

CEO COMPENSATION AND DISCLOSURE POLICY

by

Weijia Zhang

Bachelor of Economics, Zhejiang University of Finance and Economics, 2015

and

Kun Zhang

Bachelor of Commerce, University of Guelph, 2013

PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE IN FINANCE

In the Master of Science in Finance Program
of the
Faculty
of
Business Administration

© Weijia Zhang, Kun Zhang 2016

SIMON FRASER UNIVERSITY

Fall 2016

All rights reserved. However, in accordance with the *Copyright Act of Canada*, this work may be reproduced, without authorization, under the conditions for *Fair Dealing*. Therefore, limited reproduction of this work for the purposes of private study, research, criticism, review and news reporting is likely to be in accordance with the law, particularly if cited appropriately.

Approval

Name: Weijia Zhang, Kun Zhang
Degree: Master of Science in Finance
Title of Project: CEO Compensation and Disclosure Policy

Supervisory Committee:

Amir Rubin
Senior Supervisor
Associate Professor

Alex Vedrashko
Second Reader
Associate Professor

Date Approved:

Abstract

This paper examines the relationship between CEO compensation and disclosure policy related to corporate governance information within S&P 500 index. Our sample consists of 456 companies for the period from 2005 to 2015. Most previous researchers mainly put their attention on various corporate governance characteristics such as board size, board independence, and executive ownership when analysing CEO compensation. Our paper extends the previous study by dividing corporate governance into two aspects: governance transparency and governance characteristics. We find a significant relationship between CEO total compensation and governance transparency. In addition, a significant positive relationship exists between CEO salary and governance transparency with year and industry fixed effect. The higher transparency, the less option compensation the CEO receives. As for governance characteristic measure, we choose CEO ownership and board independence as independent variables. We find that more CEO ownership leads to less total compensation, salary, and more option awards. However, no significant evidence shows the impact of board independence. The results show that governance with higher transparency can serve as an alternative mechanism for pay-for-performance. When governance transparency is relatively high, the board is able to monitor the CEO better and hence is able to tilt the compensation towards fixed-salary and less pay-for-performance.

Keywords: CEO compensation; corporate governance; governance transparency; CEO ownership; board independence; S&P 500

Acknowledgements

We would like to first say a very big thank you to our supervisor Professor Amir Rubin for introducing us to the topic and methodology as well as his continuous support of our research. This paper would have never been accomplished without his immense knowledge and dedicated involvement in every step through this research process.

We would also like to express our gratitude to Professor Alex Vedrashko for his support of our research project. We really appreciate the help directly and indirectly to complete our final project from all the people.

Last but not least, we would like to thank all Beedie Business School faculties for their help and assistance over the past 16 months.

Table of Contents

Approval.....	i
Abstract	ii
Acknowledgements	iii
Table of Contents	iv
1: Introduction.....	1
2: Literature Review	3
3: Data and Measurement.....	6
4: Methodology and Empirical Results	8
4.1 Summary Statistics	8
4.2 Pearson Correlation Analysis	8
4.3 Difference Test Based on the Level of Governance Score.....	9
4.4 Regression Analysis	9
5: Conclusion.....	11
Appendices	12
Bibliography.....	17
Works Cited.....	17

1: Introduction

With increasing transparency in executive compensation disclosure, one particular question that has attracted both academic and media attention is the sharp increase in CEO compensation, especially compared to the average level of compensation enjoyed by employees. CEO-to-worker compensation ratio was 20 to 1 in 1965, and raised to 303 to 1 in 2014; Inflation adjusted CEO compensation increased 997 percent from 1978 to 2014, the increase almost double stock market growth in same period and dramatic if compared to the 11 percent growth of a typical worker's compensation. Also, during the 2008 financial crisis, many executives received the huge amount of salaries even though their companies were in deep trouble and struggling to avoid bankruptcy. The Securities and Exchange Commission (SEC) has been promoting transparency since 2013.

