Factors Determining CEO Compensation in an Emerging Economy : Evidence from India

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Abstract

Executive compensation has been a topic of great interest in the academics as well as in the corporate world due to a growing bent of firms towards corporate governance practices. The present research work examined the various firm specific characteristics that influence the components of CEO's compensation in Indian firms. The study selected a sample of 123 publicly listed Indian firms across different sectors. The research identified the determinants of CEO compensation in an emerging economy, India using data from FY 2012–18, a period that witnessed various changes in the executive compensation structure post the implementation of Companies Act, 2013. A panel data regression of select variables indicated that in India, a firm's performance with respect to its profitability affected the retirement benefits given to CEOs, while its leverage and size significantly affected CEO's salary as well as total remuneration. In addition, we found that firm's size had a significant relationship with bonus component, and contribution to provident fund for key executives. However, none of the variables except firm's size were found to have a significant relationship with the perquisites paid to the CEOs. The study concluded by giving policy implications and suggestions about linking CEO compensation to profitability, stability, and sustainability of the organization.

Keywords : **CEO compensation, firm performance, growth, risk, corporate governance, panel regression**

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The subject of CEO compensation has attracted a continued interest of academicians (Makri et al., 2006 ; Murphy, 1999) as well as practitioners (McGregor, 2007 ; Scannell & Lublin, 2007) because of two key reasons, that is, the magnitude of pay offered to key executives and its direct relation to organizational performance. The role of a CEO is pivotal for the success of any organization and is subject to a wide discussion and debate worldwide. The issue of executive compensation in India especially came to the fore with the Infosys controversy and its board facing criticism over the CEO, Vishal Sikka's salary. The controversy reflected the importance of CEO compensation as Infosys later addressed the issue by announcing a lower package for the new CEO, Mr. Salil Parekh. According to The Economic Times Intelligence Group (ETIG), a study of pay ratio data provided in the FY16 annual reports of 38 of 50 companies that comprise the Nifty index, a CEO's annual remuneration was ₹ 13 crore on average, which is approximately 237 times the median wage of these companies (Somvanshi, 2017). Therefore, the question here arises if these pays are really justified.

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Executive compensation can have a direct impact on the shareholder's value. If the actions of the CEO are not in congruence with the interests of shareholders, then it will result in a separation of management and ownership. The agency theory proposed by Jensen and Meckling (1976) stated that the principal (shareholder or the owner) and the agent (CEO or who manages the firm) both want to maximize their share, and this might result in the conflict of interests between both. One cannot ignore the fact that CEOs can work for self-interest, which can harm shareholders. The principal (owner) can control the actions of the agent (CEO) by the way of formal control systems and auditing. However, this involves cost (monitoring cost) and reduces the profits available to shareholders. Therefore, it is essential for an organization that the CEO should work for the interests of the shareholders. Researchers believe that one of the solutions to this problem lies in tying CEOs' compensation to the firm's performance, which would be in the interests of shareholders. Over the last two decades, the academic literature on CEO compensation has emphasized on linking the overall CEO compensation with a firm's performance (Gunasekarage & Wilkinson, 2002 ; Jensen & Murphy, 1990 ; Khanna, 2016). Many researchers have been exploring CEO compensation from different aspects. Krishnan et al. (2014) studied the CEO compensation of Malaysian firms in terms of impact of non-financial factors. Chen et al. (2009) examined how employee stock bonus influenced financial performance for electronic firms listed on the Taiwan Stock Exchange over the sample period from 1996 – 2001 and found that the average return on equity was significantly higher for firms distributing employee stock bonus than those not distributing such incentives.

