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REVERBERATIONS OF MACRO-ECONOMIC VARIABLES ON TATA MOTORS' FINANCIALS: AN ECONOMY-INDUSTRY-COMPANY ANALYSIS

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ABSTRACT

Automobile industry was in full-bloom after the advent of New Industrial Policy, 1991 due to various foreign collaborations and technological know-how. But, the upsurge of the COVID 19 pandemic and resultant lockdown, disrupted the entire production process along with the disposal pattern of an individual, hitting this sector hard as they are not a part of necessity segment which was demanded in purview of crisis. This paper tried to study the level of impact in automobile sector with regard to the macro-economic variables with special reference to TATA MOTORS and its financial performance. Various tools and techniques have been used to identify the relationship and influence level between macro-economic variables and company's performance. The analysis revealed that the movements of GDP and the RoE have no consistent relation between them. This is because there are a lot of identifiable and unidentifiable factors which have an influence on the company's financials.A proper relationship cannot be established if any factor is studied in isolation. The cost of new emission norms which tends to increase the price of entry level vehicles; a price sensitive segment along with the ongoing pandemic, calls for government support (even in the form of Goods & Service Tax cuts) will be well appreciated.

Keywords: Automobile, EIC analysis, Macro-economic variables, TATA Motors

JEL Classification: E00, E01, E02, E52, L25

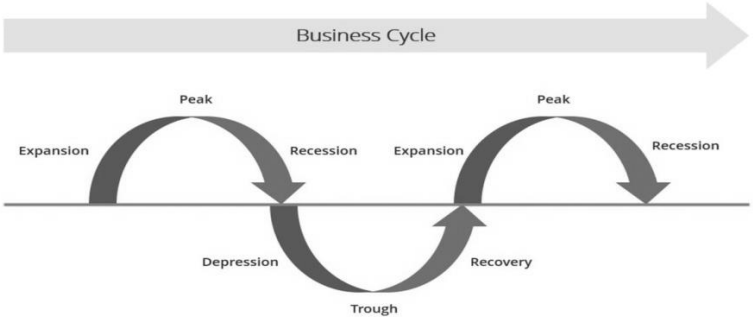
1. INTRODUCTION

Every investor, be it an individual, a company, or an economy, wants to grow their money to beat inflation and their wants. So investment is the only way out. Investment enhances the economic growth and manufacturing volume of an economy.

In economic and business cycles, a lot of fluctuations like expansion, contraction, and recession are experienced. In a typical business cycle after the recession, expansion follows its step. Various economists and professionals around the world have studied this cycle its features and tried to formulate models to contract the reverberation of frequent changes in business cycles. However, their attempt was not profitable, and eventually, many economies were the victim of this catastrophic web.

Both microeconomic and macroeconomic factors are pertinently influencing when it comes to business performance. Some factors are calculable and controllable in nature. However, some factors like unemployment rates, corporate taxation regimes, etc., are beyond the control of an organization.

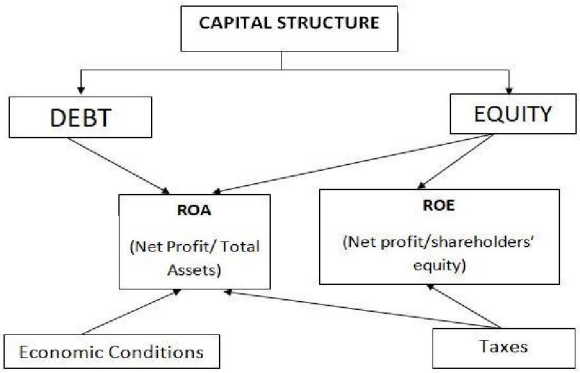
Figure 1 ***Stages of Business Cycle***



Source: www.corporatefinanceinstitute.com

The financials of a company can be calculated using various widely acceptable accounting ratios. However, different accounting methods, window dressing, manipulation of data make comparison ineffective and generalization difficult.