Conyon and He (2012) address how the quality of internal corporate governance mechanisms would influence intensity of incentive compensation. Agency theory is based on the fact that the objective of the principal and the agent are at conflict at times. Berle and Means (1932) describe the agency problem of separation of control and ownership, Smith (1937) document a caustic remark about the agency problem as the core problem faced by modern companies. Agency conflict is commonly suggested as a major determinant of compensation. Corporate governance mechanisms could effectively reduce the conflicts between shareholders and executives and therefore influence the compensation policy. Yoshikawa and Phan (2001) argue that lower cost margins brought by global competition and rapid technological innovations have forced companies to maximize shareholder value and use their asset effectively. Bencht et al. (2002) document the growth of private savings, deregulation of capital market, worldwide privatization trend together with 1997 East Asia crisis and U.S. corporate scandals have risen the prominent of corporate governance. Furthermore, corporate governance has been refocused as a method of increasing accountability and transparency on CEO compensation. For example, The Dodd-Frank Act provided investors with 'say-on-pay' opportunity to vote for CEO pay.

Besides board structure and ownership structure which are regarded as important monitoring mechanism of managerial behavior, transparency that reflects the openness and willingness of managers to provide clear information to shareholders and other stakeholders is also essential. In this paper, we investigate how corporate governance transparency and other governance characteristics such as CEO ownership and board independence are correlated with CEO compensation in public listed firms by using panel data of companies in S&P 500 from 2005 to 2015. CEO compensation packages are mostly designed to motivate CEO to make decisions aligned with shareholders' objective. Option-based compensation can reduce agency cost. In order to analyse fixed portion and pay-for-performance of executive compensation on governance, we consider the major components such as salary and option awards when measuring CEO compensation.

Our main findings show that higher governance transparency is correlated with higher CEO salary and total compensation. Furthermore, we find that proportion of share owned by executive officer is negatively correlated with total CEO compensation. We also find that higher CEO ownership is negatively correlated with salary pay, but is positively correlated with option compensation, which in turn may lead to their increased ownership in the company.

The remainder of this paper is organized as follow. Section 2 reviews the previous literature on the influence of governance transparency, relation between CEO ownership and CEO pay, as well as board composition and CEO compensation. Section 3 describes the sample and variables which have been used. The research method and empirical results are discussed in Section 4. Section 5 gives conclusions of our work.

2: Literature Review

For modern corporations, corporate governance is essential. It describes the processes and policies of how corporations monitor and administer their behaviour. Good governance is important for a company's reputation because potential investors want to know that their investments are preserved adequately and not subject to agency conflicts.

There have been claims that corporate governance variables such as CEO ownership and board composition are important in shaping CEO compensation. Jensen and Meckling (1976) argue that high level of CEO's share ownership would lead to lower demand for compensation in the form of pay-for-performance. Holderness and Sheehan (1988) show that managers who are majority shareholders in publicly traded firms are likely to receive marginally higher level of salaries than other officers. Thus CEOs holding a high percentage of their company's equity would possibly result in over-concentrated power for executive officer and a high potential for increasing their own compensation. Allen (1981), however, provides evidence that CEO pay is negatively related to shares held by CEO. Consistent with Allen's (1981) finding, Lambert et al. (1993) discover that if there is an internal member on the board (who is not a CEO) who holds a minimum of 5% of shares, CEO compensation is a decreasing function of CEO ownership. Core (1997), by analysing Canadian firms, point out that CEO pay tend to decrease when inside directors' ownership increase. More recently, using a sample of Hong Kong companies, Cheung et al. (2005) find that CEOs with large proportion of share ownership are likely to supplement their cash compensation with dividend income if those are considerably higher than cash pay received.

The board of directors is regarded as essential in monitoring management and is responsible for evaluating management as well as managers' performance. However, previous studies have pointed out that outside directors who are not fully employed by the company are likely to play a relatively larger role in monitoring corporate behaviour. Fama and Jensen (1983) argue that inside directors have less incentive to provide an effective monitoring process. While outside directors, are likely to be more objective compared with inside directors and normally act

with more incentive to ensure the effective operation and prove their capability to the market. Williamson (1985) suggests that the lack of independent remuneration committees would likely lead to executives signing on the contract written by themselves. Closely tied their career concerns CEO, inside directors would be unwilling to take positions that challenge CEO as reported by Crystal (1991) and Ozkan (2007). Relying just on executive directors may lead to compensation contracts optimized for CEO but not the company, thus increasing the effectiveness of board of directors is vital. Jensen (1993) argue that a board with high percentage of insiders is considered to be weak in governance and except CEO, all board members should be hired from outside of the firm.

