



Effect of Human Resource Value on Firms' Stock Price and Financial Performance in Context of Listed Manufacturing Companies in India

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Abstract

The lack of quantification and disclosure of human assets in domestic and international financial reports may impact stock price. The aim of this study is to analyze empirically the relation between the value of human resource and firms' stock price and financial performance. The data used in the study has been collected from the annual reports of eight selected Manufacturing companies listed in BSE-500 Index for the years 2005-06 to 2011-12. This study is limited to 8 manufacturing organizations, and it indicates that the human asset has not impact on the stock price of selected manufacturing organization. This research also indicates that the human value is positively and negatively affected by the financial performance of the companies; therefore there is a statistically significant relationship between human capital efficiency and firms' financial performance. From a careful examination of correlation results on firm financial performance and HRV the conclusion derives is that the return on asset as a profitability ratio does not have effect on Human value and current ratio and acid ratio as liquidity ratios have negative relationship with Human value and two financial variables which have positive relationship with human resource value are sales revenue and net income.

Keywords: Human Resource Value (HRV), firms' stock price, financial performance, manufacturing companies.

Introduction

Swart¹ in his article refers to "core competence, knowledge creation and innovation ... creating value over and above financial and physical resources". Human Resource has long been recognized as a vital and important asset and value creator to organizations. The fundamental goal underlying Human Asset Accounting is to facilitate the effective and efficient management of human resources².

In an effort to emphasize the importance of managing the human resources of a company, Likert introduced the concept of human asset accounting³. This concept indicates the significance of identifying the human assets that create the service or product. He indicates that when considering the methodology of human asset accounting as a basis to disclose the value and the viability of an organization's human assets, the production and value of the organization was affected.

The American Accounting Association's (AAA) definition of human asset accounting is the process of identifying and measuring information about human assets and communicating this data to interested parties⁴.

In mission statements, annual general meetings and annual reports, organizations declare that our greatest assets are our people⁵. The investments directed to increase knowledge; skills and aptitudes of the workforce of the organization are the investments in human resource. Graham Ward, former president

of the Institute of Chartered Accountants for England and Wales (ICAEW) stated on June 2000, firms that ignore human capital will go the way of dinosaurs⁶.

Literature Review: Human Resource Accounting (hereafter HRA) and disclosure has attracted researchers from all over the globe and accordingly some studies have been conducted on different aspects of Human resources. Several studies have been conducted to show accounting perspective of Human Assets in different parts of the world.

Abeyssekera⁷ studied the perspective and context of the political economy of accounting to find out the motivations. Using the model of content analysis, this study examined human capital disclosure practices in annual reports of eleven selected firms in Sri Lanka, a developing nation. All firms interviewed from the sample explore the motivations behind the disclosure practices of firms. Findings revealed that companies use disclosure to reduce tension between firms and their constituents, in the benefit of further capital accumulation.

Giuseppe Folloni, and Giorgio Vittadini⁸, used two methods in their study for estimating the value of the stock of Human Capital (HC) – the retrospective and prospective one – with a review of the models proposed. These used methods are closely linked both to the theory of HC investment as a rational choice, the literature analyzing the contribution of HC investment to economic growth and the HC estimating method through educational attainment. The more recent literature on HC as a

latent variable is also assessed and a new method of estimation where HC is seen both as an unknown function of formative indicators and as a 'latent effect' underlying earned income is proposed.

According to Asif Ahmed⁹, there is no standard proposed by any accounting standard committee for this regard. So there is no guideline for human asset accounting. On the other hand, by this process a firm has the chance of manipulation the financial statement.

Imtiaz Alam, and Suman Kanti Deb¹⁰ investigated corporate attitudes that influence HRA disclosure within 58 sample companies listed either with Dhaka stock exchange or Chittagong stock exchange in 2009. This paper revealed that none of the companies disclose all the HRA data items. From the research it has been found that the level of human asset reporting of listed firms of Bangladesh is very poor.

