

# **RESEARCH PAPER ON STUDY OF GOODS AND SERVICES TAX AND IT'S IMPACT ON THE AUTOMOBILE SECTOR OF INDIAN ECONOMY**

**Course: Post-Graduate Certificate in Financial  
Analytics**

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## ❖ **ABSTRACT:**

Goods and Services Tax is a proposed system of indirect taxation in India. It was introduced as a Constitution Act 2016. The chairman of the GST council was then the ex-union finance minister Mr. Arun Jaitley.

GST is a comprehensive indirect tax on the manufacture, sale and consumption of goods and services throughout India, to replace taxes levied by the central and state governments. The GST is a consumption-based tax levied on the supply of Goods and Services which means it is levied and collected at each stage of sale or purchase of goods or services. Taxable goods and services are not distinguished from one another and are taxed at a single rate in a supply chain till the goods or services reach the consumer. Administrative responsibility would generally rest with a single authority to levy tax on goods and services. The introduction of GST is a significant step in the reform of indirect taxation in India.

Amalgamating several Central and State taxes into a single tax mitigates the cascading or double taxation effect, facilitating a common national market. From the consumer point of view, the biggest advantage would be in terms of a reduction in the overall tax burden on goods and services, free movement of goods from one state to another without stopping at state borders for hours for payment of state tax or entry tax and reduction in paperwork to a large extent.

This research paper highlights the Goods and services tax and its impact on the price of Automobiles of the Indian Economy and the revenue implications for the government. We have used a variety of statistical tools and tables for analysis and interpretation. Also, in this research we have tried to find whether the GST eliminates the problem of cascading effect.

## ❖ INTRODUCTION:

GST is an Indirect Tax which has replaced many indirect taxes in India. The Goods and Service Tax Act was passed in the Parliament on 29th March 2017. The Act came into effect on 1st July 2017; Goods & Service Tax Law in India is a **comprehensive, multi-stage, destination-based tax** that is levied on every **value addition**.

In simple words, Goods and Services Tax (GST) is an indirect tax levied on the supply of goods and services. This law has replaced many indirect tax laws that previously existed in India.

Goods and Services Tax (GST) is the most ambitious and biggest tax reform plan, which aims to stitch together a common market by dismantling fiscal barriers between states. It is a single national uniform tax levied across India on all goods and services. In GST, all the indirect taxes will be subsumed under a single regime.

The GST taxation laws will put an end to multiple taxes which are levied on different products, starting from the source of manufacturing to reaching the end consumer. GST works on the fundamental principle of “One Country One Tax”.

- **Rationale:** In the past, the Indian taxation system depended on several taxes. A major chunk of revenue was earned through these several indirect taxes until new reforms were adopted in the 90s. The major cause given for reliance on these multiple indirect taxes was that the population of India was poor due to which expansion of direct taxes was limited. We all know that the indirect taxation system is characterised by a cascading effect, distorting tax on the production of goods and services which hampers productivity and leads to slower economic growth. There were many kinds of taxes which were levied both by the centre and states. To remove such duplicity of taxes a new single type of indirect tax was created, known as Goods and Services Tax. In this research paper, we have tried to learn more about the Goods and Services Tax and also study its implementation in the Automobile sector. Moreover, we have also tried to analyse and compare the impact of GST on the price of automobiles with the previous indirect taxation system.

- **Relevance:** Through this thesis, we have tried to understand how the new taxation system works and how it is implemented in India. In addition to this, we have also tried to analyse the impact of GST on the price of automobiles and how it compares with the previous taxation system. After completion of the research paper, we will understand whether the price of automobiles is as compared to the old taxation system. Moreover, we will also understand whether the current taxation system generates high or low revenue for the government in comparison to the previous taxation system.

## ❖ HOW GST WORKS:

- GST is collected and paid at all stages of the supply chain. All businesses pay GST when they buy supplies, assets, or services for running their business. GST registrants will charge and collect GST on taxable goods and services that they provide (taxable supplies).
- The GST paid on their purchases (input tax credit) will be set off from the GST they charged and collected (output tax). If the output tax exceeds the input tax, the difference is to be remitted to the customs authorities. On the other hand, if the output tax is less than the input tax, a refund will be given by the Customs authorities. The end consumer is borne to pay the ultimate GST.

## ❖ FEATURES OF GST:

GST is applicable on the “supply” of goods or services as against the present concept of tax on the manufacture of goods on the sale of goods or the provision of services.

