

Does Corporate Governance Determine Corporate Performance and Dividends During Financial Crisis: Evidence from Poland

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Abstract

This study seeks to investigate the relationship between corporate governance, measured by Corporate Governance Index (CGI), and firm's performance and dividend payouts during the financial crisis in Poland. The empirical approach in the study lies in constructing a comprehensive measures of the corporate governance for 298 non-financial companies listed on Warsaw Stock Exchange in the years 2006-2010. The results shows a positive association between corporate governance and performance measured by Tobin's q. Moreover, I find evidence that higher corporate governance leads to an increase in cash dividends. Finally, the results presents that during the recent financial crisis corporate governance is positively associated with return on assets. However, in the period of the financial crisis better governed companies paid dividends less generously than do firms with lower corporate governance standards.

Keywords: corporate governance, firm performance, dividend policy, emerging markets

JEL Codes: G18, G30, G34, G39, K22, K29

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1. Introduction

Corporate governance has become a main subject in discussion in academic as a result of the crisis in 1990s and early 2000s. As a consequence there has been much research work on the broad topic of corporate governance in the last decade. However, corporate governance received much attention again due to the financial crisis in 2007-2008, which was often related to prior weak governance in the financial institutions and corporations. According to Claessens and Yurtoglu (2012) the systematic consequences of those failure resulted in reorganization of the potential macroeconomic, distributional and long-term consequences of weak corporate governance systems by policymakers and corporate world.

While, weak corporate governance is often related to the recent financial crisis, little is known whether better governed companies better performed in this period. In order to measure corporate governance standards the Corporate Governance Index (CGI) was constructed for 361 listed companies at the Warsaw Stock Exchange (WSE). The WSE is an interesting choice for a study because the results may be applicable for other emerging economies. Similarly, as in many other emerging countries the Polish stock market is poorly developed and characterized by realtive poor investors' protection, by an inefficient law enforcement system, and is deemed to furnish a favorable context to minority expropriation (Kowalewski et al. 2008). Consequently, good governance of companies may be especially important in the period of the financial crisis.

Indeed, using panel regression for 298 listed companies and the corporate governance index for the years 2006-2010 the results confirms the importance of the corporate governance on performance and dividend policy of listed companies during the crisis. I find that companies with good governance are characterized by higher Tobin's q and dividend policy. While, during the financial crisis companies with higher governance standards reported higher return

on assets than firms with weak corporate governance. Consequently, the study confirms that good corporate governance is associated with better performance during the crisis.

The study adds to the growing literature on the benefits of corporate governance on companies performance. The main contribution is to present the role of corporate governance on firm's performance of listed companies in an emerging market during the recent financial crisis. Indeed, the confirms that even during the recent crisis better governed companies outperformed companies with weak corporate governance standards.

The paper is organized as follows. The next section shortly reviews the pertinent literature. Section 3 discusses data and describe the governance indices. Section 4 presents the methodology and analyses the results. Finally, the last section offers a conclusions.

2. Literature review

A great deal of attention has been given to understanding how corporate governance affect firm's performance in developed and emerging countries¹. Most of the studies confirm a positive link between good corporate governance practices to firm performance and value. As a results, a number of corporate governance indexes has been developed and found to be positively be related to firm performance.

Brown and Caylor (2004) analyze the US firms with 51 factors, 8 sub-categories for 2327 firms based on dataset of Institutional Shareholder Service (ISS). Their findings indicate that better governed firms are relatively more profitable, more valuable and pay more cash to their shareholder. While, Black et al. (2006) using a corporate governance index finds evidence that corporate governance is an important factor in explaining the market value of Korean public companies. Overall, most studies support the importance of firm level corporate governance using a corporate governance index, especially in countries with weak legal protections for investors. Indeed, Black (2001), argues that larger effects of corporate

¹ See Claessens and Yurtogul (2012) for a survey on corporate governance in emerging markets.

governance practices on firm performance are likely to be found in developing countries, because these countries often have weaker rules and larger variations between firms in corporate governance practices. Nevertheless, Johnson et al. (2000) finds that weak legal institutions for corporate governance were key factors in exacerbating the stock market declines during the 1997 East Asian financial crisis. They reports that in countries with weaker investor protection, net capital inflows were more sensitive to negative events that adversely affect investors' confidence.

However, in times of economic shock the quality of corporate governance can also affect firms' performance and valuation. Mitton (2002) using firm level data on 398 listed companies from Indonesia, Korea, Malaysia, Philippines and Thailand documented that the firm-level differences in variables are related to corporate governance has strong impact on firm performance during East Asian Crisis in 1997 and 1998. Moreover, the study suggest that better price performance is associated with firms that have indicators of higher disclosure quality, higher outside ownership concentration and they are focused rather than diversified. Similarly, Lemmon and Lins (2002) finds that, during the Asian financial crisis, firms showed low performance when their controlling managers had more control rights than ownership rights. This provides firm-level evidence consistent with the view that corporate governance helps explain firm performance during a financial crisis. Moreover, Bae et al. (forthcoming) documents that during the Asian financial crisis, firms with weaker corporate governance experience a larger drop in their share values. While, in the the post-crisis recovery period, firms with better corporate governance experience a larger rebound in their share values.

Cornett et al. (2009) shows that during the recent financial crisis, firms that had better internal corporate governance tend to have higher rates of return. Consequently, the existing results show that corporate governance determine firm performance and value, in developed as well as developing countries, and even during a financial crises.

3. Data description

3.1 Construction of the Corporate Governance Index (CGI)

In the study a Corporate Governance Index (CGI) is constructed to measure corporate governance for listed companies at the Warsaw Stock Exchange (WSE) in the years 2006-2010. In this direction the work closely relates to the financial literature as Klapper and Love (2004), Gompers et al. (2003), Black et al. (2006). The CGI is based only on public information such as annual reports or filings with regulatory agencies. The CGI was designed and completed in the years 2011-2012. Initially the information on the CGI was hand collected for 361 domestic companies, which were listed on the WSE in the years 2006-2010. In the panel regression, however, the sample is later reduced as financial companies are excluded. Therefore, the final data set for the panel regressions consists of 298 listed firms.

The CGI tries to assess the governance of the companies and how protected against expropriation outside investors are, thus providing a measure about the balance of power between insiders and outsiders. The CGI covers a broad range of governance topics and consist of the seven subindices: Management, Supervisory Board, Remuneration, Shareholder rights, Ownership structure, Audit and financial disclosure and Corporate behavior. The subindex Management measure the structure and procedure of the executive management of the company. Similarly the subindex Supervisory Board assess the structure and procedure of the supervisory board. The subindex Remuneration measure management and supervisory board remuneration and its ownership in the company. The subindex Shareholders quantify the degree to which the company informs relevant corporate facts to outside stakeholders. The subindex Ownership measures the ownership structure of the company, especially taking into account rights of the minority shareholders. The subindex Audit measures assess the quality of audit and financial disclosure. Finally, the subindex Corporate evaluate the social behavior

of the company. The structure of the CGI, and the percentage of positive entries on each item, are presented in Table 1.

