

Project Report

MASTER OF BUSINESS ADMINISTRATION (MBA) Part 1

Analysis of Total Revenue and Total Assets vis-à-vis HR Expenditure of Tata Motors

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DECLARATION

I **SAJAL GOVENKAR** Roll No **2019** hereby declare that this project report entitled

Analysis of Total Revenue and Total Assets vis-à-vis HR Expenditure of Tata Motors

has been prepared by me towards the partial fulfilment of the requirement for the award of the Master of Business Administration (MBA) Degree under the guidance of

Ms. PRIYANKA NAIK also declare that this project report is my original work and has not been previously submitted for the award of any Degree, Diploma, Fellowship, or other similar titles.

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TABLE OF CONTENTS

1. INTRODUCTION	5
1.1 Industry Overview	5
1.2 PESTLE Analysis	6
1.3 PORTER’S FIVE FORCES Analysis.....	8
1.4 Company Overview	10
1.5 Products of the Company	11
1.6 Human Resource Policies	12
1.7 SWOT Analysis.....	14
1.8 VRIN/VRIO Analysis.....	15
2. LITERATURE REVIEW	17
3. RESEARCH GAPS AND QUESTIONS	19
3.1 Research Questions.....	19
3.2 Research Hypotheses	19
4. PROJECT OBJECTIVES	20
4.1 Scope of the Study	20
5. PROJECT METHODOLOGY	21
5.1 Data Collection.....	21
5.2 Research Methodology	22
6. DATA ANALYSIS AND DISCUSSION	23
6.1 Descriptive Statistics.....	23
6.2 Hypothesis Testing	24
7. FINDINGS	27
8. CONCLUSION	28
9. MANAGERIAL IMPLICATIONS	29
10. REFERENCES	30

LIST OF FIGURES

Table 1: Financial data for the years 2011-2020	21
Table 2: Descriptive Statistics	23
Table 3: Correlation Test	24
Table 4: Regression analysis Results of Total Revenue with respect to HR Expenditure	25
Table 5: Regression analysis Results for Total Assets with respect to HR Expenditure.....	26

1. INTRODUCTION

1.1 Industry Overview

In 2020, India was the fifth-largest auto market, with approximately 3.49 million units combined sold in the passenger and commercial vehicles categories. It was the seventh largest manufacturer of commercial vehicles in 2019. The two wheelers segment dominate the market in terms of volume owing to a growing middle class and a young population. Moreover, the growing interest of the companies in exploring the rural markets further aided the growth of the sector. India is also a prominent auto exporter and has strong export growth expectations for the near future. In addition, several initiatives by the Government of India and major automobile players in the Indian market is expected to make India a leader in the two-wheeler and four-wheeler market in the world by 2020.

Domestic automobiles production increased at 2.36% CAGR between FY16-20 with 26.36 million vehicles being manufactured in the country in FY20. Overall, domestic automobiles sales increased at 1.29% CAGR between FY16-FY20 with 21.55 million vehicles being sold in FY20.

Two wheelers and passenger vehicles dominate the domestic Indian auto market. Passenger car sales are dominated by small and mid-sized cars. Two wheelers and passenger cars accounted for 80.8% and 12.9% market share, respectively, accounting for a combined sale of over 20.1 million vehicles in FY20. EV sales, excluding E-rickshaws, in India witnessed a growth of 20% in FY20 driven by two wheelers.

Passenger vehicle (PV) sales stood at 281,380 units in February 2021, compared with 238,622 units in February 2020, registering a growth of 17.92%. As per Federation of Automobile Dealers Associations (FADA), PV sales in December 2020 stood at 271,249 units, compared with 218,775 units in December 2019, registering a 23.99% growth.

Overall, automobile export reached 4.77 million vehicles in FY20, growing at a CAGR of 6.94% during FY16-FY20. Two wheelers made up 73.9% of the vehicles exported, followed by passenger vehicles at 14.2%, three wheelers at 10.5% and commercial vehicles at 1.3%.

EV sales, excluding E-rickshaws, in India witnessed a growth of 20% and reached 1.56 lakh units in FY20 driven by two wheelers. According to NITI Aayog and Rocky Mountain Institute (RMI) India's EV finance industry is likely to reach Rs. 3.7 lakh crore (US\$ 50 billion) in 2030. A report by India Energy Storage Alliance estimated that EV market in India is likely to increase at a CAGR of 36% until 2026. In addition, projection for EV battery market is forecast to expand at a CAGR of 30% during the same period.

Indian automotive industry (including component manufacturing) is expected to reach Rs. 16.16-18.18 trillion (US\$ 251.4-282.8 billion) by 2026. The Indian auto industry is expected to record strong growth in 2021-22, post recovering from effects of COVID-19 pandemic. Electric vehicles, especially two-wheelers, are likely to witness positive sales in 2021-22.

1.2 PESTLE Analysis

Political

Laws governing commerce, trade, growth, and investment are dependent on the local government as well as how successful local markets and economies will be due to regional, national and local influence. The industry's growth internationally depends on deep understanding of political stimulation, customer requirements, and individual government regulations and laws.

