financing to businesses, in particular SMEs, and even more in the context of the recovery to the Covid-19 Crisis. It also impacts insurers' international competitiveness. In fact, by having to "set aside" a high amount of regulatory capital when investing in equity, insurers have less "available capital" to further expand internationally (e.g. invest in a foreign subsidiary) or to offer products with guarantees to consumers.

Second, the downward trend in equity investments actually dates back to the beginning of the 21st century. And the Study contracted by the European Commission on the drivers for investments in equity[57] also concludes that the Solvency II framework, which only entered into application in 2016, is not the main driver of insurers' investments, even by anticipation. Likewise, EIOPA's analysis suggests that the existing calibrations for equity are appropriate

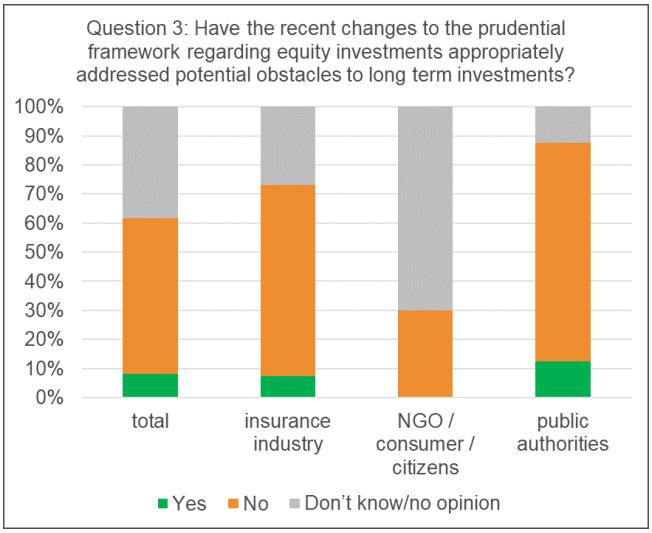
[56] See also section 2 – Description of the intervention.

[57] European Commission, DG FISMA (2019): "*Study on the drivers of investments in equity by insurers and pension funds*"; prepared by Deloitte Belgium and CEPS.

and that financial data do not support the preferential treatment on long-term equity investments which was introduced by the Commission in 2019.

Still, the regulatory framework is often reported by the industry as an important driver hindering insurers' ability to contribute to the long-term funding of the economy in the EU. Over the recent years, the Commission made several amendments to Solvency II to dampen this reported – unintended – disincentive for insurers to contribute to the long-term financing of the European economy. Preferential treatments have indeed been introduced in order to remove barriers to investments in long-term equities (as well as in infrastructure, in high-quality securitisation and in privately-placed debt).[58] However, overall, those new "asset classes" remain "niche investments", and many stakeholders maintain their claim that prudential rules reduce insurers' investment in such assets, as can be observed from the replies to the COM's public consultation[59]. Indeed, only 7% of stakeholders belonging to the insurance industry and 12.5% of public authorities indicated that the current framework including its recent changes, appropriately addressed the potential obstacles to long-term equity investments.

Figure 6.1-19: Public Consultation – treatment of equity investments



Source: COM services; analysis of the Public Consultation.

In particular, the recently introduced preferential treatment for long-term investment in equities is used by a very limited number of insurance companies, and the existing complex and conservative criteria may explain why less than 1% of European insurers' equity portfolio benefit from this new provision.[60] Indeed, in EIOPA's impact assessment, among those companies which provided information on equity investments, only 3.6% indicated using the "long-term equity" asset class from five Member States. For those firms, only 2.62% of total equities were classified as long-term equities (i.e. around € 4 billion of all equities), representing for them a decrease in capital requirements on equity of about 1% only compared to standard capital charges on equity.

[58] However, there is no sufficient data yet to draw valid conclusions at the time of this evaluation.

[59] Commission's public consultation available at this link.

[60] This also relates to results of the COM's consultation mentioned above, to which only 7% of stakeholders belonging to the insurance industry indicated that the current framework (including its recent changes) appropriately addressed the potential obstacles to long-term equity investments.

Conclusion: An objective of the Solvency II Directive was to facilitate a better allocation of capital resources at firm level, at industry level, and within the EU economy, and it has been reinforced by the Delegated Regulation's objective to foster growth through the promotion of long-term investment. However, the investments share of the insurance sector in the real economy and infrastructure has remained limited. Even the recent several amendments to Solvency II, through preferential treatments for certain classes of long-term assets, have not seem adequately designed to succeed in dampening this reported disincentive. The criteria to identify the long-term assets qualifying for preferential treatment are considered by the industry to be complex and not practical. A partial explanation for this disincentive is the risk-based principle of the framework. Without further changes - taking into account the necessity of adequately assessing the risk while ensuring enough investments in the EU economy - the level of equity investments by insurers would remain far below its level at the beginning of the 21st century (three times less).

6.2. Efficiency

Summary assessment:

The Solvency II provisions on supervisory reporting and disclosure have enhanced comparability, supervisory effectiveness and convergence, as well as transparency and indirectly risk management practices, thereby fostering policyholders' protection, competitiveness and integration of the EU insurance market.

Due to the difficulties in obtaining reliable cost estimates and the lack of means to quantify the general benefits of the Solvency II framework, it has not been possible to carry out a full quantitative assessment of its efficiency at EU level. The available evidence on compliance costs, however, suggests that the proportionality principle is not fully implemented and that smaller insurers in particular, spend significant financial resources to comply with the current regulatory requirements, in particular as regards the reporting and disclosure requirements. Updating and clarifying the application of the proportionality principle could improve the general efficiency of the framework.

6.2.1. Has the Solvency II Framework proven to be cost-efficient in delivering on the objectives? To what extent are the associated costs justified by the benefits it has brought?

General improvement vs cost of compliance

The three specific objectives of the Directive meant to facilitate the general ones are: (i) to improve risk management, (ii) to increase transparency and (iii) to advance supervisory convergence and cooperation. Most of their benefits have been reviewed in the effectiveness section above (see section 6.1), they are numerous and often the combined effect of targeting two or three of those objectives. Yet, they are difficult to measure in monetary terms, as they are most often reinforcing the "normal" functioning of the insurance companies, clarifying and/or standardizing existing internal requirements for instance, rather than replacing them. The Framework established a new approach to risk management, which is now integrated in

the strategic processes of the insurers; it imposed more transparency and standardisation, thereby allowing an easier access to information for the supervisors as well as for the consumers (policyholders); thanks to this it also produced a more robust governance system, reducing the probability of the insurer to fail, providing for more opportunities to prevent it or to smoothen the impact of it, should it nevertheless happen. In the process, the Framework benefits the society more widely. It increases the stability of the insurance sector, allows for greater availability of insurance and greater investment in growth-enhancing sectors, although not yet to its full capacity[61].

Being ambitious in its objectives, Solvency II is a very elaborated and complex framework. Likewise, it generates high compliance costs, which for the smaller insurers in particular may in some cases outweigh the benefits of the application of the framework. The "Study on the costs of compliance for the financial sector" (hereafter named "Study on Compliance Costs")[62] calculated for the insurers and reinsurers an average impact of the ongoing "general" costs of compliance of more than 32 million EUR, which represents 2.18% of their total operating costs, out of which more than half (1.12%) attributed to the Solvency II Framework. For the one-off costs, it rises to 3.53% of the total operating costs attributed to Solvency II. The Solvency II framework also ranked among the three most costly factors of the study.

The supervisory reporting and disclosure requirements: opportunities and costs

A pivotal component of the Solvency II framework comprises the requirements for supervisory reporting and disclosure ("pillar 3").[63] With regard to supervisory reporting, the benefits of the Solvency II Directive are numerous as well. It allowed moving from mainly national reporting to EU-level harmonised reporting. The new requirements have clear EU added value by providing data to supervisors and regulators that was not available before and enabling the EU-wide supervision of entire sectors. They also generate efficiencies in reporting and foster the convergence of supervisory practices through more harmonised requirements, which should enable supervisors to assess risks consistently across the EU, based on comparable data.

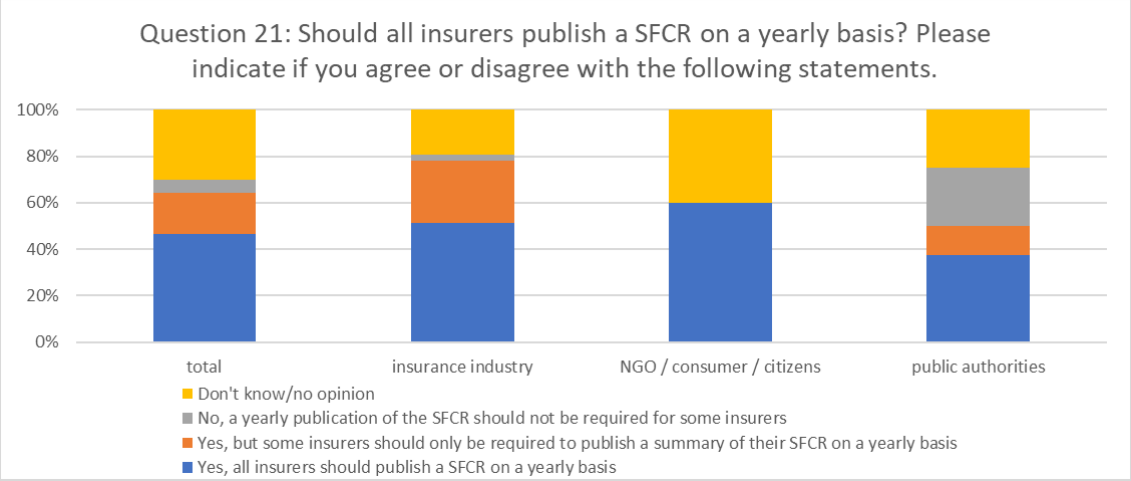
In addition, by requiring the yearly publication of a "solvency and financial conditions report" (SFCR), the Solvency II Directive has significantly enhanced transparency and disclosure to all types of external stakeholders (prospective) policyholders, creditors, investors, rating agencies, etc.. It has thereby facilitated comparability between the different insurers, which allowed better EU market integration and reinforced policyholders' protection.

These benefits may also explain why the stakeholders replying to the Public Consultation[64] do not oppose the annual SFCR requirement. Even the industry seems to support a yearly publication (51%), even though for 26.8% of them some insurers should only be required to

[61] Note that the stakeholders from the insurance industry often argue that there is a lack of supply of such products for them to invest in.
[62] Study on the costs of compliance for the financial sector, February 2020.
[63] See section 2 – *Description of the intervention*.
[64] Commission's public consultation available at this link.

publish a yearly summary. As for the public authorities, they also mostly support the yearly SFCR publication even though 25% of them would prefer more proportionality by exempting some insurers from a yearly publication. In addition, EIOPA confirms in the background analysis[65] to its Opinion that "SFCR is an important tool regarding market discipline and the reports are used by stakeholders".

Figure 6.2-1: Public consultation: SFCR



Source: COM services; analysis of the Public Consultation.

The specific objectives of EU supervisory reporting requirements are not spelled out in legislation. Nonetheless, the main goal of these requirements — to provide supervisors with the data they need to fulfil their functions that contribute to the wider objectives of financial stability, market integrity and policyholder protection — continues to be highly relevant, as well as the subsequent increased transparency and enhanced trust for policyholders.