The CGI comprises of 7 categories that include total 50 binary items, for each of them, the company is given a value of 1 if the company comply with a given item, and a value of 0 otherwise. Each company is then rated from 1 (poor) to 10 (excellent) in each of the categories based on the number of items complied based on its position to its peers. While, the CGI reflects company position to its peers based on information on all the subindices. The CGI has three distinctive advantages. First, it is clearly objective and documented. Second in a country like Poland where disclosure requirements are relatively low and mostly limited to accounting information, it reflects voluntary rather than mandatory information, and thus it may display a desirable variability across firms. Finally, it is not affected by the frequent low response rate in company surveys, which can be a unsolvable obstacle to perform econometric analysis as a result of the very small final sample. Hence, we are confident that the CGI is a comprehensive measure of corporate governance and we be applied as the main measure of corporate governance hereafter. Conversely, it has the limitation that it does not allow to know about corporate governance features that the company has decided not to disclose openly.

[Table 1]

3.2 Dependent Variables

The study follow Klapper and Love (2004) by taking the return on assets (ROA) and Tobin's q as indicators of companies performance. The former is included as an accounting measure and is calculated as the earnings before interest and taxes over total assets. The latter proxy reflects expectations about future earnings and market perceptions of the value of the company. The implications of the performance variables are radically different in each case. The ROA and corporate governance link reflects a tangible, balance-sheet effect on

companies performance. In contrast, the Tobin's q and corporate governance nexus has more to do with market perceptions about the value of corporate governance. Even though one would expect some correlation between them, this may not be always the case, especially during a financial crisis. Indeed, the simple correlation in the sample is negative and statistical significant. An explanation for the results is that during the financial crisis the market expectations about companies future performance were strongly distorted. Moreover, during the crisis the market valuations of many companies was strongly influenced by herd behavior of investors. Consequently, in a period of a financial crisis Tobin's q may not reflect well the company performance. Therefore, the main indicator of companies performance is ROA in this study, which I assume better measures of companies performance during a financial crisis.

Moreover, in order to check the robustness of the results an additional measure is used. Following Kowalewski et al. (2008) we employ the ratio of cash dividends to earning and sales is used as a dividend measure. According to La Porta et. al. (2000) firms with strong investor protection pay more dividends. They argue that better protected shareholders have better chances to force cash disgorgement, thus precluding insiders from using a high percentage of the firm's earnings for personal benefits. Similarly, Kowalewski et al. (2008) document that dividends play a basic role in limiting insider expropriation in Poland. They show that companies with higher corporate governance standards pay higher dividends, which confirms the previous findings of La Porta et al. (2000). By paying dividends, insiders return corporate earnings to investors and hence are no longer capable of diverting these earnings. Thus, the ability to disgorge cash is detrimental to outside shareholders' interest, otherwise the excess funds might be wasted.

3.3 Control Variables

In the regressions a set of control variables is included following the literature. Sales growth is a proxy for the product demand faced by the firm and its productivity. The debt ratio can, on one hand, improve performance by limiting managerial misbehavior and by serving as a signal of high quality, but, on the other hand, a high leverage may lead to asset substitution and underinvestment (Bebczuk, 2003). Firm size may have a negative effect if size is correlated with the exhaustion of growth opportunities, but may contrarily have a positive impact whenever size is correlated with more diversification, more economies of scale and scope, more professionalized management, and less severe financial constraints.

The econometric specifications also include industry and time dummies. Taking into account the importance of industry effects on companies' performance, firms are classified into five broad sectors: industry, construction, energy, telecom services. Those sectors vary in productive technology and international tradeability.

4. Results

The period of analysis is 2006-2010. During this period the stock market downturn unraveled at the end of 2007 in Poland, while the economic growth slowed down in 2008. The high volatility in the financial markets during the crisis and the slowdown of the economic growth have affected performance of the companies listed on the WSE. In order to control for it in the study a variable crisis is employed, which takes the value 1 for the period 2008-2009 and 0, otherwise.

4.1 Descriptive Statistics

Summary statistics on the CGI and ownership variables appear in Table 2. Out of 60, the average CGI is 34.551, with a minimum of 15 and a maximum of 60. The two subindices CGI-Audit and CGI-Corporate are equally low on average with 4.784 and 3.765, respectively. While, the other CGI-subindices are on average in the range from 5.273 (CGI-Board) to 5.116

(CGI-Renumeration). Hence, the results reveals relative problems in the area of audit and financial disclosure as well corporate behavior within the Polish listed companies.

[Table 2]

The pairwise correlation among governance and the performance and control variables can be seen in Table 3. The CGI is strongly, positive correlated with each of the subindices. Moreover, CGI and most of its subindices are strongly and positive correlated with ROA. Additionally, the CGI is positive correlated with Tobin's q and both measures of dividends. However, there is a negative and significant correlation between ROA and Tobin's q. As mentioned earlier Tobin's q can be distorted by the strong market volatility during a crisis. Indeed, the crisis dummy is negatively correlated with the CGI as well the performance and one of the dividend measures. The correlation between the crisis dummy, ROA and Tobin's q are statistically significant. ROA is also negatively correlated with debt to assets, while positively with size and sales. In contrast, Tobin's is positively correlated with debt to assets, while negatively with size and sales.

[Table 3]

4.2 Corporate Governance and Firm Performance

I explore the impact of corporate governance on firm performance by estimating:

$$Performance_{i,t} = \alpha + \beta CGI_{i,t} + Control_{i,t} + \varepsilon_{i,t} \quad (1)$$

where i and t refer to firm and time, respectively; GGI is a vector of corporate governance measures; vector $Control$ includes sales growth, debt to asset ratio, size, sector and time dummy variables.

Tables 4 reports the random effects estimation showing the impact of corporate governance on ROA. The regressions also include the set of control variables that determine companies performance. The results show that the corporate governance index is positively correlated with ROA, yet the coefficient is insignificant. In order to understand the impact of the CGI on

firm performance individual regressions are in addition estimated, keeping the same control set as before, of each of the CGI subindices. The results are presented in specification (2)-(8), which show the impact of each of the corporate governance indices on companies performance. However, I find that only the coefficient for the variable CGI-Shareholder is positive and significant at 5%, while most other CGI subindices are lacking significance. Surprisingly, the coefficient on CGI-Board is negatively and significant related to ROA. Among the control variable the debt ratio is positive and highly significant. While, the sales growth ratio as well as firm size variable are positive and highly significant. Those variables seem to have a stronger influence on companies performance than the corporate governance index. The estimated coefficients for the control variables remain reasonably stable across all specifications. The significance of the debt variable may be explained by a financial crisis as companies with low debt may have reflected a proper governance as a disciplining device to mitigate the incentives towards overinvestment and excessive risk-taking. Moreover, during the crisis companies with low level of debt reflected lower default risk. Moreover, as growing firms, which are proxied by the growth of sales, need adequate governance standards to enhance their access to financing and to avoid overinvestment, especially during a financial crisis. The dummy variables are included only to control for potential industry and year effects. Construction and service sector dummies variables are statistically significant in all the specifications. While, industry and energy sector dummies never enter the specification significantly.

