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Impact of Financial Leverage on Profitability of Reliance Industries LTD

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Abstract

Oil and gas sector is among the eight core industries in India and plays a major role in influencing decision making for all the other important sections of the economy. The main purpose of the study is to examine the impact of financial leverage on the profitability of reliance industries ltd. The study verifies two hypotheses first is There is no significant relationship between financial leverage with Profitability and Second one There is no significant impact of financial leverage on profitability of Reliance Industries Ltd during the study period. Financial leverage is taken as independent variable and Net Profit Ratio (NPR), Earning per share (EPS), Return on Equity (ROE) and Return on Asset (ROA) are taken as dependent variable. The data collected over period of 2016-17 to 2020-21 regarding financial leverage and profitability from annual consolidated financial statement of Reliance Industries Ltd. Correlation is used to know the relationship between financial leverage with Profitability. Linear regression is used to examine the impact of leverage on profitability. The results showed that there is no significant relationship between financial leverage with NPR and significant positive relationship between financial leverage with EPS, ROE and ROA. Regression result shows that there is no significant impact of leverage on profitability of reliance industries ltd during the study period.

Introduction

The term leverage indicates the ability of a firm to earn higher return by employing fixed assets or debt. Financial decision is one of the integral and important parts of financial management in any kind of business concern. A sound financial decision must consider the broad coverage of the financial mix (Capital Structure), total amount of capital (capitalization) and cost of capital. Capital structure is one of the significant things for the management, since it influences the debt equity mix of the business concern, which affects the shareholder's return and risk. Hence, deciding the debt-equity mix plays a major role in the part of the value of the company and market value of the shares. The debt equity mix of the company can be examined with the help of leverage.

Leverage

Leverage refers to the ability of firm in employing long term fund having a fixed cost to enhance the returns to the owner. In other words leverage is the amount of debt that a firm uses to finance its assets. a firm with a lot debt in its capital structure is said to be highly levered. A firm with no debt is said to be unlevered. The term leverage in general refers to a relationship between two interrelated variables. In financial analysis it represents the influence of one financial variable over some other related financial variable. These financial variables may be costs, output, sales revenue, earnings before interest and tax (EBIT), earning per share (EPS)

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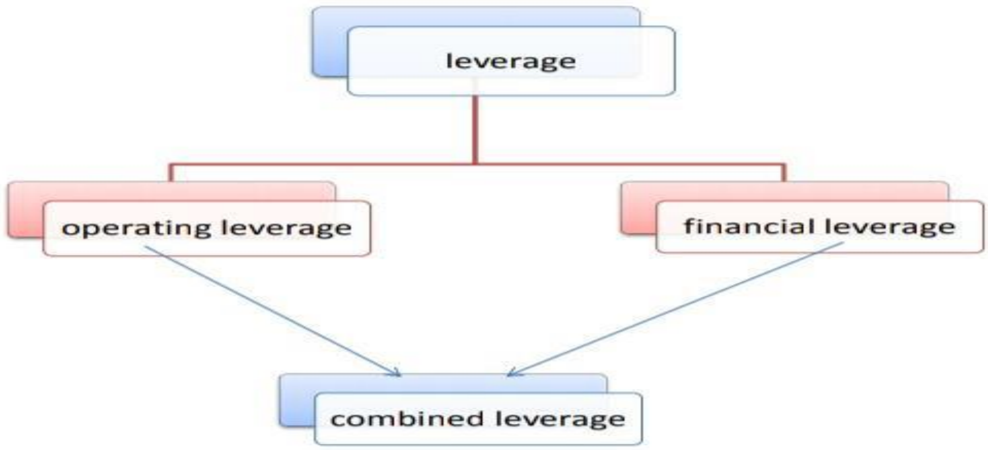
etc. According to James C. Van Home, “Leverage refers to the use of fixed cost in an attempt to increase (or lever up) profitability”. In the words of J. E. Walter, “Leverage may be defined as percentage return on equity and the net rate of return on total capitalization”

Types of Leverage

There are three types of leverage; (1) Operating leverage; (2) Financial leverage; (3) Combined leverage



Literature Review

Sukhija (2012) has analysed, “A Study of Leverage and Profitability Position of Selected Textile Companies” The main of this study was to be understood and analysed the leverage position of textile industries in India and to examined the impact of leverage on EPS of selected textile companies. The researcher has been selected six industries and six years data used for analysis from 2005 to 2010. To testing the hypothesis Correlation have been used. The results showed that overall leverage of Lakshmi Mills Co. Ltd is maximum indicating higher profits and ensured that any small change will lead to more reflection and also concluded that the companies could reframe their optimum capital structure and capacity utilization for further profitability in future.

