

The influence of abnormal directors' compensation on corporate performance in Nigeria

Abstract: **Authors & Affiliation:** The thrust of this paper is to examine the relationship between firm ¹Aroh Joseph Chike, ¹Aroh Nkechi N. and performance and abnormal directors' compensation for thirteen (13) listed 2Augustine Nwekemezie Odum* banks in Nigeria for the period from 2012 through 2016. The study adopted Robust Least Square Regression Analysis in finding coefficient estimates ¹Department of Accountancy, Federal that will be used for policy recommendations. The researcher found that Polytechnic, Oko, Nigeria there is a positive but insignificant relationship between firm performance measured by shareholders' value of Tobin Q and abnormal directors' 2.Department of Accountancy, Nnamdi compensation. The results also showed that the size of the firm significantly Azikiwe University, Awka, Nigeria influence shareholder's wealth but not significantly affecting firms' profitability. The study recommends the adoption of a sound framework and appropriate contractual arrangement that will direct the board of directors' compensation of Nigerian quoted banks in order to ensure available best practices of corporate governance in the industry. **Corresponding Author:** Keywords: Executive Compensation, Agency Theory, Corporate Governance. Augustine Nwekemezie Odum

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Introduction:

Ceteris paribus, company officers and executives not properly compensated will tend not to have the incentive to perform their duties to the best interest of shareholders' wealth. This can highly be detrimental to the shareholders. Hence, the level(s) of executives' compensation and its consequent relationship with firm financial performance are critical issues in a generally heated debate among a host of financial journalists, economists, legislators, corporate directors, and compensation professionals [1].

Studies have shown that remuneration to executives serves as an incentive that affects decisions made and strategies adopted by an executive, both of which affect firm performance. Research findings have suggested that remuneration has a motivational effect and is an indicator of value for executives. It serves as a means for executives to realize rewards for their hard work. In the corporate environment, executives participate in the firm's profitability. Therefore, when firm executive makes sound decisions and engages in gainful strategies, the executive and the organization realize financial enrichment [2].

The common understanding underlying executive compensation is that in order to motivate executives to exert effort and work shareholders' wealth, compensation packages should include some forms of incentive components [3]. Therefore, all such incentives should establish a connection between the performance of the firm and executive compensation.

Since shareholders are mainly interested in maximizing their wealth, then executive compensation can be employed as an effective instrument for creating value for shareholders by improving their firm performance [4].

[5] has confirmed low pay performance sensitivities. In the Nigerian banking sector, executive remuneration has not come under massive spotlight perhaps due to the nature of executive compensation. As opposed to compensation in more developed economies, executive compensation in Nigeria appears to be limited to cash salary, allowances and cash bonuses as shown in various annual reports of listed banks. Again, since executive compensation is not tied to the performance of stocks by reason of stock options the motivation for executive performance is unlikely to emanate from the benefits of a rising stock price.

Furthermore, almost all listed banks employ return on equity and return on assets as performance measures. Hence, it is fair to conclude that some of the primary benchmarks used to set the goals of executive performance are mainly accounting-based and this will result in viable conclusion(s) when the relationship between compensation and accounting based performance measures is carried out.

Research Problem:

Studies have shown that good compensation systems motivate managers to make expenditure decisions that maximize shareholders wealth. For example, a manager who is aware that his entire compensation is based on a fixed salary would definitely lack the incentive and zeal to work toward the increase of the wealth of shareholders since he does not have any benefit from the resulting wealth [3]. However, if the manager's compensation is based on the firm's performance, the problem of finding the incentive to increase shareholders' wealth is solved. Compensation schemes do not matter, in the sense that executives respond predictably to the incentives built into their compensation contracts [1].

[6], found out that company performance is not significantly related to executive compensation. [7], found a statistically negative and non-significant relationship between performance of commercial banks and executive compensation in Kenya. [5], found a negative and significant relationship between corporate performance and CEO pay in the Nigerian banking industry.

A careful examination shows that this study is unique in itself since it will employ variables such as abnormal directors' fee and the value of Tobin Q as part of its study variables. Owing to the fact that only a few known empirical studies have been carried out on the subject matter in the Nigerian banking industry, the study intends to fill the knowledge gap by exploring the existence and direction of the relationship between abnormal board compensation and firm value of the highly competitive banking sector in the Nigeria.

