FINAL YEAR BBA (H) STUDY PAPER

"FINANCIAL RATIO ANALYSIS OF TATA MOTORS"

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A PROJECT REPORT ON FINANCIAL RATIO ANNALYSIS OF TATA MOTORS

PROJECT REPORT



TATA MOTORS TATA MOTORS



CHAPTER-1

EXECUTIVE SUMMARY:-

Financial statements provide summarized view of the financial position and Operation of the company. Therefore, now a day it is necessary to all companies to know as well as to show the financial soundness i.e. position and operation of Company to their stakeholders. It is also necessary to company to know their financial position and operation of the company.

COMPANY PROFILE

Tata Motors Group, a USD 42 billion organisation, is a leading automobile manufacturer with a portfolio that includes a wide range of cars, sports vehicles, trucks, buses and defence vehicles.

Our marque can be found on and off-road in over 175 countries around the globe.



Part of the USD100 billion Tata group founded by Jamsetji Tata in 1868, Tata Motors is among the world's leading manufacturers of automobiles. They are India's largest automobile manufacturer, and continue to take the lead in shaping the Indian commercial vehicle landscape, with the introduction of leading-edge powertrains and electric solutions packaged for power performances and user comfort at the lowest life-cycle costs. Their new passenger cars and utility vehicles are based on Impact Design and offer a superior blend of performance, driveability and connectivity.

ABOUT TATA MOTORS

Tata Motors Limited (formerly **TELCO**, short for **Tata Engineering and Locomotive Company**) headquartered in <u>Mumbai</u>, is an Indian <u>multinational automotive</u> manufacturing company and a member of the <u>Tata Group</u>. Its products include passenger cars, trucks, vans, coaches, buses, sports cars, construction equipment and military vehicles. [3]

Tata Motors has auto manufacturing and assembly plants in <u>Jamshedpur</u>, <u>Pantnagar</u>, <u>Lucknow</u>, <u>Sanand</u>, <u>Dharwad</u>, and <u>Pune</u> in India, as well as in Argentina, South Africa, Great Britain and Thailand. It has research and development centres in Pune, Jamshedpur, Lucknow, and Dharwad, India and in South Korea, Great Britain and Spain. Tata Motors' principal subsidiaries purchased the English premium car maker <u>Jaguar Land Rover</u> (the maker of Jaguar and Land Rover cars) and the South Korean commercial vehicle manufacturer <u>Tata Daewoo</u>. Tata Motors has a bus-manufacturing joint venture with <u>Marcopolo S.A.</u> (<u>Tata Marcopolo</u>), a construction-equipment manufacturing joint venture with <u>Hitachi</u> (<u>Tata Hitachi Construction Machinery</u>), and a joint venture with <u>Fiat Chrysler</u> which manufactures automotive components and Fiat Chrysler and Tata branded vehicles.

Founded in 1945 as a manufacturer of <u>locomotives</u>, the company manufactured its first commercial vehicle in 1954 in a collaboration with <u>Daimler-Benz</u> AG, which ended in 1969. Tata Motors entered the passenger vehicle market in 1991 with the launch of the <u>Tata Sierra</u>, becoming the first Indian manufacturer to achieve the capability of developing a competitive indigenous automobile. In 1998, Tata launched the first fully indigenous Indian passenger car, the <u>Indica</u>, and in 2008 launched the <u>Tata Nano</u>, the world's cheapest car. Tata Motors acquired the South Korean truck manufacturer <u>Daewoo Commercial Vehicles Company</u> in 2004 and purchased <u>Jaguar Land Rover</u> from <u>Ford</u> in 2008.

Tata Motors is listed on the (BSE) <u>Bombay Stock Exchange</u>, where it is a constituent of the <u>BSE SENSEX</u> index, the <u>National Stock Exchange of India</u>, and the <u>New York Stock Exchange</u>. The company is ranked 226th on the <u>Fortune Global 500</u> list of the world's biggest corporations as of 2016.

On 17 January 2017, Natarajan Chandrasekaran was appointed chairman of the company.

HISTORY

Tata entered the commercial vehicle sector in 1954 after forming a joint venture with Daimler-Benz of Germany. After years of dominating the commercial vehicle market in India, Tata Motors entered the passenger vehicle market in 1991 by launching the Tata Sierra, a multi utility vehicle. Tata subsequently launched the Tata Estate (1992; a station wagon design based on the earlier 'Tata Mobile' (1989), a light commercial vehicle), the Tata Sumo (1994; LCV) and the Tata Safari (1998; India's first sports utility vehicle).

The first-generation(1998–07)

Tata Indica.

Tata Bolt		
Tata Tiago.		
Tata Tigor.		

"T1 Prima Truck Racing Championship".

On 26 January 2014, the Managing Director Karl Slym was found dead. He fell from the 22nd floor to the fourth floor of the Shangri-La Hotel in Bangkok, where he was to Tata launched the Indica in 1998, the first fully indigenous Indian passenger car. Although initially criticized by auto analysts, its excellent fuel economy, powerful engine, and an aggressive marketing strategy made it one of the best-selling cars in the history of the Indian automobile industry. A newer version of the car, named Indica V2, was a major improvement over the previous version and quickly became a mass favourite. Tata Motors also successfully exported large numbers of the car to South Africa. The success of the Indica played a key role in the growth of Tata Motors.

In 2004, Tata Motors acquired Daewoo's South Korea-based truck manufacturing unit, Daewoo Commercial Vehicles Company, later renamed Tata Daewoo.^[7]

On 27 September 2004, Tata Motors rang the opening bell at the New York Stock Exchange to mark the listing of Tata Motors.

In 2005, Tata Motors acquired a 21% controlling stake in the Spanish bus and coach manufacturer Hispano Carrocera. Tata Motors continued its market area expansion through the introduction of new products such as buses (Starbus and Globus, jointly developed with subsidiary Hispano Carrocera) and trucks (Novus, jointly developed with subsidiary Tata Daewoo).

In 2006, Tata formed a joint venture with the Brazil-based Marcopolo, Tata Marcopolo Bus, to manufacture fully built buses and coaches.

In 2008, Tata Motors acquired the English car maker Jaguar Land Rover, manufacturer of the Jaguar and Land Rover from Ford Motor Company.

In May 2009, Tata unveiled the Tata World Truck range jointly developed with Tata Daewoo; the range went on sale in South Korea, South Africa, the SAARC countries, and the Middle East at the end of 2009.

Tata acquired full ownership of Hispano Carrocera in 2009.

In 2010, Tata Motors acquired an 80% stake in the Italian design and engineering company Trilix for €1.85 million. The acquisition formed part of the company's plan to enhance its styling and design capabilities.

In 2012, Tata Motors announced it would invest around ₹6 billion in the development of Futuristic Infantry Combat Vehicles in collaboration with <u>DRDO</u>.

In 2013, Tata Motors announced it will sell in India, the first vehicle in the world to run on compressed air (engines designed by the French company MDI) and dubbed "Mini CAT".

In 2014, Tata Motors introduced first Truck Racing championship in India attend a meeting of Tata Motors Thailand.

On 2 November 2015, Tata Motors announced <u>Lionel Messi</u> as global brand ambassador at <u>New Delhi</u>, to promote and endorse passenger vehicles globally.

On 27 December 2016, Tata Motors announced the Bollywood actor <u>Akshay Kumar</u> as brand ambassador for its commercial vehicles range.

On 8 March 2017, Tata Motors announced that it has signed a memorandum of understanding with <u>Volkswagen</u> to develop vehicles for India's domestic market.



TATA SUMO(1994-2011)



The first generation(1998-07)Tata indica



TAMO Racemo



The Tata Prima Heavy Truck

OPERATIONS

Tata Motors has vehicle assembly operations in India, Great Britain, South Korea, Thailand, Spain and South Africa. It plans to establish plants in <u>Turkey</u>, Indonesia, and Eastern Europe.

Tata Motors Cars

Tata Motors Cars is a division of Tata Motors which produces passenger cars under the Tata Motors marque. Tata Motors is among the top four passenger vehicle brands in India with products in the compact, midsize car, and utility vehicle segments. The company's manufacturing base in India is spread across Jamshedpur (Jharkhand), Pune (Maharashtra), Lucknow (Uttar Pradesh), Pantnagar (Uttarakhand), Dharwad (Karnataka) and Sanand (Gujarat). Tata's dealership, sales, service, and spare parts network comprises over 3,500 touch points. Tata Motors has more than 250 dealerships in more than 195 cities across 27 states and four Union Territories of India. It has the third-largest sales and service network after Maruti Suzuki and Hyundai.

