Impact of GST on the Automobile Industry

Akhilesh Kumar[1]*, Dr. Ram Lochan Mishra[2]

[1] Research Scholar, Janta Koshi College, Biraul, Barbhanga

[2] Associate Professor (H.O.D.), Janta Koshi College, Biraul, Barbhanga

Abstract - Under the Pre GST regime, central and state government have levied multiple taxes on the same supply chain. There was cascading effect of taxes, as taxes levied by the central government, were not allowed as set off against the taxes levied by state government. In the view of the above difficulties, the certain taxes have been subsumed in a one tax called the goods and service tax (GST). Automobile industry in India is one among the most victorious and rising manufacturing industry after liberalization. The industry has prospective to grow and become a most important contributor for the economic development and employment formation. The Indian government has also identified the need for Automobile industry in the Indian economy and is currently functioning on Automotive Mission Plan 2026. The automobile industry produces commercial vehicles, passenger's cars, and three and two-wheeler.By the outline of GST, where all the taxes are subsumed into one, it becomes necessary to foresee the impact of GST on this industry. This paper covers the overall impact of GST on Automobile sector in India.

Keywords - GST, Automobile Sector, Taxation, Indian Economy, India

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INTRODUCTION

India's GST (Goods and Services Tax) is a planned indirect tax system that would combine several of the country's current taxes into a single tax. One hundred and one amendments to the Constitution were enacted in 2016. Economic growth in India is projected to be bolstered by the implementation of the Goods and Services Tax (GST), a major reform of indirect taxation in the country. The cascading effect of taxes is also predicted to be eliminated by GST. In the coming years, India is expected to play a significant role in the global economy. [1]

The automobile industry serves as a symbol of human ingenuity. The dynamic growth phases of one of the world's fastest-growing sectors are explained by the nature of competition, the life cycle of the product and the demand of consumers. It is today's global automobile business that is concerned with consumer demands for style; safety and comfort; and manufacturing efficiency. When it comes to worldwide mergers and relocating manufacturing hubs to emerging economies, this business is at a crossroads. [2]

In India, the automobile sector, which includes automobiles and automotive components, is a major economic contributor. It is a key contributor to manufacturing GDP, exports, and jobs because of its close ties to other industrial sectors. Historic capabilities in casting, forging and precision machining have driven this industry's expansion. It has also benefitted from low-cost skilled labour and considerable FDI inflows, as well as traditional strengths in fabrication (welding, grinding, and polishing). [3]

Automotive production in India ranks as a global leader. 7.1 percent of the country's GDP is attributed to the sector (GDP). Almost 13 percent of government excise revenues come from this industry, which accounts for 4.3 percent of India's overall exports. With federal excise duty ranging between 12.5 percent and 30 percent and several cesses imposed at the government's whims and fancies to raise income, this industry has had to deal with high tax rates for a long time now. The most recent of these is the infrastructure cess. [4]

Vehicle manufacturers and their consumers would both benefit from lower taxes under the Goods and Services Tax (GST), which is expected to be implemented in full on January 1, 2017. Taxes like sales tax, road tax, sector tax, VAT and vehicle tax, as well as fees for registering a car, were all in place prior to the implementation of the GST. Taxes on car services now include all of these.[5]

LITERATURE REVIEW

Eeshan Gupta, Dr. Sangeetha R (2015) Understanding GST and the Indian stock market's performance as a result of the adoption of GST is the focus of this study. In order to better understand this field of study, this paper evaluates twenty-five published works by well-known scholars. The BSE Auto index, the BSE Oil and Gas index, and the BS E banking index prices are all included in this publication. Descriptive Statistics, Regression, Unit Root Test, Paired T test, and Granger's Causality test are used to examine the data in this work. The outcomes of the analysis are desirable and aid in further investigation and interpretation. [6]

