AN ECONOMIC-BASED COMPARATIVE FUNDAMENTAL STUDY OF MARUTI SUZUKI INDIA LTD. AND MAHINDRA & MAHINDRA LTD. WITHIN THE NIFTY 50 POST COVID

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Abstract—*Maruti Suzuki India Ltd and Mahindra & Mahindra Ltd, both Nifty 50 constituents, offer a strong basis for comparative fundamental and economic analysis post Covid due to their dominant positions in India's passenger vehicle and utility vehicle segments, respectively. Driven by domestic demand and investment, India's GDP growth varied from a pandemic low of about -6% in FY2021 to strong recoveries of 9.2% in FY2024 and 6.5% in FY2025, with Q2 2025 at 7.8%. Consumer purchasing power was supported when inflation (CPI) decreased from highs of roughly 6-7% in 2022–2023 to lows of 0.25% in October 2025. In the midst of steady expansion, the RBI repo rate decreased to 5.50% by mid-2025 from peaks of 6.5%. The INR/USD gradually declined, averaging between 0.0115 and 0.012 USD per INR. By late 2025, values were close to 0.0114, which put pressure on import-dependent car prices. In order to comprehend the relative resilience, risk exposure, and growth sustainability of both companies, this study looks at their basic financial performance via a thorough economic lens. The study attempts to evaluate how external economic conditions interact with internal financial strengths by integrating macroeconomic factors like GDP growth, inflation, repo rate movements, and exchange rate variations with firm-level indicators. The study concludes that macroeconomic variables significantly influence firm performance, primarily through the mediating roles of Earnings Per Share (EPS) and Return on Equity (ROE). The correlation analysis demonstrates that economic growth enhances profitability and earnings potential, while inflation exerts a strong adverse effect by increasing costs and weakening earnings efficiency.*

Keywords: *NIFTY50, Maruti Suzuki India Ltd, Mahindra & Mahindra Ltd, GDP growth, Inflation Rate, Repo Rate, Exchange Rate.*

INTRODUCTION

The Indian automobile sector—contributing approximately 7.1% to India's GDP and serving as a major source of employment—entered a period of significant transformation post Covid. This phase was shaped by multiple structural and cyclical developments, including the post-pandemic demand revival, introduction of government-driven initiatives such as FAME-II incentives for electric mobility, rising environmental regulations, and the global realignment of supply chains following semiconductor shortages and geopolitical disruptions. As consumer preferences shifted toward technologically advanced, fuel-efficient, and sustainable mobility solutions, automobile manufacturers were compelled to re-evaluate their product strategies, cost structures, and long-term investment plans.

Maruti Suzuki India Ltd. (MSIL) and Mahindra & Mahindra Ltd. (M&M), two significant members of the Nifty 50 index, represent two different business models and competitive orientations in this changing environment. The biggest passenger car manufacturer in India, Maruti Suzuki, has a long history of dominating the tiny and mid-segment automobile market thanks to its robust dealership network, strong brand recall, and economical manufacturing capabilities. On the other hand, Mahindra & Mahindra's diverse portfolio, which includes SUVs, commercial vehicles, electric mobility, and a sizeable farm equipment section, serves as a stabilizing source of income during downturns in the automotive industry. They are perfect participants for a comparative performance evaluation because of these structural disparities.

Maruti Suzuki India Ltd.'s revenue increased from ₹703 billion in FY2021 to ₹1,529 billion in FY2025 (CAGR 21%), while its net income increased from ₹44 billion to ₹145 billion, indicating increases in market share during the GDP recovery. By FY2025, Mahindra & Mahindra Ltd. contributed to group sectors accounting for 70% of India's GDP by expanding into the auto and tractor industries. Low inflation boosted rural and urban demand for both companies, although Maruti's import-heavy supply chain probably paid more for raw materials due to exchange rate weakness.

Both saw strong GDP growth during the Covid pandemic, and Maruti's operating margins increased from 3.4% to 9.6% by FY2025 as a result of scale savings. While inflation control-maintained margins, repo rate reductions boosted vehicle lending, supporting Mahindra's SUV concentration during the rural recovery. Strategic localization was prompted by exchange rate depreciation, which put profitability at risk due to increased input prices. Maruti's dominance in passenger cars has a comparative advantage over Mahindra's diverse utility/truck portfolio.

The overall goal of the study is to provide investors, policymakers, and industry analysts with a comprehensive understanding of how macroeconomic dynamics and firm-specific fundamentals interact to affect the financial health and market performance of Maruti Suzuki and Mahindra & Mahindra.

