# Bulgarian General Insurance Companies from Solvency II Perspective

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#### Summary:

By nature insurance is an activity involving a wide range of risks and uncertainty is generally seen as one of its fundamental and most important characteristics. The tangible exposure to risks and the extremely significant social function of insurance can be outlined as the main contributors for the constantly increasing importance of the insurance companies' solvency used as leading indicator for their financial health. With regard to the insurance companies' solvency three key categories of uncertainty can be identified - uncertainty connected with the liabilities' amount and characteristics, uncertainty connected with the assets and with their sufficiency for covering the continuously emerging volume of payables on their maturity date and uncertainty, arising from the profitability of the future premiums. These three key aspects of the uncertainty as integral characteristics of the insurance business are strongly envisaged in the new European legislation, concerning the solvency of the insurance companies -Solvency II directive. According to the result of the fifth quantitative impact study (QIS 5,

performed by EIOPA), based on financial data for the Bulgarian General insurance market for 2009, some of the insurance companies on the market were able to ensure less than 75% coverage of the solvency capital requirement. A comparison between the values of key indicators respectively in 2009 and in 2013 shows that the basic tendencies have not changed. From this perspective there is no ground for stating that today the Bulgarian insurance market has the capacity to fulfill to greater extent Solvency Il requirements. It should be also taken into consideration that the time for preparation and adaptation to the new legislation is shrinking. In such a dynamic environment the Bulgarian insurance market is subject to an intensive process of consolidation and relocation of market shares.

Key words: solvency, risk, insurance market, quantitative study, assets, liabilities;

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#### 1. Introduction

The core foundation of insurance as a type of economic activity requires that a strong focus is put on insured risks management as the key aspect of the insurance business. It should be organized

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in a way so as to ensure that prompt covering of the outstanding payables to the end consumers of insurance products and continuous guaranteeing of their needs as far as the bought insurance coverages are concerned. To make this possible, the insurance companies should stay solvent while performing their operating activities. Despite the undisputable social importance of the insurance globally there is a continuous tendency for reducing the efforts of the owners of the capital of the insurance companies to keep an appropriate level of protection of the rights of the insured persons in order toreduce the risk for their own investments and maximize profitability. This practice considerably shrinks the possibilities in front of the insured persons to be able use adequate insurance security. to The conflict between the owners of the capital of the insurance entities and the consumers of insurance services arises from the fact that the too adventurous management practices might lead to visible worsening of the insurance company's risk profile after the insured person has already bought a package of insurance services and paid the required insurance premium. In particular, exactly the immanent for the owners' and managers' behavior moral hazard in the process of strategic decision making determines the crucial function that legislation and the supervision authorities perform in ensuring of the system's stability and adefinite level of protection of the insured persons' interests. These key preconditions determine the current development of the contemporary regulatory frameworks, laid down also in Solvency II and in its three-pillar structure:

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- prudent risk management practices, analysis of the different risk types to which one insurance entity is traditionally exposed and building of an individual risk profile;
- the definition of qualitative criterion for evaluation of the internal risk management;
- the establishment of effective systems for disclosure of financial and other relevant information in sufficient volume and quality.

As being inseparable part of the world insurance industry the Bulgarian insurance market is also exposed to dynamic developments in different directions, but the increasing competition, the on-going legislative amendments and Solvency II introduction can be outlined as areas with a significant impact. The future effects that Solvency II has on the insurance market are discussed at large and from this perspective the evaluation of the issues in front of the Bulgarian General Insurance companies becomes a subject of great importance. The main purpose of the current article is to evaluate the current level of preparedness of the General Insurance sector through comparison with 2009 results<sup>1</sup>. The provided analysis contains four notional centers which can be described as follows:

- The first part aims at providing a brief overview of the development of the insurance companies` solvency concept and of the issues that have brought the risk-based approach on the agenda;
- The next section describes the key characteristics of Solvency II and the efforts on European level towards the ensuring of a smooth transition from

<sup>1</sup> AQIS 5 results

purely accounting-based Solvency I to individual risk profiles needed for Solvency II;

- The third part focuses on the current solvency position of the Bulgarian General Insurance market and on the main sources of insecurity towards the level of its preparedness for the new environment;
- The final part presents a comparison between several key indicators' values respectively in 2009 and 2013. This parallel aims to evaluate the major market trends and their impact on the enforcement of Solvency II.

The conclusion points out a set of important features that can cause difficulties and turbulence on the market.

