The impact of board characteristics on corporate performance: a balanced approach between strategy and control.

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Abstract

Recent corporate governance regulations have successfully reduced corporate risk, as perceived by shareholders. This lower perceived risk is due to less bankruptcies, fraud, and earning restatement risks. However, the application of these same regulations has not been shown to increase corporate performance. Some recent research has explained this by the fact that there is a tendency to focus too much on the control and monitoring aspects of governance, while forgetting the important elements of corporate strategy. The objective of this study is to determine the impact of both strategy and control on overall corporate risk and performance, as perceived by shareholders. We used a sample of Canadian publicly listed companies, over a three-year period. Using regression analysis, the results of our study show that a strategic approach used by the board does in fact increase corporate perceived risk and the cost of equity capital; however, when these same companies adhere to audit committee regulations, this increased risk is mitigated. The results of our study contribute to the corporate governance literature and practices by encouraging boards of companies to not have to choose between a control and monitoring approach versus a more strategic approach. Instead, corporations should be focusing on a balanced approach to corporate governance, such as including strategic board members, while delegating the monitoring activities to the audit committee.

Keywords: Board of directors, audit committee, cost of equity capital, corporate governance.

Introduction

The financial scandals that have negatively affected financial markets and caused significant losses to investors have mainly been attributed to some defects in corporate governing systems. Regulations put in place to respond to these scandals, such as Sarbanes-Oxley in the United States, and the principles of best practices of governance in Canada and elsewhere, were aimed at improving governance practices and restoring investors' confidence in financial markets. The Canadian regulation on the Board of directors, like many others national regulations, is intended to achieve "a balance between the objectives of ensuring investors protection, foster fair and efficient capital markets, and bolster confidence in financial markets." This procedure implicitly assumes that the stock market reacts positively to the improvement of internal governance mechanisms, hence our query concerns the nature of an alleged relationship between improving internal governance practices and the positive response of financial markets.

Internal corporate governance practices are ensured through several structures and mechanisms that merge the divergent interests of managers, toward the value maximization of the firm (Agrawal and Knoeber, 1996), mainly by ensuring better performance, limiting the transfer of wealth in favor of managers, and reducing the risk of dispossessing shareholders (Parrat, 2003). One way of maximizing value for shareholders is to reduce financing costs (Naciri, 2006), through the minimization of the rate of the return required by investors, i.e. the cost of equity capital. The cost of the capital is the discount rate that the market applies to the company's expected

future cash flows, given a certain level of risk, for the computation of its current share price (Botosan and Plumlee 2005; McInnis, 2010). Consequently, the lower the rate is, the higher the share price will be. Actually, improving internal governance mechanisms may prove to represent the best way of insuring the respect of shareholders rights and reducing their risk of being dispossessed of their equity in the company (Finet, 2005).

The relationship between internal governance mechanisms and the firm's financial performance has been largely documented (Bhagat and Black, 2002, Agrawal and Knobe, 1996, Bhagat and Bolton, 2008; Iyangar and Zampella, 2009) and so their effect on the company's risk (Beasley, 1996, Dechow, Sloan and Sweeney, 1996; Persons, 2006 Agrawal and Chadha, 2005, Daily 1996), no study has, however, dealt with the issue of the impact of board practices (non duality) and audit committee characteristics on the firm's cost of the equity capital. This paper aims in filling such gap by addressing this issue, for the first time, while highlighting the differences between firms that are only subjected to Canadian regulations and those that are submitted to both Canadian and U.S. regulations on board of directors. This is important because good corporate governance includes both strategic decision making along with monitoring and control practices; they should not be mutually exclusive (Leblanc and Gillies, 2005).

Our results suggest that when the board of directors uses a strategic approach and practices non-duality (the CEO is also the Chairman of the Board) the perceived cost of capital increases. However, when the Board of Directors has an effective Audit Committee the perceived cost of capital actually decreases. Our analysis shows a significant negative relationship between audit committee characteristics and the firm's cost of equity capital. Therefore, corporations can pursue a strategic board approach as long as they have an effective Audit Committee. The remainder of the paper is organized as follows: the second section is devoted to literature review and hypotheses development, the third section deals with the research methodology, the fourth section presents the results of the study and the final section contains conclusion and discussion.