Government enforce strict safety regulations on the automotive industry. These regulations govern the manufacturing of motor vehicles for providing specific build requirements, such as seatbelts, to ensure passenger safety. This makes it more difficult to launch a new business in the automotive space, helping existing brands to maintain their place in the market. Almost all cars, motorcycles, and buses are powered by fossil fuels such as petroleum and diesel, which produce a number of environmental pollutants when burnt. As such, government have a great interest in the emissions statistics of new and existing vehicles.

Economic

Currency fluctuations can equate to higher or lower demands in the industry which in turn affect profitability. Such as domestic currency, the rupee, but also to the dollar, euro, bhat, won, and pound, etc. India has also been experiencing economic growth at an average 6% and the automobile industry contributes 22% to the GDP of the country. This makes it a very important income generating activity for the country.

As a general trend, individuals around the world are earning more money every year. This means they have more money to spend on luxury items such as electronics and automobiles. demand for motor vehicles is slowly but surely growing. India would be able to attract as many foreign investors in the automobile industry. It is thus important for the country to sustain this upward growth as it will affect all its manufacturing industries.

Additionally, the price of certain crucial commodities has also influenced the automobile. Crude oil and petroleum products always affect the automobile industries. Rise in the world market price of these products makes things expensive and this trickles down to automobile manufacture as well as maintenance.

Social

The market in India for cars is much different than the market for cars in Italy. For one, India has over one billion more people than Italy does, thus the market is much larger or not as limited. Also the effect of demographics and the average income of each market. Italians have a higher average income per capita than Indians and Italian citizens tend to drive larger and fancier cars.

India is fast becoming an automobile industry hub because of its large population. This forms a bustling market for the manufacturers. The tastes of the populations may vary but

manufacturers always take note of the fast selling automobiles and create appropriate designs. For instance, in the past three years, there has been a surge of two-wheeler vehicles because of their convenience in the country. Many automobile industries have created these vehicles for domestic consumers.

Technology

In the automotive industry, it is becoming increasingly crucial for manufacturers to stay on top of the technology curve with new problems always rising such as escalating gas prices and pollution problems. To rapidly grow, and extensive research and development is exactly what Tata is doing to stay competitive in the automotive sector.

The biggest Technological shift impacting the automotive industry is the advance of self-driving technology. it may mean that manufacturers of conventional cars have to change their business strategy to stay relevant.

Legal

Legal factors have played a role in the recent expansion of the Indian automobile industry. This is because the industry is extremely incentivized with investors being given 100% foreign direct investment pass. There are also zero taxes for the investors who ship the cars to other countries from their manufacturing bases in India. By easing the legal rules affecting the industry, the government of India has encouraged varied automobile companies to set up businesses in the country. The IPR (intellectual property rights) is a common issue in the automobile industry. Different automotive brands file patent, design, trademark, and copyright lawsuits on other brands to protect their interests.

Environmental

Environmental factors have influenced automobile industry in India because more investors are opting to manufacture environmental friendly vehicles. These include, vehicles that consume less fuels and emit less fumes. There are also some investors that have chosen to manufacture the electric vehicle in a bid to conserve energy and also the environment.

Carbon Emissions are one of the most serious Environmental pollutants generated by the automotive industry. It plays a large role in global climate change, by means of the greenhouse effect. Over the last few years, the issue of carbon emissions has gained global attention. People continue to drive motor vehicles on a daily basis, but it's unclear whether governments will be forced to take greater action to stop global warming by switching towards electric vehicles.

1.3 PORTER'S FIVE FORCES Analysis

1. Rivalry Amongst Competitors:

Auto Industry have stiff competition, so the companies have to be price efficient and come up with new technologically advanced cars and features where cost is very high as a lot of asset investment is being done, which boost the competition as the industry is very large, company needs to deeply focus on R&D. As the diversification increases the industry becomes unstable, so the diversity of rivals is moderate as most offer products which are close to standard version and the strength is all most similar of the competitors. To survive in the competition auto-maker were persuaded to offer value added services to the customers incurring more cost.

2. A Threat by Substitutes:

Personal vehicle can be substituted by public transport, cabs and others modes of transports. Booking of tickets online and also increasing in fuel rate can substituted the personal vehicle with other modes of transport. In the commercial vehicle segment, road transport is still very much dominated (59%) as it can be connected to the mountains and to sea shores unlike trains, which makes substitutes for commercial vehicle highly unfavourable. There are mainly two substitutes are: Railways Airlines, both of these will not be substitutes for every customer and in every situation.

3. Barriers to Entry

It becomes very difficult for new entrants to start a new business in auto industry it requires continuous innovation, proper raw material, skilled workers and huge start-up capital investment. There are very strict government policies which especially focusing on environmental safety and high import taxation.

Economies of scale: New players will have to face difficulties to get benefits of these economies of sales due to high price competition from old players like Maruti, Hero Honda and many more as this companies are already present in market from passed many years and are successful in achieving the optimum level of production.

Demand side benefit of scales: It will be difficult for new players to get the trust of the customer, so the new players have to make place among the customers to beat the competition which will not be easy for them as there are old players like Hero Honda, Bajaj and TATA, having the large numbers of customer base.