Objective of the Study:

The key objective of the study was to examine the relationship between abnormal board executive compensation and firm performance of listed Nigerian banks. The specific objectives include:

- 1. Finding out the effect of abnormal directors' compensation on firm value
- 2. Examining the influence of abnormal directors' compensation on firm profitability

Hypotheses of Research Study:

The study tested the null hypotheses that correspond to the above objectives and are stated as:

H01: There is no significant relationship between abnormal directors' compensation and firm value.

H02: There is no significant relationship between abnormal directors' compensation and firm profitability.

Review of Related Literature:

Remuneration:

From the employee's perspective, pay is the reward for labor, which is, the actual effort of producing goods or services. The nature of the payment varies greatly across companies, and may include not only monetary compensation paid shortly before or after the labor is supplied, but also deferred compensation, such as pensions and holiday pay, plus non-monetary rewards such as health insurance and other fringe benefits which are often rated by employees as more valuable than their monetary equivalents [8]. Social norms also play a vital role. For the employees, one's social status is often bound up with one's wage and even how it is paid (hourly, weekly or as an annual salary). It may have a direct link on the worker's well-being, in terms of the capacity to borrow, and how she is perceived by work colleagues, friends and relatives. Above all else, workers' well-being is highly correlated with perceptions of their pay relative to their peers [9].

Abnormal Remuneration:

In this study, executives' total compensation in a given year is obtained by the summation of the executives' salary (fixed part) and bonuses (variable component). However, stock options allowed to the executives are not included into the variable component, because banks are not required to disclose a naira value for these plans. Thus, like most of the literatures, the annual compensation figures we employed do not contain a source of extra compensation for executives. However, the faux pas of these less visible forms of compensation may not pose a serious problem in this study. More so, the omission of these methods of compensation are highly correlated [10]. In this study, directors' abnormal remuneration is calculated by taking the difference between directors' total annual compensation and the industry average for the period under study.

Bank Performance:

There are numerous empirical studies on the relative advantages of different measures of performance. However, this study follows the extant literature and used both accounting based measures of performance, as well as market based measures. Those on the banking literature are no exception performance [3]. The production process of banks

differs remarkably to that of other industries. [11] noted that the basic differences are: (a) banks earn most of their funding from debt with relatively little earned from equity; (b) demand deposits makes up the greater part of banks' liabilities; and (c) long-term loans constitutes most of their assets.

Accordingly, several measures of performance are available, including the conventional measure of Returns on Equity (ROE) and Return on Assets (ROA). For instance, [4] used these conventional performance measures. Bank specific studies has been using these measures as well to assess bank performance [2]; [12]; and [6], though there is need to include other key performance measures such as Firm Profitability (patm) and Share holders' Wealth of Tobin Q.

Corporate Governance Vs Executive Compensation:

In an organization where the corporate governance is weak and shaky, top management tend to exert a strong and powerful influence on the volume the compensation that they are entitled to. These management cadres can thus be overpaid even when they perform their duties below required standard [13], and [14].

This is presented in the enactment of U.S Sarbanes Oxley Act, 2003. In this case study, the New York Exchange (NYE) adopted some sections of the Act. It was done due to the factors which contributed to Enron-collapse. Thus, these factors led to the adoption of policies such as: forbidding the increase of pay owing to accounting restatements and freezing and liquidating any extra-ordinary payment(s) to company officers as well as directors. The U.S Security Exchange Commission (SEC) rule thus requires that a compensation committee be created with a proper reviewed and approved goals, which will evaluate the CEO's performance and determine the nature of pay based on such evaluation scaling.

[15], concluded in his study that CEO influences governance structures negatively with the sole aim of achieving high level of compensation. While according to [8], the effect(s) of executives' compensation on corporate governance structure is negatively felt by the organization. They also found that CEO duality, board composition and audit size have significant influences on the compensation deal and as such it influences top executive behavior hence performance.

Theoretical Literature:

Every scientific investigation into the unknown, adds to the repository of the knowledge available in that particular research area. To this end, this research reviewed some theories that are relevant to the study.

Earnings Based Agency Theories:

The study of [16] asserted that components of earnings will be employed by shareholders as additional performance measures when the components reports that managerial decisions yield robust earnings. In that case, both cash flow measures and elements of earnings possesses a better connection with the cash compensation(s) given CEOs in the companies in U.S. than with only aggregate earnings.