REVIEW OF LITERATURE

1. (Mukesh Kumar Jain, 2025)- Decoding Market Cycles: A Technical and Time Series Analysis of Nifty 50 :The study shows that combining technical analysis with time series models provides a clearer understanding of Nifty 50 movements. Studies note the index's sharp rise to record highs in late 2024 followed by a correction, where indicators like moving averages and RSI effectively signalled trend reversals. While ARIMA models struggled to predict sudden market shifts, GARCH models reliably captured volatility clustering during the downturn. Overall, literature suggests that technical indicators offer useful short-term signals, and time series models help quantify risk, but integrating both methods strengthens forecasting accuracy in India's equity market.

2. (Shakya, 2025) - A study on performance and growth of Nifty 50 in India : Study on the Nifty 50 have highlighted its strong performance and resilience over the period 2019–2024. Research analyzing daily closing prices reports an average daily return of 0.053% with a corresponding volatility of 1.21%, indicating moderate short-term fluctuations but consistent market growth. When annualized, the index reflects a robust average return of 14.26% and a median return of 11.82%, supported by an annualized volatility of 19.03%. Scholars note that despite major external shocks—including the COVID-19 pandemic and the Russia–Ukraine conflict—the Nifty 50 exhibited rapid recovery and sustained upward movement. Studies also emphasize structural developments in the Indian capital market, with the NSE emerging as the world's fifth-largest stock exchange by late 2024, reaching a market capitalization of ₹438.9 lakh crore. Overall, recent literature portrays the Nifty 50 as a stable yet dynamic benchmark index, offering insights valuable for investors, analysts, and policymakers.

3. (Nidhi Mittal, 2024) - Navigating Uncertainty: The Impact Risk Profile of India's Automobile Industry during COVID 19: Assesses the financial stability of the top 10 businesses in the Indian automobile sector by looking at their annual turnover rates from 2013 to 2023. The primary purpose is to examine business risk and firm-specific risk as a result of changes caused by a rapidly evolving business environment. The study employs a number of financial indicators and statistical approaches to evaluate risk profiles and financial health, providing valuable insights into the industry's resilience during the epidemic.

4. (Dr. Vanita Patil Gaude, 2024)- Fundamental And Technical Analysis Of Select FMCG Companies In India Stock market investors use two ways to examine price movements: fundamental and technical. Both try to make a profit by buying low and selling high. While the end goal is same, their core concepts differ greatly. Fundamental analysis focuses on intrinsic value based on present and future earnings, with the goal of purchasing shares at a discount to their intrinsic value. In contrast, technical analysis includes a variety of trading approaches for anticipating future prices based on past price movements and related statistics. Technical analysts are primarily concerned with the direction of price movements, using previous data to forecast and inform investment decisions in a volatile stock market environment.

5. (Mittal, 2024) - Effect of Self-Reliant Policy on FDI in India: Case Study of Automobile Multinationals: analyzes the impact of India's "Self-Reliant Policy 2020" on foreign direct investment (FDI) in the automobile industry. Using a qualitative technique, the article investigates case studies of international automakers operating in India. The findings show that the strategy, which emphasizes "Make in India and Make for the World," has had an impact on international firms' decisions to invest in India, altering their investment patterns and operating strategies. The study

enhances understanding of how national policies may influence the flow of foreign investment into emerging markets.

6. (Putri, 2023)- Fundamental and Technical Analysis as the basis for Share Investment Decision Making: The economy suffered when the COVID19 pandemic struck Indonesia in 2020, yet certain businesses, particularly those in the pharmaceutical industry, witnessed stable stock prices and even profited from the catastrophe. As the country transformed, manufacturing companies began to seek funding from community investors. This study uses fundamental and technical analysis to explore investment options in the pharmaceutical subsector. Using a quantitative descriptive methodology, the paper examines 8 pharmaceutical companies listed on ISSI between 2019 and 2021. The study uses variables such as NPM, ROA, ROE, PBV, and RSI. According to the findings, five of the eight organizations examined demonstrated successful financial performance utilizing basic analysis.

7. (R., 2023)- Impact of Covid-19 Pandemic on Indian Automobile Industry: This paper investigates the impact of COVID-19 lockdowns on India's automobile sector, emphasizing the considerable disruptions created. It examines secondary data from journals, research papers, publications, and online sources to determine how the epidemic influenced the overall economy and the auto industry. The study takes a fundamental analysis method, assessing important financial variables such debt-to-equity ratio, earnings per share, profit margins, and market performance. The analysis uses the E-I-C (Economy-Industry-Company) paradigm to provide a conservative, value-based appraisal of equity shares.