[Table 4]

In order to investigate the impact of corporate governance on firm performance the estimations are repeated, whereas a new variable crisis is employed in the regressions. The variable should capture the impact of the financial crisis and economic slowdown on firm performance. I also interact this variable with the corporate governance measure and the CGI

subindices to investigate whether there is a different or stronger impact of corporate governance on firm performance during the crisis in home countries.

The results in Table 5 show that the interactive term corporate governance and crisis is positive and significant at 1% level. In line with expectations the coefficient for the variable crisis is negative and highly significant. Consequently, I find that companies with high corporate governance standards performed better during the recent financial crisis. I estimated as well the interactive term for each of the CGI subindices and crisis on ROA. The results shows that the interactive term for the coefficient for CGI-Management, CGI-Shareholder, CGI-Ownership, CGI-Audit and crisis are positive and statistical significant. Hence, the results confirm that better governed companies are performing better than firms with lower corporate governance standards.

Similar as in the previous regressions the sale and size variables are positive and significant, while leverage is negatively and highly statically related to ROA. Moreover, also the construction and service sector dummies variables are again statistically significant in all the specifications. While, industry and energy sector dummies as before never enter the specification significantly.

[Table 5]

Table 6 presents the results for the regressions when Tobin'q is employed instead of ROA as a firm performance measure. Conversely to the previous results the CGI variable is now positive and statistically significant at 1%. Hence, the results are in line with the literature documenting that corporate governance is positively related to firms valuations. Moreover, the regression on CGI-subindices presents that CGI-Audit and CGI-Corporate are also positive and statistically significant related to Tobins'q.

However, in contrast to the previous findings the debt variable is now positive and significant, while sales growth is negative and insignificant. Moreover, the size variable is now negative and significant at 1% level.

[Table 6]

As previously I investigate also the impact of the financial crisis including the crisis dummy into the regression and interacting it with the corporate governance measure and the CGI subindices. The results are presented in Table 4. In contrast to the previous results I find that the crisis and corporate governance interactive term is not significant related to Tobin's q. Moreover, none of the interactive terms with the CGI subindices are now significant. One of the explanation for the results is the high volatility of the stock prices and hence market valuation of companies during a financial crisis, which is often the result of herding behavior of investors. Consequently, during a market crisis Tobin's q may not correctly reflect companies fundamentals by the market.

In line with the previous results I find that the leverage variable is positive and significant, while size is negatively and highly statically related to Tobin's q. Moreover, the variable sales growth is negatively related but remains insignificant. While, the dummy variables for industry, construction and service sectors are now negative and highly significant. It is worth mentioning that the coefficient for the energy sector dummy is the only one, which remains positive and weak statistical significant. Indeed, the results indicate that during the crisis investors prefer industries that are less affected by the economic downturn as energy production and distribution.

[Table 7]

4.3 Corporate Governance and Dividends

In order to investigate whether the corporate governance measure explain the cash dividends of the companies during a crisis I estimate pooled Tobit regression model similar to the one in

the study of Kowalewski et al (2008). This empirical methodology is applied as the dependent variable is truncated at zero and it has numerous individual observations displaying such value in the sample. The empirical specification can be summarized as follows

$$Dividend_{i,t} = \alpha + \beta CGI_{i,t} + Control_{i,t} + \varepsilon_{it} \quad (2)$$

where i and t refer to firm and time, respectively; CGI is a vector of corporate governance measures; vector $Control$ includes Tobin's q , ROA, sales growth, debt to asset ratio, size, sector and time dummy variables.

The results of a regression analysis for pooled Tobit are shown in Table 8. The governance index captures the impact of corporate governance on cash dividends to earnings. The regressions also include the set of control variables that determine the dividend policy. Moreover, in specification (2)-(8) the impact of each of the corporate governance indices on dividend policies is presented.

The CGI is positive and highly significant, as well the subindices CGI-Management, CGI-Audit and CGI-Corporate. Hence, the results confirms that corporate governance is positively related to cash dividends in Poland.

ROA is positively associated with cash dividends to earnings at 1% significance level, but Tobin's q variable is not statistically significant. Size is positively related with the same variable at 1% significance level. While, sales growth and debt variables are not significant. The dummy variables are included only to control for potential industry and year effects. However, sectors' dummies variables are statistically insignificant in all the specifications.

[Table 8]

As before I examine the impact of the crisis including the crisis dummy into the regression and interacting it with the corporate governance measure and CGI subindices. In contrast to the previous results the interaction term CGI and crisis is negative and insignificant. Moreover, the interaction term CGI subindices and crisis are insignificant in all the

specification. Consequently, I do not find evidence that corporate governance determine the cash dividend policy of companies during the crisis.

In line with the previous findings ROA remain positively associated with cash dividends to earnings at 1% significance level, while Tobin's q variable is again insignificant. Also size remains positively and highly significant related with ROA. While, the remaining control variables remain insignificant in all the specifications.

[Table 9]

Finally, I repeat the estimation using cash dividends to sales as dependent variable. Table 9 shows the results confirming the positive impact of corporate governance on cash dividends. The variable CGI is positive and significant at 5% level. In addition also the subindices CGI-Management, CGI-Audit and CGI-Corporate are positively and significantly associated with cash dividends to sales. Hence, the results confirm the previous findings showing the positive effect of corporate governance on companies dividend policy.

As before ROA is positively associated with cash dividends to sales at 1% significance level, while Tobin's q variable is again insignificant. Size is positively and significantly related with the same variable, while debt is negatively associated with ROA at 1% significance level. The remaining control variables are statistically insignificant in all the specifications.

[Table 10]

At the end I interact again the corporate governance measures with the crisis dummy. The interactive term of corporate governance and crisis is negative and significant at 10%. Moreover, the interactive term of CGI-Board and crisis is negative and significant at 1% level. Hence, the results shows that companies with higher corporate governance were less likely to pay out cash dividends during the crisis. An explanation can be that better governed companies are more risk averse and consequently not pay out profit during a crisis.

The results for the control variables are in line with previous results. Again, ROA and size is positively and significantly related to the cash dividend measure. While, the leverage ratio is negative and highly significant. The remaining control variables as before are statistically insignificant in all the specifications.

[Table 11]

5. Conclusion

The study confirms that corporate governance is an important determinant in explaining the performance and dividend payouts of listed companies during the financial crisis in Poland. To measure the quality of corporate governance, I construct the Corporate Governance Index for 298 companies listed on the WSE for the years 2006-2008.

