

# “Executive Compensation-Firm Performance relationship: A perspective from India”

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**Abstract:** *The Indian Companies Act, 2013 under section 197 contains provision towards maximum managerial remuneration. The total remuneration to directors and managers should not exceed 11% of its net profit for the financial year. There are other provisions relating to the payment of remuneration which act as the measures to control any abnormal behaviour of management towards payment of remuneration. There are firms, headed by CEO, who were paid too much at the expense of the stakeholders, which also manifests executives' self-interest with complete lack of accountability for stakeholders and a gloomy picture of corporate governance.*

*This study aims to examine the relationship between executive compensation and firm performance of BSE 200 listed firms in India. There has been research in this area in the countries such as US, UK and other countries, however little literature is available in emerging economies especially in the India. The amount of literature of executive pay and firm performance, which is available for Indian companies, is very limited. There is dearth of recent literature on executive pay and firm performance with recent data. Also, we could not find a study or research where executive compensation and pay performance, market based and accounting based, has been studied. Therefore, this study finds a unique place in the existing literature. Present study is based on the executive compensation for the year 2017 where data has been collected from Bloomberg and Prowess. Size of the firm is a significant variable in explaining executive compensation. Firm's performance is a major factor affecting executive compensation. The pay performance relationship does not hold true in the case of small firms in the sample. Firms' performance, market based and accounting based, is negatively correlated with executive compensation.*

**Key words:** *Corporate Governance, Executive Compensation, Firm's performance, Indian listed firms, transparency*

**JEL:** *M12, L25, G34, G38*

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## 1. Introduction

Increasing research and publication in the field of corporate governance, opens not so known facts and nexus of executive compensation, which is a matter of concern for the stakeholders. The current research mainly focuses on relationship between executive compensation and firm performance however whether a better performance leads to better executive compensation or not. What is more important in this context whether the executive compensation is based on some rational and logical parameters, is questionable and is of research interest within corporate governance domain. Agency theory given the relationship between executive pay and firm performance (Holmstrom, 1979, Grossman & Hart, 1983). As per agency theory, there should be proper alignment of interest of the principals (shareholders) and agents (managers), while designing compensation contracts for later. A firm having more outside directors uses equity-based compensation extensively. (Mehran, 1995). Optimal contracting approach of agency

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problem, boards are assumed to design compensation schemes in such way to provide managers efficient incentives to maximize shareholders value and wealth. Managerial power approach of agency problem not only sees executive compensation as a potential instrument for addressing the agency problem but also as part of the agency problem itself (Bebchuk & Fried, 2003).

The functioning of a board of directors in modern corporations serves as a mechanism for institutionalising the process of fixing managerial compensation and monitoring performance, thereby ensuring that the wealth maximisation objective of the shareholders is maintained (Parthasarathy, et al (2006). The area of executive compensation is not much researched among Indian companies, which makes it obvious choice for the study. Moreover, India also has underdeveloped regulatory and institutions mechanism along with less active investors. (Balasubramanian, et al, 2010; Khanna & Palepu, 2010; Narayanaswamy, Raghunandan, & Rama, 2012). Results are expected to be applicable in other emerging economies. The benefits of corporate governance practices vary across firms and country as these depends on characteristics of firm and country (Balasubramanian, et al 2010). In another study in China it was suggested that pay-for-performance relation was stronger non-state-controlled firms and firms which had a greater proportion of independent directors on board. (Conyon, 2011).

There has been research in this area in the western countries and it is developed in those countries, however little literature is available in emerging economies especially in context to Indian companies. Not many studies have been done in Indian companies to study the executive pay and firm performance while there are studies which are linked to labour market. Post 1990s since India embraced policy of liberalization, it has not only opened new vistas for the business but there have been increasing need for the governance mechanism of the firms. These LPG policies have also impacted the structuring of the executive compensation. We expect to contribute to the literature on corporate governance by showing the relationship between executive compensation and firm's performance.