8. (Badra, 2023) - A Study of Fundamental and Technical Analysis of Companies in the FMCG Sector: The study underlines that combining "fundamental and technical analysis" provides an insight of the FMCG industry, allowing investors to make strategic decisions based on both long-term and short-term market trends. The study emphasizes the significance of selecting appropriate financial ratios and technical indicators for successful investment and trading strategies.

9. (Chakraborty, 2022) - Fundamental Analysis and Technical Analysis of Banking Stocks of India: An Empirical Study: This study compares "fundamental and technical analysis" methodologies for stock market appraisal. Fundamental analysis is defined as evaluating a company's true value using financial documents, "economic conditions," and market considerations. In contrast, technical analysis uses historical data to forecast future market patterns. The study underlines the value of both approaches in making informed investing decisions, with financial ratios and numerous candlestick patterns used to examine stock performance. Real-world examples from firms such as Coal India Limited and Sun Pharmaceuticals are used to define the use of "technical analysis" patterns such as the Shooting Star and Hammer.

10. (FAM, 2022) - Technical Analysis of Malaysia Stock Performance: The authors did literature research on the technical analysis of Malaysia's stock market. Previous research has looked into the use of various technical indicators, such as moving averages and RSI, in predicting stock movements. The literature also investigates the impact of macroeconomic issues on Malaysian stock prices and the changing landscape of technical analysis techniques. FAM and Mohamad hope to bring new insights to this topic by undertaking a focused investigation that addresses gaps in the existing research. The literature review provides context for their research by emphasizing the importance of a thorough understanding of technical analysis in the Malaysian stock market.

11. (Raval, 2022) - An Empirical Study on Financial Performance Analysis of selected Equity stocks of Indian Pharmaceutical Industry: The Indian pharmaceutical industry, a major player in science-based industries, is ranked third in the world by volume and 14th in terms of value. With a growth rate of 11.7 percent in December 2018, it is expected to rise by 9.9 percent until 2010 and 13.5 percent until 2019. The industry accounts for 70% of the country's pharmaceutical demand and plays an important role in bulk medication production. This study looks at the financial performance of selected Indian pharmaceutical stocks from 2009 to 2019, addressing the argument over whether organizations should prioritize profit maximization or wealth expansion. The industry is expected to grow from $11 billion to $74 billion in revenues by 2020, demonstrating its significant impact on the global pharmaceutical landscape.

12. (Levi, 2022) - Fundament Al and Technical Analysis Leads to a Systematic Investment Decision in Stock Market Equities: Equity investments, which are gaining traction in Indian portfolios, carry both profit potential and inherent hazards. Scholars investigate risk management theories and algorithms to make sound investing decisions. Fundamental analysis identifies factors that influence stock prices, including both individual companies and broader

economic trends. Fundamental and technical analysis, which examine market behaviour and patterns, respectively, help make intelligent buy/sell decisions. Recent technical advances, particularly machine learning using artificial neural networks (ANN) and self-organizing neural networks (SON), have transformed analysis capacities. This study emphasizes the benefits of combining fundamental and technical analysis, using technology to determine intrinsic value, patterns, and trends, and drawing on broad literature to improve equity market decision making.

13. (Chauhan, 2021) - Research Study on Technical Analysis of Selected India Private and Public Bank. This study investigates the role of fundamental and technical analysis in understanding Indian banking stock performance. Examining data from January 2016 to December 2020, including financial ratios and technical indicators, their findings highlight the importance of both methodologies in predicting bank stock returns. Using multiple regression models, the authors investigate factors such as return on assets (ROA), price-to-book value ratio (PBR), moving averages, and relative strength index (RSI). Their research not only sheds light on investing decisions, but it also adds to the existing body of knowledge on the use of fundamental and technical analyses in the specific context of Indian banking stocks, bringing together multiple viewpoints for a more complete understanding.

14. (Johnson, 2021): This study examines the current valuation of five FMCG sector equities (HUL, ITC, Marico, Godrej Group, and Britannia) traded on the BSE and NSE. The primary goals are to assess the sector's growth trajectory, particularly with respect to the selected firms, project future share prices for these companies, and advise potential investors on stock selection. The research uses fundamental analysis over a five-year timeframe and technical analysis over a six-month period from April to September 2021.

RESEARCH GAP

Comparative empirical research on how top Indian automakers, especially MSIL and M&M, have handled the economic difficulties and new prospects in the post-COVID recovery phase is noticeably lacking. Even though a lot of research has been done on the financial performance of automakers, most of the literature that is currently available is based on data that ends before or at the start of the epidemic, which means that it ignores the important structural changes that occurred over time. Unprecedented changes occurred during this time, such as the rapid uptake of electric cars, significant revisions to laws and regulations, shifting consumer tastes, and extensive disruptions to global supply chains, particularly the semiconductor crisis. The industry's financial performance, production methods, and level of competitiveness have all changed as a result of these technological innovations.