The findings are mixed on relation between board independence and CEO pay according to a large number of prior studies. Hermalin and Weisbach (1991) find out non-executive directors have less influence on determining CEO pay. Thus, monitoring benefits provided by non-executive directors to other shareholders may facilitate incentive compensation. These directors can influence the corporate governance policies as members of compensation committees. Lambert et al. (1991) concludes that the percentage of board composed with non-executive directors (outside directors) is positively related to CEO compensation. Sapp (2008) documents that an increase in the number of independent members on the compensation committee is likely to reveal a higher CEO pay. Similarly, Ozkan (2011) notice a positive relation between CEO compensation and the proportion of outside directors on the board. However, Finkelstein and Hambrick (1989) report unrelated considering percentage of non-executive directors on board and CEO compensation.

Most corporate governance papers have been focusing on the impact of governance mechanism on financial performance and market valuation. Klapper and Love (2004) found that better governance is highly correlated with better-operating performance and market valuation. Hermalin and Weisbach (2007) argued that increase in governance transparency can be associated with both costs and benefits, and eventually will lead to an optimum level where more transparency will lower profits. The better transparency enables the public to learn more about the CEO which will increase the risk associated with CEO's wrongdoings. Their study also shows that executives could have incentives to increase transparency due to career concerns. However, there are very few studies that examine CEO compensation and governance information disclosure. Craighead, Magnan, and Thorne (2004) find that CEO performance-contingent cash

compensation increases more in widely held firms than closely held firms when mandated disclosure is implemented. Eng and Mak (2003) discover that ownership structure and board composition can affect disclosure. Increased disclosure is related to less managerial ownership and more government ownership. More outside directors will lead to less corporate transparency. Mas (2016) find the pay disclosure did not achieve the intended effect which is broadly lowering CEO compensation. He analysed the change of executive compensation during the Great Depression, before and after mandated pay disclosure in 1934.

Given the mixed nature of previous empirical results, the impact of corporate governance transparency as well as board independence and CEO ownership on CEO compensation remain ambiguous. The aim of our study is to investigate the relation between variables mentioned above.

3: Data and Measurement

The data consists of a sample of 457 traded companies from 2005 to 2015 with a total of 3763 firm-year observations of S&P 500 firms. 59 industries are covered by our sample data. We drop off the unqualified firm-year data containing one or more empty variable values.

We use Governance Disclosure Score as the transparency measure, obtained from Bloomberg environmental, social, and governance (ESG) function platform, which includes over 11,300 public traded companies around the world. More than 35 analysts are working for Bloomberg's ESG team to collect, classify information and help users to integrate ESG criteria in their portfolio management. The data source of ESG includes the annual report, sustainability reports, press releases and third-party research. All data available is gathered from the company public document. The higher score implies a better transparency and companies are actively involved in improving their scores for the various metrics (for example, reducing GHG emissions). Governance Disclosure Score measures the degree of transparency on governance matrix. The detailed definition as follows:

Proprietary Bloomberg score based on the extent of a company's governance disclosure as part of Environmental, Social and Governance (ESG) data. The score ranges from 0.1 for companies that disclose minimum amount of governance data to 100 for those that disclose every data point collected by Bloomberg. Each data point is weighted in terms of importance, with board of director's data carrying greater weight than other disclosures. The score is also tailored to different industry sectors. In this way, each company is only evaluated in terms of the data that is relevant to its industry sector. (Bloomberg, GOVERNANCE_DISCLOSURE_SCORE)

Only a small number of published researches use Bloomberg ESG disclosure score as the data source. Mark and Cheung (2010) used ESG score to explore the relationship between CSR disclosure and firm financial performance of international commercial banks in European and North American countries. They conclude that ESG disclosure has no significant impact on ROA,

ROE, and market return. Percentage of the independent director on Board is also based on Bloomberg database.