Alkhatib (2012), has analysed “The Determinants of Leverage of Listed Companies” The main aim of the study was to explained the impact of the explanatory variable used in the study like firm’s liquidity, size, growth rate, profit and tangibility on leverage in Jordanian industrial and services companies listed on the Jordanian Stock Exchange. The sample size of 121 listed companies on the Jordanian Stock Exchange have been selected from the period 2007 to 2010. The sample included the industrial and services sector while financial sector was not included in the study. Data analysed through regression model. The result showed that for both industrial and services sectors there were no significant relationship between explanatory variable and leverage. When the two sectors were separated, the results for the industrial sector showed that liquidity and tangibility have significant positive impact on leverage while the results of service sectors suggested that the explanatory variables tangibility, growth rate and liquidity have a positive impact on leverage.

Krishna & Mohandas (2013), have analysed “A Study on the Factors Influencing the Leverage of Indian Companies” This study examined the impact of growth, profitability, liquidity, and dividend policy of a firm on its leverage. The sample was conducted by taking 40 Indian companies from four industrial sectors namely engineering, personal care, pharmaceutical and

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constructions. Ten companies were taken from each industry for the study based on rank of market capitalization. The data was collected from CMIE database for a period of 5 years from 2006 to 2010. For the testing hypothesis Multiple regression was used to analyzed the data. The results concluded that regression summary constituting all the 40 companies from 4 industries liquidity and profitability were two major factor which have significantly influence leverage of Indian companies.

Khedkar (2015), has analysed “A Study of Leverage Analysis and Profitability for Dr. Reddy’s Laboratories” The main objective of this study was to understood the decision made by Dr Reddy’s Laboratories with regards to its asset’s utilization and Leverage management. For research objectives Dr Reddy’s Laboratories has been selected one of the most pharmaceutical firms in India in terms of Net Sales. The source of data for analysis was secondary collected from annual report of the firm from 2010 to 2014. For testing the hypothesis Ratio analysis, Correlation has been used. The result founded by researcher was Degree of operating leverage was significant negative correlation with the ROI. Degree of Financial Leverage and Degree of Combined Leverage has Positive correlation with the ROI.

Krishna (2018), have studied “Financial Leverage and Firm Performance – An Empirical Study of Selected Public Sector Undertakings listed at BSE, India” The main purpose of the study was to examined the impact of financial leverage as measured by Short-term Debt Ratio (SDR), Long-term Debt Ratio (LDR) and Total Debt Ratio (TDR) on the profitability of public sector enterprises listed at Bombay Stock Exchange (BSE) as measured by Return on Equity (ROE) and Return on Assets (ROA). For the testing hypothesis correlation and regression analysis have been used. It was found that there was negative correlation between SDR, LDR, TDR with ROA and positive correlation with ROE at 1% level of significance.

Kothari (2004), have analyzed “The Impact of Liquidity and Leverage on Profitability: Evidence from Selected Pharmaceutical Companies of India” The main aim of this study was to analysed the relationship between liquidity and profitability and investigate the impact of financial leverage and liquidity on the financial performance of selected pharmaceutical companies. For the study the researchers have been selected samples of 10 pharmaceutical companies from Nifty index. The study was based on secondary data and collected from financial reports. The study covered a period of 10 years from 2008-09 to 2017-18. To testing hypothesis, the researchers have been used descriptive statistics and correlation. The results of the study showed that liquidity ratios have positive correlation with profits and capital structure of the firm. Debt ratio and Debt equity ratio have negative correlation with profit of the firms. There was no significant impact of leverage on profitability and capital structure of selected pharmaceutical companies of India.

Artue Zimny (2020), has conducted “The Impact of Financial Leverage on a company’s Market Valuation” The purpose of the study was to examine the impact of leverage on the market valuation of companies. This research covers the 11 energy companies listed on the Warsaw Stock Exchange. The researcher verified two hypotheses: 1. The degree of leverage is an important factor that impacts the market valuation of companies. 2. For companies with a high level of leverage, the impact of this leverage on their valuation is negative, and for companies with a low level of leverage, the impact is negative. Above each hypothesis was tested by correlation and multiple regression model. The result was found that first hypothesis was accepted and second was failed to accept by researcher. The research showed positive correlation and regression coefficients between the leverage and value of firm.