In the wake of increasing corporate scandals, the research on executive compensation has also gained momentum in India. An analysis of the CEO salaries many years ago, that is, 2015–16 disclosed by the country's top listed companies, forming part of the stock market benchmark index Sensex, showed that these companies paid an average overall remuneration of close to ₹ 19 crore to their top executives. This includes salary, commissions, allowances, value of all perquisites, and employee stock option plans (ESOPs) exercised during the year, among other benefits disclosed by the companies as part of the total remuneration to their top-paid executives, which included Executive Chairpersons, CEOs, or Managing Directors. CEOs got an average annual increase of 49% compared with 7.5% for everybody else working in the company. Total CEO compensation in India comprises of base salary, perquisites, bonus, stock options, pensions, contribution to provident fund, and other incentives.

There has been a raise in voice of public regarding the CEO packages in India to be inflated and sky-high. The reason for increasing public outrage regarding CEO salary is that the Indian CEOs are making salary as much as 1200 times the pay of median workers in their companies. Additionally, in the past, the government tightly regulated executive compensation in India. Companies put caps on the compensation packages of executives for both fixed as well as variable components. Post economic liberalization, there have been significant changes in the compensation policies of the Indian firms with a steady and dramatic increase in the salary levels of executives. Therefore, the question that arises is : What should really determine CEO compensation and its components ? Most of the companies in India as well as worldwide have linked the executive compensation to the firm's performance.

A large body of academic literature (Antle & Smith, 1986 ; Gunasekarage & Wilkinson, 2002 ; Khanna, 2016 ; Sloan, 1993) is available, wherein, accounting based performance measures like return on equity, return on assets, earnings per share etc., and market based performance measures like company specific stock returns and Tobin's *Q* were utilized to calculate the total compensation. Adding to this, company's size, tenure of CEO, and board size are amongst few other significant determinants of CEO compensation. Considering these developments, the present research focuses on the financial determinants of CEO compensation in an emerging economy, India using both accounting and market-based performance measures. The main objective of the current research work is to explore whether the CEO's compensation in Indian firms depends on firm's performance and other firm specific characteristics or is it just a fad.

Literature Review and Hypothesis Development

Firm Performance and CEO Compensation

Most of the existing literature asserts linking CEO compensation with firm's performance (Ghosh, 2006 ; Khanna, 2016 ; Raithatha & Komera, 2016). The reasons behind this are first, a performance-based compensation can help in reducing adverse selection problem (Arya & Mittendorf, 2005 ; Darrough & Melumad, 1995). Second, using firm's performance as a determinant of CEO compensation can help in resolving principal – agent relationship problem leading to better congruence between the interests of principal (owner) and agent (executive) (Gunasekarage & Wilkinson, 2002 ; Khanna, 2016). In light of the above, various researchers have tried to explore the relationship between performance of a firm and CEO compensation. Jensen and Murphy (1990) asserted that there existed a positive but not very strong elasticity between cash compensation paid to CEOs and firm performance which may be due to political forces that limit the overall compensation. Hall and Liebman (1998) added to this research by including stock and stock option holdings along with cash compensation paid to CEOs of these NYSE firms. Their study also found a significant and positive relationship between firm's performance and overall compensation of CEOs. Ozkan (2011) found that there is a significantly positive relationship between CEO cash compensation and firm's performance of UK firms, which becomes insignificant after including equity incentives in the compensation structure. Lin et al. (2013) found no relationship between firm performance and CEO compensation for a set of S&P large, mid, and small cap firms. Gao and Li (2015) did a comparative analysis of pay-performance sensitivity in private and public firms and found a weak link between CEO compensation and performance of private firms.

In context of Indian firms, Ghosh (2006) and Ramaswamy et al. (2000) found a positive and strong influence of past performance on CEO pay of small firms while that of current performance in case of large firms. Kuo et al. (2013) proxied firm's performance with ROE and found that relationship between compensation and performance existed only below a threshold ROE for Indian firms. Mukherjee (2019) studied a sample of Indian banks and found no causal relationship between yield performance of Indian banks and the percentage of expenditure incurred towards salary and compensation paid to its employees. Sridhar and Jasrotia (2021) found no relationship between CEO pay and performance indicators for Nifty 50 companies. The above studies had mixed views on relationship between firm performance and CEO compensation. Moreover, majority of the studies had not split the compensation into fixed and variable components, retirement benefits, etc. or into cash and non-cash components (perquisites). To cater to this research gap, we propose the following hypothesis :

↳ **H1 :** Firm's performance significantly influences various components of CEO compensation.