With symmetric information, [17] employs a multi-period principal-agent model to demonstration that residual income is an optimal performance measure in a pure moral hazard setting. Since it measures value creation, he argues that compensation function depends on the history of residual income. In continuation, but including the issue of asset valuation, [18] argues that residual income, together with fair value accounting for receivables, offers an optimal performance measure for incentive purposes.

Board Capture Agency Theories:

[19], noted that under the board capture theory, the board of directors is "captured" by the company's CEO – with board changes and social dynamics discouraging non-executive directors from being overly demanding in formulating executive pay packages. In examining whether compensation committee composition affects CEO compensation practices, [12], found that CEOs receive preferential treatment (at shareholders' expense) in cases when CEOS are serving members of compensation committee.

Management Discretion Agency Theories:

Managerial discretion can be defined as task complexity and the latitude of options which top managers have in making strategic choices. It has been well established that ceteris paribus, the larger the size the company possesses, the greater will be the manager's discretion to influence the absolute value of shareholders wealth [20]. Managerial discretion according to [6] refers to the extent to which an organization's formation and its fate lie within the control of its top managers. However, principal to this concept is that the greater the level(s) of discretion, the greater the potential impact of actions taken by the executive on the firm and, consequently, on the ability to directly influence its performance. Therefore, executive compensation is expected to be higher in high discretion environments, which is in line with agency theory insights on the use of subjective measurements.

Review of Empirical Literature:

[21] Examine the widespread belief that executive pay should reflect firm performance. A compilation of a handcollected data set of compensation paid to executive directors of Dutch listed companies was done. Using a variety of accounting-based and capital market-based performance measures, the empirical analysis fails to detect a positive pay-performance relationship. The findings are consistent with the view that powerful managers can influence their own pay. [22], examined the linkage among top executive pay, firm performance and board structure. The focus of the work is to establish if governance structure influences top executive pay. Using a balanced panel of firms listed in the Portuguese Stock Market, the study found no relationship between company performance and board remuneration; and that that firms with more non-executive board members pay higher wages to their executives.

The investigation of [9] on the nature and direction of relationship among level of board compensation, corporate ownership, and among listed firms in Italy between 1995 and 2002 shows that excess compensation is negatively related to the firms' future performance though the variable is linked to several governance characteristics. [4] examined the impact of the incentives of board of directors on CEO compensation, sensitivity of compensation and shareholder wealth on corporate performance. He found that the sensitivity of the pay-performance linkage will increase with increase in the directors' equity in the firm.

Using 280 listed firms in the New York Stock Exchange period between 2006 and 2009, [23] explores the relationship of company performance (proxied by return on equity) and CEO pay. The study found a significant and positive relationship between these variables. While the duration in office or tenure of the chief executive officer also showed a significant sign, the firm size variable is the most significant factor in the determinant of the level of CEO compensation.[24] empirical work presents the relationship between the performance and corporate governance of firms in Vietnam economy. After an intensive review, and with the aid of flexible generalized least squares (FGLS) technique on 77 listed firms trading within the 2006 to 2011 period, the study indicated various elements of corporate governance such as the compensation of board members have positive effects on the performance of firms, as measured by the return on asset (ROA).

The work of [8] empirically analysed the changes in experienced in both executive pay and incentives among firms in the U.S between 1993 and 2003. They found both the compensation and board committees overtime has become more independent. They also discovered that compensation committees in which members of the board are do not set fewer incentives or greater pay.

Analyzing the impact of executive compensation on firms' profitability for listed companies in Nigeria for a period of ten years ranging from 2004 to 2013, the results from the study of [8] revealed a significant positive relationship between the directors' cash incentives, bonus issue of share and earnings per share.

Methodology of Research Study:

The study adopted a causal research design. In addition, a census study of thirteen (13) registered banks in Nigeria over a five year period from 2012 to 2016 was made. The study typically employed secondary data extracted from the published financial statements listed in the Nigerian Stock Exchange over the five year period.

In this study, directors' abnormal remuneration is calculated by taking the difference between directors' total compensation and the industry average for the period under study. This approach is to estimate several payperformance equations, but for brevity we include only some of the key results. In order to capture the pay versus performance nexus adequately, it is necessary to introduce a range of control variables (the Z vector) that may reasonably be expected to determine pay, independently of performance.