Shalimi Sharma, R.K. Shukla¹¹ examined application of HRA in Heavy Industries covering the period from 2001-2010 with the case study of the Hindustan Copper Limited, a public sector undertaking. The case study helps to analyze that the value of production per employee is increasing or decreasing. The concept of HRA is yet to gain momentum in India. For the betterment of the companies, it is important to evaluate the worth of human assets in a systematic manner and record the information related to them in the financial statement of the organization to communicate their worth time to time to the users of the financial statement. The HRA concept itself represents a new way of thinking about people as assets. It has a great potential for future organization to understand the value of human forces and the same should be mentioned in the financial statements.

Rossen Petkov¹² examined perspectives on disclosing human capital into the notes of the financial statements. This study showed that the current accounting framework under International Financial Reporting Standards (IFRS), specifically International Accounting Standard 1 (IAS1), could accustom the disclosure of human capital into the notes of the financial statements. In addition, research identifies the key compulsory indicators include the short and long term strategies related to human capital. In addition, organizations need to provide details on the effectiveness and performance of their human resource management policies.

Fariborz Avazzadehfath, and H. Rajashekar¹³, conducted a research on Decision-making based on HRA information and its evaluation model, the outcomes indicate that HRA information disclosure in financial statements is relevant and impact on the optimal investment decisions. Furthermore, other outcomes state that the most appropriate evaluating model of human asset consistent with current status of Iranian organizations and institutions is the original cost model (Historical cost).

Hamid Saremi and Nader Naghsbandi¹⁴ conducted survey analysis

consist of structure interview, library observation and content analysis. This helped the researcher in analyzing the present situation, nature of current situations and conditions and inter-relationship between the different events and situations. The finding of this study indicates applying in HRA is not used in Iranian companies or we can say that there is no any model of using for human resource evaluation such as present value, opportunity cost, etc. Few HR managers and employees of these companies who were showing more sensitive and attention to HRA information and they knew that this information can be useful in their decision regarding their strategies of their companies.

Adam Steen and Denice Welch¹⁵ conducted a study to analyze the concept of human capital and its measurement through a review of the HRA literature, as well as the literature in human asset. This research then draws on the findings of an exploratory study into the measurement of Return on Investment (ROI) for international roles. Interview and discussion information reveals that intangible costs and benefits are problematic whenever applying such a metric; that much of the result from the assignment is Intellectual Capital (IC) and therefore serious difficult to isolate and measure.

Dasari Pandurangarao, S. Chand Basha, Devarapalli Rajasekhar¹⁶ highlight the significance of Human resource valuation and methods to measure human assets value. The article directly describes views of the authors and finds out the organizations those have tried to implement HRA. The article depicts the merits of human resource valuation. The finding of this study indicates even valuing human resources appears to be very important to Indian organizations, most organizations do not value their human resources and plans to implement valuation of human assets are at a most early stage. Despite the benefit in valuation there will be little progress in the area over the next five to ten years.

Edirin JEROH¹⁷ examined HRA affects on financial statement analysis and decision making. This study concludes that there is a significant relationship between HRA and the comparability of financial statements in Nigeria. The researcher recommended based on the conclusion that appropriate steps should be taken by regulatory bodies to develop uniform acceptable standards and models for the computation of the value of human asset such that same can be reflected in the financial statements of companies in Nigeria.

According to Rasoul Baradaran Hsanzadeh, Samad Torabynia, Karim Esgandari and Shima Kordbacheh¹⁸ the managers is suggested to pay more attention to those criteria related to profit or cash profit to affect the firm value. And according to the conclusion of their study income statement items are more important than balance sheet items for investors.

Objectives of Study: To examine the effect of the value of human assets on firm's stock price. To measure the relationship between the quantitative data of financial variables and human resource value.

