

THE EFFECTS OF SOLVENCY II ON CORPORATE BOARDS: A SURVEY ON ITALIAN INSURANCE COMPANIES

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Abstract

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Governance and the internal control system represent a fundamental pillar in the Solvency II Directive. In that context, the insurance companies' board plays a key role in assuming new responsibilities and duties. The present work aims to examine the role of insurance companies' boards in view of the important changes introduced by Solvency II. An empirical analysis is conducted on a sample of 102 Italian insurance companies. Three areas of investigation, size and composition, board self-assessment processes and board remuneration policies, are covered by the survey. The results show a satisfactory level of compliance of the boards with respect to the requirements established by Solvency II. There is still room for improvement as regards the level of disclosure and diversity. The paper contributes to deepen the understanding of Solvency II effects on the composition and functioning of insurance companies' boards. In addition, the study provides, through the Italian case analysis, some indications on the likely future development of the insurance companies.

Keywords: Solvency II, Corporate Boards, Insurance Companies, Remuneration Policies, Disclosure

1. INTRODUCTION

The Solvency II, Directive 2009/138/EC with regard to insurance and reinsurance activities, is the new regulatory framework for the European insurance industry based on a more dynamic risk-based approach. The Solvency II Directive has been conceived with the aim of exceeding the limits of the minimum capital requirement scheme proposed by Solvency I Directive, in order to achieve a quantitative and qualitative measure of the risks arising from the insurance business and to improve its performance and operating efficiency.

The process of transposing the Solvency II Directive into the legislation of the 28 Member States of the European Union has followed a long and complex path, which is still being completed. The transposition developed in parallel with a general review process of the architecture of the European financial regulation that has led to the new regulatory mechanism resulting from the De Larosière Report, in place of the previous normative technique (Lamfalussy). In the new regulatory framework drawn up by the De Larosière group, the

third level committees are transformed into European Micro-prudential Supervisory Authorities, with a legal personality under Community law, to which new tasks and greater relevance are assigned. In particular, EU regulations No. 1093/2010, No. 1094/2010 and No. 1095/2010, established the new Supervisory Authorities responsible, respectively, for the banking sector (European Banking Authority - EBA), for insurances and occupational pensions (European Insurance and Occupational Pensions Authority - EIOPA) and for the financial instruments (European Securities and Markets Authority - ESMA).

The Directive 2009/138/EC has been amended several times and its entry into force, postponed several times, has been set for all Member States on 1 January 2016.

Solvency II Directive gives the internal control system a decisive role, in order to guarantee the sound and prudent management of the company. Adequate governance is one of the conditions necessary for the correct performance of the insurance business.

The aim of this work is to examine the current role played by insurance companies' board in light of the important changes introduced by the Solvency II legislation. To this end, empirical analysis has been conducted on a sample of 102 Italian insurance companies to understand the characteristics of the board, with reference to the 2017 fiscal year, as well as its level of compliance respect to Solvency II requirements.

The structure of the work is as follows: Section 2 provides a summary of the main changes introduced by Solvency II regarding the insurance companies' board; Section 3 draws the literature review; Section 4 introduces the research methodology and the results of the empirical analysis; Section 5 presents conclusions and final remarks.

2. THE EFFECTS OF SOLVENCY II ON INSURANCE COMPANIES' BOARDS

Solvency II, as mentioned above, pursues the main objective of renovating the set of rules aimed at ensuring the stability of insurers and reinsurers in the European Union, establishing a new solvency regime. By borrowing its structure from the banking sector, Solvency II introduces a regulatory framework based on three pillars.

The first pillar outlines the minimum capital requirements to ensure firms are adequately capitalized according to risk exposure. According to the first pillar, companies can use the Standard formula approach or the internal model approach. The use of internal models is subject to strict standards and to the preventive approval of the supervisory authorities. Under Solvency I, capital requirements are determined to start from profit and loss accounting measures (premiums and claims). In contrast, Solvency II adopts a balance sheet focused approach, with the capital requirements derived from different stress scenarios regarding the key risks affecting all the balance sheet components (assets, as well as insurance liabilities), together with an evaluation of the operational risk profiles.

The third pillar aims at greater levels of disclosures in the interest of both the supervisors and the public. The increased disclosure requirements are built around a private annual Report to Supervisors (RTS) and a public Solvency and Financial Condition Report (SFCR). According to the new standards, corporate reports will provide all the essential information on both a quarterly and an annual basis, so to allow a more reliable assessment of a company's overall financial position and more up-to-date information.

This study focuses on the second pillar and, more specifically, on the enhanced role played by insurance companies' board. Indeed, the second pillar imposes higher standards of risk management and governance within the business organization. Qualitative requirements will be based on three core strategic issues:

1. *An overall responsibility of leadership in managing risk*: the risk management system must be integrated into the organizational structure and decision-making processes of the company and must cover some minimal areas (i.e., calibration of reserves, management of assets and liabilities, investments in derivatives, management of liquidity and concentration risks, management of operational

risks, reinsurance and other risk mitigation techniques). The risk management system includes the Own Risk and Solvency Assessment (ORSA), which requires a company to undertake its own forward-looking self-assessment of risks and the capital required to address these risks.

2. *A clearly defined risk strategy linked to the business strategy*: Solvency II identifies some core principles that should characterize an effective system of governance. These principles include transparency (to be achieved through a clear division and appropriate separation of responsibilities, as well as through an effective information system), proportionality (with respect to the nature, scope and complexity, of a company's activities), written policies (subject to the preliminary approval of the board of directors and to be reviewed at least once a year) on risk management, internal control, internal audit and (where relevant) outsourcing, and business continuity (i.e. emergency plans to ensure continuity of activities in stressful situations).

