

Impact of Human Resource Accounting on Companies Profitability

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Abstract:

The present study has attempted to examine the human resource accounting impact on the organization's bottom line and top-line growth. The aim of the study has considered analyzing the five organizations which are implementing the human resource accounting system with the large presence of the employees. This research is performed using the secondary data of financial information from the period of 2013-14 to 2018-19. The statistical tools adopted for present research work are the bivariate correlation and the result indicated that both the top line and bottom-line growth indicators are having a relationship with the Human Resource Accounting. The ordinary least square method has been applied and the result stated that both the top line and bottom-line growth indicators are having the influence significantly.

Keywords: Human Resources, Accounting, Profitability, Public Sector

1. Introduction

Human Resource accounting has been the focus of much academic research since the late 1960s. Human Resource is a term that refers to the set of individuals who make up the workforce of an organization or a business entity. This may be attributed to the apparent increasing recognition within the business community of the important major stakeholders attach to socially and environmentally responsible corporate behavior (Enofe, Mgbame & Ovie, 2013¹).

Human resource accounting (HRA) is of tropical origin and is struggling for acceptance. It is clearly said that Human resources accounting is an accounting measurement system and a large body of literature has been published in the last decade setting for the various procedures for measurement. At the same time, the theory and underlying concepts of accounting measurement have received

generous attention from academicians and a substantial body of literature has been developed. Under conventional accounting system, human resources are not recognized as physical or financial assets (Mustafizur, Amzad & Tabassum, 2013²). The application of HRA varies across organizations and countries. Some organizations adopt a valuation method suitable for the measurement of their human resources and report such information as additional information or provide supplementary statements in the annual reports.

2. SIGNIFICANCE OF THE STUDY:

The Public sector organizations were chosen understudy because this would support for typicality. More importantly, the selected units for the study were the concern for purposive attributes, as this study concerns itself with the impact of HRA on companies Profitability. The findings in this

¹ Enofe, A. O., Mgbame, C. Sunday O. S., & Ovie, O. (2013). Human resources accounting disclosures in Nigeria quoted firms. Research Journal of Finance and Accounting, 4(13), 7-12.

² Mustafizur, R., Amzad, H. & Tabassum, A., (2013). Problem with Human Resource Accounting and A Possible Solution. Research Journal of Finance and Accounting www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.4, No.18, 2013.

study are significant that they provide insight into the complexity of work in public sector organizations and their top-line and bottom-line growth indicators. Furthermore, they show that many factors can potentially impact the profitability of public sector organizations.

3. REVIEW OF LITERATURE:

Michael Mankins, Karen Harris et al (2017³): The author in this article explains how the Human Capital has taken more importance than financial resources. Presently global financial capital is 10 times global GDP. In many large companies, the after the cost of borrowing is close to the rate of inflation which means borrowing cost is near zero. The skillful allocation of financial capital is no longer a source of sustained competitive advantage. The weighted average cost of capital was 10% in the 1980s and 1990s and at present it ranges from 5- 6%. It is expected that global financial assets will increase by 40% from 2010 to 2020. It has also been researched that populations the age of 45-59 years are critical in determining the level of savings. These peak savers will represent a large and growing percentage of the global population until 2040. Because of financial capital abundance, the companies have started to buybacks as they do not have better investment opportunities. According to the author at present, the company must learn to quickly spot and get out of the losing venture while aggressively supporting the winners like Alphabet the parent company of Google did. Today productive means working smarter than working harder. In the new era the time, talent and energy of the people of the company along with the ideas they generate is the foundation of the superior performance. The companies that apply real discipline in their management of Human Capital are on average 40% more productive than the rest. The author hence supports that the present age is the age where the value of Human Capital outweighs the importance of financial resources which further supports the requirement of research in the field of Human Resource Accounting.

³ Michael Mankins, Karen Harris et al (March- April 2017) "Strategy in the age of super abundant capital" in Journal of Harvard Business Review South Asia.

Akindehinde, Enyi, & Olutokunbo, (2015⁴), Human Resource Accounting has a significant effect on organizational performance where their research was justified by findings empirically and concluded that the present practices of accounting related to expensing all expenditure on human assets do not depict fair and true picture in Balance Sheet of an organization. It may lead to understating of profit for the organization which has eventually a negative impact on "Earnings per Share", finds of shareholders, return of assets and market value.