#### 2. Development of the insurance companies` solvency concept

The Solvency concept is frequently used as a foundation for evolving of other statements, but it has rarely been the main object of analysis. As an economic activity insurance is a business, connected with wide range of risks and uncertainty is generally seen as one of its fundamental characteristics. With regard to insurance companies' solvency three key categories of uncertainty are identified - uncertainty connected with the liabilities' amount and characteristics, uncertainty connected with the assets and their possible coverage of the continuously emerging volume of payables on their maturity date and uncertainty, arising from the profitability of the future premiums and of the part of the collected premiums, for which there is still possibility for insurance event to occur (Weert, Fr., 2011).

The uncertainty, connected with the insurance liabilities, can be defined

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also as uncertainty arising in terms of measurement. Typically the event that gave rise to new claims and additional provisions has already taken place, but the precise amount of the claims cannot be precisely estimated. Furthermore, it is hard to predict the exact moment of payment. In addition certain level of ambiguity stems from the continuous inflation processes and on-going changes in the court practices.

In terms of assets two forms of uncertainty can be defined:

- Uncertainty connected with their proper valuation;
- Uncertainty arising from their possible rate of return.

As far as assets of the insurance companies are concerned, the solvency margin can be described as buffer, based on the assets of the respective company that covers the legally required capital. Solvency can be perceived as the possibility of the entities to cover their future payments on claims at the exact moment of their maturity date. If the aforementioned two statements are taken into account, at any time the insurer has to have access to sufficient volume of liquid assets in order to be able to cover simultaneously the matured payments and meet regulatory financial requirements.

Insurance companies' solvency has been the object of interest for several decades and has been included in a wealth of research carried out in different countries such as Great Britain (Daykin 1984, 1990), Netherlands (Kastelijin and Remmerswaal, 1986), Finland (PentikEainen 1982 and 1989, Rantala 1982) and Norway (Norberg in 1985, 1986 and 1993). Despite the increased interest in this subject in the last two decades of 20<sup>th</sup> century Lundberg and Crammer are considered to be the

pioneers in this research area due to the initial introduction (Lundberg 1909) and the further development of Risk theory (Crammer, 1930).

The available solvency margin is traditionally represented as the difference between the insurance company's assets and liabilities. This is one of the fundamental definitions provided by Pentikeainen (1952), where a clear distinction is made between the actually available capital and the regulatory required capital needed to protect the interest of the insured persons.

Campagne adopted approach for setting some minimal standard requirement which all the market agents should meet readily (Campagne, 1961). His ideas were fully adopted and widely applied in the European legislation in the field of insurance solvency.

Furthermore, more or less basic definitions of solvency as a scientific category and of the solvency capital requirements, the solvency concept continues its development and the current approach towards solvency is based on evaluation from theperspective of risk management. This new perspective is grounded on the possible negative development of the solvency position on an insurance company that used to be completely solvent and financially healthy at moment t, but after rapid worsening in a short period of time it becomes insolvent (Kumar, N., Warrier, S.R., Shekhar, P., 2008).

As part of the theory on this topic there are numerous formulas for defining and evaluation of the capital requirements with accent over the minimal capital required. Actually the tendency for applying risk-based approaches that take into consideration the influence of variety of factors, applicable Bulgarian General Insurance Companies from Solvency II Perspective

to the specifics of the workflow of an insurance company was developed during the last two decades of 20<sup>th</sup> century. Capital requirements defined on such bases are described as risk-based.

#### 3. Solvency II milestones

Solvency II is a completely new riskoriented approach for measurement and evaluation of the financial position and strength of the insurance companies, domiciled in the European Union. The main purpose of its creation and further establishment is the reaching of a higher degree of protection of the interests of the insured persons as well as better financial sustainability of the insurance market as a whole by improving the quality of the provided information and application of a wider range of instruments for evaluation and impact over the capital adequacy of the insurance companies. Even before the effective starting date of the new regulation, it has already created high expectations for visible changes in the product structure, insurance operation as well as additional tough requirements for the insurance companies. What should be also taken into consideration is that the upcoming transformation is not only about amending the current regulation, but also involves adopting a totallydifferent approachfrom purely normative regulations and prescriptions to risk-based ones. Because of the decisive changes and its scope, there is a strong need for well-planned preparation and that is why a host of preliminary quantitative study was organized. After starting date of the new regime Solvency II was delayed yet again, its launch has now been scheduled for 01.01.2016, and a wide range of

preliminary activities is expected to be organized. These activities and public discussions should be led by the local authorities, but the dynamic participation of insurance companies will have crucial influence over the final success of the transition process.

According to one of the leading Bulgarian authors writing on Solvency II, the transition towards Solvency II aims not only to improve financial stability, but also to consolidatethe insurance market, considering that the smallest insurers will not succeed in responding to the higher capital requirement and will face two possible options – to leave the market or to merge with other company (Hristozov, 2013).

