Project Dissertation Report on

CAPITAL STRUCTURE ANALYSIS OF AUTOMOBILE INDUSTRY

Submitted By:

Anshul Gupta

2K16/MBA/07

Under the guidance of:

Dr. G. C. Maheshwari

Professor

DELHI SCHOOL OF MANAGEMENT

Delhi Technological University

Bawana Road Delhi 110042

CERTIFICATE FROM THE INSTITUTE

This is to certify that the Project Report titled **CAPITAL STRUCTURE ANALYSIS OF AUTOMOBILE INDUSTRY**, is a bonafide work carried out by **Mr. Anshul Gupta** of MBA 2016-18 and submitted to Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 in partial fulfillment of the requirement for the award of the Degree of Masters of Business Administration.

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                                                      Head of the Department (DSM)

Place: Seal

Date: Head of the Department (DSM)

DECLARATION

I, **Anshul Gupta**, student of MBA Batch 2016-18 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 declare that Project Report on **CAPITAL STRUCTURE ANALYSIS OF AUTOMOBILE INDUSTRY** submitted in partial fulfilment of Degree of Masters of Business Administration, is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge. This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship.

Anshul Gupta

(2K16/MBA/07)

Place: New Delhi

Date:

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CAPITAL STRUCTURE ANALYSIS OF AUTOMOBILE INDUSTRY ABSTRACT

Capital structure is one of the most complex areas of financial decision making due to inter relationship with other financial decision variables. In finance, the capital structure is the most debatable topic and continues to keep researchers pondering. A good capital structure helps to gain attractive profit, and the absence of a proper capital structure affect the debt position as well as the leverage which leads to great financial risk.

The decision becomes even more difficult, in times when the economic environment in which the company operates presents a high degree of instability. Therefore, the choice among the ideal proportion of debt and equity can affect the value of the company, as much as the return rates can. This study analyses how far the capital structure affects the Profitability of corporate firms in India.

The study tries to establish the relationship as to how far the capital structure affect the business revenue of firms and what the interrelationship is between capital structure and Profitability. This study is arrived out after categorizing the selected companies of Automobile Industry in India. Ratios analysis has been done to show the profitability state of the selected automobile companies in past five years. Also market capitalization of the companies has been calculated to show the comparison between the companies. Share holding pattern has been analyzed to know from where the company is getting capital from and also fluctuations in the debt have been analyzed. Correlation and Regression Analysis in addition the ratios has been used. The study proves that whether there is a strong one-to-one relationship between Capital Structure variables and Profitability variables.

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1. INTRODUCTION

1.1 Concept of Capital Structure

Capital structure is the blend of debt and equity securities that are utilized to support organizations resources. It is characterized as having a long lasting effect and debt, preferential share, and equity used to support a firm. Monetary structure is at times utilized as synonymous with capital structure. Notwithstanding, budgetary structure is more exhaustive as it alludes to, in total; the measure of aggregate current liabilities, long term debt, preferential stock, and basic equity used to fund a firm. Along these lines, capital structure is just a piece of money related structure, which alludes fundamentally to the lasting wellsprings of the company's financing.

Capital structure can be characterized as the blend of association's capital with debt and equity and it has been a standout amongst the most contentious subjects in corporate fund, since the extraordinary investigation of Modigliani and Miller in 1958. Numerous speculations have been produced in support for inspecting the determinants of capital structure and these hypotheses concentrate on distinguishing the critical determinants which are probably going to have a noteworthy part in the use choice.

Past reviews have demonstrated that various components influence company's capital structure decision, for example, substantial quality, obligations, measure, profitability, development, non-debt tax shield, instability and so on. In their renowned work, Harris and Raviv (1991) condense that use increments with settled resources, non-commitment force shield, theory openings and firm size and decay with eccentrics of salary, advancing exploitation, the probability of liquidation, advantage and uniqueness of the thing. Be that as it may, the connection between the variables and capital structure is not reliable. Numerous scientists have investigated the determinants of capital structure from various purposes of perspectives and in various conditions identified with created and creating economies. It is still faced off regarding what are the huge determinants of capital structure and how they affect capital structure choice, despite the fact that different reviews have been directed on the important subject. In this part, analyst means to toss light on various factors, approach and discoveries of exact reviews directed on this subject. The present part has been sorted out into three areas. In the primary area, analyst expects to audit past experimental reviews on determinants of capital structure,

the second segment incorporates the survey of studies building up relations of capital structure with cost of capital, income per share and market estimation of firm; and segment three introduces the synopsis of audits led.

Capital structure analysis is an occasional assessment of all parts of the debt and equity financing utilized by a business. The purpose of the analysis is to assess what mix of debt and equity the business ought to have. This mix shifts after some time in light of the expenses of debt and equity and the risks to which a business is subjected. The analysis might be on a frequently scheduled basis, or it could be activated by one of the accompanying occasions:

- The upcoming development of a debt instrument, which may should be paid off or replaced.
- The need to discover financing for the obtaining of a settled resource
- The need to finance an acquisition
- A request by a key financial specialist to have the business buys back shares
- A request by financial specialists for a bigger dividend
- A normal change in the market interest rate

Elements Determining Capital Structure

The primary factors that influence a company's capital-structure decision are:

Trading on Equity

It indicates the responsibility for organization. Exchanging on equity implies exploiting equity share money to acquired supports on sensible premise. It alludes to extra benefits that equity shareholders win on account of issuance of debentures and inclination offers. It depends on the possibility that if the rate of profit on inclination capital and the rate of enthusiasm on acquired capital is lower than the general rate of organization's income, equity shareholders are at preferred standpoint which implies an organization ought to go for a reasonable mix of inclination shares, equity shares and additionally debentures. Exchanging on equity turns out to be more critical when desires of shareholders are high.

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Degree of control

In an organization, the chiefs are alleged chosen delegates of equity shareholders. These individuals have most extreme voting rights in a worry when contrasted with the inclination shareholders and debenture holders. Inclination shareholders have sensibly less voting rights while debenture holders have no voting rights. On the off chance that the organization's administration strategies are with the end goal that they need to hold their voting rights in their grasp, the capital structure comprises of debenture holders and credits as opposed to equity offers.

Flexibility of monetary arrangement

In an endeavor, the capital structure ought to be with the end goal that there is both constrictions and unwinding in arrangements. Debentures and advances can be discounted back as the time requires. While equity capital can't be discounted anytime which gives inflexibility to plans. Keeping in mind the end goal to make the capital structure conceivable, the organization ought to go for flexibility in arranging money.

Choice of speculators

The organization's approach by and large is to have diverse classes of financial specialists for securities. Subsequently, a capital structure ought to give enough decision to all sorts of speculators to contribute. Strong and bold financial specialists for the most part go for equity shares and credits and debentures are by and large raised keeping into mind cognizant speculators.

Capital economic condition

In the lifetime of the organization, the market cost of the shares has an essential impact. Amid the misery time frame, the organization's capital structure by and large comprises of debentures and advances. While in time of shelters and swelling, the organization's capital ought to comprise of share capital for the most part equity offers.

Period of financing

When organization needs to rise back for brief period; it goes for credits from banks and different establishments; while for long stretch it goes for issue of shares and debentures.

Cost of financing

In a capital structure, the organization needs to look to the element of cost when securities are raised. It is seen that debentures at the season of benefit procuring of organization turn out to be a less expensive wellspring of fund when contrasted with equity offers where equity shareholders request an additional partake in benefits.

Stability of offers

A set up business which has a developing business sector and high deals turnover, the organization is in position to meet settled duties. Enthusiasm on debentures must be paid paying little respect to benefit. Hence, when deals are high, consequently the benefits are high and organization is in better position to meet such settled responsibilities like enthusiasm on debentures and profits on inclination offers. In the event that organization is having temperamental deals, then the organization is not in position to meet settled commitments. Along these lines, equity capital turns out to be protected in such cases.

Sizes of an organization

Small size business firm's capital structure by and large comprises of credits from banks and held benefits. While then again, enormous organizations having goodwill, strength and a built up benefit can without much of a stretch go for issuance of shares and debentures and additionally advances and borrowings from money related establishments. The greater the size, the more extensive is added up to capitalization.

1.2 Industry Profile

Beginning its voyage from the day when the primary auto moved in the city of Mumbai in 1898, the Indian vehicle industry has shown an incredible development right up 'til today. Today, the Indian vehicle industry displays a world of assortments and models meeting every single conceivable desire and all-inclusive built up industry principles. A portion of the main names reverberating in the Indian car industry incorporate Maruti Suzuki, Tata Motors, Mahindra and Mahindra, Hyundai Motors, Hero MotoCorp and Hindustan Motors notwithstanding various others.

Amid the early phases of its advancement, Indian vehicle industry intensely relied on upon remote advances. In any case, throughout the years, the makers in India have

begun utilizing their own innovation advanced in the local soil. The flourishing commercial center in the nation has pulled in various car producers including a portion of the rumored worldwide pioneers to set their foot in the dirt anticipating to improve their profile and prospects higher than ever. Taking after an impermanent mishap because of the worldwide monetary subsidence, the Indian vehicle showcase has by and by grabbed a wonderful force seeing a light deal without precedent for its history in the time of 2018.

After the financial downturn and troublesome economic situations in the vehicle division all inclusive in 2008-09, amid the year, economies over the world (with a couple of exemptions) hinted at recuperation and development. The Indian economy bobbed back rapidly and firmly developing at 7.2% in 2010. The industry produced a total 14.25 million vehicles including PVs, commercial vehicles, three wheelers and two-wheeler in April to October 2015, as compared to 13.83 million in April to October 2014, registering a additional growth of 3.07 per cent, year-to-year. The car division in India began the year consistently, assembled force in various portions in the second half of the year and finished the year with a record development and execution.

The automobile industry of India is the seventh biggest on the planet. It contributes 7.2% in the GDP of the country. The nation is the biggest maker of cruisers and the fifth biggest maker of business vehicles. Industry specialists have pictured a staggeringly colossal increment in these figures over the prompt future. The Government of India aims to make automobile developing the main driver of "Make in India" initiative, as it expect the passenger vehicles market to triple to 10 million units by 2026, as highlighted in Auto Mission Plan (AMP) 2016-26. Made in India project has brand perception challenge and could be conquered only by providing value added products and services such as improved safety features, technological enhancements, and quality management. In the year 2016, India rose to be the fourth biggest exporter of autos taking after Japan, South Korea and Thailand. Specialists express that in the year 2050, India will best the auto volumes of the considerable number of countries of the world with around 611 million autos running on its streets.

1.3 Profile of the Selected Automobile Companies

Maruti Suzuki India Limited

Maruti Suzuki India Limited is a passenger car company. The organization is performing the business of assembling, manufacturing, buy and sell of motor vehicles and spare parts. The alternate activities of the organization include facilitation of pre-owned auto sales, fleet management and auto financing. The organization is a subsidiary of Suzuki Motor Corporation, Japan. The organization has a portfolio of 13 brands and more than 150 variations.