Hossain, Akhter, & Sadia, (2014⁵), The research revealed that the number of investments made on human resources generally by corporates and the effect of investments justifies on the productivity scale of humans rationalize their treatment where humans were treated as assets instead of expenses. Contradictions made against the concept of Human Resource Accounting and their applications are the topics that can be solved consequentially. The capabilities of decision making will be enhanced when the corporates quantify their human resources and report them as assets in their balance sheets where various users of annual reports will be provided with adequate information which is qualitative and quantitative.

Mustafizur, Amzad & Tabassum (2013⁶) Though Human Resources Accounting was introduced back in the 1980s, it started gaining popularity in India after it was adopted and popularized by NLC. Human Resources Accounting, also known as Human Asset Accounting, is an information system involved in identifying, measuring, capturing, tracking and analyzing the potential of the human resources of a company and communicating the resultant information to the stakeholders of the company. It is a method by which a cost is assigned to every

⁴ Akindehinde, A., Enyi, P., & Olutokunbo, A. (2015). Human asset accounting aid corporate performance. . American International Journal of Contemporary Research, 45-52.

⁵ Hossain, A., Akhter, N., & Sadia, N. (2014). An Empirical Analysis on Importance of Human Resource Accounting (HRA) Practices in the Organizations. International Journal of Ethics in Social Sciences.

⁶ Mustafizur, R., Amzad, H. & Tabassum, A., (2013). Problem with Human Resource Accounting and A Possible Solution. Research Journal of Finance and Accounting www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.4, No.18, 2013.

employee when recruited and the value that the employee would generate in the future. Human Resource accounting reflected the potential of the human resources of an organization in monetary terms, in its financial statements.

Abdullahi and Kirfi (2012⁷) maintain that the quantification of the value of Human Resources helps the management to cope up with the changes in its quantum and quality so that equilibrium can be achieved in-between the required resources and the provided human resources. As a result, it becomes imperative to put measures in place to effectively manage people with their needs and expectations to enhance productivity. Therefore, a proper appreciation of human resource accounting will enable managers to make appropriate decisions regarding investment in human resources.

Okpala and Chidi (2010⁸) in their work, examined the relevance of human capital accounting to stock investment decisions in Nigeria and opine that corporate success now rests on the ability and knowledge of people who can easily adapt to technological changes and drive the organization to attain its goals and objectives. They explain that the function of human capital accounting is to provide information that allows investors to truly evaluate and understand the complete picture of an organization.

4. OBJECTIVES OF THE STUDY

The main objective of this study is to determine the adoption of Human Resource Accounting on the Profitability of Corporate Organizations. Specifically, the study required;

- To determine the relationship of Human Resource Accounting with the select industries top-line and bottom-line growth
- To examine the impact of Human Resource Accounting on the bottom line of select industries

⁷ Abdullahi, A & Kirfi, M. M (2012). Human Capital Accounting: Assessing Possibilities for Domestication of Practice in Nigeria. Research Journal of Finance and Accounting, 3(10), 57-63.

⁸ Okpala, P.O & Chidi O.C (2010). Human capital accounting and its relevance to stock investment decisions in Nigeria. European Journal of Economics, Finance and Administrative Sciences, 4(21), 13-18.

- To analyze the impact of Human Resource Accounting on top-line growth of select industries

5. HYPOTHESIS OF THE PRESENT STUDY:

1. **H0:** There is no relationship between human resource accounting with the top line and bottom-line growth.
 2. **H0:** There is no impact of human resource accounting with the top-line growth
 3. **H0:** There is no impact of human resource accounting with bottom-line growth.
- #### 6. RESEARCH METHODOLOGY:

6.1: Research Design

Research design includes gathering data to find answers to unanswered questions regarding the current state of a subject at a given period. The complexity of this analysis has contributed to the use of ex-post facto research design and time-series data for this analysis.

The population of this study consists of five (05) public limited organizations. For the present research, the selected units are INFOSYS, BHEL, ONGC, SAIL, and NTPC. Such public sector organizations were chosen based on the fact that the data that applied to this study were available. The data is secondary data taken from different websites and sources of companies and different research papers.

6.2 Method of Data Analysis

The variables included in this analysis are employee pay rises, wage raises and retirement benefits for employees as independent variables; while the contingent variable is productivity. In evaluating the data obtained, the five selected public sector organizations' annual reports and report were used and checked using the statistical methodology adopted for this analysis adopted for this study was Correlation, Linear regression, Vector Auto Regression

7. DATA ANALYSIS & INTERPRETATIONS:

7.1: 1st Objective: To determine the relationship between Human Resource Accounting with the select industries' top-line and bottom-line growth.

