Solvency II Impact on the Romanian Insurance Industry

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Abstract

The article provides a quantitative evaluation in which is investigated the impact of the Solvency II on the Romanian insurance industry after three years of the implementation of the new insurance regulatory framework. The impact assessment was performed based on the main prudential indicators concerning the capital requirements (SCR and MCR) and Own Founds before and after Solvency II application. The analysis results shown that the new regulatory regime had a positive impact on the solvency position of the Romanian insurance industry. At individual level, after three years since the new framework became effective, all insurance companies that carrying out business on the local market have complied the regulatory capital requirements. Moreover can be observed a capital optimization trend among Romanian insurance companies. The aggregated structure of the eligible own funds to cover capital requirements shown a high quality of capitalization which indicates a sufficient absorbing capacity of losses.

Key words: Solvency II, Romanian insurance industry, SCR, MCR.
J.E.L. classification: G22, G28.

1. Introduction

From a regulatory perspective, a key milestone in the development of the insurance industry solvency regulation was the application of the Solvency II regime starting with January 1st 2016 within the European Single Market, after almost a decade in the making, repeatedly delay and widely criticism. Solvency II is currently one of the most sophisticated regulatory regimes in the world and represents a huge improvement over Solvency I imperfections. The most significant changes introduced by the new solvency regulation consist in: movement from a factor-based solvency framework to a risk-based capital regime, market-consistent evaluation of assets and liabilities, embedding strong risk management and corporate governance within insurers, increase the requirements on solvency and reserving and extended standards on public disclosure and supervisory reporting. The key objectives of the new risk oriented solvency framework cover: improve protection for policyholders and beneficiaries, harmonization of solvency laws and regulations within the Single Market, effective risk management and the growth of the financial system stability.

Romania, as a European Union member country implemented the rules of the new regime since the beginning of 2016 year, both at the level of insurance companies and within Financial Supervisory Authority (ASF). The new capital requirements introduced by Solvency II standards have raised a number of challenges on the local landscape of the insurance sector.

The main objectiv of the paper is to provide an overviw of the Solvency II impact on the Romanian insurance industry. In the academic literature, most of the papers which give an evaluation of Solvency II insurance framework and its possible implications on the Romanian insurance market have been published before the Solvency II implementation, during the development solvency reforming regulation process based on the results of the quantitative impact studies (QIS). Considering that since these publications (some of the articles are presented in the second section of the paper), the solvency regulatory regime applied on the European insurance sector (and implicitly on the local market) has changed substantially since January 2016, a re-evaluation of the Solvency II impact on the Romanian insurance industry it is required after almost four years since the new risk-based regulatory framework became effective.

This article has the following structure: the second section contains a brief overview of the literature review, the third section provides the research methodology, the fourth section presents the results of the Romanian insurance market analysis before and after implementation of the new regulatory regime and the fifth section outlines the conclusions regarding the Solvency II impact assessment on the Romanian insurance industry.

2. Literature review

In the academic literature, the issue of the potential financial impact of the new solvency framework on the insurance sector from Romania has been analyzed by many researchers. Most of the authors have concluded that the non-life insurance companies will be the most affected by the application of the new solvency regulatory regime, mainly due to the significant weight of the capital requirements for non-life underwriting risk module in the overall solvency capital requirements. Their conclusions have been derived from the results of the two surveys, QIS 4 and QIS 5 to which a number of Romanian insurance undertakings have been participated voluntarily to the simulation of the solvency capital requirements calculation in conformity with the standard approach of the new regime.

