Performance-Pay Sensitivity for Executives of Insurance Firms in Pakistan

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Abstract

**Purpose:** The main purpose of this research paper is to investigate the relationship between executive remuneration and corporate financial performance in insurance companies listed at Karachi Stock Exchange (KSE) and also to find the impact of corporate financial performance on executive remuneration in sample companies.

**Design/Methodology:** Multivariate correlation technique is applied to find the association between variables and Regression analysis is applied to find the impact of corporate performance on executive remuneration on sample companies. For this study required data is obtained from 2008-2010 audited annual reports of the corporations.

**Findings:** This study empirically proves that the executive remuneration has a significant relationship with corporate performance measures of the corporations as a whole and as far as the impact of corporate performance on executive remuneration is concerned, it has significantly positive impact on executive remuneration in case of insurance companies at KSE, Pakistan.

**Practical implications:** This empirical study provides, for insurance sector specifically and generally for all organizations, a way to motivate and retain their executives through higher corporate performance. It also gives a deeper insight for other sector companies to enhance their corporate performance to retain best executives for their organization around the globe.

**Originality/value:** This study is the first of its own nature that measure the relationship between corporate financial performance and executive remuneration and its impact on executive remuneration in case of insurance companies listed on KSE.

**Keywords:** Executive Remuneration, corporate performance, ROA, Pakistan.

**Paper type:** Research paper.

Introduction

This is the era of knowledge economy around the globe. Retention as well as motivation of best intellectual worker is necessary for any organization to compete and create a competitive edge. Better corporate performance could be the way to attract as organization could be in a position to pay higher remuneration to their executives as compared to competitors. Management remuneration could be defined differently by different authors such as; ManagementRemuneration or Remuneration: “Payment or compensation received for services or employment. This includes the base salary and any bonuses or other economic benefits that an employee or executive receives during employment”. (Investopedia, 2011) Management pay is financial compensation received by an executive of a firm, often as a mixture of remuneration, bonuses, and shares of and/or call options on the corporation stock, etc. Over the past three decades, executive pay has risen noticeably beyond the rising levels of an average worker’s wage. Executive pay is a central part of corporate governance, and is often determined by a company's board of directors.

There are six fundamental tools of compensation or remuneration.

- pay
- additional benefits, which provide short-term incentives
- long-term incentive plans (LTIP)
- employee benefits
- paid expenses (perquisites)
"My labor costs went down 50 percent for the same amount of production. The hard-working person was making (twice, on a per hour average, than the slower ones). I use incentive pay for other jobs as well (besides plants balled, dug, and burlaped), such as potting plants—I wish I could use it for everything!" (Tennessee Nursery Grower)

Incentive compensate has the potential to boost worker efficiency if properly planned and maintained. Even though workers know that concentration to detail, amplified yield, or suggestions may bring about rewards, casual incentives are characterized by the inaccurate or unexpected timing and amount of the reward. Farmers’ planned incentives are most probable to be successful if they have (1) precisely established standards; (2) undoubtedly linked better performance with pay or a valued reward; and (3) cautiously measured what type of performance the incentive stimulates. Efficient incentives are intended so the more a worker earns, the more the farmer benefits. (Gregorio Billiko, 2006).

Organizational Performance:

Organizational performance consists upon actual results of an organization measured against its intended output. According to Richard et al., (2009) organizational performance encompasses three specific areas of firm outcomes:

(a) Financial performance consists upon (profits, return on assets, return on investment, etc.)
(b) Product market performance is (sales, market share, etc)
(c) Shareholder return (total shareholder return, economic value added, etc.

Recently, balance score card methodology is used to measure the performance of organization where performance is measured in multiple dimensions.

- Financial performance
- Customer services
- Social responsibility

The rest of the paper is organized as section 2 based on literature review. Section 3 presents the hypothesis. Data and methodology is presented in section 4 and the last section discusses the analysis results and includes concluding remarks.