The paper has been organised in the following parts where second part contains an overview of exiting literature pertaining to executive compensation, firm performance, corporate governance and other factors. Empirical model used along with data source, methodology and sampling details and hypothesis tested has been explained in part three while part four gives the results of the study and gives the relationship between executive compensation and firm's performance. Next part covers discussion of the study and its results, also the implications of the results in the Indian context and finally part six provides a conclusion and summary along with future scope of work in this area.

## **2. Literature review**

Literature studied in this study has been majorly into two areas viz. executive compensation and firm's performance. Since the focus of the paper is to study executive compensation in Indian context, the studies in the Indian context have been studied in detail while giving reference to the studies done in other countries as well.

### **2.1 Executive compensation in India**

Clause 49 of listing agreements mandates the remuneration of directors should be reported in the annual report under corporate governance. This should include all the elements of remuneration package of individual directors under groups of salary, benefits, bonuses, stock option and pension etc. The report should also cover the details of fixed component and performance linked incentive, along with performance criteria. Firm is also required to furnish details of stock option it has issued to directors and whether these were issued at a discount along with the period over which accrued and over which exercisable. It is also required that the firm should include the criterion of making payment to its non-executive directors in its annual report or include on website. Number of shares and convertible instruments held by non-executive directors should also be reported in annual report. Compensation package for non-executive directors, including independent directors, should be determined by board and it is subject to a binding vote by shareholders at AGM (SEBI circular, 2004).

The standard economic theory of executive compensation is the principal-agent model (Fama and Jensen, 1983, Jensen and Meckling, 1976; Holmström, 1979, Mirrlees, 1976, 1997). Principal-agent model predicts that firms design efficient compensation packages to solve moral hazards which will motivate CEOs. (Murphy, 1999). Agency theory predicts that executive pay is positively correlated to firm performance (Conyon, 2011). Transparency in corporate financial reporting increases regulation in management of the firm and it also helps in the appropriate valuation of

firm. This transparency also reduces chances for those who take benefit by make use of sensitive information, not privy to capital market (Bhattacharyya and Rao, 2005).

## **2.2 Executive compensation and Firm's performance**

Executive compensation was freed from regulation in the year 2004. Not many studies have been carried out in the Indian context where the focus area is determinants of managerial compensation. Jensen and Murphy (1990) used sample data on executive compensation covering half a century, conclude that executive compensation does not change firm's performance. They also quoted just 6.7% increase in the salary and bonus of the CEO had the impact of \$1,000 change in the market value of the company. As per conventional economic theory, managerial compensation and incentive problem is to be seen from the perspective of "Principal-agent" framework. Shareholders (principal/owner) face the problem as to whom should they appoint as managers (agent) as well as how to incentivize them so that their performance leads to wealth maximization, after adjustment of these costs. (Parthasarathy et al, 2006). Effect of economic liberalisation on managerial compensation was analysed by using 237 CEO data and years before liberalization and after liberalisation by Bhattacharjee et al (1998). They reported that a Rs. 100 increase in sales leads to 15 paise increase in the salary of CEO while Rs. 100 increase in shareholder's wealth increased the salary of the CEO by 22 paise.

Canyon (2011) stated that the ownership of shares acts as an impetus to align interests of CEOs and owners, and also focus CEO effort on value creation. Salaries of many CEO of Indian companies increased to the tune of 300 percent in the year 2004. The component of variable pay is highest contributor to the salary package in Indian context (Swami, 2005). The issue of executive Compensation is being seen with greater interest and emphasis since liberalisation i.e. post 1990s ((Parthasarathy, et al, 2006). Board compensation is dependent on current and past year performance while at the same time compensation of CEO is dependent only on the current year's performance, as per study concluded by Ghosh (2003) covering large number of firms of the manufacturing sector. There is a positive relation between the firm performance and the percentage of equity held by managers along with percentage of manager's compensation which is equity based. Firms having a higher percentage of shares held by insiders or outside block holders, are using less equity-based compensation (Mehran, 1995).