Clipici (2012) concluded that the impact of the new framework in terms of assets for most Romanian insurers will not be significant, the values of the life technical reserves will decrease which will lead to a rise of the own funds, the solvency capital requirements for non-life insurers will increase due to the high share of the non-life underwriting risk module in the total SCR, but the number of the insurers which would be forced to correct their risk profile in order to fulfill the Solvency II standards will not be significant. Casian (2013) reveal that the Solvency II will have substantial implications on the local insurance sector, thanks to the low development of the insurance industry and the complexity of this framework. Also, he emphasized the difficulty that non-life insurers could meet regarding the accuracy of the stochastic methods used in the technical reserves evaluation in order to satisfy the new regime standards. Naghi (2013) noted that the impact of the new regime will be major by increasing of the solvency capital requirements, especially for non-life insurers that accounted a higher underwriting risk. Furthermore, this increase of the solvency capital requirements will be a difficult demand to comply by medium-sized insurers which see the capitalization as a hard to led burden. Ciotină (2014) shown that the transition to the Solvency II regime will determine a growth of the capital requirements for the Romanian insurers (about 17.47% additional capital for the overall Romanian insurance sector according to the QIS 5 results) and some insurers may have difficulties in the attracting of this additional capital. Nevertheless, the financial position of the Romanian insurance industry will remain stable and Solvency II implementation will bring benefits both for insurers and insured.

3. Research methodology

This article provides a quantitative evaluation of the Solvency II impact on the Romanian insurance industry after three years of the implementation of the new insurance regulatory framework. The research was carried out based on the statistics reports published by Romanian Financial Supervision Authority (ASF) and European Insurance and Occupational Pensions Authority (EIOPA) with respect to the main prudential Solvency II indicators concerning the capital requirements (SCR and MCR) and Own Founds. The Romanian Insurance Market Pre Solvency II analysis was performed based on the two balance sheet review reports conducted by ASF in 2015 year with the goal to assess the Romanian insurance industry situation before the Solvency II regime became effective. The Romanian insurance industry Post Solvency II analysis was made based on the public reports (annually and quarterly) published by insurance regulators (ASF and EIOPA) and Romanian insurance companies over the first three financial years (Day 1 - Opening Balance Sheet Reconciliation data at 1st January 2016, 2016 year, 2017 year and 2018 year) after Solvency II application.

According to the guidelines provided by EIOPA (Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009, Commission Delegated Regulation (EU)

2015/35), the definitions for SCR, MCR and own founds are the following:

1. Solvency Capital Requirement (SCR) corresponds to the economic mandatory capital that European insurers and reinsurers are required to hold in order to withstand significant losses and ensure a prudent level of protection for policyholders and beneficiaries with a very high level of probability over the following 12 months. Solvency II applies a modular approach to determine the SCR. The overall risk exposure of the insurer is divided into five risk modules (market, default, underwriting, operational and intangible asset risk), which are split into sub risks and sub-sub risks. Firstly, are calculated the SCRs for each risk, respectively sub or sub-sub risk module and then these SCRs are aggregated into an overall SCR. Total SCR can be calculated applying standard approach provided by EIOPA or an own internal model developed by each insurer, that need to be approved by regulator.
2. Minimum Capital Requirement (MCR) is the minimum level below which the financial resources of an insurance undertaking should not fall. This indicator is determined independently of the solvency capital requirements using an accounting linear formula. MCR has an absolute floor of 3.7 million EUR and a floor, corresponding to 25% of the SCR and a cap, equivalent to 45% of the SCR.
3. Own funds. Under the Solvency II regulatory framework the equity capital is equivalent to the excess of assets over liabilities and is known as available own funds. The proportion of the available own funds which are able to cover the SCR and MCR are known as eligible own funds. The ratios of eligible own funds to cover the SCR and MCR corresponds to SCR ratio, respectively MCR ratio, which should be at least 100%. The available own founds are divided intro three tiers according to both permanence and loss absorbency: Tier 1 split into Tier 1 unrestricted (shareholders' equity, future premiums expected profits) and Tier 1 restricted (Tier 1 debt), Tier 2 (reinsurance covers, subordinated Tier 2 debt and letters of credit) and Tier 3 (Tier 3 debt and net deferred tax assets). Compared to the Tier 1 that represents the highest quality class, available at all times and without restriction to cover the solvency capital requirements (both SCR and MCR), Tier 2 and Tier 3 are capped to different limits: eligible own funds to meet SCR (maxim 50% Tier 2 and Tier 3 and in addition maxim 15% Tier 3) and eligible own funds to meet MCR (maxim 20% Tier 2 and Tier 3 is not creditable).