On the other hand, this essential component also represents a major cost for insurers. As an illustration, the German Insurance Federation (GDV) indicates that the preparation of the 2017 SFCR by a small non-life insurer required a total of 160 working days (full-time equivalent). This cannot really be considered as on-going cost, as it was still the first years of application and one can expect certain efficiencies reducing costs going forward. Afterwards, the template SFCR can mostly be updated with relevant quantitative information, which simplifies the process. Nevertheless, the cost may be significant for smaller insurers. And it can be considered even more "unjustified" for small insurers where the granularity and complexity of the information provided in the SFCR may be seen as excessive for policyholders.[66] As an illustration, according to the GDV[67], in 2018, the 2017 SFCR of German insurers were consulted on average 33 times per month, (46 times for life insurers, 27 times for non-life insurers).[68] On the other hand, as mentioned above, EIOPA confirms in

[65] EIOPA (2020), Background Analysis, p. 407.
[66] This issue could (at least, partially) be addressed by new EU and OECD initiatives addressing financial literacy matters (see for instance the keynote speech of Commissioner McGuinness at the launch of the Commission/OECD project to develop a financial competence framework in the EU (link).
[67] See GDV (Gesamtverband der Deutschen Versicherungswirtschaft) official statement/survey (link).
[68] The mere number of consultations is only of limited informative value. While insurers assume that most readers are specialised market players, even if one assumed that only "simple" consumers had accessed an SFCR, this would still represent a mere 0.03% of households.

the background analysis[69] to its Opinion that reports are used by stakeholders. The outcome of the Commission's public consultation also shows that the SFCR's reading is considered insightful to a large majority by the insurance industry and public authorities, but only half consumer/citizen respondents were of the same opinion. Some stakeholders also claim that there is too much attention given to the SCR ratio, which can be very volatile (as explained in section 6.1.1). In this regard, besides transparency, it is important to keep (and possibly disclose) sufficient amount of information in the SFCR to avoid the focus on the unique "branding SCR ratio".

As for the cost on insurers, the "Study on Compliance Costs" further reports that within the surveyed compliance costs for (re-)insurers, supervisory reporting costs represent about 36% of the on-going costs. They amount to about 1.6 million EUR, i.e. 0.89% of total operating costs on average. It is also noticeable that the median share of ongoing supervisory reporting costs among smaller firms is twice as much as those observed among larger ones (49% vs 23%).[70] The most significant one-off cost item is reported to be "familiarisation with obligations", while the most significant ongoing cost item is "training of personnel". It also implies that the number and frequency of changes, worsened by short implementation deadlines, increase the costs incurred by reporting insurers (and supervisors).

Conclusion: To name only some benefits, the Solvency II framework established a new approach to risk management and imposed more standardisation and transparency; thanks to this it also produced a more robust governance system, more consistently supervised, reducing the probability of the insurer to fail. In the process, the Framework benefits the society more widely. It increases the stability of the insurance sector, allows for greater availability of insurance and greater investment, although not yet to its full capacity. On the other hand, it generates significant compliance costs, in particular – relatively – for the smaller insurers.

6.2.2. Is there scope for increasing efficiency and making the rules more proportionate?

<u>Proportionality assessment (1): exempted companies</u>

Principle

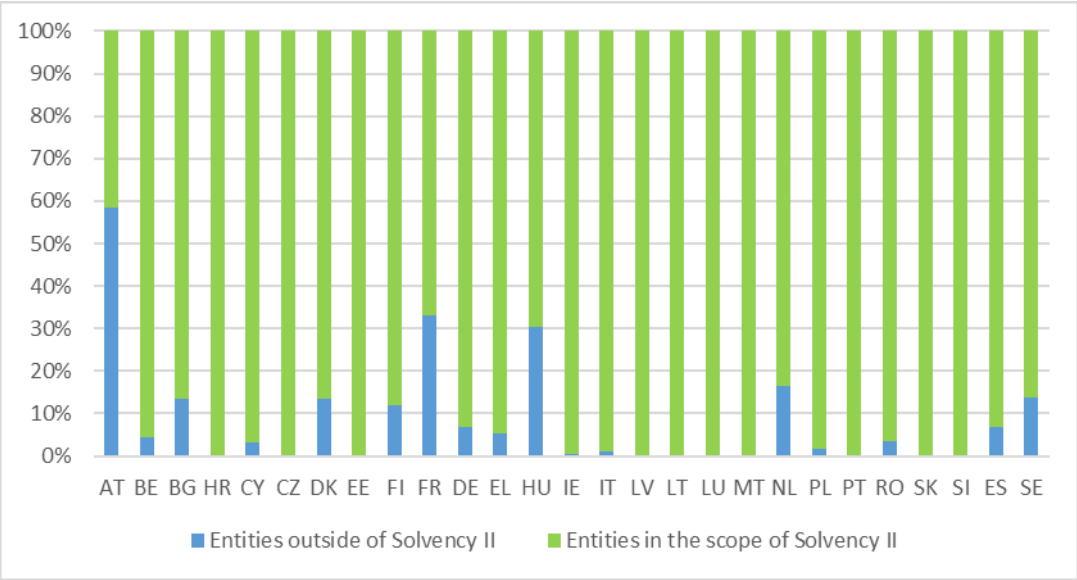
While the Solvency II framework implies high compliance costs as detailed above, it already provides (Art.4) that very small insurers are excluded from the application of the Directive if they meet a series of cumulative (quantitative) criteria.[71]

Outcome

[69] EIOPA (2020), Background analysis, p. 407.
[70] see Study on Compliance Costs.
[71] See also section 2 – Description of the intervention and its objectives. Note that there is an additional nature-based exclusion criterion, as direct insurance companies considered complex are covered by Solvency II even if they comply with the relative thresholds (i.e. those which underwrite insurance or reinsurance activities covering liability, credit and suretyship insurance risks).

In practice, the outcome of the proportionality principle is not that straightforward. Indeed, for insurers which are not in the scope of the Solvency II framework, the national prudential rules apply, and it is expected that national rules are less stringent in terms of reporting rules. The national rules may in some cases extend the scope of application of Solvency II, either by setting lower thresholds of exclusion than the ones set out in the Directive, or by simply not introducing at all any threshold. In these cases, the requirement to comply with Solvency II is not imposed by the Directive itself, but by national legislation.[72] This is the reason why in 13 Member States, all insurance and reinsurance companies are subject to the Solvency II requirements. Hence, the share of insurers exempted from Solvency II rules widely differs between Member States, from 0% (in Czechia, Croatia, Portugal etc.), to almost 60% (in Austria), for an average of 14%.[73]

Figure 6.2-2: Scope - Percentage of companies within and outside the scope of Solvency II, by Member State, 2019



Source: EIOPA (2020) Opinion - Background Analysis.

As of today, the thresholds for exclusion have not been amended since the adoption of the Solvency II Directive in 2009, and the only revision provided for in the framework is an inflation-related one.[74] Therefore, those thresholds may be considered as outdated. The first update, if the 5%-threshold is reached, will take place in 2021. Still, the lack of reassessment of the appropriateness of thresholds may imply high compliance costs for small companies in the scope of Solvency II, which may not compensate the benefit of being subject to Solvency II. As reported in the Commission's public consultation, 59% of (responding) stakeholders are satisfied with the current exclusion thresholds, while 41% are dissatisfied, which gives a somewhat mixed opinion on the existing thresholds. Some of them are more explicit, asking

[72] On the other hand, companies that wish to apply Solvency II framework have the right to do so (for example to benefit from the European passport).

[73] EIOPA (2020), excerpt of the Background Analysis, p.364: "*From the 16 Member States that have insurance undertakings excluded from the scope of Solvency II, 5 apply a regime similar to Solvency II but with some exemptions, 6 apply Solvency I and 5 a regime different from Solvency I or Solvency II*."

[74] The EUR-amount thresholds shall be revised every 5 years, starting 31 December 2015, when the percentage change since the previous revision is at least 5% (Art.300).

for increased thresholds with the reasoning that it allows NSAs to better adapt the requirements to their national smaller firms.

Proportionality assessment (2) – conditional lighter requirements

Principle

Besides the proportionality principle provided for in the scope of the Directive, the second layer of proportionality embedded in Solvency II is the requirement that the intensity of the supervisory review process is commensurate to the "nature, scale and complexity" of each company which is subject to Solvency II. Therefore, the application of the proportionality principle does not depend on the size of the companies but on the risks that they are facing. The framework as a whole is formulated in a modular manner, such that insurance and reinsurance companies must only apply those requirements, which are relevant to the risks they incur.

For quantitative requirements ("pillar 1"), this "risk-proportionality principle" broadly takes the form of "simplified calculations". In other words, for several balance sheet items (best estimate, risk margin) and risk (sub)-modules of the solvency capital requirements, the framework allows insurers to use an explicit set of simplifications when such a use: (i) is justified by the nature, scale and complexity of the risks underlying insurers' obligations or exposures; and (ii) does not lead to an underestimation of the risks or a misstatement of insurers' obligations.

A good governance and a robust risk management framework are essential to ensure that insurance and reinsurance companies are able to properly identify, measure, monitor, manage and report the risks that they are or could be exposed to. They are the object of the Solvency II so-called "pillar 2" requirements. The extent and intensity of the different requirements should of course be commensurate to the nature, scale, and complexity of each firm.

The Solvency II framework also builds on a third pillar, namely supervisory reporting and disclosure. In terms of reporting frequency, insurers must submit quantitative data at least annually, but some information are required to be reported by insurers on a quarterly basis. However, for proportionality reasons, where the reporting requirements would be overly burdensome in relation to the nature, scale, and complexity of the risks of each insurer (and under some prudential and financial stability conditions), the Directive (Articles 35(6) & 35(7)) allows national supervisory authorities to: (i) waive or reduce the scope of quarterly supervisory reporting requirements; (ii) reduce the scope of annual supervisory reporting or exempt companies from reporting on an item-by-item basis. In each of those two cases, the decision must not concern a total of more than 20% of Member State's life and non-life insurance and reinsurance market respectively (where the non-life market share is based on gross written premiums and the life market share is based on gross technical provisions).

Outcome

Several Member States, Members of the European Parliament and insurance stakeholders have raised the concern that the current rules of the EU regulatory framework does not sufficiently differentiate between the very large insurance groups and the very small

local companies. Moreover, a sizable number of respondents to the Solvency II consultation submitted that, in their view, some of the Solvency II requirements may impose a disproportionate burden on smaller and less complex insurers.

There is no specific report on the effective application of proportionality under Solvency II's three pillars.[75] However, based on EIOPA's technical advice and specific outputs (such as the Peer Review on the Regular Supervisory Report), on exchanges at the Solvency II Review Conference[76] as well as the feedback to the Commission's public consultation, the current framework results in a limited implementation in practice of the proportionality principle, as further illustrated in the paragraphs below. However, in terms of process, the outcome of the Commission's consultation reveals a mixed view, also reflecting the respondents' role in the supervision process. Indeed, 63% of the respondents from a public authority would keep the large level of discretion they currently have, while in total only 15% of respondents express support for the current level of supervisory discretion, and 44% say it should be reduced.

As regards the "pillar 1" (capital requirements), the framework for simplified calculations is considered appropriate overall by stakeholders. However, the framework does not allow for a reduced frequency of calculation for risk modules that are immaterial and complex to calculate. In "pillar 2", the Solvency II framework neither specifies how proportionality can be effectively applied to existing provisions nor provides concrete criteria for their use. As a very practical illustration, the framework does not clearly define situations where it may be acceptable for a person carrying out a "key function" in a company to also carry out other key functions. This results in a lack of transparency for the insurance and reinsurance companies and a reluctance from supervisory authorities to apply some proportionality measures due to a lack of clear legal hook, with a weakened supervisory convergence. The same goes for pillar 3, and the latest EIOPA's Peer Review on the Regular Supervisory Report ("RSR 2020")[77] confirmed that the majority of the National Competent Authorities (NCAs) do not grant this possibility for exemption and require an annual submission of the full RSR, while only one NCA (Liechtenstein) has such an exemption option (set out in the local legislation). All in all, around one-third of the NCAs (Belgium, Czechia, France, Germany, Ireland, Luxembourg, Malta, the Netherlands, Portugal, Spain, the UK) apply, to a certain extent, the principle of proportionality set out in the Solvency II Framework: these NCAs perform "risk-based supervision" and set a different frequency of submission of the full and summary RSRs than the EU-defined minimum.