3. *Ongoing management and control of the company's risk-bearing capacity*: Solvency II extends the amount of data to be provided to the supervisors as well as extends information flows within the company. Compared to the past, the information sharing within the organization is strongly enhanced by imposing a continuous flow of information from technical functions to the decision makers. The chairman of the board should ensure that the documentation supporting the board's resolutions are adequately shared with all the directors; secondly, the chairman should ensure that the strategic issues are treated with priority. He also has to verify that the board self-assessment process is carried out effectively, is consistent with the complexity of the work of the board and that the corrective measures proposed to deal with any deficiencies are adopted. The Chairman should finally ensure that training programs for board members are planned and implemented.

In this context, the insurance companies' board defines the insurer's "appetite for risk", by evaluating the actual risk assumed and the maximum acceptable risk, while dosing minimum capital requirements according to risk tolerance. It also approves risk measurement and management policies, as well as contingency plans, administrative audit activities, aimed at verifying that all the corporate functions behave properly, and sets fit and proper requirements for board members, top managers and persons responsible for the internal control function.

3. LITERATURE REVIEW

In recent years an extensive literature has been developed in the field of Solvency II. While EU Member States were preparing the implementing measures of Solvency II Directive, international institutions worked out impact studies of the Solvency II framework, in order to find the correct calibration of the new regulatory standards.

Since October 2005, the Committee of the European Insurance and Occupational Pension Supervisors (EIOPS), at the request of The European Commission, conducted five Quantitative Impact Studies (QIS). The findings of the first impact study have been published in March 2006 (QIS1), while the results of the fifth impact study (QIS5) have been published in March 2011. QIS5 represents the last

fully comprehensive stress test before Solvency II implementation. The results of QIS5 show that, at European level, Solvency II, when compared to the required solvency margin of the Solvency I system, leads to an increase in capital requirements and in the amount of eligible own funds, and a decrease in technical provisions. Also, QIS5 documents that the financial position of the European (re)insurance industry appears comfortable, with eligible own funds exceeding Solvency II capital requirements and with thirteen countries showing a capital surplus greater than the surplus assessed against the Solvency I required solvency margin.

Many other studies evaluated the expected impact of the increased capital requirements under Solvency II, while also providing overviews of the changes required to insurance companies to fulfill the new standards.

Schwarz et al. (2011) stated that under Solvency II well-capitalized companies could experiment with a higher degree of volatility and a fall back on their capital reserves, while undercapitalized insurers could mitigate their risk appetite. Garayeta et al. (2014) analyzed the different solutions that have been implemented in Spain to meet solvency capital requirements, outlining the required changes in the organizational structure and the shift from a bureaucratic structure to a governance model based on a comprehensive risk management approach within companies. Floreani (2013) focused on the Solvency II VaR capital requirement, highlighting some relevant Solvency II drawbacks, i.e. it may produce a “financialization” of insurance business, while also amplifying the macro-systemic exposure to market shortfall of the insurance industry, since the bigger/better-diversified companies face higher probabilities of default in case of market shortfalls. Doff (2016) stated the effectiveness of Solvency II, although marking violations to some criteria, due to simplifications and/or a lack of focus on specific risk profiles (i.e. government bonds, inflation, and liquidity risk).

The paper by Boonen (2017) has explored the impact for a life annuity insurer of the calibration of Solvency II capital requirements based on expected shortfall (ES) instead of value-at-risk (VaR). The author focused on the risk modules for three risk classes, which are equity risk, interest rate risk and longevity risk. His findings show that for the higher quantile of the VaR, the stress scenarios of the various risk classes based on VaR are close to the ones based on ES, while, using a smaller quantile, the equity capital requirement is relatively smaller and the longevity capital requirement is relatively larger when adopting ES instead of VaR.

Braun et al. (2018) derived an insurer’s return on risk-adjusted capital (RORAC) under the Solvency II capital requirements, taking into account the German life insurance industry. Their results indicate that the RORAC is mainly driven by the capital requirements and, hence, that under Solvency II a RORAC-based performance measurement could have negative effects for companies’ stakeholders. Rae et al. (2018) reviewed Solvency II Pillar 1’s impact on asset and liability management, pro-cyclicality and business management. The authors also analyzed Pillars 2 and 3 in respect of the Own Risk and Solvency Assessment, liquidity and disclosure. They concluded that although Solvency II represents an improvement over Solvency I, there still are concerns

around pro-cyclicality and the market consistency principle for the assessment of the financial and solvency position.

Different bodies of literature analyzed the computational problems in the Solvency II context (Floryszczak et al., 2016; Cerchiara & Demarco, 2016; Casarano et al., 2017; Coppola et al., 2018; Fiore et al., 2018) and the business and organizational changes for insurance companies in the light of Solvency II. The survey conducted by the Boston Consulting Group on a sample of European and North American insurance companies documented a considerable uncertainty about the business impact of Solvency II in the long-run (Bernert et al., 2010). The same study remarks the massive impact of Solvency II on insurers’ business strategies. Schwarz et al. (2011) pointed out the deep cultural and organizational changes implied by the new rules, besides the impact on capital requirements, risk management, and disclosure levels. According to the authors, insurance companies will be forced to develop through the organization three core capabilities, i.e. a risk-based value creation process, industrial-strength risk-assessment processes and a change-oriented culture, while Hay et al. (2011) stated three key strategic issues, that are a strong coherence between risk and business strategies, an effective and pregnant risk management and control system, and an overall leadership responsibility in managing risk.