4. Findings

4.1. Romanian insurance market pre Solvency II situation

In 2015, Romanian Financial Supervision Authority (ASF) in cooperation with European Insurance and Occupational Pensions Authority (EIOPA) carried out two balance sheet review exercises (Balance Sheet Review – BSR and Balance Sheet Review Extended – BSRE) to provide a 'high-resolution' picture of risks and vulnerabilities of the local insurance industry pre Solvency II introduction. The main objectives of the BSR and BSRE exercises were: to analyze the insurance portfolio of each insurer in order to assess the adequacy of technical provisions and to estimate the economic amount of this technical provisions in conformity with the Solvency II requirements, to evaluate the appropriateness under Solvency II framework of the recognition and valuation principles applied to all assets and liabilities, to estimate under the Solvency II regime the effectiveness of the risk transfers to third parties of risks stemming from reinsurance contracts written by the insurers including finite reinsurance contracts and to determine the prudential parameters in accordance with Solvency II regime (MCR and SCR). Also has been performed a test stress exercise to evaluate the resilience of the Romanian insurance sector under different insurance stress scenarios (five single-factor scenarios) and market stress scenarios (simultaneous six shocks), based on the adjusted Solvency II outcome from the BSR exercise. The main objective of this stress test exercise was the assessment of the capital requirements (MCR and SCR) before and after stress testing.

BSR exercise covered 13 Romanian insurers accounting for 82.04% of overall gross written premiums on the Romanian insurance market in 2013. BSR reference date was June 30, 2014. The results of the BSR exercise shown that of the total number of 13 participating insurance companies, 5 insurers hold negative own founds, 5 insurers not hold sufficient eligible own funds to cover the

MCR, 5 insurers not complied the SCR ratio and only 4 insurers have fulfilled both the SCR and MCR ratios. At aggregated level, average SCR and MCR ratios were 3.2%, respectively 3.3%. Without the largest three of the five companies with own funds negative, the aggregated SCR and MCR ratios have increased significantly to a level of 99.98%, respectively 335%. Therefore, the results of the stress testing demonstrated the vulnerability of the Romanian insurance sector (the participating insurers did not have sufficient capital), the insurance natural catastrophe stress scenario having the most significant impact and financial stress scenario are less sensitive.

The BSRE exercise has covering 21 insurers (accounting for 15.24% of overall gross written premiums on the Romanian insurance market in 2014) that were not participated to the BSR based on the financial data of December 31, 2014. The results of the BSRE exercise shown that of the total number of 21 participating insurance companies, 1 insurers hold negative own founds, 7 insurers not complied the MCR ratio, 6 insurers not fulfilled the SCR ratio and 10 insurers have meet the two level of the capital requirements (both SCR and MCR). At aggregated level, average SCR and MCR ratios were 118%, respectively 171%. Table 1 summarized the results of the two balance sheet review exercises concerning the appropriateness under Solvency II regime: eligible own funds to cover capital requirements and SCR, respectively MCR ratios.

Table no. 1 Romanian insurance industry Solvency II indicators results of the BSR and BSRE exercises
(thousand RON)

Solvency II indicators	BSR	BSRE
Eligible own funds to meet SCR	174.000	700.796
Eligible own funds to meet MCR	49.000	696.950
SCR	5.444.000	595.698
MCR	1.500.000	407.090
SCR Surplus /Shortfall	-5.270.000	105.097
MCR Surplus /Shortfall	-1.451.000	289.860
SCR ratio	3,20%	117,64%
MCR ratio	3,27%	171,20%

Source: Authors' own research based on the BSR and BSRE reports published by ASF available on www.asf.ro

The results of the two exercises concluded that under Solvency II regime, the Romanian insurance sector is not sufficiently capitalized and only 14 undertakings of the total number of 34 participating insurance companies have meet the main Solvency II prudential ratios (MCR and SCR ratios above 100%). The remaining insurers have need to take actions to correct their risk profile and improve their financial and solvency position in order to fulfill the Solvency II standards. The insurance companies with shortfall of capital had submit action plans to ASF the remediate the deficiencies identified during the BSR and BSRE exercises.