- i GST is based on the principle of destination-based consumption taxation as against the present principle of origin-based taxation.
- ii It is a dual GST with the Centre and the States simultaneously levying it on a common basis.
- iii Centre taxes that are subsumed within GST are:
  - a) Central Excise Duty.
  - b) Duties of Excise (Medicinal and Toilet Preparations);
  - c) Additional Duties of Excise (Goods of Special Importance);
  - d) Additional Duties of Excise (Textiles and Textile Products);
  - e) Additional Duties of Customs (commonly known as CVD);
  - f) Special Additional Duty of Customs (SAD);
  - g) Service Tax

## ❖ NEW TAX REGIME:

This is a tax regime which will use information technology as tools for administration, levy, collection, compliance, and assessment. This tax regime will become a mother of all future tax reforms not only for India but also for other countries since the experience of extensive use of information technology for a tax system would give birth to similar tax reforms across the world. The developed economy of OECD countries would learn from the experiences of such tax reforms and implement similar ones in their home countries to reap the fruits of such technologically advanced administered tax regimes. GST is expected to rejuvenate and expand the Indian economy in a similar way to the 1990s liberalization had done for India. Future generations of India can look back on the GST Tax law as one of the watershed moments in tax history that led to the concept of One Nation One Tax. The introduction of Goods and Services Tax (GST) is a significant reform in the field of indirect taxes in India. With the introduction of GST, India switched over to a new indirect Tax<sup>2</sup> regime which is administered with the help of new age Information technology. This is the first time that such a blending of tax law with technology is happening at the transaction level.

The mission of the Organization for Economic Co-operation and Development (OECD) is to promote policies that will improve the economic and social well-being of people around the world. Indirect Tax is Tax levied on business transactions. Other taxes are Direct tax. which is also known as income tax levied on taxable Income from all businesses.

## ❖ RESEARCH QUESTIONS:

While doing this dissertation there will be multiple questions which will emerge and will be answered when we are studying and analysing the problem.

Some of the questions for which we will find answers are:

- Whether the implementation of Goods and Services Tax has a positive effect on the price of Automobiles?
- Does Goods and Services Tax increase the revenue of the Government or not?
- Will Goods and Services Tax solve the problem of Cascading effect or not?

## ❖ HYPOTHESIS:

- **H1:** The final price of the product in the Automobile sector will be less in post-GST implementation.
- **H0:** The final price of the product in the Automobile sector will be higher in post-GST implementation.
- **H2:** There is a major difference in production and sale of automobiles before and after GST.
- **H0:** There is no major difference in production and sale of automobiles before and after GST.
- **H3:** There is a major difference in export and import of vehicles before and after GST.
- **H0:** There is no major difference in export and import of vehicles before and after GST.
- **H4:** There is major difference in sales of commercial, passenger, two-wheeler vehicles before and after GST.
- **H0:** There is no major difference in sales of commercial, passenger, two-wheeler vehicles before and after GST
- **H5 :**There is a relationship between GST and Buying Decisions
- **H0:** There is no relationship between GST and Buying Decisions

## ❖ OBJECTIVES OF THE STUDY:

- To find out whether the implementation of Goods and Services Tax has a positive effect on the price of Automobiles
- The objective of the question "Whether the implementation of Goods and Services Tax will harm the price of Automobiles?" is to assess the potential negative impact of the Goods and Services Tax (GST) on the pricing of automobiles.
- The objective of the question "Does Goods and Services Tax increase the revenue of the Government or not?" is to evaluate the impact of the Goods and Services Tax (GST) on government revenue.
- The objective of the question "Will Goods and Services Tax solve the problem of Cascading effect or not?" is to determine if the implementation of the Goods and Services Tax (GST) effectively eliminates the issue of cascading taxation, where taxes are levied on already taxed inputs.
- To look into how the GST affects the manufacturing, sales, exports, and registrations of automobiles, including electric vehicles.
- The objective of comparing the Goods and Services Tax (GST) to the previous taxation system is to understand the differences between the two frameworks.

## ❖ REVIEW OF LITERATURE:

- **Garg (2014)** analysed the impact of GST on the Indian tax scenario. He tried to highlight the objectives of the proposed GST plan along with the possible challenges and opportunities that GST brings. He concluded that GST is the most logical step in Indian indirect tax reforms. Further, he mentioned that experts say that GST is likely to improve tax collection and boost the economic development of the country.
- **Lourdunathan & Xavier (2017)** conducted a study based on an exploratory research technique based on past literature to study the opinions of manufacturers, traders, society etc. about the GST and the challenges and prospects of introducing GST in India. They concluded that no doubt GST stands with one tax one nation slogan and will provide relief to producers as well as consumers. Its efficient implementation will lead to resource and revenue gains. They also said that seamless credit and return processing without human intervention requires education, training, and workshops on GST on the part of the government.
- **The research paper (Dr D. Amutha, 2018)** discusses the economic consequences on the Indian economy due to the introduction of GST. The paper also discusses the future predictions and obstacles to GST implementation. It states that GST is an enormous concept that simplifies the current tax system in India.
- **The research paper (Nayyar, 2018)** concluded that all sectors in India - manufacturing, service, telecom, automobile, and small SMEs will bear the impact of GST. One of the biggest taxation reforms- GST will bind the entire country under a single taxation system rate. As predicted by experts, GST will improve tax collections boost India's economic development and discontinue all tax barriers between the State and Central Government.
- **GST and automotive sector in India: Issues and challenges (Srivastava B, Srivastava, H., Kumar, S., & Rai, M. K. 2022)** studied the issues concerns related to GST and concluded that the overall tax rates levied earlier on different vehicles have been largely reduced. Also, GST has reduced the transportation cost of goods by eliminating all irrelevant taxes.