Orajekwe et al. (2020), have anlaysed “Financial Leverage and Dividend Policy: Evidence from Oil and Gas Firms in Nigeria” The main objective of this study was examined the

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relationship between financial leverage and the dividend policy of selected oil and gas firms in Nigeria. The research work adopted for the study ex-post facto resign design. The data was collected over a period of 2011 to 2018 from annual reports and accounts of oil and gas firms in Nigeria and Nigeria Stock Exchange factbook. The sample size was 9 selected firms in National Stock Exchange. The researcher has been taken financial leverage as Independent Variable and Dividend Payout Ratio (DPR) as Dependent Variable also Return on Assets and Firms Size as Controllable Variable. The data was analysed through statistical tools like descriptive statistics, correlation, and the least square regression technique. The study found that a significant relationship between long term debt and total debt with dividend payout ratio while no significant relationship between short term debt and dividend payout ratio of oil and gas firm in Nigeria.

Mohammed et al. (2020), have analysed “Leverage, Liquidity and Profitability Ratios: Accountability of Malaysian Listed Oil and Gas Firms” The main aim of this study was to examine the impact of leverage and liquidity on the profitability of selected oil and gas companies in Malaysia. Data were collected from audited financial statements of 22 listed oil and gas companies for a period of ten years (2008-2017). For testing the hypothesis, the researchers were used correlation to know the relationship between leverage and liquidity with Profitability. The findings showed that leverage in terms of debt-equity ratio has significant negative relationship with firms profitability and Liquidity ratios are found to be insignificantly related on the profitability of the oil and gas companies in Malaysia.

Ramlan (2020), has conducted “The Effect of Leverage and Liquidity on the Company’s Performance” The main aim of this study was to analysed the relationship between leverage and liquidity and the Company’s performance in Malaysia. Data was collected from the 21 manufacturing and construction companies at the Bursa Malaysia between 2014 and 2018.The researcher have been taken liquidity and leverage as a Independent Variable and Company Performance (ROA) as a dependent Variable. All data analysed by using correlation and multiple regression model. The researcher found that there was significant relationship between liquidity and leverage with the performance of the company.

Prajapati (2021), has analysed “To analyse the Impact of Liquidity and Leverage on Profitability” The purpose of this study was to know the relationship between Liquidity and profitability and investigate the impact of financial leverage and liquidity on the financial performance of selected pharmaceutical companies from Nifty index. The study was based on secondary data. The data required for this study have been collected from annual reports of selected companies from 2008-09 to 2017-18. For testing the hypothesis, the researcher has used different statistical tools like mean, standard deviation and correlation etc. According to this study it was found that the liquidity ratios have positive correlation with the profits of the companies. The Leverage have no significant impact on Profitability and capital structure.

Rieska Anisa Dwiantari & Luh Gede Sri Artini (2021), have studied “The Effect of Liquidity, Leverage and Profitability on Financial Distress (Case Study of Property and Real Estate Companies on the IDX 2017-2019)” The main objective of study was to analysed the impact of liquidity, leverage and profitability on financial distress in Property and Real Estate companies listed on the Indonesia Stock Exchange (IDX) for the period 2017 to 2019. The purposive sampling technique were used, and 53 companies were selected for the study. For testing hypothesis regression analysis were used. The results of the study showed that liquidity and profitability have a significant negative impact on financial distress and Leverage has a significant positive impact on financial distress

