Cash Compensation Of CEO Or All Employees? Which Affect The Profitability Of Private Commercial Banks' Of Bangladesh

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ABSTRACT

Purpose: This paper aims to examine the impact of cash compensation of CEO and all employees on banks' profitability.

Design/methodology/approach: The study uses the Annual Reports of 10 private commercial banks of Bangladesh over the period of 2001-2013 available on websites as source of data. Regression analysis is used to test hypotheses where ROE and NIM are considered as dependent variable and CEO compensation, total salary expense of the bank, total asset, number of employees and number of branches are considered as independent variables.

Findings: The study found rather than CEO's cash compensation, total compensation of all the employees of the bank has statistically significant impact on banks' profitability.

Research limitations/implications: This study gives result based on the monetary benefits given to CEO and all employees in banks. Thereby further analysis on the same issue can be done incorporating the other benefits (non-monetary) given to CEO (if any) and all other employees.
The finding of the study is representative of the banking sector of the country which may help the policymakers to decide about the compensation package for CEO and employees of the organization. Besides the current study can be a guideline for similar studies for other industries in Bangladesh.

Originality/value: This study compares the impact of total compensation of all the employees of bank and CEO cash compensation on banks' profitability.

Keywords: Chief Executives Officer (CEO), Compensation, Bank.

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INTRODUCTION

Commercial bank plays a significant role in economic development for any country. The way banking operation enhances economic growth has been analyzed in different studies, like Naceur and Ghazouani (2007), Fernandez et al. (2010), Chang et al. (2010), Mitchener and Wheelock (2013), Pradhan et. al. (2014), Coleman and Feler (2014), Zagarra (2014). To make a successful positive impact on economic development, it is necessary that commercial banks operate efficiently and profitably. Allen and Rai (1996), Berger et al. (1993) stated that cost efficiency is a prerequisite for survival of banking and non-banking institutions. Berger and Humphrey (1997) and Xiaoqing & Heffernan (2007) argued that bank efficiency studies can contribute to government policy, research and bank management. Considering this fact, many researchers have highlighted on efficiency and profitability measurement of commercial banks, like Bhattacharyya et al. (1997) for India; Hardy and Patti (2001) for Pakistan; Rezvanian and Mehdian (2002) for Singapore; Grigorian and Manole (2002) for Central and Eastern European countries; Hasan and Marton (2003) for Hungary; Pasiouras and Kosmidou (2007) for European countries; Sufian and Habibullah (2009) for Bangladesh; Dietrich and Wanzenried (2014) on 118 countries.

To ensure the profitability and success of any organization, its management plays a very critical role. As leader of this management team, the CEO also plays important role to guide his team to convey better results of the firm. So to get the best output from CEO and management team it's very important to keep them satisfied. A better compensation package is one of the factors that motivates the CEO and the management team to work efficiently which will eventually lead better profit for the organization.

STATEMENT OF THE PROBLEM

The compensation of chief executive officers (CEOs) has long been a source of controversy (Davis et al. 2013). Manuscript evidence that compensation given to CEO has been changed over time where before 1970 the scenario was of one type - low levels of pay, little dispersion across top managers, and moderate pay-performance sensitivities) and from mid-1970s to the early 2000s it was of different pattern (grew dramatically, differences in pay across managers and firms widen, and equity incentives tie managers' wealth closer to firm performance) and continued almost until the end of 2005 which is determined by both managerial power and competitive market forces where neither approach alone is fully reliable (Frydman and Jenter, 2010). The study also notifies that these changes occurred because of some issues such as structural changes in organization, changes in firms' characteristics, technologies and product markets which is a continuous practice. Now to cope up with this situation organizations are trying to retain such a skilled hero who can work alone with team to achieve efficiency for organization by a balance of monetary and non-monetary compensation.

With the help of the existing study it will be tried to find out a comparative analysis of the impact of cash compensation of CEO and all the employees of banks on its profitability i.e. which cash compensation- CEO compensation or total compensation

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for all employees have more control over banks' profitability in the private commercial banks in Bangladesh?