- **Effect of GST on the Automobile industry (Namita Agarwal, Dr. Dharmendra Mehta, 2021)** study the impact of GST on OEMs of Automobiles and the impact on them has been both positive and negative. GST has reduced the tax cost and is consequent upon the free availability of credit for tax.
- **(Jha and Singh, 2020)** discussed the advantages and disadvantages of having a uniform GST law for the Indian automotive industry, comparing the tax rates applicable to automobiles such as two-wheelers, small cars, sedans, three-wheelers and utility vehicles, a has found that under GST most vehicles with engines below 1500cc will become cheaper, while those with engines above 1500cc will become more expensive. GST will increase logistics efficiency by reducing transit times and costs. It has been suggested that policy changes such as the GST may have been announced six months before passage so businesses could be better prepared.
- **(Roopa and Aruna, 2020)** examined the effect of GST on the automotive industry. It has been noted that the tax rate applicable to various categories of cars has decreased from pre-GST to post GST, resulting in lower prices for buyers and certainty about the tax to be paid by car dealers and manufacturers. The GST, he said, will pave the way for the growth of the structure of the automobile industry, as well as the development of the country's GDP and finances.
- **(Dr. Pratap M Chauhan and Pranay R Bhutada, 2022)** studies the effect Goods and services tax have on the Indian Automibile industry which includes four wheeler and two wheeler segement.
- **The Research paper (Booja.s, 2022)** studies the impact of Goods and services Tax and its impact on the consumer buying behaviour in the automobile sector in the state of Chennai.
- **Report No. 5 Indirect Taxes 2022- Goods and services Tax Comptroller Auditor General of India** studies indirect taxes administration and the revenue trends in indirect tax collection.

## ❖ RESEARCH METHODOLOGY:

The Research Design which we will use in the paper will be descriptive. Secondary sources of data will be used to collect data from sources such as data available at the official website of the Ministry of Finance, Society of Indian Automobile Manufacturers (SIAM), various contemporary news articles, papers, websites etc.

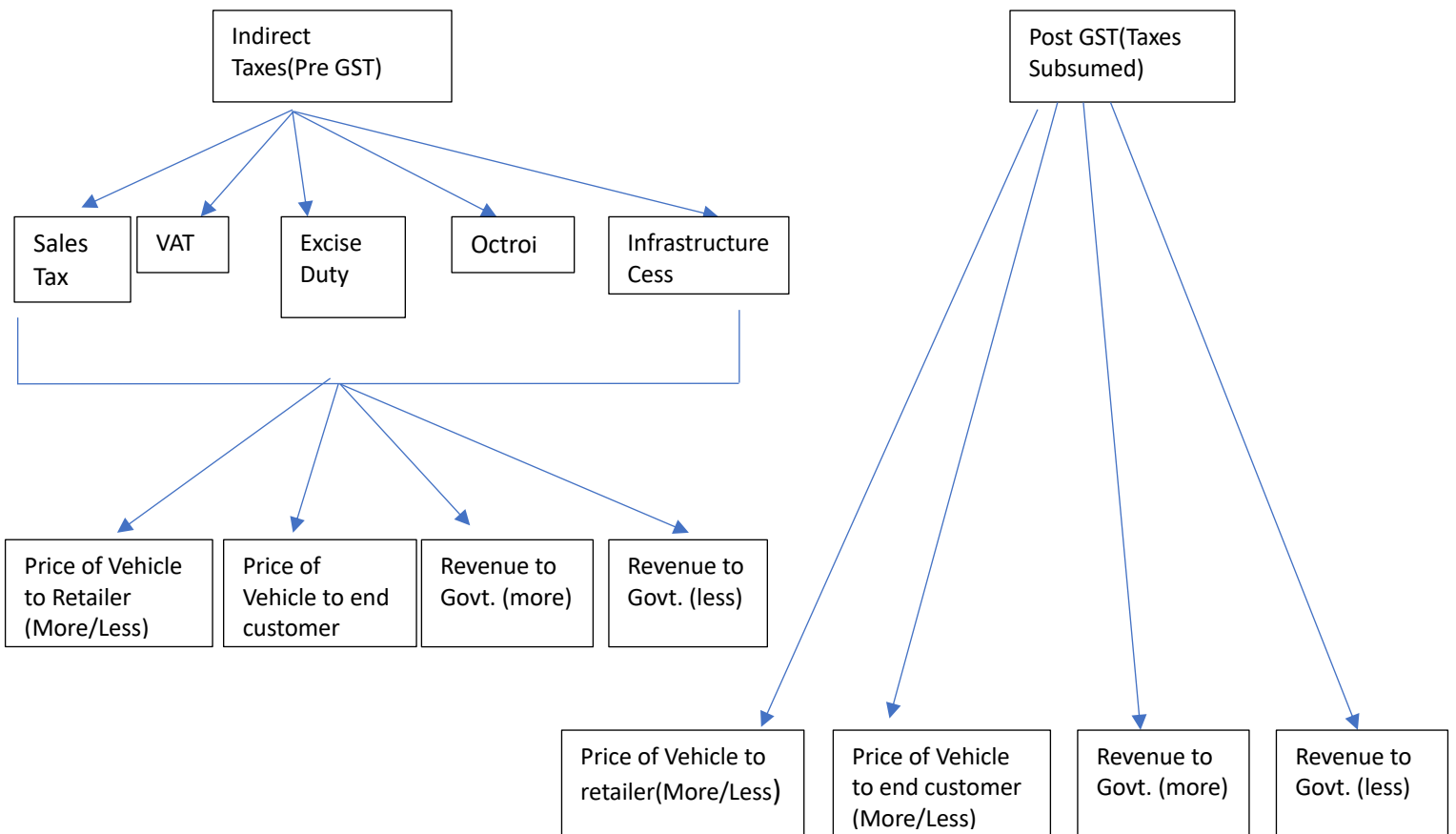
The data which will be collected will be used to understand the concept of Goods and Services Tax and how it impacts the Automobile sector of the Indian Economy. Moreover, the data which will be collected will be used to understand the previous tax structure and to calculate the tax in the GST regime. Statistical tools like mean, standard deviation, percentage, year-on-year (YoY) growth, paired test, and correlation were used. Tables and percentages will be also used for interpretation and analysis.

