

CORPORATE GOVERNANCE, SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE OF EUROPEAN INSURERS

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Abstract

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In this paper, we focus on corporate governance and corporate social responsibility in European insurance industry and test its effects on financial performance. Using a sample of European insurance companies releasing corporate governance and social responsibility information available in Bloomberg Environmental, Social, and Governance disclosure, we provide evidence of better financial performance of insurers with unbiased and objective boards, increased number of board members (indicating that investors trust independent directors as protectors of shareholder value), lower employee turnover and higher community spending. Compliance with UN Global Compact signatory also contribute to better market performance. As a result, we show that insurance companies can be socially responsible and financially successful at the same time.

Keywords: insurance, corporate governance, corporate social responsibility

INTRODUCTION

Excessive risk-taking by financial institutions could be controlled via corporate governance mechanisms, as they are meant to deal with principal-agent issues, such as misbehavior of management that threatens welfare of shareholders and other stakeholders (Gup, 2007). Importance of corporate governance increases in cases of agency problem and high transaction costs to create comprehensive contracts as a solution (Hart, 1995). Some of the documented examples of weak corporate governance procedures include: activity, rather than enterprise-based risk management, uninformed boards and senior management about risk exposures, failure of boards to establish suitable metrics to monitor implementation of approved strategy and misalignment of remuneration systems with the long-term interests of the company (OECD Steering Group on Corporate Governance, 2009).

Apart from the fact that good corporate governance is believed to be helpful in strengthening firms' ability to resist unfavorable externalities (Greuning and Brajovic-Bratanovic, 2009), in literature it is

also associated with better financial performance (e.g. Peni and Vähämaa, 2012; Caprio *et al.*, 2007; Cornett *et al.*, 2009). However, empirical evidence is not entirely straightforward with respect to every aspect of corporate governance practices.

Corporate governance is closely related to the concept of corporate social responsibility (Louche & Van den Berghe, 2005). Despite longevity of discussion in management literature regarding corporate social responsibility (CSR) and related concepts, such as corporate social performance (CSP), corporate social responsiveness or corporate citizenship, the domain still remains "controversial, fluid, ambiguous and difficult to research" (Wood, 2010, p. 50). In light of recent financial crisis, engagement in socially responsible behavior can be viewed as compensation from financial institutions for receiving public resources instead of raising capital from shareholders (Shen, Wu, Chen, & Fang, 2016).

Similarly to corporate governance studies, scholars have been interested in investigating association between corporate social performance

and various aspects of performance (e.g. Soana, 2011; Jo, Kim and Park, 2015; Simpson and Kohers, 2002). Although, due to diverse underlying motives of engagement in CSR, usage of different methods, measures, model specifications, industries or time periods, evidence regarding the question under consideration has been mixed and contradictory.

The aim of this paper is to investigate the impact of corporate governance and social responsibility on financial performance of listed European insurance companies. For this purpose, we conduct econometric analysis of panel data based on a sample of 40 biggest insurance companies across Europe. In quantifying financial performance, we follow existing literature and employ Tobin's Q and Market Capitalization to Book Value as proxies of market performance, while Return on Common Equity (ROE) and Return on Assets (ROA) are used to measure companies' accounting-based profitability.

Our study extends earlier research on the relationship between corporate governance and corporate social performance and financial performance in the insurance sector to recent time period using Environmental, Social, and Governance (ESG) factors available to investors on Bloomberg, and, unlike previous investigations, we study CSR and corporate governance indicators

simultaneously. Bloomberg ESG factors provide a common framework for the analysis of corporate governance and social responsibility, thus, unifying their measurement.

Related Literature

As formulated by Venuti and Alfiero (2016), there are several industry specific traits that influence application of corporate governance mechanisms in insurance companies:

- strict regulation of the sector regarding solvency as well as pricing, provided by different regulators leading to relative heterogeneity in legislation;
- inversion of production cycle as long as raising revenue in the form of premiums precedes the time when corresponding costs are incurred;
- another peculiarity regarding revenues/costs generation is related to certainty of the former in terms of amount and time and uncertainty of the latter until policy expires;
- high level of "social relevance" and importance for the community, policyholders and financial markets due to their role as institutional investors.

All the mentioned characteristics underscore the importance of risk management in insurance companies and therefore need to apply correct corporate governance practices in order to address

I: Existing Empirical Evidence on Corporate Governance in Insurance

Study	Sample	Time Span	Independent Variable	Dependent Variable	Result
Hardwick et al. (2011)	UK life	1994–2004	Number of directors	Profit efficiency	Not significant
He and Sommer (2011)	US P&L	1996–2004	Organizational structure	CEO turnover	Likelihood of CEO turnover based on poor performance is significantly higher in stock firms than in mutual firms
He et al. (2011)	US P&L	1996–2004	CEO turnover	Cost and revenue efficiency	Positive
Ho et al. (2013)	US P&C	1996–2007	Organizational structure	Risk-taking	Mutual insurers tend to have lower total risk.
			CEO duality	Leverage risk	Positive
			Insiders on boards	Total risk	Positive
			Board size	Leverage/ total risks	Positive
Venuti and Alfiero (2016)	EU27	2009–2013	Board size	Investment risk	Negative
			Organizational structure	Risk-taking	Publicly-held insurance companies are associated with lower risk
Cheng et al. (2011)	Life/ health	1992–2007	Institutional ownership	Risk-taking	Negative
Downs and Sommer (1999)	P&L	1989–1995	Insider ownership	Risk-taking	Positive
Eling and Marek (2013)	UK, Germany	1997–2010	Compensation	Risk-taking	Negative
			Monitoring	Risk-taking	Negative
			Ownership structure	Risk-taking	Negative

existent and potential risks. Furthermore, purposes of good corporate governance practices are not limited to protection against different types of risks and include supporting company success by making it more attractive to investors and highly qualified professionals (Njegomir and Tepavac, 2014).

Corporate governance studies in insurance companies are summarized in Tab. I. Compared to extensive empirical evidence for banks, the investigation of corporate governance and CSR is relatively scarce for insurers. Most of the studies concentrate on risk-taking behavior in insurance industry, rather than profitability or market performance. Another peculiarity of studies in this regard is variation in organizational structures of insurance companies, which allows scholars to explore its implications in reality. Below we discuss each of these works separately.

Based on research of life insurers in the UK, Hardwick *et al.* (2011) suggests that corporate governance is a complex system and possible interactions among different aspects should be taken into account while forming opinion about their effectiveness. One of the underlying results leading to such conclusion is that CEO duality *per se* does not show any significant influence on profit efficiency, however, in case of separation of the CEO and board chairman positions and absence of audit committee, impact of board independence measured by representation of non-executive directors on the board becomes positive.