Firm's Size and CEO Compensation

Size serves as a proxy for organizational responsibility (Ramaswamy et al., 2000). A number of previous studies (Ghosh, 2006 ; Ozkan, 2011 ; Ramaswamy et al., 2000 ; Talmor & Wallace, 2001) considered firm size as an explanatory variable for executive compensation. Rosen (1990) and Smith Jr. and Watts (1992) found that large firms demand for more competitive CEOs, therefore, the CEO compensation is likely to be higher in larger firms as compared to their counterparts. On the same reasons of more effort requires higher pay, Ciscel and Carroll (1980), Murphy (1985), Baker and Hall (1998), Schaefer (1998), Talmor and Wallace (2001), Shah et al. (2009), Doucouliagos et al. (2012), Raithatha and Komera (2016), and Zhou (2000) found a positive association between executive pay and firm size. However, Murphy (1999) found weak sensitivity of pay to performance for larger sized U.S. firms. Similarly, Ramaswamy et al. (2000) studied 150 large cap Indian firms and found that the size

of a firm did not have a significant and positive relationship with executive pay. Hence, keeping in mind our data period and mixed empirical evidence of past studies, we empirically examined our sample firms with the hypothesis that :

↳ **H2 :** Firm size influences CEO compensation.

Nature of the Firm and CEO Compensation

Uncertainty leads to job complexity and hence high firm risk should lead to a higher compensation (Talmor & Wallace, 2001). Miller et al. (2002) found that CEO pay had a curvilinear relationship with unsystematic risk, which meant high compensation during high firm specific risk, a situation where managers had greater control over performance of the firm. Raithatha and Komera (2016) found that the cash flow risk (unsystematic risk) had a significant and negative relationship with the CEO compensation. However, the theoretical model proposed by Banker and Datar (1989) suggested that the level of CEO compensation may either increase or decrease with firm risk. Jaiswall (2006) found a significant positive relation between CEO pay and key characteristics including risk of Indian firms. On the other hand, Raithatha and Komera (2016) propagated that risk had a negative relationship with CEO pay for Indian firms. With time varying results, considering our data period, we posit for our sample firms :

↳ **H3 :** There is a significant association between a firm's risk and CEO compensation.

Jensen (1986) proposed that debt can be used as a disciplining device for management and removing agency problems. The presence of this monitoring tool can cause a negative association between degree of leverage (debt-equity ratio) and executive compensation. Grossman and Hart (1982) propagated that debt can result in threat of bankruptcy and hence reduce the possibility to earn incentives. Palepu and Healy (2007) and Gao and Li (2015) also supported a negative association between debt financing and CEO compensation. We could not find significant contribution of Indian studies to the association between leverage and CEO compensation. Hence, in dearth of Indian studies, we propose that :

↳ **H4 :** There is a significant association between a firm's leverage ratio and CEO compensation.

Jaiswall (2006) reflected a negative association between the stock market risk and CEO compensation. Abowd (1990) suggested that paying an incremental 10% bonus to CEOs for positive stock performance resulted in 4 – 12% increase in the stock prices in the subsequent period. Tomar and Korla (2011) found stock price increase to be positively associated with the CEO compensation in a sample of non-financial companies. Raithatha and Komera (2016) reported a significant and negative relationship between firm's stock market risk and CEO compensation. In line with empirical research, we propose :

↳ **H5 :** Stock price returns influence CEO compensation.