## ❖ RESEARCH FRAMEWORK:

Here past indirect tax rates such as sales tax, excise duties and service tax will be compared with current GST rates in the automobile sector to determine the burden of tax before and after the Goods and Services Tax was introduced.

There are two types of variables in our research **independent variable** which is the rates of Goods and Services Tax and the **dependent variable** which is the prices of Automobile vehicles to the end user after the applicable tax and the revenue to the government.

Here we are going to construct a flow chart which depicts the model independent and dependent variables and shows the layout of our research.



## ❖ DATA ANALYSIS AND INTERPRETATION:

- Table 1. Basic Concept Of GST

Importer to Wholesaler		
Particulars	Pre GST rate	Post GST rate
Gold	100000	100000
Sales Tax(14%)	14000	-
Countervailing Duty(12.5%)	12500	-
Excise Duty(1%)	1000	-
CGST(18%)	-	18000
Grand Total	127500	118000
Wholesaler to Retailer		
Price	127500	118000
Add margin(10%)	12750	11800
Other charges(rent etc)	15000	15000
Sub Total	155250	144800
Sales Tax(14%)	21735	-
SGST(18%)	-	26064
Total Price	176985	170864

**Source-** Research paper on GST(slide share.net)

In the table above the basic concept of GST is discussed. In the old indirect taxation system the taxpayer pays additional tax but in GST the taxpayer pays one tax. In the table above, a taxpayer pays more taxes than the goods and services. The seller pays Rs. 27500 including sales tax, levy, tax on the indirect tax system but after the use of the goods and services tax system the seller pays Rs. 18000 as tax. The importer is responsible for many taxes such as sales tax, excise duty, property tax, etc., but after the import duty on goods and services you need to keep the GST file.

• **Table 2. Production and Sale of automobiles (Values in Numbers)**

<b>Before GST</b>			<b>After GST</b>		
<b>Year</b>	<b>Production</b>	<b>Sales</b>	<b>Year</b>	<b>Production</b>	<b>Sales</b>
<b>2014-15</b>	23358047	23297717	2017-18	29092734	<b>29022548</b>
<b>2015-16</b>	24106068	24112465	2018-19	30909486	<b>30890201</b>
<b>2016-17</b>	25329383	29022548	2019-20	26356187	<b>26306017</b>
<b>Mean</b>	<b>24264499.33</b>	<b>25477576.67</b>	<b>Mean</b>	<b>28786135.67</b>	<b>28739588.67</b>
<b>S.D.</b>	<b>995171.7298</b>	<b>3096945.252</b>	<b>S.D.</b>	<b>2292080.899</b>	<b>2305154.057</b>
<b>Paired t-Test values for production</b>			<b>Paired t-Test values for sales</b>		
<b>Number of observations =</b> <b>3 Correlation 'r' = 0.7018</b> <b>Paired Sample t-test</b> <b>2.5482</b> <b>P value of Paired Sample t-test = 0.1256</b>			<b>Number of observations =</b> <b>3 Correlation 'r' = 0.8530</b> <b>Paired Sample t-test =</b> <b>1.0856</b> <b>P value of Paired Sample t-test = 0.3910</b>		

**Source:** Analysis based on the data of Annual survey of automobile industry by SIAM.

**H1: H0: There is no major difference in production and sale of automobiles before and after GST.**

Table 2 shows the correlation and coefficient of changes in automotive production along with the pre- and post-GST paired t-test results. A significant -70% negative correlation exists between pre- and post-GST automotive manufacturing. Similarly, there is a strong negative correlation—that is, -85%—between the sale of automobiles in India before and after the introduction of the Goods and Services Tax. It indicates that there was no connection between the production and sales of automobiles before and after the GST. The mean value of sales increased from 25477576 units to 28739588 units following the implementation of the GST, while the mean value of production increased from 24264499 units to 28786135 units. Nonetheless, paired sample t-test results at a 5% significance level indicate that there isn't a statistically significant difference between automobile production and sales. Therefore, the null hypothesis can be approved.