Literature Review:

Management compensation or management remuneration achieved a great importance at present days as research demonstrates that this can influence the organization performance considerably. The level of pay and the relationship of pay to performance have been the issues in public debate. Worldwide studies document strong verification that company performance is positively connected with chief executive officer (CEO) compensation. Previous Australian studies, however, show that there is no positive association between CEO pay and market performance. Merhebi at al, (2006) find the relationship between Australian CEO Compensation and firm performance by using standard empirical models. They find that in each respect the Australian evidence is steady with global conclusions for firms of the USA, UK and Canada. In particular, they focused CEO compensation—performance connection as positive and statistically significant.

Doucouliagos et al., (2006) in their paper discovered the association among directors’ and Chief Executive Officers’ compensation and performance in Australian banking, by using panel data for the years 1992-2005. A number of wages models were predicted, by using diverse dependent variables, alternating procedures of performance and diverse assessment methods. Their results specify a lack of a simultaneous association between directors’ pay and organizational performance, and no relationship with preceding year performance. But, there is a supplementary distant pay-performance association, with total directors’ pay having a vigorous positive relationship with wages per share lagged two years, and with ROE lagged two years. Contrary to the prior studied, the study of Fernandes (2005) inspects the connection between organizational performance, board structure and top executive pay. He has used a panel of companies from the Portuguese Stock Market. The outcomes of this study shows that a large effect of firm size on top executive compensation. But there is no association between the board remuneration and company performance.

Furthermore the link between CEO pay and performance employing a unique, hand-collected panel data set of 390 UK non-financial firms from the FTSE All Share Index for the period 1999-2005 was studied by Ozkan (2007). They have included mutually cash (salary and
bonus) and equity-based (stock options and long-term incentive plans) gears of CEO remuneration in their analysis of a vibrant CEO compensation replica. The empirical consequences specify that there is a positive and significant association between firm performance and the level of CEO cash compensation. However the connection is positive but not significant for total compensation. That is how their study employs a different set of evidence. They have also locate that part of non-executive directors on board does not have a significant impact on CEO cash compensation, but non-executive directors’ share ownership has a nonlinear and significant impact suggestive of that possession can give incentives for non-executive directors to be more active in observing for CEO remuneration. In addition their results indicate that institutional ownership has a positive and significant impact on CEO pay-for-performance sensitivity of option grants. Lastly, they have found that longer CEO term is linked with lower pay-for-performance sensitivity of option grants suggestive of the entrenchment effect of CEO term.

By using quantile regression heterogeneity in pay, firm size and pay-performance relationships for U.S. CEOs was investigated F. Hallock et al,(2008).They have investigated conditionally high-wage managers have a stronger affiliation between pay and performance than conditionally low-wage managers. Their results using data of a decade demonstrate that there is sizeable heterogeneity in the returns to firm performance across the conditional allocation of salary. (F. Hallock et al, 2008). Suntheim used a new data set with thorough information on CEO remuneration of main international banks from 2000 to 2008 to elucidate how managerial incentives influence banks’ policy choices and bank risk taking. He showed that compensation had an impact on bank performance during the financial crisis. Banks which arranged more stocks to their CEOs performed superior. Moreover using simultaneous equation models he showed that over time bank risk and bank policy choices have been positively correlated with CEOs risk taking incentives (Suntheim, 2010). By Using five years of data from over 1000 Texas school districts, J. Meier and J. O'Toole, Jr.,(2002) measured the quality as added pay paid to school superintendents over and above the normal salary and found that it is positively associated with ten of eleven performance indicators covering a broad collection of organizational goals. By applying multiple approaches such as OLS cross-sectional study on period growth, panel analysis, and dynamic model with the most advanced methods of difference and system GMM the impact of corporate performance, size, and acquisition on CEO’s cash compensation of 315 firms listed on the Stockholm Stock Exchange during 2001-07 was analyzed by Khan and Nguyen, (2010). And he found that performance is more essential than growth in determining pay changes, however size-related heterogeneity is critical and Acquisition has straight impact on pay is generally undetected. 

