



## Comparative analysis of business performance of insurance companies in Jammu and Kashmir on subjective performance measures

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### Abstract

A good performance measurement system not only synchronizes the planning and controlling function of an organization but also determines the progress of an organization towards its objectives, helps in identifying areas of strength and weaknesses and decides on future initiatives with the goal of improving organizational performance. The future of the organization's capabilities to create a centre of attention, develop and hold on to a talented work force will be a significant factor in developing a high-performance organization. The current paper is to understand the differences of performance levels in the six insurance companies of Jammu and Kashmir on a seven pointer likert scale. The overall performance of a company has been measured on a ten factor seven pointer scale and the ANOVA has been run to understand dimension-wise comparison. Each of the six insurance companies has been analyzed through Post Hoc study of SPSS for micro comparisons.

**Keywords:** business performance, post hoc study, ANOVA

### Introduction

Performance is defined as an operational ability of an enterprise to satisfy the desires of its major stakeholder's viz. customers, employees, owners, creditors and community. Performance is a barometer to measure the organizational success and it indicates how efficiently and effectively management has used the scarce organizational resources to achieve the organizational objectives (Connolly *et al.*, 1980) [20]. It determines the progress of an organization toward its objectives through statistical evidence (Antic and Sekulic, 2006) [3], Dess and Beard (1984) [23], suggest that performance is a tool to evaluate whether an organization utilizes its resources effectively or not. Good performance proves managerial effectiveness whereas poor performance reveals the ineffectiveness of managerial actions (Ghalayini *et al.*, 1997) [26]; (Lee *et al.*, 2001) [36]; (Wiklund and Shepherd 2003) [63]. In general, the concept of organizational performance is based upon the idea that an organization is the voluntary association of productive assets including human, physical, and capital resources for the purpose of achieving a shared purpose (Alchian and Demsetz, 1972) [2]; (Barney, 2001) [5]; (Jensen and Meckling, 1976) [32]; (Simon, 1976). Those providing the assets will only commit them to the organization so long as they are satisfied with the value they receive in exchange relative to alternative uses of the assets. As a consequence the essence of performance is the creation of values so long as the value created by the use of the contributed assets is equal to or greater than the value expected by those contributing the assets and the assets will continue to be made available to the organization with the accounting assumption of business perpetuity. Therefore, value creation, as defined by the resource provider is the essential overall performance criteria for any organization and

how that value is created is the essence of most empirical researches in management. Conversely, how that value is measured is the essence of this research. Performance measurement is a process of assessing actual output of an enterprise against intended one. Neely *et al.* (1995) [42], has defined the performance measurement system in context of efficiency and effectiveness of the actions of a firm, where effectiveness is related with the ability of an organization to meet the requirements of different stakeholders and often deals with issues affecting present and future growth prospects of an organization. Efficiency spotlights the input/output relationship and comments upon how economically the resources have been utilized while providing a given level of customer satisfaction (Gupta and Govindaraja 1984) [28]; (Lynch and Cross 1991); (Bititci *et al.*, 2000) [8]. A good performance measurement system not only synchronizes the planning and controlling function of an organization but also determines the progress of an organization towards its objectives, helps in identifying areas of strength and weaknesses and decides on future initiatives with the goal of improving organizational performance (Neely *et al.*, 1997); (Smith and Reece, 1999) [52]; (Franco *et al.*, 2007) [25]; (Purbey *et al.*, 2007) [44]. Actions and efforts of manager are driven by the performance measurement system of an organization. Performance measurement plays a vital role in translating an organization's strategy into desired behaviors and results (Chenhall and Langfield-Smith, 1998) [16, 17]; (Kaplan and Norton, 2001) [33, 34]; (Lillis, 2002); (Bourne *et al.* 2003) [9]; (Silvestro, 2014) [50]. It communicates expectations, monitors progress, provides feedback and motivates employees through performance based rewards (Ittner and Larcker, 1997) [33]; (Banker *et al.*, 2000) [4]; (Chenhall, 2003); (Stede *et al.*, 2006) [53]; (Saidi Mehrabad *et al.*, 2011); (Teeratsirikool *et al.*,