Tata LPT Trucks made at overseas plants

Tata also has franchisee/joint venture assembly operations in Kenya, Bangladesh, Ukraine, Russia, and Senegal. Tata has dealerships in 26 countries across 4 continents. Tata is present in many countries, it has managed to create a large consumer base in the <u>Indian Subcontinent</u>, namely India, Bangladesh, Bhutan, <u>Sri Lanka</u> and Nepal. Tata is also present in Italy, <u>Spain</u>, Poland, <u>I Romania</u>, Turkey, <u>Chile</u>, South Africa, Oman, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, Bahrain, Iraq, Syria and Australia.

Tata Daewoo

Tata Daewoo (officially Tata Daewoo Commercial Vehicle Company and formerly Daewoo Commercial Vehicle Company) is a commercial vehicle manufacturer headquartered in Gunsan, Jeollabuk-do, South Korea, and a wholly owned subsidiary of Tata Motors. It is the second-largest heavy commercial vehicle manufacturer in South Korea and was acquired by Tata Motors in 2004. The principal reasons behind the acquisition were to reduce Tata's dependence on the Indian commercial vehicle market (which was responsible for around 94% of its sales in the MHCV segment and around 84% in the light commercial vehicle segment) and expand its product portfolio by leveraging on Daewoo's strengths in the heavy-tonnage sector.

Tata Motors has jointly worked with Tata Daewoo to develop trucks such as Novus and World Truck and buses including GloBus and StarBus. In 2012, Tata began developing a new line to manufacture competitive and fuel-efficient commercial vehicles to face the competition posed by the entry of international brands such as Mercedes-Benz, Volvo, and Navistar into the Indian market.

Tata Hispano

Tata Hispano Motors Carrocera, S.A. was a bus and coach manufacturer based in Zaragoza, Aragon, Spain, and a wholly owned subsidiary of Tata Motors. Tata Hispano has plants in Zaragoza, Spain, and Casablanca, Morocco. Tata Motors first acquired a 21% stake in <u>Hispano Carrocera</u> SA in 2005, and purchased the remaining 79% for an undisclosed sum in 2009, making it a fully owned subsidiary, subsequently renamed Tata Hispano. In 2013, Tata Hispano ceased production at its Zaragoza plant.

Jaguar Land Rover



The Range Rover.



Jaguar F-Type.

Jaguar Land Rover PLC is a British premium automaker headquartered in Whitley, Coventry, United Kingdom, and has been a wholly owned subsidiary of Tata Motors since June 2008, when it was acquired from Ford Motor Company of USA. [36] Its principal activity is the development, manufacture and sale of Jaguar luxury and sports cars and Land Rover premium four-wheel-drive vehicles.

Jaguar Land Rover has two design centres and three assembly plants in the United Kingdom. Under Tata ownership, Jaguar Land Rover has launched new vehicles including the <u>Range Rover Evoque</u>, <u>Jaguar F-Type</u>, the <u>Jaguar XF</u>, the <u>Jaguar XE</u>, the <u>Jaguar XJ (X351)</u>, the second-generation <u>Range Rover Sport</u>, the fourth-generation <u>Land Rover Discovery</u>, <u>Range Rover Velar and the Range Rover (L405)</u>.

TML Drivelines

TML Drivelines Ltd. is a wholly owned subsidiary of Tata Motors engaged in the manufacture of gear boxes and axles for heavy and medium commercial vehicles. It has production facilities at Jamshedpur and Lucknow. TML Forge division is also a recent acquisition of TML Drivelines. TML Drivelines was formed through the merger of HV Transmission and HV Axles.

Tata Technologies

Tata Technologies Limited (TTL) is a 43%-owned subsidiary of Tata Motors which provides design, engineering, and <u>business process outsourcing</u> services to the automotive industry. It is headquartered in Pune (Hinjewadi) and also has operations in <u>London</u>, <u>Detroit</u> and <u>Thailand</u>. Its clients include Ford, <u>General Motors</u>, <u>Honda</u>, and <u>Toyota</u>.

The British engineering and design services company Incat International, which specialises in engineering and design services and product lifecycle management in the automotive, aerospace, and engineering sectors, is a wholly owned subsidiary of TTL. It was acquired by TTL in August 2005 for ₹4 billion.

In 2017, TAL, a subsidiary of Tata Motors, manufactured <u>India</u>'s first industrial articulated robot for micro, small, and medium enterprises.

European Technical Centre

The Tata Motors European Technical Centre (TMETC) is an automotive design, engineering, and research company based at Warwick Manufacturing Group (WMG) on the campus of the University of Warwick in Great Britain. It was established in 2005 and is a wholly owned subsidiary of Tata Motors. It was the joint developer of the World Truck.

In September 2013, it was announced that a new <u>National Automotive Innovation</u> <u>Campus</u> would be built at WMG at Warwick's main campus at a cost of £100 million. The initiative will be a partnership between Tata Motors, the university, and Jaguar Land Rover, with £30 million in funding coming from Tata Motors.

JOINT VENTURES

Tata Marcopolo



A Tata Marcopolo bus in use in Chandigarh, India

Tata Marcopolo is a bus-manufacturing joint venture between Tata Motors (51%) and the Brazil-based Marcopolo S.A. (49%). The joint venture manufactures and assembles fully built buses and coaches targeted at developing mass rapid transportation systems. It uses technology and expertise in chassis and aggregates from Tata Motors, and know-how in processes and systems for bodybuilding and bus body design from Marcopolo. Tata Marcopolo has launched a low-floor city bus which is widely used by transport corporations in many Indian cities. Its manufacturing facility is based in Dharwad, Karnataka State, India.

Fiat-Tata

Fiat-Tata is an India-based joint venture between Tata and <u>Fiat Automobiles</u> which produces Fiat and Tata branded passenger cars, as well as engines and transmissions. Tata Motors has gained access to Fiat's <u>diesel engine</u> and <u>transmission</u> technology through the joint venture.

The two companies formerly also had a distribution joint venture through which Fiat products were sold in India through joint Tata-Fiat dealerships. This distribution arrangement was ended in March 2013; Fiats have since been distributed in India by <u>Fiat Automobiles India Limited</u>, a wholly owned subsidiary of Fiat.

Tata Hitachi Construction Machinery

Tata Hitachi Construction Machinery is a joint venture between Tata Motors and <u>Hitachi</u> which manufactures excavators and other construction equipment. It was previously known as Telcon Construction Solutions. The TATA Motors European Technical Centre is an automotive design, engineering, and research company. Company based at Warwick Manufacturing Group (WMG) on the campus of the University of Warwick in Great Britain. It was established in 2005 and is wholly owned subsidiary of Tata Motors. It was the joint developer of the World Truck . In September 2013 it was announced that a new National Automotive Innovative Campus would be built at WMG at Warwicks main campus at a cost of 100 million pounds.