Two other studies that examine factors other than risk-taking are He and Sommer (2011) and He *et al.* (2011). Both researches are based on the same sample, namely 423 mutual and 1516 stock insurance companies in the property-liability insurance industry within the period of 1996–2004. While the former investigates how organizational structure affects CEO turnover, the latter concentrates on post turnover developments, in particular the issue under consideration is whether companies' financial performance improves. The results suggest that likelihood of CEO turnover based on poor performance is significantly higher in stock firms than in mutual firms while CEO turnover for its part, positively affects insurers' post-turnover performance as measured by cost efficiency and revenue efficiency scores.

The interest in case of the other studies lies in how various mechanisms of corporate governance influence specific types of risks or risk-taking behavior in general. Ho *et al.* (2013) find that compared to stock insurers, mutual insurers tend to have lower total risk, including underwriting and investment risks. As for board composition, CEO duality is found to be associated with increased level of leverage risk; larger representation of insiders on boards lead to higher total risk, while large board size is related to both higher leverage and total risks (although lower investment risk), naturally pointing to importance of addressing different types of risks separately.

Contrary to previous findings, Venuti and Alfiero (2016) show that in European insurance industry the publicly-held insurance companies are associated with lower risk in comparison with privately held ones. In addition, they report that larger board size as well as higher ownership concentration is significantly correlated with lower risk, since the higher the number of directors on the board the harder for them to unanimously agree on engaging in risky projects.

Other aspect of corporate governance that deserves attention is institutional ownership. Study held by Cheng *et al.* (2011) explores its effects on life-health insurers' risk-taking behavior. According to their results, stable institutional ownership leads to decreased level of overall risk, although when investigated in details, authors find that institutional ownership stability increases investment risk, while decreasing underwriting risk and leverage. Downs and Sommer (1999) employ insider ownership as a corporate governance mechanism and document positive association between property-liability companies' risk-taking behavior and managerial ownership. Mentioned linkage is especially stronger in less capitalized firms, however, it diminishes as the level of ownership increases.

Eling and Marek (2013) examine insurance industry in the UK and Germany and address compensation, monitoring, and ownership structure as determining corporate governance factors of risk-taking behavior. The main result of the research is to confirm the existence of significant influence of all mentioned elements on risk taking. All three are found to be negatively correlated with firm risk, meaning that companies with more independent board members, more frequent board meetings, higher number of blockholders and higher levels of compensation engage in less risk taking.

Scholtens (2009, 2011) provide a cross-sectional analysis framework in order to study 32 banks and 153 insurance companies across Europe, North America and Asia Pacific regions with respect to CSR. European and Japanese insurance companies in these studies outperform North American counterparts in most of the CSR aspects researched. However, different CSR policies are not implemented into business activities at a same degree, namely, when it comes to donations/sponsoring or voluntary work, insurers perform significantly better than in environmental aspects (Scholtens, 2011). Engagement in CSR activities is positively correlated with size of insurance companies, which might be explained by increased attention from stakeholders related to company growth (Waddock and Graves, 1997). Otherwise, on an industry basis banks show notably superior performance in every single CSR aspect observed both in Europe and North America.

Clearly, there is a considerable room for further research with respect to corporate social responsibility. Diversity of the empirical studies presented above demonstrates complexity of

the concept and motivates further research in this regard in order to supplement gaps in existing literature by identifying and measuring impact of various features of corporate governance and social responsibility on financial performance in European insurance companies simultaneously.

MATERIALS AND METHODS

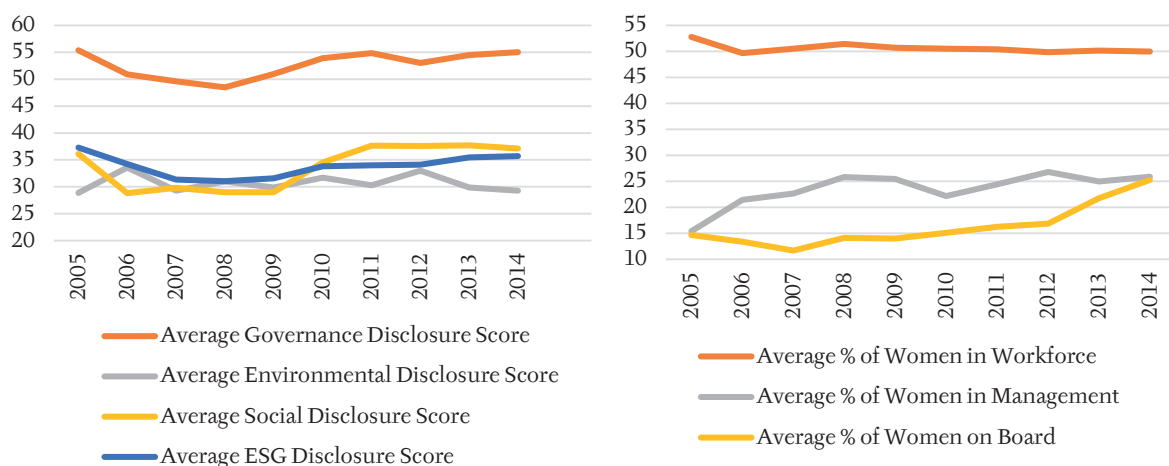
The importance of corporate governance and social responsibility in insurance companies is examined by its influence on different measures of financial performance, such as Tobin's Q, Return on Common Equity, Return on Assets and Market to Book ratio. We focus on European publicly traded insurance companies within the period of 2000–2015. The data are collected from Bloomberg. Due to poor extent of firms' Environmental, Social and Governance disclosure, our primary sample has been reduced to 40 insurance companies. As mentioned earlier, only biggest companies tend to disclose such information. Since there is little theoretical guidance about precise measurement of corporate governance and social responsibility, as well as about exact design of specifications, we select groups of variables based on the emphases placed in literature and also taking into account the accessibility of corresponding data in Bloomberg.

Table 2 summarizes the chosen variables in order to proxy relevant aspects of corporate governance and social responsibility. All the variables are retrieved from Bloomberg and further explanations are based on the data and definitions provided in the mentioned system. Tab. III provides descriptive statistics.

First, we start with ESG disclosure score, which reflects overall extent of ESG disclosure. It is based on large pool of data points and is not directly associated with the weighted sum of variables presented here. Scoring takes into account the importance of data points and their relevance to

particular industry, thus each company is evaluated in the context of the overall industry sector. Fig. 1 depicts the development of average industry scores over time.

Next, we try to cover corporate governance aspects by including six frequently used proxies, particularly: board size, percentage of women on the board of directors, percentage of independent directors and presence of CEO duality all measure general structure and board composition. In addition, they serve as a proxy for relative independence, objectivity and monitoring power of the boards; number of board meetings for the year quantifies communication between board members and finally, dummy variable for unitary and two-tier board systems depicts two major structures of governance. Women representation on boards in minimum cases is completely non-existent, although at its maximum, it can reach up to almost 60%. Description of women participation at different levels, such as boards, management or workforce in general is presented in Fig. 1. Gender balance is always kept within workforce, where share of women ranges close to 50%. The same cannot be claimed about high level positions. Slight upward trend can be captured in women participation on boards. As for management positions insurance companies keep increasing number of female managers compared to other financial institutions. Proportion of outside directors in boards of insurers varies significantly across Europe between 22.22% in Poland and 92.49% in Switzerland (Fig. 2). Share of independent directors can reach to the maximum level of 100%. Also, when we look at the CEO duality as another proxy for board independence, median values of 0 indicate acknowledged high importance of the issue in European insurance companies. Other things being equal, we expect percentage of independent directors and number of board meeting per year to be positively associated with financial performance due to enhanced monitoring power, as opposed to CEO duality.