Customer switching cost: Switching cost can be a barrier for a start up in an automobile industry. There is high customer switching cost. Because after buying vehicle once they did not replace it before two or three years, the switching cost becomes high.

Capital requirement: There is high capital requirement for a start up in an automobile industry. Land and machinery requirement and human resources requirement need a lot of money and there is a very high competition so it will be very risky for new company.

4. Bargaining Power of Suppliers:

The bargaining power of supplier depends on the size of the supplier as few small suppliers are completely dependent on few auto players, so they have to play according to the rules and regulations set by the vehicle companies, and changing from one supplier to another is very smooth for big players.

5. Bargaining Power of Customers:

Customers are very price-sensitive and would switch to other brands that offer a better car at the lowest price as there is no switching cost involved in this industry. So, customers enjoy a high bargaining power in the auto industry. However, companies try to increase customer loyalty by offering better quality and post service. Like Tata has its own steel plants so can face the problem of shortage of raw material. Price sensitive customers were some of the factors that determine the extent of influence of the buyers in this industry.

1.4 Company Overview

Tata Motors Limited (TML), a USD 42 billion organization, is India's largest automobile company by revenues. The company is a leading global manufacturer of cars, utility vehicles, buses, trucks and defence vehicles and is working towards developing Smart Mobility Solutions for Smart Cities. Tata Motors is also developing a smart range of EVs, to accelerate the adoption of Electric Vehicles (EV) in the country, supporting the government's mission on electric vehicles.

Incorporated in India, in the year 1945, Tata Motors is a part of the USD 100 billion Tata group and has operations across India, UK, South Korea, Thailand, South Africa, and Indonesia. Tata Motors also ranks amongst India's top passenger vehicle manufacturers, with over 9 million vehicles plying on Indian roads. The company has played an instrumental role in transforming the country into a destination for world-class automotive manufacturing and continues to work towards building the nation.

Tata Motors has always been at forefront of innovating technologies and providing products and experiences catering to the discerning needs of our customers across both passenger and commercial vehicles business. With its corporate brand identity – Connecting Aspirations, the company has consolidated its position as the Tata Motors Group.

Sustainability and the spirit of 'giving back to society' serves as the guiding philosophy at Tata Motors; along with good corporate citizenship, which is strongly embedded in the company's DNA.

Tata Motors Ltd Mission Statement

We innovate, with passion, mobility solutions to enhance quality of life

Tata Motors Ltd Vision Statement

By FY 2023-24, we will become the most aspirational Indian auto brand, consistently winning by

Delivering superior financial returns	Creating a highly engaged
Driving sustainable mobility solutions	Workforce
Exceeding customer expectations, and	

Tata Motors Ltd Values

Integrity	Customer focus
Teamwork	Excellence
Accountability	Speed

OFFERINGS

1. Commercial vehicles

Cargo transportation: Trucks,
tippers, tractor trailers & other
fully built applications

Passenger transportation:

Vans, buses & coaches

2. Passenger vehicles

Cars: Hatchbacks & sedans

Utility vehicles

3. Electric vehicles

1.5 Products of the Company

Passenger Vehicles:



Commercial Vehicles:



Electric Vehicles:



1.6 Human Resource Policies

1) Recruitment

Tata motors follows both internal and external source of recruitment and the nature of the recruitment process of the company is subjected to employment law. The main forms which the company is using are advertising in newspaper, magazines, and Tata motors careers portal and also internal vacancy list. At the end of every quarter the company is floating their recruitment process on their web portal for the new candidates.

2) Selection

Tata Motors follows sequence of stages for selection of employee. The process of selection for campus recruitment starts from written test and drives till the final selection, placement and training. The company screen the applications and called the candidates for written test. The

passed candidates are called for interview, then after verification of documents of selected candidates human resource department of Tata Motors issues offer letter.

3) Training & Development

Tata Motors established various training and development programs like TAS and TMTC for creative leadership within the company, improvement of organizational performance through dissemination of the latest knowledge and skills among practicing managers, development of learning organizations and attitudinal changes in employees. There are well defined Manufacturing Excellence Centre for Innovation, Commercial, Corporate, Management Development and Global Leadership.

Kaushalya: The program includes modules in light of the aptitudes for configuration, design, engineering, manufacturing, automobile production, sales & service as well in various support functions with a focus on quality, productivity, dexterity, discipline and safety.

VConnect: VConnect is the umbrella brand for all Employee Engagement Initiatives in TATA Motors Limited. The VConnect logo symbolizes organizational endeavour to bring all employees together and provide an open platform that enables free exchange of ideas, knowledge and aspirations.

4) Performance Management

Tata Motors has announced the introduction of a performance improvement programme (PIP). A PIP is generally treated as a filtering mechanism, where the organisation identifies the poor performers, and gives them a chance to improve over a few months. However, if nothing comes out of the exercise, they are asked to leave. It is also important to take regular feedback from the employees. It is essential to find out the reason why they are not performing and remove the demotivating factors hindering their productivity.