Products

Commercial vehicles



The Tata TL



A Tata 407 water truck



A Tata Starbus



Tata Motors trucks in Rajasthan, India



A loaded semi-forward Tata truck



TATA Semi-Forward Cab 1210SE Truck



TATA 1210 Series - long running production model



Tata twin-axle lorry in South India

- Tata Ace
 - Tata Ace Zip
- Tata Super Ace
- <u>Tata TL/Telcoline/207 DI</u> pickup truck
- Tata 407 Ex and Ex2



TATA 407 Ex2 BS4

- Tata 709 Ex
- Tata 807 (Steel cabin chassis, cowl chassis, medium bus chassis, steel cabin + steel body chassis)
- Tata 809 Ex and Ex2
- Tata 909 Ex and Ex2
- Tata 1210 SE and SFC (Semi Forward)
- Tata 1210 LP (Long Plate)
- Tata 1109 (Intermediate truck/ LCV bus)
- Tata 1512c (medium bus chassis)
- Tata 1515c/1615 (medium bus chassis)
- Tata 1612c/1616c/1618c (heavy bus chassis)
- Tata 1618c (semilow-floor bus chassis)
- Tata 1623 (rear-engined low-floor bus chassis)
- Tata 1518C (Medium truck) 10 ton
- Tata 1613/1615c (medium truck)
- Tata 1616/1618c (heavy duty truck)
- Tata 2515c/2516c,2518c (heavy duty 10 wheeler truck)
- <u>Tata Starbus</u> (branded buses for city, intercity, school bus, and standard passenger transportation)
- Tata Divo (Hispano Divo fully built luxury coach)
- Tata CityRide (12- to 20-seater buses for intracity use)
- Tata 3015 (heavy truck)
- Tata 3118 (heavy truck) (8x2)
- Tata 3516 (heavy truck)
- Tata 4018 (heavy truck)
- Tata 4923 (ultraheavy truck) (6x4)
- Tata Novus (heavy truck designed by Tata Daewoo)
- Tata Prima (the World Truck designed by Tata Motors and Tata Daewoo)
- Tata Prima LX (stripped-down version of Tata Prima)
- Tata Prima (Racing Trucks)

- Tata Ultra (ICV Segment)
- Tata Winger Maxivan

Military vehicles

- Tata LSV (Light Specialist Vehicle)
- Tata Mine Protected Vehicle (4x4)
- Tata 2 Stretcher Ambulance
- Tata 407 Troop Carrier, available in hard top, soft top, 4×4, and 4×2 versions
- Tata LPTA 713 TC (4×4)
- Tata LPT 709 E
- Tata SD 1015 TC (4x4)
- Tata LPTA 1615 TC (4×4)
- Tata LPTA 1621 TC (6×6)
- Tata LPTA 1615 TC (4×2)
- Tata LPTA 5252 TC (12x12), Transporter Erector Launcher for <u>Prahaar</u> (missile), Brahmos and Nirbhay
- Tata Landrover 1515 F
- TATA SUMO 4*4
- Tata Xenon
- Tata 207

Tata Motors proposed overhaul of armoured fighting vehicles and infantry main combat vehicles in 2015. The inter-ministerial committee was chaired by Secretary in the Department of Industrial Policy and Promotion (DIPP) approved most of the proposals from the defense Manufacturing sector in India.

Electric vehicles

Tata Motors has unveiled electric versions of the <u>Tata Indica</u> passenger car powered by TM4 electric motors and inverters, as well as the <u>Tata Ace</u> commercial vehicle, both of which run on lithium batteries.

Tata Motors' UK subsidiary, Tata Motors European Technical Centre, has bought a 50.3% holding in electric vehicle technology firm Miljøbil Grenland/Innovasjon of Norway for US\$1.93 million, which specialises in the development of innovative solutions for electric vehicles, and plans to launch the electric Indica hatchback in Europe next year. In September 2010, Tata Motors presented four CNG–Electric Hybrid low-floored Starbuses to the Delhi Transport Corporation, to be used during the Commonwealth Games. These were the first environmentally friendly buses to be used for public transportation in India.

Notable vehicles

Tata Nano



Tata Nano is often cited as the world's most affordable car

The Nano was launched in 2009 as a <u>city car</u> intended to appeal as an affordable alternative to the section of the Indian populace that is primarily the owner of motorcycles and has not bought their first car. Initially priced at ₹100,000 (US\$1,500), the vehicle attracted a lot of attention for its relatively low price. Production declined to 2 units per day in November 2017.

Tata Ace



Tata Ace was India's first mini truck

Tata Ace, India's first indigenously developed sub-one-ton minitruck, was launched in May 2005. The minitruck was a huge success in India with auto analysts claiming that Ace had changed the dynamics of the light commercial vehicle (LCV) market in the country by creating a new market segment termed the small commercial vehicle segment. Ace rapidly emerged as the first choice for transporters and single truck owners for city and rural transport. By October 2005, LCV sales of Tata Motors had grown by 36.6% to 28,537 units due to the rising demand for Ace. The Ace was built with a load body produced by Autoline Industries. By 2005, Autoline was producing 300 load bodies per day for Tata Motors.

Ace is still a top seller for TML with 500,000 units sold by June 2010. In 2011, Tata Motors invested Rs 1000 crore in Dharwad Plant, Karnataka, with the capacity of 90,000 units annually and launched two models of 0.5-T capacity as Tata Ace Zip, Magic Iris.

Ace has also been exported to several Asian, European, South American, and African countries and all-electric models are sold through <u>Polaris Industries'</u> <u>Global Electric</u> <u>Motorcars</u> division. In <u>Sri Lanka</u>, it is sold through Diesel and Motor Engineering (DIMO) PLC under the name of DIMO Batta.

Tata 407

The Tata 407 is a light commercial vehicle (LCV) that has sold over 500,000 units since its launch in 1986. In India, this vehicle dominates market share of the LCV category, accounting for close to 75% of LCV sales.

Tata Motors Limited

TATA MOTORS

Type Public

Traded as BSE: 500570

NSE: TATAMOTORS

NYSE: TTM

BSE SENSEX Constituent

Industry Automotive

Founded 1945; 73 years ago

Headquarters Mumbai, India^[1]

Area served Worldwide

Key people Natarajan

Chandrasekaran(Chairman) Guenter Butschek (CEO)

Products Automobiles

Sport Cars

Commercial vehicles

Coaches Buses

Construction equipment

Military vehicles Automotive parts

Services Automotive design, engineering

and outsourcing services

Vehicle leasing Vehicle service Revenue US\$40.910 billion (2017)

Operating income

US\$1.614 billion (2017)

Net income US\$958.4 million (2017)[2]

Total assets US\$41.066 billion (2017)[2]

Total equity US\$8.226 billion (2017)[2]

Number of 79,558 (2017)^[2] employees

Parent Tata Group

Divisions Tata Motors Cars

Subsidiaries Jaguar Land Rover

Tata Daewoo

Tata Technologies

Website www.tatamotors.com

NEED OF STUDIES

- The financial performance of the company is known by calculating financial statement and ratio.
- To know the organizational activity.
- To know the societies contribution to build the industry and also organization .

OBJECTIVES OF STUDY

- To find out the financial performance of the organization for last 5 years through ratio analysis.
- To know the utilization of financial resources.

CHAPTER-2

INTRODUCTION TO THE STUDY

The study paper on the topic "a study financial Ratio Analysis at TATA MOTORS" is partial fulfillment of requirement of BBA course.

It was an opportunity to learn practical aspects of industries. I have chosen this topic because "ratios are use to interpret the financial statements so that strengths and weakness of a firm as well as to know its historical performance and current financial condition can be determined."

My study covers the calculation of ratios for TATA MOTORS and to know their financial performance.

RATIO ANALYSIS

When we observed the financial statements comprising the balance sheet and profit or loss account is that they do not give all the information related to financial operations of a firm, they can provide some extremely useful information to the extent that the balance sheet, shows the financial position on a particular date in terms of structure of assets, liabilities and owners equity and profit or loss account shows the results of operation during the year. Thus the financial statements will provide a summarized view of the firm. There fore in order to learn about the firm the careful examination of in valuable reports and statements through financial analysis or ratios is required.

MEANING AND DEFINITION

Ratio analysis is one of the powerful techniques which is widely used for interpreting financial statements. This technique serves as a tool for assessing the financial soundness of the business.

The idea of ratio analysis was introduced by Alexander wall for the first time in 1919. Ratios are quantitative relationship between two or more variables taken from financial statements.

Ratio analysis is defined as, "The systematic use of ratio to interpret the financial statement so that the strength and weakness of the firm as well as its historical performance and current financial condition can be determined. In the financial statements we can find many items are

co-related with each other For example current assets and current liabilities, capital and long term debt, gross profit and net profit purchase and sales etc.

To take managerial decision the ratio of such items reveals the soundness of financial position. Such information will be useful for creditors, shareholders management and all other people who deal with company.

IMPORTANCE

As a tool of financial management ratio are of crucial significance. The importance of ratio analysis lies in the fact that it presents facts on a comparative basis and enables the drawing inferences regarding the performance of a firm. Ratio analysis is relevant in assessing the performance of a firm in respect of the following aspects:

•Liquidity position• Long term solvency• Operating efficiency• Overall profitability• Inter firm comparison• Trend analysis.