Many researchers have studied the relationship between firm's growth and CEO compensation (Penman, 1996 ; Tariq, 2010). In the past, researchers (Ghosh, 2006 ; Talmor & Wallace, 2001 ; Raithatha & Komera, 2016) have used market to book value (Tobin's q) as an indicator of firm's growth and found its relationship with CEO compensation. Therefore, to confirm the relationship with our sample firms, we propose that :

↳ **H6 :** Market to book value positively influences CEO compensation.

The review of literature suggests that there is an intense interest in examining the role of accounting variables along with non-financial ones like CEO duality, age, shareholding structure, etc. on CEO compensation. Various modelling techniques have emerged to study how firm specific factors can affect CEO pay. In the Indian context, there is no dearth of research work on executive compensation, however, the studies conducted to date have focused mainly on examining the role of a mix of accounting and non-financial variables like CEO duality, age, shareholding structure, etc. on CEO compensation. The extant literature on the issue of CEO compensation has generated mixed results regarding financial variables/factors affecting CEO compensation. We could not locate any empirical studies focusing on the split between CEO pay variables (fixed and variables) and firm specific financial factors post the implementation of the Companies Act, 2013. The Companies Act, 2013 which also regulates the managerial compensation was implemented in September 2013 and, therefore, this is considered a hallmark year for changes in the compensation structure as well as related corporate governance norms.

The current study is an attempt to address this research gap by exploring the influence of firm specific characteristics on CEO compensation after the implementation of Companies Act, 2013. The novelty of this study is that besides complementing the existing research, it takes a comprehensive list of factors and tries to explore the differential impact of these factors on fixed and variable components of CEO compensation in an era post the implementation of Companies Act, 2013.

Data and Methodology

Data Source and Period of Study

The study took a sample of firms, which constituted the National Stock Exchange (NSE) 500 index as on March 31, 2012. The period of the study is from FY 2012 – 2018. We used CMIE's Prowess database to gather data for all the variables taken up under the study. As pointed out previously, the implementation of the Companies Act, 2013 marked a number of changes in the compensation structure of Indian companies as well as related corporate governance norms. Hence, the period selected by us incorporates the impact of all these changes on the executive compensation. Although, initially, we selected 500 companies, but the data of CEO compensation variables was not available for many of the listed firms. Hence, after screening for complete availability of data, we finally took a sample of only 123 firms. Data for all the variables for each of these firms were gathered for a period of 6 years, that is, from 2012 – 2018. The final data set was a combination of cross section and time series. This necessitated the use of panel-data regression models to test the proposed hypotheses. The regression model considers CEO compensation variables, that is, total remuneration, fixed salary, bonus/commission, perquisites, and provident fund and retirement benefits as dependent variables ; while firm performance in terms of profitability, stock returns, firm size, price to book value, leverage, and beta (risk indicator) are taken as independent variables. The following section gives details of the variables selected.

Variables

For examining the relationship between CEO compensation and performance, we consider total compensation received by a chief executive officer as the proxy for pay. Components of compensation considered for the present research work include salary, perks, bonus/ commission, and contribution to provident fund. Following Murphy (1985), Jensen and Murphy (1990), Barro and Barro (1990), Ramaswamy et al. (2000), Ghosh (2006), Kuo et al. (2013), Jagannathan and Khan (2019), and Sriram (2018), we use accounting based measures, that is, return on

Table 1. ***Definitions of Variables Used in the Study***

Variable	Description
CEO Compensation	Fixed : Salary, contribution to provident fund Variable : Bonus, perquisites
ROE	Net profit / Total equity
ROA	Profit before interest and after tax / Total assets
Size	Total market capitalization
Risk	Beta = Covariance between stock and market/ variance of market
Debt Equity	Total debt/total equity
Total Return	ΔStock price
P/BV	Market price/ book value

equity (ROE) and return on assets (ROA) as proxy for firm performance. Following Ghosh (2006), Raithatha and Komera (2016), Sandhya and Prashar (2019), and Mukherjee (2019), we use price to book value (Tobin's *Q*) as an indicator for growth. Along with this, annual stock return is taken as a market-based performance measure, while firm size, risk, and leverage ratio are considered as firm specific characteristics which could influence CEO pay. Table 1 provides the definitions of all variables.