In more detail, still according to EIOPA[78], only 12 EEA NSAs granted limitations in quarterly reporting to 683 companies (see below graph), representing approximately 27% of the total number of insurers and reinsurers. Depending on the country, this does not necessarily imply an exemption of quarterly reporting, but at least a reduced number of information to be submitted. In terms of market share, such limitations concerned only 6.5%

[75] But EIOPA reports on exemptions and limitations on reporting (i.e. pillar 3).

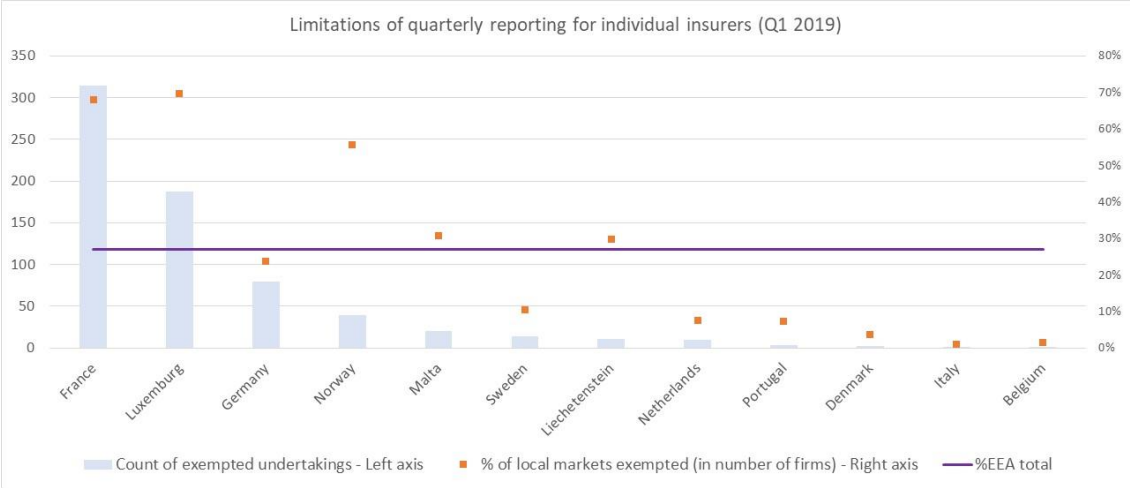
[76] As an example, the report from the Conference states that: "*There was a general agreement on the need to clarify the application of the proportionality principle in level 1 to ensure the legal certainty and predictability of the supervision…*".

[77] See EIOPA (2020b).

[78] See EIOPA (2020a).

of non-life insurers (in terms of gross written premiums)[79], and 3.5% of life insurers (in terms of life insurance liabilities towards policyholders)[80].

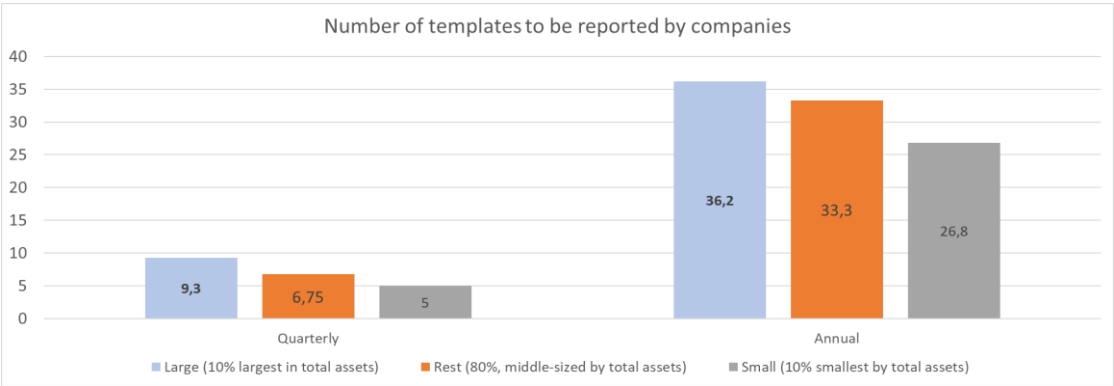
Figure 6.2-3: Proportionality in Reporting - Exempted companies by EEA Member State



Source: EIOPA (2020a), Commission services.

The number of so-called "quantitative reporting templates" (i.e. tables with quantitative data) is not negligible, although proportionate to the size as shown in the below table. In total, every year, large insurers have to report information spread over around 70 quantitative templates. The 10% smallest insurers have to report every year quantitative information spread over a bit less than 50 templates, which represents a reduction of approximately 35% compared to the 10% largest insurers. Still, it also appears clearly from EIOPA's background analysis (2020, p.406) that quarterly reporting, including of MCR, is crucial in the monitoring process.

Figure 6.2-4: Number of templates to be reported - 2019



Source: EIOPA (2020a), Table 1.4.

Conclusion: Parts of the industry remain concerned about the proportionality of the EU-level requirements for smaller firms operating in local markets only. The thresholds for exemption, although revisable to take account of inflation, have not been reviewed yet. The number and frequency of changes, coupled with short implementation timelines, add to the costs incurred by both reporting entities and supervisors. In addition, there is no systematic

[79] At national level, this percentage is above 17% in France, Luxembourg and Denmark, but below 6% in all other countries.

[80] At national level, this percentage lies between 3% and 5% in France, Liechtenstein, and Germany, but is below 1% in all other countries.

and continuous assessment of whether each information to be submitted is (still) absolutely necessary and adequate for the purpose of insurance supervision. Further, some disclosed information seems too complex and/or overwhelming for the average policyholder, which could imply a reduction rather than an increase in trust. There is therefore some room for improvement as to the clarification of the proportionality possibilities allowed to the supervisors by the Framework, as well as the adequacy of the reporting and disclosure requirements and the possibility to specify reporting output differentiated according to the needs of the target groups.

6.3. Relevance:

Summary assessment:

The main objectives of the Solvency II Framework – to deepen the integration of the EU insurance market while ensuring sufficient policyholder protection and financial stability, support the competitiveness of EU insurers and foster economic growth – remain highly relevant.

However, the economic and financial conditions faced by insurers and reinsurers over the recent years and months (in particular in relation to interest rate risks and market volatility) pose new challenges to the adequate functioning of the Framework. It may also raise financial stability issues, and the existing macro-prudential tools already embedded in the framework may not be fit to sufficiently allow addressing potential systemic risks in the insurance sector. In particular, Solvency II does not provide a framework for the coordinated resolution of insurers. Similarly, there is no coordinated approach of safety nets in the form of insurance guarantee schemes that would protect policyholders and beneficiaries in case of failure.

Another newly emerged objective is the role insurers are expected to play as institutional investors for a sustainable and green recovery. The current framework does not manage nor reflect climate and environmental risks in insurers' risk management.

6.3.1. Have the objectives proven to be appropriate?

As shown in section 6.1, the implementation of the Solvency II framework has achieved progress in relation to the different specific objectives, thus being overall effective in reaching its general objectives, i.e. to increase the EU insurance market integration, to enhance the protection of policyholders and beneficiaries and improve competitiveness of EU insurers.

However, while the introduction of Solvency II has been a significant step towards improved risk management and supervisory practices and has contributed to reduce the risk of failure and near-failure, it has not fully eliminated it. In this perspective, even though the Solvency II framework contains provisions on recognition of national reorganisation and winding-up proceedings, it was not intended to provide an alternative to insolvency regulation. This can impact both policyholders' protection and financial stability.

As explained in EIOPA's Opinion[81], a majority of Member States do not have an effective recovery and resolution framework in place[82], and when they have, there are substantial differences between those national recovery and resolution frameworks. These differences include the powers and tools available to authorities, the conditions under which these powers can be exercised and the objectives pursued when addressing the failure of insurers. Based on EIOPA's 2017 survey, 43% of NSAs identified gaps and shortcomings in their existing frameworks to deal with failing undertakings. As a result, three Member States decided to develop their own legislative framework while supervisors in other Member States have started requiring preventive recovery plans from selected insurers. This situation however contributes to a fragmentation of the single market for insurance. For those Member States that did not follow this path, and as evidenced by the few failure and near-failure cases recorded by EIOPA, the lack of sufficient preparedness of both insurers and public authorities, the lack of adequate tools and powers or the lack of cross-border coordination may have impeded a prompt and successful recovery or resolution of failing insurers in the EU. Consequently, the level of protection for policyholders and beneficiaries may have been suboptimal.

In addition, EIOPA illustrated in its advice that although a majority of Member States have set up an insurance guarantee scheme (IGS) for certain life or non-life policies, the approach they have followed for the design of the IGSs diverges quite substantially from each other. Differences can notably be observed in terms of the role and functions, geographical coverage, eligible policies, eligible claimants or funding. In contrast to the insurance sector, the guarantee schemes in other sectors of the financial system have already been harmonised at the EU level to address fragmentation. The current patchwork may have consequences for the protection of policyholders as well as the functioning of the internal market.

Conclusion: The main objectives of the Solvency II framework – to deepen the integration of the EU insurance market while ensuring sufficient policyholder protection and financial stability, support the competitiveness of EU insurers and foster economic growth – remain highly relevant. However, the economic and financial conditions faced by insurers and reinsurers over the recent years and months (in particular in relation to interest rate risks and market volatility) significantly differ from those during which the Solvency II framework was designed. In addition, Solvency II does not provide a framework for the coordinated resolution of insurers. Similarly, there is no harmonised and coordinated approach of safety nets in the form of insurance guarantee schemes.