# 4. Solvency of the Bulgarian General insurance companies

The general results from the fifth quantitative impact study show that as at the time of conducting of the study a significant portion of the Bulgarian General Bulgarian General Insurance Companies from Solvency II Perspective

to be able to continue their operations. These are the main sources of insecurity in terms of the level of preparedness of the Bulgarian insurance market to function in the new market environment characterized by fierce competition and stringent legal and regulatory requirements.

Only for comparison a look over the data, presented by the Financial Supervision Commission concerning the end of 2009, shows that the coverage of the solvency margin with own funds upon Solvency I conditions is approximately 189% and all the companies on the market had succeeded in fulfilling the capital requirement at a higher than 100% rate. As at the end of 2013 the proportion between own funds and the solvency margin was improving significantly. The high values of the observed indicator cannot be interpreted as a reliable sign that the Bulgarian General Insurance market is stable and sustainable from a financial perspective. The purely accounting character of the indicator defines its insufficient quality as instrument for analysis.

Table 1. Indicators characterizing the condition of the Bulgarian General Insurance Market<sup>2</sup>

Indicators	2009	2010	2011	2012	2013
Coverage of the solvency margin	189%	187%	193%	214%	228.40%
Gross combined ratio	89.00%	95.00%	87.00%	92.49%	88.00%

Insurance companies failed to ensure at least 75% coverage of the solvency capital requirement. In particular this suggests that in realityin order to implement the new legislative framework the local supervisory authorities will have to perform a number of restrictive activities and the affected insurance entities will have to accumulate additional capital in the short run in order Despite the constantlyrising tendency, registered by the coverage of the solvency margin indicator, the gross combined ratio development does not seem as optimistic. Its development can be described as more or less volatile and this can be seen as an early-warning signal. In this respect the effect of the administrative action for restriction of the administrative

<sup>1</sup> The provided table is based in information, published by FSC on monthly basis

expenses and the commission on MTPL, which the Bulgarian Financial Supervision Commission imposed at the end of 2010, is evident. Since MTPL hold a significant share in the whole market with regard to product structure, the gross combined ratios has apparently plummeted - from 95% at the end of 2011 to 87% at the end of 2011.<sup>3</sup> After growing in 2012, the value of the coefficient goes back to relatively positive level. The dynamics of this indicator can be evaluated as a relatively important marker of the general conditions of the market and for the results of the operational activities of the insurance companies before the influence of the reinsurance activities.

# 5. Parallel between key characteristics of the Bulgarian insurance market 2009 – 2013

In order to assess the preparedness level of the Bulgarian General Insurance market to function in the conditions of Solvency II regulation, a comparison between the key characteristics of the market, measured respectively at the end of 2009 and at the end of 2013, should be made. Even thoughthis comparison of market characteristics is based on somewhat generalized conclusions, it can be used as an approach for the analysis and assessment of the leading tendencies on the market.

A short review of the key indicators shows that:

✓ In 2013 after three consecutive years of negative development of the gross premium income, the insurance market registers 6.5% growth, compared to 2012. The first impression is that the Bulgarian General Insurance Companies from Solvency II Perspective

recorded result is extremely positive and the market is entering in a new recovery phase after its contraction during the crisis. In fact it is worth noting that a key contributor to the positive result is a decisive legislation change. The change concerns the process of continuous harmonization of the domestic regulatory framework with the European one and as a result of the undertaken activities the healthy insurance companies were obliged to apply for new licenses in order to become insurance companies. Finally the general insurance and health insurance market merged into one single formation. The merger of the two segments and the common representation of the data are the main reason for the nominally positive development. A comparison between the structure of the premium income at the end of 2012 and at the end of 2013 shows that 41% of the 2013 growth is the direct result from the merger of the two separate segments. After extracting this effect, the real growth of the market is already around 5%. Another product line with strong influence is MTPL, which shows a growth exceeding 56 million BGN.

