

**Influence of Valuation of Key Elements of Human Resource on Investment Decision in
Relation with Stock Investors in Bangalore**

Mrs. Shreelatha H R

Research Scholar

ISBR Research Centre, Bangalore

Mail ID: shreelatha.hr@gmail.com

Dr. Ratna Sinha

Professor, ISBR Research Centre, Bangalore

Email ID: drratnasinha@yahoo.co.in

Abstract:

Investment in human resources refers to all forms of investments directed to raise the knowledge, skills and aptitudes of the organization's workforce. In fact, the development of human resources constitutes an essential pre-requisite and a key factor in sustained and accelerated economic growth. Investments in human resources have directly contributed to the growth of an organization – by promoting the knowledge and application of science and technology to production processes and developing innovations and research.

External stakeholders (specifically investors of shares) have been demanding information on financial statements before making the investment decision. Transparency in annual report will be an added advantage to the decision maker. Hence human assets are one of the most important factors to any of the organization; disclosure of information relating to it will benefit the investors of the company.

The study has been undertaken with the main intention of understanding the impact of valuing the human resources in the organization and disclosing the same for the public on stock investments.

For this purpose, data has been collected through structured questionnaire. The respondents were individual equity investors from the selected stock broking firm in Bengaluru City. The investors were chosen from top five stock broking firms in Bengaluru. Findings of the study revealed that the presence and absence of the human resource accounting information has influenced the investment decision of the stock investors. From the analysis of the primary data it is found that investors would like to know HRD fund of the organisation. So if the company publishes the required information about the human resource in their organization it can attract more investors. Thus the research will help the investors while taking investment decision as well as the companies in knowing what needs to be published about the value of its human resources.

Key Words: Human Resource Accounting and investment decision.

Introduction:

There is growing recognition that over the past few decades most of the world's advanced economies have made a gradual yet fundamental transformation. They have shifted from industrial economies in which plant and equipment are the core assets to post-industrial economies in which intellectual property, specifically human capital, is the core asset.

The current technological advancement and the automation of farms and factories have freed many workforces from the domain of physical labor and gave rise to a new type of work termed as 'knowledge work'. We needed people with different traits who were able to perform the knowledge work, and then emerged a new crew of workers called 'knowledge workers'. The knowledge workers are the 'workers who could produce the information in the first place, extract meaning from it, and take action on it' (Davenport, 2005)

The key to increasing shareholder value in this "knowledge economy" lies in the intangible assets that a firm possesses like patents. Brands and licenses (Gross, 2001). A study conducted by Margaret Blair of the Brookings Institution revealed that over 20 – year period from 1978 to 1998, the proportion of corporate value accounted for by intangible assets increased from 20% to 80% (Sullivan and Sullivan, 2000). Another study conducted by Baruch Lev (2002) indicated that in the late nineties, the US had invested annually around \$1.0 trillion on

intangible, which included R & D, business processes and software, brand enhancement, employee training. This was almost equal to the \$1.2 trillion that was invested in physical assets in the manufacturing sector.

As a result of the growing importance of Human resources in the organization there is a requirement to value the human resources. All of us know that accounting is not a pure science. It has developed over a period of time along with the practices of the chartered accountants in different parts of the world. To start with in the earlier stages, we were following the GAAP. After that stage each of the countries were framing their own accounting standards which was applicable throughout their country. Later at the international level, standards have been formulated. The growth of multi nationals has led to the comparison of the accounting profits with different countries where the requirement was to move towards the international standards.

Literature Review:

The studies on investment decision based on the value of human resources of the organization is very few. The below table depicts the studies conducted on the various decision taken based on the human resource value.

Table 1: Impact of HRA on Decision Making

Sl. No.	Author	Title of the Paper	Crux of the study
1	Hendricks James A (James A, 1976)	The Impact of HRAI on Stock Investment Decision: An Empirical Study	The main objective of the study was to find the impact of HRA information on stock investment decision. The process of research has depicted that the stock investment decisions was affected by extra information about the human resources.
2	Amir Jafar	Influence of Human .Resource Accounting Information on Managerial Decision-Making: An Empirical Study	The findings of the study have shown that the concept of HRA even though was appreciated by the accounting professionals; its use has not increased throughout the world.

