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# Effect of Segment Diversification on Return on Net Worth

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#### **ABSTRACT**

The research is focused on comparative study of business segment and return on net worth. The prime objective of the study was to compare diversification status of selected Nifty indexed companies with return on net worth. CNX Nifty considered as benchmark index while selecting companies under the study. Return on net worth is considered as a very important ratio by shareholders in investment decisions making process. The purpose of this study is to find out linkage between profitability with diversification status viz. single and multi-segment approach. It was found that there exists a significant prediction of business segment diversification on profit which is generated by the company for each unit of money invested by equity shareholders.

**Keywords:** Business segment, Return on net worth, Investment decisions, Segment Profitability, CNX Nifty.

## **INTRODUCTION:**

Return on net worth (RONW) can be calculated by dividing net income of company by shareholder's equity for the fiscal year.

Return on Net Worth = Net Income/ Shareholder's Equity

Only equity Shareholders are considered while calculating value of shareholder's equity and preference shareholders are excluded while deriving this ratio. This profitability ratio indicates how much profit is generated by the company for each unit of money invested by equity shareholders. From the shareholder's point of view this very crucial ratio to judge perspective of their investment. Investors in capital market follow this ratio to track their investment.

Diversification as a grand corporate strategy always has major impact on profitability of company. In long run strategies like diversification plays vital role in providing return on investments. In this paper researchers analysed relationship between diversification and its effect on return on net worth.

#### NEED FOR THE STUDY:

Return on net worth is very important profitability measurement factor for shareholders. It plays vital role in investment decisions. Globalization & intense competition made stakeholders more aware about detailed analysis of reports of companies. Many companies are also diversifying their business into various segments. A consolidated financial statement does not provide classified information of performance of various segments of companies; it results in hiding the information of performance of individual segment. Due to incomplete information of performance of segments, stakeholders find it difficult to take vital decisions. Relationship between diversification status and profitability in terms of return on net worth will be helpful to these stakeholders for taking their investment decisions.

### **REVIEW OF LITERATURE:**

(Krishna, 1985) examined to explore relationship between diversification and company performance. He categorized dimensions of diversification into two major categories and analyzed the data and found that companies with related diversification performed better than their counterparts. The concept of related and unrelated diversification was scientifically introduced by the researcher in this study. He classified companies based on relatedness among the different product segments to distinguish between related and unrelated component of diversification. There no supporting evidence to the hypothesis that high level of diversification leads high was level of profitability compared to firms having low level of diversification. There was some evidence whichpartially support the statement that high related diversification leads to higher profitability than firms with high unrelated diversification. The result was also consistent with profit growth parameter for given companies. The better profitability of firms with related diversification is significantly consistent for an extended research period. His research with some concrete output served as founding stone for further research on diversification strategy worldwide.

(Anıl, &Yiğit, 2011) studied relationship between diversification strategy and organisational performance of Instanbul stock exchange listed companies during the period 2005-2009. The researchers' analysed concentric diversification, core business based diversification, related diversification and unrelated diversification, with respect to financial performance. Financial performance measures like return on assets, return on equity and return on sales were studied. A significant relationship was found between diversification and organisational performance with respect to profitability of companies under study. Factors like economic crisis conditions, working conditions, absence of perfect competition are very important while evaluating firm performance in emerging economic market such as Turkey. Higher ROA in companies with unrelated diversification compared to other types of diversification was observed by the researchers.

(Oyekunle Oyewobi, Olukemi Windapo, & Cattell, 2013) investigated data of large construction companies listed in South Africa for the period 2006 to 2010. Return on capital employed, return on assets and profit percent are used as indicator of measurement of profitability of selected companies while capital structure of firm, technology, firm size and age are used as control variables. Longitudinal data model was developed by researchers to establish relationship between return on assets, size and age of the firm, capital structure, technical capability with product and geographical diversification. Product diversification and geographical diversification strategies were analysed for selected period and it was found that older companies diversify more aggressively than newer companies in construction sector. Researchers concluded that for companies in construction sector in South Africa, diversification improves performance.

#### RESEARCH DESIGN:

#### Sampling frame and design:

As the present study is based on CNX NIFTY companies over the period 2007-2012, all the listed companies for the given period becomes the part of the population. Purposive sampling technique used to select the companies out of given population. Researcher has only selected the companies for analysis which were listed throughout 2007 to 2012 with CNX NIFTY. Thus sample size counts to 38 companies.

#### Sources of data:

Researcher used secondary data for this study. The secondary data was collected from Print media like books, magazines, research articles and research papers on Google Scholar, Annual Reports and such other sources.

