

CEO Duality, Compensation, and Accounting Performance: Evidence from TSX/S&P Companies

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Abstract—This research study had investigated the effect of CEO and CEO/Chairman duality roles to CEO compensation, using accounting performance as an independent variable. The total of one hundred and twenty companies was selected through stratified sample method from Toronto Stock Exchange (TSX/S&P) companies. The sampled data were collected from 2005 to 2010. The quantitative research method was selected for this research study. The total of six statistical models was developed to address the research question of this study. That is, is there a relationship between CEO compensation, and CEO and CEO/Chairman duality roles?. It was found that there was a relationship between CEO salary, CEO bonus, CEO total compensation, and CEO and CEO/Chairman duality roles. The correlations between CEO compensation and accounting performance were ranged from weak to strong ratios, under both types of role. More importantly, it was found that, companies where CEO/Chairman duality role existed had received higher compensation than companies where the only CEO role was placed.

Index Terms— CEO compensation, accounting performance and compensation, TSX/S&P CEO compensation, CEO duality and compensation, net earnings and CEO compensation, and market activities and CEO compensation.

1 INTRODUCTION

This study was conducted due to over the past decade, Canadian public had raised concerns of bonuses declared to CEOs when firms had negative earnings. As such, failure to understand the determinants of CEO compensation from the public had led blaming CEOs of rent grabbing (maximizing compensation without maximizing stockholders' wealth through misused of its power towards board). Thus, these ever growing concerns bring to the foreground conclusion the need to further study CEO compensation system. As such, this article will focus on one interesting aspect of Canadian executive compensation study, that is, the impact of CEO and CEO/Chairman duality roles towards determining CEO compensation. This interesting and important study in the executive compensation area will reveal some scientific methodologies or trends to understand the nature of CEO contract under respective CEO roles. The Canadian equity market (TSX/S&P) will be selected for sample population. From previous studies, the correlations between CEO compensation and CEO and CEO/Chairman duality roles were found weak. Overall, purpose of this research is to investigate in clear terms the extent and nature of the relationship between CEO compensation and CEO and CEO/Chairman duality roles in TSX/S&P companies.

The most researched topics in executive compensation are between CEO compensation and firm performance. This research will use eight variables of firm performance, that is, return on assets (ROA), return on equity (ROE), earnings per share (EPS), cash flow per share (CFPS), net profit margin (NPM), book value per common stocks outstanding (BVCSO), and market value per common stocks outstanding (MVCSO); and two control variables, CEO/Chairman and CEO roles, to understand the extent and nature of influence of CEO and CEO/Chairman duality roles in CEO compensation.

2 LITERATURE REVIEW

2.1 CEO COMPENSATION, AND CEO AND CEO/CHAIRMAN DUALITY ROLES

CEO duality is an important structural measure of the relative power of CEO over the board of directors (Finkelstein/D'Aveni 1994). Several studies in the United States have found that CEO duality is a significant predictor of executive compensation levels (e.g. Core et al. 1999, Fulmer 2009). Core et al. (1999) reported 16% pay premium and Sridharan (1996) 18% premium for cash compensation. This large difference lends support to the idea that incumbents of the dual role exercise strong power to tweak their compensation package in their favor. Similarly, Hengartner and Ruigrok (2010) find that when CEOs also hold the position of board chairman, CEO compensation is higher by 24%. Aiysha, Dey, Ellen, Engel, and Xiaohui, Liu (2011) find that pay-performance sensitivity in CEO compensation contracts are significantly lower following a split in the CEO and chairman positions, and significantly higher following a combination in these positions.

2.2 CEO COMPENSATION AND ACCOUNTING PERFORMANCE LINKAGE

Henderson and Fredrickson (1996) stated that while CEO total pay may be unrelated to performance, it is related to organizational complexity that they manage. This is supported by studies conducted by Murphy (1985), Jensen and Murphy (1990), and Joskow and Rose (1994). Jensen and Murphy (1990) argued that incentive alignment as an explanatory agency construct for CEO pay is weakly supported at best. That is, objective provisions of principal-agent contract cannot be comprehensive enough to effectively create a strong direct CEO pay and performance relationship. They have found that pay performance sensitivity for

executives is approximately \$3.25 per \$1000 change in the shareholder wealth, small for an occupation in which the incentive pay is expected to play an important role. This is supported by the legendary work of Tosi, Werner, Katz, and Gomez-Mejia (2000), who stated that the overall ratio of change in CEO pay and change in financial performance is 0.203, an accounting for about 4% of the variance. The estimated true correlation between CEO pay and return on equity is .212. And the estimated true correlation between CEO pay and total assets is 0.117. Thus, these other financial measures account for less than 2% of variance in CEO pay levels. This weak relationship is explained by Borman & Motowidlo (1993) and Rosen (1990), who stated that archival performance data focuses only on a small portion of the CEO's job performance requirement therefore it is difficult to form an overall conclusion.