The Dependent variable that we use to measure CEO Compensation comes from ExecuComp and firm performance data comes from CRSP and Compustat database from 2005 to 2016. WRDS is the most widely used data research platform and business intelligence tool for corporate, academic, governments. We used three different measures of CEO compensation: Total compensation, salary and option award. Our research focuses on the impact of corporate governance on CEO compensation. Total compensation data is Execucomp item. We concern ourselves with only compensation of the CEO. TDC1 is the sum of Salary, Bonus, Other Annual, Total Value of Restricted Stock Granted, Total Value of Stock Options Granted (using Black-Scholes), Long-Term Incentive Payouts, and All Other Total. Option awards are fair value of all options awarded during the year. Valuation is based upon the grant-date fair value as detailed in FAS 123R. We find that all three compensation measures are positively skewed. In order to reduce heteroscedasticity, the natural log of compensation is used. We also construct several firm performance control variables including the market value of equity, annual stock return, and market to book ratio using WRDS database platform. When calculating stock annual return, we used monthly holding period return from CRSP, and the annualized through compounding over a calendar year. Nature log of annual return is used since it is positively skewed. Market to Book ratio is calculated as market value of equity divided by (Book value per share * Outstanding shares). Company SIC code (standard industrial classification code) is also used in order to control for industry fixed effect (using two digit SIC code). The detailed data source can be found in Table 1. We winsorized market to book at 1% and 99% percentile.

4: Methodology and Empirical Results

4.1 Summary Statistics

Table 2 presents descriptive statistics on various governance measurements, compensation and firm performance for the year from 2005 to 2016. The average CEO total compensation in our sample is \$10.82 million, with a standard deviation of \$8.96 million. The minimum total compensation is \$1, which comes from Apple, Google, Yahoo and Kinder Morgan Inc. because their CEOs including Steve Jobs, Eric Schmidt, Terry Semel and Richard Kinder decided to take only \$1 compensation. The highest compensation is \$156 million on 2014 for company Discovery Communication Inc. Option awards is a larger portion of total compensation compared to salary. The range of disclosure score is from 37.5 to 85.7 with average 56.37. As for the performance measure, the mean stock annual return is 7.84% while the mean of the market value of equity is \$30.2 billion.

4.2 Pearson Correlation Analysis

Table 3 presents the Pearson correlation for various governance measures, CEO compensation, and control variables. We notice that Governance Disclosure Score is significant and positively correlated with all three compensation dependent variables. In order to get whether there is truly a positive correlation between governance and compensation, multivariate tests are required. Board independent is positively related to total compensation and salary. In addition, the correlation between market value and governance score is 0.3897 which means larger firms tend to have higher Governance Disclosure Score. The correlation between total assets and governance is 0.4071 also support this conclusion. Furthermore, the market value of equity is significantly positively related to total compensation at 1% level. There is a negative relationship between CEO ownership and total compensation and salary at 1% significant level. Since total assets and market value is extremely highly correlated (coefficient is 0.7153), we decided to use only market value as our measure for firm size in our regression analysis.

4.3 Difference Test Based on the Level of Governance Score

Table 4 represents the results of difference test. In order to analyse the potential impact of governance on CEO compensation, we compare the mean differences of different variables based on the level of governance score. We define the firms with above median governance score as High Governance Transparency and below median governance score as Low Transparency. Table 4 summarized our results. Based on the p-value, we can conclude that there is a significant mean difference for dependent variables total compensation and salary. As for the control variables, stock annual return and market value for High and Low Transparency are significant. Firms with above median Governance Disclosure Scores are usually large firms which have high market value of total assets.

4.4 Regression Analysis

The regression results are summarized in Table 5. In order to study the influence of corporate governance on CEO compensation, we construct two cross-sectional ordinary least-square (OLS) regression models. Model 1 uses Governance Disclosure Score as the independent variable which can help us explore the impact of governance transparency. Model 2 uses board independence and CEO ownership which are two specific governance characteristics as independent variables that might affect CEO compensation. Both models are control for firm performance variables including the market value of equity, annual return, and market to book ratio. We use 2 digits SIC code as the indicator for industry effects, and then cluster observations at the company level. Year effects are also controlled. Following the previous literatures, lagged governance score variable and control variables are also used.

Compared to the previous correlation matrix, some significant relationships disappear. In column 1, Governance Disclosure Score has a positive coefficient 0.014 with total compensation at 5% level, with p value being 0.016. We also find that higher governance transparency leads to higher salary and lower option awards. One unit governance score increase can increase log salary by 1.9% at 1% significant level and reduce log option awards by 0.8% at 10% significant level. This result is consistent with Schmidt's (2012) finding that enhanced disclosure can lead to higher compensation levels. In his research, he used wage as dependent variables. Moving to model 2, board independence does not have a significant impact on all three compensation

measures. The coefficient of CEO ownership in the total compensation (salary) specifications is -0.07 (-0.17), which means the more shares CEO is holding, the less total salary and total compensation he or she will get. Based on this significant result, we think CEO ownership can be a good indicator when analysing the level of CEO salary. In addition, higher option awards are positively correlated with CEO ownership with coefficient being 0.067. Move to control variables, the market value of equity and option award are positively related with coefficient being 0.419 in model 1 and 0.399 in model 2. Higher annual return leads to high option award for both models as well. Market to book ratio is positively correlated with option award but have no significant impact on total compensation and salary.