The CGI is positively and significantly associated with Tobin's q. However, when we interact the variable with the crisis dummy the interactive term is insignificant. I assume that the high volatility and herd behaviour during the crisis determines the market valuation of companies. Consequently, the market valuation of companies does not reflect the fundamentals of the companies and its future perspective. Indeed, the assumption are supported by the fact, that the interactive term ROA and crisis dummy is positive and highly significant.

Moreover, the results shows that in those listed companies in Poland, where corporate governance practices are superior and, as a consequence, minority shareholder rights are better protected, dividend payouts are higher. Such results are in line with the outcome model assuming that when shareholders have more rights, they tend to use their power to influence the dividend policy. However, I find also that during the crisis better governed companies are paying lower dividends than firms with low corporate governance measure. One explanation for the result is the risk aversion of better governed companies that try to protect their shareholders during a period of high uncertainty by keeping their profit.

The study contributes to the literature in the field of corporate governance showing its importance, especially during a financial crisis.

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Table 1.**Corporate governance index (CGI) and subindices**

The corporate governance index (CGI) measures a broad set of corporate governance features for 361 domestic firms listed on the Warsaw Stock Exchange for the years 2006-2010. For each feature, the company is given a value 1 if the company complies with a given governance features, and 0 otherwise. In order to compute the CGI each sub index was converted to standardized form in the scale from 1 to 10, whereas higher scores indicating better governance.

Item	% of complying
Management (CGI-Management)	
CEO have no external relationships with large shareholders	0.48
Majority of managers have no external relationships with large shareholders	0.55
External directorships held by managers do not appear to interfere	0.89
Managers are not listed as having a related party transaction in the last three years	0.76
The management has not been involved in new projects where there was any controversy over	0.80
Supervisory Board (CGI-Board)	
The supervisory board is comprised of no more than 5 (small)/7 (medium)/9 (large companies) members	0.83
The company has an articulated policy with respect to supervisory board member selection	0.04
The majority of supervisory board members is independent	0.05
Chairman of the supervisory board is independent	0.03
The majority of the independent supervisory board members are related to finance, accounting or business	0.05
No former CEO or companies officer on the supervisory board	0.37
External directorships held by supervisory board members do not appear to interfere	0.80
The supervisory board does not include representatives of banks or other creditors of the company	0.92
Relationships that supervisory board members have with the company or its owners are limited	0.29
Supervisory Board members are not listed as having a related party transaction within the last 3 years	0.73
Management and supervisory board members remuneration and ownership (CGI-Remuneration)	
Compensation disclosure breaks down all components of the individual's total package	0.40
Compensation include elements that are contingent on performance	0.36
Compensation for executives is both cash and share based	0.24
The CEO's last annual bonus cut in response to a decline in earnings or a loss	0.20
All managers with more than one year of service own stock after excluding options held	0.55
All supervisory board members with more than one year of service own stock	0.12
Managers and supervisory board members' stock ownership is at least 1% but not over 30% of total shares	0.33
Number of shares held by managers and supervisory board members has not	0.65

decreased by 10% or more	
Number of shares held by managers and supervisory board members has increased by 10% or more	0.11
The retention period for some shares issued upon exercise of stock options is 3 years or longer	0.07
Shareholder rights (CGI-Shareholder)	
All common or ordinary equity shares have one-share, one-vote, with no restrictions	0.75
Voting rights are not capped at a certain percentage	0.95
Company's responsiveness to investor questions present	0.14
The company statuses, financial statement and reviews are available	0.98
Shareholders meeting are online and shareholder may vote electronically	0.02
No controversy whether the supervisory board member or management take measures to safeguard the interests of all and not just the dominant shareholders	0.66
Ownership structure (CGI-Ownership)	
No shareholders with 50% or more shares present	0.45
No single shareholder or shareholder group with majority of voting power	0.27
Domestic institutional shareholding present with more than 5% of shares	0.57
Uses, or has adopted, some form of majority voting in the election of directors	0.06
No cross-holdings that may compromise minority interest	0.51
The shareholders have not been excluded from their pre-emptive rights within the last 3 years	0.93
There are no anti-takeover provisions	0.86
Did not use any anti-takeover provisions in the past	0.90
Audit and financial disclosure (CGI-Audit)	
Audit and/or Risk committee present	0.42
Chair of the audit committee is independent and has expertise in accounting or finance	0.05
Audit committee majority composed of independent and qualified members	0.04
There is an explicit, transparent and accountable process for selecting the auditor	0.06
Disclosures on transactions with subsidiaries, associates and other related parties	0.91
Does not have problems with restatements, charges, investigations, litigation or regulatory fines	0.75
Corporate behavior (CGI-Corporate)	
Discloses a code of ethics or the employee code of ethics also covers senior executives	0.07
Discloses its CSR policies	0.22
Discloses its corporate level donations and a list of biggest benefactors	0.04
Company (executives) has no pending litigation against it, has been found guilty within the last 3 years	0.84
Has not been charged serious workplace safety violations within the last 3 years	0.95

Table 2.**Descriptive Statistics**

Table shows the mean, standard deviation, minimum and maximum values of the corporate governance index, performance and control variables whose definitions are provided in Appendix.

Variable	Observ.	Mean	Std. Dev.	Min	Max
Panel A: Corporate Governance Index					
CGI	1405	34.551	7.827	15	60
CGI- Management	1405	5.198	1.615	1	10
CGI- Board	1405	5.213	1.991	1	10
CGI-Remuneration	1405	5.116	1.918	1	10
CGI-Shareholder	1405	5.273	2.001	1	10
CGI-Ownership	1405	5.201	2.052	1	10
CGI-Audit	1405	4.784	1.893	1	10
CGI-Corporate	1405	3.765	2.035	1	10
Panel B: Performance and Control Variables					
ROA	1405	0.410	0.256	-7.961	0.783
Tobin's q	1405	2.115	6.089	0.407	197.758
Dividends to earnings	1405	0.212	4.263	-4.108	154.987
Dividends to sales	1405	0.120	0.162	0	6.008
Sales	1106	-1.326	31.487	-992.883	1.000
Debt	1405	0.472	0.256	0.001	5.887
Log (Assets)	1405	12.289	1.696	5.737	17.823
Crisis	1405	0.414	0.493	0	1
Industry Dummy	1405	0.410	0.492	0	1
Construction Dummy	1405	0.172	0.378	0	1
Energy Dummy	1405	0.021	0.142	0	1
Telecom Dummy	1405	0.021	0.142	0	1
Services Dummy	1405	0.377	0.485	0	1