Hypothesis: i. “There is a significant relationship between Value of Human Assets and firm’s stock price within manufacturing companies”. ii. “There is a significant relationship between sales revenue and Human Resource value within manufacturing companies”. iii. “There is a significant relationship between Net Income and Human Resource value within manufacturing companies”. iv. “There is a significant relationship between the profitability of a company as measured by its return on Asset and Human Resource value within manufacturing companies”. v.a. “There is a significant relationship between the liquidity ratio of a company as measured by its current ratio and human resource value within manufacturing companies”. v.b. “There is a significant relationship between the liquidity ratio of a company as measured by its Acid ratio and human resource value within manufacturing companies”.

Research Methodology

The descriptive research method will be followed in the present research to describe and analyze the data concerning human assets and stock price. A purposive sampling technique is used for the selection of sample units. Samples are taken from listed manufacturing companies in India (BSE-500 Index). The sample companies which have chosen by researcher in this study are 8 listed companies in India. The researcher has found out Oil and Natural Gas Corporation of India (ONGC), National Thermal Power Corporation (NTPC), Indian Oil Corporation (IOC), Hindustan copper Ltd. (HCL), Hindustan Petroleum Corporation Ltd. (HPCL), Steel Authority of India Ltd.(SAIL), Bharat Petroleum Corporation Limited. (BPCL), and Bharat Heavy Electricals Ltd. (BHEL), are eight listed manufacturing organizations on the BSE-500 Index which are practicing HRA. The study takes into consider 7 financial reporting years; 2005-2006 to 2011-12. These organizations have used HRA consecutively for 7 years and will have used one of the theoretical methods to quantify the human assets in their organizations. The quantification must have been disclosed in their financial reports for the 7 consecutive years. All data would be analyzed by *Pearson’s Product Moment Correlation-simple* using the SPSS package.

Results and Discussion

The data that were extracted from the annual reports was input into the SPSS software to be analyzed using the descriptive statistics module. The dependent variable is the factor that is to be determined by the changes in the independent variables.

Hypothesis One: “There is a significant relationship between Value of Human Assets and firms’ stock price within manufacturing companies”.

Assets represent the resources that are acquired by an organization to use in the operations of the business. Firm value represents the investors’ perception of the benefit that can be

received from ownership of a share of stock. The data that were extracted from the annual reports of selected companies are analyzed in table 1. The Pearson’s product-moment correlation coefficients for the variables analyzed appear in table 1. The results of the analysis in table1 indicate that the correlation between HRV and stock price has turned out surprisingly to be not significant as shown in the table below. With an increase in the HRV, Stock price would not increase within manufacturing companies. The significant/probability value (PV) = 0.206 > 0.01 level of significance, therefore the researcher reject the alternate hypothesis formulated as “There is a significant relationship between Value of Human Assets and firms’ stock price within manufacturing companies”.

Table 1
Pearson’s product-moment correlation coefficients for the variables

Correlation				
Variable 1	Variable 2	Pearson Correlation	Sig.(2-tailed)	N
HRV	Stock price	-0.172	0.206	56
df=54				

The following diagram figure-1 visualize that there is not exist relationship between HRV and stock price within manufacturing companies selected by the researcher in India.

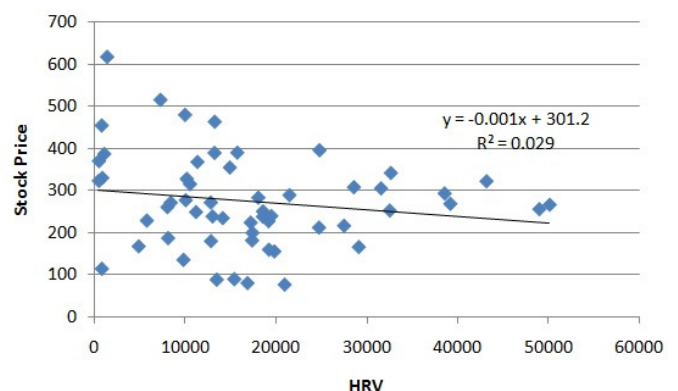


Figure-1
Relationship between HRV and stock price

The financial strength of a company, to a great extent, depends upon its human resources. As the only active asset in a company, human resources directly contribute to the ultimate goal of an organization- optimization of efficiency and profitability. These variables measuring the efficiency and profitability are termed as financial variables.