6.3.2. To what extent is the framework still relevant/appropriate given changing market conditions?

Under Solvency II, the European insurance industry has proven to be financially very robust. With levels of capital resources that remain more than twice as high as what is required by the legislation, insurers' solvency position has so far been sufficiently solid to weather quite well the economic and financial consequences of the Covid-19 outbreak. Even more, the insurers seem to have integrated in their own risk management practices both the

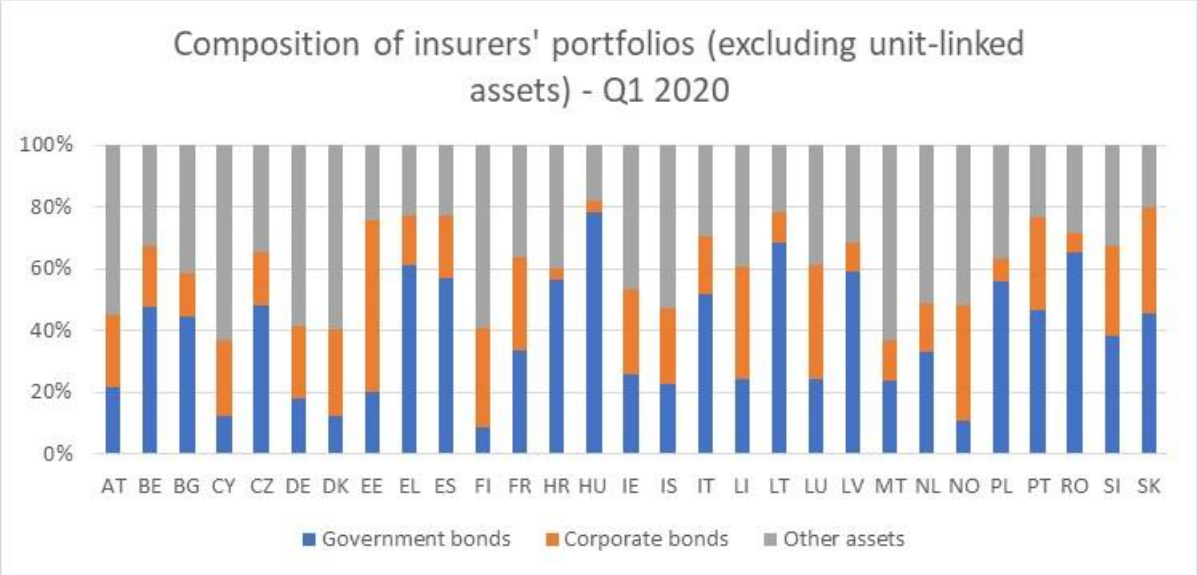
[81] EIOPA's Opinion (2017).
[82] As defined by the FSB and the IAIS.

capital requirements set by the Framework as well as the risks posed by a volatile and uncertain economic outlook, beside other stakeholders' expectations (e.g. rating agencies). However, the economic and financial conditions faced by insurers and reinsurers over the recent years and months (in particular in relation to interest rate risks and market volatility) significantly differ from those during which the Solvency II framework was designed. Therefore, it may contain outdated parameters and provisions, possibly resulting in unforeseen weaknesses and gaps in some areas of the framework. In particular, the following shortcomings were identified.

Low interest-rate environment

Insurers are large investors of fixed-income securities (i.e. debt instruments that generally pay a regular fixed amount of coupon interest). Hence, it is commonly accepted that the current low interest rate environment is one of the main risks that EU insurance companies have been facing over the recent years. And the longer the balance sheet, the more vulnerable the insurer is to low-for-long.

Figure 6.3-1: Low interest rate - Composition of portfolios - 2020



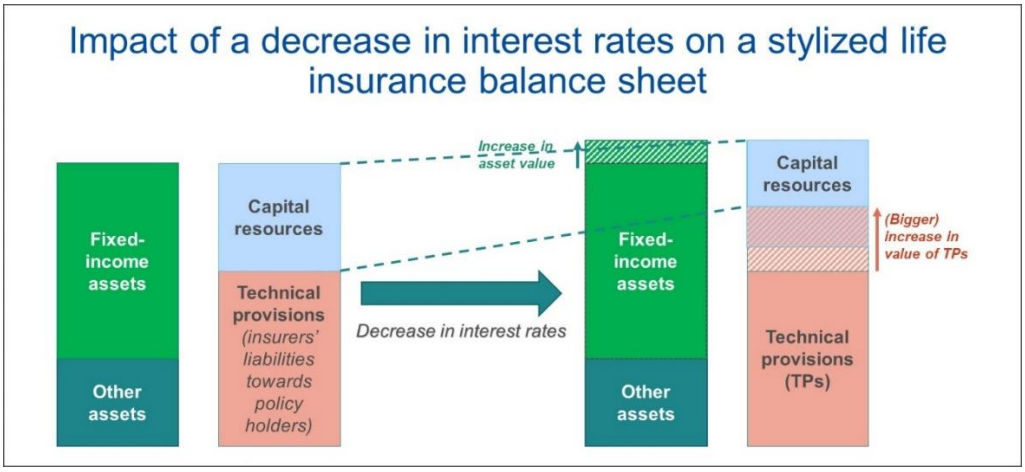
Source: Commission services – EIOPA Statistics (asset exposures).

This low yield environment affects both insurers' profitability and their solvency. Concerning profitability, insurers are facing a downward trend in the return on their fixed-income investment portfolio. Indeed, bonds that are gradually reaching maturity have to be reinvested in new fixed-income securities offering lower yields. The exposure and related deterioration of profitability will depend on the business model of individual firms. The decrease in interest rates is particularly challenging where insurance products with relatively high guaranteed returns have been sold in the past, and companies still hold a large portfolio share in these products.

As regards solvency, the low-yield environment also has a direct impact on insurers' level of capital resources. Solvency II prescribes a market-consistent valuation of assets and liabilities. Therefore, as illustrated below (Figure 6.3-2), a decrease in interest rates results in an increase in the values of both assets and liabilities. However, as life pension insurers'

assets are less sensitive (to changes in interest rates) than liabilities, they increase less and consequently insurers' solvency deteriorates when interest rates fall. [83]

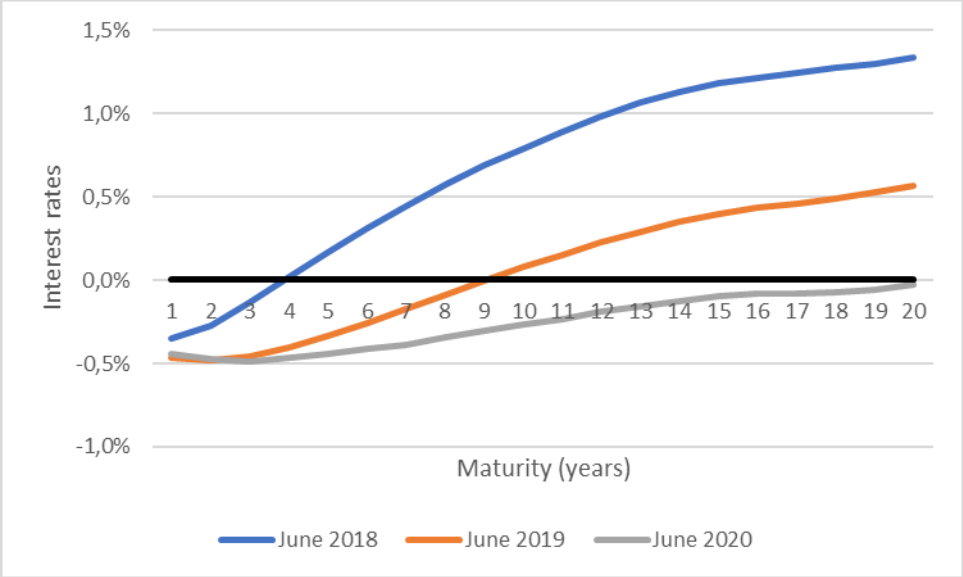
Figure 6.3-2: Life insurance balance sheet: Impact of a decrease in interest rates



Source: Commission services.

Between 2018 and 2020, the level of interest rates (for the euro) has significantly decreased. As shown in the below graph, while in 2018, interest rates used to value insurers' liabilities were positive for maturities above 4 years, in June 2020 they were negative up to a maturity of 20 years.

Figure 6.3-3: Risk-free rate curve



Source: Commission services, EIOPA Statistics.
Note: Euro risk-free interest rate curve used to value insurers' liabilities

In order to get an idea of the extent of the problem, one can refer to EIOPA's advice on the review of the Solvency II Delegated Regulation 2018 where it had already included its

[83] The sensitivity depends on the duration of both the asset and liability side. In general, the duration on the liability side is higher and therefore this side is more sensitive to interest risk change.

proposal to review changes to interest rate risk[84]. EIOPA's 2018 impact assessment suggested that capturing negative interest rates in capital requirements would imply an average decrease of 14 percentage points in solvency ratios. The actual decrease in interest rates (for maturities up to 20 years) between June 2018 and June 2019 proved to be more significant than what EIOPA had proposed to integrate in capital requirements[85]. This means that between mid-2018 and mid-2019, insurers faced a deterioration in their solvency position which was more or less equal to the capital resources which they would have had to establish if negative interest rates were appropriately accounted for in standard formula capital requirements. This however did not generate wide-scale failures as insurers' average solvency ratio remained above 200%, as already evoked above.

The assumptions underlying the design of the capital requirements under the Solvency II standard formula are therefore no longer adequate, as they do not envisage the possibility for interest rates to even move in negative territory. Likewise, they do not envisage a further decrease when rates are already negative. Therefore, the prudential framework leads to an underestimation of the interest rate risk to which the insurers are exposed. In turn, underestimation of interest rate risk can have negative effect on investment behaviours and risk-taking activities by insurers. Indeed, it does not set explicit provisions to insurers to set aside capital for the risk of negative interest rates, which has now materialised, with potential side effects on financial stability. In this respect, only few stakeholders participating either to the Commission's or EIOPA's consultations expressed the view that the framework does not require any amendment as regards risk-sensitivity, in order to reflect the low interest rate environment.

Conclusion: Insurers are large investors of fixed-income securities which implies that the current low interest rate environment is a high risk for EU insurance companies. It impacts their profitability (depending on their business model) and their solvency (the longer the balance sheet, the more vulnerable the insurer is to low-for-long). As the capital requirements under the Solvency II standard formula do not envisage the possibility for interest rates to even move in negative territory, the prudential framework leads to an underestimation of the interest rate risk to which the insurers are exposed. Which, in turn, can have negative effect on investment behaviours and risk-taking activities by insurers.

Financial stability and macro-prudential risks

The benefits of a sound risk management and enhanced supervisory convergence, both on policyholders' protection and on financial stability are not to be questioned. As illustrated in section 0, the number of failures and near miss events has actually decreased, even though the likelihood to fail has not totally vanished. It is in line with a review published by KPMG in February 2020 on "insurance undertakings insolvencies and business

[84] See EIOPA's webpage. Note that the Commission at that time decided not to endorse EIOPA's advice but to discuss it as part of the broader review of Solvency II Directive where all topics in relation to interest rates could be discussed at the same time.

[85] Beyond 20-year maturities, changes in interest rates between June 2018 and June 2019 proved to be lower than what EIOPA had modeled.

transfers in Europe"[86] that concluded on the positive effects of prudential regulations introduced in Europe since 2001. In particular, the study noted that failures after 2001 have significantly reduced in numbers and concerned smaller companies, thereby creating less impact and affecting fewer creditors.

Most rules of the Solvency II Framework are targeted to individual insurers (so-called "micro-prudential supervision") and require holding sufficient capital to be able to weather extreme adverse shocks in relation to risks. The risk-based nature of the framework requires insurers to hold more capital for riskier behaviour. Those measures targeting risky behaviour also contribute to addressing potential systemic risk stemming from large insurers whose disorderly failure could cause disruption to the global financial system and economic activity, due to their size, the complexity of their investment and underwriting activities, and/ or their interconnectedness with financial markets and the wider economy. Some provisions of the framework (including those aiming to reduce short-term volatility impact) also aim at addressing systemic risk stemming from "pro-cyclical behaviours" by a large number of (possibly smaller) insurers, which may collectively act as an amplifier of market downturns or of an exogenous shock. For instance, in case of significant market turmoil, insurers that breach their capital requirements may be granted longer deadlines to restore compliance with quantitative requirements, with the aim to avoid forced-sales of assets which could amplify negative market movements.