LITERATURE REVIEW

Literature shows a lot of studies have been complemented regarding compensation and its relationship with firm's performance, profitability and efficiency. Research conducted before 1995 showed a little relationship between CEO pay and firm performance, (Agarwal and Mandelker [1987], Abowd [1990], Jensen and Murphy [1990a, 1990b], Lewellen et al. [1992], Akhigbe et al. [1995]). But most of the studies done after 2000 explored a significant relationship between CEOs' compensation and firms' performance ([Agarwal et al. 1991; Sigler 2003; Nourayi and Mintz 2008; Nourayi and Daroca 2008]). Adams et al. 2007 and Lam et al. 2013 analyzed the impact of gender as CEO on compensation. In the first study it was found that women who reach the CEO position receive similar compensation as men in USA and in second study it was found that female CEOs receive less favorable compensation terms than their male counterparts in Chaina. Saxena et al. (http://accman.in/gyanpj14/2.pdf) found a depressing correlation between CEO pays versus profitability. Acrey et al. 2011 assumed compensation elements as positively significant in predicting the level of trading assets and securitization income in US banking sector. Whereas Davis et al. 2013 constructed a theoretical relationship between compensation package for an organization's CEO and the maximization of firms' performance by emphasizing agency theory, social comparison theory, equity theory, resource-based theory, institutional theory and social network theory in US perspectives. Livne et al. 2013 examined the relation between the investment horizon of banks and their CEO compensation, and its consequences for risk and performance. The study found that banks with short-term investment intensity pay more cash bonus, exhibit higher risk and perform more poorly than banks with longer-term investment intensity. Another study by Sun et al. 2013 examined the relation between chief executive officer (CEO) compensation and firm performance of the US property-liability (P&L) insurance industry and established that revenue efficiency (RE) and cost efficiency (CE) are positively and significantly associated with total compensation. The study also reveals that RE is associated with cash compensation while CE is associated with incentive compensation. A recent study by Jian and Lee 2015 identified a negative relationship between the CEO compensation and CSR (corporate social responsibility) investment in US companies.

Above literature establishes that there is a relationship between CEO compensation and profitability of an organization. But no literature has been found yet which highlighted this relationship i.e. CEO compensation and profitability of any organization in Bangladesh. And also it is a question that whether compensation given to the leader of the management team, i.e. CEO or compensation given to total management team is more important to generate profit for banks. With that gap this paper intends to fulfill it by scrutinizing the comparative impact of cash compensation CEO and total compensation of management team on Banks' Profitability in Bangladesh.

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VARIABLES OF THE STUDY

Many scholarly works have established that there is an association between compensation and the performance of firm. The variable considered in those studies are return on equity (ROE), CEO tenure and company revenue (Sigler, 2003); total one-year shareholder return on common stock (TRS) and ROA (Nourayi and Mintz, 2008); the sales as the proxy for the firm size, market returns, accounting returns, and the change in the number of employees (Nourayi and Daroca, 2008); age, years as CEO, years employed in the firm, sales, number of employees, market value, rate of return on assets, three year growth rate of sales, three year return to shareholders, total compensation (Adams et al. 2007); salary, bonus, all other (perks), total value of restricted stock granted, total value of options granted, and long term incentive payouts (Acrey et al. al 2011). Existing study has considered ROE and NIM as dependent variable as representing banks' profitability and CEO compensation, total salary expense of the bank, total asset, number of employees and number of branches are considered as independent variables.

METHODOLOGY

The objective of this study is to analyze the comparative impact of cash compensation of CEO and total compensation of all management team on profitability in private banking sector in Bangladesh. To analyze the relationship the study has taken a sample of 10 private commercial banks in Bangladesh where random sampling has been used. Data regarding the variables considered in the study has been collected from secondary source i.e. the Annual Report of different banks which are available on the banks' own websites. For testing the stationary of dataset the study used Augmented Dicky-Fuller Test and to judge the expected relationship the study applied regression analysis.

RESULTS AND DISCUSSIONS

To scrutinize the relationship between CEO compensation and ROE and NIM, the study has taken the log value of assets, CEO compensation and other variable values except ROE and NIM (net interest margin) as they are in ratio format. However before applying the regression analysis, it is necessary to test the stationary nature of dataset as the stationary of a data series can strongly influence its behavior and properties. Furthermore if variables are not stationary, then a regression analysis may provide a high value for R^2, where the variables are totally unrelated. Also for non-stationary data, the standard assumptions for asymptotic analysis will not be valid (Cochrane 1991).

