IS INDIAN AUTOMOBILE SECTOR PERFORMANCE GET AFFECTED POST IMPLEMENTATION OF GST IN INDIA?

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ABSTRACT

The study is on financial ratios of 15 Indian Automobile firms with reference to pre and post GST Implementation. A total of 15 companies of automobile industry are taken as the sample size based on market capitalisation. Various ratios such as profitability, margin, liquidity, solvency and efficiency/activity ratios are assessed for the period of 12 years (6 before GST and 6 after GST). The average ratios of all 15 companies taken as base for assessing pre and post impact. The majority ratios shown the changes in numerical value of ratio before and after implementation of GST. The observed difference is negative in majority of ratios. Out of 15 ratios evaluated only 6 ratios have shown significant difference in pre and post implementation of GST using statistical testing (paired t - test). The efficiency and capital productivity is significantly affected by the reforms in indirect taxes.

Keywords: Efficiency, Capital Productivity, GST Implementation.

I. INTRODUCTION

Indian automobile industry is one of the most important drivers of economic growth. After the economic reforms of 1991, its participation in global value chain has increased significantly (S, Miglani, 2018). Automobile industry is the fourth-largest producer of light motor vehicles and seventh largest in terms of production of commercial vehicles in 2019. Indian automobile industry is expected to grow by Rs. 16.16 to 18.18 trillion by 2026 (IBEF, 2020). Indian automobile industry produces more than 30 million vehicles, including commercial, passenger, two-wheelers, three-wheelers, and other types of vehicles (CMIE, 2020). Share of automobile industry in GDP is 7.1%, and it provides employment opportunity to over 35 million people, its share in global research and development accounts for 40%, and its share in total exports is 4.3% (Invest India, 2020). As per recent data of department for promotion of industry and international trade (DPIIT) automobile sector attracted FDI of Rs. 1,52,553 crores for the period between 2000 to 2020, which is 5% of India’s total FDI inflows. Given the strong demand from middle and higher-income households, growing youth population and greater access to credit further stimulus to the growth of the automobile industry. The auto sector witnessed greater number of mergers and acquisitions in the recent past, which has provided synergistic effect in terms of technology and greater access to international sources of finance, which strengthened production efficiency and innovations. The government’s vision to make India as an auto manufacturing hub with the help of initiatives such as Make in India, Automotive Mission Plan2026, and NEMMP plan of 2020 provided boost to auto manufacturing magnification in India.

Growing population and increased commercial activities necessitated movement of people, commodities, and cargo from one place to another place and it led to improved connectivity in terms of construction and development of roads in villages, suburban, and urban areas, and it provided flip for the increased demand for two-wheelers, four wheelers, as well as other vehicles. Tax is one of the important decisive factors in buying motor vehicles. The complexity of tax law and cascading of taxes and surcharges in earlier tax regimes resulted in increased price of vehicles in India. However, with the implementation of GST, many taxes are subsumed, and it’s simplified the tax structure and paved the way for increased efficiency in supply chains across India. Availability of Input tax credit (ITC) and reduced cascading of taxes led to reduced price of vehicles. GST provided benefits to the automobile sector in eliminating tax arbitrage opportunities between states and excluding government subsidies provided to e-vehicles from the transaction value (R. Mohan, 2020). On the other hand, exclusion of petroleum from the preview of GST impacted severely on the rise of petrol and diesel
prices and will lead to a reduction in the demand for the auto sector. Excise duty on petrol increased from Rs. 9.48 to Rs. 32.98 per liter, and for diesel, increased from 3.56 per liter to 31.83 per liter during 2014 and 2021, respectively (ET, 2020). The blockage of input tax credit and other factors have a significant impact on the automobile industry. An attempt made in this study to examine the impact of GST on automobile Industry.

II. REVIEW OF LITERATURE

(S M Shukla, 2022) concluded that the implementation of GST represents a shift towards a more unified and simplified taxation framework, streamlining the tax structure and promoting efficiency in the movement of goods and services across borders. Concurrently, digitalization has revolutionized tax administration, enabling seamless compliance, real-time monitoring, and data-driven decision-making. (Dr. Syed Sultana, 2018) analysed the impact of GST on the profitability and efficiency of automobile firms in India. The study used financial ratios to compare the pre and post GST periods and found that there was a significant improvement in the profitability and efficiency of automobile firms after the implementation of GST. (Jegadeeshwaran, 2018) concluded that the short term solvency position is unsatisfactory. During the study period the companies may concentrate on their cost of production, investment in fixed assets and their sales turnover to improve their profitability.