However, these tools provided for in the Solvency II Directive have been thought through at a time where the insurance sector was still deemed mostly protected from "domino effects" such as those that have been observed in the banking sector. As the market conditions were good for insurers, and the "low-for-long" not yet in sight, interconnectedness with other market participants, intersectoral impacts and common risky (herding) behaviours among insurers may have been partially overlooked, not sufficiently allowing addressing potential systemic risks in the insurance sector. As explained above, there are regulatory tools embedded in Solvency II, but they may be insufficiently fit for purpose and too narrow in terms of scope to effectively prevent a build-up of systemic risk in the insurance sector and to allow an appropriate macro-prudential supervision (i.e. a supervision of insurance sector as a whole). EIOPA and the ESRB also state that those provisions offer limited possibilities for public authorities to preserve financial stability, and to address risks generated by the insurance sector itself. In particular, they point to a lack of harmonised framework for coordination and management of crisis situations, including for the largest European insurers with international activities and potential systemic footprint, which would not be consistent with the objectives and standards developed at international level by the International Association of Insurance Supervisors (IAIS) and the Financial Stability Board (FSB). Indeed, the revised (November 2019) Insurance Core Principles and Common Framework for the Supervision of Internationally Active Insurance Groups (IAIGs) of the IAIS consider pre-emptive recovery planning as necessary at least for IAIGs, and the FSB requires resolution planning for insurers that could be systemically significant or critical if they fail. Both require a set of appropriate resolution powers.

[86] This study – prepared for, an on behalf of, the following industry associations: ICISA, ITFA, IUA and Lloyd's Market Association – reviewed the non-life insurance company failures over the last 30 years within UK, FR, IT, DE, NL, SE and Gibraltar. See KPMG 2020 (in Annex 5 on IGS).

The below examples illustrate potential sources of such systemic risk in the insurance sector that may still be insufficiently addressed by the tools embedded in the legislation.

Search-for-yield behaviour:

Due to the persistently low and declining yields on fixed-income securities, (life) insurers are facing growing pressure on investment returns, as the excess of insurers' investment income over the guaranteed returns on the insurance policies that they are offering is progressively decreasing.

According to the European Central Bank (ECB), for the euro area insurance sector as a whole, the difference between coupon income from debt securities and average guaranteed rates was approximately 1% in 2019. Assuming that the current interest rate environment will persist until 2030, even if taking into account the reduced guaranteed returns on new contracts, the spread between average coupon rates and guaranteed returns would narrow further to 0.7%. Such a projection is an "average trend" which may hide more significant challenges in some countries.

This can lead to increased risk-taking by insurers (in more risky or illiquid assets) in order to get higher yield, with demand sometimes exceeding supply in certain asset classes, which in turn may further boost asset prices and generate "bubbles" if not well-monitored. These "bubbles" can make the sector more exposed to the risks of rising spreads on fixed-income securities and plummeting equity prices. If those risks materialise, they may prompt insurers' fire-sale of risky assets to restore their solvency position (by "de-risking" their investment portfolio), which can amplify a market turmoil. This procyclical behaviour could cause a circle of fire-sales, deteriorating asset prices and even more fire-sales of assets. A prolonged period of low yields may therefore promote a further build-up of vulnerabilities for the financial sector. An attentive supervision, and further an effective supervisory collaboration, allowing a good overview of the market situation, would be even more crucial in that situation.

Yet, during 2020, this risk has not really materialised, as European insurers largely managed to weather the negative impact of the Covid-19 crisis, with levels of capital resources that are still more than twice as high as what is required by Solvency II. Even taking into account the stabilising impact of the intervention by central banks, at this stage, the level of risk taken and managed by insurers seems to remain appropriate.

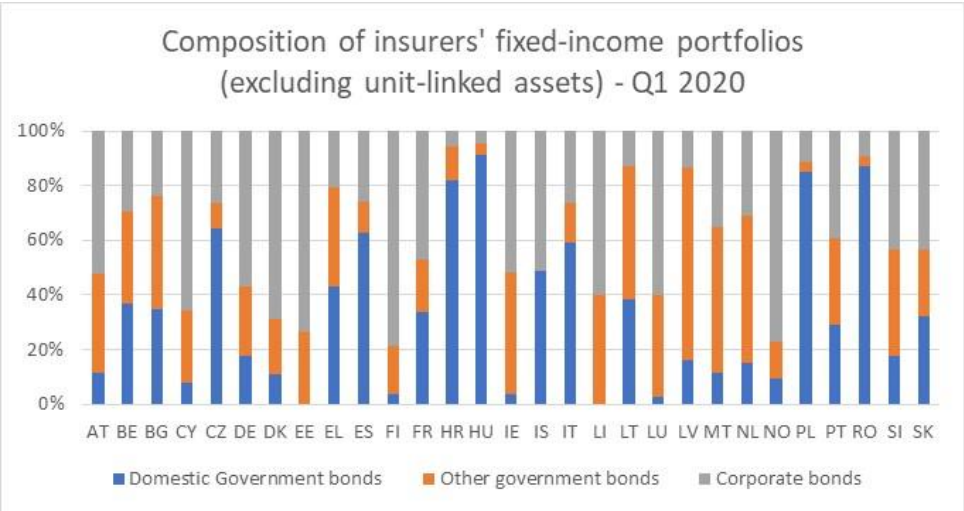
Concentrated investment portfolio

An increasingly high concentration of insurers' investment portfolio in certain asset classes, counterparties or sectors can be an additional source of systemic risk. First, insurers (life insurers in particular) represent a significant source of funding and liquidity to other financial actors, banks in particular.[87] They are therefore interconnected with them. It implies that the shocks in one financial sector might spill-over to others.

[87] As an illustration, insurers hold bonds issued by banks for an amount of EUR 976.5 billion (42% of all corporate bonds held are from banks), EIOPA (2020), Financial Stability Report.

In addition, as mentioned in sub-section 6.1.1 about volatility adjustment and shown on the graph below, insurers invest heavily in (domestic) government bonds, which exposes them to potential renewed stress in sovereign markets when spreads in government bonds of some Member States experience periods of high volatility. Indeed, the ECB also notes a high concentration of sovereign debt in insurers' debt securities portfolios (up to 70% in the Eurozone). The high level of exposure to domestic sovereign debt ("home bias") can also generate higher risks for the insurance sector, due to the potential of an asymmetric recovery from the Covid-19 crisis across Member States.

Figure 6.3-4: Investment Portfolio - 2020



Source: EIOPA Statistics (assets).

Finally, in view of the recent deterioration of the economic outlook, insurers' credit risk may increase, as their bond portfolio comprises a large share of lower-rated corporate bonds whose issuers may default or be subject of wide-scale rating downgrades by credit rating agencies. Credit risk exposure of insurers requires therefore close monitoring, as the risk of wide-scale rating downgrades could imply both large reductions in asset values and higher capital requirements for the insurance sector. In the worst-case scenario, insurance firms might de-risk and sell their portfolios, thus risking a spreading of risks throughout the financial system.

Potential liquidity strains

The insurance business model relies on the principle of "inverted production cycle": the premiums are collected prior to the payment of eventual claims, which are usually spread over months or years. For this reason, insurance companies are probably less exposed to liquidity risk than banks, and EIOPA reports that the extent of this risk has decreased since the beginning of the year (classified as "medium").[88]

At the same time, EIOPA, the ECB and the ESRB suggest that this type of risk, which can arise on both the asset and liability sides of insurers' balance sheets, may not be appropriately monitored and may differ depending on insurance policies clauses. On the asset size, insurers have slightly decreased their exposure to high-quality liquid assets in their portfolios, from

[88] EIOPA Risk Dashboard – October 2020.

34% in 2013 to 32% in 2018. Due to the Covid-19 crisis, they may also face shortfalls on expected premia inflows (due to premium payment holidays), and decreases in investment income (for instance due to payment disruptions, e.g. in the form of moratoria on residential and commercial mortgages, which are held by insurers in some countries to a material extent, or decrease in dividend distributions by corporates). In addition, some insurers may use derivatives to hedge some of their risks, and if used to a large extent, they may be subject to significant margin calls in case of sharp decrease in the market prices of these derivatives so that additional collateral could be required.

On the liabilities side, uncertainties regarding the coverage of business interruption by insurance companies, and the likely rising claims for event cancellation will generate higher pay-outs by insurers. In addition, some life insurance products allow investors to redeem their funds at short notice, while the underlying assets are structurally, or can suddenly become, relatively illiquid. This exposes insurers to potential liquidity risk in times of stress unless national laws already allow for temporary freeze in surrender rights in case of liquidity constraints. In addition to this risk affecting all forms of redeemable life policies, unit-linked insurance products may expose insurers to structural liquidity risks, similar to those inherent in investment funds.

Insufficient coordination of macro-prudential measures

Due to the nature of the principle-based framework and the related lack of certainty in some supervisory areas, there may still be a diversity of supervisory responses when there is a European-wide economic and financial shock. It has been illustrated with the Covid-19 outbreak, where EIOPA publicly urged that insurance companies temporarily suspend all discretionary dividend distributions and share buy backs aimed at remunerating shareholders. As this statement was not binding, it resulted in different effective implementation according to NSA's and in practice, supervisory approaches proved to be inconsistent across the EU.[89] This inconsistency may question the ability of public authorities to effectively preserve financial stability, and raises issues of supervisory coordination and level-playing field within the EEA. The issues related to supervisory convergence have been assessed above in section 6.1.3.

Insufficient supervisory toolkit to intervene when firms are in financial distress

In the traditional business model of insurance, due to the characteristics of the insurance activities (i.e. premiums paid in advance and usually long term commitments), the deterioration of the financial position of insurers can be monitored over time. In addition, with the exception of some life products which features could be similar to savings products in banking, the insurance industry is usually mildly exposed to the risk of runs[90]. For these reasons, the "intervention ladder" of Solvency II enabling supervisory actions before the breach of the minimum capital requirements (MCR), combined with the preferred ranking of

[89] Additional issues arose due to the inconsistent approaches followed by national supervisors regarding intra-group dividend distributions (i.e. dividend payments from one insurance subsidiary located in one country to the ultimate parent company headquartered in another one).

[90] Even though digitalisation could accelerate the procedure to exercise surrender's rights.

policyholders in the creditors' hierarchy[91], should ensure the sufficient availability of assets to cover the obligations of a failing insurer towards policyholders and beneficiaries.

In practice, however, the situation differs. As illustrated by EIOPA's analysis[92], the most common causes underlying the failure or near-failure of an insurance company are investment, asset-liability management and underwriting/technical provisions evaluation risks. And experience has shown that, despite the existing Solvency II arrangements, in some circumstances, the efforts to recover an insurer in financial distress are inefficient or run into legal or operational difficulties, as the insurers have not prepared their recovery options in advance. Likewise, public authorities may fall short of options that could effectively avoid the winding-up of the insurer as they have not looked at failure scenarios and have not anticipated possible impediments to deploying alternative measures. Furthermore, public authorities do not always have sufficient tools to avert the failure of insurers. As reported by EIOPA[93], one third of NSAs identified gaps and shortcomings in their existing preventive powers and in their range of resolution powers.

Likewise, public authorities often lack alternatives to insolvency for failing insurers. Even traditional tools for an orderly wind-up such as run-off (i.e. a ban on writing new business while fulfilling existing obligations) and transfer of portfolios are either unavailable or subject to restrictions in some Member States. In addition, the situation of insolvency, the length of its process[94] and, possibly, the prevailing stressed market conditions, might make the valuation process more complex and create material differences with the Solvency II estimates in going concern. There could thus be an uncertainty on the amount of losses that would effectively need to be absorbed. Moreover, insolvency proceedings are rarely at the advantage of policyholders and beneficiaries. This contributes to ineffective value preservation and considerable social or financial hardship for policyholders and beneficiaries, in particular in cases where an equivalent protection could not be found at acceptable conditions, due to the age of the subscriber for instance. Similar situations would also be met in the case of specialised insurers for which substitutability would be an issue. More broadly, insurers provide important functions to society at large and to the economy. A sudden interruption of risk coverage can have a systemic impact in case it is not immediately substitutable. The failure of a large, interconnected insurer or of several smaller insurers can also have an impact on financial stability.