Mahindra & Mahindra Limited

Mahindra & Mahindra Limited is the main company of the Mahindra Group, a multinational company based in Mumbai, India.

Mahindra & Mahindra is a noteworthy car maker of utility vehicles, traveller autos, pickups, business vehicles, and bikes. Its tractors are sold on six mainland's has obtained plants in China and the United Kingdom, and has three get together plants in the USA. M&M has organizations with worldwide organizations like Renault SA, France and International Truck and Engine Corporation, USA.

Tata Motors Limited

Tata Motors Ltd is a multinational car corporation headquartered in Mumbai, India. The Company keeps on being among the main three players in the traveller vehicle advertise which has more than 25 players. Tata Motors has items in the compact, fair size auto and utility vehicle fragments. The organization is the world's fourth biggest truck producer, the world's second biggest transport maker, and utilizes 24,000 labourers.

Hero MotoCorp Limited

Hero Motocorp Ltd., (previously called Hero Honda), is an Indian bike (<250cc) and bike maker situated in New Delhi, India. The organization is the biggest bike maker in India where it has a market share of around 46% in the two-wheeler classification. The 2006 Forbes rundown of the 200 World's Most Respected Companies has Hero MotoCorp positioned at 108. In 2001, the organization accomplished the desired position of being the biggest bike fabricating organization in India and furthermore, the

'World No.1' bike organization as far as unit volume deals in a timetable year. Legend MotoCorp Ltd. keeps on keeping up this position till date.

Hero Honda became the first company in the country to introduce four-stroke motorcycles and set the standards for fuel efficiency, pollution control and quality. It has an excellent distribution and service network spread throughout the country.

Bajaj Auto Ltd.

Bajaj Auto is a noteworthy Indian vehicle maker situated in Pune, Maharashtra. In recent decade, the organization has effectively changed its picture from a bike maker to a bike producer. Its products consist of bikes and scooters. Its genuine development in numbers has come over in the t recent four years after effective presentation of a couple models in the cruiser fragment. Its popular brands are Discover, Pulsar, Ninja, Platina and so forth. Its item portfolio involves; Scooters, Auto rickshaws, Motorcycles.

1.4 Objective of the study

The objectives of the study are:

- To know the various sources of the finance used by the selected automobile companies.
- To assess the change in proportion of debt and equity.
- To analyze and interpret the long term profitability position of the selected automobile companies.
- To assess the relationship between capital structure and profitability of the company.

2. LITERATURE REVIEW

Bevan and Danbolt (2000) broke down the progression in the capital structure of UK organizations from 1991 to 1997. They watched noteworthy changes in the relative significance of the different debt components after some time, and in addition changes in the connection amongst gearing and the level of development opportunities, organization size, benefit and substantial quality. The aftereffects of study recommend that the nature of the credit advertise in the UK has changed fundamentally amid the 1990s, with substantial organizations utilizing less bank support and banks progressively loaning to smaller firms. In the meantime, bank debt seems to have turned out to be all the more firmly identified with corporate profitability and guarantee equity.

Pandey (2000) investigated the 221 Thai manufacturing firms for the time of 1990-95 to discover the financing pattern of these organizations amid the time of nation's budgetary advancement and monetary achievement. The aftereffects of the review demonstrates that the Thai assembling firms have been financing the greater part of their aggregate assets through study period and share of long term debt to short term debt has gone down 24 percent. The aftereffect of the review uncovers a positive connection amongst debt and tangible assets, debt and development, debt and size in a large portion of the manufacturing firms of Thailand while a negative relationship is found amongst debt and profit, debt and interest coverage and debt and company's uniqueness. It is further revealed through CFO's study that Thai chiefs want to fund their assets by retained profit and straight debt and after that if required outside normal equity is utilized if all else fails.

Lind (2001) researched on the capital structure of non-listed firms in Sweden over the period from 1997 to 1999 and afterward, contrasts the outcomes and listed firms. The review has connected Pooled regression and Fixed effect model and found various contrasts in the capital structure of listed and unimportant to both listed and unlisted firms. Development alternatives are additionally a noteworthy determinant of capital structure decision for both listed and unlisted firms.

Pandey (2001) analyzed the determinants of capital structure of Malaysian organizations using information from 1984 to 1999. The consequences of pooled OLS regressions demonstrate that profitability, measure, development, risk and substantial quality factors have huge impact on a wide range of debt. These outcomes are regularly

predictable with the aftereffects of settled impact estimation with the special case that risk variable loses its importance. Investment opportunity has no critical effect on debt strategy in the developing business sector of Malaysia. Profitability has a determined and reliable negative association with a wide range of debt ratios in all periods and under all estimation techniques. This affirms the capital structure forecast of the Pecking Order theory in a rising capital market.

Bevan and Danbolt (2002) inspected the capital structure and its determinants from three particular points of view of 822 listed UK firms over a time of four years from 1987 to 1991 utilizing mean, median, multiple regression and t-test. It is contended in the review that investigation of capital structure is inadequate without a deep examination of various types of corporate debt. The review found that gearing is emphatically corresponded with tangibility and sale while adversely connected with market to book ratio and profitability in a critical way. In a deterioration investigation, it has been watched that long-term debt segment is contrarily corresponded with tangibility while the long term debt segment shows the positive correlation. It is further watched that size has critical negative correlation with all fleeting bank borrowings and positive correlation with all long term debt structures and short term paper debt. It was found that organizations with abnormal state of development opportunity have larger amounts of debt than their partners with lower market to book ratio. The specialist has watched that the fitting measure of gearing relies on upon the motivation behind investigation.

Garg and Shekhar (2002) broke down the debt structure of four extensive scale manufacturing enterprises from Indian corporate segment (viz. cotton, chemical and pharmaceutical, designing and cement industry) over a time of ten years and endeavor to underline the determinants of capital structure. The review uncovers that asset arrangement, security estimation of the assets, life of the organization and the corporate size were most noteworthy considers determining the capital structure of Indian firms and business risk has no significance in choosing the leverage of the organizations.

Bevan &Dan bolt (2000) analyzed the dynamics in the Capital Structure of 1054 listed non-financial UK companies from 1991 to 1997 using a Panel data set. Their study was unique as they used a variety of short term and long term components (sub components of debt, individual components of debt rather than aggregate components) for the

analysis. All gearing measures are scaled down by book equity of total assets. Growth opportunities, size, profitability and tangibility were selected as explanatory variables. They also tried to study the change in the influence of the various Capital Structure determinants over time. Using fixed effect panel model with interactive dummies (regressions), Ordinary Least square Regressions and Cross sectional Regressions, it was found out that companies with high level of growth opportunities tended to employ long term & short term debt, but changed to equity finance from debt over the sample period. Larger companies employed long term debt and smaller companies short term debt. Tangibility was positively related to long term debt and negatively related to short term debt. Their results suggested that the nature of credit market in the UK had notably changed during the sample period with large companies using less bank finance and banks increasingly lending to smaller firms.

Minton and Wruck (2001) contend that preservationist firms have similarly high cost to book proportions and work relatively regularly in ventures to be receptive to efficient misery. They trust the previous characteristic is cognizant with an expansive group of prior process reporting an inverse connection between cost to book esteem and use. Careful company's solid assets stream, clear lack of genuine information issues and tremendous money parities will propose that organizations' high cost to book proportions are all the more most likely as a result of market expectations of proceeded with solid income, rather than new innovations or items finding.

Morellec (2001) investigates the impact that benefit liquidity has on the securities esteem and company's money related deciding. He showed that an expansion in resource liquidity of the firm when it is measured by liquidation of the association's advantages lessens the corporate spread and raise ideal use. Resource liquidity when it is computed by offering cost of the association's benefit, since the foundation of the firm, diminishes corporate debt esteem opening the space of the technique to the borrower.

Huang and Song (2002) incorporate bookkeeping data and the market from more than 1000 recorded firms in the Chinese market up to the year 2000 so as to gather their data of these organizations to investigate capital structure. Like different nations in use additionally emerges with firm size, and lessens with gainfulness and has cooperation with ventures in China. One thing that they find is not quite the same as different nations is that in Chinese firms unpredictability raises use and firms expect to diminish long

haul debt. They likewise find to clarify the elements of Chinese firms' capital structure, it is ideal to utilize static tradeoff hypothesis as opposed to pecking request hypothesis.

Rao and Jijo (2002) propose that organizations with high hazard or firms that have high likelihood to default ought not to be tremendously levered. They utilize standard deviation of association's income for five year time frame for the "pre progression" and "post advancement" period as intermediary for the firm business chance and money related misery likelihood. They contend that use and business hazard is contrarily related.

Gaud et al. (2003) break down the capital structure determinants for 106 recorded firms on the Swiss stock trade. They do their examination amid 1991-200. They locate that firm size, its unmistakable resources and business hazard have positive association with use. Additionally they finish up development and productivity has negative association with use. These relations recommend that both tradeoff hypothesis and pecking request hypothesis are utilized to portray the Swiss firms' capital structure, disregarding the way that "more proof exists to approve the later hypothesis".

Chen and Hammes (2004) examine a few determinants which are affecting influence. They utilize proportions of market capital, book capital and book debt as measures of use. They utilize board information of seven nations: Germany, Sweden, Canada, US, UK, Italy and Denmark. They found that advantage substantial quality has positive connection with use, while productivity is contrarily identified with use in every one of these nations. More beneficial firms watch over obtaining less. They trust firm size is altogether and emphatically identified with company's budgetary use. They presume that the effect of the cost to book proportion vacillate when book use is utilized and show a negative and noteworthy relationship when market use is utilized for all nations with the exception of Denmark, which exhibits an unimportant esteem. They contend that every one of their archives and finding are predictable with the outcomes from related monetary speculations like pecking request hypothesis and exchange off hypothesis, for instance unsafe firms obtain less.

Shah and Hijazi(2004) made an attempt to find out the possible determinants of capital structure of Pakistani listed firms. The study used data from 445 firms in non-financial sector for the period of 1997-2001. By using panel data regression analysis, the study found that tangibility is positively correlated with debt but the relationship is not

statistically significant. The results of the study disclose positive relation between size and leverage which indicates that large firms will employ more debt. The growth and profitability have negative relation with leverage, thus, supporting the Pecking Order theory. The study reveals that size, growth and profitability have statistically significant relationship with leverage.

Kurshev and Strebulaev (2005) exactly found that firm size is emphatically decidedly is identified with capital structure. Numerous delicate clarifications can be brought for this reality, yet none of them has been thoroughly considered hypothetically. They attempt in their paper to begin overcoming any issues by investigating capacity of a dynamic capital structure model to clarify the connection between firm size and use. They discover four sorts of organization size effect on use. Little firms will pick larger amount of debt at the season of renegotiating to pay back for lower customary rebalancing. The connection amongst use and firm size inside a renegotiating cycle is negative. Finally, there are many firms which pick no use. They investigated a dynamic economy to demonstrate that cross sectional connection amongst use and size is certain, accordingly financing settled cost cause to the portrayal of the adapted use and firm size connection. Be that as it may, when they control the presence of unlevered firms, this relationship changes the sign.