1: Disclosure Scores (left) and Women Participation at Different Levels (right)

II: *Definitions of Variables*

Name	Definition
ESG Disclosure Score	Proprietary Bloomberg score based on the extent of a company's Environmental, Social, and Governance (ESG) disclosure. The score ranges from 0.1 for companies that disclose a minimum amount of ESG data to 100 for those that disclose every data point collected by Bloomberg
% Women on Board	Percentage of Women on the Board of Directors (or Supervisory Board)
% Independent Directors	Independent directors as a percentage of total board membership
Unitary or Two Tier Board System	Dummy variable indicating whether the company's board has a Unitary or Two Tier system. Marked 1 in case of Unitary system and to 0 when board system has separate boards for Supervisory/Commissioner board and Management board
Number of Board Meetings for the Year	Total number of corporate board meetings held in the past year
Size of the Board	Number of full time Directors on the company's board. Deputy members of the Board are not counted
CEO Duality	Dummy variable that equals to 1 if the company's Chief Executive Officer is also Chairman of the Board and to 0 otherwise
Energy Intensity per Employee	Energy intensity calculated as megawatt hours of energy consumed per employee
Employee Turnover %	Number of employees that left the company within the past year expressed as a percentage of the average total number of employees
Community Spending	Amount of money spent by the company on community-building activities, in millions
Employee CSR Training	Dummy variable that equals to 1, if the company conducts training courses for employees on Corporate Social Responsibility (CSR) and to 0 otherwise
Human Rights Policy	Dummy variable that equals to 1 if the company has implemented any initiatives to ensure the protection of the rights of all people it works with and to 0 otherwise
Actual Personnel Expenses per Employee	Personnel expenses divided by the number of employees.
UN Global Compact Signatory	Dummy variable that equals to 1, if the company is a signatory of the United Nations Global Compact (UNGC) and to 0 otherwise
Tobin's Q Ratio	Ratio of the market value of a firm to the replacement cost of the firm's assets. The Q ratio is useful for the valuation of a company. The ratio is computed as follows: (Market Cap + Total Liabilities + Preferred Equity + Minority Interest) / Total Assets
Market Capitalization to Book Value	Measure of the relative value of a company compared to its market value. Calculated as: Market Capitalization / Book Value
Return on Common Equity (ROE)	Measure of a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested, in percentage. Calculated as: (Trailing 12 Months Net Income Available for Common Shareholders / Average Total Common Equity) * 100
Return on Assets (ROA)	Calculated as: ((Trailing 12M Net Income + Trailing 12M Policyholders' Surplus) / Average Total Assets) * 100
Total Assets	Total assets is the sum of Cash & Near Cash Items, Net Receivables, Total Investments, Net Fixed Assets, Deferred Policy Acquisition Costs, and Other Assets
Volatility	A measure of the risk of price moves for a security calculated from the standard deviation of day to daily logarithmic historical price changes. The 360-day price volatility equals the annualized standard deviation of the relative price change for the 360 most recent trading day closing price, expressed as a percentage
Type of Insurance	Dummy variable that equals to 1 for Life insurance, to 0 in case of P&C Insurance and to -1 for Reinsurance

What concerns the measurement of CSR, literature in this regard is even more ambiguous, while data disclosed by the companies is even scarcer. One of the reasons for poor disclosure can be financial companies' relatively low exposure to environmental risks (Louche and Van den Berghe, 2005). Due to these constraints we consider seven possible proxies that are meant to assess different

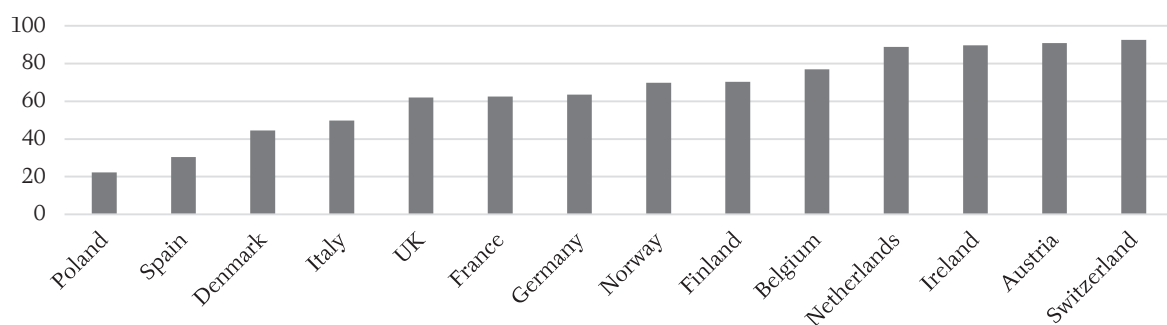
aspects of socially responsible behavior. We use energy intensity per employee, which measures consumed energy standardized by number of employees in order to evaluate firms' environmental responsibility. The rest of the variables within the group mostly concentrate on social aspect. In particular, percentage of employee turnover attempts to quantify company's attractiveness