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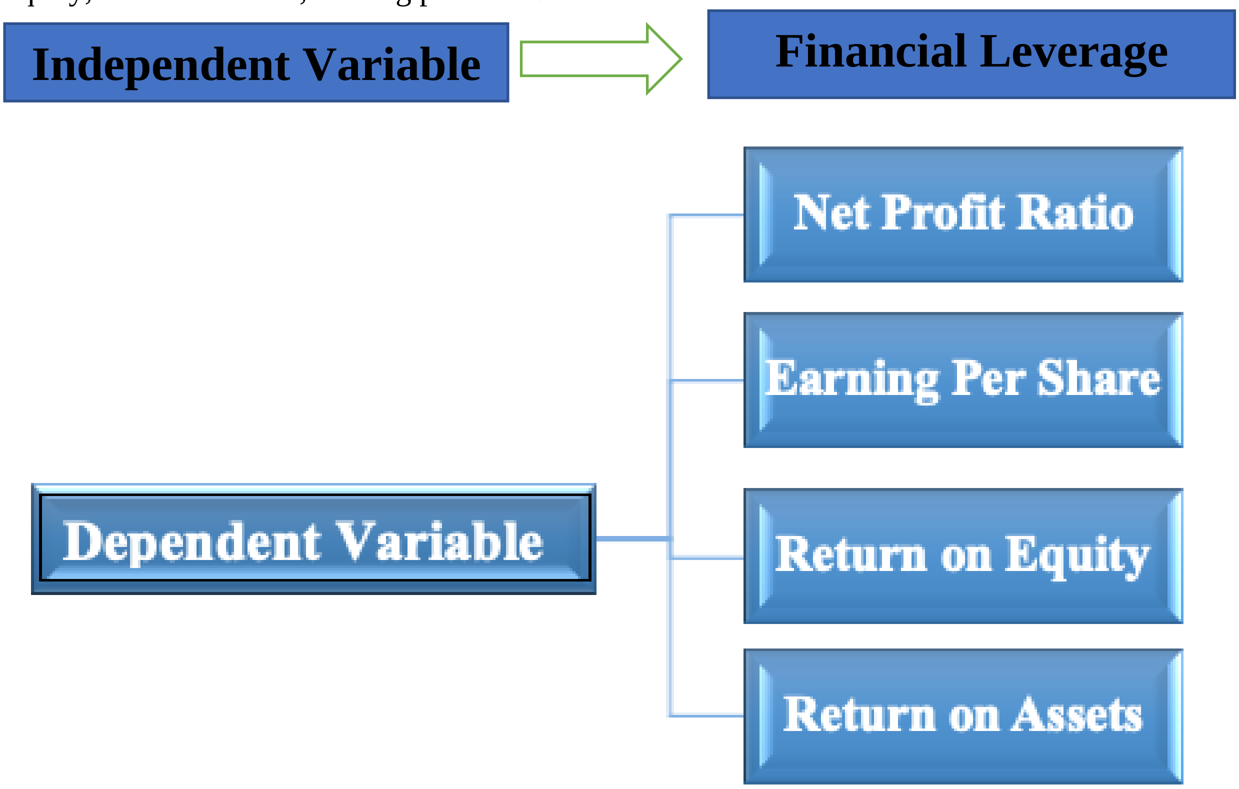
Methods

Research Methodology is defined as a systematic way of solving a research problem, it tells about methods to be followed during the research process starting from investigation to conclusion. Objectives of the Study; (1) To examine the relationship between financial leverage and Profitability of Reliance Industries Ltd; (2) To analysed the impact of leverage on Profitability of Reliance Industries Ltd. The study is made for a period of five years from 2016-17 to 2020-21. The scope of the research study is confined to measure impact of financial leverage on profitability of Reliance Industries Ltd. For these purpose five years data have been collected from 2016-17 to 2020-21. The scope of this research study is as under; (1) Functional scope of this study is to analyze impact of leverage on financial performance of Reliance Industries Ltd; (2) Geographical scope, In this study researcher selected Reliance industries Ltd which are working and producing in India. So, whole India is geographical criteria for this research study.

The sample has been selected on the basis of market capitalization of oil and gas companies in India and from them RELIANCE INDUSTRIES LTD is on top. The study is mainly based on Secondary data obtained from the annual report of company. In this study we use financial leverage as independent variable. The following equation explained the relationship between dependent and independent variables. Financial performance/ profitability of firm is the dependent variable of the study which is measured by using ratios net profit margin, return on equity, return on assets, earning per share.



Results and Discussion

Data Analysis and Interpretation and Findings

The collected data has been duly edited, classifies, tabulated according to the needs of the objectives and hypothesis. Statistical tools and techniques like Ratio analysis have been used. In this research paper researcher applied correlation and regression which is as per researcher

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appropriate for the study at the 5% level of significance. In this study Ratio analysis should be considered as accounting tool and correlation and regression as statistical tool. Ratios are calculated from the following equations.