There are different approaches for testing stationarity of data series. The most widely used approaches are Augmented Dicky-Fuller (1979) & Philliphs-Perron (1986). This study worked with the unit root test by applying the above two methods where both the methods have null hypothesis (Ho) as the dataset has unit root that means the data is not stationary and alternative hypothesis as (H_1) as the dataset is stationary. The results are shown in Table: 1

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Table: 1
Unit Root Test

Variables	Augmented Dicky-Fuller		Philliphs-Perron	
	At Level	At 1st Difference	At Level	At 1st Difference
ROE	32.0725 (0.1907)			
NIM	47.3823 (0.0064)		102.460 (0.0000)	
Asset	23.9869 (0.5767)		118.811 (0.0000)	
Branch	18.3273 (0.8635)		71.7639 (0.0000)	232.991 (0.0000)
Employee	7.74949 (0.9998)	122.579 (0.0000)	22.3918 (0.6671)	185.455 (0.0000)
CEO Compensation (CEO Comp)	46.1697 (0.0087)	37.8323 (0.0361)	12.3301 (0.9892)	
Total Compensation (TComp)	43.0837 (0.0097)		68.6308 (0.0000)	
			211.694 (0.0000)	

The above table shows the results for both Augmented Dicky-Fuller & Philliphs-Perron Test. At first it is given the t value and below each t value in bracket is given their probability value. If the probability value is less than 0.05, it shows that null hypothesis is rejected and alternative hypothesis is accepted. That means the data is stationary. The results of the table shows that ROE and asset have stationarity as per Philliphs-Perron Test at level. The data of NIM, Cash Compensation of CEO and Other Employees are stationary under both the tests at level. But no. of branches and no. of employees become stationary at 1st difference not at level. So to apply the regression model the study take 1st difference for these two variables whereas other variables can be used at their level values. The result of the regression analysis is given in the following table 2

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Table: 2
Result of Regression Analysis

Model 1: ROE is the dependent variable			
Variables	Beta Values	Significance Value	Collinearity Statistics Tolerance
(Constant)	0.802	0.000	
Asset	0.006	0.180	1.057
Branch	0.050	0.408	13.409
Employee	-0.028	0.603	13.627
CEO Compensation	-0.013	0.252	1.708
Total Compensation	-0.026	0.010	1.827
R Square	0.166*		
Adjusted R squared	0.127*		
Durbin Watson	1.690		
Model 2: NIM is the dependent variable			
Variables	Beta Values	Significance Value	Collinearity Statistics Tolerance
(Constant)	10293.572	0.000	
Asset	-733.776	0.000	1.059
Branch	733.533	0.130	12.930
Employee	-891.875	0.040	13.145
CEO Compensation	98.429	0.274	1.713
Total Compensation	310.085	0.000	1.832
R Square	0.844*		
Adjusted R squared	0.836*		
Durbin Watson	2.118		

The regression has been done twice, once taking ROE as dependent variable and secondly NIM as dependent variable. The results of these two model is shown in Table 2. In model 1, the value of R square is 0.166 indicating that the banks' profitability in terms of ROE is 16.6% affected by the selected independent variables and the result is statistically significant. This model shows that asset and branch has positive impact on banks' profitability means increase in asset and branch number increases banks' ROE. But the results are not statistically significant. The other three variables such as no. of employee, cash compensation CEO and all employees of banks have a negative impact on banks' profitability. But only total compensation has a statistically significant

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influence on banks' profit at 10$ significance level whereas the impact of CEO compensation is insignificant. The collinearity test shows that the tolerance values for all the variables are above 0.10 level which indicates that there is no problem of multicollinearity and confirms the acceptability of the explanatory power of the independent variables. The Durbin Watson value is 1.690 which is closure to 2 and indicates that the dataset has no autocorrelation problem. This result further proves the model fitness.

To further analyze the scenario a second regression was run taking NIM as dependent variable and this time the R square value is 84.4% means independent variables affect banks' profitability in terms of NIM by 84.4%. This value of R square is much higher than that of model 1. The value of Durbin Watson also improves and becomes more closure to 2 which ensures no autocorrelation problem in the data set. And also from VIF results shows no multicollinearity problem. The beta values of the regression analysis show that asset size of banks have statistically significant negative impact on banks' profit. That means increase in bank size decreases NIM of banks. This is because while calculating NIM, the study considered asset size as denominator and for this with increase in asset size the value of NIM decreases. No. of branch and CEO's cash compensation have positive impact on NIM but the results are not statistically significant. No. of employees and total compensation all employees have statistically significant impact. The results show that increase in no. of employee decreases bank's profit where increase in total compensation increases profit.