III: Descriptive Statistics

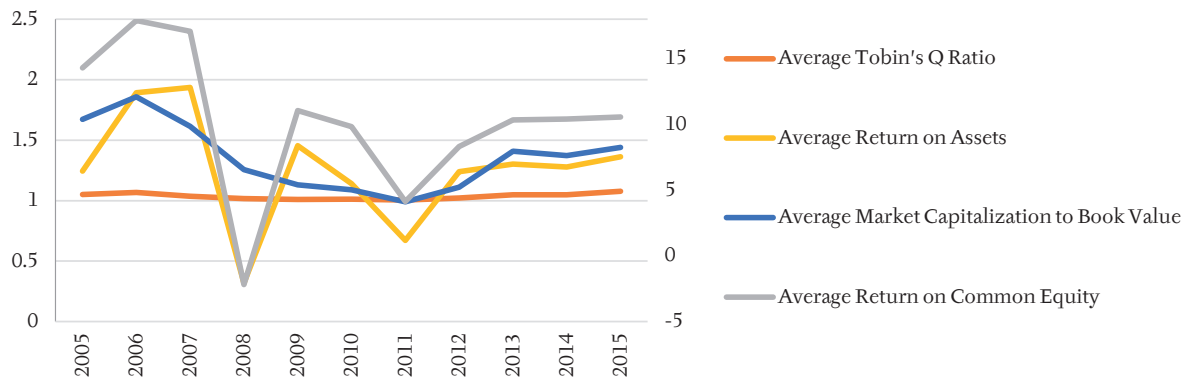
Variable	Mean	Median	Min	Max	Std. Dev.	Obs.
ESG Disclosure Score	33.63	33.55	4.82	64.91	15.42	290
% Women on Board	17.15	16.67	0.00	58.33	11.97	286
% Independent Directors	68.48	67.95	19.05	100	21.68	246
Unitary or Two Tier Board System	0.67	1.00	0.00	1.00	0.47	188
Number of Board Meetings per Year	9.53	9.00	3.00	33.00	4.33	269
Size of the Board	12.35	11.00	7.00	33.00	4.24	293
CEO Duality	0.10	0.00	0.00	1.00	0.30	292
Energy Intensity per Employee	5.80	5.32	1.13	12.45	2.47	152
Employee Turnover %	10.69	10.33	1.50	27.00	4.79	112
Community Spending	6.21	4.70	0.00	38.14	6.45	117
Employee CSR Training	0.06	0.00	0.00	1.00	0.25	281
Human Rights Policy	0.56	1.00	0.00	1.00	0.50	281
UN Global Compact Signatory	0.42	0.00	0.00	1.00	0.49	281
Tobin's Q Ratio	1.04	1.01	0.71	1.57	0.09	509
Market Capitalization to Book Value	1.44	1.24	0.13	5.83	0.83	505
Return on Common Equity (ROE)	8.93	10.25	-140.67	55.38	13.31	565
Return on Assets (ROA)	1.06	0.67	-5.81	10.37	1.79	562
Total Assets	154994	74666	871	1061150	189912	578
Volatility	33.89	28.14	9.23	167.76	18.98	531
Type of Insurance (dummy)	0.39	1.00	-1.00	1.00	0.70	598

as an employer. High employee turnover may indicate unsatisfying working conditions, including compensation, health and safety provisions. Greening and Turban (2000) conducted an experiment and found that prospective job applicants prefer to be considered for job offers from socially responsible firms and are more likely to pursue jobs in companies with better social performance reputation. If we assume that the reputation at least partly reflects the true facts, attractive companies should also be characterized with lower employee turnover. Naturally, due to recruitment of high quality workforce and reduced costs as a result of their retention, we expect lower levels of employee turnover to be linked to increased financial performance. Community spending and personnel expenses per employee measure employee-related costs such as wages, benefits, trainings, team-building

and other activities. Dummy variables show if companies take care of their employees' CSR education by providing relevant trainings and if they have implemented any initiatives in order to ensure protection of human rights. Median value for employee CSR training is 0, indicating their low initiative and involvement in promotion CSR activities among employees. However, median value for human rights policy equals to 1 and underscores companies' engagement in ensuring protection of employees' and customers' rights. Finally, we include UN Global Compact Signatory in order to judge companies' social responsibility by their adherence to the world's largest voluntary corporate sustainability initiative. The UN's corporate citizenship initiative was launched in June 2000 with the aim to support creation of sustainable and inclusive global economy (Kell, 2003).



2: Comparison of Average Board Independence across Europe



3: Financial Performance Ratios

Note: Magnitude of Average Return on Common Equity is defined on the secondary axis.

Financial performance can be observed by applying large set of ratios developed to measure particular aspect of interest. However, we follow existing empirical researches and use four most prominent indicators. To evaluate market performance of insurance companies, we apply primarily Tobin's Q. The ratio compares market value of the firm to the replacement cost of the firm's assets and is based on the hypothesis that in the long run these two amounts should be roughly equal. Calculations of Tobin's Q and other ratios are disclosed in Tab. II. As a robustness check of the results obtained on Tobin's Q, we use Market Capitalization to Book Value ratio employing same set of explanatory variables, controls and methods.

Furthermore, we use two measures of profitability based on accounting data. Return on Common Equity (ROE) reveals how much profit a company generates utilizing the money that shareholders have invested, whereas the Return on Assets (ROA) shows company's relative profitability to its total assets and illustrates management's efficiency in generating earnings by using company's assets.

Following Adams and Mehran (2008) we employ several control variables: natural logarithm of the book value of firm's total assets as a measure of the company's size; financial leverage, determined as the ratio of average assets to average equity to proxy bank's capital structure; volatility of security prices as a measure of risk and uncertainty and finally, lagged value of ROA in the specifications, involving Tobin's Q or Market to Book ratio as dependent variable to check robustness of the specifications. We also include dummy variable distinguishing results among the following types of insurance: life insurance, property and casualty insurance and reinsurance.

We estimate models based on Fixed Effects (FE) estimation procedure, apart from the cases, when relevant test statistics indicate that either Pooled OLS or Random Effects (RE) specifications are superior. Overall, we start estimation with panel data by testing existence of common intercepts. If the intercepts are equal, then data are pooled, otherwise we need to evaluate two individual effects

models, FE and RE. Unbiasedness of Random Effects estimator is tested by applying Hausman test. If the implied null hypothesis is not rejected and both FE and RE give roughly same results, then RE should be preferred since it is the most efficient estimator. However, rejection of the null suggests superiority of FE estimator.

We adopt general-to-specific modelling approach, according to which estimation starts with general unrestricted model and is gradually reduced by testing different impossible restrictions. The underlying logic implies that as long as parsimonious models convey all of the information about reality described by general complex models, but in a simpler manner, they should be favored (Verbeek, 2008).

In this context, the general unrestricted model can be formulated as follows:

$$FP_{it} = \beta_0 + \beta_1 \cdot D_{it} + \sum_{j=1}^6 \beta_j \cdot CG_{jit} + \sum_{k=1}^7 \beta_k \cdot CSR_{kit} + \sum_{l=1}^4 \beta_l \cdot C_{lit} + \varepsilon_{it} \quad (1)$$

where FP_{it} , D_{it} , CSR_{it} , C_{it} and stand for categories of variables namely Financial Performance, Disclosure, Corporate Governance, Corporate Social Responsibility and Controls respectively.