Literature review and hypotheses:

The quality institutions and laws regulating the financial market seem to depend on the level of its development and sophistication (LaPorta, Lopez-de-Silanes, Shleifer and Vishny, 1997, 2006). Further, a legal system that fulfills its functions efficiently is supposed to protect outside investors and hence improve the ability of the firm to increase its external funding and to take complete advantage of its growth opportunities. The strong protection of outside investors would always limit their expropriation by managers and would thus secure the firm's financing through the financial market (Hail and Leuz, 2006). In this regard, the Canadian capital market has undergone tremendous changes in the 2000; it was reexamined in both its legal, institutional and operational structures (Carnaghan and Gunz, 2007) to fit new reality. The latest changes to Canadian regulations regarding corporate governance practices of listed companies, have dealt primarily with the board of directors and its audit committee. Unlike the U.S. regulations on the same issue, Canadian regulations adopt a voluntary approach, based mainly on a series of suggestions of best practices regarding board and audit committee. Apart from such difference in approach, the Canadian regulations would seem to be very similar to their American equivalents.

1. The relation between the characteristics of the board and the audit committee and the firm's cost of equity capital

Authors agree that one of the main responsibilities of the board is to insure the appropriate monitoring of the firm's management (Naciri, 2008.2010; Fama and Jensen, 1983; Charral, 1997) and to have the responsibility and the power to hire and fire managers (Jensen, 1993). To monitor mangers and ensuring their adherence to 5

corporate governance rules, the board usually relies on its audit committee. The mean by which investors assess the efficiency by which the board is fulfilling rightly the job is usually measured by the investors' required rate of return, i.e. the cost of equity capital) (Khurana and Raman 2006). Consequently, several studies focused on the relationship between the board's characteristics, such as board independence, board size, duality of the chairman, etc. and the company's financial performance. A strong relationship between poor performance and increased board independence was commonly reported (Agrawal and Knobe1996, Bhagat and Black 2002, Bhagat and Bolton 2008, Iyengar and Zampella 2009, Bhagat and Black 2000). It was also suggested a negative relationship between the proportion of independent directors and company's performance (Agrawal and Knoeber 1996). Few studies found, however, that the stock price increases when companies appoint outside directors (Rosenstein and Wyatt 1990). Others studies completely failed to establish any significant relationship between the duality of the chairman of the board and the financial performance (Iyengar and Zampella 2009), while some found a significant negative relationship (Bhagat and Bolton 2008).

Needless to underline the confusion that predominates the research landscape with regard to the possible effects of board's characteristics on the company's financial performance. It is, however, largely admitted that board endeavors toward putting in place appropriate corporate governance structure are mainly guided by its willingness to maximize the firm's market value (Agrawal and Knoeber 1996). This is done by putting in place appropriate governance mechanisms that ensure investors protection of their investment in the company, reducing their risk of being dispossessed of their assets and providing them better financial performance (Shliefer and Vishny 1997). We can therefore than hypothesize a relationship between the board characteristics and the investors' required return, as expressed by the firm's cost of equity capital:

H1a: The characteristics of the board of directors, such as board size, board independence and non-duality of the chairman, are related to the cost of equity capital.

Canadian corporate governance regulations have focused primarily on improving the board characteristics and committees. The National Policy 58-201, suggests that firms should have a board of directors that contains a majority of independent members and that is chaired by an independent Chairman. It also suggests that the firm should have a code of ethics and a written charter that clearly defining the role and responsibilities of the board and the managers. This National Policy also recommends to the companies to ensure meetings with independent directors only, to conduct a periodic assessment and provide ongoing training for all board members. Canadian governmental intervention in financial markets, implicitly assumes that the stock market reacts positively to the improvement of internal governance mechanisms. We can therefore expect that the improvement in characteristics of the board, as suggested by The National Policy 58-201, to affect the risk of investors and to lead in this case to a diminution in the risk premium required by investors and included in the cost of equity capital, and this justifies our second hypothesis:

H1b: The overall board's characteristics suggested by Canadian regulation is related to the cost of equity capital.