2013)<sup>[55]</sup>. Performance measurement is not an end in itself but a tool for more effective management and has strategic implications regarding the resource deployment and utilization (Tangen, 2004)<sup>[54]</sup>; (Gruber *et al.*, 2010)<sup>[27]</sup>. The status of performance can be divided into financial and non financial parameters. Financial performance is a measure of the change of the financial state of an organization or the financial outcomes that results from management decisions and the execution of those decisions by members of the organization. Since the perception of these outcomes is contextual, the measures used to represent performance are based upon the circumstances of the organization(s) being observed. The measures selected represent the outcomes achieved, either good or bad. Global economy has witnessed tremendous changes in almost all segments of business environment (Bititci *et al.*, 2000)<sup>[8]</sup>; (Yusaf, 2002); (Cocca and Alberti, 2010); (Yadav *et al.*, 2014). Environmental forces demand greater responsiveness from a business and forces the firms to change their traditional management philosophy (Cocca and Alberti, 2010)<sup>[13]</sup>. In this scenario, top level managers have to realign their management as well as measurement practices to assess the customer needs and preferences, track competitor's actions, evaluate the impact of technology development, bring necessary product and process innovation, incorporate cost effectiveness and to raise the level of organizational effectiveness, (Chandler and Hank, 1993)<sup>[15]</sup>; (Bititci *et al.*, 1997)<sup>[7]</sup>; (Ghalayini, *et al.*, 1997)<sup>[26]</sup>; (Kaplan and Norton, 2001)<sup>[33, 34]</sup>. The treatment of the performance construct is perhaps one of the sword edge walks confronting the academic researcher today (Venkatraman and Ramanujam, 1986)<sup>[56]</sup>; (Hoffman *et al.*, 1991)<sup>[29]</sup>; (Cardinaels and Veen-Dirks, 2010)<sup>[13]</sup>. Literature in the field of business management and organizational performance reveals that there is no consensus among the researchers regarding the measurement of performance (March and Sutton, 1997); (Richard *et al.*, 2009)<sup>[46]</sup>; (Vij and Bedi, 2012)<sup>[57]</sup>; (Silvestro, 2014)<sup>[50]</sup>. Subjective as well as objective measures have been used by researchers for measuring performance. However, subjective measure of performance are more commonly used (Naman and Slevin 1993)<sup>[41]</sup>; (Jarvis *et al.*, 2000)<sup>[31]</sup>; (Wiklund and Shepherd, 2005)<sup>[62]</sup>; (Wall *et al.*, 2004)<sup>[61]</sup>; (Wood, 2006)<sup>[64]</sup>; (Ellis, 2006)<sup>[24]</sup>; (Clercq *et al.*, 2010)<sup>[18]</sup>; (Kraus *et al.* 2012)<sup>[35]</sup>; (Santos and Brito, 2012)<sup>[49]</sup>.

### Review of literature

Motivation of employees in the work place still remains one of the sensitive subjects that determine the level of input that employees will put in the organization to commit to good performance. This means that motivation either intrinsic or extrinsic contribute to employee satisfaction and thus enhances performance and productivity (Bhattacharya, 2007)<sup>[6]</sup>. Lawler (2003), expressed that in the twenty-first century treating people right is not an option but a necessity. Despite the importance of accurately measuring organizational performance in most areas of academic research there have been very few studies that have directly addressed the question of how overall organizational performance is or should be measured. Perhaps more importantly, none of these studies seem to have significantly influenced how overall organizational performance is actually measured in most of