Brunello et al, (2001) have tried to empirically explore the determinants of compensation of executives in Italy for the very first time. They used survey data for the years 1993-1996 of Italian firms in their study. According to their findings pay-performance sensitivity for executive compensation was relatively higher than lower management. This fact is consistent with principal-agent theory. They have estimated that 1 billion lire increase in real profit increases the pay of upper and middle management up to only 31 thousand lire. They also found that pay-performance sensitivity for foreign-owned and listed firms were higher than the other firms. Duffhues & Kabir (2008) found a significant but negative relationship between corporate performance and executive compensation. Findings of their research were different from other studies.

A research has been conducted on manufacturing firms of India for the period of 2007 by Ghosh (2010). The main purpose of his study was to explore the pay - performance sensitivity for executives of manufacturing firms of India. He measured firm performance with both accounting (ROA) and market based (market to book value) measures. The resultant outcome of his research was that pay for performance sensitivity was significant but small in magnitude. He found that a 10% increase in performance enhanced the pay for performance sensitivity by 0.28%. Murphy (2002) tested the relationship between corporate performance and executive remuneration. He measured firm performance by using stock market performance measures like sales growth and share holder return. He found a significant positive association between executive compensation and corporate performance. He also argued that biased results of previous cross sectional studies were only due to omission of important variables.

Most of the current literature on executive compensation comes from USA, UK and continental Europe and suggests that relationship exists between executive salary and bonus, and corporate performance. The firm performance is measured by two market level measures: Tobin Q and dividend payout ratio and two accounting measures: return on assets (ROA) and
return on equity (ROE). In the early literature, relationship between management compensation and corporate performance has been widely studied but reached no consensus. There is a widely held view that good compensation policies are associated with better firm performance. There are also some studies in which management compensation and financial performance have been correlated.

There is slight work done to study the connection between pay-performance sensitivity and firm performance in case of Pakistan. A comprehensive review of literature shows that the researchers have not reached any consensus and document that some studies find significant impact of corporate performance on executive compensation, while others demonstrate no association between management compensation and corporate financial performance. These mixed results prompt the researchers to investigate the relationship between corporate financial performance and executive compensation.

Conceptual Framework for the Research:

![Proposed Conceptual Model](image)

**Figure 1: Proposed Conceptual Model.**

**Research Hypotheses**

- $H_1$: ROA impacts executive remuneration positively, *Ceteris paribus*
- $H_2$: ROE impacts executive remuneration positively, *Ceteris paribus*
- $H_3$: Net profit impacts the executive remuneration positively, *Ceteris paribus*

**Methodology:**

In this research paper a two-step approach is used. First the nature of relationship is calculated between executive remuneration and financial performance measures i.e. return on equity (ROE) and return on assets (ROA) by multivariate correlation analysis. In second step the impact of financial performance measures is calculated on executive remuneration by using regression analysis.

**Sample and Data:**

All insurance companies listed at KSE are selected as sample. Secondary data is used for this study which is obtained from 2008-2010 audited annual reports of the companies.

**Data Analysis**

Data was entered, edited and analyzed by using software Microsoft Excel 2007 and SPSS version 17 is used for applying following techniques: Correlation and Regression.

**Measure of Executive Remuneration:**

This variable is taken from annual reports of insurance companies as to disclose it is the compulsion on listed companies according to the code of corporate governance of Pakistan (code of corporate governance 2002).

Executive Remuneration = chief executive remuneration + executive remuneration
Measures of Corporate Financial Performance:

1. **Return on Equity**
   Return on equity is the ratio of net income to total shareholders’ equity (Venkatraman and Ramanujam, 1987).
   \[
   \text{ROE} = \frac{\text{net income}}{\text{Shareholder equity}}
   \]

2. **Return on Asset**
   Return on asset is the ratio of total assets to net profit (Gibson, 7th edition, 1997).
   \[
   \text{ROA} = \frac{\text{Net profit}}{\text{Total assets}}
   \]

3. **Net Profit**
   It is the after tax profit taken from annual reports of companies.

**Analysis and Results’ Discussion:**

**Correlation Analysis**

At first step of analysis Pearson correlation was applied to check the association of constructs with one another. Summarized results of correlation are shown in table-1 beneath. All relations were found significant. The results show positively moderate to strong relationships among variables. The correlation results of each variable are discussed separately. In case of Executive remuneration, results suggest that all the variables are positively correlated to it. The most correlated variable was ROE, with correlation value of 0.627, followed by ROA having correlation value of 0.601. And the net profit comes third with correlation values of 0.563.