Ramaswamy et al (2000) while studying top 150 Indian firms found that CEO compensation was positively related to the age of CEO, while tenure was negatively correlate to the CEO compensation. They also found that the proportion of family owned business was negatively correlated with CEO compensation. CEO duality and proportion of insider director was not found to have any relation to executive compensation in family owned firm while these are key variable in non-family owned firms. Firm performance (as measured by Return on Assets) was a significant explanatory variable for CEO compensation.

Hartzell and Starks (2002) found that if the institutional ownership is more concentrated, then the executive compensation would be lower as larger institutional presence results in more performance-sensitive compensation. They examined CEO pay in almost 2000 firms during 1991-1997. In 2000, CEO compensation was on average 7.89 percent of corporate profits in the firms making up the 1500-company ExecuComp dataset (Balsam, 2002). Jensen and Warner (1988) stated that the block-holders and controlling shareholder, who are having high equity in the firm supervise managerial activities which means that in concentrated ownership shareholders can supervise managerial incentives and guard their interest in their firm. Core et al. (1999) and Shivdasani (1993) thus hypothesize that large share stakes by outside shareholders will mitigate potential CEO entrenchment and be negatively correlated with CEO compensation.

## **3. Empirical model**

This paper focuses on the executive compensation and firm performance by incorporating the approaches in the existing literature. The data set used in the study is of 2016-17 which is very recent as well as the number of firms selected are large (200) covering firms from a wide cross section of firms across industries. This will help in development of an explanatory model for executive compensation in selected Indian firms. The paper will add to the existing body of knowledge.

Firm's performance is commonly measured by its accounting based and market-based performance. Accounting based performance is measured by Total assets, Total Income, Reported Net profit while market-based performance is measured by market capitalisation.

Two different aspects of executive compensation are modelled in this paper. They are total pay of the CEO, total compensation which is inclusive of variable pay, stock option, bonus among others and cash compensation. It is assumed that the same set of independent variables determine both these dependent variables.

### 3.1 Executive compensation and firm performance

It has been widely recognized and accepted that the performance link pay help in motivating employees. If an executive is paid based on his/her performance which essentially means that the executive will have a higher component of variable pay, if the firm performance high. This helps us to formulate hypothesis

**Hypothesis 1A:** Ceteris paribus, total income of a firm and cash compensation of executive will be positively associated.

**Hypothesis 1B:** Ceteris paribus, total income of a firm and total compensation of executive pay will be positively associated.

### 3.2 Executive compensation and firm characteristics

Executive compensation is affected by various characteristics of firm viz size of firm, diversity, industry etc. The firm specific characteristics used in the study is firm size, which is measured by sales, revenue, profits and number of employees. The present paper focuses on size in terms of sales. Thus we hypothesize: -

**Hypothesis 2A:** Ceteris paribus, there exist a positive association between a firm's profit and cash compensation of executive.

**Hypothesis 2B:** Ceteris paribus, there exist a positive association between a firm's profit and total compensation of executive.

### 3.3 Executive compensation and market performance

Executive compensation is being discussed as a result of agency theory i.e. whether agents are performing in the best interest of the principal or not. Therefore, it is rational to evaluate this from the perspective of the shareholders as they are the one who have invested money and would be looking for generating returns from that investment. Thus, we hypothesize:

**Hypothesis 3A:** Ceteris paribus, there exist a positive association between market capitalization and cash compensation of executive

**Hypothesis 3B:** Ceteris paribus, there exist a positive association between market capitalization and total compensation of executive.

### 3.4 Data and Sample

Our study uses data on the top 200 publicly traded firm listed on BSE. The time period of the study is year 2017. We have combined two data sets. First data set is related to executive compensation which is taken from Bloomberg while data related to financial performance has been taken from CMIE-Prowess. The study is focuses on executive compensation and firm performance of top 200 firms listed on BSE (Bombay Stock Exchange). Quality of data of Bloomberg and Prowess is good and authentic as data is procured directly from the annual reports, news and other disclosures made by those companies. We have also verified the data by cross checking with the annual reports of the companies. These data sets have been previously used in the research by (Raithatha and Komera, 2016).