In line with Schwarz et al. (2011), O’Donovan (2016) argued the role of the new regulatory framework in stimulating the business strategic management capabilities of insurance companies, offering new opportunities to gain strong competitive leads over competitors. Peleckienė and Peleckisa (2014) stated that Solvency II will help the EU insurance industry to increase its international competitiveness.

EY (2016), in the fall of 2013, conducted one of the largest surveys on Solvency II business implications, involving more than 170 insurance companies from 20 different countries. The EY’s survey shows that in most areas, organizations had not yet reached the minimum level of Solvency II compliance. The survey also outlines that most of the companies expected a significant increase in workflows (and related costs) as a consequence of the new imposed commitments (forward-looking risk assessment, reporting to regulators, etc.).

Other studies confirm the increase in operational costs associated with the new regulatory standards and, as a consequence, also outline the risk of higher prices for policyholders and/or of a mitigation of the risks covered by non-life insurance contracts (Bernert et al., 2010; Economist Intelligence Unit, 2012).

A different research line focused on Solvency II effects on insurance companies’ investments in the light of the trade-off risk-return associated with various investment plans. Insurers are expected to redesign their investment portfolios in order to reduce risks and thereby the capital requirements to meet, so accepting the lower return associated with a lower risk profile (Hay et al., 2011). Others stated that insurers would be forced to optimize their investment portfolios in order to maximize returns given a certain level of risk and required capital (Heisen et al., 2014; Kreeb, 2015).

Generally, institutional and academic works agree upon the idea that Solvency II is not just about capital requirements while proposing fundamental

cultural and organizational changes in rules, processes and communication models. Many studies confirm that the reasons why insurers become insolvent, beyond capital adequacy and excessive risk-taking, lie in shortcomings in internal controls and management systems (Hamwi et al., 2004; Eling et al., 2007; Buckham et al., 2010).

With specific reference to the internal governance implications of Solvency II, they have been widely debated in a book by Dreher (2015), where are addressed topics such as the Own Risk and Solvency Assessment (ORSA), the fitness of members of Supervisory Board, the key functions and key function holders, the supervisory review of the key functions and the compliance function.

A more specific focus is provided by Corvese (2017), who provided evidence of the effects on the responsibilities and duties of the insurance companies' board of directors in the light of the implementation of the Own Risk and Solvency Assessment (ORSA) system in the Canadian and Italian legal systems, taking into account the direction provided by the national authorities for the insurance sector. Similarly, the work by Pukala et al. (2017) highlighted the role of the Own Risk and Solvency Assessment (ORSA) system for the development of insurance companies, outlining a set of priorities regarded as relevant in the phase of implementation of the new regulatory framework.

Magee et al. (2017) analyzed the relation between risk governance model, risk exposure and performance measures for an international sample of 107 insurance companies. The authors, by implementing a risk governance index (RGI) based on several Solvency II provisions (such as risk committee characteristics, the existence of a chief risk officer in the executive committee and the board members' industry experience), found that companies with a higher RGI usually experience lower expected default frequency during crisis years, while in a non-crisis period effective risk governance models are associated with higher risk-adjusted performances. Van Vuuren et al. (2017) investigated the impact of Solvency II - Pillar 2 on risk governance in South African insurance companies. The study also evaluates the state of South African insurers relative to the Pillar 2 risk management requirements. The results of the survey indicate that four areas fulfill the organizational changes imposed by Solvency Pillar II: having in place a risk management system, documenting the risk

management strategy, having a clear asset-liability management policy and having a risk transfer policy.

Siri (2017) provided a comprehensive overview of the corporate governance requirements under Solvency II, also highlighting the emerging regulatory trends in the governance of insurance companies. Particularly, the author outlines the considerable extension of duties and responsibilities assigned to the corporate board, far beyond the traditional role of leading business strategy and monitoring the chief executive officer. Finally, Beshar and Furusten (2018) examined how the Swedish insurance companies have adopted Solvency II with regard to the corporate governance rules, with a specific focus on the roles of administrative, management and supervisory bodies.

This paper aims at contributing to the insurance economics literature, exploiting the role of the board of insurance companies under the new internal governance standards introduced by Solvency II.

4. RESEARCH METHODOLOGY AND RESULTS

Empirical analysis has been conducted on a sample of Italian insurance companies in order to analyze the level of compliance of the boards to the requirements established by Solvency II. The survey has been conducted on a sample of 102 Italian insurance companies, extracted from the ANIA ranking drawn up on the basis of the premiums accounted in 2016 by Italian insurance companies. Companies subjected to merger or acquisition in 2016 and 2017 have been excluded from the original population, as well as companies for which the required information was not available.

Of the 102 insurance companies examined, 4 are listed on the Italian Stock Exchange. 60 companies are Italian, the remaining 42 are foreign companies operating in Italy. 52 companies in the sample only operate in the non-life segment, 32 companies operate in the life business and the remaining 17 companies operate in both sectors.

The research is focused on three areas of investigation. The first area focuses on the size and composition of the corporate board. Specifically, for each company the following item shall be verified: a number of board members, the age of each member, a number of female members, educational qualification and country of origin (Italy or foreign country) of board members.