5) Performance Appraisal

The appraisal model which is followed on annual basis has been extremely effective for the employees of Tata Motors. With a half yearly appraisal system, the employee gets feedback twice a year. A comprehensive system of quarterly appraisals' where an employee selects goals or Key Result Area (KRAs) every quarter and self-assesses the performance against these parameters. Monetary increments and designation hikes are given according to the performance.

1.7 SWOT Analysis

The Strength of Tata Motors:

Diversified Portfolios: Tata Motors has a large well-diversified portfolios of products, which helps the investors to manage the risk and reduce the volatility of an assets being too heavily weighted towards one sector. The diversified portfolio of the vehicles makes it bring stabilization in its sales and profits which give the investor the confidence to invest in TATA Motors company.

Stabilized Earning: Tata Motors has been earning stabilized profit. It having good strong management policy which can be noticed when they acquire new companies and they only purchase the same management system.

Recognized Brand: Tata is a well-known brand in the home country, and as well as in other countries like Pakistan and Bangladesh. Jaguar Land Rover PLC among others are the most recognized brand.

The Weaknesses of Tata Motors:

Global presence: Automobile industry is not limited to the local market. It becomes a strong barrier to the growth, if it is limited to a specific area in such case other foreign companies may enter the same market. In the case of Tata Motors, has not penetrated in many international market until now.

Weak Marketing Policy: Tata Motors does not have strong marketing policy to promote its products world-wide.

Narrow Domestic Market: As Tata did not enter too many global markets, it developed its business in the local market. But only the local market is not enough for a company like Tata motors.

The Opportunities for Tata Motors

Global Positioning: For developing a strong brand image, all it needs to have a strong marketing policy. This can make a new customer base in the local market and worldwide as well, if Tata Motors wants to position its products heavily.

Opportunities for Merger and Acquisitions: Merger and acquisition is a pretty common tradition in the automobile industry. Tata has a long experience as it is one of the oldest companies in India.

Expanding Auto Market: The world is becoming modernized. People are being dependent on transportation facilities heavily. It will increase the sales of motor vehicles. As Tata still has the opportunities to enter a different foreign market, it has a great expansion opportunity.

The Threats for Tata Motors:

Fuel Price: The cost of fuel affects the sale of a vehicle not only in India but also all over the world. The fuel price and the sales of the cars directly negatively related. So, if the product price increases, it will reduce the sales volume.

Government Law on Environment: Many countries are developing law on carbon emission. If India develops such kind of law, Tata might need to develop more carbon-efficient cars which may need additional investment. This requires additional investments.

Market competition: These companies are frequently offering newly developed cars which have fuel efficiency, modern models, technologies, and environmental friendliness.

Increasing Production Cost: The production cost is more than before as the company has to face more competition for offering innovative products.

1.8 VRIN/VRIO Analysis

Valuable:

Tata Motors regularly engages in social responsibility activity. All stakeholders are acknowledged about the company's activities, and social responsibility activity through official documents including the annual report and website. CSR activities allows Tata Motors Ltd to build a non-substitutable competency- as engagement and strategies for CSR are united with the broader business goals and developed strategically.

The Tata Motors Ltd is valued globally for its distribution system The company has also successfully supply products. The company's connection with dealers and suppliers is particularly based on strictly followed guideline and criteria. This is a valuable resource that permit to draw on further chance in different regions. The Tata Motors Ltd is highly innovative in its product offerings The innovation also expands into other functional areas of the company such as marketing

Rare:

The Tata Motors Ltd has a global existence, and operates in numerous countries, so this has allowed the Tata Motors Ltd to construct an expanded consumer base and earn revenue through multiple regions This has given the company higher financial strength and also higher cultural exposure and international identification.

The Tata Motors Ltd.'s risk evaluation function is well build, and admits the company to identify potential opportunities and take guided actions and steps to benefit. Being a global conglomerate and giant, the company has shown high adaptability to different cultures through engaging in localization activities, and marketing communication. The potential to adapt to different external environmental and regional cultures is a rare resource that has allowed the company higher penetration, improved accessibility, stronger brand recall, and greater visibility.

Imitable:

The Tata Motors Ltd has utilized marketing communications strategically to get higher consumer. The strategic focus of the business is enfolded by the organizational culture, and the business vision under the strategic leadership which in turn is inimitable.

The Tata Motors Ltd has efficient production capacities that operate at economies of scale. The company has controlled operational costs that have been achieved through expansion, and a consistent demand. The cost reduction function allows Tata Motors Ltd to frequently maintain competitive pricing in comparison to competitors This is an inimitable resource for the Tata Motors Ltd. The Tata Motors Ltd provides a unique customer experience to the customers. The company offers customers high brand engagement with the experience that is unforgettable, and relevant for the target groups.

Organization:

Employee training: The training provided by the company refines individuals for their job roles and professional growth and also towards personal growth and development, the training and investment by the company in individuals guides to strong organizational commitment, and is a valuable competency in allowing Tata Motors to benefit through a powerful and committed employees.

Corporate leadership and vision: The corporate leadership and vision are also non substitutable, and cannot be referred to other firms in the industry. The leadership provides unique strategic vision and guidance to the company.