the empirical research that uses this construct as a dependent measure. The empirical studies on the measurement of organizational performance by Dess and Beard (1984)<sup>[23]</sup>, Rawley and Lipson (1985), Brush and Vender Werf (1992), Robinson (1995)<sup>[47]</sup>, and Murphy *et al.* (1996)<sup>[40]</sup> provide a basic as well as directional literature on Organizational Performance. Dess and Beard (1984), examined the usefulness of subjective performance measures as compared to objective measures. Specifically, they investigated the relationship between objective and subjective measures of return on assets (ROA), growth in sales, and "global" performance measures. Dess and Beard (1984)<sup>[23]</sup>, found that top management's subjective evaluation of performance was highly correlated with objective measures suggesting that researchers may consider using subjective perceptual measures of ROA and sales growth under certain conditions. These conditions include when objective measures are not available and when the alternative is to remove the consideration of performance from the research design. Another finding reported in the study was that there is some evidence that the global measures of organizational performance overlap with subjective and objective measures of ROA and sales growth. Rawley & Lipson (1985)<sup>[45]</sup>, examined the relationships among several combinations of performance measures to demonstrate that different common measures of financial performance did not represent the same attributes. Brush and VanderWerf (1992)<sup>[12]</sup>, examined thirty-four different studies in the entrepreneurship literature that explicitly used firm performance as the dependent variable. It was found that thirty-five different measures of performance were used in those studies indicating that researchers perceived many different dimensions of performance, and that there was no agreement on what measures actually represent overall organizational performance. The most frequently used measures of performance were changes in sales, organizational survival, changes in number of employees, and profitability. Performance data provided by management proved to be reliable by comparison to archival information and had the added benefit of being more detailed. In other words, Brush and Vander Werf suggest that primary information collected from management is preferable to secondary data sources when depth and context are important to the purposes of a study. However, if such depth and context are not critical to the research, archival information is sufficiently reliable on a summary basis. Robinson (1995), examined ten different new venture performance measures to determine which individual measure was the most effective in accurately assessing long-term economic value creation. Each of the performance measures were calculated for the three-year period following the firms' initial public offerings. The ten measures studied by Robinson were (1) change in sales, (2) sales level, (3) return on sales ("ROS"), (4) return on invested capital ("ROIC"), (5) return on equity ("ROE"), (6) return on assets ("ROA"), (7) net profit, (8) earnings before interest and taxes ("EBIT"), (9) earnings multiples, and (10) shareholder value created. Robinson found strong support for his hypothesis that return to stockholders provided the most power of the ten measures evaluated in corroborating previously established relationships between the influence of new venture strategy and the joint influence of new venture

and industry structure on the economic performance of new ventures. Robinson went on to examine the extent to which differing measures may be reasonably utilized as interchangeable proxies for one another. In summary, all ten performance measures were tested individually for their relationship with multiple independent variables that had been found in prior literature to have positive relationships to new venture performance. The shareholder value created measure was determined to be the most effective measure for effectively differentiating among new venture strategies, the second most effective measure for differentiating among the structure of the new venture's entered industry, and the most effective measure in differentiating among the interactions between new venture strategies and the structure of the industry the new venture entered. Murphy *et al.* (1996)<sup>[40]</sup>, examined the variables used to measure organizational performance in entrepreneurship research in the years 1987 through 1993. They found, consistent with Brush & Vander Werf (1992)<sup>[12]</sup> and Cooper (1993)<sup>[21]</sup>, that there was no consistency in the variables used to measure new venture performance. For instance, asset, inventory, and receivables turnover are generally considered efficiency measures, whereas return on investment, return on equity, return on assets, return on net worth (generally considered the same as return on equity), and internal rate of return are all considered profitability measures, even though Murphy *et al.* classified them as efficiency measures. Similarly, measures such as return to shareholders, market-to-book value, and stock price appreciation are all considered market measures (Brealey *et al.*, 2001)<sup>[10]</sup>, even though Murphy *et al.* (1996)<sup>[40]</sup>, classified them as profit measures. Alan and Lisa (2014)<sup>[1]</sup>, said that transfer of training is positively related to firm performance. Their results reinforce the importance of research and practice on the transfer of training and indicate that organizations should implement strategies and interventions to facilitate the transfer of training if they want their training investments to result in improvements in firm performance. One way for organizations to do this is to provide effective on the job training which is positively related to the transfer of training and firm performance. Cesar and Ana (2014)<sup>[14]</sup>, concluded that both organizational innovation favours the development of technological innovation capabilities and organizational innovation and technological capabilities for products and processes can lead to superior firm performance. Mol and Birkinshaw (2009)<sup>[39]</sup>, examined that firm stand to benefit from investing in their capacity for management innovation alongside their capacity for product and process innovation. The most important practical implication is that managers should be aware of the joint strategic potential of organizational innovation and product and process innovation capabilities for reinforcing the development of each to improve firm performance. Managers should concentrate solely neither on the technological nor non- technological side of innovation. The introduction of new management practices (Organizational Innovation) is important for the positive effect of firm performance and facilitates the development of "process innovation capabilities" as well as "product innovation capabilities". Also, technological product and process innovation capabilities have a strategic character because they both positively affect firm performance,

