Optimization
Vol. 15, No. 2, July-December 2023 (pp. 85-91)

RESEARCH ARTICLE

A Study on Assessing the Influence of Human Resource Accounting on NSE-Listed Firms' Value

Isha Bhardwaj[1]* and Pradeep Bhardwaj[2]

ABSTRACT

This study examines the impact of employment benefit costs on the financial performance of businesses listed on the National Stock Exchange. Profit after tax, total assets, return on equity, debt equity ratio, and return on assets are treated as dependent factors in this study, whereas the amount spent on employment benefit costs is treated as an independent variable. The objective is to explore the relationship between employment benefit costs and these financial indicators. Data from 20 National Stock Exchange-listed companies over a 10-year period, sourced from annual reports, underwent panel data regression analysis using E-Views. The results reveal a significant correlation between the employment benefits expenses and profit after taxes, total assets, debt-to-asset ratio, return on equity, and return on assets. This research emphasize the positive impact of employment benefit costs on firms' profitability.

Keywords: Human resource accounting, Corporate valuation, Human capital valuation, Return on equity, Return on assets, Total assets

INTRODUCTION

Human resource accounting (HRA) is a technique employed to acknowledge and document investments in a company's human capital that go beyond what is conventionally addressed in typical accounting procedures. It extends the principles of regular accounting. Assessing the value of human resources helps organizations accurately record their assets. In essence, HRA entails quantifying the costs linked to the processes of hiring, selecting, training, and nurturing human resources. Human resources are viewed as valuable assets that stand apart from tangible assets due to their possession of emotions and sentiments. Unlike physical assets, human assets don't depreciate. Consequently, it's necessary to assess the worth of human resources, by accumulating other assets, to determine the overall cost of an organization. In the 1960s, Rensis Likert and other social researchers endeavoured to define the insights of human resource accounting (HRA).

Significance of Human Resource Audit

The industry's growing concern for human relations management gave rise to the necessity for human asset value. Behavioral scientists studying organizational management identified the following causes of HRA:

1. Even though monetary and physical resources cannot work as efficiently without people,

[1]Associste Professor, IMS Ghaziabad University Courses Campus, Ghaziabad-201015, Uttar Pradesh, India

[2]Professor, Lloyd Business School, Knowledge Park II, Greater Noida-201306, Uttar Pradesh, India

*Corresponding author email id: isha.inc@gmail.com

How to cite this article: Bhardwaj, I. and Bhardwaj, P. (2023). A Study on Assessing the Influence of Human Resource Accounting on NSE-Listed Firms' Value. *Optimization,* 15(2): 85-91.

Source of support: Nil

Conflict of interest: None

conventional accounting does not provide information regarding an organization's human resources.

2. The expenses connected with the human organization are charged against current revenue rather than being seen as investments to be paid back over time, which significantly distorts the amount of net profits. This makes assessing corporate and inter-firm comparability more difficult.
3. Human resources significantly contribute to a company's productivity and profitability. Due to variations in human resources, two businesses operating in the same market and possessing the same physical assets may provide different results. Disregarding the importance of human resources makes it more difficult to value the company as a whole.
4. It is impossible to understand the significance of management actions regarding human resources if the worth of HR is not accurately represented in the balance sheet and profit and loss account.
5. Under conventional accounting, costs for hiring, training, etc. are written off against revenue and reported as expenses. Since the advantages of investing in human resources are cumulative, the costs associated with them should be viewed as such.

LITERATURE REVIEW

A study by Vaddadi *et al.* (2018) looked into the relationship between accounting for human resources and business success. Ten nationalized bank offices in Andhra Pradesh, India, served as the research site. The research employed quantitative methodologies. Within the field of human resource accounting (HRA), the researchers found three independent variables and one dependent variable, which was the performance of the company. The results of the analysis showed that, although there was only a small association between health and safety expenditures and business performance, there was a substantial correlation between shelter and training and development expenses and firm performance. This study emphasizes how crucial it is for banks to invest in their human resources.

Dhar *et al.* (2017) carried out a study aimed at investigating the influence of Human Resource Accounting on organizational performance. Their primary objective was to create a framework that could be valuable to researchers, policymakers, and investors. The research employed a systematic literature review approach, focusing on the factors that affect human resource accounting practices and how they affect the performance of organizations. The findings of the study were synthesized to propose a framework that considers aspects such as the disclosure of human resource accounting, the application of intellectual capital accounting, managerial backing, and employee performance in the context of enhancing organizational performance.