Human resources: The human resource function at the Tata Motors Ltd is in charge for all employee related activities from recruiting to compensation management to succession planning and training. The human resource function is also important for maintaining the supportive organizational culture at the Tata Motors Ltd.

Organizational culture: The Tata Motors Ltd enjoys a supportive and innovative organizational culture The organizational culture at the company allows growth and development of not only the business at large, but also of individual employees The organizational culture is free sharing in information, and supports team work and synergy. This is an important competency and resource for the Tata Motors Ltd which allows it to grow internationally.

2. LITERATURE REVIEW

Human Resource is a very essential component for an organization in terms of labour turnover, productivity as well as financial growth of an organization. Similarly, good Human Resource management practices play a pivotal role in employees' retention and their productivity. (Peer-Olaf Siebers, et al-2008). There are numerous factors and actors which influence this aspect, like inadequate incentives, inadequate wages, salaries or allied benefits, poor reward system and lack of health and safety facilities. (Esra NEMLI-2010–Choi Sang Long et al, 2012)

In the economics literature, human capital refers to the productive capabilities of people (Becker 1964). Skills, experience, and knowledge have economic value to organizations because they enable it to be productive and adaptable; thus people constitute the organization's human capital. Like other assets, human capital has value in the market place, but unlike other assets, the potential value of human capital can be fully realized only with the co-operation of the person. Therefore, all costs related to eliciting productive behaviours from employees including those related to motivating, monitoring, and retaining them-constitute human capital investments made in anticipation of future returns (Flamholtz & Lacey, 1981). Organizations can use human resource management in a variety of ways to increase their human capital (Cascio, 1991; Flamholtz & Lacey, 1981).

Sir Williams Petty in 1691 was the first scholar to develop the notion of human capital. After acceptance of the concept as theory, human capital started evolving as a discipline that provides some researchers with illustration on how the expenses of human capital affects the revenue of organization. Ismaila (2013) identifies expenditures on human as an important tool for organization sustainability in growth-based knowledge era.

Classifying human resource expenditure in companies seems to have significant effect on their profitability. These can be analysed from the short run effect and the long run effect. Onafaluyo, Eke and Akinlabi (2011) cited in Anuonye (2015) restate the short run and long run effect of classifying human resource expenditure. Looking at the short run effect, if an organization is starting operation newly, the cost incurred to procure staff, train them and pay their salaries may not initially translate to profit. In fact, it may end up with the organization incurring losses all because there is tendency of using up more cash than they earn. But the long run effect on the other hand, start showing as the organization is growing and having competitive advantage over others which can be through cost leadership or differentiation.

To make a clearer picture of human resource expenditures in the statement of financial position, which was adjudicated by Ifurueze (2013), opined that of the International Financial Reporting Standards (IFRS), the expenses of human assets are classified in two parts - capital and revenue expenses. The classification used by organization will show the magnanimity of profitability to capitalize the main section of its development cost which accumulate for some years and as such should be amortized for the useful years of employee.

Acquisition Cost is the expense incurred on recruitment, selection; entire cost is taken into consideration including those who are not selected. According to Brummet, Flamholtz & Pyle (1968), this method suggests that instead of charging the costs to profit and loss account, it should be capitalized in the balance sheet accounting. The process of giving, any status of asset to the expenditure item is called capitalization.

Under this method the actual cost incurred towards recruitment, training and developing human resource of the organization are capitalized and amortized over the future expected useful life of the human resources.

Maimuna & Rashad (2013) analysed the positive association between spending on human resource and profits in these expenditures on education, training and development, increasing productivity by twice the amount of the trainee's salary increase.

Recently, scientists such as Salman& Tayib (2013) studied the connection between spending on human resource and financial performance in 50 public companies in Nigeria and to provide evidence of connection between two variables that further demonstrated that human resource spending affects the efficiency of the sample of companies is positive. Okwy & Christopher (2010) found that human resource is important both in the financial performance of the company and in future benefits, using cost models and economic approaches.

However, Shrader & Siegal (2007) pointing that concept of human resource is like other assets, since they are acquired to generate future benefits, therefore, they should be treated as asset. They have a habit of destroying money, knowledge of skills and knowledge of human resource.

3. RESEARCH GAPS AND QUESTIONS

The success of any company depends largely on the calibre of personnel in that organization. This research project attempts to establish a relationship between the HR expenditure and the performance of Tata motors, specifically considering Total Revenue and Total Assets for the years 2011 to 2020. Considering the importance of Human Resource crucial for the performance of the company; HR expenditure can have a significant impact on the financial performance especially the revenue generation and Total Assets of the company. The problem of the research lies in the above statement on how an organization employs Human Resources to generate revenue and its productivity towards Total Assets.

3.1 Research Questions

1. Is there a relationship between HR expenditure and Total revenue generated by Tata Motors?
2. Is there a relationship between HR expenditure and Total Assets of Tata Motors?
3. Is HR expenditure impacts Total Revenue generation of Tata Motors?
4. Is HR expenditure impacts Total Assets of Tata Motors?

