

## **Relationship between Human Resource Accounting and Firm Value: Empirical Study of Some Companies**

Mr. Anshul Kumar Singla (Research Scholar, Tanta University)

Dr. Kamal Vijayvergiya (Research Supervisor, Tanta University)

### **Abstract**

Human Resources are crucial in today's knowledge-based economy. Previous accountants failed to properly account for these resources. Businesses spend a lot of money on employee acquisition, development, and retention. However, as it is considered a cost of doing business, the amount is deducted from operating income. However, they are incurred to get services from the workers and therefore should be capitalised. Human resource accounting was developed as a result of the inadequacy of traditional accounting methods to value intangible assets like people. The business world has been looking for a decision-making tool for a very long time. Human resource planning, performance management, training, and development, and other choices all benefit from having an accurate picture of employees' financial situations. Research of this nature would not only assist shed light on the issues raised above; it would also shed light on how Indian organisations might put their claim that "people are our most precious assets" into practise.

### **1. INTRODUCTION**

Organizations have five mainstay resources, one of which is their human capital. However, accountants have not paid enough attention to developing criteria to value Human Resources (Assets) and to showing these in the position statement, despite the fact that these are widely regarded as the most important and valuable assets which a company possesses and on which its profitability depends (Balance Sheet). Accounting must establish norms for valuing Human Resources, both for financial reporting and as a tool for management decision making, if it is to give useful insights into a business's operations.

Financial accounting has produced a number of instruments for gauging the outcomes of business operations in terms of revenue, expenses, output, and other metrics. These don't try to quantify intangible assets like human capital, which can have a huge impact on outcomes but aren't accounted for here. The gap has been addressed by behavioural scientists who have attempted to quantify the worth of human capital. Likert and Bowers have made an early effort in this direction. Some people have gone farther in an effort to give this an actual form, and this has led to the development of human resource / asset accounting.

When compared to a company's tangible and intangible assets, its people are by far the most valuable. Neither technology nor automation can fully "replace" human capital. Accounting for management and staff as human capital with future rewards is at the heart of human resource accounting (HRA). By contrast to the more conventional method of accounting, in which human resource expenses are deducted from a company's income and shown as an expense on the balance sheet, the HRA method shows these investments in people as assets. Human resource analysis (HRA) posits that the measuring procedure itself is important to organisational decision making, not just the results of the measurements themselves.

### **2. REVIEW OF LITERATURE**

**Biswa Mohan et al (2020)** The purpose of this research was to confirm that human resource accounting methods had a positive effect on the financial performance of 30 selected small-scale enterprises in Odisha. For this aim, financial information for 30 small-scale industries (15 from the service sector and 10 from the industrial sector) has been gathered from secondary sources for the five years commencing in 2016 and ending in 2020. The study used panel fixed and random effect regression models to show that HR accounting has a significant effect on small businesses' return on assets (ROA) and return on capital employed (ROCE), proving its

importance to management. Even if a company's success is heavily influenced by its industry, it is impossible to discount the importance of a solid human capital base. Because of this, it is advised that small-scale enterprises enhance their human capital by implementing human resource accounting, in which all of the costs and benefits related with human resources are recognised, recorded, and reviewed to improve performance.

**Arunesh Kumar Gupta et al (2021)** HRA, or human resource accounting, is a relatively recent subspecialty within the larger accounting industry. Because investing in people does not result in tangible new assets, this approach is consistent with the conventional wisdom that doing so must be treated as a drain on current earnings. The prevailing view nowadays is that investments in intangible assets like Human Resources must be capitalised in order to reap the full economic advantages. The term "human resource accounting" (HRA) was used by the American Accounting Association to describe the process of calculating the worth of an organization's most valuable asset: its people. Obtaining and disseminating HR metrics. Human Resource Accounting is defined, its goals laid forth, its significance highlighted, and its many approaches discussed throughout this work.