Model Specification:

A multiple regression model was used to analyze the data using Stata version 13. Analysis was done using Pearson correlation to measure the association and a Robust Least Square to establish the nature and direction of the relationship between abnormal board executive compensation and performance of Nigerian banks. The study adopted the following regression model:

 $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu_t$

Where: Y = Tobin Q and Firm Profitability, α = Intercept, X₁ = Abnormal Director Compensation, X₂ = Firm Size, X₃ = Firm Leverage, X₄ = Firm Age, μ_t = Prediction error.

The resulting relationship is expressed in an econometric form as:	
Tobin Q = α_0 + β 1adicom + β 2tlbta + β 3fsize + β 4age + μ_t	(2)
Patm = $\alpha_0 + \beta 1$ adicom + $\beta 2$ tlbta + $\beta 3$ fsize + $\beta 4$ age + μ_t	(3)

Presentation and Interpretation of result:

The dependent variables for this study consist of Profit after Tax and Tobin Q, while the independent variables are Abnormal Directors' Compensation, Firm Size, Firm Leverage, and Firm Age. The results obtained are presented and analyzed as follows:

In Table1 (see appendix), the mean (average) for each of the variables, their maximum values, minimum values, and standard deviation are presented while table 2 (see appendix) presents the normality coefficients of skewness and Kurtosis statistics. The results in Table1 provided some insight into the nature of the selected Nigerian quoted companies that were used in this study. Firstly, going by the small variation between the maximum (6.59) and minimum values of size (5.3) it suggest that the sampled banks in this study are dominated by large banks. In other words, most of the banks employed in this study are big in relation to size of its total asset. This is evident from the standard deviation (degree of dispersion) of the variable of firm size (0.32). Again the descriptive statistics table revealed an over compensation amount of six million two hundred and eighty two thousand six hundred and eight naira and under compensation amount of five hundred and sixty seven thousand three hundred and ninety two naira for the sampled banks during the period of study. This result depicts that even among the big banks in Nigeria there exist a large differential in their compensation packages. This is also evident from large value of its standard deviation of 1082.408. While First Bank Holdings paid both the maximum and minimum amount in year 2014 and 2013 respectively, First City Monumental Bank Plc, Zenith Bank Plc. and Union Bank Plc. paid an amount around the industry average for the period under review in year 2012, 2014, and 2015 respectively.

Table 2 shows that all the variables of interest are normally distributed and statistically significant at the 1% and 5% level of significance. The descriptive statistics in general revealed that there is no sample selection bias or outlier in the data that would impair the generalization from this study.

Interpretation of Tobin Q Model:

In this model Robust Least Square Regression was adopted as it gives a better presentation of the coefficient estimates after correcting for the effect of unequal variance (Heteroscadasticity). This is evident from the results obtained in tables 5 and 6 (see appendix).

From the result, it is observed that the variable of abnormal director compensation is positively but insignificantly related to firm performance as measured by Tobin q. The result reveals that a naira increase in the financial compensation package(s) of the board of directors in the sampled banks will lead to no remarkable performance in the banks. Hence, this result suggest that irrespective of the size of compensation packages offered to the board of directors (above or below industry average) the performance of the firm remains positive but without zero degree of variation. This finding supported the view of [8], [23], and [5], but negates the view of [6] and [24]. The null hypothesis that states that there is no significant positive relationship between abnormal executive compensation and firm performance is accepted.

Furthermore, the study reveals a positive and significant relationship between the ratio of total liability to total asset (i.e. company's leverage) and firm performance. While the variable of firm size showed a positive insignificant relationship, the variable of firm age revealed a negative insignificant relationship with the dependent variable of Tobin Q. The result of Tobin Q is adopted in this study because of its inherent advantages over Return on Asset. It possesses a higher explanatory power and measures market performance of firms.

Interpretation of Firm Profitability (Patm) Model:

From the result, it is observed that the variable of abnormal director compensation is positively but insignificantly related to firm performance as measured by profit after tax. It is good to note for reference sake that the size of impact on performance measure using profit after tax equals the size of impact on performance measure adopting Tobin Q variable. This result establishes a uniqueness in this field of study and calls for further investigation. It suggests that an increase (above industry average) or a decrease (below industry average) in director's compensation will yield no addition to the variable of profit after tax.

