UPES Centre for Continuing Education

Impact of GST in Supply Chain and Logistics of Aviation Industry

Submitted By:
Name: Prabin Gyawali
Enrollment Number: 500071844

Guided By:
Name: Neha Behari
(Senior Manager- Technical Operation, United Airlines)

A DISSERTATION REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

MBA-Supply Chain and Logistics Management

OF

CENTRE FOR CONTINUING EDUCATION

UNIVERSITY OF PETROLEUM & ENERGY STUDIES, DEHRADUN

July-2020

Acknowledgement

This is to acknowledge with thanks the help, guidance and support that I have received during the Dissertation.

I have no words to express a deep sense of gratitude to the management of UPES, Dehradun, India for giving me an opportunity to pursue my Dissertation, and Neha Behari, for her able guidance, support and useful suggestions.

I must also thank Rahul Sharma (Senior Manager, IndiGo Airlines) and Divyani Gupta (Analyst, United Airlines) for their valuable support and supervision throughout the course of present work.

I also place on record my appreciation of the support provided by my co-workers for their insightful comments and constructive suggestions to improve the quality of this project work.

Prabin Gyawali
DLF phase III, Gurugram
Haryana, India - 122002
+91 7827197020
prabin.gyawali@outlook.com
Date: 7/5/2020
Gurugram

Declaration

This is to certify that the Mr. Prabin Gyawali a student of MBA, Supply chain and logistics Management SAP ID 500071844 of UPES has successfully completed this dissertation report on "Impact of GST in Supply Chain and Logistics of Aviation Industry" under my supervision.

Further, I certify that the work is based on the investigation made, data collected and analyzed by him and it has not been submitted in any other University or Institution for award of any degree. In my opinion it is fully adequate, in scope and utility, as a dissertation towards partial fulfillment for the award of degree of MBA.

Neha Behari
Senior Manager, Technical Operation, United Airlines
DLF Phase-3, Gurugram, Haryana
India-122002
Neha.behari@united.com
7/6/2020
Gurugram

Table of Contents

List of Tables

List of Figures/Graphs

Abbreviations

AAI	Airport Authority of India
ATF	Aviation Turbine Fuel
B2B	Business to Business
BCD	Basic Customs Duty
CBIC	The Central Board of Indirect Taxes and Customs
CGST	Central Goods and Service Tax
Co.	Company
CVD	Countervailing Duty
DGCA	Director General of Civil Aviation
DGFT	Director General of Foreign Trade
DTA	Domestic Tariff Area
FAA	Federal Aviation Administration
FTP	Foreign Trade Policy
GST	Goods and Service Tax
ICAO	International Civil Aviation Organization
IGST	Integrated Goods and Service Tax
ITC	Input Tax Credit
MRO	Maintenance and Repair Organization
PSF	Passenger Service Fees
SAD	Special additional duty
SEZs	Special Economic Zone
OEM	Original Equipment Manufacturer
PAX	Passenger
TCS	Tax Collection at Source
TDS	Tax Deducted at Source
UDF	User Development Fees
VAT	Value Added Tax

ABSTRACT

An efficient tax system should produce tax revenues to sustain government spending on public services and infrastructure development while keeping in view issues of income circulation. There is a significant impact of the Tax policies on the fairness and competence in a country's economy. Cascading tax revenues are putting additional burden and have differential impacts on industries/companies in the economy on those not getting input tax credits/full offsets.

As a developing economy like India, it has to more competitive and resourceful in its resource usage. For a developing economy like India it is required to become more competitive and resourceful in its resource usage. Apart from various other policy instruments, India must practice taxation policies that would maximize its economic competence and reduce distortions and hindrance to efficient distribution of resources, specialization, capital formation and international trade.

The launch of GST (Goods and Services Tax) was done by adding a passage in the Constitution (122nd amendment) Bill, 2014, on August 2016, which is a unified and pan-national tax structure. The Foreign Trade Policy (FTP) for 2015-20 says: "The simplification and harmonization of the indirect tax regime of the country will reduce the cost of production and lead to a seamless, integrated Indian market, thereby making Indian trade and industry more competitive."