3	R A A S Perera	An Empirical Study of the Impact of Human Resources Accounting Information on Corporate Investor's Decisions	The research has made an attempt to examine the effect of human Resource Accounting Information on investor's share acquisition and disposal decisions. The findings revealed that there is significance difference among the variables – Financial HRAI, Non-Financial HRAI, Knowledge of the investor towards the HRAI and corporate investor's stock acquisition decisions. It has also shown that the level of importance attached to different components of human resource value was different.
4	Avazzadehfath F & Dr. Rajshekhar H (Avazzadehfath & Dr. H.Raiashekar, 2011)	Decision making based on human resource accounting information and its evaluation method	The research study was done on the objective that whether investment decisions are affected by HRA information disclosed in the financial statement. The research has shown that stock investors decision was influenced by HRA information. It is also clear from the study that the implementation of HRA information in the annual reports of the company has incremental impact on individual decision making process.
5	Ahesha Perera (Perera, 2012)	Impact of Measuring and Reporting Human Resource on Investment Decisions in Sri Lanka	The study was done to examine the effect of knowledge towards Measuring and Reporting of Human Resource Information on investment decisions. The findings of the study was consolidated as “measuring & reporting HRI influence corporate investors for the acquisition and disposed of shares (stocks) of banking sector in Srilanka”.

6	Rakholiya Nisha Rasikbhai & Dr. Prashant Makwana (Rasikbhai & Makwana , December 2012)	A Survey of Managerial Uses of Human Resource Accounting	In the study the researcher has explored about the view of the management on H R A in decision making. The outcome of the study has shown that “HRA provides the estimates of the cost of recruitment from outside and development from within is perceived to be highest”.
7	Dr. Zafor Mamoon (Mamoon , April 2013)	Human Resource Accounting For Decision Making	The study attempted to describe the background and systematized overview to the emergence of HRA. This research paper has also thrown light upon the stakeholders’ interests in HRA. The findings of the study showed that HRA could be used as a tool in managerial and external stakeholder’s decision making.
8	Hitendra Shukla (Shukla , 2014)	Human Resource Accounting And Disclosure Practices In Indian Companies [A Comparative Study of Public And Private Sector Companies]	The study had five different objectives. Out of those one of the objectives was to explore the opinion of stakeholder towards disclosing the information about the value of human capital in financial statement. The findings of the study have shown that the investors and shareholders have the knowledge of valuation of human resources. But when making investment they do not prefer the information about the human resource accounting.
9	Mr. Sripada Dinesh Patil	Study of Human Resource Accounting Practices in Information Technology Sector in India and its	The study has been undertaken with the main objective of disclosure of HRA information on management decisions. The findings of the study have shown that

	(PATIL , November 2014)	Impact on Strategic Human Resource Management	human resource accounting information has helped in taking decision relating to various strategies of Human resource management in the organization.
10	Parijan, Khadijeh Khodabakhshi (PARIJAN , June 2014)	Impact of Human Resource Accounting Information Disclosure On Firm Value: A Study on Selected Companies in Bombay Stock Exchange	In order to know whether human resource accounting is having an influence on the firm value or not the study was conducted. The findings have shown that there is an impact of valuing the human resources on the value of the firm.
11	Dr. M Dhanabakyam & S Mufliha (Mufliha S & Dr. M Dhanabhakyam, 2016)	Impact of human resource accounting system on the decisions making areas of human resource management practices	The main objective of the study was to know the impact of HRA system on the decision making areas of human resource management practices. The study has found that HRA system is very useful in all the decision areas whether it is a case of recruitment or at the time of firing the employees.
12	Mr. Ajay Kumar Singh and Ms. Nisha Guptha (SINGH & GUPTA, December 2016)	The Impact of Human Asset Valuation Information on Stock Investment Decisions : An Empirical Study	A research was conducted a research study to find whether the reporting of information of human asset valuation in published financial statements of the companies cause investment decision to be different and to find out whether any background variables have an impact on investment decision. The results show that there is a significant impact of the human asset valuation information on investors' decision regarding their selection of the company.

13	Mr. Imran Khan & Md. Sahadat Hossen	A Contemporary Study on the Practice and Impact of Human Resource Accounting(HRA)in Banking Industry in Bangladesh	The study has investigated the practice and impact of HRA in the banking industry. The study concentrates on extensive review of related literature. The findings of the study have revealed that the level of human resource practice is at very early stage where many organizations hardly focus on the HRA practice properly and disclose all the relevant contents in annual report on time. It finally concludes that the impact of HRA is getting more and more significant to the organization and to the investors.
----	---	---	---

Objectives of the study:

1. To explore the relationship between disclosure of HRAI and stock investor's decision.
2. To identify the most important HRAI parameter that influences the stock investor's decision
3. To evaluate the association between the demographic profile of stock investors and HRAI with respect to stock investment decision.