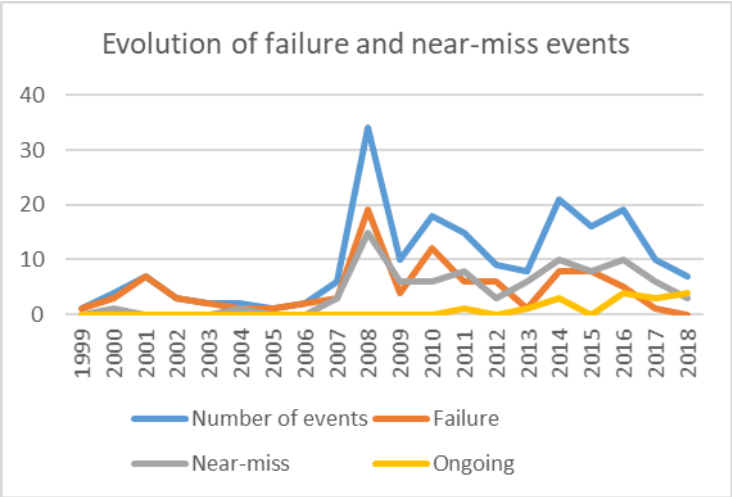
Finally, despite general cross-border coordination mechanisms for supervision, there is no clear framework for coordination and cooperation between authorities to prepare and manage a (near) failure. This can result in conflicts of interest and a misalignment between the national accountability and mandate of supervisors (protecting the interest of policyholders at national level) and the cross-border nature of the insurance industry that is not coherent with the single market objectives of Solvency II. Cross-border cooperation and coordination is however essential to support recovery, eliminate impediments to an orderly resolution process and reduce suboptimal outcomes at the EU level. In addition, national initiatives

[91] See legal provision under Solvency II.
[92] See EIOPA (2018a), Report on failures and near-misses.
[93] See EIOPA's Opinion on the harmonisation of recovery and resolution frameworks (2017).
[94] Most of them are court-based and could therefore take a long time before they are settled and result in a definitive pay-out.

creating a recovery and resolution regime locally to address that situation could further contribute to fragment the current landscape across the EU.

Further, the likelihood of (near) failure has not disappeared. Figure 6.3.5 shows that the overall trend has been decreasing, in particular since the entry into force of Solvency II (2016), yet not reaching zero.

Figure 6.3-5: Evolution of failure and near miss events



Source: see Annex 5 - IGS

When failure occurs, the disorderly winding-up of a failing insurer may cause significant disruption to the financial system and economic activity, depending on its size, the complexity of its activities, the concentrated nature of its businesses (e.g. export insurance where demand for insurance is significant), and its interconnectedness with other financial market players and/or the wider economy ("domino effect").

Going a step further then, and noting that the balance sheet of an insurance company is essentially composed of liabilities towards policyholders (by opposition to equity or debt instruments), past insolvencies of insurers have shown that policyholders need to absorb losses, either directly or indirectly through the renegotiation of their policies. The existence of an Insurance Guarantee Scheme (IGS) could provide a last-resort protection to policyholders and beneficiaries in these cases. However, a considerable share of policyholders in the EU do not benefit from any IGS protection or, while holding the same type of insurance policy, policyholders may benefit from a different level of IGS protection depending on where they live and where they have contracted their policies.[95]

Conclusion: The number of failures and near miss events has actually decreased, but the possibility of failure remains. Failures after 2001 have significantly reduced in numbers and concerned especially smaller companies, thereby creating less impact and affecting fewer creditors. However, despite the achievements in insurers' solvency state and monitoring, some concerns remain as to the possible effects of increased search for yield, excessive investment concentration, inappropriate assessment of possible liquidity stress and insufficient EU-wide coordination. In particular, the toolkit for supervisors when insurers

[95] See Annex 5 for further analysis on the current situation as regards IGS protection in the EU.

(risk to) fail seems to be unclear or insufficient to efficiently monitor, prevent and accompany possible financial distress of companies.

6.3.3. To what extent is Solvency II suited to deal with new challenges?

Long-term investment and sustainable dimension

As already explained, Solvency II is a "risk-based" framework. Based on quantitative evidence (e.g. historical price and volatility behaviour of financial assets), it defines capital requirements, i.e. the amount of capital resources that insurers have to set aside in order for them to be able to cope with very extreme adverse events[96]. Higher capital requirements on investments are therefore applied to assets that are more volatile and/or more risky, for instance equity. This principle is applied without taking into account other EU political objectives, in particular the Capital Markets Union Action Plan and the European Green Deal. Actually, it may provide lower incentives for insurers to invest in those assets, although such investments can contribute to the sustainable economic recovery and long-term growth in the EU.

First, the incentives towards long-term investments in general have proven insufficient, as discussed in Section 6.1.4 (effectiveness). Second, the financial risk for some categories of sustainable investments may already be lower or, notably with respect to transition risks, could be lower over the longer run. Current capital requirements would not capture such (lower) financial risk and the current framework may therefore not foster investments in environmentally sustainable ("green") activities.

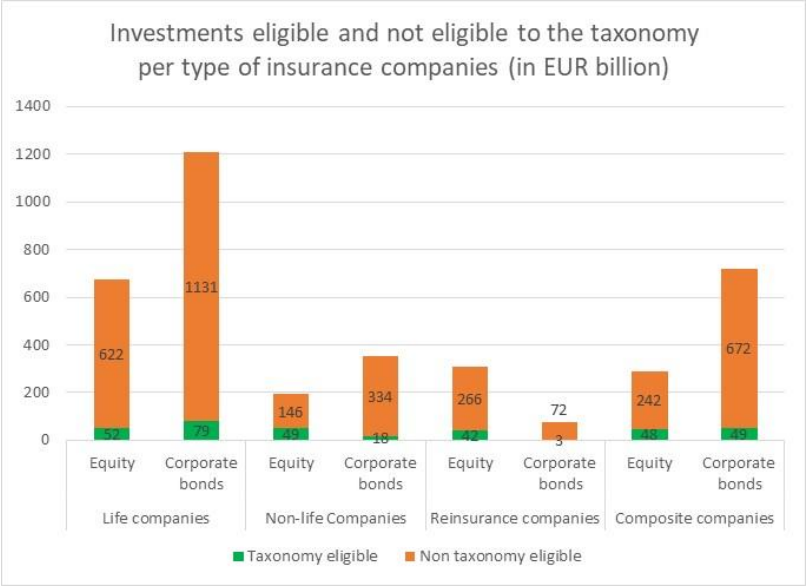
The Communication on the European Green Deal[97] states that climate and environmental risks should be managed and integrated into the financial system. To this end, the Commission will adopt a renewed sustainable finance strategy in 2021. As regards insurers, the objective is twofold: it concerns both how insurers invest their money and how they take into account sustainability factors in their risk management. With respect to the former, insurers can play a role in reducing the investment gap for environmental-friendly assets and activities. The 2030 climate and energy targets agreed at the end of 2020 are estimated to require €350 billion of additional annual investment[98] – which represents around 34% of EU insurers' gross written premiums in 2019.

However, EIOPA estimates that only up to 5 % of the total asset value held by insurers may qualify as investments in sustainable activities (as identified by the "Taxonomy"[99]), and therefore contribute to the climate objectives of the European Green Deal[100]. It has to be assumed that this stock of potentially sustainable investments has been built up over several years and that annual flows into sustainable investments by insurers are far lower than the estimated need of annual investments to achieve the Union's objective of a climate-neutral continent. For equities and corporate bonds, approximately up to 13% and 6% respectively of

[96] Defined as 1-year duration shocks whose probability of occurrence is 0.5%.
[97] Commission Communication: *European Green Deal* (EUR-Lex link).
[98] Commission Communication: *Stepping up Europe's 2030 climate ambition* (EUR-Lex link), page 4.
[99] Throughout this document, "taxonomy" refers to the technical screening criteria for the identification of sustainable economic activities as adopted under Regulation (EU) 2020/852.
[100] EIOPA (2020), Financial Stability Report (link), thematic report starting on page 88.

the asset value held by insurers for each type of securities might qualify as environmentally sustainable investment. The higher share for equity investments is mainly explained by insurers' equity holdings in other (non-life) insurance companies (approximately 7%), which is an eligible sector under the "taxonomy". More detailed statistics are provided in the below graph for corporate bonds and equities per type of insurance companies.

Figure 6.3-6: "Taxonomy" - Potentially eligible Investments - 2019



Source: EIOPA, The EU Sustainable Finance Taxonomy from the Perspective of the Insurance and Reinsurance sector, published in the Financial Stability Report, 2020.

Note: The figures represent an upper limit for "taxonomy" eligibility, as the represented sectors may qualify as environmentally-sustainable activities.

While those data may be under- or overestimated due to the inability to have a comprehensive overview of insurers' indirect investments through funds and insufficient information to assess "taxonomy" compliance conclusively, the share of green investments in insurers' asset portfolio seems too low to achieve the Union's objective of a climate-neutral continent. It has to be noted that the current rules on capital requirements do not capture the possibly lower (resp. higher) level of risks over the long term of some categories of "green" (resp. "brown") assets for the investor.

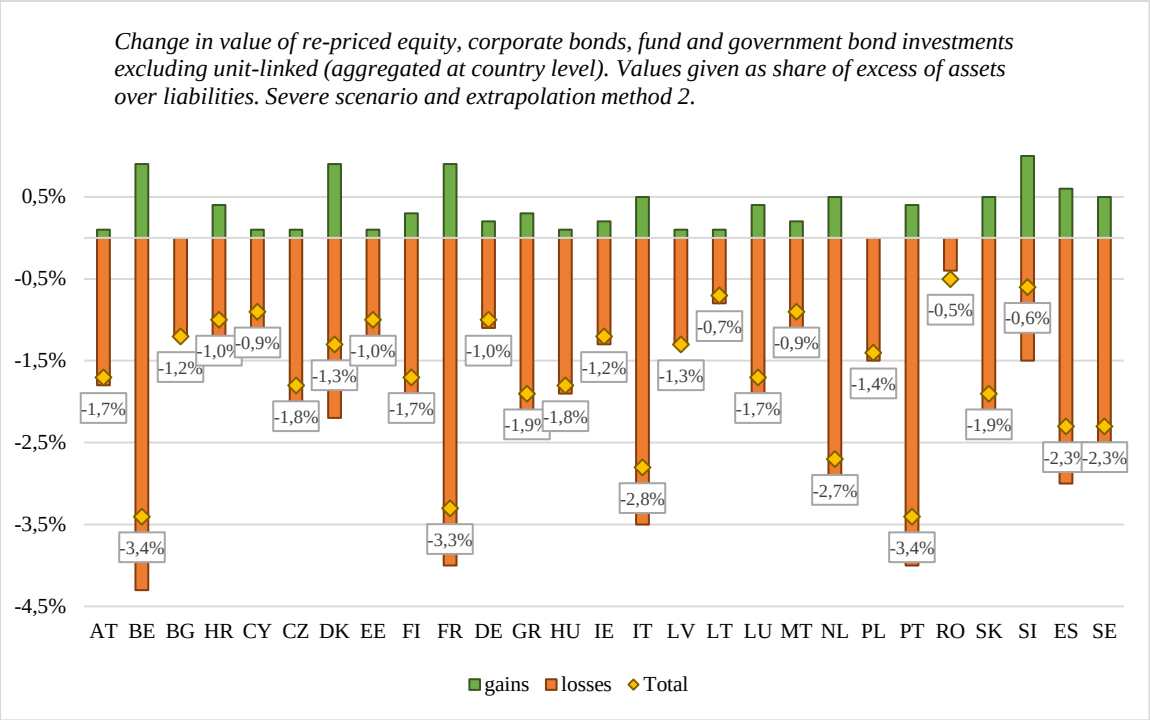
Furthermore, insurers are exposed to climate and environmental risks through their assets and liabilities towards policyholders.