Table 3
Performance and Explanatory Variables: Pairwise Correlation

	Corporate Governance Index									Dividends to						
	CGI	M	B	R	S	O	A	C	ROA	q	E	S	Sales	Debt	Size	Crisis
CGI	1															
CGI-Management	0.59	1														
CGI-Board	0.63	0.34	1													
CGI-Remuneration	0.59	0.31	0.29	1												
CGI-Shareholder	0.72	0.35	0.40	0.32	1											
CGI-Ownership	0.72	0.32	0.41	0.38	0.70	1										
CGI-Audit	0.46	0.17	0.10	0.09	0.12	0.09	1									
CGI-Corporate	0.34	0.03	0.00	0.04	-0.02	-0.02	0.31	1								
ROA	0.08	0.07	0.06	0.04	0.02	0.02	0.05	0.08	1							
Tobins' q	0.01	-0.06	-0.02	0.04	0.01	0.04	-0.01	0.03	-0.10	1						
Dividends to earnings	0.00	0.01	0.01	0.03	-0.03	0.00	-0.01	0.00	0.02	-0.01	1					
Dividends to sales	-0.01	0.00	0.00	0.01	-0.05	-0.01	0.00	0.02	0.09	0.05	0.24	1				
Sales	0.02	0.00	-0.01	0.03	-0.01	0.01	0.03	0.02	0.02	0.01	0.00	0.01	1			
Debt	-0.07	-0.07	-0.16	-0.03	0.01	-0.05	0.05	-0.02	-0.59	0.08	0.02	-0.03	0.06	1		
Size	0.12	-0.05	-0.04	-0.09	-0.02	-0.04	0.33	0.35	0.12	-0.35	-0.02	-0.05	0.03	0.04	1	
Crisis	-0.01	0.00	-0.01	0.00	-0.01	-0.01	0.00	0.00	-0.10	-0.10	0.03	-0.02	-0.04	0.01	0.04	1

*statistically significant at 10% or less in bold face

Table 4**Random effects regressions of ROA on Corporate Governance Index and Subindices**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CGI	0.001 (0.001)							
CGI-Management		0.007 (0.005)						
CGI-Board			-0.007* (0.004)					
CGI-Remuneration				0.002 (0.005)				
CGI-Shareholder					0.009** (0.004)			
CGI-Ownership						0.001 (0.004)		
CGI-Audit							0.007 (0.005)	
CGI-Corporate								-0.002 (0.005)
Sale	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)
Debt	-0.911*** (0.023)	-0.911*** (0.023)	-0.918*** (0.023)	-0.913*** (0.023)	-0.913*** (0.023)	-0.913*** (0.023)	-0.914*** (0.023)	-0.914*** (0.023)
Size	0.044*** (0.005)	0.045*** (0.005)	0.044*** (0.005)	0.045*** (0.005)	0.045*** (0.005)	0.045*** (0.005)	0.042*** (0.006)	0.045*** (0.006)
Industry	0.090 (0.061)	0.088 (0.061)	0.087 (0.062)	0.087 (0.062)	0.103* (0.062)	0.088 (0.062)	0.090 (0.061)	0.087 (0.062)
Construction	0.180*** (0.063)	0.176*** (0.063)	0.174*** (0.063)	0.177*** (0.063)	0.193*** (0.064)	0.177*** (0.064)	0.180*** (0.063)	0.175*** (0.064)

Energy	-0.000 (0.084)	-0.002 (0.084)	-0.008 (0.085)	-0.002 (0.085)	0.020 (0.085)	-0.003 (0.085)	-0.009 (0.084)	-0.003 (0.085)
Services	0.158** (0.062)	0.159** (0.062)	0.154** (0.062)	0.154** (0.062)	0.175*** (0.063)	0.156** (0.062)	0.158** (0.062)	0.155** (0.062)
Constant	-0.227** (0.101)	-0.243** (0.101)	-0.155 (0.099)	-0.211** (0.098)	-0.268*** (0.100)	-0.206** (0.099)	-0.207** (0.095)	-0.201** (0.095)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1106	1106	1106	1106	1106	1106	1106	1106
R ²	0.492	0.493	0.492	0.491	0.495	0.491	0.493	0.491
χ^2	1663***	1666***	1677***	1669***	1674***	1667***	1672***	1670***

Notes: *, **, *** significant at 1%, 5% and 10% level. Robust standard errors in brackets.

Table 5
Random effects regressions of ROA on Crisis, Corporate Governance Index and Subindices

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CGI	-0.001 (0.001)							
CGI-Management		0.001 (0.006)						
CGI-Board			-0.010** (0.005)					
CGI-Remuneration				0.003 (0.005)				
CGI-Shareholder					0.004 (0.005)			
CGI-Ownership						-0.003 (0.005)		
CGI-Audit							0.001 (0.005)	
CGI-Corporate								-0.006 (0.005)
Crisis	-0.160*** (0.043)	-0.111*** (0.032)	-0.080*** (0.028)	-0.046* (0.028)	-0.100*** (0.028)	-0.097*** (0.027)	-0.111*** (0.026)	-0.081*** (0.021)
CGI*Crisis	0.003*** (0.001)							
CGI-Management*Crisis		0.011* (0.006)						
CGI-Board*Crisis			0.005 (0.005)					
CGI-Remuneration*Crisis				-0.001 (0.005)				

CGI-Shareholder*Crisis					0.009*			
					(0.005)			
CGI-Ownership*Crisis						0.008*		
						(0.004)		
CGI-Audit*Crisis							0.012**	
							(0.005)	
CGI-Corporate*Crisis								0.007
								(0.004)
Sale	0.000*	0.000*	0.000*	0.000*	0.000*	0.000*	0.000*	0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Debt	-0.905***	-0.908***	-0.911***	-0.913***	-0.910***	-0.911***	-0.910***	-0.913***
	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)
Size	0.045***	0.046***	0.045***	0.046***	0.046***	0.046***	0.044***	0.047***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)
Industry	0.091	0.088	0.088	0.088	0.104*	0.089	0.091	0.089
	(0.061)	(0.061)	(0.061)	(0.062)	(0.062)	(0.062)	(0.062)	(0.062)
Construction	0.181***	0.176***	0.174***	0.178***	0.194***	0.179***	0.181***	0.177***
	(0.063)	(0.063)	(0.063)	(0.064)	(0.064)	(0.064)	(0.064)	(0.064)
Energy	-0.002	-0.005	-0.009	-0.004	0.019	-0.005	-0.010	-0.005
	(0.084)	(0.084)	(0.084)	(0.085)	(0.086)	(0.085)	(0.085)	(0.085)
Services	0.160**	0.160**	0.155**	0.156**	0.177***	0.158**	0.160**	0.158**
	(0.062)	(0.062)	(0.062)	(0.063)	(0.063)	(0.062)	(0.062)	(0.063)
Constant	-0.161	-0.204**	-0.131	-0.207**	-0.236**	-0.173*	-0.170*	-0.180*
	(0.103)	(0.102)	(0.099)	(0.100)	(0.102)	(0.100)	(0.096)	(0.096)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1106	1106	1106	1106	1106	1106	1106	1106
R ²	0.498	0.498	0.496	0.496	0.500	0.496	0.499	0.496
χ ²	1732	1728	1715	1730	1744	1731	1746	1739

Notes: *, **, *** significant at 1%, 5% and 10% level. Robust standard errors in brackets.