4.2. Romanian insurance market post Solvency II situation

The decision makers regarding the readiness assessment of the Romanian insurance companies for Solvency II implementation have been leaned heavily on the results that have been gathered from the BSR and BSRE exercises. BSR was seen by most insurance undertakings and also by national supervisor, as a powerful tool to understand the likely effect of the new regime on the company capital position. In line with the agreed follow-up actions in the plans submit to national supervisor, the insurance undertakings whit inconsistencies identified during the BSR have taken actions in order to correct the issues that have proved difficulties in the compliance of regulatory solvency capital requirements. These companies have been closely monitored by local regulator during the implementation process of the recommendations in order to ensure the appropriateness under Solvency II standards. In the coming period, to strengthen their capital positions and optimize their risk profile some local insurers have undertaken swift measures to cover the capital deficit. In conformity with the data published by National Association of Insurance and Reinsurance Companies from Romania, capital infusion from abroad in Romanian insurance companies was worth 90 million euro in the first three quarters of 2016. Furthermore, the injection of capital from foreign shareholders on local insurance industry have continued during the following period after the Solvency II implementation. For instance in the first quarter of 2017 year, four insurers have received capital infusion of approximately 43.12 million EUR.

As a response to the subsequent measures involving capital risk profiles correction and capital infusions which happened on the local insurance sector both prior and after the implementation of the new regulatory framework, the solvency position of the Romanian insurers has been strengthened significantly. At individual level, of the total number of 31 insurance companies which operating at the end of 2016 year on the Romanian insurance market, one insurer not meet either SCR or MCR ratios of 100%, one insurance company not achieved the SCR and one insurance undertaking not complied the MCR. To the end of 2017 year, from a number of 31 companies, only one insurer did not cover the MCR ratio of 100%, but this company at this date was in the process of transfer portfolio. On December 2018, all 29 insurance companies which carrying out business on the Romanian market have complied the regulatory capital requirements (SCR and MCR ratios above 100%). Over the all three years since the new regime became effective, at aggregated level, the main prudential Solvency II indicators have recorded changes compared to the figures of the previous years. Concerning the excess of assets over liabilities, the largest growth was registered in the first two years after Solvency II implementation, about 16% (end of year 2016 versus Day 1), respectively 15% (end of year 2017 versus end of year 2016). At the end of 2018 year, excess of assets over liabilities dropped by 5% from 2017 to 2018, mainly due to the increase of liabilities more than the assets in 2018 year (total liabilities increased by 6%, while total assets grew by 3%). Regarding the eligible own funds to meet SCR, a significant growth has occurred over the first two years, 16% - end of 2016 year versus Day 1, respectively 12% - end of 2017 year versus end of 2016 year, while at the end of 2018 year, total eligible own funds to cover SCR declined slightly by 1% from 2017 to 2018 . On the overall market, SCR recorded a similar pattern as eligible own funds to cover SCR: a more important rise over the first two years after the framework application, followed by a slightly decrease at the end of 2018 year. The aggregated MCR reached a growth in the first year post Solvency II implementation (8%) and in the subsequent years remained constant to the level of 1,2 billion RON. Over 2016-2018 period, the average SCR and MCR ratios were above the prudential requirements with an upward trend, except the last year when there was a slight reduction. Table 2 shown the results of the main prudential Solvency II indicators on the aggregated Romanian insurance industry calculated in conformity with the standards of the framework over the three years since the new regime application.

Table no. 2 Romanian insurance industry Solvency II prudential indicators results over 2006-2018 period (billion RON)