Figure 2 ***Capital Structure of a Business***



Source:Data compiled by the researcher

The current economic downfall was unprecedented in 70 years of independent India. The automobile industry is in its way to shedding close to a million jobs, directly and indirectly, due to a decline in vehicle sales.

Presently, India's economic growth has drastically decreased because of diminishing demand and private investment.

The RBI, during its monetary policy review, has significantly reduced its economic growth predictions to 6.1% from 6.9%, with an optimistic foot front that the country will revive eventually.

2. REVIEW OF LITERATURE

Acharya et al. (2009) studied the relationship between financial development and economic growth in India. The results show that there is a significant relationship between financial, economic development, and growth across Indian states.

Alam and Hasan (2003) conducted a study and found out that the stock market development has a positive impact on economic growth, specifically in the United States.

Arestis et al. (2001) examined the relationship between stock market development and economic growth. The results addressed that stock markets play an important role in the GDP growth in France, Germany, and Japan. However, in the case of the U.K. and the USA, the role played by stock markets on economic growth is somewhat weak.

Ballew et al. (1994) studied the perspective of monetary policy with reference to the automobile industry. The researcher considered the automobile industry to have significant implications on the macroeconomic environment of a nation. The study is based on three nations- Germany, Japan, the U.S., and the U.K., where the productivity indices, economic conditions, labor costs, and employment levels were studied in detail.

Barakat et al. (2016) attempted to analyze the connection between macroeconomic factors and the share market over a time frame of 15 years in two economies, i.e., Egypt and Tunisia. The findings highlighted that there is a connection between the CPI, the rate of foreign exchange, capital availability, and interest rate in Egypt.

Bokpin (2009), Dincergok and Yalciner (2011), Camara et al. (2012), using GDP growth rate as a common factor, proved the existence of a negative relationship between debt-equity structure and GDP growth rate. The preference of retained earnings against external sources was also highlighted in their study.

Booth et al. (2001), Gujarel (2006), Bokpin (2009), Dincergok and Yalcenir (2011), Mokhova and Zinecker (2014) suggest the relationship of capital structure and macroeconomic factors be positive.

Boyd et al. (2001) investigated inflation's influence on the performance of financial sectors by using the GMM method. The study disclosed that inflation has a negative relationship with banking sectors as well as the equity market.

Byoun (2008) and Antoniou et al. (2008) concluded an inverse relationship between debt and taxes; in its contrast, Moore and Raune (2005), Huizinga et al. (2008) argued the existence of a positive relationship between the same.

Chiang et al. (2011) attempted to recognize the components that influenced a firm's performance and figured out the various factors which have an impact on the firm's productivity. The results of the investigation showed that firm size influences the most while monetary obligation has little effect on the firm's performance.

Dailami and Aktin (1990) concluded that a developed stock market could increase savings and provide investible funds at lower costs by offering various financial assets to savers and investors to diversify their portfolios.

Darat and Mukherjee (1987) conducted a study and concluded that macroeconomic variables have an influence on stock market returns in the BRICS nations.

Daslalakis and Psillakis (2008), Hanoseuk and Shamshur (2011), Baltaci and Ayaydin (2014) were able to find a positive relationship between GDP growth rate and debt-equity ratio. The rate of interest was considered an important variable to affect the leverage of the firm.

Dimson et al. (2002) attempted to answer the question of whether high GDP growth countries have high and superior stock market returns in the long term. The results revealed that the influence of GDP growth rate on the stock market's performance differs from country to country, and most of their correlation may be negative.

Graham and Harvey (2001), Drobetz et al. (2006), and Henderson et al. (2006) concluded that the relationship between interest rate and capital structure is negative.

Haider et al. (2018) studied the reverberation of economic parameters on the financial outcomes of selected companies in the automobile industry of the Pakistan Stock Exchange. The results communicated that the selected macroeconomic variables have an inverse connection with ROA, ROE, and GPM, while the rate of inflation has a positive connection with ROE and a negative relationship with ROA and GPM.