The following set of equations were constructed to test the relationship of the above mentioned variables with CEO compensation :

$$Total\ Remuneration = const\_ + b_1 ROE + b_2 ROA + b_3 Size + b_4 Risk + b_5 D/E + b_6 Total\ Return + b_7 P/BV \quad \ldots\ldots (1)$$

$$Salary = const\_ + b_1 ROE + b_2 ROA + b_3 Size + b_4 Risk + b_5 D/E + b_6 Total\ Return + b_7 P/BV \quad \ldots\ldots (2)$$

$$Bonus\ \&\ Commission = const\_ + b_1 ROE + b_2 ROA + b_3 Size + b_4 Risk + b_5 D/E + b_6 Total\ Return + b_7 P/BV \quad \ldots\ldots (3)$$

$$Retirement\ Benefits = const\_ + b_1 ROE + b_2 ROA + b_3 Size + b_4 Risk + b_5 D/E + b_6 Total\ Return + b_7 P/BV \quad \ldots\ldots (4)$$

$$Contribution\ to\ Provident\ Fund = const\_ + b_1 ROE + b_2 ROA + b_3 Size + b_4 Risk + b_5 D/E + b_6 Total\ Return + b_7\ P/BV \quad \ldots\ldots (5)$$

$$Perquisites = const\_ + b_1 ROE + b_2 ROA + b_3 Size + b_4 Risk + b_5 D/E + b_6 Total\ Return + b_7\ P/BV \quad \ldots\ldots (6)$$

where,

ROE = Return on equity,

ROA = Return on total assets,

Size = Total market capitalization at the end of a financial year,

Risk = Beta of the firm,

D/E = Debt equity ratio of the firm,

Total return = Change in share price of the firm for a given financial year,

P/BV = Price to book value of the company.

Analysis and Results

The first step in data analysis, before applying regression, is to compute the descriptive statistics. Additionally, Pearson correlation matrix between CEO compensation and selected financial variables is constructed. Table 2 shows the descriptive statistics for the study.

From Table 2, we can infer that overall, the total remuneration paid to CEOs stands at an average of INR 2.56 mn, with the highest value being INR 17.07 mn. On an average scale, salary is the major component of overall remuneration. Among the variable components, the average retirement benefits/pension obligations are the highest (0.62 mn), while average contribution to provident fund is the lowest (0.139 mn). We find that on an average, salary is 63.6% of the total compensation, while variable portion is only 36.3% of the same. In order to check the impact of the selected financial variables, we applied panel data regression. Firstly, all the equations from 1 – 6 are checked for multicollinearity and heteroscedasticity and the results of the same have been reported in Table 3 and Table 4, respectively.

The results suggest that none of the study models are found to suffer from multicollinearity (VIF < 5 for all variables) (Table 3). Further, the variables are homoscedastic (insignificant chi-square) (Table 4). The results allow to use panel data regression with fixed or random effects further. A preliminary analysis of data using Pearson correlation coefficients is done and the results of the same are shown in Table 5.

The results in Table 5 suggest a positive and significant association between salary and firm size. Also, it is found that variable components of the executive compensation have a significant relationship with the

Table 2. ***Descriptives (₹ mn)***

	Salary	Bonus/ Commission	Perquisites	Retirement Benefits	Contribution to Provident Fund	Total Remuneration
Mean	1.44	0.145	0.16	0.62	0.139	2.56
Median	0.97	0.08	0.14	0.144	0.0793	1.45
Maximum	14.7	1.58	0.08	22.43	1.58	17.07
Minimum	0.01	0.01	0.00	0.00	0.00	0.00
Standard Deviation	1.64	0.19	1.10	2.81	0.19	3.09