Hypothesis:

1. H01: there is no significant difference between the investment decisions of stock investors in absence and presence of HRAI.
2. H02: there is no significant difference in the importance attached to the different HRAI by the stock investors.
3. H03: there is no association between the demographic variables such as educational qualification, experience as stock investor and type of occupation of stock investors and HRAI in making stock investment decision.

Methodology:

Based on the objectives of the research the researcher proposed to conduct a descriptive research. From the examination of the various research designs, descriptive research design is found to be the most appropriate. It is descriptive because the objective of the study is to understand the rationale behind selecting an investment option by the investors. With the help

of structured questionnaire, the primary data has been collected. To develop the questionnaire, the existing literature on HRA on investment decision by different stakeholders were reviewed.

Data Analysis:

H01: there is no significant difference between the investment decisions of stock investors in absence and presence of HRAI:

A paired-samples t-test was used to determine whether there was a statistically significant mean difference between investment decisions of stock investors in absence and presence of HRAI. Data are mean $\pm$ standard deviation, unless otherwise stated. No outliers were detected that were more than 1.5 box-lengths from the edge of the box in a boxplot. Inspection of their values did not reveal them to be extreme and they were kept in the analysis. T test being a robust test was used although the assumption of normality was violated, as assessed by Shapiro-Wilk's test ($p < 0.005$). Investors invested more when they were presented human resource accounting information for Company B as opposed to investment without HRAI, a statistically significant increase of 25317.82 ± 102352.93 Rs, $t(257) = 3.973$, $p < .0005$, $d = 0.247$

Table 2: Paired Sample t test for investment decision and HRA information

		Mean	Std. Deviation	t	p
Pair 1	investment in company A after HRAI	236124.031	80467.3613	-3.973	<0.001
	Investment in Company A before HRAI	261441.861	81773.4754		
Pair 2	investment in Company B after HRAI	263875.969	80467.3613	3.973	<0.001
	investment in Company B before HRAI	238558.140	81773.4754		

Source: Analysis of primary data

The above table clearly depicts that the investment in company A is less after disclosing HRAI for the stock investors. And the investment has increased for company B after disclosure of HRAI. The p value is less than 0.05. Therefore, the null hypothesis is rejected. So there exists

significant difference among the investment decisions of stock investors in absence and presence of HRAI.

H02: there is no significant difference in the importance attached to the different HRAI by the stock investors.

A one-way repeated measures ANOVA was conducted to determine whether there were statistically significant differences in the importance attached to the ten different HRAI 's by the individual investors. There were a few outliers and the data was not normally distributed, as assessed by box plot and Shapiro-Wilk test ($p < .05$), respectively. It was nevertheless decided to retain the outliers as the percentage of outliers was negligible and the researchers believe the results will not be materially affected by doing so. Also, since one –way repeated measure is fairly robust to violations of normality; it was decided to carry on the analysis.

The assumption of sphericity was violated, as assessed by Mauchly's test of sphericity, $\chi^2(5) = 511.586$, $p < .05$. Therefore, a Greenhouse-Geisser correction was applied ($\varepsilon = 0.766$).

The importance attached to various HRAI were statistically significant over different types, $F(6.897, 2606.900) = 38.791$, $p < .0005$, with highest importance attached to 'Salary of Key Personnel' (3.63 ± 0.888) followed by 'ROI on T&D' ($3.63 \pm .883$), 'T&D' ($3.48 \pm .944$) and so on in that order.

Post hoc analysis with a Bonferroni adjustment revealed that importance attached statistically significantly different between the pairs with notable highest significant difference between 'Salary of Key Personnel and 'Number of Employees' of 0.73, $p < .005$.

Table 3: One-way ANOVA with repeated measures Descriptive Statistics

Factors of HRAI	Mean	Std. Deviation
Salary of Key personnel	3.63	.888
ROI on T&D	3.63	.883
Training & Development	3.48	.944
Incentive, Bonus	3.29	.893
Employee Welfare 4	3.06	.937

Asset Per Employee	3.33	.803
Number of H R	2.90	1.102
HRV & MV	3.28	.844
Number of Recruitments	3.35	.836
Qualification of Employees	3.52	.784

Source: Analysis of primary data

Table 4: Mauchly's Test of Sphericity ^a							
Measure: HRAI							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Type of HR Information	.255	511.586	44	.000	.766	.782	.111
Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.							
a. Design: Intercept Within Subjects Design: type of HR _ Information							
b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.							