3.2 Research Hypotheses

H01: HR expenditure has no relationship with the Total Revenue generated by Tata Motors.

H02: HR expenditure has no relationship with the Total Assets of Tata Motors.

H03: HR expenditure doesn't have significant impact on Total Revenue generated by Tata Motors.

H04: HR expenditure doesn't have significant impact on Total Assets of Tata Motors

4. PROJECT OBJECTIVES

4.1 Scope of the Study

The research is concerned with the effect of HR expenditure of Tata Motors and how it affects specifically the Total revenue generation and Total Assets. It tests the null hypothesis considering the dependent and independent variables. The results will show the correlation between these variables. The research study is focused on the efficiency of HR with respect to the expenditure and its productivity measured in terms of Total Revenue generation and Total Assets.

The main purpose of this research is to examine the effects of human resource expenditure on the revenue generation and total assets of Tata Motors. Specifically, the objective intends to achieve the following:

1. To understand the relationship between HR expenditure and Total Revenue generation by Tata Motors.
2. To understand the relationship between HR expenditure and Total Assets of Tata Motors.
3. To study the impact of HR expenditure on Total Revenue of Tata Motors.
4. To study the impact of HR expenditure on Total Assets of Tata Motors.

The research methodology will incorporate correlation test and regression analysis. The variables considered for the study are HR expenditure (Independent Variable), Total Revenue (Dependent Variable), and Total Assets (Dependent Variable). The study will focus on the relationship and impact of independent variable on dependent variables. The result will be analysed for its managerial implications.

5. PROJECT METHODOLOGY

The crucial research questions addressed in this study are: Is there a relationship between the HR expenditure with respect to Total revenue and Total Assets of Tata Motors? Is this impact important for HR Department to augment such efforts in improving the HR management practices? To reach the conclusion, the study is aimed to examine the effect of expenditure of Human Resource on Total revenue and Total Assets by Tata Motors.

5.1 Data Collection

The data is collected from annual reports of Tata Motors Ltd. For the year 2011 to 2020. The study describes Human Resource Valuation of Tata Motors Ltd. (Rs. In Crores) as well as the data for Total Revenue and total Assets of the company from 2011 to 2020. The data is collected from the consolidated Financial Statements from the Annual Reports.

HRM cover a wide range of activities. For the purpose of this study we focus on HR Expenditure that is listed as the Employee Benefit Expense in the profit and loss Statement which comprises of salaries; wages; bonus; ex-gratia provident fund and gratuities paid; staff welfare and training expenses; ESOPs; VRS amortized and payments; arrears paid during the year; payments and reimbursement of expenses; other expenses on employees; compensation to employees capitalized, etc. The performance of the company is measured in terms of Total Revenue and Total Assets. The period of the study for which the data is collected ranges from 2011 to 2020. The research sample representing the data from Annual reports of Tata Motors.

Table 1: Financial data for the years 2011-2020

CONSOLIDATED (Core Rupees)	HR EXPENDITURE	TOTAL REVENUE	TOTAL ASSETS
Mar-20	30,438.60	2,64,041.12	3,22,121.26
Mar-19	33,243.87	3,04,903.71	3,07,194.53
Mar-18	30,300.09	2,95,508.07	3,31,350.51
Mar-17	28,332.89	2,70,447.05	2,73,754.36
Mar-16	29,198.89	2,73,930.95	2,67,141.15
Mar-15	25,548.96	2,63,695.07	2,38,657.99
Mar-14	21,556.42	2,33,662.25	2,19,998.32
Mar-13	16,584.05	1,89,629.16	1,70,026.45
Mar-12	12,298.45	1,66,316.26	1,45,382.64
Mar-11	9,342.67	1,22,557.38	1,01,014.18

5.2 Research Methodology

The analysis techniques used for the study are regression analysis and correlation. The correlation explains the interdependence and mutual relationship between the HR Expenditure and Total Revenue and Total Assets of the company. The regression analysis establishes a statistic connection on the behaviour of the variables. The variable values are converted to log values for ensuring accuracy in analysis.

Log-linear model: $\ln Y_i = \alpha + \beta_1 \ln X_i + \epsilon_i$

In the log-linear model, the literal interpretation of the estimated coefficient β is that a one-unit increase in X will produce an expected increase in log Y of β units. In terms of Y itself, this means that the expected value of Y is multiplied by e^β . Where Y is the dependent variable and X is independent variable.

HR Expenditure (Independent Variable): We focus on HR Expenditure that is listed as the Employee Benefit Expense in the profit and loss Statement which comprises of salaries; wages; bonus; ex-gratia provident fund and gratuities paid; staff welfare and training expenses; ESOPs; VRS amortized and payments; arrears paid during the year; payments and reimbursement of expenses; other expenses on employees; compensation to employees capitalized, etc. HR Expenditure is chosen to be the independent variable because it is the expense that acts as an input specifically for revenue generation and cash flow of operations conducted by the company.