Table 3. ***Test of Multicollinearity***

Variable	Variance Inflation Factor (VIF)
Salary	1.27
Bonus	1.51
Perquisites	1.30
Retirement Benefits	1.91
Contribution to Provident Fund	1.49
Total Remuneration	1.27

Table 4. ***Test for Heteroscedasticity***

Variable	Chi - square	*p* - value
Salary	39.37	0.20
Bonus	128.94	0.51
Perquisites	19.38	0.19
Retirement Benefits	10.75	0.098
Contribution to Provident Fund	94.88	0.20
Total Remuneration	476.56	0.183

Table 5. ***Pearson Correlation Matrix : CEO Compensation vs Firm Performance Measures***

Variable	ROE	ROA	Debt Equity	Size	Total Return	Beta
Salary	0.0680	0.0805	–0.0285	0.1832*	–0.0448	0.0737
Perquisites	0.1773*	0.1280*	0.0343	0.3238	–0.0653	–0.2043*
Bonus/Commission	0.0018	0.2203*	0.0411	0.3704*	–0.0480	–0.2292*
Contribution to Provident Fund	0.0306	0.2566*	–0.0770	0.2063*	–0.0384	–0.1665*
Retirement Benefits	–0.0124	–0.0049-	0.3541*	0.1888	0.1023	–0.0368
Total Remuneration	0.0458	0.2418*	–0.0012	0.3997*	–0.0454	–0.1845*

Note. *shows significance @ 5%.

profitability, size, and risk exposure of the firm. In order to choose between fixed and random effects model, Hausman test was carried out, which evidences the suitability of a random effects model. Table 6 and Table 7 show the results of the random effects model.

The results suggest that the overall CEO compensation and salary do not have any relationship with performance of the firm as measured by return on equity (b_1 = –0.0002791) (Table 5) and return on assets (b_2 = 0.14493) (Table 5). The study does not find any relationship of these performance indicators with variable components of CEO salary, that is, bonus as shown by insignificant coefficients (b_1 & b_2) in Table 6. ROE,

Table 6. ***Panel Data Regression (Random Effects) with Total Remuneration, Salary, and Retirement Benefits as Dependent Variable (Eqns. 1, 2, & 3)***

Variable	Total Remuneration	Salary	Retirement Benefits
ROE (b_1)	–0.0002791	–0.0021149	0.0322889*
ROA (b_2)	0.014493	0.0804832	0.1200207
Size (b_3)	0.1515352*	0.2058484*	0.3202146*
Risk (b_4)	–0.049891	–0.1395948*	0.4088523
Debt Equity (b_5)	–0.0009548*	–0.009245*	–0.0031547
Total Return (b_6)	–0.0001442	0.007819	0.0304538
P/B (b_7)	–0.0016882	–0.0049524	–0.290461*
*Const_*	6.368247	6.373391	4.497484
R Sq	0.23	0.29	0.25

Note. *shows significance at 5%.

Table 7. ***Panel Data Regression (Random Effects) with Bonus & Commission, Contribution to Provident Fund, and Perquisites as Dependent Variable (Eqns 4, 5, & 6)***

Variable	Bonus & Commission	Contribution to Provident Fund	Perquisites
ROE (b_1)	0.0039741	–0.006278	0.0337223
ROA (b_2)	–0.0389642	0.032227	–0.1573157
Size (b_3)	0.1396606*	0.203186*	0.1257999
Risk (b_4)	–0.1661777	–0.1298377	–0.1143133
Debt Equity (b_5)	0.0003429	–0.0008659	–0.000643
Total Return (b_6)	–0.00149934	0.0108072	–0.0017542
P/B (b_7)	0.0068224	0.0037133	0.0090374
*Const_*	6.452246	5.110874	5.736978
R Sq	0.21	0.27	0.11

Note. *shows significance at 5%.

however, significantly affects the retirement benefits (b_1 = 0.0322889) (Table 5), while there is no impact of ROA on the same (b_2= 0.1200207) (Table 5). These results indicate a mixed impact of ROE on the CEO compensation. Overall, the results cannot establish an overall impact of both ROA and ROE on CEO pay. This finding leads to the rejection of our first hypothesis (H1), indicating that firm performance, as measured by ROA and ROE, does not affect CEO compensation. These results are in congruence with the findings of the previous researchers who also found the relationship between CEO compensation and firm performance to be non-significant (Lam et al., 2013 ; Langsam et al., 1997 ; Michaud & Gai, 2009 ; Ozkan, 2011 ; Shah et al., 2009 ; Tosi et al., 2000).