### 3.5 Model Estimation

We have used a linear regression model where executive compensation, cash compensation and total compensation, is dependent on accounting and market-based performance of the firm. This model has also been used by Parthasarathy, et. al (2006). This model will help us to explain the determinants of executive compensation.

$$y(CC)it = \alpha_i + \beta_1 RNPit + \beta_2 TOAit + \beta_3 (TOI) + \beta_4 MCAPit + \epsilon_{it} \quad (1)$$

$$y(TC)it = \alpha_i + \beta_1 RNPit + \beta_2 TOAit + \beta_3 (TOI) + \beta_4 MCAPit + \epsilon_{it} \quad (2)$$

In these above equations term  $y(CC \text{ and } TC)$  it is the function of executive cash compensation for firm  $i$  in at  $t$  time. Cash compensation has been used as a measure for executive compensation in previous research as well. (Chen et al., 2010, Firth et al., 2006, Kato et al., 2006; Wang and Xiao, 2011).

Accounting based performance is being measure by reported net profit, total assets), ROA (return on assets), which are dependent variable. Market based measure (Murphy, 1985) is annualize stock return over twelve months. ROA (return on asset) is an accounting-based measure (Core et al., 1999) is defined as net profits divided by book value of assets. These dependent variables are predicted to be positive ( $\beta_1$  and  $\beta_2 > 0$ ).

CC	= Cash compensation paid to executive (in INR million)
TC	= Total compensation paid to executive (in INR million)
Reported Net Profit	= Net profit margin in the current year (in INR million)
Total Assets	= Return on asset in the current year (in INR million)
Total Income	= Total income (sales) (in INR million)
Market Cap	= Market capitalization (in INR Million)
$e$	= error term, assumed to be normally distributed

#### 4. Analysis and Results

		CC	TC	Reported Net Profit	Total assets	Total income	Market Capitalization
N	Valid	186	186	186	186	186	186
	Missing	0	0	0	0	0	0
Mean		32.3140	80.5489	20428.45	835400.99	235625.05	516998.90
Median		23.6284	43.2246	7171.60	143122.50	84395.10	244658.10
Std. Deviation		33.23026	149.18161	44284.242	2433024.012	497315.388	722588.811
Skewness		1.749	5.977	3.180	7.550	5.483	3.283
Std. Error of Skewness		.178	.178	.178	.178	.178	.178
Kurtosis		3.767	48.303	14.969	74.225	37.644	12.881
Std. Error of Kurtosis		.355	.355	.355	.355	.355	.355
Percentiles	25	6.7068	11.3570	3439.73	55375.50	42508.98	146994.03
	50	23.6284	43.2246	7171.60	143122.50	84395.10	244658.10
	75	46.2391	87.8875	18104.28	548593.50	215375.90	515936.58

**Table 1: Descriptive statistics**

Table 1 shows descriptive statistics of the data. The companies selected were S & P BSE 200, however in few cases data was missing for executive compensation. Those companies have been removed from the sample. All the values of reported net profit, total assets, total income, market capitalization, cash compensation and total compensation are given in Indian rupees (in million). The average cash compensation and total compensation is Rs.32.3140 million and Rs. 80.5489 million which is much higher than the median value of Rs. 23.6284 million and Rs .43.2246 million respectively. Cash compensation has much lower level of dispersion than the total compensation. The standard deviation of cash compensation is Rs. 33.23 million while it is Rs. 149.18 million for total compensation.

Table 1 also shows the values of coefficients of skewness and excess kurtosis for cash compensation, total compensation, reported net profit, Total assets, Total income and market capitalization. These measures tell the shape of data i.e. how data is distributed. A normally distributed data should have skewness of 0 while that is not the case in the present data. All the variables have positive skewness where 7.550 is maximum value for variable total assets while it is 1.749 for cash compensation. Kurtosis measures the tail-heaviness of the data and its value is 3 for a normally distributed data. The data exhibits leptokurtic characteristics in all the variables. The values which are less than means are more that the values above the mean, in the table and the extreme values in either directors are more common than expected statistically in normal distribution.