<table>
<thead>
<tr>
<th></th>
<th>Exe remuneration</th>
<th>ROE</th>
<th>ROA</th>
<th>Profit</th>
<th>Net profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exe remuneration</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>Pearson Correlation</td>
<td>.627</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.029</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>Pearson Correlation</td>
<td>.601</td>
<td>.992</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.039</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net profit</td>
<td>Pearson Correlation</td>
<td>.563</td>
<td>.962</td>
<td>.961</td>
<td>.681</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.057</td>
<td>.000</td>
<td>.000</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed). **Correlation significant at the 0.01 level (2-tailed).

**Regression Analysis**

To evaluate the hypothesis anticipated on one to one basis and since both dependent and independent variable(s) are quantitative, classical regression technique can be applied with confidence.

1. **ROA’s impact on Executive Remuneration**

The first hypothesis hypothesize that ROA would have positive impact on executive remuneration in Pakistan. Hypothesis developed is:

\[ H_1: \text{ROA impacts executive remuneration positively, Ceteris paribus} \]

Model 1: \[
\text{Exe Remuneration} = \alpha + \beta \text{ROA} + e_i
\]
Summarized Regression Results are:

<table>
<thead>
<tr>
<th>R</th>
<th>R-Square</th>
<th>t-value</th>
<th>Coefficient</th>
<th>F-Value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exe Remuneration ROA</td>
<td>0.601*</td>
<td>0.361</td>
<td>2.378</td>
<td>0.601</td>
<td>5.654</td>
</tr>
</tbody>
</table>

*significant at the 0.05 level (2-tailed) **.significant at the 0.01 level (2-tailed)

**Inference**

The value of $R^2$ is 0.361, which shows that 36.1% of the variance in overall executive remuneration is explained by predictor variable. The value of F-test is 5.654 at $p<0.05$ shows the model’s goodness of fit. The t-value is more than +2, which indicates that there is a positive relationship between variables. Hence, results in table-1 indicate support for $H_1$ and we conclude that corporate financial performance in terms of ROA would have a positive impact on executive remuneration in case of insurance companies of Pakistan.

2. ROE’s Impact On Executive Remuneration

In next hypothesis it is hypothesize that ROE would have positive impact on executive remuneration in Pakistan. Hypothesis developed is:

$$H_2$: ROE impacts executive remuneration positively, *Ceteris paribus*

$$\text{Model 2: } \text{Exe Remuneration} = \alpha + \beta \text{ ROE} + e_i$$

Summarized Regression Results are:

<table>
<thead>
<tr>
<th>R</th>
<th>R-Square</th>
<th>t-value</th>
<th>Coefficient</th>
<th>F-Value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exe Remuneration ROE</td>
<td>0.627*</td>
<td>0.393</td>
<td>2.378</td>
<td>0.627</td>
<td>6.477</td>
</tr>
</tbody>
</table>

*significant at the 0.05 level (2-tailed) **.significant at the 0.01 level (2-tailed)

**Inference**

The relationship between ROE and executive remuneration is tested with $H_2$. The regression analysis in Table-2 yields a significance value of 0.029 which is less than 0.05($\beta = 0.627$). As coefficient is positive indicating that the greater the ROE, greater would be the executive remuneration. So it is determined that there is significant positive relation between corporate financial performance in terms of ROE and executive remuneration. Thus, the regression results support $H_2$.

