EFFECT OF CAPITAL STRUCTURE ON FIRM'S FINANCIAL PERFORMANCE
(A case study at ITC Limited)

Vinutha[1], Dr. MANOJ KUMARA N. V.[2],
Research student,[1] Associate professor,[2]
[1, 2] Department of management science, Maharaja Institute of technology,
[1] Email – vinuthargowda04@gmail.com [2] Email – manojkumara_mba@mitmysore.in

Abstract: *Capital structure is one of the most complex areas of financial decision. Capital structure decision is the critical task for every company. It plays a vital role in firm's operations with the aim of maximizing the return. This study covered ITC Limited over the period of past 5 years from 2013 to 2017. The main objective of the study is to investigate the Effect of capital structure on financial performance of the firm. This study involves capital structure tools and techniques (i.e. Financial and statistical tools).The study found that there is a significant impact of capital employed and net profit. The outcome of the study is Firm need to focus on long term assets higher the leverage makes the organization into higher productivity with lower cost.*

Key Words: *Capital structure, ROE, ROA & ROCE, Leverages, Financial trend.*

1. INTRODUCTION:

Any new business requires capital and also additional capital required for the firm expand their business. The needed funds are available in different sources and in different forms or ways. Company can use debt & equity capital to financing its assets. Many companies try to well-structured their capital structure to maximise their profitability, stability and growth of their organisation. Capital structure is nothing but mixture of the debt and equity capital. Companies have a direct relationship between capital structure and financial performance. Financial performance of a company is the evaluation of how a firm can use its assets and capital to generate the revenue. The main objective of the firm is to maximization of profit for that the firm must determine the optimum capital structure that will increase its value.

2. THEORITICAL BACKGROUND:

Capital structure refers to combination of various long term sources of funds in total capitalisation of the firm. Financing decision is also called as the capital structure decision of the firm.

Capital structure refers to the proportionate amount invested through long term capital. Capital structure is the mix of equity capital and debt capital. The term capital structure defined as the mix of long term sources of funds such as E. shares, reserves and surplus, debenture, long term debt and preference share capital.

According to M Y Khan and P K Jain, "The capital structure is the proportion of debt, preference and equity share on a firm's balance sheet".

Importance of Capital Structure:

- It helps to increasing the Profit.
- It minimizes the Cost
- Increases in Share Price
- Its creates the Investment Opportunity
- Growth of the Country

Objectives of Capital Structure:

- To maximize the value of the firm and shareholders.
- To minimize the overall cost of capital of the firm.
- To minimize the business risk, management risk, purchase risk, interest rate risk etc.
- Preservation of control.
- To evaluate the solvency of the company.
- To analyse the liquidity position of the company.
- It helps the company for maximum utilization of available capital that should be made at minimum cost.

APPROACHES OF CAPITAL STRUCTURE:

Net Income Approach (NI):

This approach has been developed by DURAND according to this approach capital structure decision (financing decision) is relevant to the valuation of the firm. According to this theory a change in debt proportion in the capital structure will lead to change in cost of capital & the value of the firm.

Net Operating Income Approach (NOI):

This approach has been developed by DAVID DURAND according to this approach the capital structure decision of a firm is ir-relevant. It's says that any changes in debt proportion in capital structure (leverages) will not lead to any change in the value of a capital.

Determinants of Capital Structure:

- Trading on Equity
- Flexibility of Financial Plan
- Choice of Investors
- Capital Market Condition
- Period of Financing
- Cost of Financing
- Size of The Company
- Nature of Business
- Cost of Capital
- Legal Restriction

Optimum Capital Structure:

All firms are try to have an optimum capital structure. As a financing decision the financial managers job is to come out with optimum capital structure is that capital structure at the level of debt and equity proportion where market value per share is maximum and cost of capital minimum.