Arpit Jain (2014) In this study, the impact of GST on small company and the automobile sector is examined. Chaos and bewilderment erupted among the populace when the GST was implemented. For India's economy, GST was a game-changer. For the first time, all indirect taxes will be unified. It included commodities that had previously been exempt from taxation. With the GST, the government hoped to lessen the concept of "tax on tax" while also raising the country's overall GDP. Fixed rates for specific commodities were established as a way to eliminate price fluctuations between states. The GST aided in the reduction of automotive prices. [7]

Saravana Rajan S, Kirubagaran K (2014) There is a survey and an analysis of the data obtained in this study article. For this research, secondary sources such as books, journals and articles are also consulted. There were 305 responses to the survey, which was a success. Analysis of the replies took place. According to the survey, middle-class people are impacted by rising oil prices, and the government might possibly provide assistance in light of the rising prices. The implementation of GST in the vehicle industry, in particular, has proven to be a boon to both consumers and businesses. [8]

K.Neelavathi, Mrs. Rachana Sharma (2017) Post-liberalization, India's automobile sector has emerged as one of the country's most successful and promising industries. As an economic and job-creating force, the industry has a lot of promise. Cars are an important part of India's economy, and its government is now working on an Automotive Mission Plan 2026 to compete with the world's most powerful nations. India's government plans to apply the Goods and Services Tax (GST) in the manufacturing sector. [9]

Dr. B. Maheshwari (2017) A look at the automobile industry's participation in the present economic downturn is the focus of this article In the recession, the automobile industry has been one of the hardest hit. Automobiles are manufactured, marketed and sold by the automobile industry. As of 2008, there were more than 70 million vehicles on the road around the world. The United States has around 250 million automobiles on the road. More than 260 billion US gallons of gasoline and diesel fuel are consumed worldwide each year. [10]

METHODOLOGY

Secondary data, such as that found in research reports, journals, market papers, newspapers, the internet, and online databases, is given greater weight in this study. This study describes the effects of the Goods and Services Tax (GST) on India's automobile industry. Data from databases like the Center for Monitoring Indian Economy (CMIE) and the EPWRF databases is used to compile this report. IBEF, yearly reports of vehicle firms, and other reports. For the purpose of drawing conclusions from data, descriptive statistics such as the mean, paired t-test, and correlation were used.

ANALYSIS

Table 1 Growth of Automobile industry in India

Year	Before GST							After GST
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Factories	220(-)	200 (-9%)	255 (28%)	188 (-26%)	182 (-3%)	182 (0%)	238 (31%)	210 (-12%)
Employees	128,135(-)	152,731 (19%)	148,497 (-3%)	176,510 (19%)	187,346 (6%)	185,779 (-1%)	206,946 (11%)	207,213 (0%)
Workers	91,470(-)	111,191 (22%)	110,273 (-1%)	120,786 (10%)	135,282 (12%)	135,837 (0%)	147,204 (8%)	147,586 (0%)
Fixedcapital'	421,159(-)	482,561 (15%)	578,828 (20%)	708,802 (22%)	703,050 (-1%)	775,543 (10%)	980,804 (26%)	907,831 (-7%)
Investedcapital'	573,125(-)	694,000 (21%)	790,311 (14%)	895,239 (13%)	900,842 (1%)	1,029,464 (14%)	1,228,429 (19%)	1,148,269 (-7%)
Working capital'	-252,570(-)	-29,496 (-88%)	21,046 (-171%)	-143,846 (-783%)	-234,347 (63%)	-61,406 (-74%)	90,156 (-247%)	125,384 (39%)
Gross valueof output'	1,526,593(-)	1,900,460 (24%)	2,140,476 (13%)	2,158,586 (1%)	2,508,958 (16%)	2,759,543 (10%)	3,039,291 (10%)	3,160,785 (4%)
Netincome'	129,461(-)	105,025 (-19%)	207,454 (98%)	157,915 (-24%)	332,606 (111%)	374,125 (12%)	354,769 (-5%)	276,252 (-22%)
Profit'	70,434(-)	33,784 (-52%)	121,207 (259%)	62,507 (-48%)	229,528 (267%)	248,965 (8%)	161,121 (-35%)	125,403 (-22%)