Högfeldt and Oborenko (2005) trust that higher gainfulness which is profit for resources and higher current M/B which is postponed one period are contrarily identified with use, essentially on market use, similar to value has a great deal more esteem.

Duffie et al. (2005) report in their exploration that a 10 percent expansion in estimation of the advantage will bring about a diminishment in the default likelihood of firm by around 2 percent restrictive on an association's budgetary plans.

Chen and Zhao (2005) look for monetary clarifications to two test regularities. As a matter of first importance, it is evident that organizations with high benefit have a tendency to have brought down debt levels. Some new hypothetical advancement has utilized two unique components like exchange expenses or element impose installments to portray this wonder. They exhibit that even subsequent to controlling these variables, the marvel will generally remain. Furthermore, with both experimental and hypothetical depictions, they show that use level can elude mean physically paying little respect to

which hypothesis is clarifying monetary choices well. Firms with higher productivity increment bring down level of debt since they have enough and more internal assets to rely on. They trust the negative connection between use proportions and gainfulness recommends that assessment shields are in second level of concerns. Some new extensions of the tradeoff speculation to a multi period, dynamic structure have inverse impacts that if connection amongst use and benefit is negative, it will be really cognizant with the tradeoff theory.

Liu (2005) accepts there is no altogether negative connection between the present debt level and different intermediaries of market timing: "the authentic insider offering rate". This conclusion surmises that the cost to book proportion has a negative association with the present use for the reasons other than market timing.

Chen and Zhao (2006) trust that the connection between the cost to book proportion and use is negative and a standout amongst the most incredibly archived exploratory regularities in the use and capital structure history. Some related reviews utilize this negative relationship as given and contend about its monetary clarification. They show that organizations with higher cost to-book proportions will have less debt financing expenses and utilize all the more getting. They contend in their examination that the connection between the cost to book proportion and use level is not monotonic and for a large portion of the organizations is certain (as they discover, more than 95 percent of aggregate market capitalization and more than 88 percent of COMPUSTAT firms). The aforesaid demonstrated negative relationship is coordinated by a subset of firms with high cost to-book proportions.

Numerous hypotheses in back say that structure of capital has affected on estimation of the organizations. This expectation proposes that any adjustment in use affects stock return. Numerous writings in fund field have been centered on the capital structure determinants. Cai and Zhang (2006) utilize an example of U.S. recorded firms amid 1975 and 2002 and they presume that an essentially negative effect of debt level changes on standard deviation of stock returns. This negative influence remains noteworthy subsequent to including different determinants like ROE; cost to book proportion, firm size and past comes back to the investigation. They utilize and actualize numerous speculations and hypotheses to depict the watched impact. They presume that organizations with more elevated amounts of use have more grounded negative impact.

This is sound with an expectation of the pecking request hypothesis where an expansion in use level will bring about a lessening paying off debtors limit of firms and will bring about absence of interest later on. More examinations affirm this negative connection between use changes and interest in future.

Kasbi (2007) looks at the impact of market timing and cost to book proportion on capital structure in her review. She utilizes a decay of determinants of cost to book proportion into misevaluation and development openings, which is created in the review by Rhodes-Kropf et al. (2005). She shows that this negative connection between the verifiable cost to book proportion and use, which is contended in Baker and Wurgler (2002) sends back the consistent impact of past planning endeavors and along these lines, may not be ascribed to development openings.

Antoniou et al. (2007) examine how firms perform in nations with capital market propensity economy like the U.K. what's more, U.S. what's more, nations with bank inclination economy like France, Germany and Japan, to decide their capital structure. They utilize board information and a technique of two-stage framework to find that the connection amongst use and resource substantial quality and firm size is sure, yet its association with gainfulness, development openings and execution of share cost in both economy sorts is negative. The market conditions, in which the firm works, influence the use proportion. Nation's law and money related conventions are two primary variables that have affect on degree and adequacy of capital structure determinants. The outcomes that they find affirm that organizations have target use proportions, French firms are the speediest in receiving their capital structure near their objective that they have for use proportion, and Japanese firms are the slowest in changing in accordance with the use proportion target.

Sibilkov (2007) checks distinctive hypotheses about the effect of benefit liquidity on use. A gathering of information from a wide specimen of U.S. recorded firms is utilized and she finds that use proportion has a positive association with resource liquidity. Additionally investigate demonstrates that advantage liquidity and secured debt are emphatically related, because of the fact that benefit liquidity and unsecured debt is curvilinear. He finds in his review that money related pain and wasteful liquidation are critical in this connection and they have affect on choices of capital structure. What's more, his outcomes are intelligent with this speculation that expansion in resource

liquidity will raise administrative carefulness costs. The method of reasoning for a positive connection between resource liquidity and use inclines toward the supposition that benefit with lower liquidity will offer at higher costs, which raises the liquidation costs, debt level and likelihood of chapter 11. Additionally, less resource liquidity makes the need to diminish the exorbitant default likelihood by lessening influence. The method of reasoning for a negative connection between resource liquidity and use claim is that it is all the more exorbitant for executives to take away an incentive from account holders. In this manner, less resource liquidity diminishes the debt cost, thus as a conclusion, firm endeavor more debt.

Westward et al. (2007) address the hypothetical substructures of default likelihood. They utilize the capital structure neoclassical hypothesis as a starting point. An example of ideal capital structure is made and revamped into a default likelihood design. The relative static investigations exhibit that ideal capital structure and default likelihood are business hazard variables which are U formed, and they are computed by instability. This outcome is in correlation with many articles which expect a connection between capital structure and business hazard is direct and negative and the connection between default likelihood and business hazard is straight and positive. The rest relative statics exhibit genuine discoveries, either by looking at (capital structure) or as far as numbers (default likelihood). As it may be, the example can be an essential commitment when they contrast with the expansive amount of exploratory reviews which don't have any hypothesis and a reasonable alternative to the hypothesis which is on the establishment of choice evaluating.

Correa et al. (2007) try to inspect the theoretical components of recorded Brazilian firm's capital structure, in the method for exchange off hypothesis and pecking request hypothesis, examining the trial authenticity of talked speculations in the residential script. Their examination is a change of the review by Gaud et al., (2005), whose paper was utilized as an establishment of a few factors and furthermore as a base of econometric investigation guided, and it executes the system of board information. They perform dynamic tests in joining to static tests, to break down the adjustment of the capital structure through time. They dissect fluctuations to supplement tests. The discoveries demonstrate that the advantage substantial quality significance and benefit have negative impact on use, while business hazard has constructive outcome on use. They likewise contend that remote firms utilize more debt than nearby firms. They close

from the investigation and results that the pecking request hypothesis will probably clarify the recorded Brazilian firms' capital structure than exchange off hypothesis.

Mei Qiu and Bo La (2009) in their study, "The Capital Structure Difference across Australian Companies", examine the relationship between company attributes and capital structure in Australian listed companies. They analyze unbalanced group of roughly 370 companies from 92 to 2006 by using panel data regression. They conclude that relationship between debt to asset ratio and asset tangibility is positive but its relationship with business risk (calculated by unlevered equity beta) and growth prospects is negative. They also conclude that in spite of the fact that levered companies have more profitability in comparison with unlevered, profitability will reduce levered companies debt ratio. They did not find any effect from firm size on capital structure in Australian listed companies. Their findings are steady with the agency cost and pecking order theories but opposite of the tradeoff theory.

Stein Frydenberg (2011) He gave the most important arguments for what could determine capital structure is the pecking order theory and the static trade off theory. These two theories are reviewed, but neither of them provides a complete description of the situation and why some firms prefer equity and others debt under different circumstances. The paper is ended by a summary where the option price paradigm is proposed as a comprehensible model that can augment most partial arguments. The capital structure and corporate finance literature is filled with different models, but few, if any give a complete picture.

Geoffrey Peter Smith (2009) He studied in his paper, "What are the Capital Structure Determinants for Tax-Exempt Organizations?", capital structure determinants without tax encouragement. He found that the relationship between usage of debt and asset tangibility, sales growth, and firm size is positive, and its relation with company age, asset liquidity, and profitability is negative.

3. RESEARCH METHODOLOGY

3.1 Research Design

A series of advanced decisions considered together which comprises of a model or a master plan to conduct a research to meet research objectives is called a research design. Due to lack of prior knowledge of subject exploratory research is used as the research methodology.

3.2 Data collection

The research is primarily based on secondary data. The secondary data have been collected from company's annual financial statements from financial websites, research papers, books, periodicals, official directories of NSE/BSE etc.

Through this venture we are endeavoring to concentrate the capital structure of 5 of the very gainful Indian automobile companies. They are:

- Maruti Suzuki India Limited
- Tata Motors Limited
- Mahindra and Mahindra Limited
- Hero MotoCorp Limited
- Bajaj Auto Limited

The research include information regarding the market capitalization, long term debts, debt equity ratio, earning per share, profit before expense, interest coverage ratio, correlation and regression. We have likewise graphically illustrated the information.

3.3 Period of the study

The study covers a period of five years from 2012-16

3.4 Research Gap

The study concentrates on the above 5 companies because they are top 5 positioned automobile companies in terms of sales, revenue and popularity. Maruti Suzuki along with Tata motors and Mahindra and Mahindra have market share of over 70% in car category.

Bajaj Auto and Hero Motocorp together have almost 78% share in two-wheeler category.