Table 1. Sample of the Italian insurance companies (Part 1)

| Insurance companies | Life | | Non life | |
|---------------------------|---------------|---------------|---------------|---------------|
| | Premiums 2016 | Premiums 2017 | Premiums 2016 | Premiums 2017 |
| Poste Vita | 19.820.210 | 20.263.362 | 55 | - |
| Generali Italia * | 7.844.205 | 8.036.010 | 5.069.544 | 4.936.157 |
| Intesa Sanpaolo Vita | 10.436.568 | 9.797.988 | 1.259 | 1.043 |
| Unipolsai Assicurazioni | 3.041.710 | 2.891.817 | 6.960.233 | 6.901.131 |
| Allianz | 2.118.408 | 2.198.732 | 3.731.317 | 3.593.544 |
| Genertellife | 5.480.168 | 4.350.540 | - | - |
| Alleanza Assicurazioni | 4.586.686 | 4.912.284 | 26.413 | 25.223 |
| Fideuram Vita | 4.510.409 | 4.788.532 | - | - |
| Creditras Vita | 4.431.451 | 5.026.293 | - | - |
| BnpParibasCardif Vita | 4.011.572 | 3.836.003 | 9.729 | 10041 |
| Credit Agricole Vita | 3.124.045 | 2.841.463 | - | - |
| AxaMps Assicurazioni Vita | 2.809.313 | 2.106.913 | - | - |
| Mediolanum Vita | 2.800.114 | 3.043.913 | - | - |
| Cnp Unicredit Vita | 2.620.408 | 2.655.210 | - | - |
| Societa' Cattolica * | 861.062 | 974.295 | 1.658.022 | 1.690.611 |
| Aviva Vita | 2.285.833 | 2.594.616 | - | - |
| Societa' Reale Mutua | 797.089 | 817.977 | 1.400.726 | 1.416.011 |
| Axa Assicurazioni | 562.106 | 518.314 | 1.425.675 | 1.490.895 |
| Arca Vita | 1.689.062 | 641.007 | - | - |

Table 1. Sample of the Italian insurance companies (Part 2)