**Amit Arora et al (2021)** This research seeks, via a review of relevant literature, to identify the advantages and disadvantages of human resource appraisal and disclosure. The research uncovered a low HR accounting adoption rate, no standard technique for valuing human resources, and no legislative mechanism for adopting or disclosing HR accounting. Results showed that HRAP adoption led to higher profits and more staff productivity, hence the research urged its use.

**Okoye Henry et al (2019)** Human resource accounting was used to the financial results of certain Nigerian deposit money institutions for this research. Human resource accounting's effect on ROI was studied in detail. To achieve this goal, we used secondary data collected from the Nigeria stock exchange to test hypotheses and examine existing literature. Each of the fourteen (14) stated deposit money banks in Nigeria serves as the population for this study, while the five (5) selected banks were all chosen at random. Data analysis was performed using ordinary least squares regression. Results showed that human resource accounting significantly impacted ROIC for several Nigerian deposit money institutions. It was concluded that the incorporation of human resource valuation into an organization's overall value was important, and that management of corporate organisations should develop necessary instruments to enable accounting for human resources.

**Hamood Mohammed Al-Hattamiet al (2018)** The value of an organization's human resources cannot be overstated. The Accounting Information System includes a Human Resource Accounting System as one of its subsystems. To do this, it collects data on an organization's human resources from a variety of sources, processes that data in accordance with certain accounting principles, and then makes that data available to whoever might be interested. The purpose of this study is to outline the framework for a human resource accounting system. Unfortunately, many businesses and organisations fail to realise that this system plays a crucial part in assisting with resource planning, training and development, and even recruiting. In addition to being an impartial depiction of the project's bottom line, this statement also gives a clear view of the economic unit's overall financial health.

### 3. METHODOLOGY

- Financial documents from 10 different Indian organizations were accessed for this investigation, covering the years 2006 through 2012.
- Due to the fact that descriptive studies are typically the best methods for gathering data that will show relationships and describe the populations as they currently are, the

Descriptive Research Design was found to be the most appropriate research design following an examination of the available research designs.

- The sample for this analysis consists of all 500 companies that are members of the Bombay Stock Exchange (BSE).

**Multiple Regression Analysis:** Estimating the connections between several factors is the goal of multiple regression analysis. When studying the association between a dependent variable and one or more independent variables, it employs a wide range of modelling and analysis approaches for a large number of variables. In particular, regression analysis is useful for learning how the average value of the dependent variable shifts in response to changes in one independent variable while the others remain constant

#### 4. DATA ANALYSIS & INTERPRETATION

##### 4.1 RESULTS OF STEPWISE MULTIPLE REGRESSION

- Firm Value and listed independent variables

**Table 1: Variables entered into the equation**

Model	Variables Entered	Variables Removed	R	RSquare	Adjusted RSquare	Std. Error of the Estimate
1	HRV	.	.835 <sup>a</sup>	.697	.692	371.36187
2	Net Income	.	.888 <sup>b</sup>	.789	.783	311.90766
3	Sales Revenue	.	.902 <sup>c</sup>	.814	.805	295.47494

Stepwise (Criteria: Probability-of-F-to-enter  $\leq .050$ , Probability-of-F-to-remove  $\geq .100$ ) of 6 financial variables and HR component variables entered into the equation using stepwise multiple regression analysis, taking Firm Value as dependent and six financial variables and HR component variables as independents, following results were obtained. Only three independent factors were found to be most predictive of Firm Value out of a total of six variables representing financial and HR-related components. Human Resource Value (HRV), Net Income, and Sales Revenue are the three metrics in question. With a correlation coefficient of 0.835 (See table 4.28), HRV was the most important factor in predicting Firm Value, contributing 69.2% of the total. Net Income was the next most important factor, with a correlation coefficient of 0.888 and a contribution of 78.3%. The fourth and final third variable to put into the equation was Sales Revenue together with HRV and Net Income, with the correlation coefficient of 0.902 and a contribution of 80.5%. Rest of the contribution for the Firm Value was unaccounted for. Return on Asset, Total Employees, and Return on HRV, the last three financial and HR component factors, did not predict the Firm Value and were left out of the calculation.