5: Conclusion

Past researches have addressed the important connection between corporate governance and CEO compensation. Our paper examines the impact of corporate governance from both the transparency and characteristic prospective. Based on the result, we find that higher governance transparency have a significant positive relationship with total CEO compensation. Furthermore, better disclosure leads to higher salary and lower option award based on our sample. Board independence, one specific governance component, has no impact on compensation measures in our sample. In addition, the more shares CEO owns, the less total compensation and salary he or she will get even though the performance pay which is measured by option award will increase. In conclusion, the level of governance transparency can affect how CEO compensation is structured. Governance with high transparency tends to set higher total compensation for CEO with higher fixed portion and less performance pay portion, because the board may believe that they can set the salary accurately and they rely less on the performance related compensation.

Some limitations exist in our research. First, the sample size may be not sufficient for the regression model. A better result can be achieved by including more companies. Furthermore, some other variables may influence the compensation structure.

Appendices

Table 1 Variables Definitions and Source

Variable	Definitions	Data Source
<i>Governance Measure</i>		
Governance Score	The Governance Score is based on the company's annual disclosure of various metrics in its Corporate Social Responsibility (CSR) Report.	Bloomberg
Board Independence	Percentage of independent directors on board	Bloomberg
CEO Ownership	Total Shares owned by the CEO, including options that are exercisable or will become exercisable within 60 days. (SHROWN_TOT)	ExecuComp
<i>CEO Compensation Measure</i>		
Total Compensation	Total compensation comprised of the following: Salary, Bonus, Other Annual, Total Value of Restricted Stock Granted, Total Value of Stock Options Granted (using Black-Scholes), Long-Term Incentive Payouts, and All Other Total. (TDC1, in thousands)	ExecuComp
Salary	The dollar value of the base salary earned by the CEO during the fiscal year. (SALARY, in thousands)	ExecuComp
Option Awards	Grant Date Fair Value of Options Granted (OPTION_AWARDS_FV, In thousands)	ExecuComp
<i>Performance Measure</i>		
Stock Annual Return	The total annualized value of an investment in a common stock per dollar of initial investment.(based on Monthly RET)	CRSP
Market Value of Equity	Sum of all issue-level market values, including trading and non-trading issues. (MKVALT, in millions)	Compustat
Market to Book	Market value of equity over book value of equity. (BKVLPS, CSHO, MKVALT)	Compustat
Total Assets	Book value of total assets. (AT)	Compustat

Table 2 Summary Statistics

	N	Mean	Median	SD	Min	Max	25 Percentile	75 percentile
Total Compensation (\$thousands)	3763	10816.140	8723.001	8963.868	0.001	156077.900	5927.620	13136.840
Salary (\$thousands)	3763	1103.559	1035.000	470.231	0.000	5600.000	885.403	1255.000
Option Awards (\$thousands)	3763	2380.784	1346.941	5015.586	0.000	90845.600	0.000	3100.886
Governance Score	3763	56.372	55.357	6.349	37.500	85.714	51.786	60.714
Board Independence (%)	3763	83.480	87.500	9.417	23.077	100.000	77.780	90.909
CEO Ownership (%)	3763	1.013	0.152	3.200	0.000	30.100	0.023	0.548
Stock Annual Return (%)	3763	7.841	6.856	4.187	1.734	52.705	4.988	9.496
Market Value of Equity (\$millions)	3763	30239.040	13406.290	51411.610	648.052	626550.400	7155.990	28591.140
Market to Book	3763	3.618	2.713	4.770	-16.627	30.079	1.686	4.388
Total Assets (\$millions)	3763	52457.740	13905.000	186523.700	390.613	2573126.000	5661.000	34859.000

Note: Table 2 provides the mean, median, standard deviation, minimum, maximum, top quarter and bottom quarter summary statistics for 3763 firm-year observations from 2005 to 2015.