Stocks Names	Top Line	Bottom Line
Infosys	0.648	0.492
NTPC	0.573	0.334
BHEL	0.731	0.347
ONGC	0.493	0.294
SAIL	0.684	0.315

Interpretation:

The above table reflects the relationship of selected five stocks with their bottom line and top-line growth. The analysis result reveals that the human resource accounting of BHEL (0.731) is having a stronger relationship with the Top-line growth of the company. The study indicated that Infosys is having higher but moderate (0.492) with human resource accounting.

7.2: 2nd Objective: To examine the impact of Human Resource Accounting on the bottom line of select industries

The **Infosys** is implementing the human resource accounting system in the industry to improve the organizational performance (Profitability). The linear regression has been applied to know the impact on the bottom line of the company.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.990 ^a	.980	.978	523.11571
a. Predictors: (Constant), Infosys_Ec				

The above table indicates the R square result indicated .980 > 0.60 is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	Sig.
1	(Constant)	1951.543	353.710		5.517
	Infosys_Ec	.327	.015	.990	21.230
a. Dependent Variable: Infosys_np					

The above table reflects the linear regression result that at a 5 percent level the p-value is found to be significant value. The coefficient value (0.990) is having an impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the bottom line.

The **NTPC** is implementing the human resource accounting system in the industry to improve the organizational performance (Profitability). The linear regression has been applied to know the impact on the bottom line of the company.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.595 ^a	.738	.669	2570.32204
a. Predictors: (Constant), NTPC_Ec				

The above table indicates the R square result indicated 0.738 > 0.60 is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	Sig.
1	(Constant)	1753.984	2819.901		.622
	NTPC_Ec	.331	.555	.595	.596
a. Dependent Variable: NTPC_np					

The above table reflects the linear regression result that at a 5 percent level the p-value is found to be significant value. The coefficient value (0.595) is having an impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the bottom line.

The **BHEL** is implementing the human resource accounting system in the industry to improve the organizational performance (Profitability). The linear regression has been applied to know the impact on the bottom line of the company.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.863 ^a	.740	.678	2987.93857
a. Predictors: (Constant), BHEL_Ec				

The above table indicates the R square result indicated $0.678 > 0.60$ is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	15913.042	4860.863		3.274
	BHEL_Ec	-1.546	.581	.663	.026
a. Dependent Variable: BHEL_np					

The above table reflects the linear regression result that at a 5 percent level the p-value is found to be significant value. The coefficient value (0.663) is having an impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the bottom line.

The **ONGC** is implementing the human resource accounting system in the industry to improve the organizational performance (Profitability). The linear regression has been applied to know the impact on the bottom line of the company.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793 ^a	.709	.602	3149.47298
a. Predictors: (Constant), ONGC_Ec				

The above table indicates the R square result indicated $0.602 > 0.60$ is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients					
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Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18808.611	1351.790		13.914	.000
	ONGC_Ec	-.076	.272	.293	.279	.000
a. Dependent Variable: ONGC_np						

The above table reflects the linear regression result that at a 5 percent level the p-value is found to be significant value. The coefficient value (0.293) is having an impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the bottom line.

The **SAIL** is implementing the human resource accounting system in the industry to improve the organizational performance (Profitability). The linear regression has been applied to know the impact on the bottom line of the company.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.747 ^a	.658	.609	1145.14155
a. Predictors: (Constant), SAIL_Ec				

The above table indicates the R square result indicated $0.609 > 0.60$ is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	5226.560	1275.760		4.097
	SAIL_Ec	1.294	.384	.747	.008
a. Dependent Variable: SAIL_np					

The above table reflects the linear regression result that at a 5 percent level the p-value is found to be significant value. The coefficient value (0.747) is having an impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the bottom line.

7.3: 3rd Objective: To analyze the impact of Human Resource Accounting on top-line growth of select industries.

The **Infosys** is implementing the human resource accounting system in the industry to improve the organizational performance (Sales). The linear regression has been applied to know the impact on the bottom line of the company.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 ^a	.998	.998	763.69867
a. Predictors: (Constant), Infosys_Ec				

The above table indicates the R square result indicated $0.998 > 0.60$ is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	2804.807	516.383		5.432
	Infosys_Ec	1.582	.023	.999	70.290
a. Dependent Variable: Infosys_sales					

The above table reflects the linear regression result that at 5 percent level the p-value is found to be significant value. The coefficient value (0.999) is having an impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the top line.