Khan et al. (2018) investigated the relationship between the macroeconomic parameters of interest rate, inflation rate, exchange rate, GDP growth rate, and the unemployment rate with the dividend payout ratio. The researchers' analysis revealed that the correlation between the exchange rate and the unemployment rate is positive, while interest rate, inflation rate, and GDP growth rate have a negative relationship with the dividend payout ratio.

Khera and Dhanda (2020) investigated the interconnection between stock market prices of the Indian Banking sector and macroeconomic variables. The results established that the security prices and the macroeconomic parameters are in long-term equilibrium.

Levine and Zervos (1996) tried to figure out whether there is a significant relationship between stock market development and long-run growth. The results conclude that the growth and development of the stock market are positively and strongly correlated with long-run economic growth.

Mangala and Anita (2021) attempted to explore the impact of macro-economic parameters on the Indian Share Market from 2007 to 2018. Using the Bounds test-based Autoregressive Distributed lag model, the researchers illustrated that money supply and

FII positively and gold price negatively influences stock prices.

McNamara and Duncan (1995) explored the performance of firm and macroeconomics factors in Australia. The researchers uncovered that firm's performance is a function of the previous years' ROA and macroeconomic factors.

Modiglani and Miler (1963) proposed that the value of the firm can be increased by changing the capital structure.

Özlen and Ergun (2012) studied the impact of macroeconomic factors on stock returns by using five macroeconomic variables viz. exchange rate, inflation rate, interest rate, unemployment rate, and current account deficit. The researchers used the ARDL approach for arriving at the results, which revealed that stock price fluctuations are sensitive when it comes to exchange rate and interest rates.

Pacini et al. (2017) inquired about the impact of macroeconomic factors on firm performance in the U.K. The study shows that there is a positive impact of GDP, the interest rate, and the inflation rate on firm performance.

Panda and Kamaiah (2001) found that stock returns are influenced by monetary policy and inflation rates. However, monetary policy cannot justify the stock market returns accurately.

Paramati and Gupta (2011) investigated whether the results of the share market have a connection with economic growth. The results lack any relationship between GDP and BSE. However, the performed test recommended that there is a long-term connection between the performance of the share market and the development of the economy.

Pethe and Karnik (2000) evaluated the impact of selected macroeconomic parameters on share market behavior. The researchers concluded that the evidence regarding the interrelationship between macro-economic variables and stock indexes could not be established accurately, and therefore their long-term relationship is not consistent and hence not reliable.

Rajendran and Nimalthasan (2013) inquired about the relationship between capital structure and financial performance. It was found that the performance indicators viz. gross profit (G.P.), net profit (N.P.), Return on equity (ROE), Return on assets (ROA) do not have a significant relationship with the debt-equity ratio, while the Gross profit margin and Return on equity have a strong relationship with debt assets ratio.

Rehman (2016) tried to evaluate the effect of macro-economic parameters on the leverage decisions of some selected fabric manufacturing firms in Pakistan for a span of 10 years. Through his analysis, it was revealed that factors viz. rate of exchange, rate of interest, etc., had a negative association, whereas the development of share market and GDP growth rate had a positive association with economic leverage.

Satpathy et al. (2020) considered some selected macro-economic parameters and studied their reverberation on the share market of the USA and India and their interconnections. The results of the study revealed that the relationship between the rate of inflation and the securities market was found to be moderately positive.

It can be seen that most of the literature studied the relationship between macroeconomic parameters and their result on stock market prices. Also, little literature attempted to cover the reverberation of the economic parameters on a firm's performance. For this, an economy-industry-company analysis of a specific industry becomes important for a more clear and vivid understanding of the influences of the various macroeconomic factors over different areas. The study of an individual unit may project a different perspective as compared to studying all units as a whole; this is because the dimensions and accuracy of the study change as the study area changes.

As a matter of fact, studying the impact of macroeconomic variables and conducting an Economy-Industry-Company (EIC) Analysis of particularly the automobile industry becomes imperative because of the recent downfall in the auto industry's performance which in turn is because of the current pandemic faced by economies, in particular. Within the number of literature reviewed, no study has been conducted on Economy-Industry-Company Analysis of Automobile Industry, in general, and TATA Motors Company in particular. Thus, the study aims to conduct an EIC analysis of TATA Motors and study the reverberation of the macroeconomic parameters on the company's financials,

covering a time period of five years from F.Y. 2016-17 to F.Y. 2020-21.