3.5 Tools Used

Correlation and Regression analysis through Microsoft Excel

4. DATA ANALYSIS AND INTERPRETATION

4.1 Market Capitalization

Market capitalization refers to the total market value of a company's outstanding shares. Commonly referred to as "market cap," it is calculated by multiplying a company's shares outstanding by the current market price of one share. The investment community uses this figure to determine a company's size, as opposed to using sales or total asset figures.
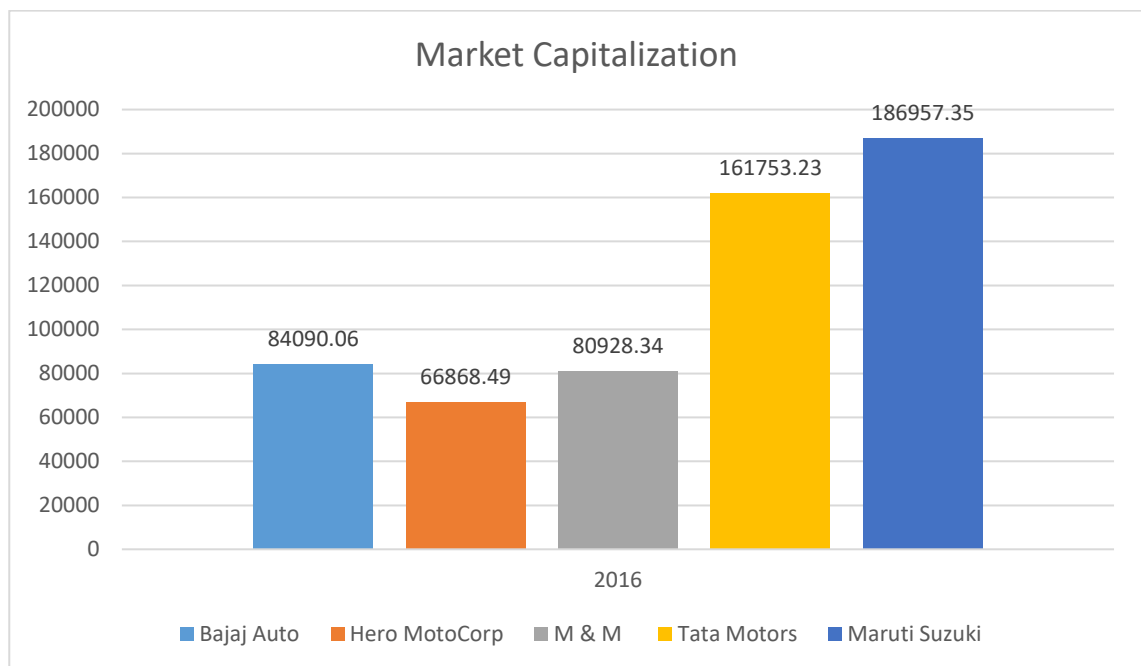
Figure 4.1 Market Capitalization (in Cr)

The Figure 4.1 depicts market capitalization for the selected automobile company Bajaj auto ltd. in 2016 stood at 84,090.06 in the year 2016, whereas Hero MotoCorp is performing at 66,868.49 crores. Likewise Mahindra & Mahindra and Tata Motors stood at 80,928.34 and 161,753.23 respectively. While Maruti Suzuki has outperformed other companies with a whopping market value at 186,957.35.

Share Holding Pattern

Shareholding pattern of a company shows how its shares are split among the entities that make up its owners. It shows how much amount of shares is hold by specific set of investors. In equity markets there are many types of investors like retail, high net worth individuals, promoters, foreign institutional investors and so on.
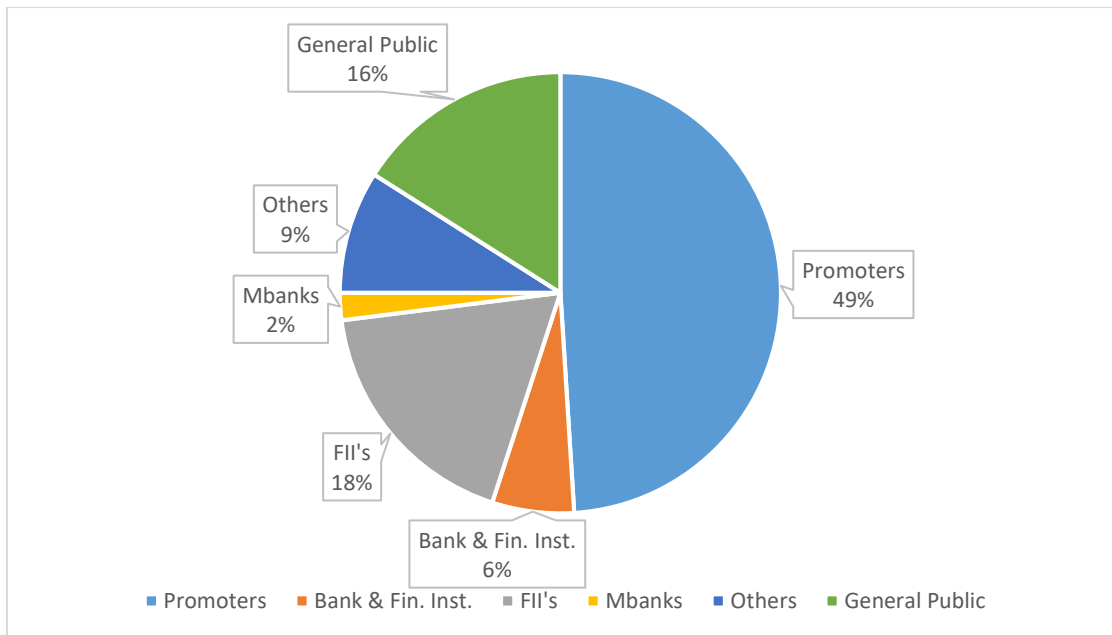
Figure 4.2 Share Holding Pattern of Bajaj Auto Ltd.

The Figure 4.2 depicts Bajaj Auto promoter holding is of 49.29 %. Large promoter holding indicates conviction and sincerity of the promoters. FII's holding in the Company stood at 25.89 % .This indicates the confidence of seasoned investors. It can likewise prompt high unpredictability in the stock cost as foundations purchase and offer bigger stakes than retail members. General public stake of 16% represents strong trust of public in the company.
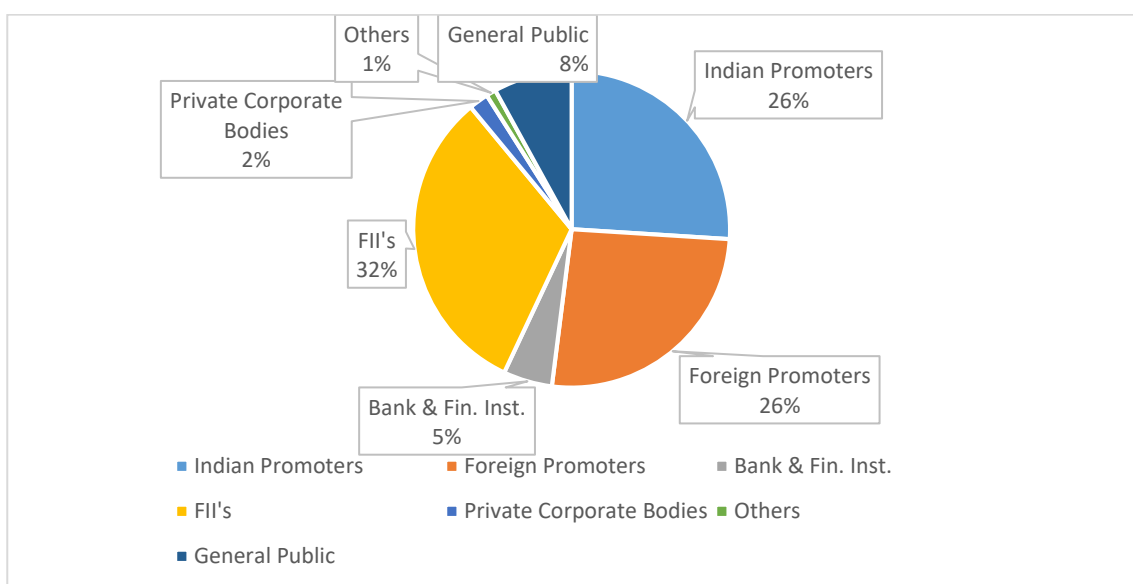
Figure 4.3 Share Holding Pattern of Hero MotoCorp

The Figure 4.3 depicts Hero Motors has Indian promoter holding of 26 % and Foreign promoters of 26%. Large promoter holding indicates conviction and sincerity of the promoters. At the same time, institutional holding in the Company stood at 52.00 % (FII). Large institutional holding indicates the assurance of investors. Also, it can also lead to high volatility in the stock price as institutions buy and sell larger stakes than retail participants.
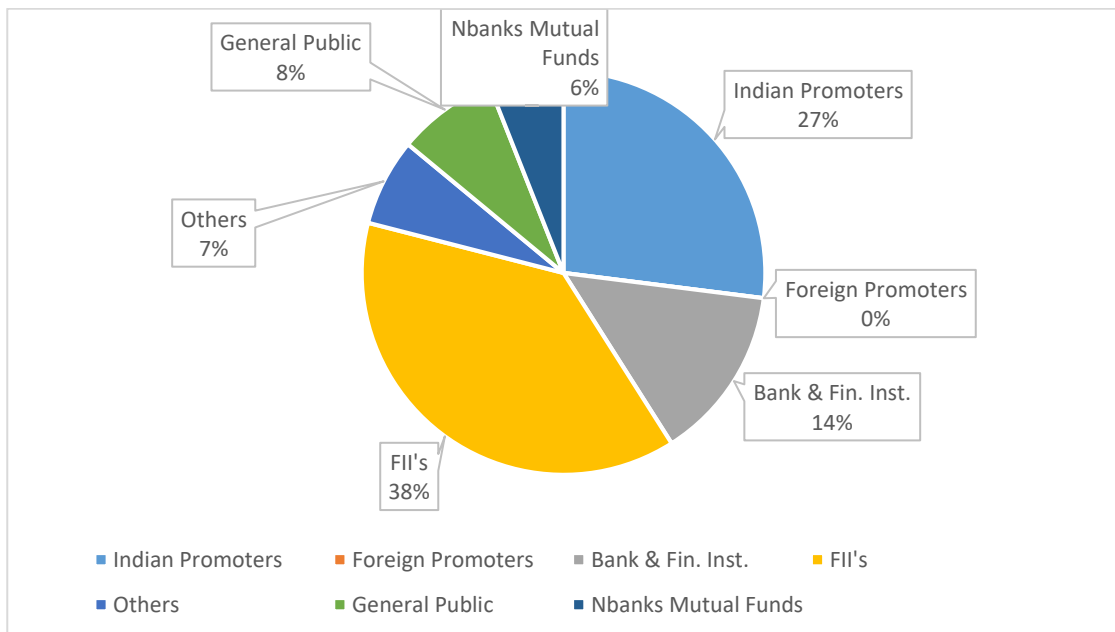
Figure 4.4 Share Holding Pattern of M&M