(Ashok Sharma, 2018) concluded that the impact of GST on the automobile industry will depend upon the compliance of the new taxation system by the sector as a whole. The automobile sector in India is one of the largest in the world. India is one of the largest tractor manufacturer in the world. (Charmi Karia) conclude that GST has mixed impact on the Indian economy. Some sectors are positively impacted by it whereas some sectors are negatively affected by it. Main sectors that were adversely affected by GST were agriculture and textile sector, the reason being outside the tax regime before GST. (Aruna Kumari, 2019) concluded that the implementation of GST led to a reduction in prices of automobile as studied with reference to TVS motor company. The effect of GST on automobile industry has led to decrease in prices which benefits the consumers. (Noor Asma) concluded that under the GST regime, taxes would be levied on the consumption state as opposed to the origin or manufacturing state, which in turn, will help give push to the growth rate of the automobile sector.

(Verma & Sharma 2018) analyzed the impact of GST on the sales and profitability of automobile firms in India. The study used a regression analysis to analyse the data and found that GST had a positive impact on the sales and profitability of automobile firms. (Patil et al, 2021) analysed the impact of GST on the financial performance of selected automobile firms in India. The study used a panel data regression analysis and found that GST had a positive impact on the financial performance of automobile firms. (Kharde, 2017) in his research paper covered the overall impact of GST on automobile sectors in India and made comparative studies between pre-tax policy and GST policy on automobile industry. Author also concluded on GST impact on the economic development of the country. (Neelavathi K) has expressed in her study “Impact of GST on Automobile Industry” The accomplishment of GST changes from the origin public to the ingesting it could improve the GDP progress that could push attention for vehicle crosswise over classes.

III. RESEARCH METHODOLOGY

The impact of the Goods and Services Tax (GST) on the financial performance of automobile companies can vary based on several factors, including the specific segment of the automobile industry they operate in, their supply chain dynamics, pricing strategies, and overall market condition. For the Simplification of Tax Structure, Input Tax Credit, Supply Chain Efficiency, Increased Compliance Costs, Impact on Demand. GST continues to play a crucial role in India’s economic landscape by promoting efficiency, transparency, and compliance in the tax system, and its importance remains undiminished in today’s context. The research is quantitative in nature as it entails gathering and analysing numerical data from secondary sources to compare financial ratios of automobile industry with reference to pre and post GST Implementation.

The sample for this study would consist of financial ratios of fifteen automobile firms spanning over 12 years on an annual basis. The data will be collected from secondary sources such as Public Annual Reports of Automobile companies and other National Stock Exchange (NSE) website. Annually twelve-year period will be included in the sample for this study, from FY 2011-12 to 2022-23. This period has been divided into the pre and post-GST period encompasses FYs 2011-12 to 2016-17, while the post-GST periods have been compared with major
financial ratio. Data pertaining to financial ratios have been collected from annual reports of the select firms. Top 15 sample firms have been selected from NSE index based on market capitalization.

**Objectives:**

- The objective is to finding out the impact of GST implementation on major financial ratios of selected Automobiles firms.
- To study Profitability analysis of selected automobile companies in India.

**Hypothesis:** The following hypotheses have been framed:

- \( H_01 \): There is no significant difference between average current ratio in pre and post-GST periods of the select firms.
- \( H_02 \): There is no significant difference between average quick ratio in pre and post-GST periods of the select firms.
- \( H_03 \): There is no significant difference between average total debt to equity ratio in pre and post-GST period of the select firms.
- \( H_04 \): There is no significant difference between average net profit ratio in pre- and post-GST period of the select firms.
- \( H_05 \): There is no significant difference between average return on capital employed in pre- and post-GST period of the select firms.
- \( H_06 \): There is no significant difference between average inventory turnover ratio in pre- and post-GST period of the select firms.
- \( H_07 \): There is no significant difference between average assets turnover ratio during pre- and post-GST period of the select firms.
- \( H_08 \): There is no significant difference between the average dividend per share (DPS) during pre and post-GST period of the select firms.
- \( H_09 \): There is no significant difference between the average earning per share (EPS) pre and post GST period of the select firms.
- \( H_{10} \): There is no significant difference between net profit per share during pre and post-GST period of the select firms.
- \( H_{11} \): There is no significant difference between revenue from operations during pre and post-GST period of the select firms.
- \( H_{12} \): There is no significant difference between return on asset during pre and post GST period of the select firm.
- \( H_{13} \): There is no significant difference between return on net worth per equity during pre and post GST period of the select firm.
- \( H_{14} \): There is no significant difference between earning yield during pre and post GST period of the select firm.
- \( H_{15} \): There is no significant difference between earning retention ratio during pre and post GST period of the select firm.