Table 3 Pearson Correlation Matrix

	1	2	3	4	5	6	7	8	9	10
1 Log (Total Compensation)	1									
2 Log (Salary)	0.6046***	1								
3 Log (Option Awards)	0.6507***	0.025	1							
4 Governance Score	0.1436***	0.1077***	0.0453**	1						
5 Board Independence	0.0969***	0.1075***	-0.0058	0.2153***	1					
6 CEO Ownership	-0.1883***	-0.3379***	0.1529***	-0.1195***	-0.224***	1				
7 Log (Stock Annual Return)	-0.0996***	-0.0791***	0.042**	-0.1664***	-0.1474***	0.1156***	1			
8 Log (Market Value of Equity)	0.2258***	0.0293*	0.373***	0.3897***	0.1473***	-0.0582***	-0.3457***	1		
9 Market to Book	0.0038	-0.0362**	0.0672***	-0.0176	0.0107	0.0406**	-0.0753***	0.128***	1	
10 Log (Total Assets)	0.2088***	0.1074***	0.2004***	0.4071***	0.221***	-0.1321***	-0.1971***	0.7153***	-0.1599***	1

Note: This table reports the Pearson correlation matrix for 3763 firm-year observations from 2005 to 2015. We use natural logarithm of the total compensation, salary, option awards, market value of equity and total assets in our analysis.

*** stands for significant different from zero at 1% level

** stands for significant different from zero at 5% level

* stands for significant different from zero at 10% level

Table 4 Difference Tests

	High Transparency	Low Transparency	t-stat Difference	Different of Means (p value)
Total Compensation	12128.05	9984.45	-7.20	0.000***
Salary	1206.11	1038.55	-10.82	0.000***
Option Awards	2304.86	2428.92	0.74	0.460
Stock Annual Return	7.16	8.27	8.02	0.000***
Market Value of Equity	47696.35	19171.89	-17.22	0.000***
Market to Book	3.52	3.68	1.04	0.296
Total Assets	91571.21	27661.53	-10.39	0.000***

Note: This table reports the mean difference test for 3763 firm-year observations from 2005 to 2015 based on the level of governance transparency.

*** stands for significant different from zero at 1% level

** stands for significant different from zero at 5% level

* stands for significant different from zero at 10% level

Table 5 Regression Results

	Log (Total Compensation)		Log (Salary)		Log (Option Awards)	
	(1)	(2)	(3)	(4)	(5)	(6)
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Governance Score _{t-1}	0.014** (0.016)		0.018*** (0.01)		-0.007* (0.094)	
Log (Market Value of Equity) _{t-1}	0.143 (0.103)	0.18** (0.026)	-0.098 (0.297)	-0.04 (0.564)	0.419*** (0.000)	0.399*** (0.000)
Log (Stock Annual Return) _{t-1}	-0.061 (0.391)	-0.014 (0.837)	-0.289*** (0.005)	-0.171** (0.034)	0.366*** (0.000)	0.336*** (0.000)
Market to Book _{t-1}	-0.005 (0.208)	-0.004 (0.381)	-0.006 (0.180)	-0.001 (0.805)	0.01** (0.050)	0.009* (0.053)
Board Independence		0.003 (0.309)		0.005 (0.250)		-0.001 (0.770)
CEO Ownership		-0.068* (0.055)		-0.167*** (0.002)		0.067*** (0.000)
Constant	7.372*** (0.000)	7.318*** (0.000)	7.933*** (0.000)	7.53*** (0.000)	3.59*** (0.000)	3.574*** (0.000)
Industry Fixed Effect	YES	YES	YES	YES	YES	YES
Year Fixed Effect	YES	YES	YES	YES	YES	YES
N	3150	3150	3140	3140	2108	2108
Adjusted R-Squared	0.108	0.133	0.061	0.182	0.34	0.367

Note: This table reports the Regression test for 3763 firm-year observations from 2005 to 2015. Variables definitions refer to table 1. *** stands for significant different from zero at 1% level, ** stands for significant different from zero at 5% level, * stands for significant different from zero at 10% level. One year lagged data is used for variables including governance score, market value of equity, stock return, and market to book.