The Figure 4.4 depicts Mahindra & Mahindra is having Indian promoter shareholding of 27% and negligible foreign promoters which represent the lowest holding compared to rest of the companies. It has solid backing of foreign financial institutions (FIIs) i.e. 38%. LIC is the second largest bloc with a 14% stake. Other prominent institutional shareholders are ICICI Prudential Life Insurance, GIC and New India Assurance. General public hold 8% in the company.
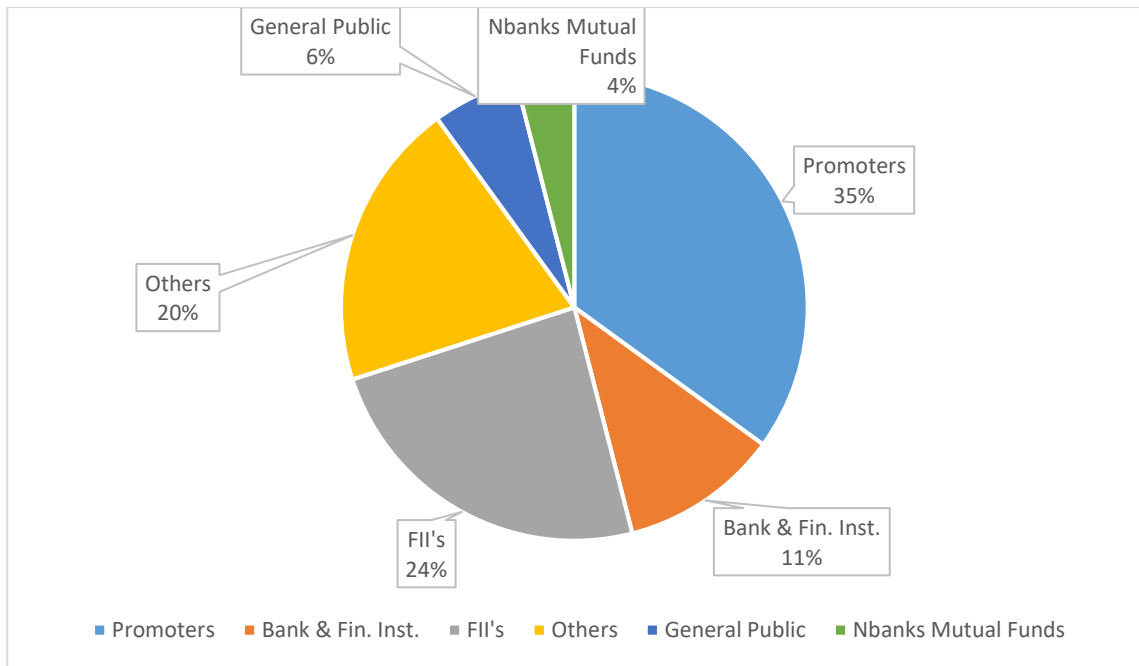
Figure 4.5 Share Holding Pattern of Tata Motors

The Figure 4.5 depicts Tata Motors have 35% stake of promoter and is 24% backed by FII. Other financial institutions along with banks and mutual funds companies hold almost 16% shareholding. General public has invested 6% in the company's stake.
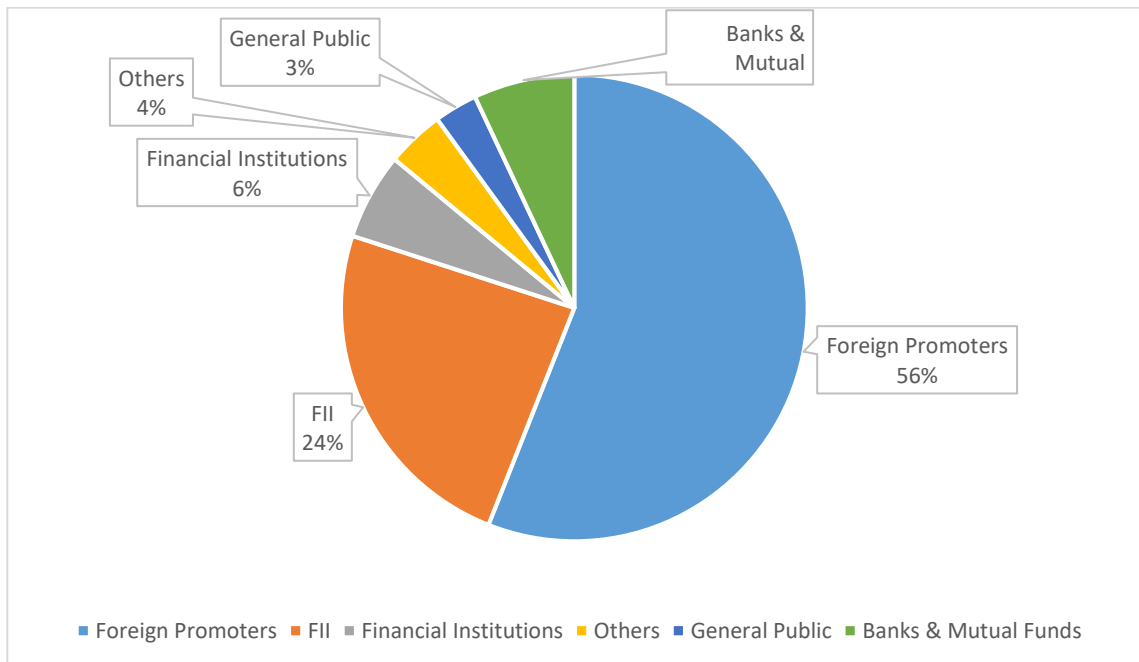
Figure 4.6 Share Holding Pattern of Maruti Suzuki

The Figure 4.6 depicts Maruti Suzuki is an owned subsidiary of Japanese automobile manufacturer Suzuki Motor Corporation, it has highest foreign promoter stake of 56%.

FII have a stake of 24% in the company and other financial institution have 6% share holding in the company.

4.2 Total Debt

Debt is an amount of money borrowed by one party from another. Debt is used by many corporations and individuals as a method of making large purchases that they could not afford under normal circumstances.

Total debt is a combination of both short-term and long-term debt. Short-term debts are those that must be paid back within a year. This type of debt applies to things like lines of credit or short-term term bonds. Long-term debt general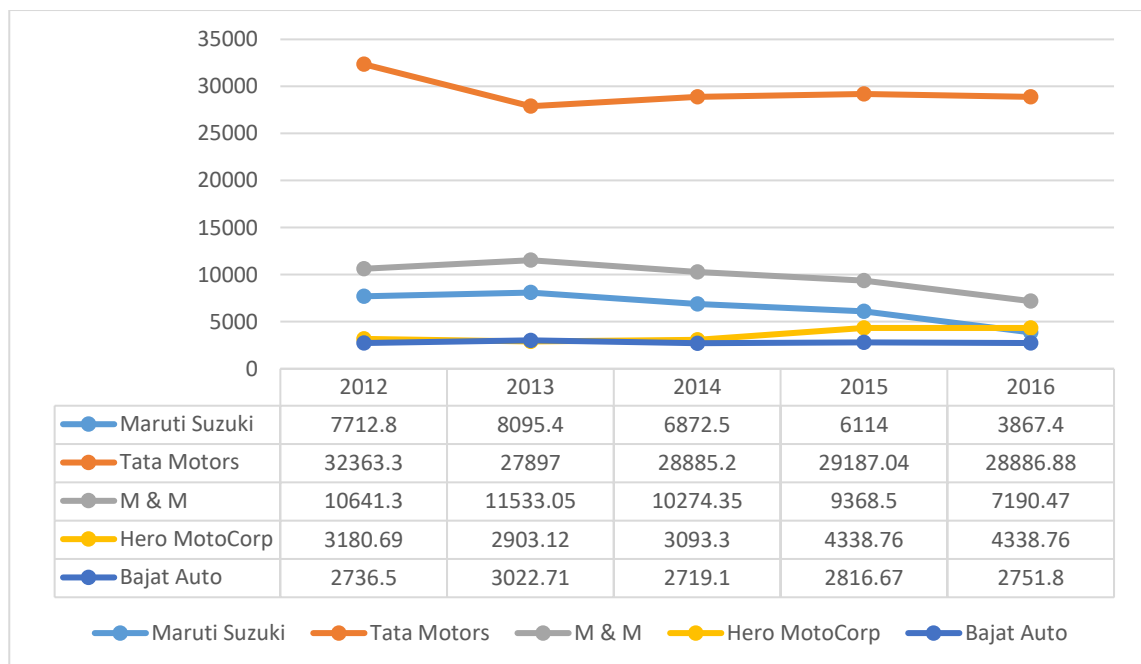ly includes every liability that must be paid off in more than a year. This typically includes large senior debts like mortgages and loans to purchase equipment or construct buildings.

	2012	2013	2014	2015	2016
Maruti Suzuki	7712.8	8095.4	6872.5	6114	3867.4
Tata Motors	32363.3	27897	28885.2	29187.04	28886.88
M & M	10641.3	11533.05	10274.35	9368.5	7190.47
Hero MotoCorp	3180.69	2903.12	3093.3	4338.76	4338.76
Bajat Auto	2736.5	3022.71	2719.1	2816.67	2751.8

Figure 4.7 Total Debt

The graph in Figure 4.7 represents the total debt of all 5 companies. Maruti Suzuki had debt of Rs.7712 crores in 2012 and is reducing year by year and has reached Rs.3867 crores in 2016. Mahindra & Mahindra have average debt of Rs. 10,000 crores every year. Bajaj Auto has average debt of Rs. 2700 crores. Hero MotoCorp also has average debt of Rs. 3200 crores. Tata motors debt averagely higher than the rest of the companies at average of Rs.30000 crores every year.

4.3 Debt Equity Ratio

The debt-to-equity ratio is a measure of the relationship between the capital contributed by creditors and the capital contributed by shareholders. It also shows the extent to which shareholders' equity can fulfill a company's obligations to creditors in the event of a liquidation.

	2012	2013	2014	2015	2016
Maruti Suzuki	0.01	0.07	0.07	0.08	0.01
Tata Motors	0.73	0.56	0.75	0.76	1.35
M & M	0.23	0.27	0.22	0.22	0.14
Hero MotoCorp	0.5	0.24	0.06	0	0
Bajat Auto	0.31	0.29	0.84	0.84	0.46
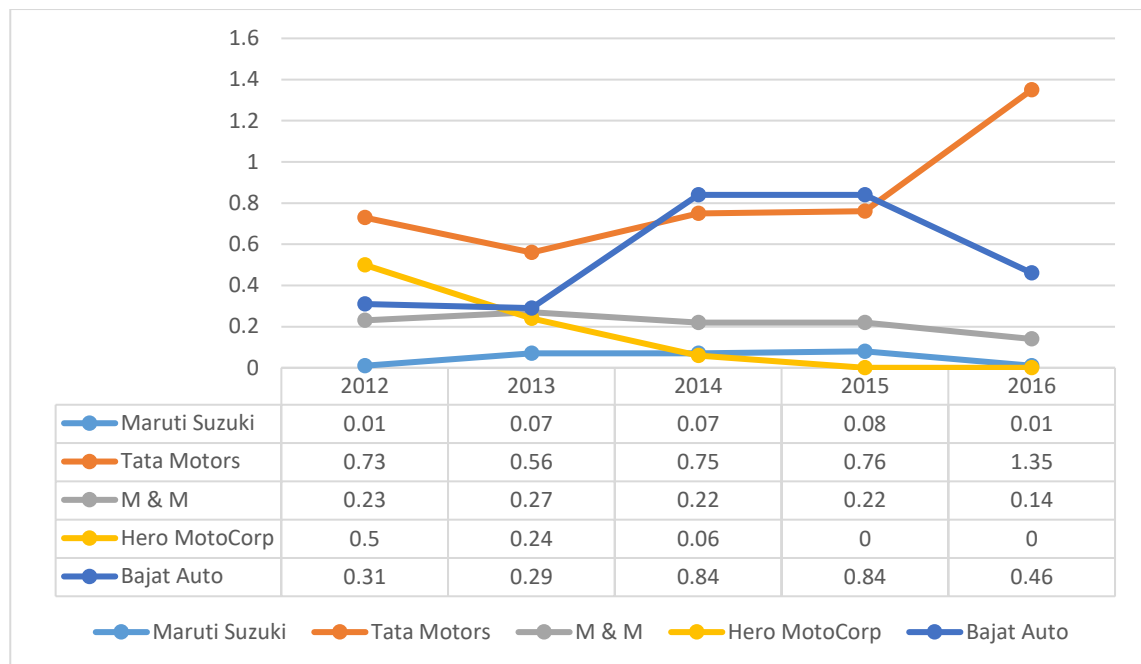
Figure 4.8 Debt Equity Ratio

The Figure 4.8 depicts that during 2012 debt to equity of Maruti Suzuki was around 0.01 which increased in following years to 0.08 but then reduced to 0.01 in 2016. Baja Auto's debt to equity was around 0.31 which increased to 0.84 but then reduced to 0.46 in 2016. Debt-toequity of Mahindra & Mahindra has reduced from 0.23 in 2012 to 0.14 in 2016. Hero Motocorp had 0.5 debts to equity ratio in 2012 which reduced to 0 in future years. Tata Motors had debts to equity ratio of 0.73 which later increased to 1.35.