Source: Analysis of primary data

Tests of Within-Subjects Effects						
Measure: HRAI						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type of HR Information	Sphericity Assumed	190.058	9	21.118	38.791	.000
	Greenhouse-Geisser	190.058	6.897	27.558	38.791	.000
	Huynh-Feldt	190.058	7.038	27.005	38.791	.000
	Lower-bound	190.058	1.000	190.058	38.791	.000

Error(type of HR Information)	Sphericity Assumed	1852.042	3402	.544		
	Greenhouse-Geisser	1852.042	2606.900	.710		
	Huynh-Feldt	1852.042	2660.334	.696		
	Lower-bound	1852.042	378.000	4.900		

Source: Analysis of primary data

H03: there is no association between the demographic variables such as educational qualification, experience as stock investor and type of occupation of stock investors and HRAI in making stock investment decision.

In order to check this hypothesis Structural Equation Model using AMOS Graphic was used. The researcher has constructed the model through SEM and checked whether it is fit or not. The summary of the same has been depicted as follows.

The variables used in the structural equation model are

I. Observed, endogenous variables

1. Awareness about HRA
2. Change in Investment in Company B due to HRA

II. Observed, exogenous variables

1. Occupation of the investor
2. Experience in investing in stock
3. Qualification of the investor

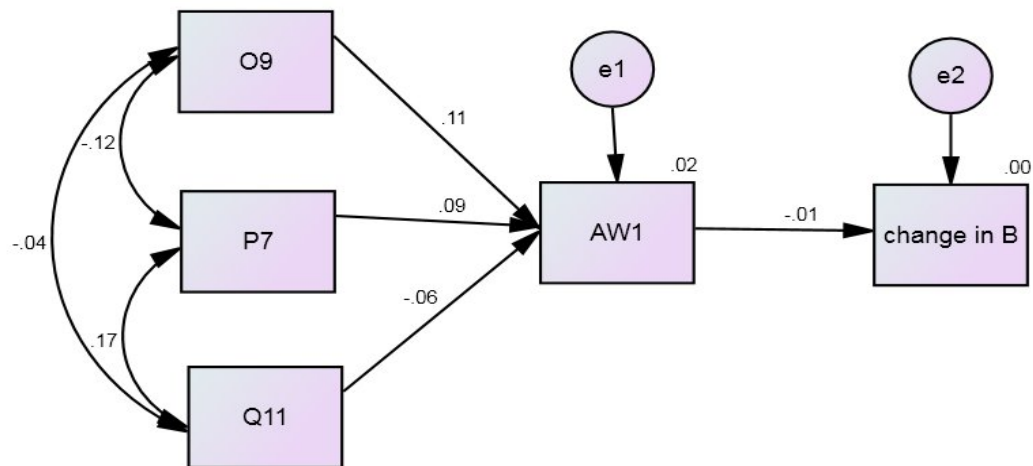
III. Unobserved, exogenous variables

1. e1: Error term for Awareness about HRA
2. e2: Error term for change in investment in company B due to HRA

Hence number of variable in the SEM is

Number of variables in model	:	7
Number of observed variables	:	5
Number of unobserved variables	:	2
Number of exogenous variables	:	5
Number of endogenous variables	:	2

Fig 1: Structural Equation Model based on standardized coefficient of Demographic Variables on investment decision



Where:

O9 = Occupation of the investors

P7 = Experience in Investing in stocks

Q11= Qualification of the investors

AW1= Awareness about HRA

Change in B = Change in the investment in Company B Due to HRAI

Table 5: variables in the Structural Equation Model Analysis

Variables			Un standardized co-efficient	S.E.	Standardize d Co- efficient (Beta)	t value	P value
Awareness about HRA	<---	Occupation	1.291	.605	0.112	2.134	.033
Awareness about HRA	<---	Experience in investing	1.001	.570	0.093	1.757	.079
Awareness about HRA	<---	Qualification	-.676	.630	-0.056	-1.073	.283
Change in investment due to HRA	<---	Awareness about HRA	-.001	.005	-0.015	-.282	.778

Source: Analysis of primary data

From the table above un standardized coefficient of occupation on awareness about HRA is 1.291 represents the greater effect of occupation on awareness holding the other path variables as constant. The estimated positive sign implies that such effect is positive that awareness would increase by more than 1 for every unit increase in occupation and this coefficient value significant at 5% level.