3. LITERATURE REVIEW:

According to **Nimalathasan Balasundaram(2004)**, the study review that the capital structure and capital structure influence on profitability of listed manufacturing companies in Srilanka during 2003 to 2007 (5 years). Multiple regression analysis method used for the study. The result of the study is a negative relationship between debt and equity.According to **Samuel Kipkorir Koech(2011)**, the study review that effect of capital structure on profitability of financial firms listed at Nairobi stock exchange during 2008 to 2012. The study revealed that a significant negative relationship between capital structure and financial performance. According to **Amarjit Gill and Nahum Biger(2011)**, the study reviewthat the effects of capital structure on profitability of the firm during 2005-2007. The finding of the study is to a positive relationship between short term debt to total assets & profitability in service and manufacturing industries. According to **Mazen KEBEWAR(2013)**, the study done on new evidence on the impact of debt on corporate profitability during the year 1999 to 2006. The major finding of the study the debt has no influence on profitability it may be linear way or non-linear way. According to **A M Goyal(2013)**,the study done on the impact of capital structure on profitability of public sector bank in India. It was listed in National stock exchange during 2008 to 2012. The major finding of the study is to reveal positive relationship of short term debt with profitability as measured by ROE, ROA and EPS. According to **S R Revathy and Dr. V Santhi(2016)**, the review states that the impact of capital structure on profitability of the manufacturing companies in India during 1991-2012. The major finding of the study is to a strong relationship between capital structure & profitability of manufacturing companies.

According to **Priya Muraleetharan(2016)**, this study reviews the impact of capital structure on profitability with the study of Beverage Food and Tobacco firms listed in Colombo stock exchange in Srilanka during 2008-2014. The major finding of the study is beverage food and tobacco firms have a positive relationship between capital structure & profitability. According to **Ramachandran Azhagaiah and Candasamy Gavoury,** the study review that how capital structure affect the company profitability during 1999-2000 to 2006-2007. Major finding of the study is to capital structure of the firm affect the profitability. According to **Hassan Jan Habib and Faisal Khan(2016)**, the study review that the debt factor impact on the profitability of the companies with evidence from non-financed sector of Pakistan during 2003 to 2010. The major finding is a negative relationship between the short term debt, long term debt, total debt & return on asset. According to **Muzzammil Hussain and Hassan Shahid(2016),** the study reviewthat the effect of profitability and financial leverage on capital structure in Pakistan textile firm during 2009 to

2014. The major finding of the study is negative correlation between capital structure and profitability & positive correlation between capital structure and financial leverage. According to **Patrik BAUER(2004),** the study reviewthat determinants of capital structure of listed companies in Czech Republic during 2000 to 2001.Result of the study is profitability less in Czech Republic compare to G7 countries, tangibility is higher in the Czech Republic and the volatility lower in the Czech Republic than in G7 countries. According to **Tarek Ghazouani(2013),** the study identifies the determinants of capital structure of Tunisian firms. The results of the study, first model tells that the profitability & asset structure are the explanatory variable of leverages of Tunisian firms. Second model states that the level of adjustment costs is highly that shows the remarkable result. According to **A. Ajanthan(2013),** the main goal of this study is to identify the factors influence the capital structure of hotel and restaurant companies in Srilanka during 2008 to 2012. The major finding of the study is negative relationship between profitability & debt ratio and there is no significant relationship between debt ratio &tangibility.

According to **Pedro Proenca and Raul M S Laureano(2014),** the study investigates the determinants of Portuguese SMEs capital structure and the influence of the 2008 financial crisis on the Portuguese SMEs capital structure during 2007 to 2008. The finding of the study is the relationship between the debt ratios and profitability is negative. According to **Laura Serghiescu and Viorela Legia Vaidean(2014),** the study review that the five important factors influence the capital structure decisions of Romanian firms listed in Bucharest stock exchange and operation in construction sector/industry during the period of 2009 to 2011. The finding of the study is the total debt ratio of Romanian companies negatively affected by the profitability & liquidity ratios. According to **Anshu Handao and Kapil Sharma(2014),** the study review that the determinants of capital structure of 870 listed Indian firms including both private sector firms and government companies during the year 2001 to 2010. The result of the study is to firms have a significant effect on leverages structure. According to **Ongree Ruth Boyani(2015),** the study review that effect of capital structure on the cost of capital of firms listed at the Nairobi securities exchange during 2010 to 2014. Result of the study there is positive relationship between capital structure and cost of capital. According to **E Chuke Nwudc and Idam Okpara(2016),** the review that the impact of debt structure on the performance of Nigerian quoted firms during 2001 to 2012. The finding of the study has negative debt structure on the performance of quoted firms. According to **Sebastian Ofumbia UREMADU and Rapuluchukwu Uchenna EFOBI(2012),** the study made on the impact of capital structure and liquidity on corporate returns in Nigeria during 2002 to 2006. The major findings of the study are that long term values lead profit under normal OLS function. Under log-linear function domestic liquidity leads return on equity. According to **Pornpen Thippayana(2014),** the study states that determinants of capital structure in Thailand. The major finding of the study is to the firm size & profitability are the determinants of capital structure in Thailand.