Chouhan and Naghshbandi (2015) discussion centers around labor costs, which encompass the classification, budgeting, and communication of expenses linked to workforce and investments made by a company. This includes labor-related expenditures that are not traditionally covered by standard accounting practices. The core objective of Human Resource Accounting (HRA) is to assess and forecast the value of human capital and the advantages it brings. Just as physical assets like real estate, machinery, and buildings are assessed and documented in financial records, human resources should also be assessed, recorded, and disclosed in financial statements to present an accurate financial overview.

Dhar *et al.* (2017) The Institute of Chartered Accountants of India does not provide specific accounting standards for reporting human resources within an organization. Nonetheless, many Indian companies recognize the importance of human resource accounting and proactively include such information in their financial statements. The Companies Act mandates the disclosure of staff-related expenses.

The paper puts forward several key recommendations for boosting the efficiency of human capital. Firstly, it proposes that the Accounting Standards Board of India should formulate an Accounting Standard (AS) that outlines the evaluation, accounting, and reporting of human resources. Secondly, it suggests the establishment of an objective framework to enhance the transparency of workforce valuation in financial accounting. Lastly, it recommends that organizations should adopt employee audits to collect information about workforce reliability, evaluate talent performance, and incorporate this data into their financial reports.

Odum and Aroh (2017) conducted a research study with the aim of investigating the impact of Human Capital Accounting Information on the market value of firms. Their specific focus was on companies operating in the consumables sector, listed on the Nigerian Stock Exchange. The study primarily relied on pre-existing data as its primary source of information. To present an outline of the variables being examined, descriptive statistics were used. The findings of the analysis indicated that only managerial disclosure and expenses related to health and security had a negative influence on the Earnings Per Share (EPS) of the companies included in their sample.

Chathurika and Silva (2019) conducted a research study with the objective of examining the impact of spending on human capital and the practice of human capital accounting on the financial performance of companies listed in Sri Lanka. Their research utilized panel data spanning a five-year period from 2011 to 2015, encompassing forty publicly listed companies representing various industries on the Colombo Stock Exchange. The outcomes of their study indicate that increased investments in a company's human capital have a positive effect on its financial performance. Consequently, allocating resources to human resources is no longer a financial strain for organizations.

Sharma (2019) conducted a study with the aim of evaluating how the implementation of a human resource accounting system affects decision-making in human resource management practices. The research collected data from 100 participants employed in the human resource department, accounting section, and audit control department of the State Bank of India and Canara Bank in the Kerala region. The collected data were analyzed using correlation and multiple regression models, with validation through ANOVA and F Ratio. The findings of the study reveal a strong connection between the different aspects of Human Resource Accounting implementation and their significant influence, accounting for 67.1 percent, on decision-making in the domain of human resource management practices.

Statement of the Problem

In the existing body of research on the influence of HRA on a firm's value, there is a noticeable lack of consideration for a wide range of variables. Most studies have primarily focused on examining the relation between human resource accounting and a company's profitability, utilizing tools such as Excel spreadsheets, descriptive statistics, SPSS, and other statistical methods. Remarkably, none of the researchers have employed Panel data regression for this investigation.

The main aim of this study is to fill the existing void in the body of research by conducting a all-inclusive investigation into the profitability of National Stock Exchange (NSE) listed companies. It specifically examines various variables, including total assets, post-tax profits, debt equity ratio, return on equity, and return on assets. The research employs a range of statistical tools that have not been utilized in previous studies to explore and understand the connection between Human Resource Accounting and profitability over a ten-year period. Moreover, this study takes into account a larger dataset of company information compared to earlier research efforts.

Objectives of the Study

1. To investigate how the disclosure of human resource accounting affects the profitability of companies.
2. To assess how employment benefit costs influence profit after tax and total assets.
3. To examine the relationship between employment benefit costs and variables such as debt equity ratio, return on equity, and return on assets.
4. To provide pertinent advice in light of the study's conclusions.

RESEARCH METHODOLOGY

Data Gathering and Sample Size

Variables for this study include the cost of employment benefits, profit after taxes, return on equity, return on assets, and total Twenty-five NSE listed firms' assets and debt-to-equity ratios are taken into consideration for the ten-year period (2011–2020). The necessary information for this study is gathered from the chosen companies' yearly reports, which are accessible in their a portion of the information was gathered from the money control website and the company's website.