3. OBJECTIVES OF THE STUDY

a. To understand how a company in a particular sector is affected by its environmental variables and understand their relationship pattern as an individual unit.

b. To evaluate the financial soundness of TATA MOTORS with special reference to the hierarchy of Economy-Industry-Company Analysis.

4. RESEARCH METHODOLOGY

4.1 Data and Sample: The data is based on secondary sources, mostly from the official website of Tata Motors, websites of ministries, and various websites mentioned in the paper.

4.2 Sampling Design and Period: The study is based on Secondary sources, and hence no sampling design has been adopted .The study has been conducted for the period of 2016-17 to 2020-21. The macroeconomic variables used in the study are from 2016 to 2020 as they are computed on the basis of calendar year in general.

4.3 Tools and techniques: SPSS 16 was used for data analysis. The researchers used Correlation Coefficient to arrive at the relationship between macro-economic parameter and company's performance. Descriptive Statistics tools like Tabulation, Graphs were also used in the process.

4.4 Research Variables: The study revolves around variables viz. GDP, inflation, monetary policy, savings and investment pattern, EPS, PAT, ROA, and ROE.

5. DATA ANALYSIS

5.1 Economy Analysis

Every organization is prone to internal and external factors of the business environment. A SWOT analysis helps in proper identification of the various factors which may aid as well as threaten the outcomes of a company. There are several parameters to understand the performance of our economy.

5.1.1 GDP of India:

GDP refers to the summation of expenditures incurred for producing final goods and services produced in the nation within a stipulated time frame. The following table relates to the GDP Growth rate from 2016 to 2020 along with the annual increase (+) or decrease (-):

Table 1 ***GDP Growth Rate and Annual Change over the years***

Year	**GDP GROWTH (%)**	**Annual Change**
2016	8.26%	+0.26%
2017	6.80%	-1.46%
2018	6.53%	-0.26%
2019	4.04%	-2.49%
2020	-7.96%	-12.01%

Source**:** macrotrends.net

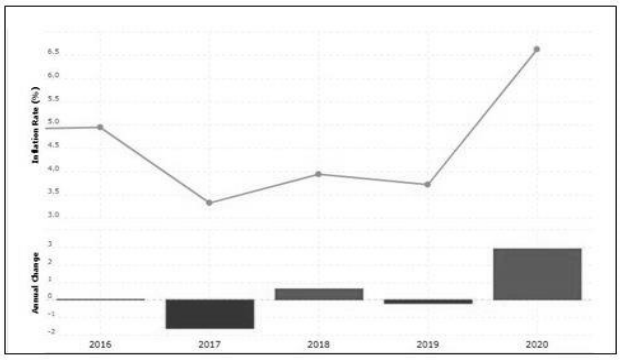
India contributes 2.32 % to the world economy in GDP value. India has experienced the longest slowdown in the past 2.3 decades in the GDP Growth rate.

Table 1 clearly indicates that the GDP growth rate has significantly faded over the years resulting in a massive slowdown in the economy. After 2019, the GDP reached a negative of around 7.96%.A combination of multifarious controllable and uncontrollable factors such as demonetization, improper functioning of GST law, downfall in the domestic automobile sales, declining investments in infrastructural development sector led to the stagnant Indian economy.

5.1.2 Inflation:

Economicinflation has a profound impact on the performance of companies. Higher rates of inflation adversely affect business plans, lead to changes in costs and result in red profit margins. It also results in a decrease in the purchasing power in the hands of consumers, thereby decreasing the demand for products in the economy. Thus, a high rate of inflation affects the performance of companies adversely.

Figure 3 ***Line Graph showing the trend of Inflation rate from 2016 to 2020***



Source: macrotrends.net

It is seen that after the arrival of the Modi Government, inflation rates have increased on an average since 2016 from 4.95% to 6.62% in 2020. One important cause of this increasing inflation rate is increased government expenditure resulting in the budget deficit. Also, government policy has created an artificial scarcity in the market due to which prices are increasing like anything.