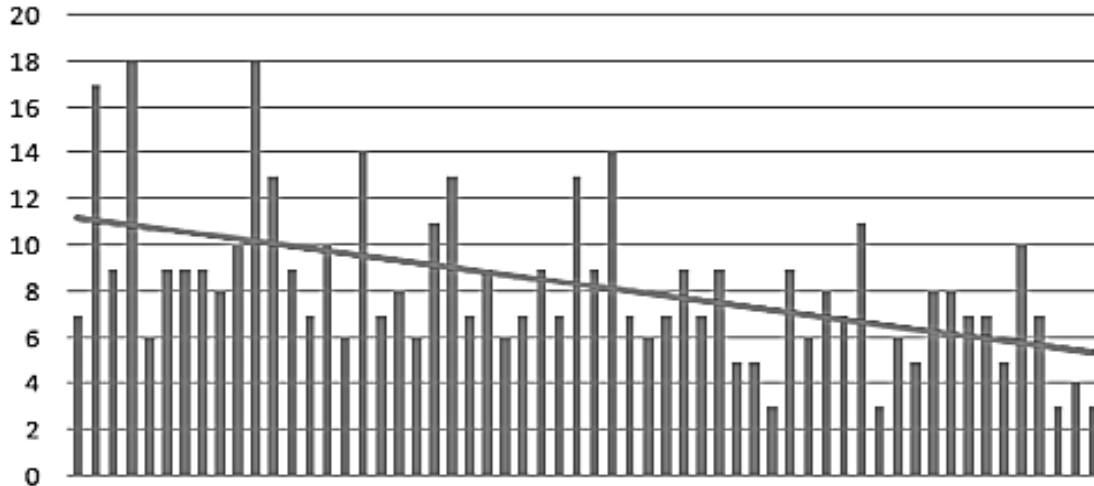
| Insurance companies | Life | | Non life | |
|-------------------------------------|---------------|---------------|---------------|---------------|
| | Premiums 2016 | Premiums 2017 | Premiums 2016 | Premiums 2017 |
| Az Life | 1.622.389 | 1.523.379 | - | - |
| Popolare Vita | 1.493.543 | 653.079 | 88 | 90 |
| Groupama Assicurazioni | 393.959 | 389.384 | 1.091.841 | 1.135.868 |
| Lombarda Vita | 1.400.776 | 1.570.407 | - | - |
| Credemvita | 1.342.575 | 1.228.042 | - | - |
| Vittoria Assicurazioni * | 189.469 | 191.144 | 1.081.145 | 1.148.072 |
| Eurovita Assicurazioni | 1.259.424 | 2.127.959 | - | - |
| Hdi Assicurazioni | 697.625 | 1.022.806 | 359.940 | 386.989 |
| Bipiemme Vita | 1.025.809 | 755.956 | 7.562 | 7.106 |
| Uniqa Previdenza | 918.298 | 715.582 | - | - |
| Amissima Vita | 834.372 | 774.745 | - | - |
| Italiana Assicurazioni | 259.878 | 238.700 | 527.832 | 541.762 |
| Itas Mutua | - | - | 738.937 | 784.002 |
| Genialloyd | - | - | 637.921 | 672.058 |
| Assimoco Vita | 557.372 | 3.735.001 | - | - |
| Sara Assicurazioni | - | - | 548.714 | 558.797 |
| Direct Line Insurance | - | - | 468.880 | 479.027 |
| Genertel | - | - | 431.209 | 405.352 |
| Aviva Italia | - | - | 426.862 | 411.526 |
| Intesa Sanpaolo Assicura | - | - | 392.498 | 430.522 |
| Itas Vita | 360.173 | 331.916 | - | - |
| Rbm Assicurazione Salute | - | - | 353.882 | 430.352 |
| Amissima Assicurazioni | - | - | 353.873 | 394.455 |
| Lloyd's | - | - | 350.069 | 341.574 |
| Unisalute | - | - | 336.947 | 371.019 |
| Aviva Life | 323.725 | 439.976 | - | - |
| Bcc Vita | 318.024 | 324.850 | - | - |
| Helvetia Vita | 317.710 | 355.120 | - | - |
| Tua Assicurazioni | - | - | 263.145 | 271.439 |
| Bancassurance Popolari | 249.212 | 218.730 | - | - |
| Uniqa Assicurazione | - | - | 239.941 | 241.957 |
| Assimoco Assicurazioni | - | - | 232.185 | 250.722 |
| Cargeas Assicurazioni | - | - | 217.882 | 217.064 |
| Metlife Europe | 132.763 | 142.884 | 72.557 | 76.607 |
| Creditras Assicurazioni | - | - | 200.580 | 243.966 |
| AxaMps Assicurazioni Danni | - | - | 187.013 | 187.518 |
| Europ Assistance Italia | - | - | 161.681 | 173.626 |
| Compagnia Ass. Linear | - | - | 149.964 | 172.344 |
| Berica Vita | 146.568 | 83.346 | - | - |
| Poste Assicura | - | - | 118.769 | 141.249 |
| Siat | - | - | 115.283 | 127.585 |
| Atradius Credito Y Caucion | - | - | 110.144 | 111.394 |
| Swiss Re International | - | - | 105.538 | 94.466 |
| Arca Assicurazioni | - | - | 104.433 | 110.313 |
| Hdi Global | - | - | 99.664 | 112.575 |
| Bim Vita | 98.563 | 103.849 | - | - |
| ObelInsurance (Europe) | - | - | 87.676 | 58.393 |
| Sara Vita | 87.208 | 90.962 | - | - |
| Nobis Assicurazioni | - | - | 81.956 | 181.242 |
| XlInsurance Company | - | - | 81.377 | 114.401 |
| Fwu Life Insurance Lux | 78.440 | 90.170 | - | - |
| SaceBt | - | - | 77.768 | 73.945 |
| Chubb Insurance Company Of Europe | - | - | 67.728 | 237.338 |
| Credit Agricole Assicurazioni | - | - | 66.083 | 73.781 |
| Assicuratrice Milanese | - | - | 62.675 | 62.756 |
| Sogessur | - | - | 57.919 | 65.276 |
| Le Assicurazioni Di Roma | - | - | 53.217 | 43.676 |
| Mediolanum Assicurazioni | - | - | 49.794 | 54.050 |
| Elba Compagnia Di Ass.Ni E Riass.Ni | - | - | 49.208 | 50.737 |
| Ariscom | - | - | 47.331 | 28.216 |
| Darag Italia | - | - | 45.793 | 43.028 |
| Net Insurance * | - | - | 38.142 | 36.655 |
| Chiara Assicurazioni | - | - | 32.785 | 39.919 |
| Credemassicurazioni | - | - | 32.126 | 35.840 |
| Amtrust International Underwriters | - | - | 32.044 | 89.189 |
| Assicuratrice Val Piave | - | - | 30.726 | 31.991 |
| Sogecap | 28.558 | 31.786 | - | - |
| Net Insurance Life | 28.051 | 21.358 | - | - |
| Cf Assicurazioni | - | - | 24.940 | 23.950 |
| Abc Assicura | - | - | 17.958 | 16.791 |
| CnaInsurance | - | - | 14.080 | 16.837 |
| S2c | - | - | 13.851 | 13.173 |
| Apulia Previdenza | 10.759 | 9.508 | - | - |
| Credendo Excess&Surety | - | - | 8.796 | 9.999 |
| Area Life International | 3.429 | 2.840 | - | - |
| R+V Allgemeine | - | - | 3.325 | 2.589 |
| Cigna Life Insurance | 2.748 | 2.551 | - | - |
| Bancassurance Popolari Danni | - | - | 2.098 | 1.826 |
| Ambac Assurance | - | - | 1.860 | 1.809 |
| Slp | - | - | 1.602 | 1.766 |

Note: *Companies listed at the Italian stock exchange

We found that, on average, insurance companies' board is composed of 8 members, with a minimum of 3 and a maximum of 18 members. Although we found a positive correlation between the number of board members and the company's

size, this was not statistically significant. Also, we found no significant relationship between the number of board members and the company business (life or non-life).