2. The relationship between the characteristics of the audit committee and the cost of equity capital

Canadian regulations on corporate governance also emphasis the role played by the audit committee. Indeed, like the SOX in U.S., the Canadian National Policy 52-110 makes the audit committee mandatory for Canadian listed companies (unlike for the rest of the rules on the board). These regulations give an important role to the audit committee in monitoring, detecting and preventing frauds, therefore reducing shareholders' risk and improving the quality of the financial information they receive from the company. Some research findings seem to back up the stand of Canadian regulations with regard to the audit committee; the size and independence of the audit committee seem, indeed, to be negatively related to the cost of debt. (Anderson,

Mansi and Reeb 2004). Further, companies with independent audit committee seem to be less likely to be prosecuted for financial fraud (Abbott Park and Parker 2000). Finally, it is argued that the stock market reacts favorably to the appointment of a financial expert among the members of the Audit Committee (Defond, Hann and Hu 2005). It can therefore be expected that the characteristics of the audit committee, that affect the performance, the oversight, the disclosure and the prevention of risk, to be related to the cost of capital. We can therefore hypothesis that:

H 2a: The characteristics of the audit committee, such as the size of the committee and the presence of a financial expert among its members, are related to the cost of equity capital.

In addition to the features of the audit committee studied in the literature, such as the Audit Committee size, its level of independence and the presence of a financial expert within its members (Defond et al., 2005, Anderson et al. 2004), Canadian regulations also require the complete independence of the audit committee, a minimum of three members and a written mandate. Such additional requirement can be expected to add more efficiency to the fraud detection role, exercised by the audit committee, helps improving disclosure and consequently to induce more positive impact on the cost of equity capital. We can therefore assume that:

H2b: The overall characteristics of the audit committee, as set out by Canadian regulations, are related to the cost of equity capital.

Research Methodology:

To test our hypotheses we use the following model:

 $CC = \beta_0 + \beta_1(BC) + \beta_2AI + \beta_3Deptratio + \beta_4US + \beta_5Sector + \beta_6size + \beta_7Beta + \varepsilon_1$

Where:

CC: cost of capital measured by the formula of Nauroth Juettner and Ohlson (2005).

BC: Characteristics of the board or the Audit committee.

AI: asymmetry of information measured by the ratio : market to book ratio [market value by net book value]

Size: natural log of the market capitalization of the company during the year of analysis.

U.S.: takes the value 1 if the company is subject to U.S. regulation and 0 if not.

Sector: Industry as defined on SEDAR. We identified 9 industries coded 1 to 9.

Debt ratios : [Long Term debt / total assets].

Beta: the business risk compared to market risk as measured by the sensitivity of stock price of the company in relation to changes in market prices.

Bi: coefficients of the explanatory variables. and

Ei: model error.

Finally, the cost of capital is determined by the method of earnings per share is calculated using the formula and Ohlson Juettner-Nauroth (2005), which is as follows:

$$r_{PEG_0} = \sqrt{\frac{eps_2 - eps_1}{p_0}}$$

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Where:

 $r_{PEG}(0)$: estimate the cost of capital at the date of interest.

Eps(t): analysts' forecasts for earnings per share at 12 and 24 month from the date of interest.

P(o): stock price at the time of analysis.

Sample selection:

Our sample is composed of Canadian companies that were part of the S & P / TSX 300 Toronto index in 2004, 2005 and 2006. The choice is based on the fact that companies included in this index covers about 95% of all shares traded on the Canadian market. The data collection covers the period 2004 to 2006.

The final sample is composed by 139 firm-years observation. Over 70% of companies listed on both U.S. and Canadian markets. Over 60% of the sample firms have a chairman who does not hold the position of Chief Executive Officer (non-duality). For more than 50% of sample firms, the audit committee is composed of 3 members or more.

Descriptive Statistics:

Table 2 describes the financial data; companies' board size in the sample varies within an interval of 5 to 17 members and the size of the audit committee varies between 3 to 7 members.

Table 3 describes board and audit committee characteristics. The score board is initially unweighted and based a gradation of 9 levels, in accordance with Canadian

regulations. It varies for all companies in the sample, within an interval of 0 to 9, with a mean and a standard deviation of 5.63 and 2.18 respectively. For the weighted score board according to experts assessment, the variation is between 0 and 12.48, with a mean and standard deviation of 7.95 and 2.92. The unweighted score for the Audit Committee is initially based on gradation of 5 levels and varies between 0 to 5, with a mean of 4.45 and standard deviation of 0.60. The weighted score for the audit committee is computed by multiplying each element by the average experts' weights and it varies in range of 2.25 to 6.63 points, with a mean of 5.97 and standard deviation of 0.6.