Bibliography

Works Cited

- Allen, M., (1981). Power and privilege in the large corporation: corporate control and managerial compensation. *American Journal of Sociology* 86, 1112–1123.
- Bauer, R., Guenster, N., & Otten, R. (2004). Empirical Evidence on Corporate Governance in Europe: The effect on Stock Returns, Firm Value and Performance. *Journal of Asset Management*, 5(2), 91-104.
- Becht, M., Bolton, P. & Rosell, A. (2002). *Corporate Governance and Control*, w9371, National Bureau of Economic Research, Cambridge.
- Berle, A.A., Jr and Means, Gardiner C. (1932). *The Modern Corporation and Private Property*, New York, MacMillan.
- Cheung, Y., Stouraitis, A., Wong, A.W.S., (2005). Ownership concentration and executive compensation in closely held firms: evidence from Hong Kong. *Journal of Empirical Finance* 12, 511–532.
- Core, J.E., (1997). The directors' and officers' insurance premium: an outside assessment of the cost of weak corporate governance. Working Paper, The Wharton School, University of Pennsylvania.
- Craighead, J. A, Magnan, M. L., & Thorne L, (2004). The Impact of Mandated Disclosure on Performance-Based CEO Compensation. *Contemporary Accounting Research*. Volume 21, Issue 2, 369 - 398
- Crystal, G., (1991). *In Search of Excess: The Overcompensation of American Executives*. W.W.Norton and Company, New York.
- Eng L.L., & Mak, Y.T, (2003). Corporate Governance and Voluntary Disclosure. *Journal of Accounting and Public Policy*, Volume 22, Issue 4, 325 – 345
- Fama, E. F., & Jensen, M. C, (1983a). Separation of Ownership and Control. *Journal of Law and Economics*, 26(2), 301-325.
- Finkelstein, S., Hambrick, D., (1989). Chief executive compensation: a study of the intersection of markets and political processes. *Strategic Management Journal* 10, 121—134.
- Hermalin, B. E., & Weisbach, M. S. (1991). The Effects of Board Composition and Direct Incentives on Firm Performance. *Financial Management*, 101-112.
- Hermalin, B. E., & Weisbach, M.S., (2007). *Transparency and Corporate Governance*. NBER Working Paper No. 12875
- Holderness, C.G., Sheehan, D.P., (1988). The role of majority shareholders in publicly held corporations: an exploratory analysis. *Journal of Financial Economics* 20, 317–346.

- Jensen, M. C. (1993). The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *Journal of Finance*, 48(3), 831-880.
- Jensen, M.C., Meckling, W.H., (1976). Theory of the firm: managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics* 3, 305–360.
- Lambert, R., Larcker, D., Verrecchia, R., (1991). Portfolio considerations in the valuation of executive compensation. *Journal of Accounting Research* 29, 129—149.
- Lambert, R., Larcker, D., Weigelt, K., (1993). The structure of organizational incentives. *Administrative Science Quarterly* 38, 438—461.
- Martin J. Conyon, Lerong He, (2012). CEO Compensation and Corporate Governance in China. *Corporate Governance: An International Review*, Volume 20, Issue 6, Page 575-592.
- Mas, A., (2016). Does Disclosure affect CEO Pay setting? Evidence from the passage of the 1934 Securities and Exchange Act. Princeton mimeo
- Overview of ESG Rating Agencies, Novethic Research, Sept 2013. Retrieved from <http://www.novethic.com>
- Ozkan, N. (2007). Do corporate governance mechanisms influence CEO compensation? An empirical investigation of UK companies. *Journal of Multinational Financial Management*, 17(5), 349-364.
- Ozkan, N. (2011). CEO Compensation and Firm Performance: an empirical investigation of UK panel data. *European Financial Management*, 17(2), 260-285.
- Sapp, S. G. (2008). The impact of corporate governance on executive compensation. *European Financial Management*, 14, 710-746.
- Schmidt, C., (2012). Does Transparency Increase Executive Compensation? Working paper, Norwegian School of Economics
- Smith, A, (1937). *Wealth of nations*. 1776 Cannan ed. New York: Modern Library.
- Weisbach, M. S, (1988). Outside Directors and CEO Turnover. *Journal of Financial Economics*, 20, 431-460.
- Williamson, O., (1985). *The economic institutions of capitalism: firms, markets, relational contracting* (Free Press, New York).
- Yoshikawa, T. & Phan, P. H.,(2001), 'Alternative Corporate Governance Systems in Japanese Firms: Implications for a Shift to Stockholder-Centered Corporate Governance', *Asia Pacific Journal of Management*, vol. 18, no. 2, pp. 183-205.