	CC (million)	TC (in million)	Reported Net Profit	Total assets	Total income	Market Capitalization
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CC (million)	Pearson Correlation	1	.310**	.007	-.093	-.086	.088
	Sig. (2-tailed)		.000	.919	.208	.244	.231
	N	186	186	186	186	186	186
TC (in million)	Pearson Correlation	.310**	1	.035	-.077	-.008	.050
	Sig. (2-tailed)	.000		.632	.294	.913	.495
	N	186	186	186	186	186	186
Reported Net Profit	Pearson Correlation	.007	.035	1	.337**	.659**	.823**
	Sig. (2-tailed)	.919	.632		.000	.000	.000
	N	186	186	186	186	186	186
Total assets	Pearson Correlation	-.093	-.077	.337**	1	.474**	.401**
	Sig. (2-tailed)	.208	.294	.000		.000	.000
	N	186	186	186	186	186	186
Total income	Pearson Correlation	-.086	-.008	.659**	.474**	1	.557**
	Sig. (2-tailed)	.244	.913	.000	.000		.000
	N	186	186	186	186	186	186
Market Capitalization	Pearson Correlation	.088	.050	.823**	.401**	.557**	1
	Sig. (2-tailed)	.231	.495	.000	.000	.000	
	N	186	186	186	186	186	186

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 2 : Pairwise correlation coefficient matrix**

Table 2 shows the results of Pearson product moment correlation coefficients and the results were not very different from the earlier computation. The relationship between cash compensation and total compensation is 0.310 which is strong based on 186 observations. The correlation is also strong between total income and reported net profit and is stronger and more significant than total assets and total income. A very significant correlation is being reported here between reported net profit and market capitalization where the values are 0.823 while market capitalization has significant correlation with total assets and total income as 0.401 and 0.557 respectively. Correlation is very weak between reported net profit and total compensation 0.035. All these results are calculation at 0.01 significance level.

### 3. Results and Discussion

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	30.192	3.049		9.901	.000
Reported Net Profit	-9.503E-5	.000	-.127	-.888	.376
Total assets	-1.597E-6	.000	-.117	-1.378	.170

Total income	-7.773E-6	.000	-.116	-1.126	.262
Market Capitalization	1.398E-5	.000	.304	2.314	.022

a. Dependent Variable: CC (million)

**Table 3: Regression coefficients for Cash compensation**

The above table shows the result for independent variable explained by reported net profit, total assets, total income and market capitalization have any impact on cash compensation of the executives in selected firms. The p values for reported net profits, total assets, total income and market capitalization are much higher than 0.05 signifying that there is no relationship between cash compensation and firms' accounting and market-based performance. This also allows us to accept null hypotheses.

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	75.996	13.923		5.458	.000
Reported Net Profit	-3.938E-5	.000	-.012	-.081	.936
Total assets	-6.984E-6	.000	-.114	-1.320	.188
Total income	-2.282E-6	.000	-.008	-.072	.942
Market Capitalization	2.269E-5	.000	.110	.822	.412

a. Dependent Variable: TC (in million)

**Table 4: Regression coefficients for Total compensation**

Table number 4 shows the regression result for total compensation and reported net profit, total assets, total income and market capitalization. In this case also the p value for all the independent variable is found to be much more than 0.05 which again testifies that the total compensation of executive of the firm is not dependent on total assets, total income etc.

The present study is a cross sectional study covering companies from different industries. This covers executive compensation and other independent variables for a single time period i.e. financial year 2016-17. The results which are presented in table 3 and 4 are for relation between total and cash compensation and firm's accounting and market-based performance. Based on these, it was hypothesised that the executive compensation and firm's performance is positively related while as the results (given in table 3 and 4) do not show any significant variation in executive compensation, is due to the variation in the accounting and market-based measures. This study is in sync with the finding of research done by Parthasarthy et al (2006).