Total Revenue (Dependent Variable): Revenue is the total amount of money a company brings in from selling its goods and services at a specific price. The starting point for any income statement is revenue that will eventually lead to net income after expenses are deducted. Total revenue is the full amount of total sales of goods and services. Total revenue is important because, in the effort to grow profits, businesses strive to maximize the difference between their total revenues and total costs. Total revenue is chosen as the dependent variable because it largely depends on the input cost specifically the HR Expenditure for the purpose of this research. The impact of HR Expenditure on the Total revenue generation by the Tata Motors Ltd. will be analysed to understand the importance of HR Expenditure with respect to revenue generation.

Total Assets (Dependent Variable): Total assets the combined amount of a company's Fixed Assets and Current Assets as recorded in the company's Balance Sheet. This shows all the assets used by a company regardless of how they are financed. Assets are items of value, such as property and equipment, which your company owns or leases in order to operate. They can also be a means of creating value in your business - for example, intellectual property, customer relations and goodwill. The impact of HR Expenditure on the Total Assets of the Tata Motors Ltd. will be analysed to understand the importance of HR Expenditure with respect to productivity towards Total Assets.

6. DATA ANALYSIS AND DISCUSSION

6.1 Descriptive Statistics

Table 2: Descriptive Statistics

	Mean	Median	Standard Deviation	Sample Variance	Kurtosis	Skewness	Minimum	N
Log of HR Expenditure	4.342	4.429	0.188	0.035	0.088	-1.135	3.970	10
Log of Total Revenue	5.362	5.421	0.127	0.016	1.047	-1.322	5.088	10
Log Total Assets	5.349	5.402	0.168	0.028	0.401	-1.063	5.004	10

As per above table the mean of log of total revenue is which is more than mean of log total assets. Therefore, HR expenditure helps to generate more revenue compare to assets. The median values of both the dependent variables are more than the mean. It suggests that the curve can be skewed on one side and the high values are more towards the median. The value of Standard Deviation of log total revenue and log total assets measures the average distance between the values of the data in the set and the mean. In this case it is low standard deviation indicating that the data points tend to be very close to the mean. The mean of HR expenditure is less than the dependent variables. It suggests that the HR expenditure can influence the dependent variables at very less expense values.

The value of sample variance of log total revenue and log total assets indicates that the sample values are distributed close from the mean value. Both the values of kurtosis log total revenue and log total assets are less than 3 therefore both curves are platykurtic. The data is more disperse from the central mean. The value of skewness of log total revenue and log total assets suggests that distribution is negatively skewed and it suggest that mean is less than median.

6.2 Hypothesis Testing

Hypothesis:

H₀₁: HR expenditure has relationship with the Total Revenue generation by Tata Motors.

H_{A1}: HR expenditure has relationship with the Total Revenue generation by Tata Motors.

H₀₂: HR expenditure has no relationship with the Total Assets of Tata Motors.

H_{A2}: HR expenditure has relationship with the Total Assets of Tata Motors.

Correlation Test:

Table 3: Correlation Test

	<i>Log of HR Expenditure</i>	<i>Log of Total Revenue</i>
Log of HR Expenditure	1	
Log of Total Revenue	0.988645906	1
<i>p-value</i>	7.1723E-08	

	<i>Log of HR Expenditure</i>	<i>Log Total Assets</i>
Log of HR Expenditure	1	
Log Total Assets	0.985288947	1
<i>p-value</i>	2.0131E-07	

Correlation Test Interpretation:

Total Revenue: Data was collected for past 10 years from 2011 to 2020 to check the correlation between the independent variable (HR expenditure) and dependent variable (total revenue). The correlation test was conducted for 10 readings, that shows HR expenditure and Total revenue have high positive correlation.

Total Assets: Data was collected for past 10 years from 2011 to 2020 to check the correlation between the independent variable (HR expenditure) and dependent variable (total assets). The correlation test was conducted for 10 readings, that shows HR expenditure and Total assets have high positive correlation.

As a result, we reject the null hypothesis H₀₁ and H₀₂. Therefore, HR expenditure has high correlation with the Total Revenue generation and Total Assets of Tata Motors.

Regression Analysis:

To study the impact of HR expenditure on Total Revenue of Tata Motors.

H₀₃: HR expenditure doesn't significantly affect Total Revenue generated by Tata Motors.

H_{A3}: HR expenditure significantly affect Total Revenue generated by Tata Motors.

Table 4: Regression analysis Results of Total Revenue with respect to HR Expenditure

Regression Statistics								
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	2.459	0.156114	15.75497	2.6319E-07	2.099577	2.819578	2.099577	2.819578
Log of HR Expenditure	0.668	0.03592	18.60933	7.1723E-08	0.585611	0.751273	0.585611	0.751273
R Square	0.977							
Adjusted R Square	0.974							

Total revenue: The regression test was conducted between independent variables (HR expenditure) and dependent variable (total revenue). The regression test result suggests that the P-value is less than significance level that is (0.05), so we reject the null hypothesis. Therefore, HR expenditure significantly affects total revenue generation. The coefficient suggests that total revenue will increase by 0.668 when HR expenditure is increased by one unit.

To study the impact of HR expenditure on Total Assets of Tata Motors.

H₀₄: HR expenditure doesn't significantly affect Total Assets of Tata Motors.