The human resource value is a result of multiparty impact. It depends on number of factors. One of the aims of the present paper is directed towards identifying the significance relationship between financial variables with the human resource value. Hence in the present section, the relationship of each variable, that are the pointer of present business

profitability and efficiency as well as factors influencing the HRV, with the HRV is premeditated with the help of a simple correlation study. Therefore, human resource value consider as the influential variable for the simple correlation study.

Hypothesis two: "There is a significant relationship between sales revenue and Human Resource value within manufacturing companies".

The Relationship between sales revenue and Human Resource value below indicates that the correlation coefficient (r) = 0.473** (table2). The significant/probability value (PV) = 0.000 < 0.01 level of significance, therefore the researcher accept the alternate hypothesis formulated as "There is a significant relationship between sales revenue and Human Resource value within manufacturing companies". There is a significant relationship exist between sales revenue and HRV (table 2).

Table-2
correlation coefficient between sales revenue and Human Resource value

Correlation				
Variable 1	Variable 2	Pearson Correlation	Sig.	N
HRV	Sales revenue	0.473**	0.000	56
**. Correlation is significant at the 0.01 level; df=54				

The following diagram figure-2 shows that there exist a high degree of positive relationship between sales revenue and HRV.

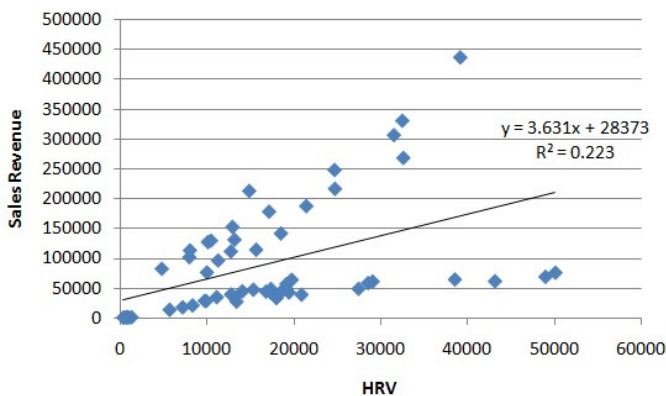


Figure 2
Relationship between sales revenue and HRV

Hypothesis three: "There is a significant relationship between Net Income and Human Resource value within manufacturing companies".

The correlation between HRV and Net Income has turned out to be highly significant as shown in the table below. HRV is positively related with Net Income. With an increase in Net Income, human resource value would increase.

The Relationship between Net Income and Human Resource

value below indicates that the correlation coefficient (r) = 0.819** (table3). This value is very high, implying that a strong positive and significant relationship exist between Net Income and Human Resource value. The significant/probability value (PV) = 0.000 < 0.01 level of significance, therefore the researcher accept the alternate hypothesis formulated as "There is a significant relationship between Net Income and Human Resource value within manufacturing companies".

Table 3
Relationship between Net Income and Human Resource value

Correlation				
Variable 1	Variable 2	Pearson Correlation	Sig.	N
HRV	Net income	0.819**	0.000	56
**. Correlation is significant at the 0.01 level; df=54				

The following scatter diagram figure-3 shows that there exist a high degree of positive relationship between net income and HRV.

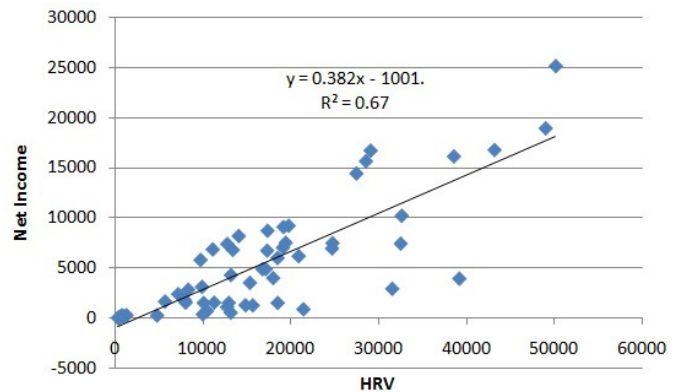


Figure-3
Relationship between net income and HRV

Hypothesis four: "There is a significant relationship between the profitability of a company as measured by its return on Asset and Human Resource value within manufacturing companies".