Further, the study finds a significant and positive association between firm's size and overall CEO compensation (b_3 = 0.1515352). Besides this, the study also explores a positive relationship between firm size and all the components of CEO salary other than perquisites. This supports our second hypothesis (H2), implying a direct relationship between firm size and CEO pay. The results find support from the previous studies, indicating higher pay for larger effort required for large sized firms (Baker & Hall,1998 ; Ciscel & Carroll, 1980 ; Doucouliagos et al., 2012 ; Michaud & Gai, 2009 ; Murphy, 1985 ; Schaefer,1998 ; Shah et al., 2009 ; Talmor & Wallace, 2001 ; Raithatha & Komera, 2016 ; Zhou, 2000).

Firm's risk, as measured by beta, is found to be negatively related only to the fixed component of the compensation, that is, salary (b_4 = –0.1395948) (Table 6). Overall compensation (b_4 = –0.049891), retirement benefits (b_4 = 0.4088523) (Table 6), and all the variable components of compensation are found to have no significant relationship with the risk (Table 7). The results are in congruence with the findings of Brick et al. (2002), who also found the cash compensation of CEO to be negatively associated with the cash flow risk. This signifies that firms with high systematic risk exposure pay less fixed salary to their CEOs to offset the cash flow risk. One possible explanation for risk not affecting the variable component could be to avoid CEOs from deliberately taking a higher risk in expectation of getting additional bonuses and hence putting the money of shareholders at stake. Overall, these findings lead to the partial acceptance of our third hypothesis (H3).

As far as leverage ratio is concerned, the overall compensation is found to have a significant and negative association (b_5 = –0.0009548) (Table 6) with the firm's leverage ratio. The results find support from the previous research work done by Raithatha and Komera (2016) and Grossman and Hart (1982), who also found the leverage ratio of a firm to be negatively associated with the executive compensation. Also, the fixed compensation, that is, salary is found to be negatively associated with CEO compensation (b_5= –0.009245) (Table 6). However, CEO's

retirement benefits and all components of variable compensation are not found to have any relationship with the leverage ratio (Table 7). Therefore, H4 is also partially accepted.

The results do not support the fifth hypothesis of the study, that is, stock price returns (b_6 = –0.0001442) (Table 5) will be significantly associated with the overall CEO compensation. The stock price returns are not found to be related to fixed salary component, retirement benefits (Table 6), as well as any of the variable components of CEO compensation (Table 7). Similar findings exist in an earlier research work of Chakrabarti et al. (2011) stating that the yearly stock returns did not have significant explanatory power with regard to CEO pay.

As per the results, P/BV ratio is found to have a negative and significant relationship with the retirement benefits (b_7= –0.290461) (Table 6) received by the CEO. The results do not support hypothesis 6 (H6) as there is no relationship of P/BV ratio with any other component of CEO salary. This is contrary to the argument that companies may offer various types of benefits to their employees following retirement like pension plans, healthcare plans, medical insurance, gratuity, and life insurance during the period of employees' service which are directly related to the company's overall growth and employees' contribution in it.