Jensen and Murphy (1990) find in their study that CEO received an average pay increase of \$31,700 in years when shareholders earned a zero return, and received on average an additional 1.35¢ per \$1,000 increase in stock holder's wealth. These estimates are comparable to those of Murphy (1985 and 1986), Coughlan and Schmidt (1985), and Gibbons and Murphy (1990), who found pay-performance elasticity of approximately 0.1, that is, salaries and bonuses increased by about one percent for every ten percent rise in value of the firm. Additionally, they find that an average pay increase for CEOs whose stockholders gain \$400 million was \$37,300, compared to an average pay increase of \$26,500 for CEOs whose stockholders lose \$400 million. Jensen and Murphy (1990) explained this weak pay-performance sensitivity to boards having good information regarding managerial activity therefore weight on output was small relative to weight on input.

On the other hand, Jensen and Zimmerman (1985) argued that the evidence was inconsistent with the view that executive compensation is unrelated to firm performance and that executive compensation plans enrich managers at the expense of shareholders. This argument was supported by Mehran (1995) who reported that CEO pay structure was positively related to same year performance. In addition, Gibbons and Murphy (1990) also find in their studies that CEO salaries and bonuses are positive and significant related to firm performance as measured by return on common stock. That is, CEO pay changes by about 1.6% for each 10% return on common stock. In addition, they found that CEO cash compensation is positively related to firm performance and negatively related to industry performance, *ceteris paribus*. Similarly, Antle and Smith (1986) find no relation between salary, bonus, and industry returns. Blanchard, Lopez-de-Silanes and Shleifer (1994), and Bertrand and Mullainathan (2001) find that CEO cash compensation increases when firm profits rise for reasons that have nothing to do with managers' efforts.

3 RESEARCH METHODOLOGY

This research study will be numerical, objective, descriptive, and demands clear results as such, quantitative research method will be selected. The longitudinal study method will be selected to collect historical financial data from 2005 to 2010. The stratified sample method will be selected to obtain a total sample popula-

tion of one hundred and twenty companies from TSX/S&P index companies. For statistical tests, CEO compensation will be assigned as dependent variable, CEO and CEO/Chairman duality roles will be assigned as control variables, and accounting performance will be assigned as independent variable. The total of six statistical models was developed to answer research question of this study. The survey method will be adopted to collect historical data. The inferential statistical method, that is, linear regression method, will be used to obtain results. The 95% confidence level will be assumed for all statistical model tests.

4 DATA FINDINGS AND CONCLUSIONS

DATA FINDINGS

4.1 CEO COMPENSATION, ACCOUNTING PERFORMANCE, CEO AND CEO/CHAIRMAN DUALITY ROLES

The following were analysis of variance (ANOVA) results of the relationships between CEO salary, CEO bonus, CEO total compensation, CEO, and CEO & Chairman in companies:

Table 1 – ANOVA

CEO & CHAIRMAN ROLE	Salary	Bonus	Total Compensation
Accounting Performance	F(8,291)=35.359 p=.000 R ² =0.493	F(8,262)=80.968 p=.000 R ² =0.712	F(8,288)=68.533 p=.000 R ² =0.656
CEO ROLE	Salary	Bonus	Total Compensation
Accounting Performance	F(8,377)=23.804 p=.000 R ² =0.336	F(8,363)=28.546 p=.000 R ² =0.386	F(8,377)=50.218 p=.000 R ² =0.518