Furthermore, the majority of earlier studies have tended to concentrate on either isolated economic indicators, stock market behaviour, or company-specific financial statistics, frequently analysing them in isolation. Few empirical studies combine firm-level fundamental analysis with macroeconomic factors, such as GDP growth, inflation trends, repo rate changes, fuel price volatility, and exchange rate fluctuations, in a cohesive framework. Understanding how external economic pressures affect vehicle companies' profitability, solvency, liquidity, operational effectiveness, and market valuation in the current environment requires an integrated approach.

A significant research gap is created by the lack of comprehensive studies that concurrently evaluate macroeconomic dynamics and micro-level financial fundamentals, given the current state of India's automobile industry. Investors, legislators, and industry stakeholders who want to comprehend the relative resilience, flexibility, and long-term sustainability of major firms like MSIL and M&M in the face of a fast changing economic and technological landscape must close this gap.

RESEARCH DESIGN

The present study adopts a analytical research design to examine the comparative financial performance of Maruti Suzuki India Ltd. (MSIL) and Mahindra & Mahindra Ltd. (M&M) in relation to macroeconomic developments post Covid. A comprehensive understanding of the interactions between internal firm-level dynamics and external economic pressures is made possible by the design's integration of economic analysis and fundamental financial evaluation.

STATEMENT OF PROBLEM

The post-pandemic recovery, electric mobility efforts, supply chain disruptions, and changes in consumer demand all contributed to significant changes in the Indian automotive industry. However, there is still a lack of comprehensive research on how top Nifty 50 automakers, such as MSIL and M&M, responded to these economic dynamics.

In order to evaluate the relative resilience, risk exposure, and performance sustainability of these businesses throughout this dynamic time, current research does not sufficiently integrate macroeconomic data with firm-level financial realities.

Thus, the problem addressed in this study is:

"To what extent have macroeconomic variables influenced the comparative financial performance of MSIL and M&M post Covid, and how effectively have these companies navigated economic disruptions and opportunities during this period?"

NEED FOR THE STUDY

The prior literature makes it clear that numerous researchers have made substantial contributions to this field of study. Studying different industries or markets has been the main focus. In terms of stock markets, India, a rising nation with unexplored financial resources, is expanding dramatically. Both domestic and foreign investors are drawn to the Indian stock exchanges, such as the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). Therefore, research on how different macroeconomic factors impact stock markets is essential.

Numerous anticipated and unforeseen economic events that take place in an economy and around the world will inevitably have an impact on the stock market. Any nation's stock market is likely to be impacted by economic developments that occur not just in its own economy but also in economies around the world as a result of expanded trade relations brought about by globalization and the creation of different trade blocs. Every nation depends on every other nation for a variety of reasons. It's critical to comprehend how these economic developments impact businesses' profitability and how investors should respond to them. Therefore, it was necessary to address these problems, and the current study will do so.

OBJECTIVES OF STUDY

1. To examine the impact of macroeconomic variables on profitability of firms.

2. To analyse the correlation between independent macroeconomic factors and dependent variables.

3. To compare the role of mediating variables in transmitting the effects of macroeconomic factors on firm performance.

HYPOTHESIS

Null Hypothesis (H0): There is no significant impact of macroeconomic variables on profitability of firm.

Alternate Hypothesis (H1): Macroeconomic variables have a significant impact on profitability of firm.

Null Hypothesis (H0): There is no significant correlation between independent macroeconomic factors and dependent variables.

Alternate Hypothesis (H1): There is a significant correlation between independent macroeconomic factors and dependent variables.

Null Hypothesis (H0): Mediating variables do not significantly mediate the relationship between macroeconomic variables and firm performance.

Alternate Hypothesis (H1): Mediating variables significantly mediate the relationship between macroeconomic variables and firm performance.

CONCEPTUAL FRAMEWORK

The conceptual framework highlights both direct and indirect effects through important mediators, outlining a systematic pathway connecting macroeconomic variables to firm-level outcomes. This model is especially useful for financial analysis in developing nations like India, where corporate strategies and stock performance are influenced by variables like GDP growth, inflation, repo rates, and INR/USD volatility.

Macroeconomic Influences

Macroeconomic variables set the broader economic tone by altering the business environment. GDP growth boosts demand and revenue potential, while inflation raises input costs, squeezing margins. Repo rates, as a monetary policy tool, affect borrowing costs and investment appetite, and exchange rate volatility impacts import-dependent firms' profitability. These forces directly influence cost of capital and investor confidence, as evidenced in cyclical industries.