This project is an attempt to evaluate the impact of GST on India's Aviation Industry. The study in this project will specifically examining the impact of GST on the logistics, maintenance and

financial stability of Airlines and remedial actions to help keep these airlines their head above water.

CHAPTER 1: INTRODUCTION

1.1 OVERVIEW

Goods and services tax (GST) are an indirect tax (or consumption tax) which is implemented in India on the supply of goods and service and which has replaced all the indirect taxes except for certain state taxes. It came into effect from July 1, 2017, wherein India combined the sales tax, value-added tax, and other indirect taxes into one category and divided it into five different tax slabs i.e. 0%, 5%, 12%, 18% and 28%. The basic idea is to collect the tax where goods are consumed and not where they are originated. Hence, the GST is calculated at one point at a single rate which is very easy for the government to track and convenient for the consumers and the businesses. This model reduces complexity of the entire taxing system. The part of the value added tax, which is accumulated or collected from the consumers and by the business or seller of the goods forwarded to the government, consequently providing income or revenue to the government which subsequently support the government in the growth procedure of Indian economy.

In order to evade cascading of tax in the economy, Goods and Service tax regime is adopted by 160 countries over the globe. India introduced GST in the year 2017 whereas many other countries implemented GST many years before in their tax system. GST is one of the top initiatives taken by most of the countries for a structured and developed economy, which was primarily adopted by France in 1954 and then followed by Germany, South Korea, Japan, Italy. Some countries refer GST as value added tax. The single unified tax system means single tax is applied all over the country and an integrated tax system means merging of all central taxes like excise duty tax, sales tax, and service tax with state-level taxes such as entertainment tax, entry tax, transfer tax, sin tax, and luxury tax and collects them as one solitary tax.

CENTRAL INDIRECT TAXES	STATE INDIRECT TAXES
Central Excise duty	Value Added Tax/Sales Tax
Service tax	Entertainment Tax (other than the tax levied by the local bodies
Additional Excise duties	Central Sales Tax
Excise Duty levied under the Medicinal and Toilet Preparations (Excise Duties) Act, 1955	Octroi and Entry Tax
Additional Duty and Special Additional Duty of Customs	Purchase Tax
Central cesses and surcharges in so far as they relate to supply of goods and services	• Luxury Tax • Taxes on lottery, betting and gambling • State cesses and surcharges in so far as they relate to supply of goods and services

Source: First Discussion Paper on Goods and Services Tax in India submitted by the Empowered Committee of State Finance Ministers submitted on 10 November 2009; Constitution (122nd Amendment) Bill, 2014

Figure 1: Old Tax System

Out of 160 countries, eight countries are not United Nation member states and they are Azores, Taiwan, Faroe Islands, Isle of Man, Jersey, Kosovo Madeira and Niue. Numbers of UN member states are 193 and out of them only 41 member countries did not implement VAT/GST and are listed in Table-2

No.	Region	No. of Countries
1	ASEAN	07
2	Asia	19
3	Europe	53
4	Oceania	7
5	Africa	44
6	South America	11
7	Central America, North America &	19

Table 1: The number of countries implemented GST

ASEAN	**ASIAN**	**EUROPE**	**OCEANIA**	**AFRICA**	**CARIBBEAN, SOUTH, CENTRAL& NORTH AMERICA**
Malaysia	Afghanistan	Andorra	Kiribati	Angola	Bahamas
Brunei	Bahrain	San Marino	Marshall Islands	Comoros	Cuba
Myanmar	Bhutan		Micronesia	Djibouti	Saint Lucia
	Iraq		Nauru	Eritrea	Suriname
	Kuwait		Palau	Liberia	United States of America
	Maldives		Solomon Island	Libya	
	North Korea		Tuvalu	Sao Tome and Principe	
	Oman			Somalia	
	Qatar			South Sudan	
	Saudi Arabia			Swaziland	
	Syria				
	Timor-Leste				
	United Arab Emirates				
	Yemen				

Table-2: List of Countries which are yet to adopt GST

1.1.1 ADOPTION OF GST BY INDIA

The adoption of GST by India on 17th July,2017 is the most courageous step taken in decades to reform the taxation system and to eradicate double taxation, which is tax on tax on goods and services which consequently transfer from supplier/manufacturing level to consumption level. A single indirect tax like GST has replaced all multiple indirect taxes.