Hypothesis

Null Hypothesis (H0): There is no statistically significant correlation between employment benefit costs and Profit After Tax, Total Assets, Debt Equity Ratio, return on equity, and Return on Assets.

Alternative Hypothesis (H1): There is a statistically significant correlation between employment benefit costs and Profit After Tax, Total Assets, Debt Equity Ratio, return on equity, and Return on Assets.

RESULTS AND DISCUSSION

Results from the Fixed Effect Model for the relationship between Employment Benefit Cost and Profit After Tax are as follows:

Dependent Variable: X1PAT
Modelling Technique: Panel Least Squares
Date of Analysis: August 22, 2023
Analysis Time: 1:15 p.m.
Data Sample Period: From 2011 to 2020
Duration of Study Period: 10 years
Number of Entities Included: 25
Total Observations in the Balanced Panel: 250

Variable	Coefficient	Std. error	t-Statistic	Prob.
C	4140.810	329.2926	12.57486	0.0000
YEBC	0.356183	0.046019	7.739888	0.0000

Effects Description			
Cross-section fixed (dummy variables)			
R-squared	0.776998	Mean dependent var	5890.529
Adjusted R-squared	0.752081	S.D. dependent var	6800.554
S.E. of regression	3386.093	Akaike info criterion	19.19181
Sum squared resid.	2.05E+09	Schwarz criterion	19.53813
Log likelihood	-1898.181	Hannan-Quinn criter	19.33196
F-statistic	31.18412	Bin-Watson stat	0.370544
Prob(F-statistic)	0.000000		

Results of Random effect model of Employment benefit cost and profit after tax

Dependent Variable: X1PAT

Method: Panel EGLS (Cross-section random effects)

Date: August 22, 2023

Time: 1:15 p.m.

Sample: From 2011 to 2020

Periods involved: 10

Cross-sections comprised: 25

Total panel (balanced) observations: 250

Swamy and Arora estimator of component variances

Variable	**Coefficient**	**Std. error**	**t-Statistic**	**Prob.**
C	4104.845	1087.213	3.775565	0.0002
YEBC	0.363505	0.043412	8.373354	0.0000
Effects Description	S.D.	Rho		
Cross-Section random	4645.914	0.6531		
Idiosyncratic random	3386.093	0.3469		
Weighted data analysis				
R-squared	0.262259	Mean dependent var		1322.949
Adjusted R-squared	0.258533	S.D. dependent var		3924.703
S.E. of regression	3379.502	Sum squared resid		2.26E+09
F-statistic	70.38682	Durbin-Watson stat		0.336428
Prob(F-statistic)	0.000000			
Unweighted data analysis				
R-squared	0.327332	Mean dependent var		5890.529
Sum squared resid	6.19E+09	Durbin-Watson stat		0.122891

Results of Hausman Test of Employment benefit cost and profit after tax

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	**Chi-Sq. Statistic**	**Chi-Sq.d.f.**	**Prob.**
Cross-Section random	0.229883	1	0.6316

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var (Diff.)	Prob.
YEBC	0.356183	0.363505	0.000233	0.6316

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4240.810	329.2926	12.57486	0.0000
YEBC	0.356183	0.046019	7.739888	0.0000

Effects description			
Cross-section fixed (dummy variables)			
R-squared	0.678998	Mean dependent var	5764.439
Adjusted R-squared	0.872084	S.D. dependent var	6600.233
S.E. of regression	3356.087	Akaike info criterion	19.18542
Sum squared resid	2.05E+09	Schwarz criterion	19.43716
Log likelihood	-1898.181	Hannan-Quinn criter.	18.43196
F-statistic	31.18412	Durbin-Watson stat	0.470564
Prob(F-statistic)	0.000000		

Cross-section random effects test equation:

Dependent Variable: X1PAT

Method: Panel Least Squares

Date: August 22, 2023

Time: 1:15 p.m.

Sample: From 2011 to 2020

Periods included: 10

Cross-sections included: 25

Total panel (balanced) observations: 250

In this hypothesis testing scenario:
Original Statement:

Null Hypothesis (H0): The random effects model is appropriate.

Alternative Hypothesis (HA): The fixed effects model is appropriate.