From 2010-2011 to 2017-2018, the automobile industry's growth is depicted in Table 1. The number of factories, fixed capital, invested capital, net income, and profitability all show negative growth. One may see that the number of employees and workers isn't increasing significantly. There is a favourable growth in working capital and the total value of output. During the research period, the automobile sector had more ups and downs due to both internal and external variables. In addition to government policy ramifications, the performance of the vehicle industry has been influenced. Demonetization and the introduction of the Goods and Services Tax (GST) were particularly detrimental to the expansion of the vehicle industry. A decrease in working capital in 2016-17 may be due to the demonetization of the Indian currency. Working capital is expected to rise in 2017-18, possibly as a result of the Goods and Services Tax (GST). Due to increased working capital requirements under the GST, as well as a drop in automotive net income and profit, this is the case. The slow expansion of the vehicle industry is also shown by other indices.

Table 2 Production andSale of automobiles (Valuesin Numbers)

Year	BeforeGST		Year	AfterGST	
	Production	Sales		Production	Sales
2014-2015	23358047	23297717	2017-2018	29092734	29022548
2015-2016	24106068	24112465	2018-2019	30909486	30890201
2016-2017	25329383	29022548	2019-2020	26356187	26306017
Mean	24264499.33	25477576.67	Mean	28786135.67	28739588.67
S.D.	995171.7298	3096945.252	S.D.	2292080.899	2305154.057
Pairedt-Testvaluesforproduction			Pairedt-Test valuesforsales		
N 3 Correlation'r' -0.7018PairedSample-test 2.5482 Pvalue ofPaired Sample-test 0.1256			N 3 Correlation'r' -0.8530PairedSample-test 1.0856 Pvalue ofPaired Sample-test 0.3910		

Results of the paired t-test and correlation and coefficient of the changes in automotive production for the pre- and post-GST periods are shown in Table 2. Pre- and post-GST auto manufacturing are determined to be negatively correlated by a factor of -70 percent. Similarly, the sale of autos in India before and after the implementation of GST shows a strong negative connection of -85%. There is no correlation between automotive production and sales prior to GST, which is what this statement insinuates. After GST was implemented, the mean values of production and sales grew from 24264499 to 28786135 and 25477576 to 28739588, respectively. There is, however, no statistically significant difference between automotive production and sales at the significance level of 5 percent, according to the results of paired sample t-tests. As a result, the null hypothesis is accepted, and it can be inferred that production and sales made prior to and following the implementation of GST have not significantly changed.

Table3: FDI inflow to Automobile and Petroleum and Natural Gas sectors

Year	BeforeGST		Year	AfterGST	
	Automobile	Petroleumand natural Gas		Automobile	Petroleumand natural Gas
2014-2015	15658.55	31.04	2017-2018	13460.78	156.1
2015-2016	17403.64	699.49	2018-2019	18309.37	940.23
2016-2017	10824.22	1197.05	2019-2020	19753.10	5962.56
Mean	14628.8	642.5267	Mean	17174.42	2352.963
S.D.	3408.442	585.0884	S.D.	3296.121	3150.493
Pairedt-TestvaluesforAutomobile			Pairedt-Testvalues forPetroleumandgas		
N 3 Correlation'r' -0.4666PairedSample-test 0.7679 PvalueofPaired Sample t-test 0.5228			N 3 Correlation'r' 0.8854 PairedSample-test 1.1194 Pvalue ofPaired Sample-test 0.3793		

Using paired t-tests and correlation coefficients, we can examine the influx of foreign direct investment (FDI) into the oil and natural gas industries (Table 3). According to the study, FDI inflow into the vehicle sector before and after GST has a moderately negative correlation of 46 percent. In addition, FDI inflows into the petroleum and natural gas sectors show a strong positive association. Auto FDI inflows were found to be negatively correlated with FDI inflows into the petroleum and natural gas sectors. Average FDI inflow grew from Rs.14628.8 to Rs.17174 crore for pre and post GST periods, and the average FDI inflow to petroleum and natural gas climbed from Rs. 642 crores to Rs. 2352 crores in both years. At a 5% threshold of significance, the paired t-test results showed no statistically significant difference between FDI inflow to automobiles and petroleum and natural gas. As a result, the null hypothesis is rejected, and it can be stated that FDI inflow to the automotive, petroleum, and natural gas industries has not changed significantly before or after GST implementation.