The whole evidence sufficiently rejects the hypothesis promoted by the social network view, while concurring with the rent extraction hypothesis. Furthermore, the study revealed a positive insignificant relationship between the ratio of total liability to total asset (i.e. company's leverage) and profitability. While the variable of firm size showed a positive insignificant relationship, the variable of firm age revealed a negative insignificant relationship with the dependent variable of profit after tax.

Conclusion:

This study has adequately contributed significantly to the relatively scarce literature on abnormal board compensation in Nigeria by analyzing data from listed banks in Nigeria. The major thrust is to explore whether the volume of remuneration paid (over-paid) or not paid (under-paid) to executives of listed firms in Nigeria is significantly related to the corporate performance of these firms. The analysis of the study is based typically on cash compensation. This was necessitated because the vast majority of organizations in Nigeria hesitate to disclose sufficient information that will allow the estimation of the noncash component. Owing to this, the analysis is of is long overdue since Nigerian banks provide a viable platform in which there is relatively limited functioning of the various mechanisms of the firms' corporate governance.

Study Recommendation:

Our findings will not be encouraging to the large proportion of the Nigerian public that owns shares in the sampled banks, as well as to non-Nigerian investors as most Nigerian banks appear not to be managed in a manner that is consistent with maximization of wealth. Therefore, this study therefore suggests the formulation of a sound framework and appropriate contractual arrangement that will guide and direct the board of directors' compensation pay of Nigerian quoted banks in order to ensure that the best corporate governance practices are adopted in the industry.

Appendix

Table 1 : DESCRIPTIVE STATISTCS

summarize tobin adicom tlbta patma fsize age

Variable	Obs	s Mean	Std. Dev.	Min	Max
+					
tobin	53	1.008302	.1098204	.83	1.44
adicom	53	125.8485	1082.405	-567.392	2 6282.608
tlbta	53	85.83038	6.314498	71.72	110.37
patma	53	18.99566	33.92971	-132.38	127.19
fsize	53	5.969434	.3233741	5.3	6.59
+					
age	53	20.18868	15.68568	5	44
Authors Computation 2017					

Table 2: PEARSON CORRELATION MATRIX

	Tobin Q	Patm
Tobin Q	1.00	0.04
Patm	0.04	1.00
Adicom	0.07	0.00
Tlbta	0.14	0.21
Fsize	0.10	0.07
Age	-0.11	-0.07

Authors Computation 2017

Table 3 DATA NORMALITY TEST:

sktest tobin adicom tlbta patma fsize age Skewness/Kurtosis tests for Normality

Ţ	Variable	Obs	Pr(Skewne	ess) Pr(Kur	tosis) adjo	chi2(2)	Prob>chi2
	+- tobin	53	0.0000	0.0005	23 41	0.0000	
	adicom	53	0.0000	0.0000	53.98	0.0000	
	tlbta	53	0.0046	0.0024	13.64	0.0011	
	patma	53	0.0684	0.0000	17.89	0.0001	
	fsize	53	0.3032	0.4958	1.59	0.0507	
	age	53	0.1358	0.0000	58.23	0.0000	

Authors Computation 2017

	Tobin Q Model	Tobin Q Model	PATM Model	PATM Model
	(OLS)	(Robust LS)	(OLS)	(Robust LS)
C	0.44	0.44	-179.00	-179.00
Adicom	0.00	0.00	0.00	0.00
	(0.67)	(0.80)	(0.26)	(0.48)
	[0.45]	[0.43]	[0.80]	[0.63]
Tlbta	0.00	0.00	1.65	1.65
	(1.71)	(1.85)	(2.00)	(0.97)
	[0.09]*	[0.07]*	[0.05]*	[0.33]
Fsize	0.04	0.04	11.03	11.04
	(0.67)	(0.92)	(0.67)	(0.50)
	[0.51]	[0.36]	[0.51]	[0.61]
Age	-0.00	-0.00	-0.48	-0.48
	(-1.74)	(-2.13)	(-1.36)	(-0.96)
	[0.09]	[0.04]**	[0.18]	[0.34]

Table 4 Robust POOLED REGRESSION RESULT

Note.*, **, are the levels of significance, revealed to be 10%, 5% Authors Computation 2017