• **Table 4. Exports and Imports of vehicles (Rs. In Lakhs)**

<b>Before GST</b>			<b>After GST</b>		
<b>Year</b>	<b>Exports</b>	<b>Imports</b>	<b>Year</b>	<b>Exports</b>	<b>Imports</b>
<b>2014-15</b>	7856975.35	2708044.34	2017-18	10023811.77	<b>3165315.04</b>
<b>2015-16</b>	8852545.59	2972245.62	2018-19	11122918.45	<b>3767386.55</b>
<b>2016-17</b>	9404045.37	3264217.63	2019-20	12653335.85	<b>4303249.88</b>
<b>Mean</b>	<b>8704522</b>	<b>2981503</b>	<b>Mean</b>	<b>11266689</b>	<b>3745317</b>
<b>S.D.</b>	<b>784085.2</b>	<b>278202.2</b>	<b>S.D.</b>	<b>1320644</b>	<b>569288.3</b>
<b>Paired t-Test values for exports</b>			<b>Paired t-Test values for Imports</b>		
<b>Number of observations =</b> <b>3 Correlation ‘r’ = 0.9667</b> <b>Paired Sample t-test =</b> <b>7.429</b> <b>P value of Paired Sample t-test = 0.01763</b>			<b>Number of observations =</b> <b>3 Correlation ‘r’ = 0.9980</b> <b>Paired Sample t-test =</b> <b>4.528</b> <b>P value of Paired Sample t-test =0.0454</b>		

**Source:** Analysis based on the data of exports and imports vehicles by MOCI.

**H2: H0: There is no major difference in export and import of vehicles before and after GST.**

Table 5 displays the correlation coefficient and paired t-test results for car import and export before and after the GST was implemented. The correlation data showed a 97% positive correlation between exports before and after GST. Similarly, there is a 98% positive correlation in auto imports. The correlation statistics show a strong positive correlation between exports before and after GST. Exports rose from Rs. 8704522 lakhs to Rs. 11266689 lakhs, whereas imports increased from Rs. 2981503 lakhs to Rs. 3745317 lakhs. The paired t-test results demonstrated a statistically significant correlation between vehicle imports and exports before and after the GST periods at a significance level of 5%.

- Table 5. Sales of Commercial, Passenger, Two-wheeler vehicles

Before GST			
Year	Commercial Vehicle	Passenger	Two-Wheeler
2014-15	1403774	6445154	36866054
2015-16	1577656	6884522	37877454
2016-17	1644706	7612618	39860030
Mean	1542045	6980765	38201179
S.D.	124350.9	589652.5	1523014
Paired t-Test values for the sales of Commercial, Passenger and Two-Wheeler Vehicles			

After GST			
Year	Commercial Vehicle	Passenger	Two-Wheeler
2017-18	1907562	8073894	46030240
2018-19	2214488	8107162	48921376
2019-20	1556802	6901772	41875710
Mean	1892951	7694276	45609109
S.D.	329086.4	686530.1	3541661

**Commercial Vehicles:**

Number of observations = 3

Correlation 'r' = -0.3064

Paired Sample t-test = 1.5754

P value of Paired Sample t-test = 0.2558

**Passenger Vehicles:**

Number of observations = 3

Correlation 'r' = -0.9187

Paired Sample t-test = 0.9885

P value of Paired Sample t-test = 0.4270

**Two- Wheeler:**

Number of observations = 3

Correlation 'r' = -0.7255 Paired

Sample t-test = 2.693

P value of Paired Sample t-test = 0.1146

**Source:** Analysis based on the data of Annual survey of automobile industry by SIAM.

**H2: H0: There is no major difference in sales of commercial, passenger, two wheeler vehicles before and after GST.**

The sales of passenger cars, commercial vehicles, and two-wheelers are displayed in Table 5, along with the findings of a paired t-test and correlation coefficient. The sale of passenger cars and the sale of commercial vehicles have a significant negative correlation (-91%), as well as a strong negative connection (-30%). Furthermore, a notable inverse relationship has been observed in the sales of two-wheelers between the pre- and post-implementation GST periods. It indicates a negative correlation between sales of two-wheelers, passengers, and commercial vehicles prior to and following the implementation of the GST. While sales of passenger vehicles increased from 6980765 to 7694276, the average number of commercial cars sold increased from 1542045 to 1892951. Also up in sales are two-wheelers, which went from 38201179 to 4609109 units. The paired t-test results in the sale showed no major difference at a significance level of 5%.

- **Table 6. GST AND BUYING DECISIONS**

**H5 :There is a relationship between GST and Buying Decisions**

**H0 :There is no relationship between GST and Buying Decisions**

CORRELATION	GST	BUYING DECISIONS
<b>Correlation Coefficient</b>	1.000	0.502
<b>Sig.(2 tailed)</b>	.	.001
<b>N</b>	100	100
<b>Correlation Coefficient</b>	<b>.502**</b>	<b>1.000</b>
<b>Sig.(2 tailed)</b>	<b>.001</b>	.
<b>N</b>	100	100
<b>Correlation is significant at the 0.01 level (2-tailed).</b>		

From the table, It is interpreted that the significance value is 0.01 which is less than 0.05 and less than the critical value 1, So the null hypothesis rejected and alternative hypothesis got accepted. Thus, there is a relationship between GST and Buying decisions