As regards insurers' investments, EIOPA analysed a scenario of the materialisation of transition risk. EIOPA estimated its scenario to lead to a reduction of the excess of assets over liabilities[101] by up to 3.4% at country-level[102]. EIOPA intends to refine its methodology for further analyses over the next years.

[101] The excess of assets over liabilities is the starting point of the determination of an insurer's own funds. EIOPA has used the excess of assets over liabilities as proxy for own funds or "free assets" in several publications (notably the 'Insurance Stress Test Report' of 2018 and the 'Sensitivity analysis of climate-change related transition risks'). At the end of 2019, EU insurers' total own funds eligible to cover the solvency capital requirement exceeded their total excess over liabilities by around 5.7%.

[102] EIOPA (2020f), Sensitivity analysis of climate-change related transition risks. EIOPA considered a scenario where delayed policy action is taken to abruptly move the economy to a path that is more likely to result in a

Figure 6.3-7: EIOPA's severe scenario



Source: EIOPA (2020f): Sensitivity analysis of climate-change related transition risks.

As regards insurers' liabilities, EIOPA tested the impact of a scenario encompassing a series of four windstorms, two floods and two earthquakes distributed throughout Europe as part of its insurance stress conducted in 2018[103]. The sum, over participating insurance groups, of the excess of assets over liabilities (AoL) dropped by only 0.3 percentage points. That indicates that the insurance sector is currently not particularly vulnerable to climate events.[104] However, a more recent analysis by EIOPA of the available evidence concluded that climate change is already affecting flood risk as well as subsidence risk and impacts on hail risk at regional level[105]. The present Solvency standard formula parameters for those risks are calibrated to reflect the current risk and do not aim to capture future increases of the risk due to climate change. Furthermore, the standard formula sets out parameters for a closed list of natural catastrophe risks that are considered to be material and to which the European insurance sector has significant exposure[106]. Climate change may lead to additional risks becoming relevant for the European insurance sector.

2 degree outcome than the current (baseline) pathway, in line with the Paris agreement to limit global warming compared to pre-industrial levels ("late and sudden" policy scenario, see page 24 and following). More specifically, EIOPA assumed an increase in carbon price per ton by the end of this decade set in order to limit carbon concentration to around 450-500 ppm.

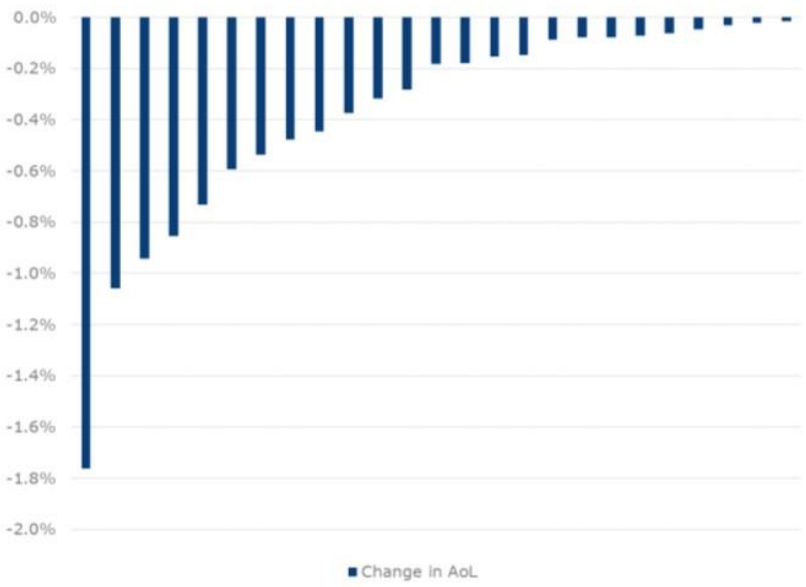
[103] EIOPA (2018c), Insurance Stress Test Report.

[104] In general, the more highly affected participants are reinsurers and those direct insurers largely involved also in reinsurance activities.

[105] EIOPA (2020e), Discussion Paper: Methodology on potential inclusion of climate change in the nat cat standard formula.

[106] The standard formula sets out parameters for following natural catastrophe risks: flood, windstorm, hail, earthquake, subsidence.

Figure 6.3-8: Assets over liabilities: stress test for natural catastrophes



Source: EIOPA (2018c), Insurance Stress Test Report.

EIOPA has also identified several actions that insurers could take to ensure that climate and environmental risks from assets and liabilities are duly taken into account[107]. The Commission ran an Open Consultation on a Renewed Sustainable Finance Strategy[108], where most stakeholders agreed that "*the EU should take further action to mobilise insurance companies […] manage climate and environmental risks, beyond prudential regulation"*. The most frequent proposed options comprise enhanced *disclosure requirements and guidance on impact investment, rules on risk management)*". ESG-related disclosure requirements are being looked at under the review of the non-financial reporting directive and the concept of stewardship in the context of investments has recently been introduced in Solvency II rules. Furthermore, several clarifications to Solvency II risk management and governance rules were already introduced making use of existing empowerments for delegated acts[109,110].

While Solvency II contains a general requirement on insurers to take into account all risks in their risk management, the Directive does also name particular risk categories explicitly. However, climate and environmental risk is not one of those risk categories and it would often materialise through other risk categories, e.g. market or underwriting risk. This may result in a lack of clarity as regards whether and where insurers are expected to reflect climate and environmental risks and, as a consequence, in insufficient management of those risks by insurers.

[107] EIOPA (2019), Opinion on Sustainability within Solvency II (link).
[108] The consultation and its feedback can be found at this link.
[109] Delegated Regulation (EU) 2021/1256 amending Delegated Regulation (EU) 2015/35 as regards the integration of sustainability risks in the governance of insurance and reinsurance undertakings (OJ L 277, 2.8.2021, p. 14)
[110] In addition, in the Consultation on the Review of Solvency II stakeholders had the possibility to rank five possible overall objectives of EU legislation for the insurance sector. Among the five choices, fostering sustainable investments ranked the lowest while policyholder protection and financial stability ranked the highest.

Solvency II and the digital transformation

The Solvency II framework is quite fit for future financial and technological developments, as it is already neutral with respect to many digital developments (see below). In addition, EIOPA has empowerments to make it even fitter, engaging in many data projects to also advance technological solutions (with reporting already being largely automated and digitalised). Furthermore, as detailed in section 6.4 on the coherence criterion, facilitating the digital transformation in the financial sector is a separate horizontal workstream.

Since the Solvency II Framework is already digitally advanced, envisaged changes would be neutral

Since the entry into force of the Solvency II Directive in 2016, all quarterly and annual reporting submissions and disclosure obligations are sent digitally. Therefore, the Solvency II Directive does not require any regular submission of information in paper. Further possible improvement of regular costs in that matter would probably be negligible in terms of cost-savings.

Several initiatives have been undertaken to explore the possibilities that the new technologies offer, aiming to understand how the development of new technologies or advantages to the use of big data could interfere with the framework's requirements. In line with the Digital Finance Strategy, the Commission services are working on a supervisory data strategy to further streamline supervisory reporting across the financial sector. As part of this, the Commission services envisage to give a mandate to EIOPA to analyse (together with the other ESAs and the ECB) the scope for further integrating supervisory data collection and facilitating the use of data already reported within other European reporting frameworks to competent authorities, both national and European ones in the Solvency II Directive. This would allow supervisors to "recycle" data that, for example, other market participants submit to their relevant authorities like ESMA or the national central banks.

Insurers as targets of cyber-attacks and as providers of cyber risk protection

Increased digitalisation and use of big data may indeed lead to more frequent and sophisticated cyber-attacks. In this respect, insurers could be both targets of cyber-attacks but also providers of protection.

Cyber risk is however also relevant for other financial services providers. That is why the Commission proposed in 2020 a "*Regulation on digital operational resilience for the financial sector*"[111] that seek to foster digital operational resilience at EU level for all regulated financial institutions, including insurers and reinsurers. This proposal aims at reducing the cyber incidents and enhancing the capabilities of financial institutions to withstand them. That important issue is therefore already dealt with but outside the scope of the Solvency II review.

[111] The regulation on digital operational resilience in the financial sector will add additional safeguard to the existing rules in the Solvency II Directive regarding the mitigation of operational risk and in EIOPA Guidelines on information and Communication Technology Security and Governance, published in 2020, providing clarification on the minimum expected information and cyber security capabilities, to ICT security and governance.

Insurers also offer protection against cyber events. In order to collect better data in this regard, EIOPA has the empowerments and has indeed proposed to introduce a new reporting template for cyber risk which will require insurance companies to report data on cyber risk underwriting. The introduction of new reporting templates (to be included in the general Reporting ITS prepared by EIOPA) should be adopted next year. No change to the Solvency II Directive or its Delegated Regulation are needed to introduce that new template.

In addition, the Cyber underwriting strategy published by EIOPA[112] in 2020 sets out the conditions which are essential for a resilient cyber insurance market, including the need for an adequate level and quality of data on cyber incidents available at European level. The access to cyber incident database(s), potentially a European Database, could enhance the further development of the European cyber insurance industry, and would be the topic of future policy proposals.

It should also be noted that insurers are already required to assess the above mentioned ICT risks, including cybersecurity, as part of their ORSA (own risk and solvency assessment) which identifies the overall solvency needs related to the specific risk profile of an undertaking. In the public consultation, civil society claimed that these risks needed to be reflected by introducing enhanced requirements for monitoring ICT risks. However, as mentioned above, this issue as well as other digital transformation challenges are already addressed by the regulation on digital operational resilience and covered in the Request to the ESAs for technical advice on digital finance and related issues (Call for Advice, 02/02/2021).

Conclusion: Insurers' investments in sustainable activities remain limited. If this problem is not addressed, the Commission will not be in a position to ensure a sustainable and green recovery from the ongoing Covid-19 crisis. The lack of prudential incentives for insurers to make long-term sustainable investments as well as a lack of clarity of obligations on the management and taking into account of climate and environmental risks may be reasons why insurers' contribution to the objectives of the European Green Deal and the Capital Markets Union remains limited at this stage. Finally, while the Solvency II framework is already neutral with respect to many digital developments, several digital transformation challenges are tackled in parallel by horizontal workstreams, as well as through EIOPA's engagement in several data projects and continuing work to deliver advice on digital finance, together with the other ESAs and the ECB.

[112] Cyber underwriting strategy: link.

6.4. Coherence

Summary assessment:

The interaction of the Solvency II framework with other parts of legislation is limited as Solvency II is self-standing and by itself replacing a patchwork of 14 former Directives. Further, while it focuses on the prudential dimension and policyholder protection by ensuring that insurers have sufficient capital to meet their obligations, the Solvency II Directive is very broad, encompassing also requirements for insurance groups.

However, the current provisions of the framework do not seem to be effective in a way that corresponds to the objectives of the renewed Action Plan on the Capital Markets Union: issues of insufficient volatility mitigation, impacting the insufficient effect of the framework on long-term investment by the insurers. The same holds for "green investment" and the European Green Deal.

From an international point of view, Solvency II is one of the most advanced standards at international level. On the other hand, the current lack of harmonised framework for coordination and management of crisis situations, including to address potential systemic risk, is not consistent with the objectives set at international level by the IAIS and the FSB.