Liquidity Position:

With the help of ratio analysis conclusions can be drawn regarding the liquidity position of a firm would be satisfactory if it is able to meet its current obligations when it become due. A firm can be said to have the ability to meet its short term liabilities if it has sufficient liquid funds to pay the interest on its short maturing debt usually within a year as well as to repay the principal. This ability is reflected in the liquidity ratios of a firm. The liquidity ratios are particularly useful in credit analysis by banks and other suppliers of short term loans.

Long term solvency:

Ratio analysis is equally useful for assessing the long term financial viability of a firm. This aspect of the financial position of a borrower is of concern to the long term creditors, security analysts and the present and potential owners of a business. The long term solvency is measured by the leverage/capital structure and profitability ratios which focus on earning power and operating efficiency. Ratio analysis reveals the strengths and weakness of a firm in this respect. The leverage ratio for instance, will indicate whether a firm has reasonable proportion of various sources of finance or if it is heavily loaded with debt in which case its solvency is exposed to serious strain. Similarly the various profitability ratios would reveal whether or not the firm is able to offer adequate return to its owners consistent with the risk involved.

Operating Efficiency:

Yet another dimension of the usefulness of the ratio analysis, relevant from the viewpoint of management, is that it throws light on the degree of efficiency in the management and utilization of its assets. The various activity ratios measure this kind of operational efficiency. In fact, the solvency of a firm is, in the ultimate analysis, dependent upon the sales revenues generated by the use of its assets total as well as its components.

Overall Profitability:

Unlike the outside parties which are interested in one aspect of the financial position of a firm, the management is constantly concerned about the overall profitability of the enterprise. That is, they are concerned about the ability of the firm to meet its short term as well as long term obligations to its creditors, to ensure a reasonable return to its owners and secure optimum utilization of the assets of the firm. This is possible if an integrated view is taken and all the ratios are considered together.

Inter firm Comparison:

Ratio analysis not only throws light on the financial position of a firm but also serves as a stepping stone to remedial measures. This is made possible due to inter firm comparison and comparison with industry averages. A single figure of a particular ratio is meaningless unless it is related to some standard or norm. one of the popular techniques is to compare the ratios of a firm with the industry average. It should be reasonably expected that the performance of a firm should be in broad conformity with that of the industry to which it belongs. An interfere comparison would demonstrate the firm's position vis-à-vis its competitors. If the results are at variance either with the industry average or with those of the competitors, the firm can seek to identify the probable reasons and, in that light, take remedial measures.

Trend Analysis:

Finally, ratio analysis enables a firm to take the time dimension into account. In other words, whether the financial position of a firm is improving or deteriorating over the years. This is made possible by the use of trend analysis. The significance of a trend analysis of ratios lies in the fact that the analysts can know the direction of movement, that is, whether the movement is favorable or unfavorable. For example, the ratio may be low as compared to the norm but the trend may be upward. On the other hand, though the present level may be satisfactory but the trend may be a declining one.

Limitations:

Ratio analysis is a widely used tool of financial analysis. Yet, it suffers from various limitations. The operational implication of this is that while using ratios, the conclusions should not be taken on their face value. Some of the limitations which characterise ratio analysis are

- i) Difficulty in comparison
- ii) Impact of inflation, and
- iii) Conceptual diversity.

Difficulty in Comparison:

One serious limitation of ratio analysis arises out of the difficulty associated with their comparisons are vitiated by different procedures adopted by various firms. The differences may relate to:

Differences in the basis of inventory valuation (e.g. last in first out, first in first out,

- average cost and cost); Different depreciation methods (i.e. straight line vs. written down basis)
- Estimated working life of assets, particularly of plant and equipment;
- Amortization of intangible assets like good will, patents and so on;
- Amortization of deferred revenue expenditure such as preliminary expenditure and
- Discount on issue of shares; Capitalization of lease;
- Treatment of extraordinary items of income and expenditure; and so on.

Secondly, apart from different accounting procedures, companies may have different accounting periods, implying differences in the composition of the assets, particularly current assets. For these reasons, the ratios of two firms may not be strictly comparable.

Another basis of comparison is the industry average. This presupposes the availability, on a comprehensive scale, of various ratios for each industry group over a period of time. If, however as is likely such information is not compiled and available, the utility of ratio analysis would be limited.

Impact of Inflation:

The second major limitation of the ratio analysis as a tool of financial analysis is associated with price level changes. This, in fact, is a weakness of the traditional financial statements which are based on historical costs. An implication of this feature of the financial statements as regards ratio analysis is that assets acquired at different periods are, in effect, shown at different prices in the balance sheet, as they are not adjusted for changes in the price level. As a result, ratio analysis will not yield strictly comparable and, therefore, dependable results. To illustrate, there are two firms which have identical rates of returns on investments, say 15%. But one of these had acquired its fixed assets when prices were relatively low,

While the other one had purchased them when prices were high. As a result, the book value of the fixed assets of the former type of firm would be lower, while that of the latter higher. From the point of view of profitability, the return on the investment of the firm with a lower book value would be overstated. Obviously, identical rates of returns on investment are not indicative of equal profitability of the two firms. This is a limitation of ratios.

Conceptual diversity:

Yet another factor which influences the usefulness of ratios is that there is difference of opinion regarding the various concepts used to compute the ratios. There is always room for diversity of opinion as to what constitutes shareholders equity, debt, assets, and profit and so on. Different firms may use these terms in different senses or the same firm may use them to mean different things at different times.

Reliance on a single ratio, for a particular purpose may not be a conclusive indicator. For instance, the current ratio alone is not a as adequate measure of short term financial strength; it should be supplemented by the acid test ratio, debtors turnover ratio and inventory turnover ratio to have real insight into the liquidity aspect.

Finally, ratios are only a post mortem analysis of what has happened between two balance sheet dates. For one thing, the position in the interim period us bit revealed by ratio analysis. Moreover, they give no clue about the future.

Liquidity Ratios:

The importance of adequate liquidity in the sense of the ability of a firm to meet current/short term obligations when they become due for payment can hardly be overstressed. In fact, liquidity is a prerequisite for the very survival of a firm. The short term creditors of the firm are interested in the short term solvency or liquidity of a firm. But liquidity implies, from the viewpoint of utilization of the funds of the firm that funds are idle or they earn very little. A proper balance between the two contradictory requirements, that is, liquidity and profitability

is required for efficient financial management. The liquidity ratios measure the ability of firm to meet its short term obligations and reflect the short term financial solvency of a firm.

Long -term Solvency Ratio:

The second category of financial ratios is leverage or capital structure ratios. The long term creditors would judge the soundness of a firm on the basis of the long term financial strength measured in terms of its ability to pay the interest regularly as well as repay the installment of the principal on due dates or in one lump sum at the time of maturity. The long term solvency ratio of a firm can be examined by using leverage or capital structure ratios. The leverage or capital structure ratios may be defined as financial ratios which throw light on the long term solvency of a firm as reflected in its ability to assure the long term creditors with regard to: (1) Periodic payment of interest During the period of the loan and (2) Repayment of principal on maturity or in pre determined installments at due dates.

Activity Ratios:

Activity ratios are concerned with measuring the efficiency in asset management. These ratios are also called efficiency ratios or assets utilization ratios. The efficiency with which the assets are used would be reflected in the speed and rapidity with which assets are converted into sales. The greater is the rate of turnover or conversion, the more efficient is the utilization/management, other things being equal. For this reason, such ratios are also designated as turnover ratios. Turnover is the primary mode for measuring the extent of efficient employment of assets by relating the assets to sales. An activity ratio may, therefore, be defined as a test of the relationship between sales and the various assets of a firm.

Profitability Ratios:

We know that the net operating result, i.e. operating net profit, is not the sole criterion of the firm although the same is the primary objevtives of all business enterprises .Because, profit is needed for extension and development also. Moreover, various interested groups consider it from their own interest. For example, an investor is interested in higher returns, creditors want better security, workers want higher wages etc. All these problems can be solved if the concern earns adequate profits and naturally profit is the yardstick of measuring the overall efficiency of firm. Profits are the margin of safety to a creditor, test of efficiency and control to the management, worth of investments to the owners, measure of tax paying capacity to a government etc. Thus, profits are the index of economic progress of a country, as a whole. For this purpose profitability ratios are calculated in order to measure the overall efficiency of a firm. Profitability ratios are usually expressed in terms of percentage.