RESULTS

Throughout analysis we employ three methods of estimation, Pooled OLS, FE and RE. P-values providing support for choice of the models are presented in the last row of every table. Whenever we are forced to use only Pooled OLS due to small number of observations in comparison with number of variables included, p-values are not applicable (N/A). In case of using FE or Pooled OLS, P-values are presented according to robust test for differing group intercepts with null hypothesis that the groups have a common intercept, thus low value counts against adequacy of OLS and provides evidence in favor of FE, while high values

IV: Preliminary Regressions of Tobin's Q and Market Capitalization to Book Value on Corporate Governance and Social Responsibility Indicators Together and Separately

	Dependent variable: Tobin's Q			Dependent variable: M/B		
	I	II	III	I	II	III
	Pooled OLS	Within	Pooled OLS	Pooled OLS	Within	Pooled OLS
Constant	1.094*** [0.0085]	0.7007* [0.0764]	1.290*** [<0.0001]	11.02 [0.1358]	-2.133 [0.6871]	9.241*** [<0.0001]
ESG Disclosure Score	0.000477 [0.3369]	0.001558 [0.1572]	-0.0001609 [0.6557]	-0.07955*** [0.0032]	-0.0001582 [0.9795]	0.008335 [0.342]
% Women on Board	-0.0002669 [0.6526]	0.001455*** [0.0099]		-0.008457 [0.4235]	0.009877*** [0.0028]	
% Independent Directors	-0.0005825* [0.0676]	0.0009773 [0.3341]		-0.02752*** [0.0086]	0.004823 [0.1407]	
Unitary or Two Tier Board System	0.01273 [0.3019]			-0.7578* [0.0589]		
Number of Board Meetings for the Year	0.0003518 [0.7491]	-0.0001998 [0.8519]		0.01993 [0.3609]	-0.01691 [0.161]	
Size of the Board	-0.003541** [0.0238]	0.002678 [0.5081]		-0.07008 [0.1009]	0.0309 [0.3867]	
CEO Duality	0.009427 [0.6484]	0.04790*** [<0.0001]		-0.7445 [0.2377]		
Energy Intensity per Employee	0.00009228 [0.9722]		-0.0005987 [0.5973]	0.01628 [0.765]		-0.03211 [0.3898]
Employee Turnover %	0.0008697 [0.2072]		-0.0002988 [0.4551]	0.01756 [0.2351]		-0.01539 [0.2657]
Community Spending	-0.0002444 [0.5819]		0.001168*** [0.0034]	-0.02146* [0.093]		0.01637 [0.2532]
Employee CSR Training	-0.0135 [0.4022]		-0.008102 [0.1932]	-1.013** [0.0283]		-0.4394** [0.0396]
UN Global Compact Signatory	0.01189 [0.1047]		0.01890*** [<0.0001]	1.183*** [0.001]		0.7869*** [0.0002]
Volatility	-0.001082 [0.1521]	-0.0002335 [0.187]	-0.0002003 [0.144]	-0.004994 [0.6704]	-0.01171*** [0.0012]	-0.003463 [0.4165]
Type of Insurance	-0.02075*** [0.0087]		0.01173** [0.021]	-0.3274* [0.0761]		0.4650*** [0.0037]
Ln (Total Assets)	-0.0007654 [0.968]	0.01156 [0.693]	-0.02197*** [0.0007]	-0.2161 [0.636]	0.2492 [0.5607]	-0.6618*** [0.0001]
Human Rights Policy			-0.01437*** [0.0026]			-0.4058*** [0.0058]
n	20	142	41	20	126	41
Adj. R2	0.5585	0.2454	0.3637	0.7566	0.3115	0.3335
P-value	N/A	4.13256E-14	0.355552	N/A	1.48045E-07	0.0879968

Notes: P-values in parentheses. *, **, *** indicate significance at the 10, 5, 1 percent level respectively. P-values in the last row are related to robust test for differing group intercepts. Low values count against the null hypothesis that the groups have a common intercept, in favor of the fixed effects alternative; N/ A whenever it's impossible to estimate either FE or RE. Model I in each section includes all the variables defined in dataset. Models II and III use only Corporate Governance and Social Responsibility factors together with control variables.

indicate that data are poolable. As for RE, we conduct comparison between FE and RE estimators using Hausman test, with null hypothesis that GLS estimates are consistent. Therefore, low p-values in this case count against the usage of RE and provide

evidence in favor of FE, whereas high p-values prove RE to be better choice.

First, we start by investigating impacts of corporate governance and social responsibility on market-based measures of financial performance,

particularly Tobin's Q and ratio of Market Capitalization to Book Value. Tab. IV discloses results of the preliminary specifications for each dependent variable. Columns I in each section use Pooled OLS as an estimation method due to impossibility to utilize either FE or RE. Columns II and III employ FE and Pooled OLS respectively in accordance with the indications of p-values presented in the last row. Women representation on the boards significantly positively affects both measures of market performance, although only when studied in context of corporate governance. Percentage of independent directors and board size show negative impact only when all the rest of the variables are included in specifications. UN Global Compact signatory in most of the specifications improves market performance. As for type of insurance, results are extremely confusing and contradictory, since whenever equation employs all the available variables, reinsurers seem to perform significantly better than life or P&C insurance companies; however, when it comes to assessing impact of CSR attributes, relation changes into completely opposite direction and life insurers outperform the rest. We refrain from commenting preliminary results and move to mixed specifications to check robustness of the results.

Tab. V showcases six different models attempting to capture linkages between corporate governance and CSR and financial performance as measured by Tobin's Q. Development of model designs have been based on data availability and intention to include different combinations of relevant variables in order to check robustness of the obtained results. Noticeably, initial intuition regarding female directors on the boards has only been strengthened in mixed specifications, underscoring importance of achieving gender balance on the boards. Larger board size also contributes to improved market performance indicating that in insurance industry the problem of communication in large boards might not be that severe to affect their monitoring power. Our outcome indirectly conforms the results of Venuti and Alfiero (2016) which find larger board size to be associated with the lower risks in the European publicly-held insurance companies. Furthermore, percentage of independent directors and community spending are positively associated with market performance in every specification, while showing significance only once. Since higher representation of insiders on the boards is found to be associated with increased total risk (Ho *et al.*, 2013), our results additionally underscore the importance of independent and objective boards when it comes to market performance proxied by Tobin's Q and also provide support for the idea that socially responsible activity can be beneficial for companies. Finally, financial performance decreases together with size and complexity of companies measured with the natural logarithm of total assets.

Results presented in Tab. VI further examine the reliability of specifications developed above

by employing another market based indicator of financial performance, namely ratio of Market Capitalization to Book Value. Previously discovered significantly positive impact of board independence on market performance in insurance companies is even more obvious when studying Market to Book ratio as a dependent variable. Our evidence relatively directly conforms to findings of Eling and Marek (2013) who report the share of independent directors to be negatively associated with the risk taking behavior of insurance companies in the UK and Germany. Same pattern applies to board size. Particularly, variable's influence becomes significant in every model where the dependent variable is the Market to Book ratio and indicates that larger boards enhance performance in European insurance companies. This can be attributed to the beliefs of investors that more directors can supervise firms in a better way.

Employee turnover adversely affects financial performance this time proxied by Market to Book ratio obtaining significance at 10% level. Meanwhile community spending stays as significantly positively associated with market performance as before, proving further that regardless the measure, socially responsible activities are positively assessed by investors. As for women representation on the boards, impact remains positive, however, is not as strong in terms of level of significance as displayed in case of Tobin's Q. Finally, UN Global Compact Signatory obtains consistency across different specifications and while always keeping positive sign, shows significance in half of them, meaning that investors associate companies' signatory to the principles of socially responsible behavior and are ready to pay premium for it.