4. OBJECTIVE OF THE STUDY:

- To investigate the Effect of capital structure on financial performance of the firm.

5. METHODOLOGY:

5.1 Types of Research

Descriptive Research:

Descriptive research used for the study. It consists of past and present financial statements. It shows the past and present financial data relating to the impact of capital structure on profitability.

5.2 Collection of Data

- *Primary Data*:
  The researcher personally collects the information for the study. It is a fresh data collected by the researcher. It is the direct interaction with the organisation people. The data collected through discussion with the directors and managers.
- *Secondary Data*:
  Secondary data is already available data. It is obtain from companies website and past financial records. Data collected through financial reports, Journals and books.

5.3 Statistical Tools

Descriptive Statistics:

Descriptive statistics are ways of summarizing large set of quantities or numerical information.

- *Mean:*
  The mean is just the average. It is the total or sum of all measurements, dividing by the number of measurements. The mean represents the expected value.
- *Standard Deviation:*

It is the average degree to which scores deviate from mean. It measures how far all measurements are from the mean.

- *Co-Efficient Of Variation:*
  It shows the relationship between the standard deviation and the mean.

❖ *T – Test:*
To ascertain the changes in the variables.

5.4 Financial Tools

- *Leverages:*
  It helps to look at the structure of the firm's income statement. It defines the relationship between the certain income statement items.
- *ROE:*
  It helps to identify the benefit of the shareholder's and proprietors of the company. ROE shoes the relationship between profit after tax and the shareholders' equity.
- *ROI:*
  It evaluates the working efficiency and effectiveness of the firm. It is the part of EBIT from the aggregate or total investment.
- *EBIT and EPS:*
  It helps to understand how the EPS to change in profit before interest & tax under different financing alternatives. It is useful to analyse the impact of debt on EPS.
- *Trend Analysis:*
  It is the comparison of past data over all period of time with a base.
- *Ratio Analysis:*
  It is an analysis of company's financial strengths and weakness. It shows the competition level of the firms. It is the comparison of financial performance. It helps to know the liquidity position of the firm.

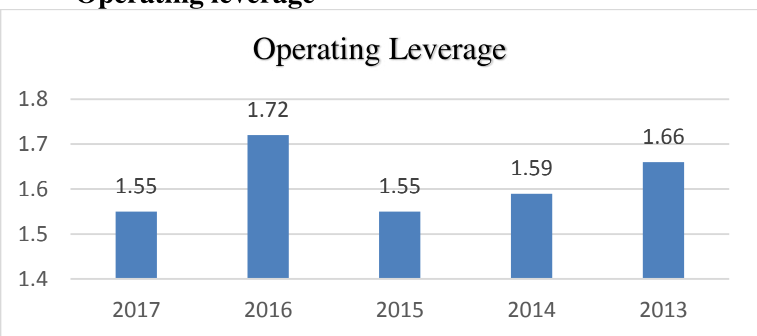
5.5 Hypothesis of the Study:

- **H_0:** There is no significant Effect of capital structure on financial performance of the company.

6. DATA ANALYSIS AND INTERPRETATION:

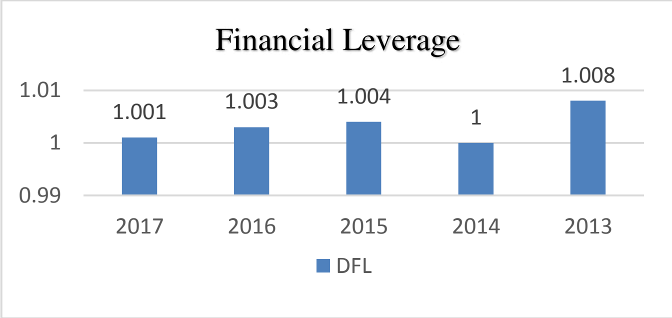
This analysis considers effect of capital structure on financial performance of the firm. The different tools are used to construct capital structure i.e. financial and statistical tools. Financial tools are leverage, ROI, ROE, EPS, trend analysis and ratio analysis. Statical tools are descriptive statistics and t-test. For the analysis company financial reports are used. The study period is to 5 years.