The various replaced Taxes in India are:

At the central level, central excise duty, additional excise duty, additional customs duty special additional duty of customs, service tax and excise duty levied under medicinal and toiletries preparations. Under state-level VAT/ Sales tax, entertainment tax, Luxury tax, tax on lottery/betting/gambling, octroi, and purchase tax were charged.

Tax	Rates
Central Excise Tax	12.36%
Duties of Excise	12.36%
Additional duties of excise	26.5%
Cess	22%
State VAT	Liquor, cigarettes- 12.5% , others 14-15%
Additional duties of custom	12.36%
Special additional duty of custom	4%
Central sales tax	15%
Luxury Tax	3% pa - 12 to 13 pa
Sales Tax	14.5- 15%
Entry Tax	Differs for states
Entertainment Tax	15%-30% (differs for states)
Taxes on lotteries, betting and gambling	15%
Taxes on advertisements	6%

Table-3: List of various tax heads and the rates which were later replaced by GST

1.1.2 Indirect taxes to be subsumed into GST

Before GST regime the tax system was very complex, and the service tax was levied on multiple stages on various levels and it created the cascading effect of tax. GST was expected to bring in the uniform, non-complex, efficient indirect tax system, which would overcome the shortcomings and drawbacks of service tax system and is leviable to all goods and services but at a single base rate. The expectations from the system to improve in various aspects are:

a) Taxable event would occur simultaneously on supply of goods and services and taxability would not be dependent on ‘goods’ or ‘services (existing in current regime).

b) Existing complexities relating to ‘works contract’, software, intellectual property etc., are expected to be eliminated making taxation of such transactions simpler and reducing their tax burden.

c) To address and resolve the challenges faced by E-commerce, Telecom, Financial services, Real Estate etc.

d) The complexities of the existing system concerning valuations and classification of goods and services on account of the varied interpretations and rulings will be eliminated.

e) Lower administrative burden and provide simplicity by standardizing GST return/challans and payments and provide for easy access through a central web-portal for registration, refund etc. In short, GST when implemented is expected to perform miracles. But, can it really?

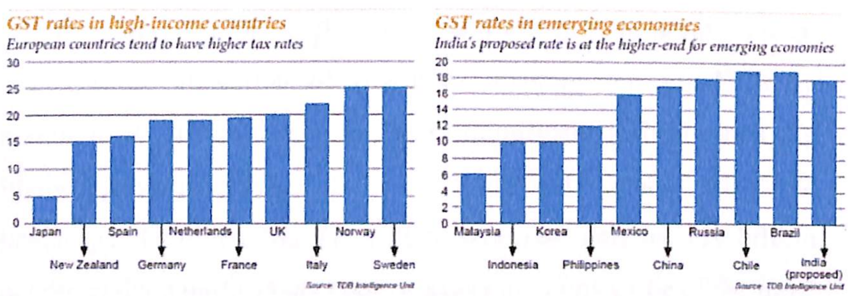

Figure 2: GST Rates in different countries

1.1.3 GST rates in High Income Countries and Emerging Economies

High inflation and slowdown in consumption initially was observed in the past, in the countries (like Malaysia and New Zealand) which have opted for GST. Whether history will be repeated in India depends on a host of factors, the most important being the standard rate of GST finally agreed upon. (Refer Table 1)

An introduction of GST has changed the way of doing business in India and have had significant impact on international trade of goods, from the change in customs duty computation, possible withdrawal of various duty exemptions to the change in terms of the foreign trade policy ('FTP').