H_{A4}: HR expenditure significantly affect Total Assets of Tata Motors.

Table 5: Regression analysis Results for Total Assets with respect to HR Expenditure

Regression Statistics								
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1.522	0.234901	6.481294	0.000191853	0.980778	2.064141	0.980778	2.064141
Log of HR Expenditure	0.881	0.054047	16.30703	2.0131E-07	0.756718	1.005984	0.756718	1.005984
R Square	0.970794							
Adjusted R Square	0.967144							

Total Assets: The regression test was conducted between independent variables (HR expenditure) and dependent variable (total assets). The regression test result suggests that the P-value is less than significance level that is (0.05), so we reject the null hypothesis. Therefore, HR expenditure significantly affects Total Assets. The coefficient suggests that total assets will increase by 0.881 when HR expenditure is increased by one unit.

7. FINDINGS

We can see that there is a positive correlation between both the variables. HR expenditure and total revenue have a high correlation. This signifies that when HR expenditure will increase, the total revenue will also increase. If the total revenue increases, then it is beneficial for Tata Motors to grow in terms of financial performances. Therefore, if Tata Motors efficiently manages HR expenditure it will positively impact total revenue.

We can see that there is a positive correlation between both the variables. HR expenditure and total assets have a high correlation. This signifies that when HR expenditure will increase, the total assets will also increase. If the total assets increases, then it is beneficial for Tata Motors to grow in terms of financial performances. Therefore, if Tata Motors efficiently manages HR expenditure it will positively impact total assets.

Regression analysis was done to determine the degree to which HR expenditure (independent variable) is influencing total revenue (dependent variables). According to the results the null hypothesis was rejected as p-value was less than significances level. Since the total revenue of Tata Motors is generated through sales of automobiles which are a service operation that demands involvement of human resources of the company. Therefore, strategically managing HR expenditure will significantly increase total revenue of the company.

Regression analysis was done to determine the degree to which HR expenditure (independent variable) is influencing total assets (dependent variables). According to the results the null hypothesis was rejected as p-value was less than significances level. Since the total assets of Tata Motors is generated through that demands involvement of human resources of the company. Therefore, strategically managing HR expenditure will significantly increase total assets of the company.

Since Tata Motors has strong HR policies as well as efficient and productive workforce that is supported by ethical and active organizational culture, the company generates total revenue and total assets according to its quarterly annual financial goals in normal economic condition. This allows the company to generate higher profits in the automobile business.

8. CONCLUSION

The research was aimed at understanding the importance of HR expenditure on financial performances factors such as total revenue and Total Assets. The data was collected from annual reports of Tata Motors from 2011 to 2020. The parameters were taken from consolidated financial statements HR expenditure was the predictor variable and total revenue and Total Assets as outcome variables. Correlation test and regression analysis was conducted to understand relationship as well as influences respectively.

HR Expenditure is very crucial expenditure for any organisation to operate efficiently. Human resource is at the heart of any operation for it to function effectively. In case of Tata motors, if the HR expenditure is increased strategically as per the scale of operations, the financial benefits will increase in terms of total revenue and total assets.

Total Revenue depends on the sales of the automobiles in a financial year. The sales are done primarily by sales team (human resource). Therefore, increasing the HR expenditure to motivate the sales team will allow the company to increase the sales and thereby the total revenue.

Total Assets depends on the ability of the company to manage assets liabilities and equity of the shareholders to produce value in term of the products and services offered by the company. The productivity and performance of the Human resource will determine the output and asset turnover of the operations. Therefore, increasing the HR expenditure will increase Total Assets.

The results of the test suggested that HR expenditure is a crucial factor in influencing the dependent variables there by benefiting the financial performance of the company. According to the strategic analysis Tata Motors is one of the leading companies in the automobile sector.

The HR policies and the active organisational culture in conjunction with productive workforces ensure human recourse that is beneficial for the company in terms of financial performances of the company.

Organization and companies cannot achieve good productivity and financial performance without implementing well recognized vision, mission and values for the organization as a whole. An effective appraisal and performance management system helps curtailing turnover issues, and low productivity.

A well-recognized benefits and compensation program helps in motivating employees. For better productivity and high performance, goals must be clear to every employee of the company. Articulation of vision, mission and values helps improve maturity and refinement of process.

Through training and HR department, companies can eliminate remarks and scraps, thus saving huge expenditure. In the modern area, companies can not solely rely on traditional way of management of employees. Now a day, implementation of HRIS is mandatory for multinational companies, companies and organizations.

9. MANAGERIAL IMPLICATIONS

As per the analysis done between the independent and dependent variables it is advent that increasing HR expenditure will increase total revenue and total assets of the company. Therefore, the company will perform better financially. This HR expenditure can be managed strategically by budgeting various employee benefit expenses such as salary, wages, bonuses provident fund, gratuities etc. employee engagement and up skilling are vital for productive human resources.

Apart from this the HR manager can strategically budget for training and development programs because these programs allow the company to improve the performance of the employees and workforce. Therefore, careful planning management and budgeting of HR expenditure is crucial for the financial growth of the company.

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