4.4 Interest Coverage Ratio

A ratio used to determine how easily a company can pay interest on outstanding debt. The interest coverage ratio is calculated by dividing a company's earnings before interest and taxes (EBIT) of one period by the company's interest expenses of the same period.
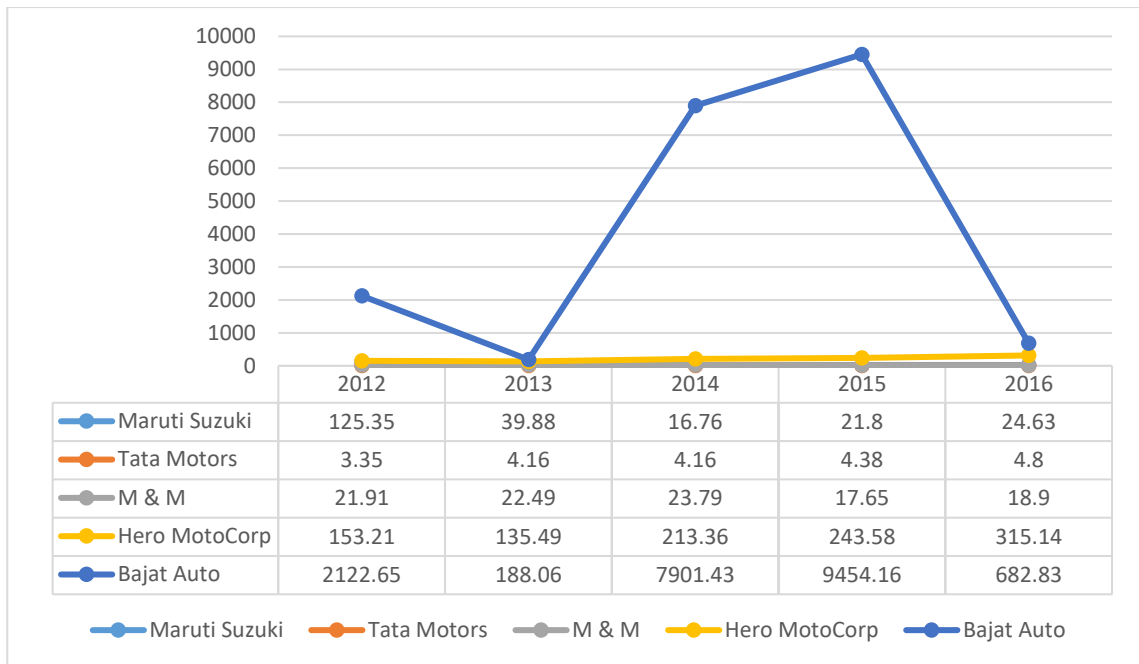
Figure 4.9 Interest Coverage Ratio

The Figure 4.9 depicts that Interest coverage ratio of Maruti Suzuki has reduced from 125 in 2012 to 24 in 2016. Bajaj Auto's interest coverage ratio has reduced rapidly from 2,122 in 2012 to 683 in 2016. Mahindra and Mahindra have interest coverage ratio of 22 and has reduced to 18.9 in 2016. Tata Motors, ICR was on average 4. Hero Motocorp interest coverage ratio was increasing during these years from 153 in 2012 to 315 in 2016.

4.5 Earnings per Share

The term earnings per share (EPS) represents the portion of a company's earnings, net of taxes and preferred stock dividends, that is allocated to each share of common stock. The figure can be calculated simply by dividing net income earned in a given reporting period (usually quarterly or annually) by the total number of shares outstanding during the same term.

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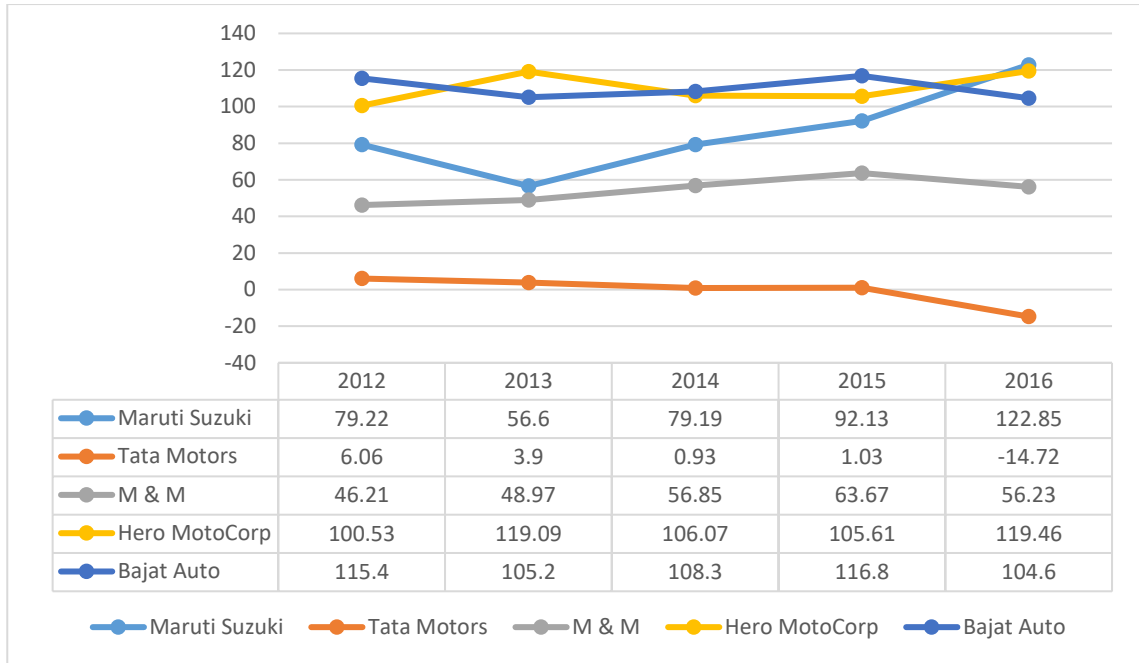
Figure 4.10 Earnings Per Share

The Figure 4.10 depicts that Maruti Suzuki's EPS is currently Rs. 122.85 which was previously Rs. 79 in 2012. The EPS of M&M for current year is 56.23 as compared to 46.21 of 2012. EPS of Tata Motors has reduced tremendously from Rs.6 in 2012 to Rs. -14.72 in 2016. EPs of Bajaj Auto and Hero Motocorp are averagely Rs. 110.

4.6 Profit before Interest and Tax Margin

Profits before interest and taxes (EBIT), is a measure of a firm's profit that includes all expenses except interest and income tax expenses. It is the difference between operating revenues and operating expenses. When a firm does not have non-operating income, then operating income is sometimes used as a synonym for EBIT and operating profit.

	2012	2013	2014	2015	2016
Maruti Suzuki	8.55	6.18	7.29	8.77	10.15
Tata Motors	7.82	5.79	4.42	2.48	-5.39
M & M	14.81	11.49	11.24	11.29	10.39
Hero MotoCorp	10.43	10.63	8.86	9.45	10.69
Bajat Auto	22.1	21.41	21.33	22.99	20.5
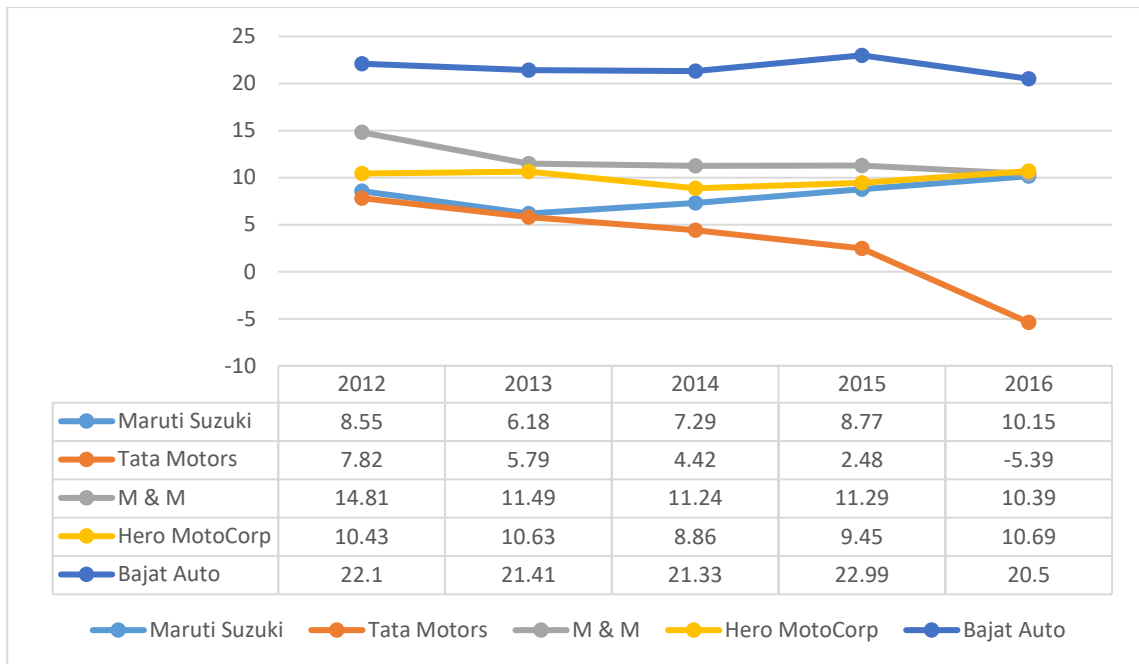
Figure 4.11 Profit before Interest and Tax margin

The Figure 4.11 depicts that PBIT gives venture investigators valuable data for assessing an organization's working execution without respect to premium costs or expense rates. PBIT limits these two factors that might be one of a kind from organization to organization, and empowers one to dissect working benefit as a particular measure of execution which have been shown in the graph. Bajaj Auto has highest PBIT margin at average of 22% throughout the 5 years and is increasing. Mahindra & Mahindra had PBIT margin of average 11% throughout the 5 years. Maruti Suzuki has average margin of 8%. Tata Motors' margin has reduced sharply in these 5 years and has reached -5%.