Next we investigate relations between accounting-based indicators, such as ROE and ROA and corporate governance and social responsibility and follow the same sequence of research. Tab. VII compares preliminary estimations for each dependent variable. Based on the tests, when every defined variable is included or we are interested just in CSR aspects, the most suitable method to use is OLS, since the data are poolable. However, when it comes to addressing only corporate governance indicators, in case of ROE as a dependent variable, F-test showed that groups have different intercepts, making FE the most appropriate method to apply; while in case of ROA, Hausman test indicates that RE model is more efficient. Regarding the estimates of the independent variables, remarkably, none of them except controls shows consistently significant impact on both measures of financial performance, naturally forcing us to evaluate relations separately from each other. Furthermore, when employing ROA as dependent variable, conclusive results are absent even between the models.

Frequent board meetings improve companies' financial performance, thus having positive influence on ROE that becomes significant when studied in context of corporate governance. While

V: Fixed Effects Regressions of Tobin's Q on Corporate Governance and Social Responsibility Indicators

	Dependent variable: Tobin's Q					
	I	II	III	IV	V	VI
Constant	2.285*** [<0.0001]	1.874*** [<0.0001]	1.555*** [0.0002]	0.8688** [0.0496]	1.817*** [<0.0001]	1.301*** [<0.0001]
ESG Disclosure Score	-0.0004549 [0.4814]	-0.0002225 [0.6546]			-0.0003043 [0.4869]	-0.0005768 [0.113]
% Independent Directors	0.0004615*** [0.008]	0.000359 [0.2876]		0.000423 [0.2891]	0.0003005 [0.3946]	-0.0002102 [0.197]
Size of the Board	0.00365** [0.0024]	0.002522 [0.3343]		0.003774** [0.0112]	0.001828 [0.4381]	
Employee Turnover %	-0.0007761 [0.2859]		-0.001585 [0.1508]	0.0001654 [0.8974]		
Community Spending	0.0001389 [0.7988]		0.0008017 [0.2917]			0.001224** [0.0217]
UN Global Compact Signatory	0.03135*** [<0.0001]			0.02389 [0.4009]	-0.008601 [0.6065]	-0.01464 [0.3519]
Volatility	-0.000502*** [0.0018]	-0.0002281* [0.0836]	-0.000259*** [0.0056]	-0.0002225** [0.021]	-0.0002381** [0.0203]	-0.00022*** [0.0002]
Ln (Total Assets)	-0.1100*** [0.0007]	-0.07868*** [0.0004]	-0.04508 [0.1595]	0.007054 [0.8406]	-0.07281*** [0.003]	-0.02104 [0.2568]
% Women on Board		0.001647** [0.0222]	0.0007356* [0.0613]		0.001391*** [0.0081]	0.000413 [0.1213]
No of Board Meetings per Year			0.0002846 [0.5496]		0.0006502 [0.5174]	
CEO Duality					-0.0145 [0.3902]	
n	47	225	56	90	207	97
Adj. R2	0.5171	0.2274	0.28	0.0778	0.2462	0.269
P-value	0.0373309	2.66847E-34	0.00283648	1.69536E-06	1.56675E-15	1.58148E-10

Notes: P-values in parentheses. *, **, *** indicate significance at the 10, 5, 1 percent level respectively. P-values in the last row are related to robust test for differing group intercepts. Low values count against the null hypothesis that the groups have a common intercept, in favor of the fixed effects alternative

community spending decreases effectiveness of equity, UN Global Compact Signatory drives the ratio to the opposite direction, although both of them just as in case of number of board meetings show significance only when studied in relevant context, namely CSR. And finally, according to results, accounting profitability proxied by ROE is the highest in case of reinsurance companies and lowest in life insurers.

Subsequently Tabs. VIII and IX provide empirical results for our sample insurance companies with respect to ROE and ROA separately. As expected according to the preliminary specifications, number of board meetings per year significantly positively affects return on equity in almost all of the designed models. Other things being equal, more frequent board meetings indicate better communication between members and more active involvement in the company's matters, furthermore, in the UK and Germany, number of board meetings in insurance companies is found to be negatively associated with

risk taking (Eling and Marek, 2013). Altogether, these and other underlying determinants are expected to ultimately improve financial performance as measured by ROE. Significantly negative impact of community spending on profitability might be related to additional expenses incurred by the company.

Importance of other explanatory variables is not crucial if we judge based on their estimates' statistical significance. However, presence of independent directors on the boards shows almost always positive influence on ROE, while employee turnover, on the opposite, decreases profitability in every specification since high turnover might indicate companies' failure to retain qualified staff and constant need to spend time and funds on recruitment. As for control variables, interestingly, firm size and complexity is negatively associated not only with market performance of European insurance companies, but with accounting profitability as well.

VI: Fixed Effects Regressions of Market Capitalization to Book Value on Corporate Governance and Social Responsibility Indicators

	Dependent variable: Market Capitalization to Book Value					
	I	II	III	IV	V	VI
Constant	17.12*** [0.0056]	0.4659 [0.8249]	8.990* [0.0774]	1.321 [0.7882]	0.4451 [0.8196]	6.654 [0.1069]
ESG Disclosure Score	-0.01461 [0.1429]	-0.008563** [0.0265]			-0.01133*** [0.0061]	-0.01634* [0.0684]
% Independent Directors	0.01399*** [0.0012]	0.004393 [0.1921]		0.01244*** [0.0023]	0.003989 [0.2943]	-0.0006736 [0.869]
Size of the Board	0.1355*** [<0.0001]	0.07767*** [0.0076]		0.1233*** [<0.0001]	0.07151** [0.0153]	
Employee Turnover %	-0.01545 [0.4825]		-0.04561* [0.0698]	-0.01405 [0.5524]		
Community Spending	0.02147 [0.1435]		0.03138* [0.0959]			0.02899* [0.0747]
UN Global Compact Signatory	0.9368*** [<0.0001]			0.3407* [0.0545]	0.1114 [0.5116]	0.009058 [0.9826]
Volatility	-0.01004** [0.0016]	-0.005192** [0.0179]	-0.006693*** [0.009]	-0.005154** [0.0402]	-0.005233*** [0.0044]	-0.005553** [0.0118]
Ln (Total Assets)	-1.497*** [0.0024]	0.0001667 [0.9993]	-0.6179 [0.1273]	-0.1956 [0.6402]	0.007488 [0.9665]	-0.3934 [0.2359]
% Women on Board		0.005696 [0.2097]	0.01036* [0.099]		0.004491 [0.1232]	0.008468 [0.2554]
No of Board Meetings per Year			-0.003845 [0.7295]		0.004415 [0.7861]	
CEO Duality					-0.1923 [0.3505]	
n	47	209	56	90	191	97
Adj. R2	0.7014	0.1792	0.394	0.3399	0.2132	0.3023
P-value	6.44514E-06	1.78141E-19	1.60417E-05	2.35068E-05	1.94976E-16	2.24455E-21