**Table 2: Results of regression ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21552447.660	1	21552447.660	154.279	.000 <sup>b</sup>
	Residual	9377855.265	68	137909.636		
	Total	30930302.925	69			
2	Regression	24412115.052	2	12206057.526	125.465	.000 <sup>c</sup>
	Residual	6518187.873	67	97284.386		
	Total	30930302.925	69			
3	Regression	25168143.804	3	8389381.268	96.092	.000 <sup>d</sup>
	Residual	5762159.121	66	87305.441		
	Total	30930302.925	69			

Furthermore, Fishers values varied from 96.092 to 154.279, all of which were highly significant at the.000 level, as shown by the results of the regressional ANOVA. Therefore, the hypothesis that the regressor has a negligible influence on the relationship cannot be supported.

**Table3: Coefficient,ttestsandsignificancesfordifferentmodelspredicted**

Model		UnstandardizedCoefficients		StandardizedCoefficients	t	Sig.
		B	Std.Error	Beta		
1	(Constant)	-14.980	58.786		-.255	.800
	HRV	.020	.002	.835	12.501	.000
2	(Constant)	122.628	55.516		2.209	.031
	HRV	.022	.001	.951	15.839	.000
	NetIncome	-.041	.008	-.325	-5.422	.000
3	(Constant)	204.426	59.485		3.437	.001
	HRV	.022	.001	.947	14.661	.000
	NetIncome	-.040	.007	-.312	-5.471	.000
	SalesRevenue	-.001	.000	-.157	-2.943	.004

The above table also shows that the t values for all the predicted models and constants ranged from -5.471 to 14.661, and were all judged to be significant at the 0.004 to 0.000 levels.

**Table 4:ExcludedVariables-stepwise**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	NetIncome	-.325 <sup>b</sup>	-5.422	.000	-.552	.873
	SalesRevenue	-.180 <sup>b</sup>	-2.833	.006	-.327	1.000
	ReturnonAsset	.076 <sup>b</sup>	.987	.327	.120	.745
	TotalNumberofEmployees	-.023 <sup>b</sup>	-.270	.788	-.033	.645
	RetrunonHRV	-.176 <sup>b</sup>	-2.693	.009	-.312	.960
2	SalesRevenue	-.157 <sup>c</sup>	-2.943	.004	-.341	.994
	ReturnonAsset	.159 <sup>c</sup>	2.473	.016	.291	.711
	TotalNumberofEmployees	-.001 <sup>c</sup>	-.017	.986	-.002	.643
	RetrunonHRV	.174 <sup>c</sup>	1.928	.058	.231	.372
3	ReturnonAsset	.095 <sup>d</sup>	1.369	.176	.167	.573
	TotalNumberofEmployees	-.039 <sup>d</sup>	-.582	.563	-.072	.620
	ReturnonHRV	.114 <sup>d</sup>	1.266	.210	.155	.345

At this stage, we are not considering factors like net income, sales revenue, return on assets, headcount, or HRV (human resource value). Step 2 excludes Sales Revenue, ROA, TE, and

ROHRV; step 3 excludes ROA, TE, and ROHRV. These three factors did not reach statistical significance, suggesting they are not predictive of Firm Value. Therefore these 3 variables have been deleted in the model.

## CONCLUSION

It is concluded that The primary purpose of this study is to analyse how the various components of Human Assets' value affect Firm Value. Finding a high correlation (significant at the 1% level) between Human Resource Value and its component factors on Firm Value demonstrates that this goal has been met via the use of correlation and regression analysis. HRV was also revealed to be the greatest predictor variable for firm value in multiple regression analysis using the stepwise technique.

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