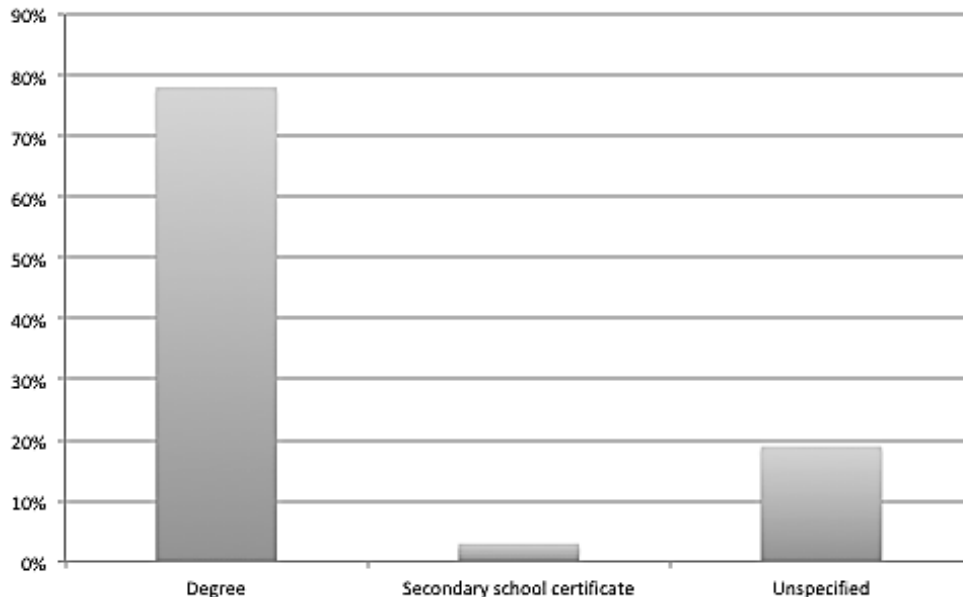
Figure 1. Board size



With reference to the board diversity, our analysis considers age, gender, nationality, and educational qualification. At the end of 2017, the board members had an average age of roughly 57 years (56.76), with some variability according to gender (men 58 vs. women 54).

Regarding the level of education, about 78% of the board members have a degree, while about 3% have a secondary school certificate. For the remaining 19% it was not possible to find the required information (therefore it has been included in an "unspecified" category).

Figure 2. Education level



As for the educational path, 60% of the members have a degree in economics, 19% a law degree and 22% have been included in the macro-category "other degrees" (engineering, medicine, mathematics, etc.).

Women are more likely to have higher educational qualifications (81% for women vs. 77%

for men). The prevalence of degrees in economics is for both men and women (about 60% for both categories). Finally, a fair percentage of the board members is represented by foreigners (on average, 31% of the total components). The percentage of foreign members is similar for men and women (33% and 32%, respectively).

Figure 3. Board size and configuration

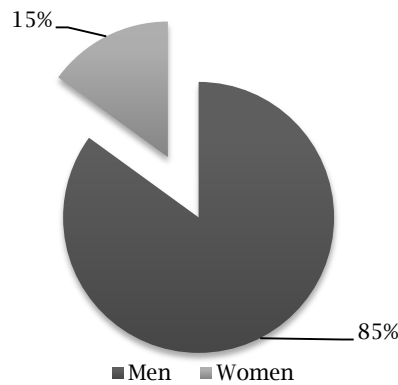


Table 2. Subsample (2nd and 3rd areas of investigation)

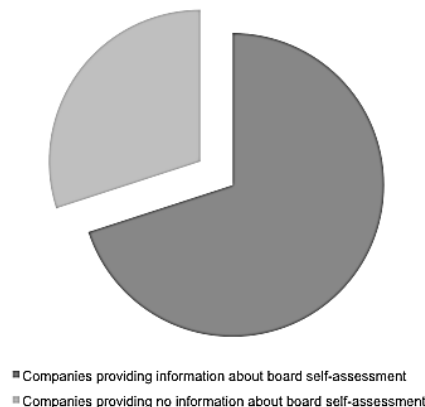
| <i>Subsample</i> |
|----------------------------|
| ALLEANZA ASSICURAZIONI |
| ALLIANZ |
| ASSIMOCO VITA |
| AVIVA |
| AVIVA VITA |
| AXA MPS ASSICURAZIONI VITA |
| BNP PARIBAS CARDIF VITA |
| CNP UNICREDIT VITA |
| CREDIT AGRICOLE VITA |
| CREDITRAS VITA |
| EUROVITA ASSICURAZIONI |
| FIDEURAM VITA |
| GENERALI ITALIA* |
| GENERTELLIFE |
| INTESA SANPAOLO VITA |
| MEDIOLANUM VITA |
| POSTE VITA |
| SOCIETA' CATTOLICA* |
| UNIPOLSAI ASSICURAZIONI |
| ZURICH INVESTMENTS LIFE |

*Note: *Companies listed at the Italian stock exchange*

For the 20 largest insurance companies, a second and third survey area have also been examined (see Table 2 above). The second survey area concerns the board evaluation. More specifically, we checked whether the companies in the sample publish information on the board self-assessment processes and, if so, in which documents and/or specific sections of the websites. Secondly, we investigated whether the self-assessment processes are carried out directly by the companies or outsourced to consulting firms or

other entities. The research also investigated another aspect concerning the object of self-assessment, that is the elements taken into consideration in the evaluation process (size and composition of the board, functionality, efficiency, etc.). Then, the goal of the self-assessment processes has been examined, in order to verify their use beyond mere compliance purposes. Lastly, the procedures to carry out the self-assessment process have been investigated (i.e., questionnaires, analysis of the time length of board meetings, etc.).

Figure 4. Board self assessment processes



Survey results show that 70% of the companies declare to have carried out a board self-assessment process in 2017. In the remaining 30% of the sample, it is not clear whether the self-assessment has been carried and/or we found no information regarding its modalities. The listed companies present in the subsample (Generali & Società Cattolica), declare that they have carried out the self-assessment process of the board. Very few companies provide information about self-assessment methods, the outcomes of the process and their possible use. Almost all the companies adopting a board self-assessment process do it internally (no outsourcing): in these cases, the board conducts the self-assessment on its own; just in one case, the board has been supported by the board of statutory auditors. Almost always the board carries out a self-assessment by means of questionnaires. In other cases, the questionnaires are integrated with interviews and also with the analysis of the time length of board meetings.