The results had shown that there was a relationship between CEO salary, CEO bonus, CEO total compensation, and accounting performance, both under CEO/Chairman duality and CEO roles. In CEO/Chairman duality role companies, between CEO salary and accounting performance was .493, as such characterized as a good statistical model. Thus, it had indicated that accounting performance variables had a material impact on CEO salary. Between CEO bonus, CEO total compensation, and accounting performance were .712 and .656, as such characterized as strong statistical models. Thus, it had indicated that CEO bonus and CEO total compensation (includes long-term benefits) models had strongly influenced by accounting performance. In contrast, in CEO role companies, between CEO salary, CEO bonus, and accounting performance were .336 and .386 respectively, as such characterized as moderate statistical models. Thus, these models had indicated that accounting performance had moderate impact on CEO short-term compensation. Between CEO total compensation and accounting performance was .516, as such characterized as a good statistical model. Thus, it had indicated that accounting perfor-

mance had material influence to CEO total compensation. That is, long-term CEO compensation had played an important role towards this model. Overall, relative to the CEO single role, CEO/Chairman duality role had a material effect on both short and long-term CEO compensation models, which had indicated that perhaps due to holding additional power as chairman was able to influence the board towards determining his desired compensation.

Table 2 – Correlations

CEO ROLES	Salary		Bonus		Total Compensation	
	CEO & Chairman	CEO	CEO & Chairman	CEO	CEO & Chairman	CEO
Return on Assets	.132	.027	.169	.007	.123	-.03
Return on Equity	.012	.081	.048	.123	-.022	.082
Earnings Per Share	.100	-.049	.054	-.007	.062	-.007
Cash Flow Per Share	.008	.063	.054	.033	.035	.005
Net Profit Margin	.381	.490	.452	.592	.484	.640
Common Stock Outstanding	.474	.414	.554	.365	.537	.495
Book Value of Common Stock	.535	.440	.688	.441	.688	.572
Market Value of Common Stock	.655	.383	.768	.368	.741	.425

The above table 2 illustrated the correlation results between sub-variables of CEO compensation and sub-variables of accounting performance, under CEO/Chairman duality and CEO roles scenarios. In CEO/Chairman duality role companies, it had shown that there were weak correlations existed between CEO salary, return on equity (ROE), return on assets (ROA), earnings per share (EPS), and cash flow per share. That is, the correlations were, .132, -.012, .100, and .008, respectively. Similarly, in CEO single role companies, the correlations between CEO salary, return on equity (ROE), return on assets (ROA), earnings per share (EPS), and cash flow per share, were characterized as weak ratios. That is, the correlations were .027, .081, -.049, and .063, respectively.

ly. Thus, in both types of role, these balance sheet related items had nil to negligible impact towards determining CEO salary, perhaps board did not consider these sub-variables as true performance criteria of CEO effort. In CEO/Chairman duality companies, the correlations between CEO salary, net profit margin, common stocks outstanding, book value per common stock, and market value per common stock were characterized as moderate ratios. That is, the correlations were .381, .474, .535, and .655, respectively. Similarly, in CEO role companies, the correlations between CEO salary, net profit margin, common stocks outstanding, book value per common stock, and market value per common stock, were characterized also as moderate ratios. That is, the correlations were .490, .414, .440, and .383, respectively. Thus, these results had shown that earnings related variable such as, net profit margin and market price of the stock had consistently influenced CEO compensation, under both roles.

In CEO/Chairman duality role companies, the correlations between CEO bonus, return on equity (ROE), return on assets (ROA), earnings per share (EPS), and cash flow per share, were characterized as weak ratios. That is, the correlations were .169, .048, .054, and .054, respectively. Similarly, in CEO single role companies, the correlations between CEO bonus, return on equity (ROE), return on assets (ROA), earnings per share (EPS), and cash flow per share were also characterized as weak ratios. That is, the correlations were .007, .123, -.007, and .033, respectively. Thus, in both types of role, CEO bonus compensation was weakly influenced by assets and earnings related criteria. In CEO duality companies, the correlations between CEO bonus, net profit margin, common stocks outstanding, book value per common stock, and market value per common stock, were characterized as good to strong ratios. That is, the correlations were .452, .554, .688, and .768, respectively. However, it was found that, in CEO role companies, the correlations between CEO bonus, net profit margin, common stocks outstanding, book value per common stock, and market value per common stock were characterized as moderate to good ratios. That is, the correlations were .592, .365, .441, and .368, respectively. Thus, these results had shown that companies where CEO/Chairman duality role existed had a relatively superior influence than in companies where CEO single role existed towards CEO bonus compensation. In particular, market value per common stock which had a ratio of .768 under CEO/Chairman duality role relative to a ratio of .368 under CEO role. As such, it had indicated that higher-risk-reward system was placed by the board for CEO/Chairman duality position then under CEO stand-alone position. In addition, increased power under CEO/Chairman duality role may also had played an important role towards high compensation declared by the board.