Profitability ratios are, again, of following two types:

a)General Profitability Ratio b)Overall Profitability Ratio

(In terms of sales) (In terms of investment)

1)Gross Profit Ratio 1)Return on Capital Employed

2) Net Profit Ratio 2) Return on Ordinary Share capital

3)Operating Profit 3)Return on Total Resources

4)Operating Profit Ratio 4)Return on proprietor's Fund

5)Profit Cover Ratios 5)Dividend Yeild Ratio

6)Dividend Pay-out Ratio

7)Dividend Per share

8) Earning Price Ratio

9) Earning Per Share

10)Price Earning Ratio

11)Assets Cover

12)Capital Turnover Ratio

13) Turnover to Proprietor's Fund Ratio

14) Turnover to Fixed Assets Ratio

15) Turnover to Assets and Liabilities

16) Net Profit to Total Assets Ratio

17) Net Profit to Fixed Assets Ratio

18) Assets to Proprietorship Ratio

Ratio

General Profitability Ratios:

(1) Gross Profit Ratio

This is the ratio of Gross Profit to Net Sales and expressed as a percentage. It is also called Turnover Ratio. It reveals the amount of Gross Profit for each rupee of sale. It is highly significant and important since the earning capacity of the business can be ascertained by taking the margin between cost of goods and sales. The higher the ratio, the greater will be the margin, and this is why it is called Margin Ratio. Management is always interested in a high margin in order to cover the operating expenses and sufficient return on the Proprietor 's Fund. It is very useful as a test of profitability and management efficiency . 20% to 30% Gross profit Ratio may be considered normal:

Gross Profit Ratio = Gross Profit/Net Sales *100

INTERPRETATION AND SIGNIFICANCE

This ratio reveals the efficiency of the firm about the goods produced. Since gross profit is the difference between selling price and cost of goods sold the higher the profit, better will be the financial performances.

NET PROFIT RATIO

This is the ratio of Net Profit to Net Sales and is also expressed as a percentage. It indicates the amount of sales left for shareholders after all costs and expenses have been met.

The higher the ratio, the greater will be profitability---and the higher the return to the shareholders. 5% to 10% may be considered the normal. It is a very useful tool to control the cost of production as well as to increase sales:

Net Profit Ratio=Net Profit /Net Sales*100

This ratio measures the overall efficiency of the management. Practically, it measures the firm's overall profitability. It is the difference between Gross Profit and operating and non-operating income minus operating and non-operating expenses after deduction of tax. This ratio is very significant as, if it is found to be very low, many problems may arise, dividend may not be paid, operating expenses may not be paid etc. Moreover, higher profit earning capacity protects a firm against many financial hindrances(e.g.

adverse economic condition) and, naturally, higher the ratio, the better will be the profitability.

OPERATING RATIO

This is the ratio of operating expenses or operating cost of sales. It may be expressed as a percentage and it reveals the amount of sales required to cover the cost of goods sold plus operating expenses. The lower the ratio the higher is the profitability and the better is the management efficiency. 80% to 90% may be considered as normal.

Operating Ratio= Cost of goods sold+Operating Expenses/Sales *100

Operating Expenses consist of (i)Office and Administrative expenses, and (ii) Selling and Distribution expenses and the two components of this ratio are Operating Expenses and Net Sales.

INTERPRETATION AND SIGNIFICANCE

The primary purpose of this ratio is to compare the different cost components in order to ascertain any change in cost composition, i.e. increase or decrease and to see which element of cost has increased and which one decreased. Moreover, there is no standard or norm about this ratio since it varies from firm to firm---depending on the nature and type of the firm and its capital structure. For a better performance, a trend analysis of the ratios for some consecutive years many present a valuable information. If non-operating expenses are considered by mistake, the same may present a wrong information.

OPERATING PROFIT RATIO

It is a modified version of Net Profit to Sales Ratio. Here, the non-operating incomes and expenses are to be adjusted (i.e. to be excluded) with the net profit in order to find out the amount of operating net profit. It indicates the amount of profit earned for each rupee of sales after dividing Operating Net Profit by Net Sales. It is also expressed as a percentage:

Operating Profit Ratio = Operating Net Profit/Net Sales*100

Here, Operating Net Profit=Net Profit-Income from external securities and others (i.e. non-trading incomes)+Non-operating expenses (i.e. Interest on Debentures etc.).

(I) DIVIDEND COVERAGE RATIOS

a) Preference Shareholders' Coverage Ratio

It indicates the number of times the Preference Dividends are covered by the Net Profit (i.e.,

Net Profit after Interest and Tax but before Equity Dividend). The higher the coverage the better will be the financial strength. It reveals the safety margin available to the Preference Shareholders:

Prefernce Shareholders' Coverage Raito

= Net Profit(after Interest and Tax but before Equity Dividend) / Preference Dividend

(ii)Equity Shareholders' Coverage Ratio

It indicates the number of times the equity dividends are covered by the Net Profit (i.e. Net Profit after Interest, Tax and Pref. Dividend). The higher the coverage, the better will be the financial stength and the fairer the return for the shareholder since maintenance of dividend is assured.

Equity Shareholders' Coverage Ratio

= Net Profit(after Interest, Tax and Pref. Dividend)/ Equity Dividend

(b) INTEREST COVERAGE RATIO

It indicates the number of times the fixed interest charges (Debenture Interest, Interest on Loans etc.) are covered by the Net Profit (i.e. Net Profit before Interest and Tax).

Net Profit (before Tax and Interest)(EBIT)

Interest Coverage Ratio=

Fixed Interest and Charges

(c)TOTAL COVERAGE RATIO

The coverage ratio is a measure of a company's ability to meet its financial obligations. In broad terms, the higher the coverage ratio, the better the ability of the enterprise to fulfill its obligations to its <u>lenders</u>. The trend of coverage ratios over time is also studied by <u>analysts</u> and investors to ascertain the change in a company's financial position.

(d) OVERALL PROFITABILITY RATIO

i)Return on Capital Employed/Return on Investment

Return on capital employed (**ROCE**) is a financial ratio that measures a company's profitability and the efficiency with which its **capital** is **employed**. **ROCE** is calculated as: **ROCE** = Earnings Before Interest and Tax (EBIT) / **Capital Employed**.

Return on Investment (ROI) is a performance measure, used to evaluate the <u>efficiency</u> of an investment or compare the efficiency of a number of different investments. ROI measures the amount of <u>return</u> on an investment, relative to the investment's cost. To calculate ROI, the benefit (or return) of an investment is divided by the cost of the investment. The result is expressed as a percentage or a ratio.

ii)Return on Equity

Return on equity (ROE) is the amount of net income returned as a percentage of shareholders **equity**. **Return on equity** measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

iii)Return on Common Equity

Return on equity measures a corporation's profitability by revealing how **much** profit a company generates with the money shareholders have invested. Net income is for the full fiscal year (before dividends paid to common stock holders but after dividends to **preferred** stock.)

iv)Return on Assets

Return on Assets (ROA) is an indicator of how profitable a company is relative to its total **assets**. ROA gives an idea as to how efficient management is at using its **assets** to generate earnings. Calculated by dividing a company's annual earnings by its total **assets**, ROA is displayed as a percentage.

v)Cash return on Asset

Definition. **Cash** ROA (TTM) is the amount of **cash**flow from operations (CFO) over a firm's total **assets**. Typically, a ROA compares net income (NI) to a firm's total **assets**. The difference between using CFO and NI is that CFO is harder to manipulate than NI, thus a better indicator of true **return**.

vi) Return on Proprietor's Fund/Earning Ratio

Return on shareholders' investment ratio is a measure of overall profitability of the business and is computed by dividing the net income after interest and tax by average stockholders' equity. ... The ratio is usually expressed in percentage.

vii) Return on Ordinary Shareholder's Equity

Return on **equity** (ROE) is the amount of net income returned as a percentage of **shareholders equity**. **Return** on **equity** measures a corporation's profitability by revealing how much profit a company generates with the money **shareholders** have invested.