The correlation between HRV and return on asset has turned out to be not significant as shown in the table below. HRV is not related with return on asset.

The significant/probability value (PV) = 0.053 > 0.05 level of significance therefore the researcher reject the alternate hypothesis formulated as "There is a significant relationship between the profitability of a company as measured by its return on Asset and Human Resource value within manufacturing companies".

Table 4
Correlation between HRV and return

Correlation				
Variable 1	Variable 2	Pearson Correlation	Sig.	N

HRV	Return on asset	0.260	0.053	56
df=54				

The scatter diagram below (figure 4) shows that there is no relationship exists between return on asset as a profitability ratio and HRV.

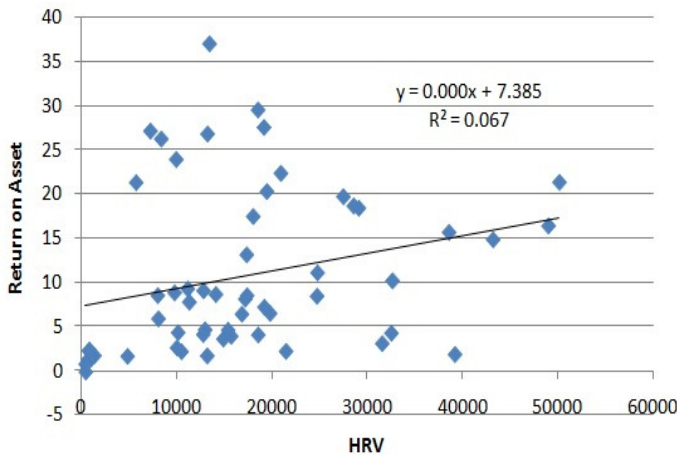


Figure-4

Relationship exists between return on asset as a profitability ratio and HRV

Hypothesis five. a: “There is a significant relationship between the liquidity ratio of a company as measured by its current ratio and human resource value within manufacturing companies”.

Hypothesis five. b: “There is a significant relationship between the liquidity ratio of a company as measured by its acid ratio and human resource value within manufacturing companies”.

The correlation between HRV and current ratio has turned out to be highly significant as shown in the table below. HRV is negatively related with current ratio. With an increase in the current ratio, human resource value would decrease.

The Relationship between current ratio and Human Resource value below shows that the correlation coefficient $\rho = -0.341^*$ (table-5). This value is high, implying that a strong negative relationship exist between current ratio and Human Resource value. The significant/probability value (PV) = 0.010 < 0.05 level of significance, therefore the researcher accept the alternate 5.a hypothesis formulated as “There is a significant relationship between the liquidity ratio of a company as measured by its current ratio and human resource value within manufacturing companies”.

The correlation between HRV and acid ratio has turned out to be highly significant as shown in the table below. HRV is negatively related with acid ratio also. With an increase in the acid ratio, human value would decrease.

The Relationship between acid ratio and Human Resource value below shows that the correlation coefficient $\rho = -0.384^{**}$ (table

6). This value is high, implying that a strong negative relationship exist between current ratio and Human Resource value. The significant/probability value (PV) = 0.003 < 0.01 level of significance, therefore the researcher accept the alternate 5.b hypothesis formulated as “There is a significant relationship between the liquidity ratio of a company as measured by its acid ratio and human resource value within manufacturing companies”.

Table 5

Relationship between current ratio and Human Resource value

Correlation				
Variable 1	Variable 2	Pearson Correlation	Sig.	N
HRV	Current Ratio	-0.341*	0.010	56
*. Correlation is significant at the 0.05 level; df=54				

The diagram (figure 5) visualizes that there is a negative relationship between current ration and HRV.