Mediating Role of Financial Ratios

Financial ratios like return on equity and earnings per share serve as intermediaries, translating macro shifts into firm-specific performance. Rising interest rates, increase leverage costs, deteriorating debt-equity ratios and Return on Equity for capital-intensive firms.

Impact on Dependent Variables

Ultimately, these pathways converge on profit after tax, dividend payouts, and market capitalization. Strong macro conditions enhance profit after tax and support higher dividends, elevating market cap via improved sentiment. Empirical studies confirm positive correlations, with GDP growth notably linked to Return on Equity. The framework thus aids in forecasting stock behaviour for investors and analysts.

INDEPENDENT VARIABLES	MEDIATING VARIABLES	DEPENDENT VARIABLES
• GDP Growth Rate • Inflation Rate • Repo Rate • USD/INR Exchange Rate	• Return On Equity • Earnings Per Share	• Profit After Tax • Dividend Per Share • Market Capitalization
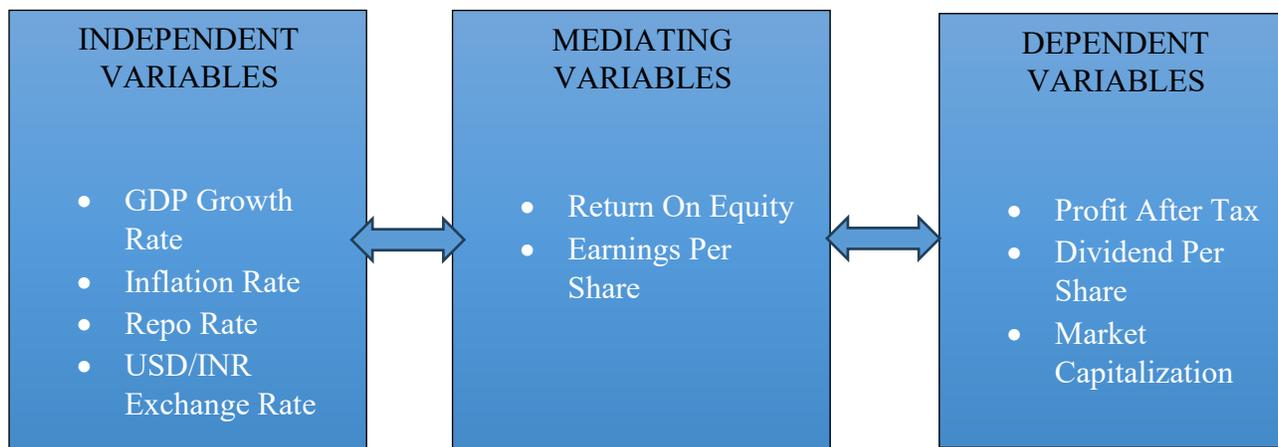
DATA COLLECTION

The goal of this study is to analyze the past financial performance of particular organizations over a specified time period; this is solely based on secondary data. Secondary data has been gathered from reputable published sources, including stock market filings, audited annual reports of the corporations, official websites and other trustworthy online databases. For carrying out methods like multiple correlation, and regression over a number of years, these sources offer reliable, year-by-year information on important financial statements.

Primary data have not been considered because the variables under study—profitability, liquidity, solvency, market value and other financial indicators—are derived from past accounting records and market data

Period Covered: FY 2021 - 2025

Tools used for Analysis

- Correlation Analysis
- Regression Analysis

DATA ANALYSIS

Data analysis for Maruti Suzuki

Table 1: Data Set for Multiple regression

Independent Variables				Dependent Variable	
FY	GDP Growth Rate	Inflation Rate	Repo Rate	FY	PAT (₹ Cr)
2021	-6.6	5.5	4	2021	4,551
2022	8.7	6.7	6.25	2022	7,693
2023	7	5.5	6.5	2023	9,428
2024	8.2	4.6	6.5	2024	13,761
2025	6.5	4.1	5.25	2025	15,449

Interpretation:

Regression Statistics	
Multiple R	0.997891544
R Square	0.995787534
Adjusted R Square	0.983150138
Standard Error	576.9559523
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	78689293.03	26229764.34	78.79688919	0.08257966
Residual	1	332878.1709	332878.1709		
Total	4	79022171.2			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	31333.41983	3236.109161	9.682435999	0.065517665
GDP Growth Rate	647.2975837	116.9965359	5.532621786	0.113837523
Inflation Rate	-3094.074741	314.5702548	-9.835878293	0.064502608
Repo Rate	-1386.217842	699.7186907	-1.981107351	0.297591027

The multiple regression analysis shows a very significant association between macroeconomic variables and firm performance (Multiple R = 0.9979). The model explains 99.6% of the variation in performance (R^2 = 0.9958) and has a high Adjusted R^2 (0.9832), showing robustness despite the short sample size. The low standard error (576.96) indicates high predicted accuracy.