Chart no 6.1 **Operating leverage**



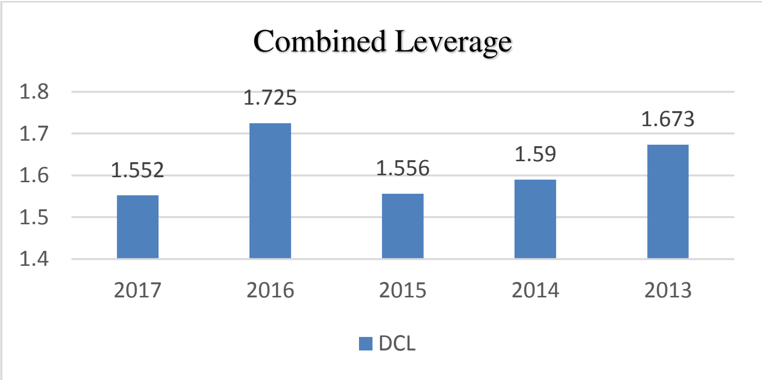
The above chart no 6.1,it clearly indicates that throughout the study period from 2013 to 2017 operating leverage resulted by more than 1.5.It also found that there is an increase in operating leverage in 2016 and 2013 it proves that leverage helps to improve the operational earnings.

Chart no 6.2 **Financial leverage**



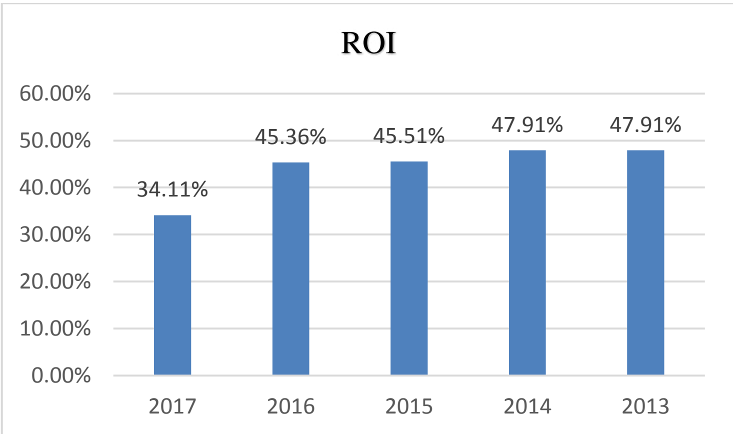
The above chart no 6.2, it clearly indicates that throughout the study period from 2013 to 2017 financial leverage resulted by more than 1.00.It also found that there is an increase in financial leverage in 2013 and 2015 it proves that leverage helps to improve the financial earnings.

Chart no 6.3 Combined leverage



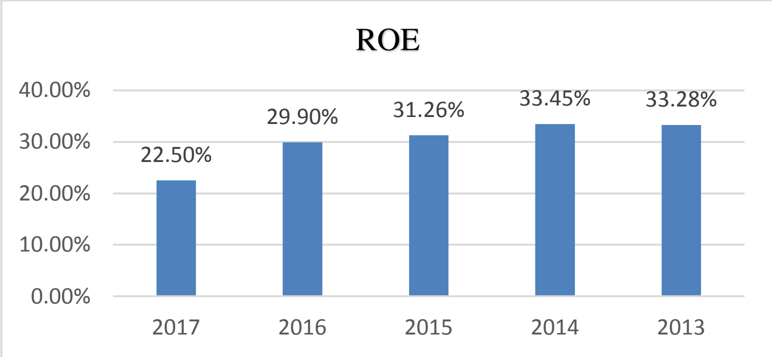
The above chart no 6.3, it clearly indicates that throughout the study period from 2013 to 2017 combined leverage resulted by more than 1.5.It also found that there is an increase in combined leverage in 2016 and 2013 it proves that leverage helps to organization earnings.