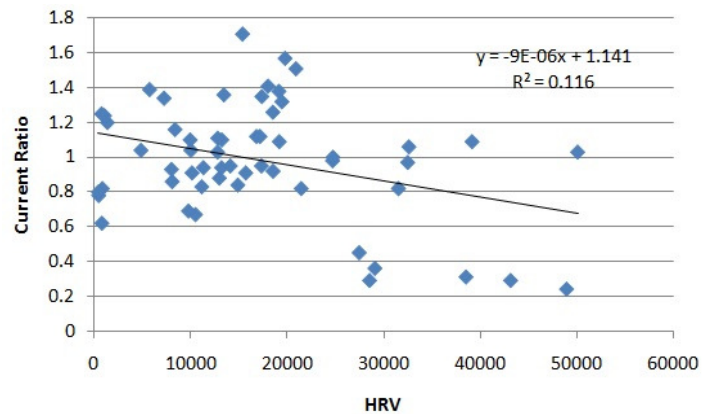


Figure-5

Relationship between current ration and HRV

Table-6

Pearson Correlation between Acid ratio HRV

Correlation				
Variable 1	Variable 2	Pearson Correlation	Sig.	N
HRV	Acid ratio	-0.384**	0.003	56
**. Correlation is significant at the 0.01 level; df=54				

There exist a high degree of negative relationship between acid ratio and HRV which the scatter diagram (figure 6) shows it below.

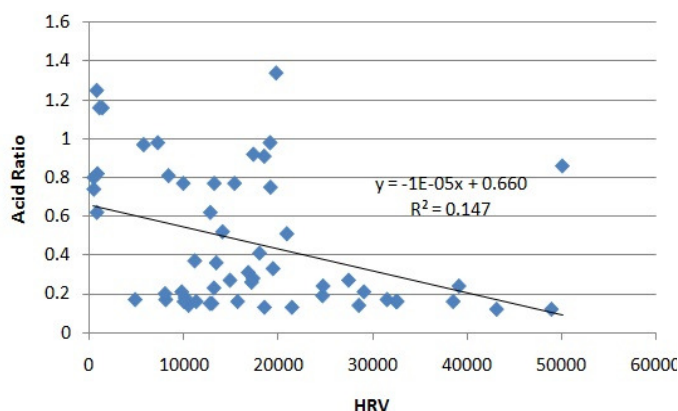


Figure-6
Relationship between acid ratio and HRV

Major Findings: Major findings are discussed with reference to the objectives of the study which are as follows: i. The first research objective of this study is to measure the effect of the value of human assets on stock price. This objective has been answered by the results of correlation approach which have shown that no relationship exist between the human asset value and stock price. (table-1) ii. The second objective is to measure the relationship between quantitative data of financial variables on human assets value. Based on, the empirical analysis it can be proved that HRV positively related with Sales Revenue (significant at 1%) and Net Income (significant at 1%),and HRV negatively related with Current Ratio (significant at 5%) and Acid Ratio (significant at 5%) but does not have any significant relationship with return on asset. (table 2 to 6)

Conclusion

To improve the level of a workforce, more attention to the most valuable asset of an organization, the human asset, may be needed. This study is limited to 8 manufacturing organizations, and it indicates that the human asset has not impact on the stock price of selected manufacturing organization.

In addition, this research also indicates that the human value is positively and negatively affected by the financial performance of the companies; therefore there is statistically significant relationships exist between human capital efficiency and financial performance. The results of correlation analysis suggest that HRV influences efficiency and profitability positively and negatively at selected companies listed in Bombay Stock Exchange. From a careful examination of correlation results on firm financial performance and HRV the conclusion derives is that the return on asset as a profitability ratio does not have effect on Human value and current ratio and acid ratio as liquidity ratios have negative relationship with Human value and two financial variables which have positive relationship with human resource value are sales revenue and net income.

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