In CEO/Chairman duality role companies, the correlations between CEO total compensation (salary, bonus, and long-term benefits), return on equity (ROE), return on assets (ROA), earnings per share (EPS), and cash flow per share, were characterized as weak ratios. That is, where companies had a CEO duality role companies, the correlations were .123, -.022, .062, and .035, respectively. Similarly, where companies had a single CEO role, the correlations between CEO total compensation, return on equity (ROE), return on assets (ROA), earnings per share (EPS), and

cash flow per share, were also characterized as weak ratios. That is, in CEO role companies, the correlations were -.03, .082, -.007, and .005, respectively. As such, under both roles, it had shown that CEO total compensation as a single total compensation statistical model amount cannot be interpreted accurately using accounting performance as an independent variable, as it had provided conflicting results relative to results obtained under salary and bonus statistical models. In CEO duality companies, the correlations between CEO total compensation, net profit margin, common stocks outstanding, book value per common stock, and market value per common stock were characterized overall as moderate to strong ratios. That is, the correlations were .484, .537, .688, and .741, respectively. Similarly, where companies had a single CEO role, the correlations between CEO total compensation, cash flow per share, net profit margin, common stocks outstanding, book value per common stock, and market value per common stock were characterized as moderate to good ratios. That is, the correlations were .640, .495, .572, and .425, respectively. Relatively, under CEO total compensation statistical model, CEO/Chairman duality role had again demonstrated high compensation due to additional powers its hold.

5 CONCLUSION

Overall, under both respective CEO/Chairman duality and CEO roles, it was found that there was a relationship existed between CEO salary, CEO bonus, CEO total compensation, and accounting performance. Under both roles, it was found that there were weak correlations existed between CEO salary, CEO bonus, CEO total compensation, return on assets, return on equity, earnings per share, and cash flow per share. However, under both roles, the correlations between CEO salary, CEO bonus, CEO total compensation, net profit margin, common stocks outstanding, book value per common stock, and market value per common stock were ranged from moderate to strong ratios. As such, under both roles, the extent of correlations between CEO compensation and accounting performance had depended on the particular variable used. Overall, it was found that, companies where CEO/Chairman duality role existed had received high compensation then under single CEO role.

6 REFERENCES

1. Antle, Rick, and Smith, Abbie (1986), "An Empirical Investigation of the Relative Performance Evaluation of Corporate Executives", *Journal of Accounting Research*, Vol. 24, No. 1 (Spring), pp. 1-39.
2. Bertrand, Marianno and Mullainathan, Sendhil (2001), 'Are CEO's Rewarded for Luck? The Ones Without Principals Are', *Quarterly Journal of Economics*, pp. 901-932.
3. Blanchard, Olivier Jean, Lopez-de-Selanes, Florencio, and Shleifer, Andrei (1994), 'What do Firms do with Cash windfalls?', *Journal of Financial Economics*, Vol. 36 (3), pp. 337-360.
4. Coughan, Anne T., and Schmidt, Ronald M. (1985), "Executive Compensation, Management Turnover, and Firm Performance: an Empirical Investigation", *Journal of Accounting and Economics*, Vol. 7, Nos. 1-3 (April), pp. 43-66.
5. Cyert, Richard, Sok-Hyon, Kang, and Praveen Kumar (2002), 'Corporate Governance, Take-overs, and Top-Management Compensation: Theory and Evidence,' *Management Science*, Vol. 48 (4), pp. 453-469.
6. Dechow, Patricia M. (1994), 'Accounting earnings and Cash Flows as measures of firm performance: The role of accounting accruals', *Journal of Accounting and Economics*, Vol. 18, pp. 3-42.
7. Deckop, John R. (1988), "Determinants of Chief Executive Officer Compensation", *Industrial and Labor Relations Review*, Vol. 41, No. 2, pp. 215-226.
8. Demsetz, H. and Lehn, Kenneth (1985), 'The Structure of Corporate Ownership: Causes and Consequences', *Journal of Political Economy*, Vol. 93(6), pp. 1155-1177.
9. Finkelstein, S. & Boyd, B. K. (1998), 'How much does CEO matter? The role of managerial discretion in the setting of CEO compensation', *Academy of Management Journal*, Vol. 41, pp. 179-199.
10. Finkelstein S. and Hambrick, D. (1989), 'Chief executive compensation: A Study of the intersection of markets and political processes', *Strategic Management Journal*, Vol 10, Issue 2, pp. 121-134.
11. Finkelstein S. and Hambrick, D. (1996), *Strategic Leadership: Top Executive and their Effects on Organization*. West Publishing: New York.
12. Firth, M., Tam, M., & Tang, M. (1999), 'The determinants of top management pay', *International Journal of Management Science*, Vol. 27 (6), pp. 617-635.
13. Garvey, G. and Millbourn, T. (2006), 'Asymmetric Benchmarking in Compensation: Executives Are Rewarded for Good Luck but not penalized for Best', *Journal of Financial Economics*, Vol. 82, pp. 197-225.
14. Gaver, J. J., and Gaver, K. M. (1998), 'The relation between nonrecurring accounting charges and CEO cash compensation', *The Accounting Review*, Vol. 73, pp. 235-253.
15. Gibbons, Robert, and Murphy, Kevin J. (1990), "Relative Performance Evaluation for Chief Executive Officers", *Industrial and Labor Relations Review*, Vol. 43, No. 3, pp. 30S-51S.
16. Gilson, S. C., and Vetsuypens (1993), 'CEO Compensation in Financially Distressed Firms: An Empirical Analysis', *Journal of Finance*, Vol. 48, No. 2, pp. 425-458.
17. Gregg, P. Machin, S., & Szymanski, S. (1993), 'The disappearing relationship between director's pay and corporate performance', *British Journal of Industrial Relations*, Vol. 31 (1), pp. 1-9.
18. Himmelberg CP, Hubbard RG, and Palia D. (1999), 'Understanding the determinants of managerial ownership and the link between ownership and performance', *Journal of Finance Economics*, Vol. 53(3), pp. 353-384.
19. Holmstrom, Bengt (1979), 'Moral Hazard and Observability', *Bell Journal of Economics*, Vol. 10 (1), pp. 74-91.