Table 6
Random effects regressions of Tobins'q on Corporate Governance Index and Subindices

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CGI	0.012*** (0.005)							
CGI-Management		-0.044** (0.022)						
CGI-Board			-0.014 (0.018)					
CGI-Remuneration				-0.006 (0.019)				
CGI-Shareholder					-0.009 (0.018)			
CGI-Ownership						0.001 (0.017)		
CGI-Audit							0.124*** (0.019)	
CGI-Corporate								0.144*** (0.018)
Sale	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Debt	0.450*** (0.019)	0.450*** (0.019)	0.450*** (0.019)	0.450*** (0.019)	0.451*** (0.019)	0.451*** (0.019)	0.446*** (0.019)	0.446*** (0.019)
Size	-0.505*** (0.012)	-0.504*** (0.012)	-0.503*** (0.012)	-0.503*** (0.012)	-0.503*** (0.012)	-0.503*** (0.012)	-0.514*** (0.012)	-0.516*** (0.012)
Industry	-0.656** (0.256)	-0.707*** (0.256)	-0.706*** (0.256)	-0.706*** (0.256)	-0.722*** (0.258)	-0.706*** (0.257)	-0.616** (0.251)	-0.611** (0.247)
Construction	-0.585** (0.264)	-0.646** (0.263)	-0.657** (0.264)	-0.652** (0.264)	-0.668** (0.266)	-0.651** (0.265)	-0.548** (0.259)	-0.485* (0.255)

Energy	0.625 [*] (0.353)	0.561 (0.353)	0.568 (0.354)	0.570 (0.354)	0.551 (0.357)	0.576 (0.354)	0.465 (0.347)	0.424 (0.341)
Services	-0.834 ^{***} (0.257)	-0.915 ^{***} (0.257)	-0.899 ^{***} (0.257)	-0.892 ^{***} (0.258)	-0.914 ^{***} (0.260)	-0.895 ^{***} (0.258)	-0.785 ^{***} (0.253)	-0.763 ^{***} (0.248)
Constant	6.629 ^{***} (0.342)	7.338 ^{***} (0.322)	7.174 ^{***} (0.314)	7.123 ^{***} (0.312)	7.159 ^{***} (0.325)	7.091 ^{***} (0.317)	6.541 ^{***} (0.304)	6.599 ^{***} (0.293)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1106	1106	1106	1106	1106	1106	1106	1106
R ²	0.103	0.103	0.101	0.100	0.100	0.100	0.114	0.126
χ^2	3601 ^{***}	3584 ^{***}	3576 ^{***}	3574 ^{***}	3575 ^{***}	3573 ^{***}	3743 ^{***}	3804 ^{***}

Notes: * **, *** significant at 1%, 5% and 10% level. Robust standard errors in brackets.

Table 7
Random effects regressions of Tobin's on Crisis, Corporate Governance Index and Subindices

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CGI	0.012*** (0.005)							
CGI-Management		-0.045** (0.022)						
CGI-Board			-0.015 (0.018)					
CGI-Remuneration				-0.004 (0.019)				
CGI-Shareholder					-0.009 (0.018)			
CGI-Ownership						0.000 (0.017)		
CGI-Audit							0.122*** (0.019)	
CGI-Corporate								0.142*** (0.017)
Crisis	-0.022 (0.030)	-0.036 (0.023)	-0.033* (0.019)	-0.014 (0.020)	-0.028 (0.020)	-0.030 (0.019)	-0.018 (0.018)	-0.018 (0.015)
CGI*Crisis	-0.000 (0.001)							
CGI-Management*Crisis		0.002 (0.004)						
CGI-Board*Crisis			0.001 (0.003)					
CGI-Remuneration*Crisis				-0.003 (0.003)				

CGI-Shareholder*Crisis					0.000 (0.003)			
CGI-Ownership*Crisis						0.001 (0.003)		
CGI-Audit*Crisis							-0.001 (0.003)	
CGI-Corporate*Crisis								-0.002 (0.003)
Sale	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Debt	0.457*** (0.019)	0.457*** (0.019)	0.458*** (0.019)	0.458*** (0.019)	0.458*** (0.019)	0.458*** (0.019)	0.452*** (0.019)	0.452*** (0.019)
Size	-0.495*** (0.012)	-0.495*** (0.012)	-0.494*** (0.012)	-0.493*** (0.012)	-0.494*** (0.012)	-0.494*** (0.012)	-0.504*** (0.012)	-0.506*** (0.012)
Industry	-0.646** (0.254)	-0.696*** (0.254)	-0.695*** (0.254)	-0.694*** (0.254)	-0.711*** (0.256)	-0.695*** (0.255)	-0.606** (0.249)	-0.602** (0.245)
Construction	-0.577** (0.262)	-0.638** (0.262)	-0.648** (0.262)	-0.642** (0.262)	-0.659** (0.264)	-0.642** (0.263)	-0.541** (0.257)	-0.480* (0.253)
Energy	0.612* (0.350)	0.550 (0.350)	0.556 (0.351)	0.557 (0.351)	0.539 (0.354)	0.564 (0.352)	0.455 (0.344)	0.415 (0.339)
Services	-0.818*** (0.255)	-0.899*** (0.255)	-0.881*** (0.255)	-0.874*** (0.255)	-0.897*** (0.258)	-0.878*** (0.256)	-0.769*** (0.250)	-0.749*** (0.247)
Constant	6.516*** (0.342)	7.228*** (0.322)	7.058*** (0.314)	6.988*** (0.312)	7.040*** (0.325)	6.980*** (0.317)	6.429*** (0.303)	6.491*** (0.293)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1106	1106	1106	1106	1106	1106	1106	1106
R ²	0.104	0.104	0.102	0.102	0.101	0.101	0.116	0.128
χ^2	3595***	3585***	3570***	3564***	3569***	3573***	3724***	3793***

Notes: *, **, *** significant at 1%, 5% and 10% level. Robust standard errors in brackets.

Table 8
Pooled Tobit of Dividend to Earnings on Corporate Governance Index and Subindices

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CGI	0.243** (0.097)							
CGI-Management		0.924* (0.477)						
CGI-Board			0.327 (0.389)					
CGI-Remuneration				0.506 (0.399)				
CGI-Shareholder					0.068 (0.380)			
CGI-Ownership						0.292 (0.363)		
CGI-Audit							0.999** (0.452)	
CGI-Corporate								1.326*** (0.377)
ROA	40.317*** (8.791)	40.361*** (8.749)	40.430*** (8.695)	39.493*** (8.653)	40.199*** (8.690)	40.274*** (8.697)	40.590*** (8.818)	37.727*** (8.733)
Tobin's q	-2.259 (1.663)	-1.805 (1.647)	-1.983 (1.645)	-1.912 (1.644)	-1.982 (1.648)	-1.967 (1.648)	-2.473 (1.679)	-2.884* (1.676)
Sale	0.844 (1.341)	0.956 (1.414)	0.916 (1.362)	0.908 (1.360)	0.950 (1.376)	0.924 (1.352)	0.993 (1.402)	0.909 (1.404)
Debt	-3.710 (4.407)	-4.296 (4.385)	-3.656 (4.411)	-4.204 (4.393)	-4.117 (4.390)	-3.861 (4.400)	-4.961 (4.457)	-2.803 (4.373)
Size	1.143** (0.507)	1.413*** (0.515)	1.261** (0.507)	1.318*** (0.510)	1.265** (0.509)	1.279** (0.509)	0.892* (0.527)	0.501 (0.533)