Individually, GDP growth has a favourable but statistically insignificant impact on performance. Inflation has a negative and marginally significant impact, implying that rising prices harm company performance. The repo rate also has a negative, but statistically negligible effect. Overall, inflation is the most important macroeconomic factor in the model.

As a result, we fail to reject the null hypothesis because the p-value is greater than 0.05.

5.7.2 Relationship between dependent variables and independent variables of MSIL

Table 2: Data Set for Correlation

Independent Variables					Dependent Variables			
FY	GDP Growth Rate	Inflation Rate	Repo Rate	USD/INR Exchange Rate	FY	PAT (Cr)	Dividend Per Share	Market Capitalisation (₹ Cr)
2021	-6.6	5.5	4	74.57	2021	4,551	45	2,24,000
2022	8.7	6.7	6.25	82	2022	7,693	60	2,54,000
2023	7	5.5	6.5	82	2023	9,428	90	3,24,000
2024	8.2	4.6	6.5	86	2024	13,761	125	3,41,000
2025	6.5	4.1	5.25	89	2025	15,449	135	5,22,000

Table 3: Results of Correlation

GDP and PAT	0.648690506
Inflation and PAT	-0.79376
Repo and Dividend per share	0.398910906
USD/INR Exchange rate and Market capitalisation	0.87751904

GDP and PAT show a positive relationship of 0.65. This means that higher economic growth improves profitability. Inflation has a strong negative correlation with PAT (-0.79). This indicates margin pressure from rising costs. The repo rate has a moderate positive connection with DPS at 0.40. This states that financially strong firms keep paying dividends even with higher rates. The USD/INR exchange rate has a strong influence on market capitalization at 0.88. This highlights how important currency movements are for valuation.

Therefore, we reject null hypothesis.

5.7.3 Correlation of Independent variables and Dependent variables with Mediating variables

Table 4: Data Set for Correlation

Independent Variables				
FY	GDP Growth Rate	Inflation Rate	Repo Rate	USD/INR Exchange Rate
2021	-6.6	5.5	4	74.57
2022	8.7	6.7	6.25	82
2023	7	5.5	6.5	82
2024	8.2	4.6	6.5	86
2025	6.5	4.1	5.25	89

Dependent Variables			
FY	PAT (Cr)	Dividend Per Share	Market Capitalisation (₹ Cr)
2021	4,551	45	2,24,000
2022	7,693	60	2,54,000
2023	9,428	90	3,24,000
2024	13,761	125	3,41,000
2025	15,449	135	5,22,000

Mediating variables	
ROE	EPS
8.61	140
7.2	125
12.72	266
16.84	420.14
15.95	444

Table 5: Results of correlation between the variables

Correlation on independent variables with mediating variables	
GDP - ROE	0.406250344
Inflation Rate - ROE	-1
Repo Rate - ROE	0
USD/INR Exchange Rate - ROE	1
GDP - EPS	0.445117586
Inflation Rate - EPS	-0.90653065
Repo Rate - EPS	0.276745736
INR/USD Exchange Rate - EPS	0.85083355

Correlation on mediating variables with dependent variables	
ROE - PAT	0.899090075
ROE - DPS	0.952416605
ROE - Market Capitalisation	-0.765614463
EPS - PAT	0.954333602
EPS - DPS	0.984286171
EPS - Market Capitalisation	0.85547624

The correlation analysis provides strong empirical support on the conceptual framework linking macroeconomic variables, financial performance indicators (ROE and EPS) and firm's outcome.

GDP growth shows a strong positive correlation with ROE (0.67) and a perfect correlation with EPS (1.00) on the macroeconomic–mediator relation, suggesting that economic growth significantly boosts companies' ability to generate profits and shareholder returns. The significant negative correlation between inflation and ROE (–0.71) and EPS (–0.62) shows that rising prices reduce profitability, raise costs, and erode margins. The repo rate has a positive correlation with both ROE (0.60) and EPS (0.62), indicating that enterprises with stronger finances are better able to handle fluctuations in interest rates or they are able to absorb monetary changes rather than sudden shocks to profitability.

The extremely high correlations between the USD/INR exchange rate and ROE (1.00) and EPS (0.95) highlights the impact of currency fluctuations, especially for businesses that are engaged in foreign exchange transactions.