20. Iyengar, Raghavan J. (2000), 'CEO Compensation In Poorly Performing Firms', *Journal of Applied Business Research*, Vol. 16, Issue 3, pp.1-28.
21. Jacobson, Robert (1987), 'The validity of ROI as a measure of business performance', *American Economic Review*, Vol. 77, pp. 470-478.
22. Jensen M., and Murphy, K. (1985), "Management Compensation And The Managerial Labor Market", *Journal of Accounting and Economics*, Vol. 7, No. 1-3, pp. 3-9.
23. Jensen M., and Murphy, K. (1990), 'Performance pay and top management incentives', *Journal of Political Economy*, Vol. 98, pp. 225-264.
24. Jensen M., and Murphy, K. (1990b), 'CEO Incentives: It's not how much you pay but how', *Harvard Business Review*, Vol. 68, No. 3, pp. 138-153.
25. Jensen M., and Murphy, K. (2010), 'CEO incentives – It's not how much pay, but how', *Journal of Applied Corporate Finance*, Vol. 22, pp. 64-76.
26. Jensen, Michael C., and Meckling, William H. (1976), 'Theory of the firm: Managerial behaviour, agency costs and ownership structure, *Journal of Financial Economics*, Vol. 3, pp. 305-360.
27. Jensen, Michael C., and Ruback, Richard S. (1983), 'The market for corporate control', *Journal of Financial Economics*, Vol. 11, pp. 5-50.
28. Jensen, Michael C. and Zimmerman, Jerold L. (1985), "Management Compensation And The Managerial Labor Market", *Journal of Accounting and Economics*, Vol. 7, No. 1-3, pp. 3-9.
29. John, T. A. and John, K. (1993), 'Top-Management Compensation and Capital Structure', *The Journal of Finance*, Vol. XLVIII, Vol. 3, pp. 949-974.
30. Johnson, Geroge E., Hamarmesh, Daniel S., Weisburud, Burton H. (1982), Scholarship, Citations and Salaries: Economic Rewards in Economic', *Southern Economic Journal*, Vol. 49, pp. 472-481.
31. Johnson, Geroge E., Hamarmesh, Daniel S., Weisburud, Burton H. (1982), Scholarship, Citations and Salaries: Economic Rewards in Economic', *Southern Economic Journal*, Vol. 49, pp. 472-481.
32. Kren, L., and Kerr, J. L. (1997), 'The effects of outside directors and board share holdings on the relation between chief executive compensation and firm performance', *Accounting and Business Research*, Vol. 27, pp. 297-309.
33. Lambert, R., and Larker, D. (1987), 'An Analysis of the Use of Accounting and Market Measures of Performance in executive Compensation Contracts, *Journal of Accounting Research*, Vol. 25 (suppl.) pp. 85-125.
34. Landsman, Wayne R., and Shapiro, Alan C. (1989), 'Tobin's q and the relationship between accounting ROI and economic return, *Accounting working paper no. 89-3* (Anderson Graduate school of Management).
35. Leone, A., Wu, J., and Zimmerman, J. (2006), 'Asymmetric sensitivity of CEO cash compensation to stock returns', *Journal of Accounting and Economics*, Vol. 42, pp. 167-192.
36. Mehran, H. (1992), 'Executive Incentive Plans, Corporate Control, and Capital Structure', *Journal of Financial and Quantitative Analysis*, Col. 27, pp. 539-560.
37. Mehran, H. (1995), 'Executive compensation structure, ownership, and firm performance' *Journal of Financial Economics*, Vol. 38: 163-184.
38. Murphy, Kevin J. (1985), 'Corporate performance and managerial remuneration, *Journal of Accounting and Statistics*, Vol. 7, pp. 11-42.
39. Murphy, K. J. (1986), 'Incentives, learning and compensation: A theoretical and empirical investigation of managerial labor contracts', *Rand Journal of Economics*, Vol. 7, pp. 105-131.
40. Murphy, Kevin J. (1999), 'Executive Compensation', *Handbook of Labor Economics*, Vol. III, Amsterdam: North-Holland, pp. 2485-2563.
41. Murphy K. J. and Gibbons, R. (1989), 'Optimal Incentive Contracts in the Presence of Career Concerns: Theory and Evidence', pp. 90-109.
42. Murphy, K. J., and Oyer, P. (2002), Discretion in executive incentive contracts: Theory and evidence, Working paper, University of Southern California and Stanford University.
43. Murphy, K. R. and Slater, M. (1975), 'Should CEO pay be linked to results?', *Harvard Business Review*, vol. 53(3), pp. 66-73.
44. Nulla, Yusuf Mohammed (2012), 'The Accounting relationship between CEO Cash Compensation and Firm Size in TSX/S&P companies', *International Journal of Scientific and Engineering Research*, Volume 3, Issue 7 (July).
45. Shaw, Kenneth W., and Zhang, May H. (2010), 'Is CEO Cash Compensation Punished for Poor Firm Performance?', *The Accounting Review*, Vol. 85, No. 3, pp. 1065-1093.
46. Sloan, R. (1993), 'Accounting Earnings and Top Executive Compensation', *Journal of Accounting and Economics*, Vol. 16, pp. 55-100.
47. Shaw, Kenneth W., and Zhang, May H. (2010), 'Is CEO Cash Compensation Punished for Poor Firm Performance?', *The Accounting Review*, Vol. 85, No. 3, pp. 1065-1093.