The following are the findings of the researcher's examination of the aforementioned table:

Prior to GST and after GST, the classification of vehicle taxes

A number of car sectors will be impacted by the introduction of the Goods and Services Tax (GST). Let's take a look at the overall impact of GST on the automotive industry.

• Two-wheelersegment	BeforeGST	AfterGST
Enginesizelessthan350cc	30.2%	28%
Enginesizegreaterthan350cc	30.2%	31%
• Commercialvehicles	BeforeGST	AfterGST
Threewheelers	30-33%	28%
Minibuswith10to13 Passengercapacity	30-33%	31%
Tractor	28%	28%
• CarSegments	BeforeGST	AfterGST
Smallcars(below1200cc)	28%	29%
Mid-sizecars(1200-1500cc)	39%	31%
Luxurycars(over1500cc)	45-50%	43%
SUVs(over1500cc,over170mm		
GroundClearance)	50-54%	43%

FINDINGS

To know the impact of GST on automobile industries.

Particulars	Engine	Before GST	After GST + Cess	Total	Impact
Below 4 meters	Below 1.2l petrol	31.5%	28%+1%	29%	+ve
Below 4 meters	Below 1.5 ldiesel	33.25%	28%+3%	31%	+ve
Below 4 meters	Above 1.2 lpetrolor 1.5l diesel	44.7%	28%+19%	47%	-ve
Below 4 meters	Above 1.2 lpetrolor 1.5l diesel	51.6%	28%+25%	53%	-ve
SUV's	-	55%	28%+29%	57%	-ve
Electric vehicles	-	20.5%	12%+0%	12%	+ve
Hybrids	-	30.3%	28%+25%	43%	-ve

Incaseofusedcars:

In the 2018 financial budget report, GST rates for used cars were reduced, while a number of categories were exempted from the cess. The initiative is a major thrust toward the used automobile segment, which accounts for a sizable portion of annual sales. The GST on used medium, big automobiles and SUVs has been reduced from 28 percent to 18 percent as a result. Small cars and motor vehicles, on the other hand, have dropped from 28 percent to 12 percent. Cessation has been averted in both circumstances. " The previous rates led to an increase in used car prices and a stumbling block in the transition to an organised economy for used car partiers. The drop in rates is expected to increase demand for pre-owned vehicles.

Incaseofautorickshaws:

Generally speaking, the GST proposal appears to be beneficial, with little automobiles not seeing much of an adjustment in costs after GST, while luxury automobiles will be less expensive.

To be aware of the challenges faced during GST implementation's early stages.

- On July 1, 2017, the GST was implemented in or country. A month after the GST council was held on August 5th, the administration proposed boosting SUV and luxury vehicle excise taxes from the existing 15% to 20%. In the automotive business, this resulted in a great deal of confusion.
- After the effective implementation of GST, the automobile industry expects a positive demand draw as a result of increased customer interest in a unified single market.

CONCLUSION

People, economists, and politicians have all voiced their disapproval of the GST since its implementation. It is undeniable, however, that GST has had a positive impact on the country's economic growth. It will eliminate cascading consequences and generate cash for both the federal and state governments. There has been a drop in the tax rates on luxury cars as a result of this study, which could lead to an increase in sales of luxury cars. Small vehicles, on the other hand, have the opposite impact. In the long run, the government's decision to raise the tax rate in the current fiscal year may have a favourable influence on the vehicle sector. Automobile sales could see a boost if the same thing happens again in the near future.

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Corresponding Author

Akhilesh Kumar*

Research Scholar, Janta Koshi College, Biraul, Barbhanga