5.1.3 Monetary Policy:

RBI's monetary policy involves the management of cash supply and interest rates through various credit control tools and instruments.

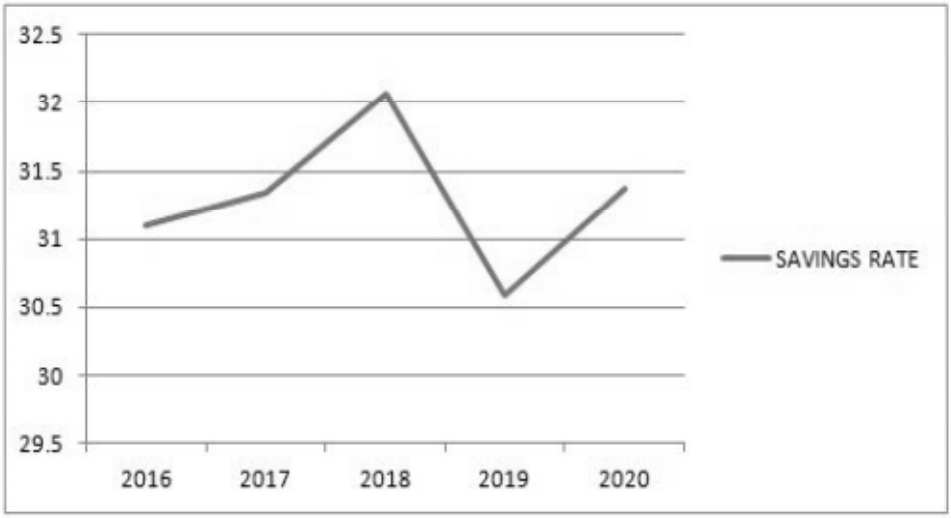
The Monetary Policy Committee (MPC) recommended repo rate unaltered at 4.0 % and the reverse repo rate at 3.35 %. Moreover, the marginal standing facility (MSF) rate and thediscount rate were fixed at 4.25 %.

According to the point of view of monetary policymakers, the business of automobiles holds an unprecedented spot. Automobile industry, holding a significant position in the economy, has a good hold over the public due to its significant contribution as well as generation of revenue to the economy of India. Furthermore, the monetary policy is prone to repeated amendments due to lack of uniformity in government regulations and vision of different policymakers Changing the economic events is of critical interest to policymakers Sometimes, these events are self-evident; in several cases, they could be difficult to investigate. Within the two occurrences, data sources and comprehension are fundamental. Ultimately, given the consistent realignment within the commercial center, policymakers should evaluate accurately the course of progress and its effect. Indeed, certain ventures fill in as a bellwether.

***5.1.4 Savings and Investment Trends*:**

India's Savings Pattern has significantly declined over the past year by 2.3%. The prevailing average Indian Gross Savings Rate is 18.6% from March 1951 to March 2019. The Domestic Savings Rate is extracted from the components of Domestic Savings and GDP by the Census and Economic Information Center. The coronavirus pandemic has caused contractions in GDP forecast for the country.

Figure 4 ***Line Graph showing the trend of Savings Rate from 2016 to 2020***



Source: Compiled by researcher, data sourced from ceic.mt.gov

5.2 Industry Analysis

The automobile industry, in general, dominates the entire economy of India due to the continuous increase in demand in its prime products and their growing importance. However, due to the worldwide pandemic, the automobile industry experienced a sudden downfall in its demand, sales and hence adversely affected its profitability position. The automobile industry was in one of the largest winning streak since the last five years. However, the streak got conquered and victimized by the pandemic-in and across nations. Almost every financial figure of the sector contracted to a large extent (viz. domestic sales, demand, profits, market share, to name a few), thus painting a bleak picture of the company's position. Moreover, the emerging emission laws will add to the costs of the vehicles leading to higher prices and thus, again decreased demand. The price of introductory products will be high and being a price-sensitive zone, the demand of the brand will fall even before it gets launched in the market, leading to further fall in sales of the automobile industry.

