

# A CRITICAL ANALYSIS OF BUSINESS SEGMENTS AND ITS IMPACT ON RETURN ON LONG TERM FUNDS

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## ABSTRACT:

Return on long term funds is considered as one of the most important factor for evaluation of any company for investment purpose. In this paper researchers focused on establishment of relationship between business segment diversification and profitability with respect to return on long term funds. The researchers carried out analysis of selected National Stock Exchange (NSE) listed companies in India for hypothesis testing. It has been concluded that there exists significant relation between the two factors and multi segment approach is beneficial to companies to generate profitability with respect to return on long term funds. There was significant anticipation of return on long term funds on segment diversification.

**Keywords:** Return on long term funds, Investment, Profitability, Business segment, Nifty.

## INTRODUCTION:

The return is calculated as the annual percentage return based on the yields of all the underlying securities in the portfolio, but is weighted to account for each security's market value and maturity. The return is presented net of estimated fees and the maximum offering price, but does not account for delays in income distributions from the fund. The estimated long-term return may be the metric that should look at if planning on investing for the duration of the trust.

Return on long term funds ratio can be calculated by dividing operating profit by long term funds of the company where long term funds refer to the total investments made in a company for the long term.

Formula for return on long term funds can be given as,

$$\text{Return on Long Term Funds \%} = \text{EBIT/Long Term Funds X 100}$$

This ratio is very useful in providing information regarding performance of investments made for long duration of time.

**NEED FOR THE STUDY:**

After performing in depth analysis of available literature, it was found that most of research in diversification strategy was performed in developed economies like USA, Japan and some European countries. Many researchers focused on impact of diversification on firm value. Very few researchers focused on impact of diversification on profitability of company. Majority of research work on profitability given emphasis on ROA and ROS figures and very few attempts were performed to analyze profitability in terms of ROCE, ROE, EPS, PBIT and return on long term funds.

**REVIEW OF LITERATURE:**

(Lecraw, 1983) analyzed 200 largest non-financial firms in Canada in the year 1975 to study cause and effect of segment diversification. These companies categorised into 4 classes namely Single Business (SB), Vertically Integrated Business (VIB), Related Business (RB) and Unrelated Business (UB) to have better insight into the subject. Firms adapted to one of the above diversification strategy as per their strategic goal. It was found that certain factors like characteristics of firm and characteristics of base industry are major deciding factors of type of diversification. Diversification strategy should be as per strengths and weaknesses analysis of the firm and selection of wrong diversification strategy leads to loss of value for firm. It was further found that there was increase in ROE of the firm compared to the industry in which it operates, if it follows the related diversification strategy. Optimum capital structure, relative market share are other major supporting parameters for maximum ROE along with appropriate diversification strategy.

(Pandya & Rao, 1998) performed empirical analysis of diversification strategy and performance of company and found that diversified companies perform better in terms of risk and return as compared to non-diversified companies. Researchers classified companies into three categories viz. high performing class of companies, average performing class of companies and low performing class of companies. They found that in former class diversified companies show better financial performance while in latter two classes non-diversified firms are performing better financially. It was also found that there is reduction of risk in non-diversifying companies if they go for diversification but it is at the cost of profitability. Even though financial performance of company goes downside due to diversification, risk also decreases. Return on equity, return on assets and market return are the financial performance indicators used to evaluate the returns generated by company on its equity capital, assets and shares. Diversification is helpful for managers and employees of the company as it reduces volatility and risk of the firm but at the same time it may not be beneficial to investors as it reduces returns of the firm.

(Jara-Bertin, López-Iturriaga, & Espinosa, 2015) analyzed 83 non-financial Chilean companies to study diversification strategy over the period 2005-2013 listed on Santiago Stock Exchange. They studied

business diversification and ownership diversification as two forms of corporate diversification strategy and analyzed its impact on market value of selected companies. Variables such as excess value for sales and assets multiples, market to book value, entropy of sales and assets, inverse Herfindahl index of sales and assets, number of segments, related subsidiaries, invested capital, ownership diversification, excess of voting rights, cash flow rights, investment ratio, debt, EBIT margin, financial crisis time period, economic growth, proportion of diversified companies and sales were measured. Researchers observed concentrated ownership structure with low legal protection of investors in Chilean economy which very much affects decision making process. Use of ownership structure to extract private benefits by largest shareholders results in inefficient use of resources resulting in loss in value of firm. They observed there is effect of ownership structure on diversification discount of Chilean companies which represents emerging market economy.

## **RESEARCH DESIGN:**

### **Sampling frame and design:**

Researchers used purposive sampling technique to select companies from National Stock Exchange of India (NSE). Researchers selected the companies for analysis which were listed throughout 2007 to 2012 with CNX Nifty. Total 38 companies were selected for the study.

### **Sources of data:**

Secondary data used for this study. The secondary data was collected from print media like books, research journals, magazines, research articles and research papers available online and offline, annual reports of companies and other sources.

### **Statement of the problem:**

Researchers are concerned with comparison of single segment approach verses multi-segment approach with respect to return on long term funds parameter for selected CNX Nifty companies for the selected period. Profitability analysis of single segment firms against multi-segment firms can provide critical information in selection of most suitable business approach.

### **Objectives:**

- To study return on long term funds of selected NSE listed companies with respect to their diversification status i.e. companies with diversification and companies with no diversification.
- To study correlation of segment diversification with return on long term funds.