The third and last survey area concerns the remuneration policies adopted by the companies in the sample. The remuneration policies of insurance companies in Italy have been initially regulated by a special ISVAP regulation (ISVAP Regulation No. 39/2011). From 2017, the remuneration policies of Italian insurance companies are governed by the IVASS regulation (IVASS Regulation No. 2/2017), which aims to strengthen coherence between remuneration policies and company long-term objectives, by avoiding remuneration policies to provide risk incentives and promoting the shareholders' active role. IVASS rules also require the insurance companies to provide more detailed disclosure about remuneration policies, including quantitative data about the remuneration assigned to board members, basic functions managers, and other risk-takers, and establishes basic criteria for variable remuneration assigned to executive board members in order to achieve a correct balance between fixed and variable components. In detail, we proceeded to verify:

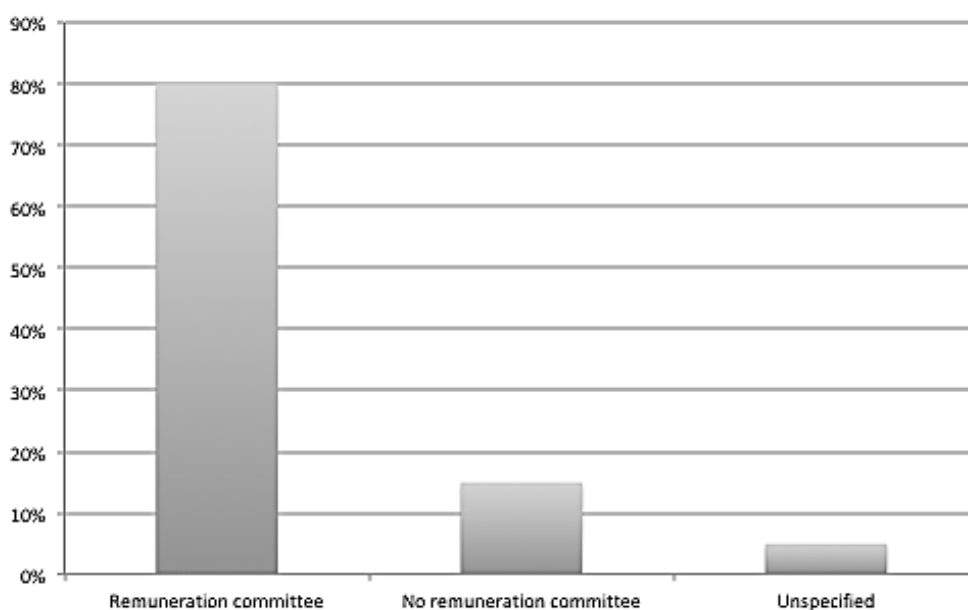
- if a clear indication of all remuneration policies is provided;
- if the risk taker personnel is clearly identified;
- the presence of a remuneration committee, including the number of its members;
- if the fixed component/variable component ratio is indicated;
- as regards the variable component of the remuneration, the presence of maximum amount limits;
- the provision of adjustment mechanisms to prevent the imbalance of short-term remuneration compared to long-term remuneration;
- the performance indicators used.

The analysis has been conducted through the examination of different corporate reports as of 31/12/2017, available on the websites of the insurance companies. Specifically, the Solvency and Financial Stability Reports (SFCR), the financial statements, the corporate governance reports, and the remuneration reports have been examined. The information available on specific sections of the websites dedicated to the boards of directors has also been used.

In almost all cases (75% of the sample) it has not been possible to find the remuneration report on the company website. Anyway, the information regarding the remuneration policies has been found in other documents, mainly in the Solvency and Financial Stability Reports (SFCR). A small part of the sample (20%) shows a lack of information on the remuneration policies.

Regarding the second point, our research document that 50% of the companies provide detailed information on risk takers. Turning to the third point, 80% of the companies adopted a remuneration committee composed, on average, by 3 members, 15% of the sample explicitly declares not to have established a remuneration committee, while 5% of the insurers do not provide any information on the matter.

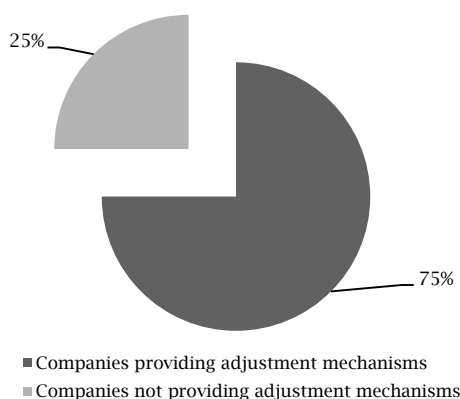
Figure 5. Presence of the remuneration committee



A large part of the population (80%) implemented a variable component of remuneration. Fifty percent of the companies adopting a variable component provides an indication of the relative weight as compared to the fixed component. This weight moves within a range between 15% and 50%.

As regards the variable component of the remuneration, 80% of the companies provide variable remuneration limits measured, in almost all cases, in terms of maximum percentage, which are often differentiated according to a time frame (short term versus long-term incentives).