4.7 Correlation between Profitability and Debt-To-Equity Ratio

The bivariate Pearson Correlation produces a sample correlation coefficient, r, it calculates the strength and direction of linear relationships between pairs of continuous variables. The Pearson Correlation evaluate statistical facts for a linear relationship among the pairs of variables in the population, represented by ρ ("rho"), population correlation coefficient, The Pearson Correlation is a parametric measure. This measure is also known as Pearson's correlation.

Capital structure decision is the vital one since the profitability of an enterprise is directly affected by such decision. The successful selection and use of capital is one of the key elements of the firms' financial strategy. Hence, proper care and attention need to be given while determining capital structure decision.

The statistical analysis carried out seeking to discover is there any relationship between capital structure and profitability of the selected automobile companies.

Correlation (Maruti Suzuki)

		net profit ratio	debt equity ratio
net profit ratio	Pearson Correlation	1	-.637
	Sig. (2-tailed)		.247
	N	5	5
debt equity ratio	Pearson Correlation	-.637	1
	Sig. (2-tailed)	.247	
	N	5	5

Table 4.1 Correlation between Capital Structure and Profitability of Maruti Suzuki

Maruti Suzuki shares a moderately strong downhill negative relationship. As we can see from the table, the correlation between the capital structure and the ROE is -.637.

Capital structure and Profitability are negatively correlated. As firm's Profitability increases, a debt to equity ratio decreases. Hence as the debt structure increases, so does

the financial payable burden on the firm's assets. Maruti has significantly halved its debt dependency in the last 5 years while maintaining an uphill PBIT and EPS.

Correlation (Tata Motors)

		net profit ratio	debt equity ratio
net profit ratio	Pearson Correlation	1	-.960**
	Sig. (2-tailed)		.010
	N	5	5
debt equity ratio	Pearson Correlation	-.960**	1
	Sig. (2-tailed)	.010	
	N	5	5

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.2 Correlation between Capital Structure and Profitability of Tata Motors

In case of Tata Motors, the correlation is significant at the 0.01 level on a 2 tailed test showing an extremely negative correlation between Profitability and Debt-to-Equity ratio. However as noted earlier this may be due to huge investments by the organization in form of Jaguar Land Rover deal.

Correlation (Mahindra & Mahindra)

		net profit ratio	debt equity ratio
net profit ratio	Pearson Correlation	1	.302
	Sig. (2-tailed)		.621
	N	5	5
debt equity ratio	Pearson Correlation	.302	1
	Sig. (2-tailed)	.621	
	N	5	5

Table 4.3 Correlation between Capital Structure and Profitability of Mahindra & Mahindra

Mahindra and Mahindra Ltd. Shares a weak positive linear relationship. The organization has declined on debt dependency while maintaining a positive EPS.

Correlation (Hero MotoCorp)

		net profit ratio	debt equity ratio
net profit ratio	Pearson Correlation	1	.859
	Sig. (2-tailed)		.062
	N	5	5
debt equity ratio	Pearson Correlation	.859	1
	Sig. (2-tailed)	.062	
	N	5	5

Table 4.5 Correlation between Capital Structure and Profitability of Hero MotoCorp

Hero Moto Corp has displayed a strong positive linear relationship. The organization is judiciously utilizing the debt to leverage its position.

Correlation (Bajaj Auto)

		net profit ratio	debt equity ratio
net profit ratio	Pearson Correlation	1	-.277
	Sig. (2-tailed)		.652
	N	5	5
debt equity ratio	Pearson Correlation	-.277	1
	Sig. (2-tailed)	.652	
	N	5	5

Table 4.4 Correlation between Capital Structure and Profitability of Bajaj Auto

Bajaj Auto displays a weak negative linear relationship indicating that it should focus on eradicating its debt dependability. As we can see from the table, the correlation

between the capital structure and the ROE is -.277. Capital structure and Profitability are negatively correlated. As firm's Profitability increases, a debt to equity ratio decreases. Hence as the debt structure increases, so does the financial payable burden on the firm's assets.

4.8 Regression Analysis between Capital structure and Profitability

These are the "Goodness of Fit" measures. They reveal to you how well they figured linear Regression equation conditions your information.

1. Multiple R. This is the coefficient. It discloses to you how solid the linear relationship is.
2. R squared. This is r2, the Coefficient of Determination. It discloses to you what number of points falls on the Regression line.
3. Balanced R square. The balanced R-square alters for the quantity of terms in a model. You'll need to utilize this rather than #2 in the event if you have more than one x variable.
4. Standard Error of the regression: A gauge of the standard deviation of the error μ. This is not the same as the standard error in illustrative insights! The standard error of the Regression is the accuracy that the Regression coefficient is measured; if the coefficient is huge contrasted with the standard error, then the coefficient is most likely not quite the same as 0.
5. Perceptions. Number of perceptions in the example.

Anova Table

1. SS = Sum of Squares.
2. Regression MS = Regression SS/Regression degrees of freedom.
3. Residual MS = mean squared error (Residual SS/Residual degrees of freedom).
4. F: Overall F test for the null hypothesis.
5. Significance F: The significance associated P-Value

Regression analysis is used to investigate the relationship between capital structure and profitability measured by ROE.

4.8.1 Maruti Suzuki (Regression Analysis between Capital Structure and Profitability)

Regression Statistics	
Multiple R	0.637264
R Square	0.406106
Adjusted R Square	0.208141
Standard Error	0.93969
Observations	5

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	1.811426	1.811426	2.051404	0.247485
Residual	3	2.649054	0.883018		
Total	4	4.46048			

Table 4.6 Regression analysis of Capital Structure and Profitability of Maruti Suzuki

For Maruti Suzuki:

The table depicts that multiple R is at 0.63 defining a strong correlation. R2 defines 40% of the data fits the model. It shows that only as the percentage of 40 of the variations in the dependent variable (Capital Structure) is explained by the given independent variable (Profit Margin). .Standard Error is at 0.94. Since P value for the X variable is > 0.05

4.8.2 Tata Motors (Regression Analysis between Capital Structure and Profitability)

Regression Statistics	
Multiple R	0.960078
R Square	0.921749
Adjusted R Square	0.895665
Standard Error	2.20286
Observations	5

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	171.4817	171.4817	35.33817	0.009518
Residual	3	14.55777	4.852591		
Total	4	186.0395			

Table 4.7 Regression analysis of Capital Structure and Profitability of Tata Motors

For Tata Motors Ltd

Multiple R is at 0.96 defining a strong positive correlation between the capital structure and profitability.. R^2 defines 92% of the data fits the model. Standard Error is at 2.20. Since P value for the X variable is < 0.05.

4.8.3 Mahindra & Mahindra (Regression Analysis between Capital Structure and Profitability)

Regression Statistics	
Multiple R	0.302149
R Square	0.091294
Adjusted R Square	-0.21161
Standard Error	1.33268
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.535293	0.5352926	0.301397	0.621229
Residual	3	5.328107	1.7760358		
Total	4	5.8634			

Table 4.8 Regression analysis of Capital Structure and Profitability of Mahindra & Mahindra

For Mahindra & Mahindra Ltd

Multiple R is at 0.30 defining a positive correlation between capital structure and profitability. R2 defines 9% of the data fits the model. Standard Error is at 1.33. Since P value for the X variable is > 0.05.

4.8.4 Hero Motocorp (Regression Analysis between Capital Structure and Profitability)

Regression Statistics	
Multiple R	0.859266
R Square	0.738339
Adjusted R Square	0.651118
Standard Error	0.461567
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	1.803466	1.803466	8.465208	0.042022
Residual	3	0.639134	0.213045		
Total	4	2.4426			

Table 4.9 Regression analysis of Capital Structure and Profitability of Hero MotoCorp

For Hero MotoCorp Ltd

Multiple R is at 0.85 defining a positive correlation between the capital structure and profitability.. R2 defines 73% of the data fits the model. Standard Error is at 0.46. Since P value for the X variable is < 0.05

4.8.5 Bajaj Auto Ltd (Regression Analysis between Capital Structure and Profitability)

Regression Statistics	
Multiple R	0.27714809
R Square	0.07681106
Adjusted R Square	-0.2309186
Standard Error	2.9855712
Observations	5

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	2.224894	2.224894	0.249606	0.651695
Residual	3	26.74091	8.913635		
Total	4	28.9658			

Table 4.10 Regression analysis of Capital Structure and Profitability of Bajaj Auto

For Bajaj Auto Ltd

Multiple R is at 0.27 defining a positive correlation between the capital structure and profitability. R2 defines 7% of the data fits the model. Standard Error is at 2.98. Since P value for the X variable is > 0.05

4.9 FINDINGS AND SUGGESTIONS

Through this study we found out that the capital structure of the company is having significant impact on the profitability of the automobile industry. Maruti Suzuki India Ltd, Bajaj Auto ltd, Mahindra & Mahindra Ltd, Tata Motors Ltd, Hero MotoCorp Ltd all is having ideal capital structure and so respectively they are having good profitability.

Market capitalization is the total valuation of the organization in light of its present share cost and the aggregate number of remarkable stocks. It represents the size of the companies. This shows that Maruti has more assets, revenues and capital than the rest of the companies.

Interest Coverage ratio of Maruti Suzuki has reduced rapidly from 125.35 in 2012 to 24.63 in 2016 indicating reduced burden of debt expenses of the company and reflects that company is generating enough amount for shareholders of the company even after paying its debt debts. The interest coverage ratio of Maruti Suzuki has been reduced to 24.63 showing a low burden by debt expense. Bajaj Auto's interest coverage ratio has reduced rapidly from 2,122.65 in 2012 to 682.83 in 2016 indicating reduced burden of debt expenses of the company and reflects that company is generating enough amount for shareholders of the company even after paying its debts.

Tata Motors major amount of the liquidity requirement is met through the accumulated reserves and surplus. With good interest coverage ratio in last 5 years company has been able to raise the debt easily from the market and is earning enough to pay off its interest obligation. Mahindra and Mahindra have an average interest coverage ratio as 20 which indicate that company is capable enough to pay off its interest out of its EBIT. Hero MotoCorp has an increasing interest coverage ratio every year showing its growth in terms of EBIT and its strong capacity to pay off its interest expenses. A major fluctuation is because of debt raised during that year which led to interest payment increment and hence fall in ICR.