Thus, the entire auto sector was in its depression stage during the last few years, although, at present, it is in its revival stage and is expected to restart its winning streak once again and reach heights in the coming years.

5.3 Company Analysis

A Company Analysis gives the researcher unique insights about the company and helps to pierce into the internal affairs of the company and also helps in estimating the direction towards which the company is heading.

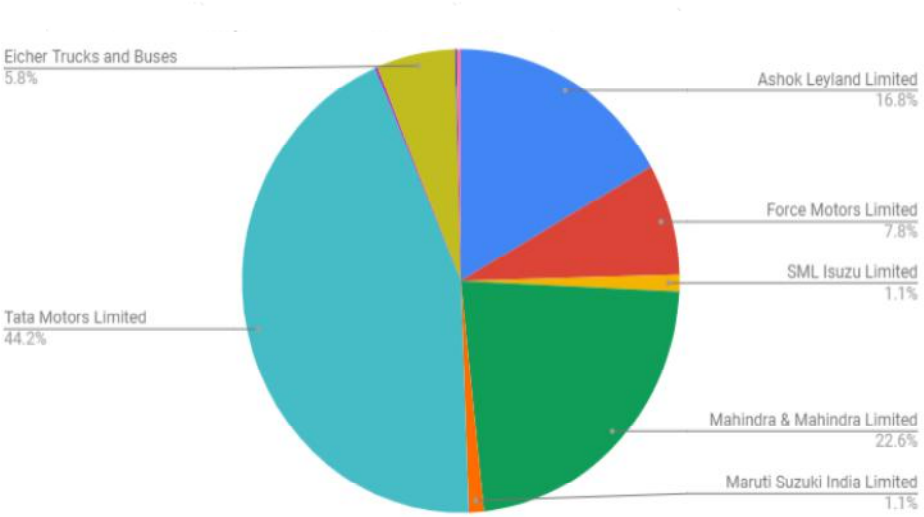
5.3.1 About Tata Motors:

Tata Motors Limited is an MNC with its headquarters in Mumbai, India. It is a part of the Tata Group and mainly deals with commercial four wheelers, private cars and vehicles for military purposes.

5.3.2 Why Tata Motors?

TATA Motors was selected as a part of the study due to its significant market share in India, which would further add practicality to the results of the study. But, a noticeable fact that needs mention in this regard is that most of the companies like TATA Motors, Eicher Trucks and Buses, Ashok Leyland Limited etc. deal with heavy commercial vehicles whereas Maruti Suzuki India Limited's main business encompasses small non-commercial four-wheelers; showing heterogeneity in the characteristics of the components of data. For the current study, the heterogeneous nature of data has been ignored, thereby looking at the overall market scenario.

Figure 5 ***Pie-chart showing the Market Share of purely Indian Automobile Companies***



Source: auto.economictimes.indiatimes.com

5.3.3 *Performance Indicators of Tata Motors*:

Table 2 ***Descriptive Statistics relating to EPS, PAT, RoA & RoE of Tata Motors from 2016-17 to 2020-21***

Sl. No.	PARTICULARS	2016-17	2017-18	2018-19	2019-20	2020-21
1.	**EPS**	₹ 21.94	₹ 26.46	₹ (84.89)	₹ (34.88)	₹ (36.99)
2.	**PAT**	₹ 6063.56	₹ 6813.10	₹ (28,933.7)	₹ (13,016.14)	₹ (11,975.23)
3.	**RoA=(Net Profits/Total Assets)**	2.76%	2.74%	-9.35%	-4.04%	-3.49%
4.	**RoE=(Net Profits/Shareholder's Equity)**	12.91%	9.47%	-47.3%	-20.37%	-21.07%

Source: Compiled by researcher, data sourced from the Annual Reports of Tata Motors published in tatamotors.com

Interpretation:

5.3.3.1 Earnings per share:

The earnings per share ratio (EPS ratio) indicate the amount which each shareholder is supposed to get after meeting all admissible expenses.