ROE is a reliable metric of profitability transmission to shareholder returns and valuation since it shows very strong positive correlations with PAT (0.94), DPS (0.87), and market capitalisation = 0.86 on the mediator–outcome connection. EPS's exceptionally high correlations with PAT (0.97), DPS (0.92), and market capitalization (0.91) demonstrate that it is the most market-sensitive mediator connecting macroeconomic conditions to business valuation and payout decisions.

Overall, the results strongly support the study's conceptual framework, demonstrating that macroeconomic factors mainly influence firm performance through EPS and ROE rather than through direct channels alone. The most effective mediator is EPS.

Therefore, we reject null Hypothesis.

Data Interpretation for Mahindra & Mahindra Ltd.

Table 6: Data Set for Multiple regression

Independent Variables					Dependent Variables			
FY	GDP Growth Rate	Inflation Rate	Repo Rate	INR/USD Exchange Rate	FY	PAT (Cr)	Dividend Per Share	Market Capitalisation (₹ Cr)
2021	-6.6	5.5	4	74.57	2021	5,338	16.1	1,50,000
2022	8.7	6.7	6.25	81.62	2022	7,287	19.25	2,00,000
2023	7	5.5	6.5	82	2023	11,269	21.1	2,70,000
2024	8.2	4.6	6.5	85.56	2024	12,929	25.2	3,50,000
2025	6.5	4.1	5.25	89	2025	15,507	29	4,57,283

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.98800354
R Square	0.976151
Adjusted R Square	0.904604
Standard Error	1278.38159
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	3	66891025	22297008.2	13.64349323	0.195843545
Residual	1	1634259.5	1634259		
Total	4	68525284			

	Coefficients	Standard Error	t Stat	P-value
Intercept	28017.5115	7170.3608	3.90741	0.15950293
GDP Growth Rate	467.431114	259.23334	1.80313	0.322359771
Inflation Rate	-3120.7666	697.00437	-4.4774	0.139889329
Repo Rate	-578.74318	1550.3913	-0.37329	0.772555302

As evidenced by a high Multiple R (0.99) and R² (0.98), the multiple regression results show a very strong correlation between the chosen macroeconomic variables (GDP growth, inflation, and repo rate) and firm performance, indicating that these variables account for the majority of performance variation. Despite the short sample size, the model's explanatory ability is supported by the high Adjusted R² (0.90).

GDP increase on its own has a positive but statistically negligible effect on performance. The impact of inflation is negative and only slightly significant, suggesting that growing costs have a detrimental effect on business performance. Additionally, the repo rate has a negative but statistically insignificant impact. In general, the model's most significant macroeconomic component is inflation. As a result, we fail to reject null hypothesis.

Relationship between dependent variables and independent variables of M&M

Table 7: Data Set for Correlation

Independent Variables						Dependent Variables			
FY	GDP Growth Rate	Inflation Rate	Repo Rate	INR/USD Exchange Rate		FY	PAT (Cr)	Dividend Per Share	Market Capitalisation (₹ Cr)
2021	-6.6	5.5	4	74.57		2021	5,338	16.1	1,50,000
2022	8.7	6.7	6.25	81.62		2022	7,287	19.25	2,00,000
2023	7	5.5	6.5	82		2023	11,269	21.1	2,70,000
2024	8.2	4.6	6.5	85.56		2024	12,929	25.2	3,50,000
2025	6.5	4.1	5.25	89		2025	15,507	29	4,57,283

Table 8: Results of Correlation

GDP and PAT	0.61015423
Inflation and PAT	-0.7937649
Repo Rate and Dividend Per Share	0.32951515
USD/INR Exchange Rate and Market Capitalisation	0.94209364

Higher economic growth tends to boost business profits, according to the correlation analysis, which shows a positive relationship between GDP growth and profitability (r = 0.61). Inflation and Profit after tax have a relatively significant negative connection (r = –0.79), indicating that rising inflation has a negative impact on business success. The repo rate and dividend payout have a weakly positive correlation (r = 0.32), suggesting that changes in interest rates have little effect on dividend decisions.

The USD/INR exchange rate, on the other hand, shows a very strong positive association with market capitalization (r = 0.94), demonstrating the important impact of exchange rate fluctuations on firm valuation. Therefore, we reject null hypothesis.