Chart no 6.4 ROI



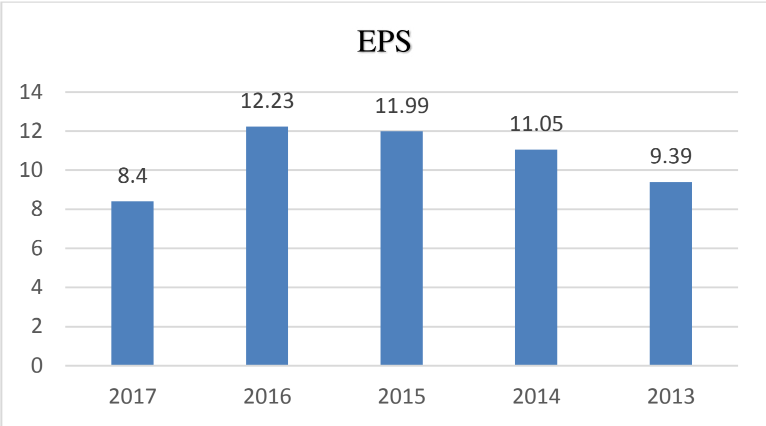
The above chart no 6.4, it clearly indicates that throughout the study period from 2013 to 2017 ROI results more than 34%, it also found that there is an increase in ROI in 2013 to 2014 it proves that profitability of the company is in good position.

Chart no 6.5 ROE



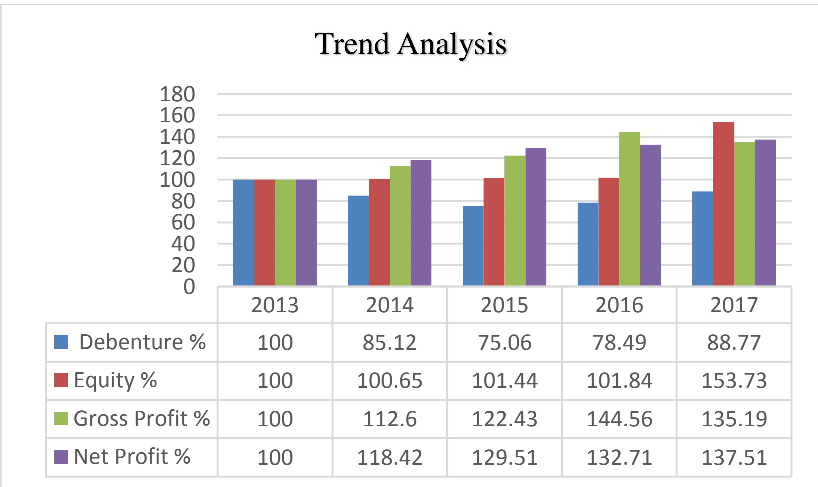
The above chart no 6.5, it clearly indicates that throughout the study period from 2013 to 2017 ROE resulted by more than 22%, it also found that there is an increase in ROE increase in 2014 and 2013 it proves that ROE of the company is in good position.

Chart no 6.6 **EPS**



The above chart no 6.6, it clearly indicates that throughout the study period from 2013 to 2017 EPS results more than Rs.8, it also found that there is an increase in EPS in 2016 and 2015 it proves that EPS of the company is in good position.

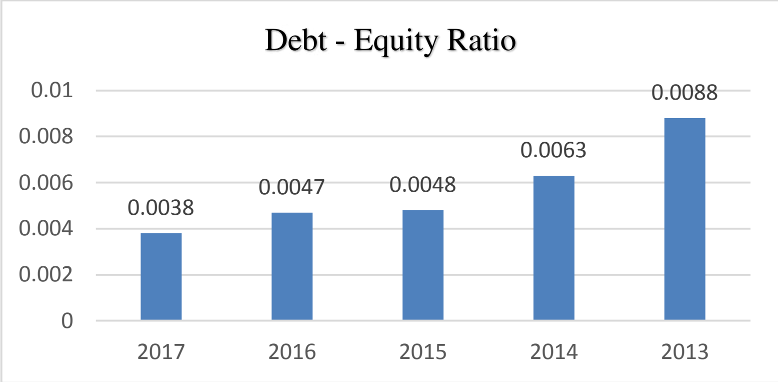
Chart no 6.7 **Trend analysis**



	2013	2014	2015	2016	2017
Debenture %	100	85.12	75.06	78.49	88.77
Equity %	100	100.65	101.44	101.84	153.73
Gross Profit %	100	112.6	122.43	144.56	135.19
Net Profit %	100	118.42	129.51	132.71	137.51