Table 5 HETEROSCEDASTICITY TEST (TOBIN Q MODEL)

<i>Chi</i> ²	5.84		
Pro. Chi ²	0.0157		
Authors Com	putation 2017		
Table 6	HETEROSCEDASTICITY TEST (PATM MODEL)		
Chi ²	2.72		
Pro. Chi ²	0.0962		

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References:

- 1. Lambert R A and Larcker D F (1985) "Executive Compensation, Corporate Decision-Making and Shareholder Wealth: A Review of the Evidence" Corporate Finance Journal 2 No.1
- 2. Finkelstein S., Boyd B. (1998) 'How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation' Academy of Management Journal. Vol. 41(2) Pp 179-200.
- 3. Murphy K. J. (1998) "Executive Compensation" Handbook for labour economics, Volume 3, North Holland.
- 4. El Akremi A., Roussel P., and Trepo G. (2001) "CEO compensation strategies: Consequences on the structure and management of executive pay" working paper.
- 5. Samson, C. R. (2015). A Study of the relationship between firm performance and CEO compensation in the commercial banking industry. Journal of Applied Management and Entrepreneurship, 13(2), 26-44
- Fernandes N. (2005) "Board Compensation and Firm Performance: The Role of "Independent" Board Members Finance" Working Paper No. 104/2005
- 7. Aduda J. (2011), The relationship between executive compensation and firm performance in the Kenyan banking sector "Journal of Accounting and Taxation Vol. 3(6).
- 8. Dale-Olsen H (2006). "Wages, Fringe Benefits and Worker Turnover", Labour Economics, 13 (1): 87-105
- 9. Brown MP, Sturman MC, Simmers MJ (2003). "Compensation Policy and Organizational Performance: The Efficiency, Operational and Financial Implications of Pay Levels and Pay Structure".
- 10. Kaplan, S. N., 1994, "Top executive rewards and firm performance: A comparison of Japan and the United States," Journal of Political Economy, 102, 510.
- 11. Macey, J R, and O'Hara, M. 2003, "The Corporate Governance of Banks", Economic Policy Review, 91-107.
- 12. Knapp, M., Gart, A. and Becher, D. 2005. "Post-Merger Performance of Bank Holding Companies, 1987-98", The Financial Review, 40:549-74.
- 13. Bertrand T.O and Sendhill M.M. 2003. CEO compensation, director compensation, and firm performance: evidence of cronyism? Journal of Corporate Finance 12, 403-423.
- 14. Bebchuk L, Fried J, Walker D, 2002. Managerial power and rent extraction in the design of executive compensation. University of Chicago Law Review, 69: 751-846.
- 15. Mululu AK (2005). "The Relationship between Board Activity and Firm Performance: A Study of Firms Quoted on the Nairobi Stock Exchange" [unpublished]
- 16. Natarajan R (1996). "Stewardship Value of Earnings Components: Additional Evidence on the Determinants of Executive Compensation", Acc. Rev., 71(1): 1-22.
- 17. Ohlson J (1999). "Earnings, Book Values and Dividends in a Stewardship Setting with Moral Hazard", Working Paper, Graduate School of Business, Columbia University

- 18. Dutta S, Reichelstein S (2000). "Controlling Investment Decisions: Hurdle Rates and Intertemporal Cost Allocation", Working paper, University of California at Berkelely
- 19. Stapledon, G. (2004). "The Pay for Performance Dilemma", University of Melbourne Legal Studies Research Paper No. 83.
- 20. Lazear E, and Rosen S (1981). "Rank-Order Tournaments as Optimum Labor Contracts," J. Pol. Econ., 89(5): 841-864.
- 21. Kevin MJ and Leigh (2003). Board Structures around the World: An Experimental Investigation. (Electronic version). Reports on Cutting Edge Research in Business, Finance and Economics; Report 107, November 30, under the title: Which Board Structure Performs Best?
- 22. Nuno (2005). "Leadership Structure and CEO Compensation", American. Bus. Rev., 17(1): 50-56
- Sigler K. J. (2011) "CEO Compensation and Company Performance" Business and Economics Journal, Volume-31.
- 24. Neslihan M.M 2011. "The Dependence of Pay-Performance Sensitivity on the Size of the Firm", Review of Economics and Statistics, 80(3):436-43.