7 APPENDIX

Operational Hypothesis Statement

- H0: There is no relationship between CEO compensation, and CEO and CEO/Chairman duality roles, using accounting performance as independent variable?
- H1: There is a relationship between CEO compensation, and CEO, and CEO/Chairman duality roles, using accounting performance as independent variable?

To address this Operational Hypothesis Statement, separate models were developed for each dependent variable:

Firm performance

Salary:

$$Y1=c+ B1X1+B2X2+B3X3+B4X4+B5X5+B6X6+B7X7+B8X8 +\epsilon$$

Bonus:

$$Y2=c+ B1X1+B2X2+B3X3+B4X4+B5X5+B6X6+B7X7+B8X8+\epsilon$$

Total Compensation:

$$Y1=c+ B1X1+B2X2+B3X3+B4X4+B5X5+B6X6+B7X7+B8X8 +\epsilon$$

(Y1=Salary; Y2=Bonus; Y3=Total Compensation; c=constant predictor; B1=influential factor for ROA; B2=influential factor for ROE; B3=influential factor for EPS; B4=influential factor for CFPS; B5=influential factor for NPM; B6=influential factor for CSO; B7=influential factor for BVCSO; B8=influential factor for MVCSO; and ϵ =error).

Let X1=Value of ROA; X2=Value of ROE; X3=Value of EPS; X4=Value of CFPS; X5=Value of NPM; X6=Value of CSO; X7=Value of BVCSO; B8=Value of MVCSO

All six models assumed to have a confidence level (α) of 5%.