- **Table 7. GST revenue of Government of India: Budget Estimates vs Actual Receipts(in crores)**

Year	Budget Estimates (BE)				Revised Estimates (RE)				Actual Receipts			
	CGST	IGST	Cess	Total	CGST	IGST	Cess	Total	CGST	IGST	Cess	Total
2017-18	No BE, only RE				2,21,400	1,61,900	61,331	<b>4,44,631</b>	2,03,261	1,76,688 <sup>28</sup>	62,612	<b>4,42,561</b>
2018-19	6,03,900	50,000	90,000	<b>7,43,900</b>	5,03,900	50,000	90,000	<b>6,43,900</b>	4,57,534	28,945 <sup>29</sup>	95081	<b>5,81,560</b>
2019-20	5,26,000	28,000	1,09,343	<b>6,63,343</b>	5,14,000	--	98,327	<b>6,12,327</b>	4,94,070	9,125	95,553	<b>5,98,748</b>
2020-21	5,80,000	---	1,10,500	<b>6,90,500</b>	4,31,000	---	84,100	<b>5,15,100</b>	4,56,334	7,251	85,192	<b>5,48,777</b>

**Source:** Union Finance Accounts and receipt budget documents of respective years.

As could be seen from the table above, the Central GST revenue was short of the Budget Estimates for the years 2018-19, 2019-20 and 2020-21. The shortfall vis-à-vis budget estimates was 22 *per cent*, 10 *per cent* and 21 *percent* for the years 2018-19, 2019-20 and 2020-21, respectively. The actuals for 2018-19 and 2019-20 were also short of the Revised Estimates. During 2020-21, however, the actuals exceeded the Revised Estimates and were 106.54 *per cent* of the Revised Estimates.

When pointed out (December 2021), the Ministry attributed (February 2022) shortfall in GST revenue to impact on account of transitional credits (2017-18), negative growth in Index of Industrial Production (IIP) (2019-20), and low economic growth owing to nation-wide and regional lockdowns to contain the spread of Covid-19 (2020-21).

## ❖ EFFECT ON AUTOMOBILE SECTOR FROM GST

India's automobile industry is a massive operation that produces a big number of automobiles and motorcycles each year, fueled primarily by the country's massive population. The GST absorbed the majority of indirect taxes.

The table shows the types & rates of taxes levied on pvt/commercial vehicles/SUV's

Segment	Excise	Nccd +autocess	VAT	Road tax	Motor vehicle tax	Total	CGST	SGST	TOTAL
Small Cars <1200cc	12.50 %	1.1%	14%	State based	State based	28%(approx.)	9%	9%	18%
Mid-Size Cars from 1200cc to 1500cc	24%	1.1%	14%	State based	State based	39%	9%	9%	18%
Luxury Cars>1500cc	27%	1.1%	14%	State based	State based	42%	14%	14%	28%
SUV's >1500cc, >170mm ground clearance	30%	1.1%	14%	State based	State based	45%	14%	14%	28%
Commercial Vehicles	30.2%	1.1%	14%	State based	State based	45%	14%	14%	28%

Excise and VAT, with a total average rate of 26.50 to 44 percent above GST levels of 18 and 28 percent, were the two taxes formerly paid by the last buyer of a car and bicycle. As a result, the eventual buyer will face a lower tax burden under GST.

Exporters / sellers would be happy as they would be able to claim GST paid for imported / sold goods and previously, they were not eligible for VAT and VAT. Payments in the transfer of stock will cover IGST under GST law. Prepared earnings for the supply of goods will also be taxed under the GST. GST can assist manufacturers in purchasing car parts at a lower cost due to the improved supply chain system under GST.

The GST for cars and bicycles is kept under 28% brackets and the list of fees for a different type of vehicle has also been announced by the Indian government. Cess is charged with different types of vehicles ranging from 1 to 15%.

Let me explain how the GST will affect the automotive industry. Here we take the example of the Honda City Car effect on car prices before and after the Goods and Services Tax.

Honda City	I-DTEC SV	IDTEC V	Honda City	I-DTEC SV	IDTEC V
	<b>Base Model</b>			<b>Base Model</b>	
<b>Manufacturing Cost</b>	700000	740000	<b>Manufacturing Cost</b>	700000	<b>740000</b>
<b>All other cost</b>	171000	181000	<b>All other cost</b>	171000	<b>181000</b>
<b>Add margin</b>	80000	100000	<b>Add margin</b>	80000	<b>100000</b>
<b>Sub total</b>	951000	1021000	<b>Sub total</b>	951000	<b>1021000</b>
<b>VAT(14%)</b>	133140	142940	<b>SGST(28%)</b>	266280	<b>285880</b>
<b>Price for retailer</b>	<b>1084140</b>	<b>1163940</b>	<b>Price for retailer</b>	<b>1217280</b>	<b>1306880</b>
<b>Agency to Retailers</b>			<b>Agency to Retailers</b>		
<b>Ex showroom price</b>	1084140	1163940	<b>Ex showroom price</b>	1217280	<b>1306880</b>
<b>RTO</b>	86536	93250	<b>RTO</b>	86536	<b>93250</b>
<b>Insurance</b>	40221	43135	<b>Insurance</b>	40221	<b>43135</b>
<b>Others</b>	10817	11656	<b>Others</b>	10817	<b>11656</b>
<b>On road price</b>	<b>1221714</b>	<b>1311981</b>	<b>On road price</b>	<b>1354854</b>	<b>1454921</b>