By considering both the models, it is found that CEO compensation does not have any statistically significant impact on banks' profit in either of the models but total compensation package all the employees of the bank has significant impact in both the models either positively or negatively.

CONCLUSION

Commercial banks of any country should earn sufficient profit to support the economic development of the country. And the management team of the bank and their leader, CEO, operate to earn more profit for bank. So in this aspect the role of management team as well as the CEO is remarkable. This study focuses on this issue and tried to find out the relationship between total cash compensation provided by banks to all its employees and its profitability as well as CEO compensation and bank profitability. The study used regression analysis where ROE and NIM were taken as dependent variable in two different models and five related variables were taken as independent variable. The result shows CEO compensation has no significant impact on banks' profitability but under both models total compensation of all employees of bank was found to have significant influence on banks' profit.

The result of the study is very useful for policy makers and bank owners who appoint CEO and other members in the banks' management team and offer them different packages of compensation so that they work for banks' betterment. The study shows that while bank authority decides about the compensation package, they should keep in mind that an attractive compensation can motivate the employees to work properly for the organization and can bring better returns.

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The limitations of the study is that the study considers only monetary benefits given to employees and CEO as compensation. But there are other non-monetary benefits given which the study has not included. So in future the study can be extended by including the non-monetary benefits in the compensation package. Also similar study can be done on other financial institutions of the country.

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REFERENCES

[1] Abowd, J. (1990), "Does Performance-Based Compensation Affect Subsequent Corporate Performance?", *Industrial and Labor Relations Review*, 52-72.

[2] Acrey, J. C., McCumber, W. R. Nguyen, T. H. T. (2011), "CEO incentives and bank risk", *Journal of Economics and Business,* 63, 456– 471

[3] Adams, S. M., Gupta, A., Haughton, D. M. Leeth, J. D. (2007), "Gender differences in CEO Compensation: evidence from the USA", *Women in Management Review,* 22(3), 208-224.

[4] Agarwal, A., Mandelker, G. N. (1987), Managerial Incentives and Corporate Financing And Investment Decisions, *Journal of Finance,* 823-838.

[5] Agrawal, A. Makhija, A. K. Mandelkar, G. N. (1991), "Executive compensation and Corporate performance in Electric and Gas Utilities", *Financial management,* 20(4), 113-124.

[6] Akhigbe, S., Madura, J., Tucker, A. (1995), "Re-examining the Link between Executive Compensation and Corporate Performance: A Note", *American Business Review,* 83-89.

[7] Allen, L., Rai, A., (1996), "Operational efficiency in banking: An international comparison", *Journal of Banking & Finance*, 20, 655-672

[8] Berger, A. N., Humphrey, D. B. (1997), "Efficiency of financial institutions: International survey and directions for future research", *European Journal of Operational Research*, 98(2), 175–212.

[9] Berger, A. N., Young, De. R. (1993), "The Effects of Geographic Expansion on Bank Efficiency", *Journal of Financial Services Research*

[10] Bhattacharyya, A., Lovell, C. A. K. Sahay, P. (1997), "The impact of liberalization on the productive efficiency of Indian commercial banks", *European Journal of Operational Research,* 98(2), 332–345.

[11] Chang, Y. Y. Dasgupta, S. Hilary, G. (2012), "CEO Ability, Pay, and Firm Performance", *Management Science,* 56(10).

[12] Coleman, N. S., Feler, L. (2014), " Bank Ownership, Lending, and Local Economic Performance During the 2008-2010 Financial Crisis", *FRB International Finance Discussion Paper No. 1099*. Retrived from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2423040, 01:50 am.

[13] Davis, S. A., DeBode, J. B., Jr., D. J. K. (2013), "Dollars and sense: The implications Of CEO compensation for organizational performance", *Business Horizons*, 56, 537—542.