Debt to equity ratio: total liabilities/Shareholder's funds or total equity
Net profit margin ratio: Net Profit/Net sales
Earnings per share: net profit after tax/No. shares outstanding
Return on equity: Net income/Book value of shareholder's equity
Return on assets: Net income/Total assets

Table 1. Ratio Calculation

Years	DFL	NPR	EPS	ROE	ROA
2016-17	0.7	9.8	101.33	11.37	4.19
2017-18	0.62	9.19	60.94	12.29	4.41
2018-19	0.70	6.98	66.82	10.22	3.94
2019-20	0.65	6.65	63.07	8.76	3.37
2020-21	0.32	11.39	76.37	7.01	3.71

Source: Annual Reports of RIL)

Table 2. Correlation Result

	DFL	NPR	EPS	ROE	ROA
DFL	1				
NPR	-0.71701	1			
EPS	0.05138	0.494124	1		
ROE	0.733025	-0.19268	0.088735	1	
ROA	0.271305	0.329331	0.236578	0.823323	1

RATIO	NPR	EPS	ROE	ROA
DFL	-0.71701	0.05138	0.733025	0.271305

The above table showed that correlation between Degree of Financial leverage and profitability of Reliance Industries Ltd during the study period. The results showed that there is significant negative relationship between Degree of financial leverage with Net Profit Ratio. It means that if Increase in Financial leverage than decrease in NPR. The relationship between financial leverage is positive with EPS but not significant it means if financial leverage increase than EPS also increase but not more. The relationship between financial leverage with ROE is Significant Positive, it shows that increase in financial leverage than significant increase in ROE. The result of relationship between financial leverage with ROA is positive but not significant

Table 3. Correlation between leverage and Profitability

	Correlation	Relationship
DFL with NPR	-0.71701	Negative
DFL with EPS	0.05138	Positive
DFL with ROE	0.733025	Positive
DFL with ROA	0.271305	Positive

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Table 4. Regression Results

	NPR	EPS	ROE	ROA
Standard Errors	1.599448595	19.06836178	1.648587207	0.451422
Coefficient	-8.95418641	5.339257504	9.669233807	0.692535545
R Square	0.514108	0.00264	0.537326	0.073607
Adjusted R Square	0.352144	-0.32981	0.383101	-0.23519
ANOVA significance F	0.172834	0.93461	0.158794	0.658849

From the above regression result of we found that R-square 0.514108 ANOVA significance F is 0.172838 which is higher than the significant level 0.05. So null hypothesis is Accepted. So we can say that there is no significant impact of Financial leverage on Net Profit Ratio of Reliance Industries Ltd. There is no significant impact of financial leverage on EPS because ANOVA significant F is 0.93461 which is higher than the significant level 0.05. The regression result shows that impact of DFL on ROE is not significant because ANOVA significant F is 0.158794 which is also higher than the significant level 0.05. and last the impact of DFL on ROA is also not significant because ANOVA significant F is 0.658849 which is higher than the significant level 0.05.

Findings on the Basis of Regression Analysis

Table 5. Regression between leverage and Profitability

	P Value	***5% Significant level***	**Hypothesis (Ho) (accepted/ rejected)**	**Remarks**
DFL WITH NPR	0.172834	*0.05*	*Accepted*	*There is no significant impact on DFL on NPR*
DFL WITH EPS	0.93461	*0.05*	*Accepted*	*There is no significant impact on DFL on EPS*
DFL WITH ROE	0.158794	*0.05*	*Accepted*	*There is no significant impact on DFL on EPS*
DFL WITH ROA	0.658849	*0.05*	*Accepted*	*There is no significant impact on DFL on EPS*

Conclusion

From the above study researcher conclude that there is no significant negative relationship between financial leverage with Net profit Ratio and there is a significant positive relationship between financial leverage with Earning per share, Return on Equity and Return on Asset. Regression findings shows that there is no significant impact of financial leverage on Profitability of Reliance Industries Ltd. It shows that if company increase its debt there is no any impact on its profitability.

Suggestion

Degree of financial leverage has negative relationship with Net Profit Ratio. So, company should decrease its debt or financial leverage for increase its net profit. Degree of financial leverage has positive relationship with EPS, ROE and ROA. So, company should maintain its optimum level of capital structure to give maximum benefits to its stakeholders.

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