6.4.1. How does the Directive interact with other (possibly new) EU instruments/ legal frameworks? Are there newly created overlaps, gaps or contradictions?

The interaction of the Solvency II Framework with other parts of legislation is limited as the Solvency II Directive is self-standing and by itself replacing a patchwork of 14 former Directives. It therefore brings coherence into this part. Further, while it focuses on the prudential dimension and policyholder protection by ensuring that insurers have sufficient capital to meet their obligations, the Solvency II Directive is very broad, encompassing also groups.

Motor Insurance Directive and Insurance Distribution Directive

The Motor Insurance Directive deals with a particular category of insurance and in particular its cross-border dimension from the point of view of a potential victim of an accident caused by a motor vehicle. The Motor Insurance Directive assures a minimum level of coverage of the insurance policies within Europe and deals with special provisions regarding accidents caused by uninsured vehicles as well as the cross-border dimension of accidents. As to the Insurance Distribution Directive, it deals with transparency and information, which needs to be disclosed to the potential policyholder during the distribution process. Those directives are posterior to the Solvency II Framework, and therefore have to ensure coherence with the latter.

Financial Conglomerates Directive

When the "Financial Conglomerates Directive" (FICOD)[113] was adopted, it aimed to provide supplementary supervision for complex large groups. It supplemented the relevant sectorial frameworks then existing: the "Capital Requirements Directive" (CRDIII) and the various insurance directives. However, the sectorial legislation has been significantly overhauled in recent years with the adoption of CRR/CRD IV and the Solvency II Directive, as well as in the securities sector. The enhanced supervisory framework at sectorial level may have diminished the supervisory relevance of FICOD, and may have also created issues with the coherence of the supervisory frameworks across the sectors and FICOD. As FICOD builds on sectorial legislation, the question of coherence was already dealt with during the review of FICOD. In particular, it was noted that the effectiveness of FICOD to ensure the financial stability of financial conglomerates may be undermined by its silence in the area of resolution.[114] We refer to the according Staff Working Document.[115]

Digital Finance Strategy

Digital transformation is a horizontal issue. The recently adopted Digital Finance Strategy has identified the main priorities for the EU and these priorities are also relevant for the insurers and reinsurers. In that context, the Commission invited EIOPA (as well as the other European Supervisory Authorities) to provide technical advice on digital finance (with a final report due for 31 January 2022), notably on (i) the new material developments in the evolution and fragmentation of value chains of single financial services driven by technological innovation and the entry of new market participants, (ii) monitoring online services and (iii) risk related to mixed activity groups involving large technology companies. If necessary, Commission services will propose targeted amendments to the financial services acquis, including the Solvency II framework (possibly via a cross-sectoral proposal) but the need for a legislative change (as opposed to what can be done through EIOPA's guidelines) is yet to be identified.

Capital Markets Union

However, the current provisions of the framework do not seem to be effective in a way that corresponds to the objectives of the renewed Action Plan on the Capital Markets Union. We have discussed in the effectiveness and relevance sections the issues of insufficient volatility mitigation, impacting the insufficient effect of the framework on long-term investment by the insurers. For this reason, the renewed Action Plan acknowledges that insurers' investments are instrumental in supporting the long-term financing of the economy and that prudential rules are not yet fully adequate to remove unjustified barriers to equity investments.

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[113] Directive 2011/89/EU of the European Parliament and of the Council of 16 November 2011 amending Directives 98/78/EC, 2002/87/EC, 2006/48/EC and 2009/138/EC as regards the supplementary supervision of financial entities in a financial conglomerate (EUR-Lex link).

[114] Respondents to the related public consultation (link to the consultation page) mainly argued that it would be premature to consider any resolution framework for financial conglomerates while there is a gap in this area on the insurance side. Additionally, many respondents highlighted that the development of robust sectorial regimes would be sufficient in ensuring a sound resolution framework for groups, including financial conglomerates.

[115] https://ec.europa.eu/info/sites/info/files/ficod_swd_2017_272_en.pdf .

European Green Deal, Renewed Sustainable Finance Strategy and Non-Financial Reporting Directive

The same holds for "green investment". The Communication on the European Green Deal states that climate and environmental risks should be managed and integrated into the financial system. The renewed sustainable finance strategy (RSFS) that the Commission will adopt to this end in 2021 should be coherent with the Solvency II framework, including with the reviewed provisions. In addition, the same communication underlines that the Commission intends to review the "Non-Financial Reporting Directive" (NFRD)[116] the scope of which goes beyond the insurance sector, in order to extend "green" disclosure requirements to all types of financial market participants through one single piece of legislation. Therefore, a review of the Solvency II framework should avoid overlapping disclosure requirements for insurers in different Directives. Several current Commission initiatives, with a significant impact on the insurance sector, aim to increase private financing of the transition to a carbon-neutral economy and to ensure that climate and environmental risks are managed by the financial system. Besides the renewed sustainable finance strategy and the review of the NFRD, the "taxonomy regulation"[117] creates a common language for the identification of sustainable activities. An on-going initiative aims to develop technical screening criteria for the taxonomy in a delegated act. It is probable that the delegated act will contain sectoral criteria for underwriting by non-life insurance and reinsurance companies.

6.4.2. Is it coherent with international developments/ international initiatives?

Solvency II is one of the most advanced standards at international level, and several jurisdictions, in particular in Asia, are in the process of incorporating (some of) the European rules in national legislations. In addition, the draft "insurance capital standard" (ICS) - developed by the International Association of Insurance Supervisors - is very consistent with Solvency II, although the design of the international standard is overall less conservative. The ICS is not yet formally adopted and currently subject to a 5-year monitoring period (until 2024), which means that the Solvency II review should be completed before the finalisation of the ICS in 2024. If eventually adopted by other jurisdictions, the ICS with its risk-based approach will improve the global level-playing field.

However, as explained in section 6.3.2, the current lack of harmonised framework for coordination and management of crisis situations, including for the largest European insurers with international activities and potential systemic footprint (IAIGs), is not consistent with the objectives and standards developed at international level by the International Association of Insurance Supervisors (IAIS) and the Financial Stability Board (FSB). Indeed, the IAIS considers pre-emptive recovery planning as necessary and at least for IAIGs, and the FSB requires resolution planning for insurers that could be systemically significant or critical if they fail. Both imply a set of appropriate resolution powers.

[116] Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups, OJ L 330, 15.11.2014, p. 1.

[117] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, OJ L 198, 22.6.2020, p. 13.

6.5. EU added value

Summary assessment:

Overall, the Solvency II framework has clear added value by providing a harmonised and sound prudential framework. Because of their scale and generalised effects, the problems clearly requested further EU intervention, as an integrated EU insurance market and a level-playing field for EU insurers require harmonisation, both technical (e.g. calculation of technical provisions, risk-sensitive solvency standards) and operational (e.g. supervisory methods and tools). On this basis, the framework has promoted comparability, transparency and competitiveness. It has also significantly enhanced the protection of policyholders and beneficiaries, by limiting the likelihood that their insurer fails, as well as increasing transparency on the risks their insurer is facing. Solvency II has also facilitated supervisory convergence within the Union and contributed to the integration of the Single Market for insurance services.

However, the assessment suggests weaknesses in supervisory convergence and cooperation which clearly hinder the effectiveness of the framework in terms of competitiveness and integration of the EU market and, in particular in the case of cross-border activities, lead to insufficient or unequal policyholder protection in case of failure. In addition, there is no harmonised and coordinated approach of safety nets in the form of insurance guarantee schemes that would protect policyholders and beneficiaries in case of failure.

6.5.1. Compared to the previous national approaches, has Solvency II resulted in a more consistently applied regime across all Member States?

- **Has it facilitated the integration of the EU insurance market and supported the competitiveness of EU insurers compared to a scenario without the Solvency II framework?**

The obstacles to a fully-functioning integrated EU market for insurance clearly requested further EU intervention. Indeed, while preserving the "principle-based" nature of the framework, an integrated EU insurance market and a level-playing field for EU insurers require harmonisation, technical (e.g. calculation of technical provisions, risk-sensitive solvency standards) and operational (e.g. supervisory methods and tools). Only an EU action could ensure the uniform application of the regulatory provisions and guarantee the existence of the well-established regulatory framework regarding the taking up and the pursuit of (re)insurance and business. In addition, at the time Solvency II was prepared, the IAIS was also developing new solvency standards and valuation rules of technical provisions, therefore moving towards a risk-based and market-consistent approach. Likewise, Basel II had introduced a more risk sensitive capital regime in the banking sector. This lack of international and cross-sectoral convergence was a risk to the competitiveness of insurers, while also increasing the opportunities of regulatory arbitrage.

The Solvency II framework therefore contributed to a more level-playing field within the European Union. Uniform conditions for the calculation of technical provisions ensure that

insurance liabilities are valued in a consistent way, of both a domestic insurer and an insurer offering the same insurance product cross-border via FoS/FoE. This is a precondition for the functioning of an integrated market, as price differences merely on valuation techniques should not be possible. It increased product comparability and transparency for policyholders. The result is an effective price competition leading finally to good consumer outcomes.

However, despite the progress in the field of market integration regarding harmonised rules for the supervision of insurance undertakings and the valuation of technical liabilities, the market remains fragmented in other aspects.

Regarding the competitiveness of EU insurers operating in third countries, the Solvency II framework offers the possibility according to article 227 of the Directive for equivalence decisions, i.e. in case of a positive equivalence decision an EU insurer operating in a third country could use the local rules relating to capital requirements, and would not have to calculate them according to the Solvency II rules.

- **Has it better enhanced policyholders' protection?**

As assessed earlier and recalled in the above section, thanks to its EU-wide dimension, the Solvency II framework has enhanced policyholders' protection through better information, transparency and comparability and by providing incentives for better risk-management which also resulted in lower probability to fail. It improved supervisory convergence and coordination, with a similar result of better risk management and less failures or near misses. However, the supervisory convergence process has not reached an optimal outcome, and some lack of clarity can entail divergent supervisory decisions. This leaves policyholders (and other stakeholders) with still too many uncertainties. In addition, there are no harmonised rules regarding the failure of an insurer so that it can happen that the Member State of residence of a policyholder is primarily relevant for the question regarding the responsibility of insurance guarantee schemes. Discrimination of policyholders based on their place of residence in the case of an insurance failure was and still is a problem.

- **Has it fostered growth and recovery better than a "no-Solvency II" scenario?**

The Solvency II regime eliminated previous restrictions imposed by Member States on the composition of insurers' investment portfolios. Instead, insurers must invest according to the "prudent person principle" and their capital requirements depend on the actual risk of investments. Besides the impact on risk management, an objective of the Solvency II Directive was to facilitate a better allocation of capital resources at firm level, at industry level, and within the EU economy, and it has been reinforced by the Delegated Regulation's objective to foster growth through the promotion of long-term investment. From a prudential perspective, a long-term perspective encompasses the possibility for insurers to avoid forced selling under stressed market conditions. Based on EIOPA's statistics, insurers are already largely investing in long maturity debt, bonds and loans. The trend has improved in the recent years since the entry of application of the Solvency II framework in 2016.

However, insurers have been retrenching from equity investments over the past twenty years and this trend has not been reversed since 2016. And the investments share of the insurance sector in the real economy and infrastructure has remained limited. Even the recent several

amendments to Solvency II, through preferential treatments for certain classes of long-term assets, have not seem adequately designed to succeed in dampening this reported disincentive. Without further changes - taking into account the necessity of adequately assessing the risk while ensuring enough investments in the EU economy - the level of equity investments by insurers would remain far below its level at the beginning of the 21st century.