Variables	Minimum	Maximum	Mean	Standard	Variance
				deviation	
Board size	5	17	10,453	3,08	9,481
Audit committee size	3	7	3,84	1,037	1,076
Independence ratio of the	0,375	0,9375	0,747	0,1345	0,018
board					
Cost of equity capital	0	18,652	6,485	4,232	17,91
Price to book ratio	0,53	17,595	3,076	2,194	4,817
Long term debt ratio	0	0,565	0,166	0,142	0,020
BETA	-0.419	1 615	0 8577	0 7855	0.6171
DLIA	-0,+1)	7,075	0,0377	0,7055	0,0171

Table 2: Descriptive statistics on financial data

Variable	Minimum	Maximum	Means	Standard	Variance
				deviation	
Unweighted board score	0	9,00	5,6294	2,18083	4,756
Unweighted audit committee score	2,00	5,00	4,4545	0,60196	0,362
Weighted board score					
Weighted audit committee score	0	12,48	7,9544	2,91896	8,520
	2,25	6,63	5,9773	0,77107	0,595

Table 3: descriptive statistics on board and audit committee characteristics

There strong correlations between the variables expressing the board of directors and the audit committee characteristics, as evident by the correlation matrix presented in appendix 1. Consequently, we chose to introduce one by one, these variables in our model.

Multivariate analysis:

- Relationship between the characteristics of the board and the cost of equity capital

Appendix 2 shows that several indicators are used in the analysis models to explain the relationship between the characteristics of the board and the cost of equity capital, such as the board size, board independence, and the two scores developed. To test the relationship between the cost of equity capital and the variables, the simple linear regression is used, with ordinary least squares. Only the non-duality of the Chairman seems positively and significantly related to the cost of equity capital for firms in the sample, as indicate in Appendix 2. This finding partially confirms our hypothesis H1a. The hypothesis H1b, tested with the developed board scores, however, seems to be rejected. In light of these results, there is no relationship between overall board features, as required by Canadian regulation and the cost of equity capital.

- Relationship between the characteristics of the audit committee and the cost of equity capital:

The models used relate the cost of capital to the set of explanatory variables as the size of the audit committee, the presence of an expert on this committee and the two weighted and unweighted scores of this committee (see appendix 3). The coefficient of the audit committee size is significantly positive. The size of the audit committee seems to be positively related to the cost of equity capital of the firms of the sample. This finding partially confirms our hypothesis H2a.

Models 8 and 9 in appendix 3 show that the weighted and unweighted scores of the audit committee are both negatively and significantly related to the cost of capital. The overall characteristics of the audit committee are then related to the cost of capital and this confirms our hypothesis H2b. These results indicate that for firms that are most in accordance with Canadian regulations regarding the requirements of the Audit Committee have lower costs of capital.

Conclusion and discussion

The results of our study show that even though non-duality increases a corporation perceived cost of capital, an effective audit committee with mitigate this increased corporate risk, and actually lower the cost of capital (see Figure 1). Therefore the Chairman of the audit committee who is also the CFO or CEO (duality) can be strategic as long as the audit committee is effective to assure monitoring and compliance, mitigating perceived corporate risk (measured by the costs of capital). To the best of our knowledge, this is the first study to include the results of these two board characteristics. Our results are important since they provide evidence that a Board of Directors could enhance corporate strategy at the board level without

worrying about increased perceived risk as long at the audit committee performs effectively according to it's prescribed regulations.

More precisely, this study results also show that the independence and the size of board and chairman independence do not affect the cost of capital for firms in the sample. Our findings regarding board independence are consistent with Bhagat and Bolton (2008), Yermak (1996) and Daily et al. (2008) who were unable to establish a significant relationship between independence and financial indicators.

The study results indicate no significant relationship between board overall characteristics and the cost of capital, as measured by the scores of the Board. Such results are in line with those of Cereol and Epps (2004) and the findings of Bhagat et al. (2008) in the sense that the characteristics of governance, as measured by scores or measurement indices are not related to the company's financial indicators.

Analyses show that the size of the audit committee positively affects the cost of capital for firms in the sample. This finding is consistent with those of Yermak (1996) and Karamanou and Vafeas (2005) concerning the relationship between the size of the board of directors and financial performance of the company. These authors found a significant negative relationship between board size and financial performance of the company. Our result can be explained by the fact that a committee of large size, like a large board, is perceived as inflexible and less efficient (Yermak, 1996; Karamanou and VAFEAS, 2005). The results are sensitive to the period of study.