- viii) Net profit to Fixed Asset ratio:- This is the ratio of Net Profit to Fixed Assets which indicates whether or not the fixed assets have been effectively utilized in the business.
- ix) Net Profit to Total Assets:- This is the ratio of net profit to total assets. It also indicates whether the total assets of the business have been properly used or not. If not properly used, it proves inefficiency on part of the management. It also helps to measure the profitability of the firm.
- x) Price Earning Ratio:- It is the ratio which relates to the market price of the shares to earning per equity shares. A high ratio satisfies the investors and indicates the share prices that are comparatively lower in relation to recent earning per share.
- xi) Earning Price Ratio/Earning Yield:- Yield is expressed in terms of market value per share. This ratio is calculated by dividing earning per share by the market price per share.
- xii) Earning Per Share:- This is calculated by dividing the net profit (after tax and pref.dividend) available to the share holders by the number of ordinary share. It indicates the profit available to the ordinary share holders on per share basis.
- xiii) Dividend Yield Ratio:- It is calculated by cash dividend per share by the market value per share. It is very important to the new investors.
- xiv) Dividends Payout Ratio:- The **dividend payout ratio** is the amount of **dividends** paid to stockholders relative to the amount of total net income of a company. The amount that is not paid out in **dividends** to stockholders is held by the company for growth. The amount that is kept by the company is called retained earnings.
- xv) Dividend per share:- *Dividend per share* (DPS) is the sum of declared *dividends* issued by a company for every ordinary *share* outstanding. The figure is calculated by dividing the

total *dividends* paid out by a business, including interim *dividends*, over a period of time by the number of outstanding ordinary *shares* issued.

- xvi) Capital Turnover Ratio:- The working **capital turnover ratio** is also referred to as net sales to working **capital**. It indicates a company's effectiveness in using its working **capital**. The working **capital turnover ratio** is calculated as follows: net annual sales divided by the average amount of working **capital** during the same 12 month period.
- xvii) Turnover to Proprietors fund Ratio:- 1) Ratio of fixed assets to shareholders or proprietors' funds. 2) Ratio of current assets to shareholders or proprietors' funds.
- xviii) Assets to Proprietorship Ratio:- Proprietary ratio. **Equity** ratio. The proprietary ratio (also known as the **equity** ratio) is the proportion of **shareholders**' **equity** to total assets, and as such provides a rough estimate of the amount of capitalization currently used to support a business.
- xix) Price-book Ratio:- The **price**-to-**book ratio** (P/B **Ratio**) is a **ratio** used to compare a stock's market **value** to its **book value**. It is calculated by dividing the current closing **price** of the stock by the latest quarter's **book value** per share. A lower P/B **ratio** could mean that the stock is undervalued.
- xx) Market price per share:- The Price-Earnings Ratio is calculated by dividing the current **market price per share of the stock** by earnings **per share** (EPS). (Earnings **per share** are calculated by dividing net income by the number of **shares** outstanding.)
- xxi) Book-value per share:- The **book value per share** formula is used to calculate the **per share value** of a company based on its equity available to common shareholders. The term "**book value**" is a company's assets minus its liabilities and is sometimes referred to as stockholder's equity, owner's equity, shareholder's equity, or simply equity.

FORMULAS:-

- i) Return on Capital Employed = Net profit(after tax) / Capital employed
- ii) Return on Equity = Net Income / Avg. Shareholders (including pref. shareholders fund)
- iii) Return on Common Equity = Earning after Tax-Pref. Div / Equity Shareholder's Fund * 100
- iv) Return on Assets = Earning before interest and tax / Total Assets * 100
- v) Cash Return on Assets = Cash flows from Operating activities / Total Assets * 100
- vi) Return on proprietors fund/earning ratio=net profit(after tax) / propreitors fund
- vii) Return on ordinary share holders equity (ROE)=net profit (after tax and pref. dividend)/proprietors equality(less Pref. share capital)
- viii) Net profit to fixed assets ratio= Net profit / Fixed Assets
- ix) Net Profit to Total Assets Ratio = Net Profit / Total Assets
- x) Price Earning Ratio= Market Price of Share / Earning per Share
- xi) Earning price Ratio/Earning Yield = Earning per share / Market price per Share
- xii) Earning Per Share = Net Profit available to Ord. Shareholders / No. of Ordinary Shares
- xiii) Dividend Yield Ratio = Dividend per Share / Earnings per Share
- xiv) Dividend Pay-out Ratio= Dividend per Share / Earnings Per share
- xv) Dividend Per Share = Dividend paid to Ordinary Shareholders / No. of Ordinary shares
- xvi) Capital Turnover Ratio= Sales (Turnover) / Average Capital Employed
- xvii) Turnover to Proprietor's Fund Ratio= Sales(Turnover) / Proprietor's Fund
- xviii) Assets to Proprietorship Ratio= Total Assets / Proprietor's Fund
- xix) Price-Book Value Ratio= MPS / Book Value Per Share

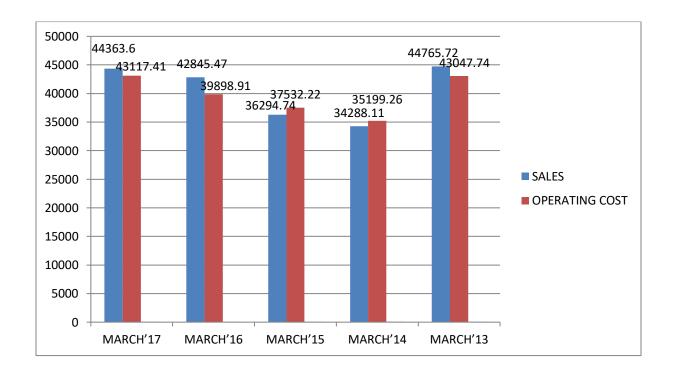
CHAPTER-3

TO JUDGE THE ABOVE TWO OBJECTIVES WE ARE CONCENTRATING ONLY ON PROFITABILITY RATIOS:-

A) i)OPERATING PROFIT RATIO= OPERATING PROFIT/ NET SALES * 100

ii)OPERATING PROFIT= SALES - OPERATING COST

	MARCH'17	MARCH'16	MARCH'15	MARCH'14	MARCH'13
SALES	44363.60	42845.47	36294.74	34288.11	44765.72
OPERATING COST	43117.41	39898.91	37532.22	35199.26	43047.74
OPERATING PROFIT	1246.19	2946.56	-1237.48	-911.15	1717.98
OPERATING PROFIT RATIO	2.80	6.87	-3.40	-2.65	3.83



INTERPRETATION:

In 2013, sales was 44,765.72, it had decreased by 10,477.61 amount in 2014 and sales dropped down to 34,288.11. In 2015, it had increased a little bit i.e, by 2,006.63 and sales came up to to 36,294.74. In 2016 sales had increased by 6,550.73 and sales came up to 42845.47. In 2017 again sales had increased by 1518.13 and sales became 44363.60.

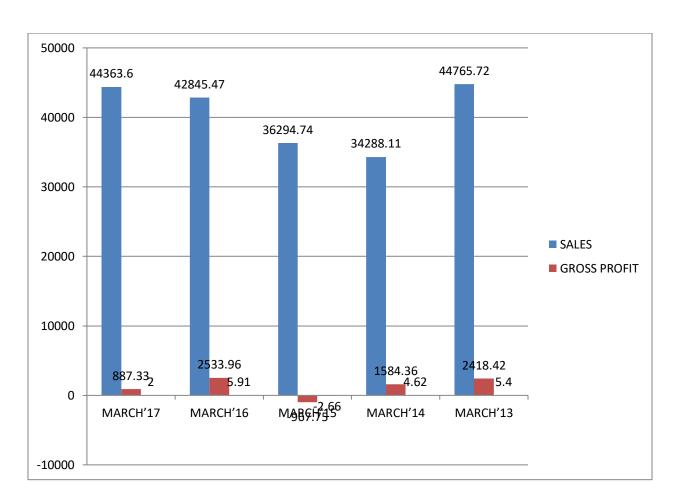
Similarly with respect to 2013 Operating cost got reduced by 7848.48 amount in 2014. And with respect to 2014 operating cost 2332.96 in 2015. Again in 2016 it had increased by 2366.69 amount. Also in 2017 it had increased by 2366.69 amount. Also in 2017 it had increased by 2366.69 amount.