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[14] Dietrich, A., Wanzenriedasa, G., (2014), "The determinants of commercial banking profitability in low-, middle-, and high-income countries", *The Quarterly Review of Economics and Finance,* 54(3), 337–354
[15] Fernández, A., González, F., Suárez, N. (2010), "How institutions and regulation shape the influence of bank concentration on economic growth: International evidence", *International Review of Law and Economics,* 30(1), 28–36. Frydman, C., Jenter, D. (2010), CEO Compensation. *Working paper.*
[16] Hardy, D. C., Emilia Bonaccorsi di Patti (2001), "Bank Reform and Bank Efficiency in Pakistan", IMF Workiing Paper No. 01/138
[17] Grigorian, D. A., Manole, V. (2002), "Determinants of Commercial Bank Performance in Transition: An Application of Data Envelopment Analysis", World Bank Policy Research Working Paper No: 2850, Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2423040, 01:50 am.
[18] Hasan, I., Marton, K (2003), Development and efficiency of the banking sector in a transitional economy: Hungarian experience", *Journal of Banking & Finance*, 27, 2249–2271.
[19] Jensen, M., Murphy, K. (1990a), "Performance pay and top management incentives", *Journal of Political Economy*, 98(2), 225-64.
[20] Jensen, M., Murphy, K. (1990b), "CEO incentives – it's not how much you pay, but how", *Harvard Business Review*, 63(3), 138-49.
[21] Jian, M., Lee, Kin-Wai. (2015), "CEO compensation and corporate social Responsibility", *Journal of Multi. Finance. Management,* 29, 46–65
[22] Lam, K.C. K., McGuinness, P. B. Vieito, J. P. (2013), "CEO gender, executive Compensation and firm performance in Chinese-listed enterprises", *Pacific-Basin Finance Journal,* 21, 1136–1159.
[23] Lewellen, W., Loderer, C. Martin, K. (1987), "Executive Compensation and Executive Incentive Problems", *Journal of Accounting and Economics*, 9, 287-310.
[24] Livne, G., Markarian, G. Mironov, M. (2013), "Investment horizon, risk, and Compensation in the banking industry", *Journal of Banking & Finance,* 37, 3669–3680.
[25] Mitchener, K. J., Wheelock, D. C. (2013), "Does the structure of banking markets affect economic growth? Evidence from U.S. state banking markets", *Explorations in Economic History*, 50(2), 161-178
[26] Naceur, S. B., Ghazouani, S. (2007), "Stock markets, banks, and economic growth: Empirical evidence from the MENA region", *Research in International Business and Finance,* 21, 297–315.
[27] Nourayi, M. M., Mintz, S. M. (2008), "Tenure, firm's performance, and CEO's compensation", *Managerial Finance,* 34(8), 524 – 536
[28] Nourayi, M. M., Daroca, F. P. (2008),"CEO compensation, firm performance and Operational characteristics", *Managerial Finance,* 34(8), 562 – 584.
[29] Pasiouras, F., Kosmidou, K. (2007), "Factors influencing the profitability of domestic and foreign commercial banks in the European Union", *Research in International Business and Finance,* 21(2), 222–237
[30] Pradhan, R. P., Arvin, M. B., Hall, J. H. and Bahmani, S. (2014), "Casual nexus between economic growth, banking sector development, stock market

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development, and other macroeconomic variables: The case of ASEAN countries.", *Review of Financial Economics*, 23(4), 155-173

[31] Rezvanian, R., Rao, N. Mehdian, S. M. (2008), "Efficiency change, technological progress and productivity growth of private, public and foreign banks in India: evidence from the post liberalization era", *Applied Financial Economics*, 18(9).

[32] Saxena, P. Jain, R. Dua, G. M. "An analysis of the relation between Executive Compensation and Firm's Profitability: Cases of India", Retrieved 26th April 2015, 10:54fromhttp://accman.in/gyanpj14/2.pdf

[33] Sigler, K. J. (2003),"CEO compensation and healthcare organization performance", *Management Research News,* 26(6), 31 – 38.

[34] Sun, F. Wei, X., Huang, X. (2013), CEO compensation and firm performance, *Review Of Accounting and Finance,* 12(3), 252 - 267

[35] Sufian, F., Habibullah, M. S. (2009), " Determinants of bank profitability in a developing economy: Empirical evidence from Bangladesh", *Journal of Business Economics and Management,* 10(3).

[36] Xiaoqing (Maggie) FU, Shelagh Heffernan, (2007), "Cost X-efficiency in China's Banking sector" *China Economic Review*, 18, 35–53.

[37] Zegarra, L. F. (2014), "Bank laws, economic growth and early banking in Latin America: 1840–1920", *Explorations in Economic History*, 53, 101-119

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