The study results show a significant positive relationship between non-duality of the Chairman. The separation of the functions of CEO and chairman is generally recommended for the separation of the functions of management and control, in order to avoid the entrenchment of the CEO (Fama and Jensen, 1983). From this point of view, non-duality of the Chairman is a preventive measure that reduces the risk for shareholders of being dispossessed. From another point of view, having an in house manager at the head of the board, can prove to be beneficial; It may allow the board to

better accomplish its task of monitoring and supervising (Iyengar and Zampella, 2009) and its strategic task.

The results reveal a robust negative relationship between all the characteristics of the audit committee and the cost of capital. More companies comply with regulations regarding audit committee over the impact on the cost of capital is visible. This finding is consistent with Anderson, Mansi and Reeb (2004), who found a negative relationship between certain characteristics of the audit committee, such as independence and size, and cost of debt.

The results have certain inherent limitations to measurements of variables such as the board characteristics or the cost of capital. Regarding the presence of a financial expert within the audit committee, our measure is based solely on the requirement of having a title of financial accounting and not on the experience of the person designated by the Board as an expert. This helped to avoid subjective interpretation of financial expertise of board members; however, it might also exclude many individuals with the required financial experience. This may explain the fact that no relationship was found between the presence of a financial expert on the audit committee and the cost of capital. Finally, our study was conducted over a period of three years only. Expanding the study period would have a better idea of the changing characteristics of the board and its committees and financial benefits of this development.





	1	2	3	4	5	6	7	8	9	10	11	12
1.AC Size	1	0,41**	0,43**	0,168*	0,305**	0,137	0,32**	0,132	0,40**	-0,111	0,159	0,177
2.Board Size	0,41**	1	0,112	0,012	0,18*	0,093	0,16*	0,073	0,66**	-0,123	0,020	0,24*
3.Board Independence	0,43**	0,112	1	0,06	0,26**	0,066	0,29**	0,095	0,16*	-0,18*	-0,067	-0,041
4.CC	0,168*	0,012	0,056	1	0,040	-0,099	0,084	-0,113	0,151	0,009	-0,133	-0,064
5.UWBS	0,305**	0,18*	0,26**	0,040	1	0,38**	0,97**	0,38**	0,31**	0,084	0,121	0,065
6.UWACS	0,137	0,093	0,066	-0,099	0,38**	1	0,36**	0,97**	0,17*	0,034	0,030	-0,031
7.WBS	0,32**	0,16*	0,29**	0,084	0,97**	0,36**	1	0,36**	0,295**	0,018	0,097	0,087
8.WACS	0,132	0,073	0,095	-0,113	0,38**	0,97**	0,36**	1	0,17*	0,030	0,027	-0,033
9.Size	0,40**	0,66**	0,165*	0,15 3	0,31**	0,17*	0,30**	0,17*	1	-0,122	-0,25**	0,29**
10.BETA	-0,111	-0,123	-0,18*	0,009	0,084	0,034	0,018	0,030	-0,122	1	0,131	-0,28**
11.PRICE TB	0,16 ³	0,020	-0,067	-0,133	0,121	0,030	0,097	0,027	-0,25**	0,131	1	-0,096
12.Dept RATIO	0,177	0,24**	-0,041	-0,064	0,065	-0,031	0,087	-0,033	0,29**	-0,28**	-0,096	1

Appendix 1: Correlation Matrix

**Significant at 1% level (Bilateral). * Significant at 5% level (Bilateral). Significant at 10% level (Bilateral).

AC size: Total members on audit committee.

Board size: number of members on the board.

Board independence: ratio; number of independent members of the board / total board members.

CC : cost of equity capital based on Ohlson et Juettner-Nauroth (2005) model.

UWBS : Unweighted board score ; 1 point for each of the 9 characteristics.

WBS: weighted board score based on expert consultation average weight of each characteristic.

UWACS: Unweighted audit committee score; 1 point for each of the 5 characteristics.

WACS: weighted audit committee score based on expert consultation average weight of each characteristic.

Size: Natural log of market value of equity.

BETA: Company's risk compared to market risk based on share price sensitivity.

PRICETB: Ratio; market value / book value of the company.

DebtRatio: Long term dept / total assets.