EPS of the company is declining substantially, which can be due to several underlying reasons. The EPS of Tata Motors showed a positive trend in the initial year of study but significantly declined over the years.

5.3.3.2 Profit after tax:

The profit after tax is more practical of what a business is really earning and hence can be used in its operations.

PAT has been decreasing over time, indicating lower efficiency in operations of TATA MOTORS In the year 2020-21, the loss was lower as compared to the previous years

5.3.3.3 Return on Assets:

Return on assets (ROA) implies the effective utilization of a company's total assets to generate sufficient net income for the company.

The road of the company continuously declined during the first 3 financial years, indicating that the company unable to utilize its assets effectively to generate income and therefore, is growing less profitable with respect to its assets. However, the company has revived over the last 2 financial years and is somehow managing its assets, although it is s till in the red zone.

5.3.3.4 Return on Equity:

Return on Equity (ROE) is a ratio that provides information to the investors as to how efficiently a company is handling the shareholders' money.

It can be seen that the ROE of the company is showing a declining trend, on an average,

reaching a negative value of 21.07%. This implies that the company is not able to generate much Return from its equity financing and needs to resurrect as quickly as possible.

5.4 Relationship between Macroeconomic Variable and Company's Performance:

The study examines the connections between macroeconomic parameters and a company's financials by ascertaining the lineage of such macroeconomic parameters on company's financial outcome. Here, the paper is confined to the impact of the GDP of the country on the RoE of the company. Below is the comparison chart for GDP and RoE of the company:

Table 3 ***Figures relating to GDP & ROE***

Year	GDP GROWTH (%)	Year	ROE
2016	8.26%	2016-17	12.91%
2017	6.80%	2017-18	9.47%
2018	6.53%	2018-19	-47.30%
2019	4.04%	2019-20	-20.37%
2020	-7.96%	2020-21	-21.07%

Source: Compiled by researcher, data sourced from macrotrends.net & Annual Reports of Tata Motors

During the first three financial years, GDP and RoE had a positive relationship, i.e., both were decreasing. However, the RoE had a drastic fall in 2018-19 with decreasing GDP. In the 4th year (2019-20), their relationship was negative as RoE was in its revival stage while the GDP of the economy continuously declined.

This has been further analyzed using Pearson's Correlation Coefficient through SPSS 16 as below:

Table 4 ***Correlation (First 3 financial years)***

		GDP	ROE
GDP	Karl Pearson's Correlation	1	.659
	Sig. (2-tailed)		.542
	N	3	3
ROE	Karl Pearson's Correlation	.659	1
	Sig. (2-tailed)	.542	
	N	3	3

Source: Compiled by researcher in SPSS 16

Table 5 ***Correlation (Last 3 financial years)***

		GDP	ROE
GDP	Karl Pearson's Correlation	1	-.615
	Sig. (2-tailed)		.578
	N	3	3
ROE	Karl Pearson's Correlation	-.615	1
	Sig. (2-tailed)	.578	
	N	3	3

Source: Compiled by researcher in SPSS 16

Interpretation: In Table 4, the correlation between GDP & ROE for the first three financial years is 0.659 at 0.542 level of significance (i.e. 0.458 confidence level). This indicates that the value of correlation so found is 45.8% true. However, it can be seen from Table 5, that the correlation so obtained for the last three financial years is -0.615 (negative correlation).

Thus, the overall correlation obtained for the five financial years can be shown and interpreted as below:

Table 6 ***Overall Correlation (2016-17 to 2020-21)***

		GDP	ROE
GDP	Karl Pearson's Correlation	1	.277
	Sig. (2-tailed)		.651
	N	5	5
ROE	Karl Pearson's Correlation	.277	1
	Sig. (2-tailed)	.651	
	N	5	5

Source: Compiled by researcher in SPSS 16

Interpretation: At 0.651 level of significance (0.349 level of confidence), the correlation so obtained is 0.277. This implies positive low correlation between the economic parameter, GDP and the company's performance as measured by ROE.