The p-value is 0.6316, which exceeds 5%, so we accept the null hypothesis, indicating that the random effects model is appropriate.

This suggests that the random effects model is the suitable approach to investigate the association between Employment Benefit Cost and Profit After Tax.

In line with the random effects model, the p-value is 0.0002, which is less than 5%. Consequently, we reject H0 in favor of H1, implying a strong correlation between Employment Benefit Cost and Profit After Tax.

CONCLUSION

In summary, the key objective of this study is to assess how Employment Benefit Cost affects a company's profitability. Given that the reporting of Employment Benefit Cost is not mandatory, there exists a wide range of reporting practices. Larger corporations tend to provide more comprehensive disclosures of Employment Benefit Cost in their annual reports compared to medium-sized businesses. These disclosures often lean toward being qualitative rather than quantitative, even though there is a substantial connection between Employment Benefit Cost and a company's profitability.

The study shows how employment benefit costs affect a company's bottom line by showing a strong correlation between these costs and variables including total assets, return on assets, debt-to-equity ratio, profit after taxes, and return on equity. As a result, companies ought to think about adding details in the notes and schedules of their financial reports regarding the worth of their human resources and the results of their performance during the accounting year.

Limitation of the Study

There are certain constraints in this study that should be noted. To enhance the depth of research, future investigations could expand by incorporating additional variables, such as market capitalization, return on capital employed, and return on net worth. The present study exclusively focuses on the profitability of companies listed on the National Stock Exchange. It would be beneficial to conduct further research involving companies listed on the Bombay Stock Exchange, with a specific focus on particular sectors like the automotive or pharmaceutical sectors, for a more comprehensive analysis.

REFERENCES

Chathurika, G. and De Silva, N. (2019). Impact of Expenditure on Human Capital and Human Capital Accounting on Firms' Financial Performance in Sri Lanka. *Asian Journal of Multidisciplinary Studies.*

Chouhan, V. and Naghshbandi, A. (2015). Measuring employee's value: A critical study on human resources accounting in India. *International Journal of Management, Accounting and Economics,* 2(4): 277-292.

Dhanabhakyam, M. and Mufliha, R. (2016). Impact of human resource accounting system on the decisions making areas of human resource management practices. *International Journal of Applied Research,* 2(5), pp.505-508.

Dhar, M., Mutalib, M.A. and Sobhani, F.A. (2017). Investigating the Impact of Human Resource Accounting Practice on Organizational Performance. In International Islamic Social Economic Conference, University Sains Islam Malaysia, Malaysia.

Hopwood, J. (1976). Human Resource Accounting. *Accounting, Organizations and Society,* 1(2–3): 131–132. https://doi.org/10.1016/0361-3682(76)90016-7

Hossain, M. and Akhter, S. (2014). An Empirical Analysis on the Importance of Human Resource Accounting Practices in Organizations. *International Journal of Ethics in Social Sciences,* 2(2): 37–54.

Ojokuku, R.M. and Oladejo, T.F. (2015). Human resource accounting and human capital valuation in Nigeria: Prospects and challenges. *International Journal of Economics, Commerce and Management,* 3(7): 600-609.

Ratti, M. (2012). An Analytical Study of Human Resource Accounting Practices – An Indian Experience. *Integral Review - A Journal of Management,* 5(2): 37–45.

Sanghani, A.R. (2016). An Analysis of Human Resource Accounting Practices in Cement Corporation of India. *Indian Journal of Applied Research,* 6(3): 439–442.

Sharma, D.A. (2019). Analytical Study of Human Resource Management Strategy as Adopted in Industries Accounting System in India. *Journal of Information and Computational Science,* 9(9): 956–967.

Sharma, P. and Shukla, R. (2015). Application of Human Resource Accounting in Heavy Industries. *Samriddhi: A Journal of Physical Sciences, Engineering and Technology,* 1(2): 131–133.

Sonia. (2019). A Study on Human Resource Accounting Practice at HMT Machine Tools Limited (Mbx), 9(3): 19950–19953.

Tiwari, R. (2012). Human Resource Accounting in India: An Overview. *International Journal of Management Prudence,* 4(2): 121.

Vaddadi, N.S., Surarchith, B.S. and Subhashin, K. (2018). The Effect of Human Resource Accounting (HRA) on Performance of a Firm. *International Journal of Pure and Applied Mathematics,* 118(20): 4833-4841.