✓ The paid claims development follows the gross written premiums but with some delay due to the technological specifics of claims handling (usually a significant part of the claims, incurred during one calendar year, is settled in the next reporting period). Another important feature here is the fact that the insurance

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Indicator/Period	2009	2010	2011	2012	2013
Gross written premium – MTPL (BGN M)	440.53	482.24	525.37	522.87	579.52
Gross written premium – Casco (BGN M)	602.66	496.24	442.84	416.65	410.56
Gross written premium – Property (BGN M)	378.86	362.19	357.82	357.49	358.19
Gross written premium – Accident (BGN M)	34.63	33.94	36.03	39.06	75.20
Gross written premium – Total (BGN M)	1,459.06	1,377.20	1,364.91	1,338.68	1,425.83
Gross earned premium (BGN M)	1,468.09	1,377.78	1,370.17	1,341.50	1,428.66
Net earned premium (BGN M)	1,254.04	1,158.47	1,121.24	1,105.25	1,196.30
Gross acquisition costs (BGN M)	-307.94	-331.38	-288.13	-282.95	-292.99
Net acquisition costs (BGN M)	-273.85	-289.99	-242.84	-232.84	-238.25
Paid claims (BGN M)	-679.68	-678.44	-633.96	-685.47	-728.63
Change in claims' provisions (BGN M)	-80.93	-70.94	-62.60	-35.90	12.20
Gross losses total (BGN M)	-760.61	-780.34	-722.39	-721.36	-740.25
Ceeded losses (BGN M)	-90.18	84.07	83.79	123.28	100.67
Net losses (BGN M)	-670.44	-637.80	125.48	-598.08	-639.58
Administrative costs (BGN M)	-197.76	-169.46	-166.56	-152.16	-156.25
Other technical elements (BGN M)	-151.30	-132.29	-118.00	-1 13.31	-108.47
Income on investments (BGN M)	132.86	58.86	50.62	66.20	65.23
Net result (BGN M)	86.25	-16.52	51.53	55.04	66.60
Net provisions (BGN M)	1,091.46	1,121.61	1,170.22	1,185.26	1230.76
Net provisions ratio (%)	87%	97%	104%	107%	103%

Table 2. Indicators, describing the Bulgarian General Insurance market in the period 2009 - 20134

<sup>&</sup>lt;sup>3</sup> The administrative measure, imposed by FSC, restricted the administrative and acquisition expenses on MTPL policies – their accumulative share from the written premium should not exceed 20%. <sup>4</sup> The provided table is based on FSC data.

limits on MTPL were visibly increased as of 1 June 2012. Another factor with an adverse effect is the dynamically changing weather conditions, which affect the occurrence of natural disasters and other risks related to climate change. A global trend is the increased frequency of occurrence of severe insurance events involving natural risks.

- ✓ The administrative expenses have contracted, which can be interpreted as a positive sign and as a result of ongoing optimization processes;
- ✓ The income on investments has almost halved compared to 2009, which supports the above-stated assumption that in terms of liabilities insurance companies are exposed to a wide range of purely financial risks related to the assets' profile. Especially in view of Solvency II, the credit rating of the issuer of the possessed assets is extremely important. In this respect the current decrease of the Bulgarian credit rating will have a negative impact on the capital charge for market risk calculation of the insurance companies on the market that have allocated a significant part of their investments' portfolios in government bonds.
- ✓ The net result from operational activities is also falling, which gives us reason to assume that if this trend is sustainable over time,market players' capacity to cushion current and future losses by positive results from previous years is diminishing. What should also be considered in the comparison process

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is that the total net result for 2013 is actually the result after the merger of the two market segments.

#### 6. Conclusion

From the analysis above it becomes clear that the topics, connected with the forthcoming adoption of Solvency II and with the Bulgarian insurance companies'overall solvency are extremely important not only with regard to compliance with the new legislation, but also with regard to guaranteeing the system's stability on one hand and the interests of the insured persons on the other. These issues are even more crucial against the backdrop of the recent negative developments in the Bulgarian banking sector.

Some of the participants on the Bulgarian general insurance market can be characterized with number of features that can pose serious difficulties and even threaten their survival:

- A significant share of the investments is concentrated on property and subsidiaries;
- Substantial investments in equities are not subject to active trading and accordingly their real market value is hard to estimate;
- Too high a share of receivables mainly from policyholders. Part of the negative implications concern the Solvency II definitions and the treatment of the receivables as in the balance sheet with its own specific dynamics;
- Low coverage of the technical provisions with high-quality investments;

- Too abrupt fluctuations in the product selling prices, which are rarely based on the risk characteristics.

In addition to theabove-stated conclusions it should be also mentioned that the insurance market does not function in isolation. It is tightly connected with the other financial markets and other sectors of the economy and all the trends are spilled over onto the insurance market through different transmission mechanisms.

The practical application of Solvency Il willimpose significantly higher capital to insurance companies. These requirements are expected to prevent the entities from the effective allocation of their own funds (Hristozov, 2013).

In this context it could be summed up that the Bulgarian General insurance market will be exposed to wide range of challenges topreserving financial stability and sustainability in view of limited growth prospects and increasing losses.

Therefore the active participation and the clear position of the local supervisory authorities is essential, especially with regard to establishing of a package of indicators for early notification in the event of any sign for instability.

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