<b>Excise Duty(24%)</b>	<b>293211</b>	<b>314875</b>	<b>Road Tax(2%)</b>	<b>27097.08</b>	<b>29098.42</b>
<b>Infrastructure Cess(2.5%)</b>	30543	32800	<b>GST(28%)</b>	379359	<b>407378</b>
<b>VAT(14%)</b>	171040	183677	<b>Total Tax</b>	<b>406456</b>	<b>436476</b>
<b>Octroi(4%)</b>	48869	52479	<b>Car price</b>	<b>1761310</b>	<b>1891397</b>
<b>Road Tax(2%)</b>	24434.28	26239.62			
<b>Total tax</b>	<b>568097</b>	<b>610071</b>			
<b>Car price</b>	<b>1789811</b>	<b>1922052</b>			

**Source-** Research paper on GST (slideshare.net)

### INTERPRETATION

In the above table one can clearly see that the price of the car to the retailer is more after applying GST than in the previous taxation system.

Moreover the on road price of the car is also more after implementation of GST but the ultimate price of the car to the final consumer is less after implementation of Goods and services tax i- e customer is getting a profit of Rs. 28501 on i-DTEC SV and a profit of Rs. 30665 on i-DTEC V after the implementation of goods and services tax and road tax

Another example is **of two wheeler segment**. Here we are checking impact on prices of **Hero Splendor Motor Bike**.

Particulars	Pre GST	Post GST
<b>Manufacturing Cost</b>	59000	<b>59000</b>
<b>Excise Duty(13%)</b>	7670	-
<b>Infrastructure cess(2.5%)</b>	1475	-
<b>VAT(14%)/GST(28%)</b>	8260	<b>16520</b>
<b>Octroi(4%)</b>	2360	-
<b>Road Tax(2%)</b>	1180	<b>1420</b>
<b>Bike Price</b>	<b>79945</b>	<b>76940</b>

### INTERPRETATION

We can observe that under the former taxing system, several taxes were charged, which was not the case during the GST era. Due to many taxes being charged before to the GST period, the ultimate price of a Hero Bike for the consumer increased, but during the GST era, just two taxes are charged: GST and Road tax, which has helped to lower the price of the bike.

## ❖ OBSERVATIONS AND FINDINGS

➤ Following are the observations for the impact of GST on automobile sector

- There were various taxes charged at different periods of supply of goods and services in the previous indirect taxation system but under new taxation era only one tax is charged i-e Goods and services tax thereby reducing excessive burden of tax on end consumer and the cascading effect.
- Importers or dealers are able to claim GST paid on import of goods and services under input tax credit which they were not able to claim in the previous tax system.
- The price of the product in the automobile sector has also reduced for the end or final consumer under goods and service tax system than the previous taxation system.

➤ Following are the observations regarding the revenue of the government after implementation of GST.

- According to the Economic Survey 2017-18, the base of indirect tax payer has increased substantially by more than 50% with 34 Lakh more people coming into the tax net.
- The preliminary analysis of data shows that the number of GST registrants rose mainly on account of large increase in voluntary registrations, especially by small enterprises that buy from big companies and want to get input tax credits.
- When the tax base of GST increases, more taxpayers are also added within the ambit of direct taxes this helps in increasing the revenue of the government. Before implementation of GST, taxpayers used to show different revenue for the purpose of sales tax and income tax so that they can avoid paying the tax according to the Income Tax Act.
- However, it has now become very easy for the Tax department to see that the two tax records are reconciling and any major changes in NP ratio could create suspicion on the past conduct of the firm. This has

forced the taxpayers to pay more income taxes as more transactions have been recorded in the books of account.

- The amount collected in indirect taxes rose by 1, 20,555 crore (12.56 per cent) in FY21 compared to FY20. In FY 21, there was an increase in the yearly growth of indirect taxes (Y-o-Y), which had been steadily declining from 21.33 percent in FY 17 to 1.76 percent in FY 20. In addition, the ratio of indirect taxes to GDP increased in FY 21 from 4.70 percent in FY 20 to 5.45 percent in FY 21. The increase in Central Excise Duty and Customs Duty receipts, which rose by ~25,467 crore and 1,50,215 crore, respectively, over the prior year (FY20), was the cause of the growth in indirect taxes.
- However, the revenue from central GST taxes fell from approximately 6,01,784 crore in FY 20 to approximately 5,51,541 crore in FY 21 a decrease of 8.34%.The proportion of GDP attributed to central GST taxes fell to 2.79 percent in FY 21 from 2.95 percent in FY 20 and 3.02 percent in FY 19.

## ❖ LIMITATIONS OF THE STUDY:

- The present study provides a starting point for further research in this field. It is not a comprehensive study.
- The study talks about the impact of GST on the Automobile sector, and it does not cover all the sectors of the economy.
- This study is based on secondary data and not on primary data which would help in providing more knowledge about the field of study.