**IV. RESULT**

The study examines the impact on financial ratios of 15 Indian Automobile firms with reference to pre and post GST Implementation by calculating Mean and Standard Deviation. In order to test for statistical significance, the paired sample t-test has been applied to find out any statistical relation exist among the financial ratios with reference to pre and post GST. The help of p value is taken to accept or reject the hypothesis drawn.
Summery Table:

<table>
<thead>
<tr>
<th>Financial Ratios</th>
<th>Before GST</th>
<th>After GST</th>
<th>T-Stat</th>
<th>P-Value</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio</td>
<td>1.47</td>
<td>1.33</td>
<td>0.40</td>
<td>0.70</td>
<td>No Significant</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>0.80</td>
<td>0.89</td>
<td>-0.96</td>
<td>0.35</td>
<td>No Significant</td>
</tr>
<tr>
<td>Asset Turnover Ratio</td>
<td>139.85</td>
<td>68.61</td>
<td>10.52</td>
<td>0.00</td>
<td>Significant</td>
</tr>
<tr>
<td>Inventory Turnover Ratio</td>
<td>13.57</td>
<td>11.46</td>
<td>2.22</td>
<td>0.04</td>
<td>Significant</td>
</tr>
<tr>
<td>Return on Capital Employed</td>
<td>17.42</td>
<td>15.78</td>
<td>0.89</td>
<td>0.39</td>
<td>No Significant</td>
</tr>
<tr>
<td>Total Debt/Equity</td>
<td>0.46</td>
<td>0.32</td>
<td>1.87</td>
<td>0.08</td>
<td>No Significant</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>10.69</td>
<td>7.42</td>
<td>3.57</td>
<td>0.00</td>
<td>Significant</td>
</tr>
<tr>
<td>Return on Net worth/ Equity</td>
<td>20.03</td>
<td>12.21</td>
<td>5.74</td>
<td>0.00</td>
<td>Significant</td>
</tr>
<tr>
<td>Net Profit Margin</td>
<td>7.61</td>
<td>6.76</td>
<td>1.17</td>
<td>0.26</td>
<td>No Significant</td>
</tr>
<tr>
<td>Net Profit/Share</td>
<td>250.29</td>
<td>237.12</td>
<td>0.49</td>
<td>0.63</td>
<td>No Significant</td>
</tr>
<tr>
<td>Revenue from Operation/ Share</td>
<td>2712.66</td>
<td>3636.20</td>
<td>-1.31</td>
<td>0.21</td>
<td>No Significant</td>
</tr>
<tr>
<td>Dividend/Share</td>
<td>18.43</td>
<td>33.71</td>
<td>-2.40</td>
<td>0.03</td>
<td>Significant</td>
</tr>
<tr>
<td>Basic EPS</td>
<td>253.65</td>
<td>237.09</td>
<td>0.65</td>
<td>0.53</td>
<td>No Significant</td>
</tr>
<tr>
<td>Earning Retention Ratio</td>
<td>61.12</td>
<td>49.56</td>
<td>1.43</td>
<td>0.18</td>
<td>No Significant</td>
</tr>
<tr>
<td>Earning Yield</td>
<td>0.08</td>
<td>0.04</td>
<td>2.35</td>
<td>0.03</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The above table showing the average ratio of sample companies (15) before implementation of GST and the average ratio after implementation of GST. As the sample is similar before and after the implementation of GST the paired t test value is indicated for each ratio undertaken for study along with the respective p-value to assess the impact at 95% level of confidence. The result shows that out of 15 ratio's evaluated for measuring the impact of GST, only ratios have shown a significant change post implementation of GST.

V. CONCLUSION

The study aimed to find out that whether reforms in indirect taxes has any significant impact on the performance of firms operated in automobile industry. As mentioned in result section, it has been cleared that only 6 ratios are showing significant impact, but going beyond on comparison of ratios before implementation of GST with after implementation of GST, the numerical values of almost all ratios have declined. The ratios which are significantly affected are mainly in the category of capital productivity ratios (ROE and ROA) as well as activity/efficiency ratios (Turnover ratios). The margin ratios, liquidity as well as solvency ratios have mostly shown no significant impact post implementation of GST. Thus, it can be concluded that the reforms in indirect taxes either in terms of increasing or decreasing tax liability affects generously on firm's activity ratios and the capital productivity ratios.

VI. REFERENCES


https://www.icidirect.com/ilearn/stocks/articles/key-financial-ratios-to-access-automobile-stocks