Maruti Suzuki Company is seeing continuous growth in its EPS which is currently 122.85 that is a good indicator for the performance of the company. A steady change in the EPS figure a seemingly endless amount of time is the sign of nonstop change in the procuring force of the company. A reduced EPS indicates less earning per share.

The gross revenue of the Maruti Suzuki for the year (2012 – 2016) was 1.4 million units as against 1.29 million units in the previous year showing growth of 11%. Sales of vehicles in the domestic market increased to 1,289,128 as compared to 1,152,128 in the previous year showing a growth of 11%. Exports of vehicles grew at an impressive rate of 6% from 118,445 to 126,430 in the current year. The overall growth was 29%. The company is seeing continuous growth in its EPS which is currently 122.85. The board recommends a final dividend of 700 percent (Rs. 35.00 per share) for the year 2016.

Whereas Mahindra and Mahindra's EPS showing a great boom. The Automotive Divisions of M&M have clocked one of their best performances reflecting total sales as 4,94,096 vehicles as against a total of 4,64,850 in the previous year which shows a substantial growth of 6.3 percent. The Company sold a total of 4, 58,065 vehicles in the year under review from 4, 34,654 in the financial year 2016, concluding the growth of 5.4 percent. M&M recorded total sales of 4, 37,911 vehicles and 56,185 three-wheelers as compared to 4,05,446 vehicles and 59,404 three-wheelers in the previous year registering a growth of 7.4% and decline of 5.7% in vehicles sales and three-wheeler sales respectively. EPS of M&M has also shown a steady improvement in the past 5 years.

Earnings per share of Bajaj auto ltd is showing a fall year by year from 115 to 104. Increase in sales and the profits company has been able to provide good returns to its shareholder. EPS has steadily risen to 115 in the year 2012. Total operating income earned by the company during the year under review grew by 7.2% to Rs.21, 817crores, with net sales increased to Rs. 21,104 crores as 7%.

Though Bajaj Auto's Profit after Tax decreased by 13.2% to Rs. 2,814 crores, it has a strong financial base company with a very good credit rating. Since In the last year company's PAT has reduced but it is still the second largest player in the two wheeler segment.

Tata Motors recorded a gross sale of 266,345 crores 2016, a growth of 12.6% over previous year 236,626 crores in the domestic market in India, representing a 43% share in the industry.

Consolidated EBIT of Tata Motors was 16% as Rs. 21,703 crores. The Tata Motors' Group turnover improved realization due to successful launch of some new products. Tata Motors' EPS was around 1.03 at the end of the year March 2016. EPS has

decreased to -14.72 in 2016. Jaguar Land Rover contributes a large portion of the Company's consolidated revenues. A decline in demand for Jaguar and Land Rover vehicles in its main markets, like North America, China, and failure to maintain its pricing strategy, has drastically impact the company's trade and monetary position.

Hero MotoCorp Ltd is a market leader in the domestic two-wheeler market with about 52.8 % market share. The company has captured 53.5% market share in the domestic motorcycle segment. Hero MotoCorp's strong monetary position enables the company to have bigger advertising budget to attract customers and also allows the company to spend in new product launches & technology to uphold its market share and raise its overseas existence. EPS of Hero MotoCorp has steadily grown in these years with 100 in 2012 to 119 in 2016 revealing a substantial growth of 10%.

Organizations working with high debt to equity to value on their asset reports are helpless against monetary cycles. In times of stoppage in economy, organizations with abnormal amounts of debt to equity discover it progressively hard to benefit the enthusiasm on their borrowings as net revenues decrease. If long term debt to equity ratio is higher than 0.6 – 0.8 then it could influence the matter of an organization and its consequences of operations.

The profits of the Maruti Suzuki Company have been rising; it has also reduced debt from the market. Company has raised debt previously but has maintained a strong position in terms of debt – equity. Increase in Reserves and surplus of the company and reduction in the current liabilities has led to a reduced debt-to-equity ratio to 0.01. Maruti Suzuki's debt-to-equity has reduced to 0.01 that means the company is less dependent on debts to finance its growth. This indicates that the Company operates with a low level of debt and is well placed to pay for its debts.

Bajaj Auto's profits of the company have been rising; it has also raised debt from the market regularly. Company has raised debt but is able to maintain a healthy balance of debt – equity of the company. Bajaj Auto's average long term debt to equity ratio over the last 5 financial years has been 0.54 times which indicates that the Company is operating with a very low level of debt and is well placed to meet its debts.

Debt-to-equity of M&M has reduced sharply to 0.14 that represent Company has lowered its dependency on debt financing for its growth. It reveals that the Company

operates with convenient level of debt and will be able to ride out dreadful economic cycles even if the organization's profitability margins decline provisionally.

In the last 5 years the debt equity ratio of Tata Motors is has increased to 1.35 which is revealing that aggressive strategy of company in which it is highly depending on debts. Debt-to-equity is 1.35 because of fall in sales and also the debt has increased and the equity capital has increased with the right issue. During previous year Tata Motors has also raised fund through issue of debentures.

Hero MotoCorp's is a debt free company hence it relies least on debt. It has 0.16 average debt equity ratio which indicates that it performs with low level of debt.

Bajaj Auto focuses on two-wheeler segment. It operates in automotive segment and investment. Its product portfolio comprise; Scooters, Auto rickshaws, Motorcycles and Mopeds. The sales have seen continuous growth in these years leading to increasing income from operations in 2016 as Rs. 21,614 crores and increased PBIT margin every year due to its success of XUV500.

Tata Motors performance these years have reduced to -5.39 PBIT margin. It is due to the failure to reach the desired sales of its new launched cars Bolt and Zest. Also the sales of Jaguar and Land Rover have reduced these years which has caused heavy losses and huge expenses to the company.

Mahindra & Mahindra's profit for the year before Depreciation, Interest, Exceptional items and Taxation was Rs. 5,358crores as against Rs. 4344crores in the previous year, an increase of 24.45%. Maruti Suzuki's profit before depreciation, interest, tax and amortization (EBDITA) stood at Rs. Rs. 7545 crores in 2016 against Rs. 3339crores in the year 2012.Profit before tax (PBT) stood at Rs. 4868crores against Rs. 2146crores in the previous year and profit after tax (PAT) stood at Rs. 3711crores against Rs. 1635crores in the previous year. There is a fall in PBT in the last year because of a rise in operating expense of the company. Most of the funding requirements of the company were done by the internal accruals which were created through continuous profits.

Hero MotoCorp has EBDITA of Rs. 3880 crores and is increasing constantly year by year due to its growing sale of two-wheeler vehicles. The company has PBIT margin of almost 11% every year.

Current total debt of Baja Auto comprises of loans from bank against the hypothecation of assets, Raw materials, finished goods and cash credit. They have constant debt of average Rs. 2800 crores. In a challenging financial market environment, in May 2009, the Tata Motors effectively turned over, in the bridge finance it had obtained for acquiring of the Jaguar and Land Rover business for the period of 18 months, till December 2015. There has been significant rise in the debt of Tata Motors during the years because of TATA-Jaguar deal. They have average debt of Rs. 30,000 crores every year.

Maruti Suzuki has lowering total debts every year showing it's less dependency on debt to finance the company. Its debts have gone down from Rs. 7,712 crores to Rs. 3,867 crores in 2016.

Mahindra and Mahindra company has raised debt in the year 2012 for the purpose of production of its new XUV500 which it repaid soon in next year's. Later the company has reduced its dependency on debts to Rs. 7190 crores.

Hero MotoCorp has been debt-free for the past 13 years and incur no borrowing costs. Finance cost includes interest on account of advances from dealers and other transactional costs. Its debt to equity ratio of the last 5years has been 0.16 times which shows that the company perform its operations with a low level of debt. Currently the company is enjoying zero debt position.

The result of the study through regression analysis and ANOVA shows that there was no influence of capital structure indicators on profitability for Maruti Suzuki, Bajaj Auto Ltd, Mahindra & Mahindra Ltd. But for Hero MotoCorp Ltd and Tata Motors Ltd shows that there was influence of capital structure on the profitability of the company.

This is overall general suggestions and it may very useful for the companies to get better the financial position and for the better performance.

- The company should try to increase the production so as to get economies of largescale production. It will assist in raising the rate of return on capital employed.
- In order to increase the profitability of the companies, it is suggested to control the cost of goods sold and operating expenses.

- The management should try to take on cost reduction techniques in their companies to get over this critical situation. At the same way, to reduce power and fuel Cost Company should find out other alternative for this.

- The quantum of sales generated should be improved impressively in order better to enjoy better per of the assets and capital employed.

- The burden of interest has produced a worsening effect and abridged the percentage of net profit. It is suggested that company like Tata Motors should try to reduce the interest burden slowly by increasing the owner's fund.

- To support the financial efficiency, long-term funds have to be used to finance core current assets and a part of temporary current assets. It is better if the companies can reduce the oversized short- term loans and advances eliminates the risk arranging finance regularly.

- Cost accounting and cost audit should be made mandatory for this units and cost sheet along with annual financing statement should be prepared.

- Improper planning and delays in implementation of projects lead to rise in their cost. So properly planning should be made.

- The companies should try minimizing their non-operating expenses.

- With the help of these suggestions all the selected automobile companies try to improve their financial performance.

5. CONCLUSION

The study has compared 5 different segments of 5 companies over 5 years.

Looking at the general execution of the 5 organizations chosen, it is Hero MotoCorp which had displayed an enduring and consistent execution in the course of the last 5 years. The EPS for Hero MotoCorp shares remained at Rs. 119.46 at year end 2016. In the earlier years, we saw a decline in the EPS as 119.09 to 105.61 but only till the year till year end 2015 and till the den of 2016 we have seen a quick ascent. No extreme or sudden falls have been clocked.

Profit of the organization is ascending alongside EPS. Lessening owing debtors over the run has also helped the organization to keep up its good debt to equity to value ratio.

Tata Motors' interest coverage ratio has been at a great 683 at year end 2016 with Hero MotoCorp being the following nearest at 315 took after by Maruti Suzuki at 24.63 in the third place.

The company showed a stable growth rate in PBT as 10.69 till 2016 followed by a horse race between Mahindra & Mahindra and Maruti Suzuki as 10.39 and 10.15 respectively. The organizations in the industry which we have compared about are in different segments. Inside the two wheeler section Hero MotoCorp has the best capital structure. In the business vehicle segment Maruti Suzuki has sufficient proportion of debt to equity to value giving most extreme comes back to its shareholders. Seeing to its present capital structure it likewise has ability to raise further capital if required for financing.

For this research it would be concluded that there exist significance between the capital structure and the profitability of the company in automobile industry of India. A company can generate more profits if they maintain ideal capital structure and vice versa.

6. LIMITATIONS OF THE STUDY

- The results cannot be generalized to all the companies of automobile industry.
- The study is based on published datum.
- Qualitative aspects like human resource and legal aspects are avoided due to nonmeasurability of the same.

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