## ❖ SUGGESTIONS

- The present study provides a starting-point for further research in this field. It is not a comprehensive study therefore one needs to do further research in this area of field
- The study tells about the impact of goods and services tax on the automobile sector it does not cover all the sectors of the economy therefore more sectors can be covered in the further study in the future.
- This research study is based on secondary data and not on primary data which would provide more knowledge and data in the field of study.
- Government should ensure a good management of the revenue collected from the goods and services tax.
- Special focus should be given by government to provide awareness and training to officers, professionals and assesses about GST and its implementation so that they can smoothly and efficiently implement GST.
- The assesses must be offered seamless, unambiguous, and simple changeover provisions that are simple to decipher.



## ❖ CONCLUSION

GST will give assistance to manufacturers and consumers by providing comprehensive and complete coverage of fixed input tax credit, fixed service tax, and the usage of a few taxes, as discussed above.

GST, a major indirect tax change will reduce the tax burden due to the decline in effect.

Efficiency in tax administration will be improved, indirect tax revenue will increase significantly due to the introduction of additional goods and services and ultimately the compliance costs will be reduced for retailers. The implementation of GST will favour free trade across the country. GST helps to reduce taxpayer liability and helps reduce the price of various commodities.

The proper implementation of the GST will assist the union and regional governments generate money by expanding the tax base and enhancing tax compliance. It is also possible to argue that GST has a positive impact on numerous economic sectors.

## ❖ REFERENCES & BIBLIOGRAPHY

- Lourdunathan F and Xavier P, “A study on implementation of goods and services tax (GST) in India: Prospectus and challenges”, International Journal of Applied Research 2017; 3(1): 626-629.
- Dr. R. Renuka, “Impact of GST on Services Sector in India”, International Journal of Management, IT & Engineering, Vol. 8 Issue 3, March 2018, ISSN: 2249-0558.
- Indirect Tax Laws, Vandana Bangar and Yogendra Bangar, Bangar’s comprehensive guide, 2016.
- Adhana, D. (2015), “Goods and Services Tax (GST): A Panacea for Indian Economy”, International Journal of Engineering and Management Research.
- Prof.Megha Agarwal.(2019).Study of Leading Sectors of Indian Economy after GST Implementation.Retrievedfrom<http://isbsimr.com/index.php/imr/article/view/144363/103642>.
- Dept. of Revenue Ministry of Finance.(2022).Goods and Services Tax. Retrieved from <https://dor.gov.in/goods-and-service-tax>.
- Dr. Madhu Bala.(2018).GST in India and it’s impact on Indian Economy Retrieved from[https://www.academia.edu/41382299/GST in India and its Impact on Indian Economy](https://www.academia.edu/41382299/GST_in_India_and_its_Impact_on_Indian_Economy).
- Dr.GurinderjitSingh.(2017)Retrievedfrom<https://www.slideshare.net/manishkumar2428/research-report-on-gst>
- Prof.Dr.BabaSaheb.R.Jadhav&Dr.Chetan.Chaudhari(2019),“The studyofImplementationOfGST”,InternationalJournalofManagement,Volume07Issue03I SSN:2321-1784  
Retrievedfrom[https://www.academia.edu/39722032/THE STUDY OF IMPLEMENTATI ON OF GST AND ITS IMPACT](https://www.academia.edu/39722032/THE_STUDY_OF_IMPLEMENTATI ON_OF_GST_AND_ITS_IMPACT)
- ProfAjayShukla&ProfPoojaKushare(July,2017),”AtheoritcalStudyonGSTReforms” Vol.03Issue(I)ISSN:2454-3187
- Retrievedfrom[https://www.researchgate.net/publication/331249394 A Theoretical S tudy of GST Reforms in India](https://www.researchgate.net/publication/331249394_A_Theoretical_S tudy_of_GST_Reforms_in_India)

- BusinessAlligators(2017),Retrievedfrom<https://www.businessalligators.com/gst-impact-rates-type-conclusion/>
- Paisa Bazaar(2021), Retrievedfrom<https://www.paisabazaar.com/tax/gst-rates/>
- IBEF. (2020, 10). *Indian Automobile Industry Analysis Report*. Retrieved from INDIA EQUITY BRAND FOUNDATION: <https://www.ibef.org/archives/industry/automobiles-reports/indian-automobiles-industry-analysis-september-2020>
- Siam Statistics <https://www.siam.in/statistics.aspx?mpgid=8&pgidtrail=14>
- International Organization of Motor Vehicle Manufacturer <https://www.oica.net/production-statistics/>
- (Dr. Pratap M Chauhan and Pranay R Bhutada, 2022) studies the effect Goods and services tax have on the Indian Automibile industry which includes four wheeler and two wheeler segement.
- The Research paper (Booja.s, 2022) studies the impact of Goods and services Tax and its impact on the consumer buying behaviour in the automobile sector in the state of Chennai.
- Report No. 5 Indirect Taxes 2022- Goods and services Tax Comptroller Auditor General of India studies indirect taxes administration and the revenue trends in indirect tax collection.