		-							-	-		
	Intercept	Board size	Board independen	Independence of the board	Non- duality	US	Price to book	Dept ratio	Firm size	BETA	Activity Sector	-
			60	provident								1

Appendix 2: Multivariate models; Cost of equity capital and board characteristics (MCO):

			ce	president									
Model 1	5,065**	-6,044E-02	_	I	_	1,286	-0,287*	-1,491	0,371	-0,117	-0,154	2,1%	1,414
Model 2	4,762	_	0,178	-	_	1,228	-0,285*	-1,782	0,322	-8,99E-02	-0,156	1,9%	1,382
Model 3	4,617**	_	_	0,821	_	1,154	-0,304*	-2,117	0,315	-2,44E-03	-0,130	2,8%	1,563
Model 4	4,386*	_	_		1,284*	1,147	-0,295*	-2,233	0,291	-9,45E-02	-0,136	4%	1,826*
Model 5	4,939**	-5,816E-02	_	1,335	-0,283*	-1,671	0,345	-8,801E-	-0,155	2%	1,397		
								02					
Model 6	4,751**	_	-9,544E-02	1,137	-0,29*	-1,938	0,305	-9,544E-	-0,155	2%	1,402		
								02					

Dependent Variable: cost of equity capital; *Significant at 10% level; **Significant at 5% level; *** Significant at 1% level.

Model 1: Introduced explanatory variable Board size.

Model 2: Introduced explanatory variable Board independence.

Model 3: Introduced explanatory variable Independence of the president of the board.

Model 4: Introduced explanatory variable non-duality of the president of the board.

Model 5: Introduced explanatory variable Unweighted board score.

Model 6: Introduced explanatory variable weighted board score.

Board size: number of members on the board.

Board independence: ratio; number of independent members of the board / total board members.

UWBS: Unweighted board score; 1 point for each of the 9 characteristics.

WBS: weighted board score based on expert consultation average weight of each characteristic.

Firm size: Natural log of market value of equity.

BETA: Company's risk compared to market risk based on share price sensitivity.

PRICETB: Ratio; market value / book value of the company.

DeptRatio: Long term dept / total assets.

US: 1 if the firm is listed on the American stock market and 0 if not.

Adjusted

 \mathbf{R}^2

F

Appendix 3: Multivariate models; Cost of equity capital on audit committee characteristics (MCO)¹

	Intercept	AC size	UWACS	WACS	Financial	US	Price to	Dept Ratio	Firm size	BETA	Activity	Adjusted	F
					expert		book				sector	\mathbf{R}^2	
Model 7	2,656	0,700*	_	_	_	0,973	-0,372**	-2,792	0,252	4,03E-02	-0,118	4,5%	1,794*
Model 8	9,937***	-	-0,998*	_	_	1,228	-0,277*	-1,892	0,391	-9,74E-02	-0,192	3,9%	1,804*
Model 9	10,861***	I	_	-0,90**	I	1,295*	-0,273*	-1,637	0,383	3,01E-02	-0,211	4,6%	1,948*
Model 10	5,057**	_	_	_	-0,718	1,251	-0,273	-1,989	0,347	-0,103	-0,149	2,6%	1,53

Dependent Variable: cost of equity capital; *Significant at 10% level; **Significant at 5% level; *** Significant at 1% level.2

Model 7: Introduced explanatory variable audit committee size.

Model 8: Introduced explanatory variable unweighted audit committee score.

Model 9: Introduced explanatory variable weighted audit committee score.

Model 10: Introduced explanatory variable financial expert.

Audit committee size: number of audit committee members.

UWACS: Unweighted audit committee score; 1 point for each of the 5 characteristics.

WACS: weighted audit committee score based on expert consultation average weight of each characteristic.

Financial expert: 1 if one of the audit committee members is a financial expert and 0 if not.

Firm size: natural log of market value of equity.

BETA: Company's risk compared to market risk based on share price sensitivity.

PRICETB: Ratio; market value / book value of the company.

DeptRatio: Long term dept / total assets.

US: 1 if the firm is listed on the American stock market and 0 if not.

Activity sector: 1 to 9 according to the firm's sector.

¹ Independence of the audit committee Variable has not been introduced in the regressions since nearly 95% of companies in the sample had an audit committee composed of independent members ² For all regressions, we used the cost of capital in percentage.

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