Theoretical and Managerial Implications

The results of the research conclude that there is no significant relationship between firm performance and CEO compensation among the sample firms. One possible explanation for this non-significant relationship can be alternative forms of compensation like ESOPs, sweat equity, phantom stocks, etc. offered to executives in addition to the traditional compensation structure. We find that the size of the firm has a direct relationship with the CEO compensation, thus supporting 'higher pay for higher effort.' This implies that the larger a firm, the higher will be the compensation paid to the CEO. The firm risk has a negative relationship with the fixed component of CEO compensation. This finding gives an insight that with increasing systematic risk, firms may shift towards a compensation structure consisting of larger variable and a smaller fixed component. An implication of the findings could be that variable component in the CEO compensation, which can be a combination of annual and long-term incentives, need to be increased. The companies should decide the percentage of fixed and variable component based on their risk profiles. In addition, they should also keep in mind their total asset base (tangible as well as intangible) while structuring the variable pay of CEOs. This will ensure a corollary between the pay of executives and the size of the asset base managed by them. In order to ensure the growth of the organization, it is advisable to tie CEO compensation to the profitability, stability, and sustainability of the organization.

As far as the effect of leverage ratio on CEO compensation is concerned, the findings are in congruence with the principle of agency theory. High leverage results in an inherent threat of bankruptcy and hence forces the managers to use organizational funds judiciously. As a result, debt acts as a self-disciplining device. This can force the CEOs to take away less bonuses so that they can live within their means and meet the fixed obligations. Our sample firms are evidence to this wherein we observe a negative relationship between leverage ratio and salary component as well as total remuneration of the CEO, highlighting the effect of leverage covenants.

According to the results, stock returns do not affect CEO compensation. We attribute this observation to the propensity of the sample firms to award CEOs with stock-based compensation rather than in traditional forms. We also find a negative and significant relationship between P/BV ratio and the retirement benefits given to CEO. One possible explanation for this may be that the high retirement benefits with high growth may serve as an encouragement to older workers to plan for voluntary retirement as well as increase the future obligations of the firm. Hence, the findings indicate that the growth firms may discourage this move by reducing future benefits and instead increase the current compensation of CEOs.

Additionally, the present study revalidates the importance of firm related characteristics in determining CEO compensation. It also concludes that CEO compensation is independent of profitability of the firm and instead,

it is associated with its size, level of indebtedness, as well as systematic risk faced by it. Thus, the findings of the study call for the exploration of fresh thinking to bring about required changes in the CEO compensation structure in Indian firms to make it more oriented with growth and profitability to ensure alignment of the same with shareholder's wealth.

Conclusion

In this study, we empirically examine the factors affecting CEO compensation in Indian firms. Overall, it can be concluded that among firm specific factors, firm performance as measured by profitability ratios, that is, ROA and ROE does not affect CEO compensation. Firm size has a direct relationship with CEO pay. Firm's risk, as measured by beta, has a negative correlation with the fixed component of compensation, indicating the sensitivity of firms to cash flow risk. The results assert a negative association of leverage ratio with overall compensation and fixed components, while no relationship is found between leverage ratio and variable components. P/BV ratio has a positive association with retirement benefits only, while stock price returns, a measure of market-based performance, has no impact on overall or any component of CEO compensation.

Limitations of the Study and Scope for Future Research

Overall, the study contributes to the existing literature by explaining the role played by firm-performance measures and firm specific characteristics as determinants of CEO compensation. However, the study does not take into account stock-based options in overall compensation paid to CEOs. Further research in this area can focus on determining factors affecting CEO compensation by including the stock option component in the overall compensation paid to CEOs. Additionally, the role of shareholder activism can be an interesting area to explore the determinants of CEO compensation structure.

Authors' Contribution

Dr. Monika Chopra conceived the idea and developed qualitative and quantitative design to undertake the empirical study. Dr. Deepti Pathak extracted research papers with high repute, filtered these based on keywords, and generated concepts and codes relevant to the study design. Dr. Monika Chopra verified the analytical methods for the study. The data were extracted by Dr. Monika Chopra and Dr. Deepti Pathak. The analysis was done by Dr. Monika Chopra using E-Views. Dr. Deepti Pathak wrote the manuscript in consultation with Dr. Monika Chopra.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

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