Industry	0.588 (4.964)	-0.053 (4.924)	-0.248 (4.963)	-0.157 (4.950)	0.016 (5.024)	0.156 (4.982)	0.156 (4.991)	0.623 (5.102)
Construction	0.383 (5.179)	-0.369 (5.142)	-0.194 (5.173)	-0.352 (5.169)	0.016 (5.226)	0.071 (5.188)	0.105 (5.206)	1.180 (5.313)
Energy	3.396 (6.431)	2.420 (6.391)	2.334 (6.440)	2.655 (6.434)	2.358 (6.548)	2.519 (6.470)	1.553 (6.476)	2.396 (6.523)
Services	1.532 (5.044)	1.188 (5.007)	0.647 (5.040)	0.443 (5.035)	0.936 (5.128)	0.979 (5.055)	1.228 (5.071)	1.403 (5.175)
Constant	-36.258*** (9.273)	-35.275*** (9.377)	-30.186*** (8.867)	-31.414*** (8.949)	-28.893*** (9.137)	-30.468*** (9.010)	-28.500*** (8.594)	-25.032*** (8.583)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1106	1106	1106	1106	1106	1106	1106	1106
Obs. left-censored at zero	920	920	920	920	920	920	920	920
χ^2	68.635***	67.020***	65.967***	66.737***	65.623***	65.851***	67.461***	72.325***
Log likelihood	-904.5	-905.9	-907.5	-907.0	-907.8	-907.5	-905.3	-901.3

Notes: *, **, *** significant at 1%, 5% and 10% level. Robust standard errors in brackets.

Table 9
Pooled Tobit of Dividend to Earnings on Crisis, Corporate Governance Index and Subindices

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CGI	0.275** (0.128)							
CGI-Management		0.930 (0.648)						
CGI-Board			0.642 (0.532)					
CGI-Remuneration				0.108 (0.533)				
CGI-Shareholder					-0.006 (0.510)			
CGI-Ownership						0.412 (0.497)		
CGI-Audit							1.262** (0.590)	
CGI-Corporate								1.647*** (0.486)
Crisis	3.294 (5.533)	1.319 (4.166)	4.123 (3.592)	-2.258 (3.480)	0.574 (3.397)	2.311 (3.333)	3.664 (3.694)	3.696 (2.724)
CGI*Crisis	-0.056 (0.147)							
CGI-Management*Crisis		-0.010 (0.727)						
CGI-Board*Crisis			-0.531 (0.614)					
CGI-Remuneration*Crisis				0.666 (0.608)				

CGI-Shareholder*Crisis					0.129 (0.583)			
CGI-Ownership*Crisis						-0.194 (0.563)		
CGI-Audit*Crisis							-0.454 (0.653)	
CGI-Corporate*Crisis								-0.555 (0.516)
ROA	41.520*** (8.874)	41.332*** (8.804)	41.330*** (8.757)	40.600*** (8.719)	41.073*** (8.752)	41.345*** (8.759)	42.277*** (8.956)	39.674*** (8.897)
Tobin's q	-2.308 (1.667)	-1.821 (1.648)	-2.014 (1.647)	-1.875 (1.645)	-1.985 (1.649)	-1.991 (1.648)	-2.574 (1.686)	-2.992* (1.683)
Sale	0.910 (1.385)	1.032 (1.468)	0.976 (1.404)	1.025 (1.446)	1.014 (1.426)	0.994 (1.396)	1.084 (1.449)	0.975 (1.464)
Debt	-3.725 (4.403)	-4.311 (4.382)	-3.777 (4.413)	-4.118 (4.393)	-4.089 (4.387)	-3.869 (4.397)	-4.931 (4.452)	-2.561 (4.377)
Size	1.132** (0.506)	1.405*** (0.514)	1.253** (0.506)	1.308** (0.509)	1.257** (0.508)	1.269** (0.508)	0.886* (0.527)	0.486 (0.534)
Industry	0.654 (4.961)	0.022 (4.922)	-0.196 (4.958)	-0.184 (4.938)	0.099 (5.018)	0.198 (4.976)	0.229 (4.989)	0.617 (5.104)
Construction	0.367 (5.176)	-0.364 (5.137)	-0.223 (5.168)	-0.427 (5.157)	0.029 (5.219)	0.029 (5.182)	0.084 (5.203)	1.070 (5.313)
Energy	3.389 (6.429)	2.433 (6.385)	2.322 (6.435)	2.680 (6.413)	2.410 (6.541)	2.484 (6.465)	1.611 (6.470)	2.494 (6.521)
Services	1.568 (5.041)	1.237 (5.005)	0.678 (5.035)	0.407 (5.024)	0.990 (5.121)	0.987 (5.049)	1.268 (5.069)	1.354 (5.176)
Constant	-38.027*** (9.796)	-35.942*** (9.746)	-32.459*** (9.109)	-29.928*** (9.126)	-29.165*** (9.298)	-31.708*** (9.199)	-30.595*** (8.892)	-27.081*** (8.744)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1106	1106	1106	1106	1106	1106	1106	1106

Obs. left-censored at zero	920	920	920	920	920	920	920	920
χ^2	69.147***	67.526***	66.925***	67.847***	66.123***	66.352***	68.116***	72.695***
Log likelihood	-904.054	-905.494	-906.681	-906.029	-907.381	-907.028	-904.627	-900.374

Notes: *, **, *** significant at 1%, 5% and 10% level. Robust standard errors in brackets.

Table 10
Pooled Tobit of Dividend to Sales on Corporate Governance Index and Subindices

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CGI	0.001** (0.001)							
CGI-Management		0.005* (0.003)						
CGI-Board			0.000 (0.002)					
CGI-Remuneration				0.001 (0.002)				
CGI-Shareholder					-0.000 (0.002)			
CGI-Ownership						0.000 (0.002)		
CGI-Audit							0.006** (0.002)	
CGI-Corporate								0.008*** (0.002)
ROA	0.233*** (0.039)	0.233*** (0.039)	0.232*** (0.039)	0.230*** (0.039)	0.231*** (0.039)	0.232*** (0.039)	0.234*** (0.039)	0.219*** (0.038)
Tobin's q	-0.001 (0.008)	0.001 (0.008)	0.001 (0.008)	0.001 (0.008)	0.001 (0.008)	0.001 (0.008)	-0.002 (0.008)	-0.005 (0.008)
Sale	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)
Debt	-0.093*** (0.023)	-0.095*** (0.022)	-0.093*** (0.022)	-0.095*** (0.022)	-0.094*** (0.022)	-0.094*** (0.022)	-0.099*** (0.023)	-0.084*** (0.022)
Size	0.013*** (0.003)	0.014*** (0.003)	0.013*** (0.003)	0.013*** (0.003)	0.013*** (0.003)	0.013*** (0.003)	0.011*** (0.003)	0.008*** (0.003)