## **Statement of the problem:**

Profitability analysis of single segment firms against multi-segment firms can provide critical information in selection of most suitable business approach. Researcher is concerned with comparison of single segment approach verses multi-segment approach with respect to return on net worth parameter for selected CNX Nifty companies for the period 2007-08 to 2011-12.

# **Objectives:**

- 1. To study return on net worth of selected companies with respect to their diversification status i.e. companies with diversification and companies with no diversification.
- 2. To study correlation of segment diversification with return on net worth.

## LIMITATIONS OF THE STUDY:

- 1. The study is limited to data collected from financial statements of selected companies only for the period 2007 to 2012.
- 2. The findings of the study solely based on information provided by published data.

#### DATA ANALYSIS AND INTERPRETATIONS:

Table 1: Correlations - Segment Diversification and Return on Net Worth

		<b>Segment Diversification</b>
	Pearson Correlation	.248
Return on Net Worth	Sig. (2-tailed)	.001
	N	190

To find out the correlation between Segment Diversification and Return on Net Worth, researcher has used 5 years financial data of 38 select NIFTY companies and Segment Diversification of the same. Correlation coefficient (r) between Segment Diversification and Return on Net Worth is .248, indicating positive relationship. As Pearson's r is positive, it indicates that if one variable increases in value, the second variable also increases in value and represents positive correlation. P-value for this correlation coefficient is .001. As p < .05, the relationship between Segment Diversification and Return on Net Worth is statistically significant. Thus, it can be concluded that when segment diversification increases, Return on Net Worth also increases.

**H**<sub>1</sub>: There will be significant prediction of Return on Net Worth by Segment Diversification.

**Table 2: Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.248ª	.061	.056	20.76579

a. Predictors: (Constant), Segment Diversification

The above table provides the R and R<sup>2</sup> values. The R value represents the simple correlation and is 0.248 (the "R" Column), which indicates a moderate degree of correlation. The R<sup>2</sup> value (the "R Square" column) indicates how much of the total variation in the dependent variable, Return on Net Worth, can be explained by the independent variable, Segment Diversification. In this case, 6.1% can be explained, which is low.

Table 3: ANOVAb

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	5294.955	1	5294.955	12.279	.001a
1	Residual	81068.972	188	431.218		
	Total	86363.927	189			

a. Predictors: (Constant), Segment Diversification

b. Dependent Variable: Return on Net Worth

The ANOVA table indicates that the regression predicts the dependent variable significantly. P-value indicates the statistical significance of the regression model. Here, P < 0.05, and indicates that the regression model statistically significantly predicts the outcome variable i.e. it is a good fit for the data.

The table 'Coefficients' provides the details of the results. The Zero-order column under Correlations lists the Pearson r values of the dependent variable with each of the predictors. The Partial column under Correlations lists the partial correlations for each predictor as it was evaluated for its weighting in the model. The Part column under Correlations lists the semi partial correlations for each predictor once the model is finalized; squaring these values informs us of the percentage of variance each predictor uniquely explains.

Table 4: Coefficients<sup>a</sup>

	Model	Unstandardized Coefficients		Standardized Coefficients	4	S:a
		В	Std. Error	Beta	וו	Sig.
1	(Constant)	11.764	2.729		4.310	.000
	Segment Diversification	2.228	.636	.248	3.504	.001

a. Dependent Variable: Return on Net Worth

The prediction model was statistically significant, F (1,189) = 12.279, and p < 0.05 and accounted for approximately 24.8% of the variance 'Return on Net Worth' ( $R^2 = .061$  and Adjusted  $R^2 = .056$ ). At  $\alpha = 0.05$  level of significance; there exist enough evidence to conclude that there will be significant prediction of Return on Net Worth by Segment Diversification and thus researcher fails to accept null hypothesis.

From the above output, the regression equation is: Return on Net Worth = 11.764 + 2.228 Segment Diversification

## **FINDINGS:**

The financial years 2007-08, 2010-11 and 2011-12 mean Return on Net Worth of non-diversified companies were higher than diversified companies. Thus it can be concluded that non-diversified companies generated more profit with the money shareholders have invested than diversified units.

## **CONCLUSION:**

The relationship between Segment Diversification and Return on Net Worth is statistically significant. Thus, it can be concluded that when segment diversification increases, Return on Net Worth also increases. It was found that there will be significant prediction of Return on Net Worth by Segment Diversification. This study will be helpful for investors and other stakeholders for in depth analysis of companies they are investing in as it was found that diversification strategy has certain impact on profitability of company.

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