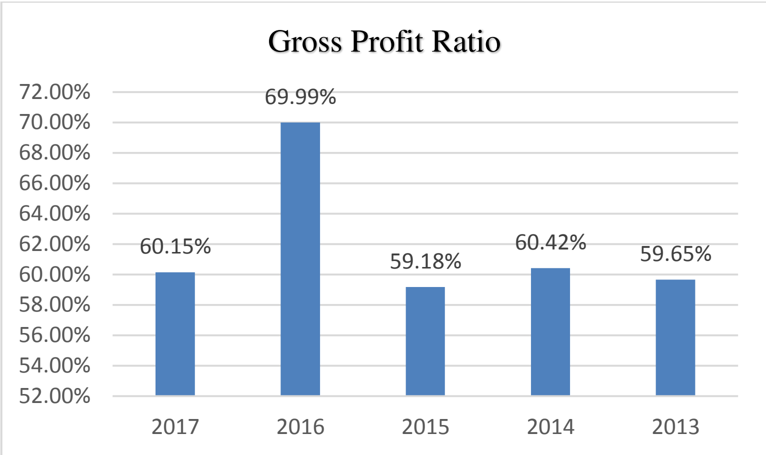
The above chart no 6.7, it clearly indicates that throughout the study period from 2013 to 2017, 2013 considered as base year for the analysis the percentage of debenture, equity and net profit will be highly increased in 2017. The percentage of gross profit will be highly increased in 2016, it proves that financial trend of the company is good.

Chart no 6.8 **Debt – Equity ratio**



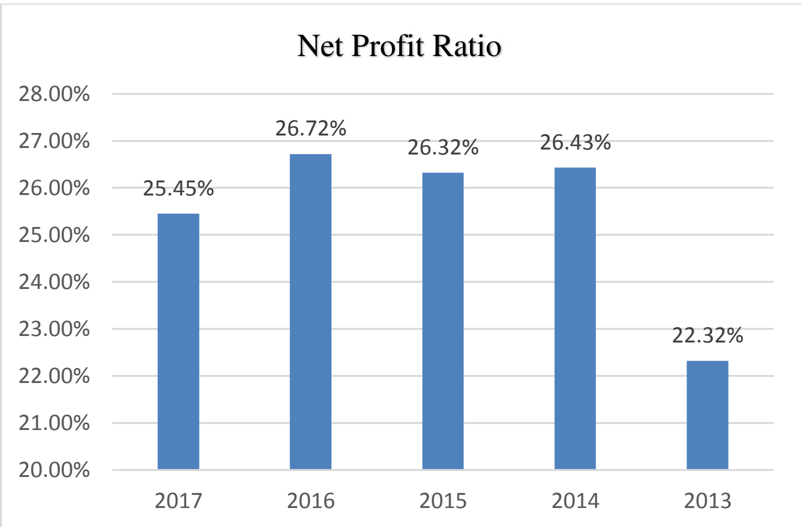
The above chart no 6.8, it clearly indicates that throughout the study period from 2013 to 2017, debt equity value increased in the year 2013 then it is decreased in the year 2017 and in the year 2017 have a very low debt equity value and the company had good debt equity proportion in the year 2013.

Chart no 6.9 Gross Profit Ratio



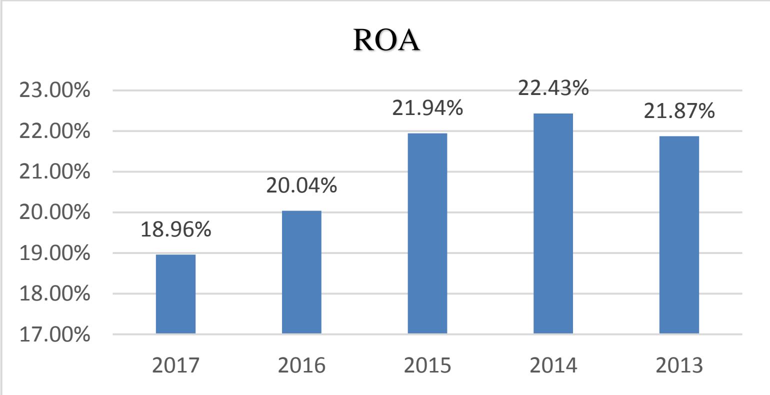
The above chart no 6.9, it clearly indicates that throughout the study period from 2013 to 2017 gross profit resulted by more than 65%, it also found that there is an increase in gross profit in 2016 and 2014 it proves that profitability of the company is in good position.