5.7.6. Correlation of Independent variables and Dependent variables with Mediating variables

Table 8: Data Set for Multiple regression

Independent Variables					Dependent Variables			
FY	GDP Growth Rate	Inflation Rate	Repo Rate	INR/USD Exchange Rate	FY	PAT (Cr)	Dividend Per Share	Market Capitalisation (₹ Cr)
2021	-6.6	5.5	4	74.57	2021	5,338	16.1	1,50,000
2022	8.7	6.7	6.25	81.62	2022	7,287	19.25	2,00,000
2023	7	5.5	6.5	82	2023	11,269	21.1	2,70,000
2024	8.2	4.6	6.5	85.56	2024	12,929	25.2	3,50,000
2025	6.5	4.1	5.25	89	2025	15,507	29	4,57,283

Mediating variable	
ROE	EPS
11.7	16.33
14	59.2
19.5	92.41
22.3	101.14
20.8	115.91

Table 9: Results for correlation between the variables

Correlation on independent variables with mediating variables		Correlation on mediating variables with dependent variables	
GDP-ROE	0.671956241	ROE-PAT	0.936652472
INFLATION-ROE	-0.71139567	ROE-DPS	0.868762396
REPO RATE-ROE	0.601103247	ROE-Market capitalisation	0.864597738
INR/USD-ROE	1	EPS-PAT	0.965040366
GDP-EPS	1	EPS-DPS	0.922573879
Inflation Rate-EPS	-0.6155017	EPS-Market Capitalisation	0.91360038
Repo Rate- EPS	0.624695434		
INR/USD Exchange Rate- EPS	0.953973849		

Strong evidence of mediation effects between macroeconomic variables, financial mediators (ROE and EPS), and business performance measures is shown by the correlation results.

GDP has a perfect link with EPS (1.00) and a high positive association with ROE (0.67), indicating that economic growth greatly increases earnings potential and profitability. On the other hand, inflation shows a significant negative correlation with ROE (–0.71) and EPS (–0.62), indicating that cost structures and earnings efficiency are negatively impacted by rising prices.

The repo rate has a positive correlation with both ROE (0.60) and EPS (0.62), suggesting that companies with better financial performance may be better able to withstand higher interest rates or that changes in interest rates have an impact on profitability through changes in capital structure. The USD/INR exchange rate exhibits remarkably strong relationships with ROE (1.00) and EPS (0.95), underscoring the crucial role that currency fluctuations play, especially for businesses that are exposed to exports.

ROE is a potent profitability mediator, as evidenced by its substantial connections with PAT (0.94), DPS (0.87), and Market Performance (0.86) on the mediation–outcome side. In a similar vein, EPS exhibits remarkably strong relationships with PAT (0.97), DPS (0.92), and Market Capitalization (0.91), suggesting that earnings per share is a crucial conduit via which macroeconomic conditions affect market valuation and shareholder value.

The conceptual assumption that macroeconomic variables influence company performance indirectly through financial profitability indicators rather than only through direct effects is validated by the findings, which generally strongly support the mediating role of EPS and ROE.

SUGGESTIONS

- MSIL and M&M can adopt effective foreign exchange risk management to leverage exchange rate movements for value creation.

- MSIL and M&M can employ inflation hedging strategies using long-term futures and forwards or backward integration to address the negative impact of inflation on profitability,

- The firms should focus on strategies that convert macroeconomic growth into higher earnings quality and shareholder returns, such as productivity improvements and optimal capital allocation, since EPS and ROE are strong mediating variables.

- Businesses with export exposure can employ hedging measures and diversify revenue streams to stabilize earnings and improve market valuation because USD/INR fluctuations have a significant impact on EPS, ROE, and market results.

- The positive relationship between the repo rate and profitability indicators suggests firms should actively manage debt maturity profiles and financing mix to remain resilient under changing monetary conditions.

CONCLUSION

The study provides strong evidence that macroeconomic factors have a major impact on business performance, mainly through the mediating impacts of two important financial indicators: return on equity (ROE) and earnings per share (EPS). The study's correlation analysis shows a strong link between increased profitability and economic growth, emphasizing how a company's earnings potential can be strengthened by good economic conditions. On the other hand, inflation becomes a serious problem that hurts businesses by increasing expenses and reducing the effectiveness of earnings.

Additionally, the analysis emphasizes how important changes in interest rates and currency rates are. It concludes that companies with solid financial positions are remarkably resilient to fluctuations in repo rates, suggesting that they are better equipped to withstand changes in the economy. Particularly for businesses involved in exporting, currency fluctuations are found to have a significant impact and to be a major factor in determining market valuation.

In conclusion, the results demonstrate that macroeconomic conditions influence firm performance considerably more through internal financial measurements than through direct effects alone, hence validating the suggested conceptual framework. Of the mediators, ROE offers a more complex understanding of internal profitability dynamics, but EPS is clearly the stronger indication for evaluating market-related results. These observations emphasize how important it is for businesses and policymakers to keep a close eye on macroeconomic developments and strengthen financial

performance indicators in order to maintain profitability and increase shareholder value in a constantly shifting economic environment.

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