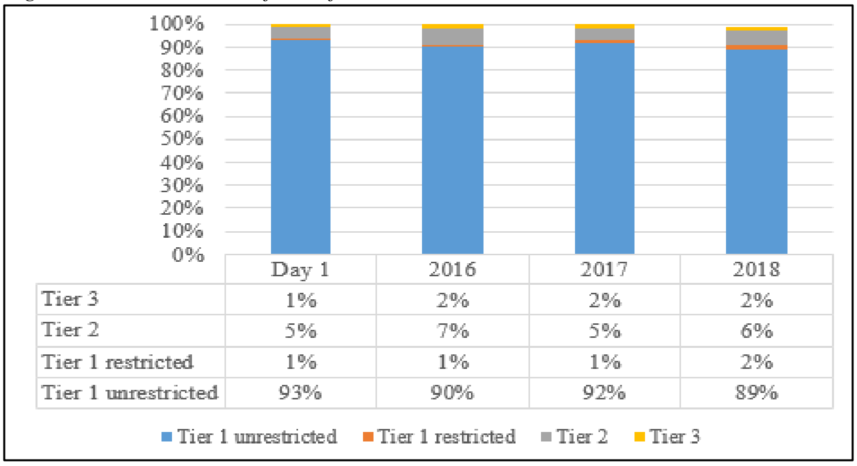
Solvency II indicators	Day 1 (01.01.2016)	Year 2016	Year 2017	Year 2018
Assets	16,36	18,85	19,94	20,60
Liabilities	12,58	14,46	14,88	15,79
Excess of assets over liabilities	3,78	4,39	5,06	4,81
Eligible own funds to meet SCR	3,97	4,61	5,16	5,10
SCR	2,62	2,83	2,99	2,98
MCR	1,12	1,21	1,22	1,22
SCR ratio	151%	163%	173%	171%
MCR ratio	354%	355%	399%	387%

Source: Authors' own research based on the statistics published by ASF and EIOPA available on www.asf.ro

The aggregated structure of own funds (Figure no. 1) over the 2016 - 2018 period shown a high quality of capitalization which indicates a sufficient loss absorbing capacity of the Romanian insurance market. The highest quality of capital held by the Romanian insurance companies is proved by the significant weight of the Tier 1 unrestricted items (especially common shares) in the overall eligible own funds to meet capital requirements.

During the all three years analyzed, Tier 1 capital items have covered at least 90% of the overall available own founds, followed by Tier 2 own funds and Tier 3 own funds.

Figure no. 1. Structure of own founds



	Day 1	2016	2017	2018
Tier 3	1%	2%	2%	2%
Tier 2	5%	7%	5%	6%
Tier 1 restricted	1%	1%	1%	2%
Tier 1 unrestricted	93%	90%	92%	89%

Source: Authors' own research based on the statistics published by ASF available on www.asf.ro

5. Conclusions

The two Quantitative Impact Studies and Balance Sheet Review exercises carried out before Solvency II implementation have provided an excellent opportunity to test the preparedness of the Romanian insurance companies for new solvency framework compliance. The BSR and BSRE exercises have represented an important milestone in the resilience evaluation of the local insurers for new regulatory regime implementation. The Balance Sheet Review had provided a more comprehensive assessment of the potential financial impact of Solvency II framework on the Romanian insurance sector rather than the exercises testing (QIS 4 and QIS 5) ran by EIOPA whereas have covered all insurers which have operated on the local insurance market (not only which have participated voluntarily), have been reviewed all liabilities and all assets (not only those covering technical provisions) and the capital requirements calculations under Solvency standards have been performed by an independent reviewer (not own calculations). Furthermore, the Balance Sheet Review conclusions was an opportunity for most insurers to understand the likely effect of the new regime on their capital position and to take business decisions on both the quantitative and qualitative elements.

Following the successful implementation of the swift measures agreed in the actions plans submit to Financial Supervisory Authority by insurance undertakings with deficiencies identified during the Balance Sheet Review, in the coming period, the solvency position of the Romanian insurance industry has been improved substantially. At individual level, after three years since the new regime became effective, all insurance companies which carry out businesses on the local market have complied the regulatory capital requirements (SCR and MCR ratios standing at above the prudential requirements - 100%). Moreover can be observed a capital optimization trend among Romanian insurance companies. The aggregated structure of the eligible own funds to cover capital requirements shown a high quality of capitalization which indicates a sufficient absorbing capacity of losses. The results recorded by the main prudential indicators over the three years since the Solvency II became effective, shown that the new regulatory framwork had a positive impact on the solvency position of the Romanian insurance industry.

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