In 2014 it had decreased by 6,48% with respect to 2013. In 2015 it raised up by 0.75% and in 2016 it again raised up sharply by 10.27%. In 2017 it got reduced by 4.07% with respect to 2016.

In 2017, proper control measures are necessary in Operating Cost.

B)GROSS PROFIT RATIO= GROSS PROFIT/NET SALES

	MARCH'17	MARCH'16	MARCH'15	MARCH'14	MARCH'13
SALES	44363.60	42845.47	36294.74	34288.11	44765.72
GROSS PROFIT	887.33	2533.96	-967.75	1584.36	2418.42
GROSS PROFIT RATIO	2.00	5.91	-2.66	4.62	5.40



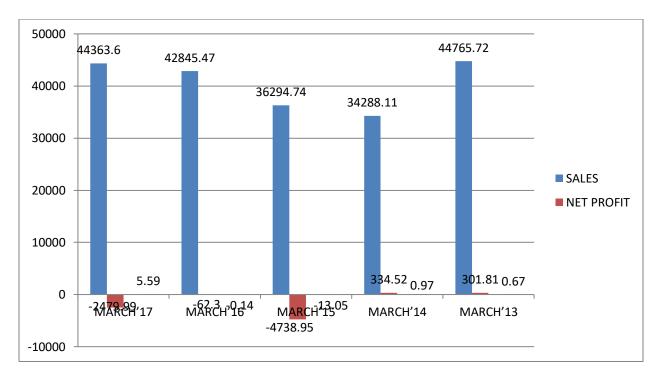
INTERPRETATION:

From the above data we can see that sales was 44,765.72 in 2013.In 2014, sales got reduced by 10,477.61 amount and sales came down to 34,288.11. In 2015 again sales had increased a little bit i.e. by 2,006.63 amount and it became 36,294.74.In 2016, it had increased quite a bit i.e. by 6,550.73 and sales became 42,845.47.In 2017, it again had increased by 1,518.13 amount and it raised upto 44,363.60

Similarly with respect to 2013, Gross Profit Ratio reduced by 0.78% in 2014. And with respect to 2014 Gross Profit Ratio again got decreased by 7.28% in 2015. Again in 2016 it had increased by 8.57% with respect to 2015. With respect to 2016 Gross Profit Ratio got reduced by 3.91%.

C) NET PROFIT RATIO=NET PROFIT / NET SALES*100

	MARCH'17	MARCH'16	MARCH'15	MARCH'14	MARCH'13
SALES	44363.60	42845.47	36294.74	34288.11	44765.72
NET PROFIT	-2479.99	-62.30	-4738.95	334.52	301.81
NET PROFIT RATIO	-5.59	-0.14	-13.05	0.97	0.67



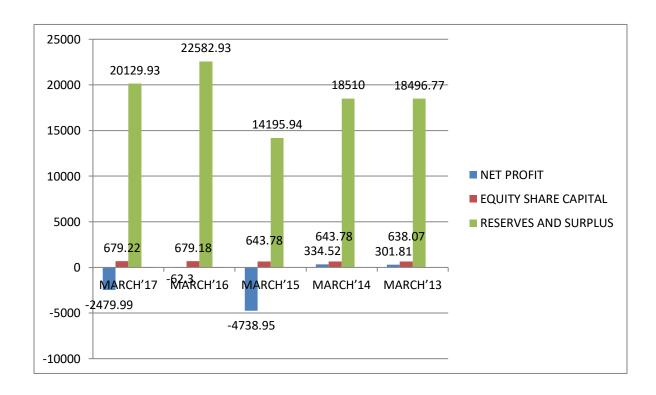
INTERPRETATION:

From the above data we can find that sales was 44,765.72 in 2013 with respect to 2013 sales got reduced by 10,477.61 amount in 2014 and sales came down to 34,288.11.In 2015, again sales had increased a little bit i.e. by 2,006.63 amount and it became 36,294.74.In 2016, it had increased quite a bit i.e. by 6,550.73 and sales became 42,845.47.In 2017, it again had increased by 1,518.13 and it raised upto 44,363.60.

Similarly in 2013, with respect to 2013 we can find that it had increased a little bit by 0.3% in 2014. In 2015 it decreased by 14.02% with respect to 2014. With respect to 2015 it raised up by 12.91% and in 2017 it came down by 5.45% so we can find that Net Profit Ratio is maximum in 2014.

D) RETURN ON NET WORTH= NET PROFIT/EQUITY SHARE CAPITAL+RESERVES AND SURPLUS

	MARCH'17	MARCH'16	MARCH'15	MARCH'14	MARCH'13
NET PROFIT	-2479.99	-62.30	-4738.95	334.52	301.81
EQUITY SHARE CAPITAL	679.22	679.18	643.78	643.78	638.07
RESERVES AND SURPLUS	20129.93	22582.93	14195.94	18510.00	18496.77
RETURN ON NET WORTH	-11.91	-0.26	0.03	1.74	1.57



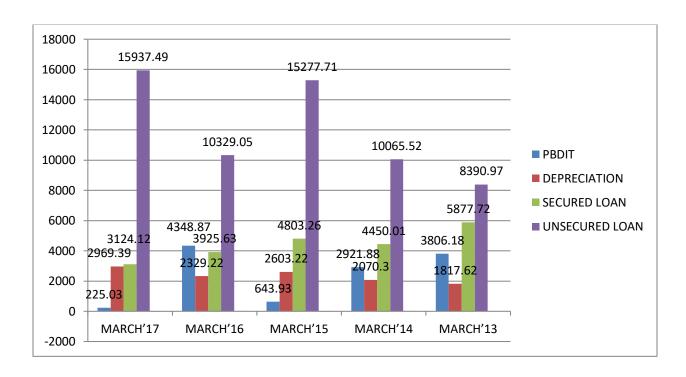
INTERPRETATION:

In 2013 return on net worth was 1.57 and with respect to 2013 it increased by 0.17% in 2014. In 2015 it again got decreased by 1.71% with respect to 2014. In 2016 and 2017 return on net worth fell down by 0.29% and 11.65% repectively.

In 2017, return on net worth is negative . It implies that there is a capital erosion by 11.91 %.

E) RETURN ON LONG TERM FUNDS= PBDIT-DEPRECIATION/SECURED LOAN+UNSECURED LOAN

	MARCH'17	MARCH'16	MARCH'15	MARCH'14	MARCH'13
PBDIT	225.03	4348.87	643.93	2921.88	3806.18
DEPRECIATION	2969.39	2329.22	2603.22	2070.30	1817.62
SECURED LOAN	3124.12	3925.63	4803.26	4450.01	5877.72
UNSECURED LOAN	15937.49	10329.05	15277.71	10065.52	8390.97
RETURN ON LONG TERM FUNDS	-14.3	14.16	-11.14	5.86	13.93



INTERPRETATION:

In 2013, return on long term funds was 13.93%, with respect to 2013 it got decreased by 8.07% in 2014.

In 2015 it fell down by 17 % . Again in 2016 it raised up by 25.3%. With respect to 2016 it is reduced by 28.46 % .



CONCLUSION

From the above analysis of the company's financial statement it is concluded that the company's financial position is not good because the company's profitability positions are critically low and the company's have to raise its profitability positions for better performance.

SUGGESTIONS

In 2017 operating cost had sharply raised so it's my advice to firm proper measures should be taken .In 2016 the cost of goods sold was good enough but in 2017 it became huge, as a result Gross Profit got reduced with respect to 2016. Maximum measures should be taken to control cost of goods sold. If it doesn't happen, then the company's profitability will get poor.