Earlier studies done by Ramaswamy et al (2000) and Ghosh (2003) found that the return on assets (ROA) was found to have significant determinant of CEO compensation. (Raithatha, 2016) found that there was no pay-performance relationship using market-based measures while there is relationship between pay-performance using accounting-based measures. It was also concluded that the pay-performance relationship was absent in smaller firms while it was significant for larger sample firms. Greater is the firm size greater is CEO pay (Chakrabarti, 2011) however this study does not show any positive relative like this. This study also shown the state of corporate governance in India by focussing the executive compensation which is not regulated by law in India.

## 6. Conclusion

This study was carried out with a motivation to ascertain the determinants of cash and total compensation of the executives, where accounts-based parameters (Total income, total assets and reported net profit) and market-based returns (market capitalization) were used to explain variation in executive compensation. The present study shows that total income, total assets, reported net profit and market capitalization do not significantly determine cash and total compensation of the executive in S & P BSE 2000 firms.

This papers makes an attempt to add knowledge the existing body by studying the relationship between accounting and market based measures and executive compensation. The amount of literature in this domain is very limited as far

as Indian firms are concerned. There are other studies performed by Ramaswamy et al (2000), Ghosh (2003), Parthasarthy et al (2006) in the area of executive compensation. These studies are quite old and moreover the firms of a particular sector, while present study focuses on the firm which are across sectors.

Executive compensation should have restricted stock and restricted stock option which will be a barrier to liquidity for the executives and they should not be able to sell their stocks and option for 2-4 after leaving the company and this will help in synchronizing the interest of the shareholders with long term executive compensation (Bhagat et al, 2008). Ghosh (2003) concluded in his study that there was a non-linear positive relation between pay and performance of the firm.

It was also suggested CEOs of private firms were more likely to be replaced if the firm performed poorly regarding stock price (Conyon, 2011). Ramaswamy et al (2000) stated that the CEO compensation was found to be positively related to CEO age and organizational performance in India while family ownership was negatively related to CEO pay.

### 6.1 Limitations and future scope of work

It is important to acknowledge the limitations of the study. The study was limited to the S & P BSE 200 companies which could be a limitation. The time period used for the study was one year i.e. financial year 2016-17. There were limited factors in terms of time and resources which restricted a longitudinal study. The focus of the study i.e. unit was CEO/Executive director/Managing director, however senior management or board of directors can also be considered. Executive compensation was taken as dependent variable, and assumed to take care of long run and short run compensation.

This study focussed on S & P BSE Sensex while there could another study which is longitudinal study. Time period taken in the present study was 2017 while we can more studies in this area by taking data from more companies. There can be other areas where the number of companies could be more, and researchers can take big data of BSE.

### References: -

- Balasubramanian, N., Black, B. S., & Khanna, V. (2010). The relation between firm-level corporate governance and market value: A case study of India. *Emerging Markets Review*, 11(4), 319-340.
- Balsam, S., Bartov, E., & Marquardt, C. (2002). Accruals management, investor sophistication, and equity valuation: Evidence from 10-Q filings. *Journal of Accounting Research*, 40(4), 987-1012.
- Bebchuk, L. A., & Fried, J. M. (2003). Executive compensation as an agency problem. *The Journal of Economic Perspectives: A Journal of the American Economic Association*, 17(3), 71-92.
- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of corporate finance*, 14(3), 257-273.
- Bhattacharyya, A. K., & Rao, S. V. (2005). Economic impact of 'regulation on corporate governance': Evidence from India. *Accessible via: <http://econpapers.repec.org/paper/wpawuw/pfi/0504002.htm>*.
- Bhattacharjee, A. (1998). Managerial influences on intraorganizational information technology use: A Principal-agent model. *Decision Sciences*, 29(1), 139-162.
- Bhattacharjee, D., Jairam, S., & Shanker, G. R. (1998). Top management remuneration and firm performance: an exploratory analysis. *Economic and Political Weekly*, M10-M15.
- Chakrabarti, R., Subramanian, K., Yadav, P. K., & Yadav, Y. (2012). 21 Executive compensation in India. *Research handbook on executive pay*, 435.
- Chen, J. J., Liu, X., & Li, W. (2010). The effect of insider control and global benchmarks on Chinese executive compensation. *Corporate Governance: An International Review*, 18(2), 107-123.
- Cheng, S., & Firth, M. (2006). Family ownership, corporate governance, and top executive compensation. *Managerial and Decision Economics*, 27(7), 549-561.
- Conyon, M. J., & He, L. (2011). Executive compensation and corporate governance in China. *Journal of Corporate Finance*, 17(4), 1158-1175.
- Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of financial economics*, 51(3), 371-406.



- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, 26(2), 301-325.
- Ghosh, A. (2003). Board structure, executive compensation and firm performance in emerging economies: Evidence from India. *Indira Gandhi Institute of Development Research*.
- Grossman, S. J., & Hart, O. D. (1986). The costs and benefits of ownership: A theory of vertical and lateral integration. *Journal of political economy*, 94(4), 691-719.
- Hartzell, J. C., & Starks, L. T. (2003). Institutional investors and executive compensation. *The journal of finance*, 58(6), 2351-2374.
- Hölmstrom, B. (1979). Moral hazard and observability. *The Bell journal of economics*, 74-91.
- [https://www.sebi.gov.in/legal/circulars/oct-2004/corporate-governance-in-listed-companies-clause-49-of-the-listing-agreement\\_13153.html](https://www.sebi.gov.in/legal/circulars/oct-2004/corporate-governance-in-listed-companies-clause-49-of-the-listing-agreement_13153.html), accessed on 27.07.18
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of political economy*, 98(2), 225-264.
- Jensen, M. C., & Warner, J. B. (1988). The distribution of power among corporate managers, shareholders, and directors. *Journal of Financial Economics*, 20, 3-24.
- Kato, T., & Long, C. (2006). Executive compensation, firm performance, and corporate governance in China: Evidence from firms listed in the Shanghai and Shenzhen Stock Exchanges. *Economic development and Cultural change*, 54(4), 945-983.
- Khanna, T., & Palepu, K. G. (2010). *Winning in emerging markets: A road map for strategy and execution*. Harvard Business Press.
- M.J. Conyon, L. He / *Journal of Corporate Finance* 17 (2011) 1158–1175
- Mehran, H. (1995). Executive compensation structure, ownership, and firm performance. *Journal of financial economics*, 38(2), 163-184.
- Mirrlees, J. A. (1976). The optimal structure of incentives and authority within an organization. *The Bell Journal of Economics*, 105-131.
- Murphy, K. J. (1985). Corporate performance and managerial remuneration: An empirical analysis. *Journal of accounting and economics*, 7(1-3), 11-42.
- Murphy, K. J. (1999). Executive compensation. *Handbook of labor economics*, 3, 2485-2563.
- Narayanaswamy, R., Raghunandan, K., & Rama, D. V. (2012). Corporate governance in the Indian context. *Accounting Horizons*, 26(3), 583-599.
- Parthasarathy, A., Menon, K., & Bhattacharjee, D. (2006). Executive compensation, firm performance and governance: an empirical analysis. *Economic and Political weekly*, 4139-4147.
- Raithatha, M., & Komera, S. (2016). Executive compensation and firm performance: Evidence from Indian firms. *IIMB Management Review*, 28(3), 160-169.
- Ramaswamy, K., Veliyath, R., & Gomes, L. (2000). A study of the determinants of CEO compensation in India. *MIR: Management International Review*, 167-191.
- Shivdasani, A. (1993). Board composition, ownership structure, and hostile takeovers. *Journal of accounting and economics*, 16(1-3), 167-198.
- Swami, P. (2005). India's highest paid executives'. *Business India*, November, 7, 62.
- Wang, K., & Xiao, X. (2011). Controlling shareholders' tunneling and executive compensation: Evidence from China. *Journal of Accounting and Public Policy*, 30(1), 89-100.