The **NTPC** is implementing the human resource accounting system in the industry to improve the organizational performance (Sales). The linear regression has been applied to know the impact on the bottom line of the company.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 ^a	.624	.602	7763.72032

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 ^a	.624	.602	7763.72032
a. Predictors: (Constant), NTPC_Ec				

The above table indicates the R square result indicated $0.602 > 0.60$ is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	8134.783	8517.580		.955
	NTPC_Ec	5.283	1.677	.724	3.150
a. Dependent Variable: NTPC_sales					

The above table reflects the linear regression result that at a 5 percent level the p-value is found to be significant value. The coefficient value (0.724) is having an impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the top line.

The **BHEL** is implementing the human resource accounting system in the industry to improve the organizational performance (Sales). The linear regression has been applied to know the impact on the bottom line of the company.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816 ^a	.766	.685	3342.60359
a. Predictors: (Constant), BHEL_Ec				

The above table indicates the R square result indicated $0.685 > 0.60$ is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients				
Model	Unstandardized Coefficients		Standardized Coefficients	t
				Sig.

		B	Std. Error	Beta		
1	(Constant)	34315.265	5437.842		6.310	.000
	BHEL_Ec	1.175	.650	.516	1.808	.004
a. Dependent Variable: BHEL_sales						

The above table reflects the linear regression result that at 5 percent level the p-value is found to be significant value. The coefficient value (0.516) is having an impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the top line.

The **ONGC** is implementing the human resource accounting system in the industry to improve organizational performance (Sales). The linear regression has been applied to know the impact on the bottom line of the company.

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.786 ^a	.736	.652	10428.13182	
a. Predictors: (Constant), ONGC_Ec					

The above table indicates the R square result indicated 0.652 > 0.60 is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients					
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	71695.236	4475.875		16.018
	ONGC_Ec	1.504	.901	.486	1.669
a. Dependent Variable: ONGC_sales					

The above table reflects the linear regression result that at 5 percent level the p-value is found to be significant value. The coefficient value (0.486) is having an impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the top line.

The **SAIL** is implementing the human resource accounting system in the industry to improve the organizational performance (Sales). The linear

regression has been applied to know the impact on the bottom line of the company.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928 ^a	.861	.846	6086.91745
a. Predictors: (Constant), SAIL_Ec				

The above table indicates the R square result indicated 0.846 > 0.60 is greater than the base value. The study p-value is observed to be significant at 5% level.

Coefficients					
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	11436.134	6781.210		1.686
	SAIL_Ec	15.237	2.040	.928	7.470
a. Dependent Variable: SAIL_sales					

The above table reflects the linear regression result that at 5 percent level the p value is found to be significant value. The coefficient value (0.928) is having the impact on the net profit of the organization. Hence it concluded that the human resource accounting impact is observed on the top line.

8. FINDINGS & SUGGESTIONS OF THE STUDY:

1. The study found that the human resource accounting of BHEL (0.731) is having a stronger relationship with top-line growth.
2. The study found that the human resource accounting of Infosys (0.492) is having a stronger relationship with top-line growth.
3. The study observed with the ordinary least square method that the Infosys beta coefficient (0.990) is having a higher impact on the bottom line compared to other selected industries.
4. The study observed with the ordinary least square method that the Infosys beta coefficient (0.999) is having a higher impact on the top line compared to other selected industries.
5. The study suggests the industries to adopt the human resource accounting system to

improve the bottom line and top-line growth significantly.

6. It has been found that the stronger the human resource accounting system will have the stronger performance of the industries especially people-oriented industries, such as information technology.

9. CONCLUSION:

The present study has been focused on the human resource accounting system with the help of secondary data. The study has considered the five industries which are implementing the HRA along with the secondary data from the period of 2013-14 to 2018-19. The bivariate correlation has been applied to know the relationship between the employee's cost benefits (HRA) with the top line and bottom line. The ordinary least square method has been applied and the result indicated that both the top line and bottom line indicators are significantly getting influenced by human resource accounting. Hence there is a need to do further research in this area by considering the critical areas of the organizations, where human resource accounting will have a significant impact.

10. LIMITATIONS OF THE STUDY:

The following are the limitations of the study.

- The said study is based on secondary data only, collected from annual reports of companies. The limitation is of secondary data influence the study.
- The study period of said study is limited to selected five financial years only.
- Only public sector organizations are selected under study has been considered for the study of the impact of Human Resource Accounting on Profitability.

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