although the first does so directly and the later indirectly through product innovation capabilities. Gupta and Govindarajan, (1984)<sup>[28]</sup>; Covin *et al.*, (1994); Dawes, (1999)<sup>[22]</sup>; Brewer (2006)<sup>[11]</sup>, concluded that subjective measures may be more appropriate than objective measures for comparing profit performance in cross-industry studies. This is because profit levels can vary considerably across industries, obscuring any relationship between the independent variables and company performance. Subjective measures might be more appropriate in this situation because managers can take the relative performance of their industry into account when providing a response. Vij and Bedi (2016)<sup>[58]</sup>, analysed that both subjective and objective measures of business performance are capable for measuring the performance of an organization but neither of the subjective or the objective measure of business performance is superior to the other; as both are considering financial as well as operational indicators. However, high degree of correlation found in this study supports the use of subjective business performance measures for making cross industry comparison and draw the attention of the decision makers towards factors that are crucial for building capabilities for the achievement of strategic goals of an organization. The use of subjective business performance in strategic management research is justified and may be recommended in situation warranted by non-availability of archival data, but does not suggest replacement of objective business performance by subjective business performance measures. Vij and Farooq (2014 & 2015)<sup>[59]</sup>, analysed that learning orientation has significant positive effect on business performance. It is found that organizations committed to learning, having shared vision and specific mechanisms for sharing their experiences are more innovative and high performing. It is incumbent upon firms to create a high level of awareness about the benefits of learning orientation, sharing knowledge and using information technology efficiently to enhance organizational learning capability. Learning oriented firms should focus on exploiting and leveraging their existing competitive advantage to provide better value and capture market for superior overall business performance. It was concluded that strong positive relationship has been identified between two constructs. Second major finding of the study is that impact of knowledge sharing orientation on business performance is not moderated by the firm age. This study contributes by providing empirical evidence to support that knowledge sharing orientation has a direct impact on business performance and firm age does not moderate the effect of knowledge sharing orientation on business performance. In an attempt to bridge the gap between theory and practice, Kaplan (1984)<sup>[33, 34]</sup>, proposed that effective organizational performance should be measured using a "balanced scorecard". It was suggested that organizational performance measurement requires measures that are not purely financial in nature, because many of the financial indicators are a result of critical operational measures, like accounting measures, which report what has happened in the past and not the investments in future opportunities and it was argued that a combination of financial and operational measures is necessary for measuring overall organizational performance. Accordingly, the balanced scorecard is a multi-disciplinary view of organizational

performance, which include market share, changes in intangible assets like patents or human resources skills and abilities, customer satisfaction, product innovation, productivity, quality, and stakeholder performance in which most of the measures require primary data from management in the form of their assessment of their own performance, which may lead to questions of the validity of the responses.

**Analysis**

While ANOVA was run on the ten items measuring

organizational performance and comparing the “F” values with the table values of “F”, it can be conclude that the difference within and between the groups is significant. The alternate hypothesis is accepted as the difference is significant on each dimension between the groups. Therefore, the level of organizational performance is different for each company as revealed by the results calculated on the primary data. The organizational performance here has been measured through subjective business measures.