Chart no 6.10 Net Profit ratio



The above chart no 6.10, it clearly indicates that throughout the study period from 2013 to 2017 net profit resulted by more than 25%, it also found that there is an increase in net profit in 2016 and 2014 it proves that profitability of the company is in good position.

Chart no 6.11 ROA



The above chart no 6.11, it clearly indicates that throughout the study period from 2013 to 2017 ROA resulted by more than 19%, it also found that there is an increase in ROA in 2014 and 2015 it proves that ROA of the company is in good position.

Statistical Tools

Paired t test

		Mean	Std. Deviation	Std. Error Mean	T	df	Sig. (2-tailed)
Pair 1	NP - CE	-22506.6	7827.88	3500.734	-6.42909	4	0.003

The study resulted with respect to study The Impact of Capital Employed on Profitability of the concern and used paired T-test with 5% significant level. The t – critical value resulted -66.42909 and P-value of 0.003. There for the study proven that P-value is lower than the significant level 0.05 based on that the study proven H_o is rejected, H_o states "There is no Effect of Capital Employed and Net Profit".

7. FINDINGS :

Firm have a better operational leverage in the year 2016 that is 1.72 times. The return on investment is more in 2012 (47.91%) compare to 2017 (34.11%).

The return on equity is more in 2014 (33.45%) compare to 2017 (22.50%). The company net earnings were increased from year on year. The EPS of the company is increased by year on year and decreased in the year 2017. It helps to enhance the market share along with price of the company. The debt – equity ratio is more in 2013 (0.0088:1) compare to 2017 (0.0038:1). The gross profit ratio is more in 2016 (69.99%) compare to 2017 (60.15%). The net profit ratio is more in 2016 (26.72%) compare to 2017 (25.45%). The return on asset is more in 2014 (22.43%) compare to 2017 (18.96%). The study consider the value of capital employed and net profit the study found that there is a significant impact of capital employed on net profit. (H_o rejected).

8. RECOMMONDATIONS:

- Company need to concentrate on increase in proportion of debt in the capital structure. Due to financial leverage resulted 1 to 1.5 throughout the study period.
- According to Industry standard the Debt-Equity ratio should be 0.5:1 but resulted in the range of 0.0038 to 0.0088. Therefore, the firm need to concentrate on maximizing the debt level to take tax advantage.
- The firm has good performance with respect to higher operating leverage that results in greater profitability to the concern.
- Firm need to focus on long term assets higher the leverage makes the organization into higher productivity with lower cost.
- To maximize the shareholder's return firm has to reduce the burden of internal stake and need to make a finance by external borrowings.
- Earning position of the company is well. So try to continue the same position it will effect on the investment and also in market share of the company.

9. CONCLUSION:

The analysis revealed that Effect of capital structure on Financial Performance of the ITC Limited. This study mainly focuses on analysing and identifying the mixture of debt and equity mix to meet the overall cost of capital of the firm. Hence the study mainly estimates the optimum capital structure decision. This study helps to examine the effect of capital structure on financial performance of the firm. This study involves various capital structure tools and techniques such as Leverage analysis, EBIT – EPS analysis, Debt-Equity ratio, Profitability ratios, and Financing trend and for the purpose of proving the hypothesis using the Descriptive statistics and T- test and also investigation of financial statement such as profit and loss statement and balance sheet of the ITC Ltd.

Capital structure decision helps to determine the company utilization towards capital mix of debt and equity as a long term resource. It helps to make strategic decision to increase money or finance to meet the needs of the firm, which results on the profit and share value of the company in the market.