Notes: P-values in parentheses. *, **, *** indicate significance at the 10, 5, 1 percent level respectively. P-values in the last row are related to robust test for differing group intercepts. Low values count against the null hypothesis that the groups have a common intercept, in favor of the fixed effects alternative

Tab. IX presents results of mixed specifications designed using ROA as a dependent variable. In this case, panel diagnostics and more specifically Hausman test shows that the most suitable estimation method to use is Random Effects. One of the advantages of RE is that it enables estimating coefficient on time invariant dummy variables, such as type of insurance company. Board size and number of board meetings significantly affect profitability proxied by ROA although in different directions. Particularly, larger boards lose effectiveness and ultimately decrease profitability in insurance companies. The result can be explained by increased level of leverage and total risks (Ho *et al.*, 2013). At the same time, importance of communication becomes vital and can actually mitigate adverse effects of larger boards. Another characteristic of board structure, namely gender diversity shows significantly positive influence not only on market performance, but also on accounting-based profitability indicator,

such as ROA. Furthermore, size and complexity of the company proxied by Total Assets has consistently significant negative impact on financial performance of European insurance companies. Finally, previously provided intuition for type of insurance has only been strengthened in case of ROA and we can report that reinsurance companies outperform other types of firms in the insurance industry in terms of profitability.

VII: Preliminary Regressions of ROE and ROA on Corporate Governance and Social Responsibility Indicators Together and Separately

	Dependent variable: ROE			Dependent variable: ROA		
	I	II	III	I	II	III
	Pooled OLS	Within	Pooled OLS	Pooled OLS	GLS	Pooled OLS
Constant	-81.01 [0.4679]	122.5** [0.0199]	45.16** [0.0186]	-4.225** [0.0114]	8.608** [<0.0001]	0.9359 [0.4029]
ESG Disclosure Score	-0.8855* [0.082]	-0.3140*** [0.004]	-0.03916 [0.5908]	-0.01802** [0.0221]	-0.007124 [0.5484]	-0.01544** [0.0164]
% Women on Board	-0.03563 [0.779]	0.09854 [0.1733]		-0.002092 [0.5924]	0.02297** [0.0258]	
% Independent Directors	-0.2689* [0.0639]	0.002159 [0.9778]		0.002264 [0.3076]	-0.01764** [0.042]	
Unitary or Two Tier Board System	-1.914 [0.6702]			-0.06464 [0.2992]	-0.5539 [0.1971]	
No of Board Meetings per Year	0.371 [0.2717]	0.8365*** [0.0028]		-0.005706 [0.4711]	0.03031 [0.3498]	
Size of the Board	0.09203 [0.9331]	-0.1166 [0.786]		0.008139 [0.7224]	-0.1115** [0.0141]	
CEO Duality	-18.87 [0.1726]	0.8941 [0.719]		-0.2631 [0.3656]	1.084** [0.0152]	
Energy Intensity per Employee	0.4069 [0.6589]		-0.7218** [0.0382]	0.01499 [0.4222]		-0.004145 [0.8313]
Employee Turnover %	-0.3066 [0.3447]		-0.1209 [0.2859]	-0.006442 [0.4386]		0.001744 [0.7333]
Community Spending	-0.1628 [0.4517]		-0.2727*** [0.0006]	0.008327 [0.117]		0.003094 [0.5301]
Employee CSR Training	-10.85 [0.1275]		-4.412* [0.061]	0.2086 [0.1772]		-0.1167 [0.6134]
UN Global Compact Signatory	-0.1137 [0.9684]		3.128** [0.0309]	-0.006704 [0.8778]		-0.1963** [0.0229]
Volatility	0.2559 [0.1864]	-0.1492*** [<0.0001]	-0.2208*** [<0.0001]	0.007334 [0.2678]	-0.01915** [0.0002]	-0.006743** [0.0156]
Type of Insurance	-9.470* [0.0855]		-0.407 [0.8142]	-0.5232*** [0.0036]	-0.8271** [0.0035]	-0.4663** [<0.0001]
Ln (Total Assets)	12.38 [0.1717]	-9.033** [0.0398]	-0.9985 [0.5444]	0.4359*** [0.0033]	-0.3501** [0.0429]	0.08541 [0.4439]
Human Rights Policy			-6.510*** [0.0024]			-0.08475 [0.1387]
n	20	211	41	20	142	41
Adj. R2	-0.171	0.2039	0.4274	0.884		0.6287
P-value	N/A	0.000109265	0.244226	N/A	0.266122	0.43261

Notes: P-values in parentheses. *, **, *** indicate significance at the 10, 5, 1 percent level respectively. P-values in the last row are related to either 1) robust test for differing group intercepts (in case of OLS or FE/Within), where low values count against the null hypothesis that the groups have a common intercept, in favor of the fixed effects alternative; or 2) Hausman test (in case of GLS/RE), where low p-value counts against the null hypothesis that the random effects model is consistent, in favor of the fixed effects alternative. N/A whenever it's impossible to estimate either FE or RE. Model I in each section includes all the variables defined in dataset. Models II and III use only Corporate Governance and Social Responsibility factors together with control variables.

VIII: Fixed Effects Regressions of ROE on Corporate Governance and Social Responsibility Indicators

	Dependent variable: ROE					
	I	II	III	IV	V	VI
Constant	232.3*** [<0.0001]	188.9*** [<0.0001]	227.9*** [<0.0001]	94.58 [0.2627]	135.2** [0.0143]	88.29 [0.156]
ESG Disclosure Score	0.2243 [0.2248]	0.03351 [0.751]	0.2274 [0.2487]		-0.3438*** [0.0039]	-0.3135*** [0.0091]
% Independent Directors	0.07955 [0.5802]		0.07732 [0.5598]	-0.1833 [0.1416]	0.008255 [0.9177]	0.02313 [0.7904]
Size of the Board	0.7327 [0.4123]		0.8384 [0.369]	-0.529 [0.6304]	-0.1474 [0.7267]	-0.1522 [0.7174]
Employee Turnover %	-0.3185 [0.245]	-0.04375 [0.6317]	-0.2778 [0.3538]	-0.2231 [0.4911]		
Community Spending	-0.3785** [0.0368]		-0.3670** [0.0382]	-0.07039 [0.6261]		
UN Global Compact Signatory	-2.237** [0.0378]	0.1803 [0.9213]	-1.99 [0.1601]	-4.633 [0.1485]	2.778 [0.3622]	2.532 [0.4072]
Volatility	-0.3266*** [<0.0001]	-0.2241*** [<0.0001]	-0.3285*** [<0.0001]	-0.1616* [0.0728]	-0.1494*** [<0.0001]	-0.1544*** [<0.0001]
Ln (Total Assets)	-19.16*** [<0.0001]	-14.78*** [<0.0001]	-18.82*** [<0.0001]	-5.064 [0.3969]	-10.05** [0.0284]	-6.032 [0.2419]
% Women on Board		0.052 [0.3314]	-0.1246 [0.4448]	0.02122 [0.9119]	0.09539 [0.1902]	
No of Board Meetings per Year		0.2844** [0.0481]		0.5419 [0.2329]	0.8069*** [0.0044]	0.7742*** [0.005]
Employee CSR Training						1.262 [0.543]
n	47	99	47	48	207	208
Adj. R2	0.3263	0.2733	0.3318	0.2147	0.2213	0.2021
P-value	0.00577037	5.16837E-06	0.00681643	0.000128265	0.00150955	0.00755253