**Limitations of the study:**

- The study is limited to data collected from financial statements of selected companies only for the period 2007 to 2012.
- 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 Long Term Funds%**

		<i>Segment Diversification</i>
<b>Return on Long Term Funds %</b>	Pearson Correlation	.208
	Sig. (2-tailed)	.004
	<i>N</i>	190

To find out the correlation between Segment Diversification and Return on Long Term Funds Ratio, researchers 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 Long Term Funds Ratio is .208, 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 .004. As  $p < .05$ , the relationship between Segment Diversification and Return on Long Term Funds Ratio is statistically significant. Thus, it can be concluded that when segment diversification increases, Return on Return on Long Term Funds Ratio also increases.

**$H_3$ :** There will be significant prediction of Return on Long Term Funds by Segment Diversification.

**Table 2: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.208 <sup>a</sup>	.043	.038	24.69443

a. Predictors: (Constant), Segment Diversification

The above table provides the R and  $R^2$  values. The R value represents the simple correlation and is 0.208 (the "**R**" Column), which indicates a moderate degree of correlation. The  $R^2$  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, 4.3% can be explained, which is low.

**Table 3: ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5189.192	1	5189.192	8.509	.004 <sup>a</sup>
	Residual	114645.186	188	609.815		
	Total	119834.379	189			

a. Predictors: (Constant), Segment Diversification

b. Dependent Variable: Return on Long Term Funds %

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	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	22.777	3.246		7.018	.000
	Segment Diversification	2.206	.756	.208	2.917	.004

a. Dependent Variable: Return on Long Term Funds %

The prediction model was statistically significant,  $F(1,189) = 8.509$ , and  $p < 0.05$  and accounted for approximately 20.8% of the variance 'Return on Long Term Funds' ( $R^2 = .043$  and Adjusted  $R^2 = .038$ ). At  $\alpha = 0.05$  level of significance; there exist enough evidence to conclude that there will be significant prediction of Return on Long Term Funds by Segment Diversification and thus researcher fails to accept null hypothesis.

From the above output, the regression equation is:

$$\text{Return on Long Term Funds} = 22.777 + 2.206\text{Segment Diversification}$$

**FINDINGS:**

Return on Long Term Funds Ratios of diversified firms are greater than non-diversified firms for all 5 selected financial years from 2007-08 to 2011-12. The difference in percent, for all 5 financial years, is minimum 5% of mean on Return on Long Term Funds Ratios.

**CONCLUSION:**

Segment reporting is used as a source of information pertaining to extent of diversification companies adopting and accounting standard boards at national and international level has always insisted to report such segment wise information to stakeholders through statutory reports. This study was carried out to find out relationship between diversification statuses and company profitability in Indian context by studying major Indian capital market index CNX Nifty. It was found that there is certain impact of diversification strategy on overall profitability of company.

**REFERENCES:**

- 1) Rumelt, R. P. (1982). Diversification strategy and profitability. *Strategic management journal* , 359-369.
- 2) Lecraw, D. J. (1983). *Diversification Strategy and Performance*. London: Centre for the Economic Analysis of Property Rights. Economics and Law Workshop Papers.
- 3) Kaura, M. N. (1987). Diversification: Profile of Indian industries. *ASCI Journal of Management*, 16 (2) , 121-135.
- 4) Ramanujam, V., & Varadarajan, P. (1989). Research on corporate diversification: A synthesis. *Strategic Management Journal*, 10 (6) , 523-551.
- 5) Pandya, A. M., & Rao, N. V. (1998). Diversification and firm performance: An empirical evaluation. *Journal of Financial and Strategic Decisions*, 11 (2) , 67-81.
- 6) Palich, L. E., Carini, G. R., & Seaman, S. L. (2000). The impact of internationalization on the diversification–performance relationship: A replication and extension of prior research. *Journal of Business Research*, 48 , 43-54.
- 7) Rajan, R., Servaes, H., & Zingales, L. (2000). The Cost of Diversity: The Diversification Discount and Inefficient Investment. *The Journal of Finance* 55 (1) , 35-80.
- 8) Graham, J. R., Lemmon, M. L., & Wolf, J. G. (2002). Does corporate diversification destroy value? *The Journal of Finance*, 57 (2) , 695-720.
- 9) Villalonga, B. (2004). Diversification discount or premium? New evidence from the business information tracking series. *The Journal of Finance* , 59 (2), 479-506.

- 10) Matraves, C., & Rodriguez, P. (2005). Profitability, diversification, and multinationality in leading German and UK firms. *International Journal of Business and Economics* , 4 (2), 87-105.
- 11) Fan, J. P., Huang, J., Oberholzer-Gee, F., Smith, T. D., & Zhao, M. (2008). Diversification of Chinese companies: an international comparison. *Chinese Management Studies* , 2 (1), 6-13.
- 12) Hron, J., Štůsek, J., Arnošt, M., & Huml, J. (2008). Diversification strategy in small and medium size agribusinesses in the Czech Republic—impulses for searching business opportunities. *Agric. Econ.—Czech*, 54, 505-509.
- 13) Hollie, D. (2015). A Perspective on segment reporting choices and segment reconciliations. *Applied Finance and Accounting*, 1(2), 88-95.
- 14) de Andrés, P., de la Fuente, G., & Velasco, P. (2016). Are real options a missing piece in the diversification-value puzzle?. *International Review of Financial Analysis*, 48, 261-271.