REFERENCES: Journals:

1. A. Ajantha (2013), "Determinants of capital structure; Evidence from Hotel and Resturant companies in Srilanka", *InternationalJournal of Scientific and Research Publications*, Volume-3, Issue – 6, pp 1-8.
2. A.M. Goyal (2013), "Impact of capital structure on performance of listed public sector banks in India", *International Journal of Business and Management Invention*, Volume-2, Issue date 10/2013, pp 35-43.
3. Amarjit Gill Nahum Biger and Nil Mathur (2011)," The effect of capital structure on profitability: evidence from the united states", *International Journal of Management*, Volume 28, No. 1, pp 3-194.
4. Anshu Handao and Kapil Sharma (2014), "A study on determinants of capital structure in India", *IIMB Management review 26*, pp 170-182.
5. E. Chuke Nwudc, Idam Okpara Itiri, Bdimidele Oyakhiromhe Agbadua and Sergies Nwannebuike Udeh (2016), "The impact of debt structure on firm performance: empirical evidence from Nigerian quoted firms", *Asian Economic and Financial review*, pp 647-660.
6. Hassan Jan Habib, Faisal Khan and Dr. Muhammad Imran Wazir (2016), "Impact of debt on profitability of firms: evidence from non – financial sector of Pakistan", *City university Research Journal*, Volume-6, pp 70-80.
7. Laura Serghiescu and Viorela – Ligia Vaidean (2014), "Determinants factors of the capital structure of a firm an Empirical analysis", *Procedia Economics and Finance ;15*, pp 1447-1457.
8. Mazen KEBEWAR (2013), "The effect of debt on corporate profitability: Evidence from French service sector", *Brussels Economic Review*, Volume 56, Issue – 1, pp 43-59.
9. Muzzammil Hussain, Hassan Shahid and Muhammad Akmal (2016), "Effect of profitability and Financial leverage on capital structure in Pakistan textile firms", *Arabian J. bus Manag reciew 6:222*, Volume-6, Issue – 4, pp 1-4.
10. Nimalathasan Balasundaram (2004)," Capital structure and its Impact on profitability – A study of listed manufacturing companies in Srilanka", *Revista Tinerilor Economisti* (The young Economists Journal), pp 7-16.
11. Ongree Ruth Boyani (2015), "The effect of capital structure on the cost of capital of firms listed at the Nairobi securities exchange", pp 1-60.
12. Patrik BAUER (2004), "Determinants of capital structure – empirical evidence from the Czech Republic", *Finance auver – Czech Journal of Economics and Finance*, Volume 54, pp 1-21.
13. Pedro Proenca, Raul M. S.Laureano & Luis M.S. Laureano (2014), "Determinants of capital structure and the 2008 financial crisis : evidence from Portuguese SMEs", *Procedia – social and Behavioral science*, pp 182-191.
14. Pornpen Thippayana (2014), "Determinants of capital structure in Thailand", *Procedia – social and Behavioral science*, Volume-143, No 1, pp 1074- 1077.
15. Priya Muraleetharan (2016), "Impact of capital structure on profitability – A case study of Beverage Food and Tobacco firms in Colombo stock exchange in Srilanka', *IRACSI – International Journal of Commerce, Business and Management (IJCBM)*, Volume-5, pp 93-99.
16. Ramachandran Azhagaiah and Candasamy Gavoury, "The impact of capital structure on profitability with special reference of IT Industry in India", *Managing Global Transactions 9*, pp 371-392.
17. S.R. Revathy and Dr. V. Santhi (2016), "Impact of capital structure on Profitability of Manufacturing companies in India", *International Journal of Advanced Engineering Technology*, Volume-7, Issue – 1, pp 24-28.
18. Samuel Kipkorik Koech (2011)," The effect of capital structure on profitability of financial firm listed at Nairobi stock exchange", pp 1-52.

19. Sebastian ofumbia UREMADU and Rapuluchukwu Uchenna EFOBI (2012), ”The impact of capital structure and liquidity on corporate returns in Nigeria; Evidence from Manufacturing firm's”, *International Journal of Academic Research in accounting finance and management science*, Volume 2, Issue -3 (2012), pp 1-16.
20. Tarek Ghazouni (2013), “The capital structure through the Trade Off Theory: Evidence from Tunisian Firm”, *International Journal of Economics and Financial Issues,* Volume -3, pp 625-636.