Industry	-0.007 (0.025)	-0.010 (0.025)	-0.011 (0.025)	-0.011 (0.025)	-0.011 (0.026)	-0.010 (0.025)	-0.008 (0.025)	-0.007 (0.025)
Construction	-0.007 (0.027)	-0.011 (0.026)	-0.010 (0.026)	-0.011 (0.026)	-0.011 (0.027)	-0.010 (0.026)	-0.008 (0.026)	-0.004 (0.026)
Energy	-0.003 (0.034)	-0.008 (0.033)	-0.009 (0.034)	-0.008 (0.034)	-0.010 (0.034)	-0.009 (0.034)	-0.012 (0.034)	-0.010 (0.033)
Services	-0.004 (0.026)	-0.006 (0.025)	-0.008 (0.026)	-0.009 (0.026)	-0.009 (0.026)	-0.008 (0.026)	-0.005 (0.026)	-0.006 (0.025)
Constant	-0.211*** (0.049)	-0.209*** (0.049)	-0.175*** (0.046)	-0.182*** (0.047)	-0.170*** (0.048)	-0.175*** (0.047)	-0.174*** (0.045)	-0.146*** (0.043)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1106	1106	1106	1106	1106	1106	1106	1106
Obs. left-censored at zero	915	915	915	915	915	915	915	915
χ^2	137.017***	137.028***	135.560***	135.758***	135.686***	135.557***	137.751***	145.604***
Log likelihood	80.297	79.572	77.629	77.850	77.614	77.612	80.999	87.480

Notes: *, **, *** significant at 1%, 5% and 10% level. Robust standard errors in brackets.

Table 11
Pooled Tobit of Dividend to Sales on Corporate Governance Index and Subindices

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CGI	0.002*** (0.001)							
CGI-Management		0.007** (0.003)						
CGI-Board			0.005* (0.002)					
CGI-Remuneration				0.002 (0.003)				
CGI-Shareholder					-0.000 (0.002)			
CGI-Ownership						0.001 (0.002)		
CGI-Audit							0.007*** (0.003)	
CGI-Corporate								0.010*** (0.002)
Crisis	0.035 (0.022)	0.021 (0.016)	0.037*** (0.014)	0.003 (0.014)	-0.001 (0.013)	0.007 (0.013)	0.011 (0.015)	0.008 (0.011)
CGI*Crisis	-0.001* (0.001)							
CGI-Management*Crisis		-0.004 (0.003)						
CGI-Board*Crisis			-0.007*** (0.002)					
CGI-Remuneration*Crisis				-0.001 (0.002)				

CGI-Shareholder*Crisis					0.000 (0.002)			
CGI-Ownership*Crisis						-0.001 (0.002)		
CGI-Audit*Crisis							-0.002 (0.003)	
CGI-Corporate*Crisis								-0.002 (0.002)
ROA	0.236*** (0.039)	0.233*** (0.039)	0.226*** (0.039)	0.228*** (0.039)	0.230*** (0.039)	0.231*** (0.039)	0.237*** (0.040)	0.221*** (0.039)
Tobin's q	-0.001 (0.008)	0.001 (0.008)	0.000 (0.008)	0.001 (0.008)	0.001 (0.008)	0.000 (0.008)	-0.003 (0.008)	-0.005 (0.008)
Sale	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)
Debt	-0.094*** (0.022)	-0.094*** (0.022)	-0.096*** (0.022)	-0.095*** (0.022)	-0.094*** (0.022)	-0.094*** (0.022)	-0.099*** (0.023)	-0.083*** (0.022)
Size	0.013*** (0.003)	0.014*** (0.003)	0.013*** (0.003)	0.013*** (0.003)	0.013*** (0.003)	0.013*** (0.003)	0.011*** (0.003)	0.008*** (0.003)
Industry	-0.007 (0.025)	-0.010 (0.025)	-0.011 (0.025)	-0.011 (0.025)	-0.011 (0.026)	-0.011 (0.025)	-0.009 (0.025)	-0.008 (0.025)
Construction	-0.008 (0.026)	-0.011 (0.026)	-0.011 (0.026)	-0.011 (0.026)	-0.011 (0.027)	-0.010 (0.026)	-0.009 (0.026)	-0.004 (0.026)
Energy	-0.003 (0.034)	-0.007 (0.033)	-0.010 (0.034)	-0.008 (0.034)	-0.010 (0.034)	-0.009 (0.034)	-0.012 (0.034)	-0.009 (0.033)
Services	-0.005 (0.026)	-0.005 (0.025)	-0.009 (0.025)	-0.009 (0.026)	-0.009 (0.026)	-0.008 (0.026)	-0.006 (0.026)	-0.006 (0.025)
Constant	-0.230*** (0.050)	-0.223*** (0.050)	-0.195*** (0.047)	-0.184*** (0.048)	-0.169*** (0.048)	-0.179*** (0.048)	-0.181*** (0.046)	-0.151*** (0.043)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1106	1106	1106	1106	1106	1106	1106	1106

Obs. left-censored at zero	915	915	915	915	915	915	915	915
χ^2	140.547***	139.543***	144.878***	136.302***	135.789***	136.007***	138.408***	146.268***
Log likelihood	81.760	80.609	81.901	77.918	77.633	77.854	81.391	88.101

Notes: *, **, *** significant at 1%, 5% and 10% level. Robust standard errors in brackets.

Annex

Definitions of Variables

Variable	Description
ROA	Earnings before interest and taxes to total assets
Tobin's q	Log of [market value of assets / book value of assets]. Market value of assets is estimated as market value of common stock + market value of preferred stock + book value of debt.
Dividends to Earnings	Cash dividends to total earnings
Dividends to Sales	Cash dividends to sales
Sales	Percentage sales growth
Debt	Book value of debt to book value of assets
Size	Log of book value of assets.
Crisis	This variable takes the value 1 for the years 2008-2009, and 0 otherwise.
Industry Dummy	This variable takes the value 1 if the company belongs to the industrial sector, and 0 otherwise. The activity classification is taken from the NACE.
Construction Dummy	This variable takes the value 1 if the company belongs to the construction sector, and 0 otherwise. The activity classification is taken from the NACE.
Energy Dummy	This variable takes the value 1 if the company belongs to the energy sector, and 0 otherwise. The activity classification is taken from the NACE.
Telecom Dummy	This variable takes the value 1 if the company belongs to the telecom sector, and 0 otherwise. The activity classification is taken from the NACE.
Services Dummy	This variable takes the value 1 if the company belongs to the service sector, and 0 otherwise. The activity classification is taken from the NACE.