6. RESULTS AND DISCUSSION

The role of macro-economic variables on a company's performance has gained significant attention of various economists and financial experts.The present study made an attempt to examine and evaluate the relationship between the macro-economic factors and the selected firm's performance thereby highlighting the aftermath of macroeconomics on the financial health and soundness of TATA Motors Additional objectives were included to identify the grounds of such a debacle of the automobile industry.

The ultimate cornerstone of the study was to discern the GDP Growth rate and the ROE of the company and hence, sought out an interrelationship thereby studying the impact of GDP growth rate on the ROE of the company. To address the stated objectives, the study made use of SPSS 16 software. The analysis revealed thatthe movements of GDP and the RoE have no consistent relation between them. This is because there are a lot of identifiable and unidentifiable factors which have an influence on the company's financials. For establishing a proper connection between the macroeconomic parameters and the company's performance, every factor, directly or indirectly affecting the company's performance must be studied. A proper relationship cannot be established if any factor is studied in isolation. Thus, studying any one or two of the macro-economic parameters lacks the needed explanatory power to explain the significant variations in and within a firm's or industry's performance.

The results of the analysis are in line with the findings of Pethe and Karnik (2000). Pethe and Karnik (2000) concluded that the evidence regarding the interrelationship between macro-economic variables and stock indexes cannot be established accurately and therefore their long-term relationship is not consistent and hence not reliable. While, the findings ofHaider et.al. (2018), Deepa Mangala and Anita (2021) and Satpathy et.al. (2020)were found to be contradictory as they established some connections between the macro-economic parameters and the performance of firms and share prices, be it positive or negative. However, the other literatures focused more on the influence of macroeconomics on share prices and fluctuations.

7. CONCLUSION

Business Environment, both external a well as internal, affects businesses; domestic and international significantly. Inflation, demand and supply, cost of production are few factors which affect businesses directly. Profit maximization is one of the basic aims of every business. But, achievement of this goal needs significant study of demand and supply trends, production of reasonable and quality products and reasonable pricing strategy. But, all these operations are controlled by various factors which influence them. The sales, production and procurement processes of an entity are impacted by the economic factors taken together and also in cohesion.

The purpose of this study is to know how various macro-economic variables and industrial factors affect a company's performance, so that it becomes easier to predict the performance of the company in

study and investors (prospective investor, in general) can take healthy opportunities from the same . Advantage may be observing the EPS or getting hold of capital gain in case of an investor and share price in case of a speculator.

8. IMPLICATION OF THE STUDY

Taking into consideration a stated number of factors say 'X', which is again affected by another stated number of factors say 'N', which affect the former individually as well as jointly, the study becomes complicated and establishing any concrete relationship is not possible on that ground. Here, the concept of Random Walk Theory which says there is no relationship between the previous and present move, may stand true. But a person having desired knowledge and expertise might benefit even in the backdrop of uncertainties. Uncertainties are uncontrollable, but an investor having proper knowledge will be in a position to anticipate as well as absorb those changes tactfully and cater profits even in circumstances of depression.

9. LIMITATIONS OF THE STUDY

The study so conducted was limited to a single company i.e. Tata Motors. The study aimed to present the impact of the various macro economic variables on the performance of an industry (automobile industry) and in turn, the company (TATA Motors). However, the findings of the study would have been more relevant had the study covered all the companies belonging to the selected industry. There are around fifteen[1] purely Indian Companies (excluding joint ventures) operating in the auto sector.Applying the research objectives on all the companies would have widened the scopeof the study.Thus, all the companies were not taken into consideration which, in turn may act as the major limitation of the study. Furthermore, the data gathered from the yearly reports followed the financial yeari.e., books were closed on 31st March every year. On the contrary, the data relating to the economic parameters (macro-economic variables) followed the calendar year.Thus, the results so obtained, through the link created between them, may be subtle. Hence, the findings may not accurately depict the stated impact and may not throw light on all the objectives clearly;although, they give a fair idea regarding the reverberation of the macro-economic parameters on the company's performance.

[1]https://en.wikipedia.org/wiki/List_of_automobile_manufacturers_of_India

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