Notes: P-values in parentheses. *, **, *** indicate significance at the 10, 5, 1 percent level respectively. P-values in the last row are related to robust test for differing group intercepts. Low values count against the null hypothesis that the groups have a common intercept, in favor of the fixed effects alternative

IX: Random Effects Regressions of ROA on Corporate Governance and Social Responsibility Indicators

	Dependent variable: ROA					
	I	II	III	IV	V	VI
Constant	9.454*** [<0.0001]	9.282*** [<0.0001]	8.742*** [<0.0001]	8.796*** [<0.0001]	9.471*** [<0.0001]	9.075*** [<0.0001]
ESG Disclosure Score	-0.006898 [0.5203]		-0.003538 [0.7071]	-0.009853 [0.3622]	-0.009136 [0.6584]	
% Independent Directors	-0.01096* [0.0971]	-0.01029 [0.1306]		-0.00555 [0.3567]	0.000593 [0.9379]	
Size of the Board	-0.08472** [0.0244]	-0.08969** [0.0188]	-0.02677 [0.3775]			
Employee CSR Training	0.1261 [0.7343]	-0.03506 [0.9183]	-0.06593 [0.8347]	-0.05698 [0.8795]		-0.1697 [0.6198]
Human Rights Policy	0.1834 [0.4254]		0.0912 [0.6678]	0.08753 [0.7125]		0.5039 [0.1113]
Volatility	-0.01390*** [0.0001]	-0.01404*** [<0.0001]	-0.01334*** [<0.0001]	-0.01316*** [0.0005]	-0.01381 [0.1346]	-0.01186* [0.0863]

	Dependent variable: ROA					
	I	II	III	IV	V	VI
Type of Insurance	-0.7383*** [0.0052]	-0.7464*** [0.0062]	-0.4818** [0.0336]	-0.6294** [0.0138]		-0.231 [0.2946]
Ln (Total Assets)	-0.4772*** [0.0013]	-0.5050*** [0.0006]	-0.6231*** [<0.0001]	-0.5947*** [<0.0001]	-0.7489*** [0.0003]	-0.7579*** [<0.0001]
No of Board Meetings per Year		0.03583 [0.1508]	0.04703** [0.0298]	0.04329* [0.0889]	0.02853 [0.5196]	0.03483 [0.2691]
UN Global Compact Signatory		0.04588 [0.8642]			0.2985 [0.4814]	
% Women on Board			0.01132 [0.1668]	0.01545* [0.0916]	0.03504** [0.0209]	0.03222*** [0.0056]
Employee Turnover %					0.03048 [0.4403]	0.02591 [0.4086]
n	223	211	244	207	81	102
P-value	0.231678	0.146497	0.422525	0.157886	0.474257	0.177612

Notes: P-values in parentheses. *, **, *** indicate significance at the 10, 5, 1 percent level respectively. P-values in the last row are related to Hausman test, where low p-value counts against the null hypothesis that the random effects model is consistent, in favor of the fixed effects alternative.

CONCLUSION

The purpose of this paper was to investigate the importance of corporate governance and social responsibility in insurance companies by identifying and measuring their impact on financial performance. This investigation is believed to make a contribution to the earlier research in two regards. First, we employ different aspects of corporate governance and social responsibility simultaneously. To the best of our knowledge, previous studies have been concentrated only on particular facets, such as board size and composition or aggregated index, quantifying companies' socially responsible behavior. Second, we have based our analysis on the information from Bloomberg, thus involving all the available and relevant measures of Environmental, Social, and Governance (ESG) factors, which are easily available to investors and analysts without any additional analysis needed.

The main result of this analysis is that corporate governance and social responsibility factors significantly influence financial performance in the European insurance sector. Generally, we find that market-based performance ratios are more vulnerable in comparison with their accounting-based counterparts if judged according to the number of affecting corporate governance or corporate social responsibility (CSR) dimensions. Particularly, board independence proxied by the percentage of independent directors is a strong determinant of improved market performance. We also provide support for unbiased and objective boards, indicating that investors trust independent directors as protectors of shareholder value. As for board size, the increased number of board members on average is associated with improved market performance.

As for social responsibility, three main factors turn out to be relatively more important than others, in particular: employee turnover, community spending and UN Global Compact signatory. Employee turnover shows significantly negative impact on market performance measured by Market Capitalization to Book Value, whereas community spending enhances companies' financial performance proxied by Tobin's Q. Based on our results, UN Global Compact signatory has the best explanatory power on movements in both ratios. The result might be driven by the fact that adherence to internationally accepted principles is a relatively simple indicator for investors to judge companies' attitudes towards social responsibility. As for positive linkage, literature outlines several underlying reasons, such as capacity of good management to manage both CSR and financial performance well, the existence of slack resources in financially successful companies that can be spent on social activities or excess of potential benefits over actual costs of social performance (Simpson and Kohers, 2002).

Accounting-based profitability measures in our sample of companies are sensitive to relatively different set of corporate governance and social responsibility factors. In particular, frequency of board meetings shows consistently significant positive impact on profitability. The result underscores the vital importance of boards' active involvement in business process, proper execution of advisory and monitoring power and benefits of increased communication between members. Since previous empirical researches find evidence for both positive significant and insignificant impacts of board

independence on profitability, it is hard to form clear expectation about significance of that particular aspect. However, the positive expected impact of board independence on profitability is supported by our and other empirical studies. Board size and women representation are two other dimensions of corporate governance, significantly affecting return on assets. Larger board size significantly reduces financial performance, while women representation is associated with value creation.

Social responsibility factors are significant when explaining variation in return on equity. Community spending, even though positively influencing market performance, expectedly reduces accounting-based profitability due to additional expenses incurred. Furthermore, employee turnover has consistently adverse impact on ROE, although, contrary to our expectation, the significance of estimated coefficients is present only when studied in relation with Market Capitalization to Book Value.

Corporate governance mechanisms together with socially responsible behavior can be treated as factors influencing financial performance of European insurance companies. Clearly, significant room exists for future research. Major limitations of panel-data studies on the effects of corporate governance and CSR include: absence of a comprehensive conceptual framework, ideal empirical measurement techniques and expected theoretically sound causations (Simpson and Kohers, 2002). However, results of our study contribute to existing debate about the relationship between different mechanisms of corporate governance and social responsibility and financial performance by providing additional empirical evidence that insurance firms can be socially responsible and financially successful at the same time.

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