3. Net Profit’s Impact On Executive Remuneration

The hypothesis proposed next hypothesizes that Net profit would have positive impact on executive remuneration in Pakistan. Hypothesis developed is:

$$H_3$: Net profit impacts the executive remuneration positively, *Ceteris paribus*

$$\text{Model 3: } \text{Exe Remuneration} = \alpha + \beta \text{ net profit} + e_i$$

Summarized Regression Results are:

<table>
<thead>
<tr>
<th>R</th>
<th>R-Square</th>
<th>t-value</th>
<th>Coefficient</th>
<th>F-Value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exe Remuneration Net Profit</td>
<td>0.563*</td>
<td>0.317</td>
<td>2.154</td>
<td>0.563</td>
<td>4.641</td>
</tr>
</tbody>
</table>

*significant at the 0.05 level (2-tailed) **.significant at the 0.01 level (2-tailed)

**Inference**

The third ($H_3$) hypothesis proposes that net profit will have positive influence on Executive remuneration. The results in table 4 indicate support for $H_3$, as net profit influence on remuneration of executives is positive ($p=0.05$). By examining the standardized beta weights in Table 4, it is shown that ($\beta=0.563$) there is a slightly significant influence of net profit on executive remuneration. Thus the results, presented in Table-4 suggest support for $H_3$. 
Conclusion and Future implications:

In a new economic era, when knowledge-intensive companies tend to dominate in the service based sector as in the Pakistani insurance sector, it is necessary to maximize the utilization of resources in such a way to enhance the level of commitment and motivation of the key employees. This how pay for performance theory advocates that to earn more through your executive give more to retain and keep them motivate. As in the 21st century, business processes are less and less based on tangibles, which have been the base for traditional management systems, the question arises how to manage not only processes and companies but also regional and national economies in the case when intangible have become the key factor of value creation and corporate performance enhancement. This is especially true in a knowledge-driven economy, such as insurance, where the value added of corporations, organizations and individuals is directly related to their knowledge.

From correlation and regression analysis it is confirmed that there is a positive association between corporate financial performance like ROA and ROE and executive remuneration but weak association between net profit and executive compensation of insurance companies. It is concluded on the basis of this empirical study that there is a significantly positive relationship between corporate financial performance and executive remuneration in case of Pakistani insurance sector companies. As far as the consistency of results with prior studies is concerned, the results of this study is consistent with the study of Doucouliagos et al., (2006), study of Merhebi et al., (2006) in case of Australian CEO Compensation and firm performance and study of Ghosh (2010). Study of Suntheim, (2010) shows consistency with this study by advocating that Banks which arranged more stocks to their CEOs performed superior.

The study provides the strong proof to report IC and its efficiency in annual reports of joint stock companies. Which will not only be useful in assessing the portfolio by existing and potential investors but benchmarking within industry would also be possible. Due to availability of information related to IC efficiency, potential investors would be in a better position to estimate the risk associated with their investment which may reduce borrowing cost and ultimately reduction in weighted average cost of capital for the company. The study proves that VAIC can be used by regulatory authorities to identify weaknesses and strengths of different industries to subsidize particular industrial sector. This study also provides insights to various stakeholders, like scholars, shareholders, policy makers, institutional investigators and other related stakeholders One of the recent issues that Islamic banks are facing is the lack of expert Islamic finance professionals having the knowledge of both finance and religion, i.e., human capital, which is one of the main components of intellectual capital. The present study determined the importance of human capital to enhance value creation and business efficiency. But unfortunately there are no professional academic institutes present in Pakistan, which produce the Islamic finance professionals. So, there is a need of introducing a field of specialization keeping in view the significant role of IC in financial performance, the study emphasizes the need to draw the guidelines for measuring and disclosing IC in financial reports.

Limitations of Research:

This study is based on insurance companies of Pakistan. Different countries around the world apply different national accounting standards, disclosure and listing requirements. These differences can also affect the results of this model in other regions.

Now, Securities and Exchange Commission of Pakistan is taking active steps to adopt International Financial Reporting Standards like many other regions of the world which will mitigate the comparison problems due to differences in accounting rules of different countries. However, reliability of the study is good and based on population, as all listed insurance companies are considered for research, and data used in the study was recorded by qualified accountants, testified by the management and audited by the external auditor. So the results of this research may not be generalized to non-listed companies. This study is focused on insurance sector of Pakistan. So generalizability of results is somewhat lower for other countries due to special economic situation of Pakistan, as the cultural and legal environment of every economy is different and the research is not set in that environmental context. Time and cost constraints are the major limitations. Only secondary data is used for the current research. Inference based on primary data could be more accurate and clear.

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