**Table 1:** ANOVA of organizational performance

		Sum of Squares	Df	Mean Square	F	Sig.
OP1	Between Groups	20.378	5	4.076	5.702	.000
	Within Groups	73.622	103	.715		
	Total	94.000	108			
OP2	Between Groups	41.903	5	8.381	11.243	.000
	Within Groups	76.776	103	.745		
	Total	118.679	108			
OP3	Between Groups	38.682	5	7.736	8.760	.000
	Within Groups	90.969	103	.883		
	Total	129.651	108			
OP4	Between Groups	38.533	5	7.707	9.185	.000
	Within Groups	86.421	103	.839		
	Total	124.954	108			
OP5	Between Groups	53.244	5	10.649	15.190	.000
	Within Groups	72.205	103	.701		
	Total	125.450	108			
OP6	Between Groups	36.618	5	7.324	10.428	.000
	Within Groups	72.336	103	.702		
	Total	108.954	108			
OP7	Between Groups	42.233	5	8.447	17.553	.000
	Within Groups	49.565	103	.481		
	Total	91.798	108			
OP8	Between Groups	27.414	5	5.483	8.153	.000
	Within Groups	69.265	103	.672		
	Total	96.679	108			
OP9	Between Groups	38.114	5	7.623	12.375	.000
	Within Groups	63.445	103	.616		
	Total	101.560	108			
OP10	Between Groups	38.940	5	7.788	14.652	.000
	Within Groups	54.748	103	.532		
	Total	93.688	108			

- a. The Post-hoc analysis of sales growth (OP1) reveals that there is a significant difference between LIC and New India insurance Ltd, while Bajaj life insurance has significant difference in sales growth dimension with rest of the private and public sector companies under study. The results further indicate significant difference between private sector and public sector insurance companies; however, HDFC life has insignificant difference with LIC and New India Insurance companies.
- b. The market share (OP2) dimension results reveal that there is a significant difference between LIC and New India insurance Ltd, while there is also significant difference between public and private sector companies with the exception of Bajaj Life insurance company. The test results of OP2 dimension for private insurance companies understudy reveal significant difference between Bajaj life Insurance and other companies under study with exception of LIC.
- c. The test results on the dimensions of return on investments (ROI), OP3 reveal significant difference between LIC and New India Insurance Ltd. The comparison between public and private sector insurance companies on this dimension indicates that there is a significant difference on return on investment (ROI) dimension. HDFC Life and Bajaj life insurance has significant difference with all other insurance companies under study.
- d. The test results on the dimension of service quality (OP4) reveal that there is significant difference with public and private sector insurance companies. LIC had significant difference with rest of insurance companies under study, the service quality of Bajaj life insurance Ltd. is similar to LIC.
- e. The post hoc parameters of customer satisfaction (OP5)

indicate significant difference between LIC and New India Insurance Company. The four private sector companies under study reveal significant difference with prominent difference between Bajaj life and others. The results further reveal significant differences between public and private sector companies.

- f. The study of employee satisfaction (OP6) reveals similar results that of customer satisfaction with the exception that difference between the public sector and private sector companies is not so significant.
- g. The results of employee turnover (OP7) indicate significant difference between public and private sector insurance companies. The test indicate significant difference with LIC and New India Insurance Ltd, as well. The result also shows significant difference between private sector insurance companies under study.
- h. The Post hoc comparison of product innovation (OP8) reveals similar results as of (OP7) dimension. The difference between Bajaj life insurance and other insurance companies is significant except LIC.
- i. The product quality dimension (OP9) results narrate insignificant difference within two public sector companies under study; however the difference is significant between public and private sector companies. The results further reveal significant difference with private sector companies under study with Bajaj life insurance producing significantly different results with all other five companies under study.
- j. The statistical figures of Post hoc analysis on process innovation (OP10) dimension reveals significant difference within private and public sector insurance companies whose responses have been put to analysis. The results indicate that Bajaj life has significant difference with four other companies while Reliance life insurance has significant difference with three other insurance companies.

### Conclusion

In conclusion it can be understood that there is significant difference on each dimension between public and private sector insurance companies under study. Besides, there is also significant difference with public and private sector companies under study. Further, it is also revealed that Bajaj Life Insurance Company has significant difference on each dimension with rest of the insurance companies under study.

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