BIBLIOGRAPHY

1. FINANCIAL MANAGEMENT-III; S Kr PAUL; CHANDRANI PAUL

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- 2. https://en.wikipedia.org/wiki/Tata Motors
- 3. https://money.rediff.com/companies/Tata-Motors-Ltd.&snssrc=sugg

ANNEXURE

Balance sheet (rs crore)

Share application money - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <th></th> <th>Mar ' 17</th> <th>Mar ' 16</th> <th>Mar ' 15</th> <th>Mar ' 14</th> <th>Mar ' 13</th>		Mar ' 17	Mar ' 16	Mar ' 15	Mar ' 14	Mar ' 13
Equity share capital 679.22 679.18 643.78 643.78 638.0 Share application money - - - - - - Preference share capital - - - - - - Reserves & surplus 20,129.93 22,582.93 14,195.94 18,510.00 18,496.7 Loan funds Secured loans 3,124.12 3,925.63 4,803.26 4,450.01 5,877.7 Unsecured loans 15,937.49 10,329.05 15,277.71 10,065.52 8,390.9 Total 39,870.76 37,516.79 34,920.69 33,669.31 33,403.5 Uses of funds Fixed assets Gross block 35,863.28 35,050.15 27,973.79 26,130.82 25,190.7 Less : revaluation reserve - - 22.87 22.87 Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Sources of funds					
Share application money - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td>Owner's fund</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Owner's fund					
Preference share capital - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <th< td=""><td>Equity share capital</td><td>679.22</td><td>679.18</td><td>643.78</td><td>643.78</td><td>638.07</td></th<>	Equity share capital	679.22	679.18	643.78	643.78	638.07
Reserves & surplus 20,129.93 22,582.93 14,195.94 18,510.00 18,496.7 Loan funds Secured loans 3,124.12 3,925.63 4,803.26 4,450.01 5,877.7 Unsecured loans 15,937.49 10,329.05 15,277.71 10,065.52 8,390.9 Total 39,870.76 37,516.79 34,920.69 33,669.31 33,403.5 Uses of funds Fixed assets Gross block 35,863.28 35,050.15 27,973.79 26,130.82 25,190.7 Less : revaluation reserve - - 22.87 22.87 Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Share application money	-	-	-	-	-
Loan funds Secured loans 3,124.12 3,925.63 4,803.26 4,450.01 5,877.7 Unsecured loans 15,937.49 10,329.05 15,277.71 10,065.52 8,390.9 Total 39,870.76 37,516.79 34,920.69 33,669.31 33,403.5 Uses of funds Fixed assets Gross block 35,863.28 35,050.15 27,973.79 26,130.82 25,190.7 Less : revaluation reserve - - 22.87 22.87 Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Preference share capital	-	-	-	-	-
Secured loans 3,124.12 3,925.63 4,803.26 4,450.01 5,877.7 Unsecured loans 15,937.49 10,329.05 15,277.71 10,065.52 8,390.9 Total 39,870.76 37,516.79 34,920.69 33,669.31 33,403.5 Uses of funds Fixed assets Gross block 35,863.28 35,050.15 27,973.79 26,130.82 25,190.7 Less : revaluation reserve - - 22.87 22.87 Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Reserves & surplus	20,129.93	22,582.93	14,195.94	18,510.00	18,496.77
Unsecured loans 15,937.49 10,329.05 15,277.71 10,065.52 8,390.9 Total 39,870.76 37,516.79 34,920.69 33,669.31 33,403.5 Uses of funds Fixed assets Gross block 35,863.28 35,050.15 27,973.79 26,130.82 25,190.7 Less : revaluation reserve - 22.87 22.87 Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Loan funds					
Total 39,870.76 37,516.79 34,920.69 33,669.31 33,403.50 Uses of funds Fixed assets Gross block 35,863.28 35,050.15 27,973.79 26,130.82 25,190.70 Less: revaluation reserve - 22.87 22.87 Less: accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.90	Secured loans	3,124.12	3,925.63	4,803.26	4,450.01	5,877.72
Uses of funds Fixed assets Gross block 35,863.28 35,050.15 27,973.79 26,130.82 25,190.7 Less : revaluation reserve - 22.87 22.87 Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Unsecured loans	15,937.49	10,329.05	15,277.71	10,065.52	8,390.97
Fixed assets Gross block 35,863.28 35,050.15 27,973.79 26,130.82 25,190.7 Less : revaluation reserve - - 22.87 22.87 Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Total	39,870.76	37,516.79	34,920.69	33,669.31	33,403.53
Gross block 35,863.28 35,050.15 27,973.79 26,130.82 25,190.7 Less : revaluation reserve - - 22.87 22.87 Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Uses of funds					
Less : revaluation reserve 22.87 22.87 Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Fixed assets					
Less : accumulated depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Gross block	35,863.28	35,050.15	27,973.79	26,130.82	25,190.73
depreciation 15,625.73 13,974.34 12,190.56 10,890.25 9,734.9	Less : revaluation reserve	-	-	22.87	22.87	-
Not block 00 007 FE 04 07E 04 4E 700 00 4E 047 70 4E 4FE 7		15,625.73	13,974.34	12,190.56	10,890.25	9,734.99
Net block 20,237.55 21,075.81 15,760.36 15,217.70 15,455.7	Net block	20,237.55	21,075.81	15,760.36	15,217.70	15,455.74
Capital work-in-progress 7,236.96 5,686.53 6,040.79 6,355.07 4,752.8	Capital work-in-progress	7,236.96	5,686.53	6,040.79	6,355.07	4,752.80
Investments 17,708.16 16,963.32 16,987.17 18,458.42 19,934.3	Investments	17,708.16	16,963.32	16,987.17	18,458.42	19,934.39
Net current assets	Net current assets					
Current assets, loans & advances 13,353.93 12,950.34 11,131.98 9,680.36 12,041.8		13,353.93	12,950.34	11,131.98	9,680.36	12,041.84
Less : current liabilities & provisions 18,665.84 19,159.21 14,999.61 16,042.24 18,781.2		18,665.84	19,159.21	14,999.61	16,042.24	18,781.24

	Mar ' 17	Mar ' 16	Mar ' 15	Mar ' 14	Mar ' 13
Total net current assets	-5,311.91	-6,208.87	-3,867.63	-6,361.88	-6,739.40
Miscellaneous expenses not written	-	-	-	-	-
Total	39,870.76	37,516.79	34,920.69	33,669.31	33,403.53
Notes:					
Book value of unquoted investments	2,711.11	2,056.03	16,633.67	18,104.92	19,580.89
Market value of quoted investments	218.18	144.34	275.36	253.07	204.82
Contingent liabilities	4,438.92	3,931.64	9,882.65	13,036.73	14,981.11
Number of equity shares outstanding (Lacs)	33958.51	33956.80	32186.80	32186.80	31901.16

Profit loss account (rs crore)

	Mar ' 17	Mar ' 16	Mar ' 15	Mar ' 14	Mar ' 13
Income					
Operating income	44,364.00	42,845.47	36,294.74	34,288.11	44,765.72
Expenses					
Material consumed	31,928.03	29,628.79	27,489.01	26,412.31	33,620.80
Manufacturing expenses	894.51	849.04	833.35	820.83	910.42
Personnel expenses	3,558.52	3,188.97	3,091.46	2,877.69	2,837.00
Selling expenses	848.36	670.01	-	-	-
Adminstrative expenses	5,888.39	5,562.10	6,118.40	5,088.43	5,679.52
Expenses capitalised	-	-	-	-	-
Cost of sales	43,117.81	39,898.91	37,532.22	35,199.26	43,047.74
Operating profit	1,246.19	2,946.56	-1,237.48	-911.15	1,717.98
Other recurring income	978.84	1,402.31	1,881.41	3,833.03	2,088.20
Adjusted PBDIT	2,225.03	4,348.87	643.93	2,921.88	3,806.18
Financial expenses	1,590.15	1,592.00	1,611.68	1,337.52	1,387.76
Depreciation	2,969.39	2,329.22	2,603.22	2,070.30	1,817.62
Other write offs	-	-	-	-	-
Adjusted PBT	-2,334.51	427.65	-3,570.97	-485.94	600.80
Tax charges	59.22	-4.80	764.23	-1,360.32	-126.88
Adjusted PAT	-2,393.73	432.45	-4,335.20	874.38	727.68
Non recurring items	-79.87	-481.17	-403.75	-539.86	-425.87
Other non cash adjustments	-	-	-	-	-
Reported net profit	-2,473.60	-48.72	-4,738.95	334.52	301.81
Earnigs before appropriation	-50.95	1,685.91	-3,761.36	1,677.31	1,965.72
Equity dividend	49.00	-	-	555.16	566.17

	Mar ' 17	Mar ' 16	Mar ' 15	Mar ' 14	Mar ' 13
Preference dividend	-	-	-	-	-
Dividend tax	12.00	-	-	93.40	79.03
Retained earnings	-111.95	1,685.91	-3,761.36	1,028.75	1,320.52