Un standardized coefficient of experience in investing by stock investors on awareness about HRA is 1.001 represents the greater effect of experience in investing by stock investors on awareness holding the other path variables as constant. The positive sign implies the effect is positive. It means awareness would increase by 1 unit for every unit increase in experience in investing.

The un standardized coefficient of qualification on awareness is -0.676. This represents the effect is negative. The p value is >0.05 which means it is insignificant at 1%, 5% and 10% level.

Value of un standardized coefficient of awareness about HRA on change in investment in B Company is -0.001. Therefore, these two are not significantly related. The p value is >0.50. So the null hypothesis is accepted.

Based on standardized coefficient, occupation on awareness (0.112) is influencing to some extent in this SEM model. The next position is experience on awareness (0.093). Whereas qualification and awareness it is negative and also for awareness and investment decision it is negative.

For the purpose of testing the model fit null and alternate hypothesis is framed:

Hypothesis: the hypothesized model has good fit

Alternate Hypothesis: the hypothesized model does not have a good fit.

Table 6: Model Fit Summary of Structural Equation Model

Indices	Value	Suggested value
Chi-square value	2.402	-
DF	3	-
P value	0.493	> 0.05 (Hair et al., 1998)
Chi-square value/DF	.081	< 5.00 (Hair et al., 1998)
NFI	0.912	> 0.90 (Hu and Bentler, 1999)
CFI	1.000	> 0.90 (Daire et al., 2008)
RMSEA	<0.001	< 0.08 (Hair et al. 2006)

Source: Analysis of primary data

From the table 6 it is found that the computed p value is 0.493 which is greater than 0.05 which indicate perfectly fit. The calculated Normed Fit Index (NFI) value (0.912) and Comparative Fit Index (CFI) value (1.000) indicates that it is a perfectly fit and also it is found that Root Mean Square Error of Approximation (RMSEA) value is less than 0.08 which indicated it is perfectly fit.

Conclusion:

The study was conducted in order to identify whether value of human resources will influence the stock investment decision. And it is clear from the analysis that human resource valuation influences the decision making. The component of human resource value that influences the decision making is disclosing of investment in training and development of the human resources. the study also shows that the background variables that have impacted on the awareness level is the occupation and experience in investing but not the educational qualification.

References

1. Avazzadehfath , F., & Dr. H.Raiashekar. (2011). Decision-Making Based on Human Resource Accounting Information and Its Evaluation Method. Asian Journal of Finance & Accounting, 3(1).
2. Davenport, T. (2005). Thinking for a Living-How to Get Better Performance and Results from Knowledge Workers. Harvard Business School Press, 4-5.
3. James A, H. (1976). The Impact of HRAI on Stock Investment Decision: An Empirical Study. The Accounting Review, 292-305.
4. Mamoon , D. (April 2013). Human Resource Accounting For Decision Making. International Journal of Innovative Research & Development, 2(4), 703-724.
5. Mufliha S , & Dr. M Dhanabhakym. (2016). Impact of human resource accounting system on the decisions making areas of human resource management practices. International Journal of Applied Research, 2(5), 505-508.
6. Parijan , K. K. (June 2014). Impact Of Human Resource Accounting Information Disclosure On Firm Value: A Study On Selected Companies In Bombay Stock Exchange. Ph D Thesis, B.N. Bahadur Institute Of Management Sciences University Of Mysore, Manasagangotri, Management Science .
7. Patil , S. D. (November 2014). Study Of Human Resource Accounting Practices In Information Technology Sector In India And Its Impact On Strategic Human Resource Management. Phd Thesis, Savitribai Phule Pune University , Human Resource Management , Pune .
8. Perera, A. (2012). Impact of Measuring and Reporting Human Resource on Investment Decisions in Sri Lanka. IPEDR, 54(8), 38-42.
9. Rasikbhai , R. N., & Makwana , D. (December 2012). A Survey of Managerial Uses of Human Resource Accounting. INDIAN JOURNAL OF APPLIED RESEARCH, 2(3), 114-115.
10. Shukla , H. (2014). Human Resource Accounting And Disclosure Practices In Indian Companies [A Comparative Study Of Public And Private Sector

Companies]. Phd Thesis, Dayalbagh Educational Institute (Deemed University)
, Department Of Accountancy & Law , Dayalbagh, Agra.

11. SINGH, A. K., & GUPTA, N. (December 2016). The Impact of Human Asset Valuation Information on Stock Investment Decisions : An Empirical Study. FINANCE INDIA(4), 1203—1218.