Figure 6. Board remuneration policies



Most companies (75%) adopted adjustment mechanisms to avoid the imbalance of short-term remuneration compared to long-term remuneration. These mechanisms include, for example, the malus bonus clauses, clawback clauses and the deferral of the variable component.

Finally, almost all companies provide information about the indicators used to calibrate the remuneration variable component; in most cases (80%) are used performance indicators, such as RORAC, ROE, total shareholder return, liquidity cover ratio, etc.

5. CONCLUSIONS

This research has explored the effects of Solvency II on corporate boards of Italian insurance companies. The survey has been conducted on a sample of 102 Italian insurance companies. Of the 102 insurance companies examined, 4 are listed on the Stock Exchange. The analysis refers to information as of 31/12/2017 and is divided into three part.

In the first part, we have analyzed the size and composition of the corporate boards for all the companies in the sample. The analysis considered different aspects of diversity, both demographic (i.e. gender, nationality, and age) and cognitive (education). Contrarily to the expectations, the board size doesn't appear significantly related to company size, neither to company business (life or non-life). Results show a still too low level of gender diversity, slightly higher for listed companies. Better results emerge with reference to the diversity related to the nationality. A fair percentage of the members, indeed, are foreigners. About the competence, we analyzed the educational qualifications of board members. The results are quite comforting considering that the majority of the members have a degree. However, many improvements should be desirable in this area.

In the second part, board self-assessment processes have been analyzed for the 20 largest companies in the sample. Results revealed that a

high percentage of the sample have carried out a board self-assessment process in 2017 (70% of the examined companies). However, the level of disclosure concerning this issue is very low. A very few companies indeed provide information about self-assessment methods, the outcomes of the process and their eventual use. The board self-assessment process is conducted in the majority of the cases internally, without recourse to outsourcing, and is realized by questionnaires. The importance of this aspect has not yet been fully understood by companies. So there's no awareness about the ways by which carrying out this process.

In the third session, board remuneration policies have been treated with reference to the 20 largest companies. Empirical evidence highlight a very high level of disclosure of companies concerning these issues. Detailed public information about remuneration policies is provided by most of the companies. A clear indication of the recipients of the remuneration policies in place is provided too. Also, risk taker personnel is clearly identified. The presence of a remuneration committee, of about 3 members on average, is largely widespread.

A first area that could be further improved concerns the establishment of the criteria for the variable remuneration assigned to executive board members in order to achieve a correct balance between fixed and variable components.

Another area susceptible to improvements is that referred to the adoption of mechanisms aimed to strengthen the coherence between remuneration policies and company long-term objectives. By this, companies should avoid remuneration policies that provide risk incentives and promote the shareholders' active role.

A first consideration concerns a sort of parallel existing between the national adequacy process to Solvency II and the state of art of the examined Italian companies. Our results appear consistent with the Italian regulation context and evolution. In many aspects, the regulatory legislation in force in Italy seems to have anticipated the principles of Solvency II on governance (Dell'Atti & Sylos

Labini, 2017). In this sense, the analysis of Italian adequacy process to the new European rules highlights that the national regulation in the field of internal controls, risk management, compliance and externalization of the activities of insurance companies (ISVAP Regulation No. 20 of 26 March 2008), in many parts was already compliant even before the entry of Solvency II.

The aspects on which Italian companies resulted to be weaker in our analysis – i.e. many aspects of the composition of the board and the process of board self-assessment – coincide with the more innovative elements introduced by Solvency II. On the contrary, the evidence more comforting regarding the remuneration policies corresponds to the less newly part of the regulation. In Italy, the area of the remuneration has been disciplined by ISVAP Regulation No. 39 since 9 June 2011. Apart from minor changes that have taken place over the years, the content of the cited Regulation has remained rather unchanged in substance. So, in this field, Italy seems to be somewhat aligned with the principles stated by Solvency II.

About the listed companies, as expected, the results observed – almost with reference to all the elements analyzed – are better than the results arising from the rest of the sample. A higher level of disclosure and more diversified boards characterize this kind of companies. This could be explained by the fact that these companies adopt the Italian Corporate Governance Code (as approved by the Corporate Governance Committee in March 2006, was amended in March 2010, and was updated in December 2011, July 2014, July 2015 and July 2018). The compliance with the new rules of Solvency II is most likely to be easier for these companies because of the greater familiarity with reporting obligations and other constraints.

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In summary, the area in which the efforts of Italian companies should be greater is to make the boards more diversified. The diversity of skills, experience, and background could enhance the quality of the decisions together with a constructive dialectic between the board and the chief executive officer and between the executive and non-executives.

The current Italian context is characterized by a few large companies and by many small, often family-owned companies. In such realities, it is not an infrequent coincidence between ownership and management. Overcoming this phenomenon requires a fundamental cultural change that is not easy to achieve. In this direction, the principle of proportionality could help Italian companies in the transition phase. For this reason, the Italian regulator should pay special attention to how to apply this principle in our national regulatory framework.

Of course, our research has its limitations. First, for some of the investigated aspects difficulties have emerged in acquiring the required information, sometimes forcing the use of "unspecified" categories in interpreting the results of the survey. Second, our findings could be affected by the heterogeneity of the sample, particularly regarding the mix of listed and unlisted insurance companies. Finally, the study specifically focuses on the Italian insurance industry and, consequently, the results cannot be immediately extended to different national contexts.

Further research could explore the effects of Solvency II on corporate boards of insurance companies across different countries, as well as the extent to which the level of disclosure and the board diversity improve both the value and the performance of insurance companies.

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