Below we have mentioned Impact of GST on few areas related to foreign trade -

1.1.3.1 Business made easy

One factor where the industry has clearly been in consensus is that GST being a destination-based tax (where the tax is not applied at the point of production but at the point of supply or consumption), will make life easier for businesses in India. Companies will not have to file tax returns with multiple departments, but there will be just one web-based form to file tax returns. The country will finally become one common market, with uniform pricing across states, and optimal allocation of resources, making our goods more competitive. "Undoubtedly the most significant reform since the liberalization in 1991, GST will transform India's economic landscape. Unifying the $2 trillion economy and its 1.3 billion people under a uniform tax code, makes our country one of the most attractive destinations for business. I am confident that this game-changing legislation will propel India into a $20 trillion economy in the decades to come," says Anil Agarwal, Chairman, Vedanta Group. Apart from this, there will be a very strong positive impact on the logistics sector. There is no one in India who has not seen the serpentine queues of goods carrying vehicles standing at inter-state check posts for inspection and payment of taxes. Even Shaktikanta

Das, Economic Affairs Secretary, Ministry of Finance, GoI, is on record saying that trucks on an average spend 48 hours stranded at different check-posts every trip. The GST in 'one fell swoop' will remove these barriers, thus making India a preferred destination for business. "GST will revolutionize logistics with unified and simplified structure versus multiple taxes at various levels. It will lower the inventories and working capital, reduce documentation, improve asset utilization, ensure higher turnaround time and efficiencies. We expect the industry to move away from pure vanilla warehousing needs to contract logistics," Prakash Tulsiani, Executive Director & COO, all cargo Logistics, tells The Dollar Business.

1.1.3.2 Exports to climb

If GST improves ease of doing business, can exports be far behind? With uniform taxation and cost efficiencies owing to reduced time and costs in transportation, one obvious effect would be that 'Made in India' products would now be more cost competitive in the global markets. "In the previous tax regime, our ports were sagging, since we also exported a major portion of taxes. Indigenous manufacturers failed to capitalize owing to double taxation. All this will change post GST. And eventually exports from the country will increase," says Nihal Kothari, Chairman, National Council on Indirect Taxes, ASSOCHAM and Executive Director at Khaitan & Co. And he is right! We have examples of GST boosting an economy's exports. For instance, New Zealand implemented GST in CY1986 and saw it exports jump from $5,880 million in CY1986 to $7,195 million CY1987, a growth of 22.36%. Similar was the case with Australia, which implemented GST regime in CY2000. Australia's exports grew at a CAGR of 7.9% from $63,870 million in CY2000 to $86,565 million in CY2004.The present system of differential multiple tax regimes across sectors of production and locations leads to distortions in allocation of resources as well as supply chain and warehouse structuring.

1.1.3.3 Fate of Foreign Trade Policy Schemes

A mixed bag of good and bad news could therefore be on offer for India's exporters. And it will be that way with some sectors emerging as winners, while others losing out on a few advantages. However, what can be a bigger cause of worry for exporters is the ambiguity with respect to various export promotion schemes allowed by India's Foreign Trade Policy (like MEIS, SEIS, EPCG, DBK, Advance Authorization, etc.) during the initial GST implementation phase. Exporters can claim refunds on Central Excise, Customs duties and Service Tax against various scrips issued by the Ministry of Commerce. Since Central Excise and Service Tax will be subsumed under GST, exporters may face problems in enchasing the much-needed incentives that have been structured to support exports. Asks Shah of Nipha Group, "Exports are zero rated, but GST retains the refund system at the final stage which will mean increased blockage of funds. Several current export promotion schemes will wither away or get diluted. Similarly, what will happen to our dues during the transition from the current system to GST? How will they be treated?"

Office of the Directorate General of Foreign Trade (DGFT), Ministry of Commerce, GoI, is aware of the issue. D. K. Singh, Additional DGFT, while speaking to The Dollar Business says, "Under the current system, one can pay Customs Duty, Central Excise Duty and Service Tax. But, since Central Excise will be replaced by other taxes such as IGST and SGST under GST, it may not be a smooth transition for our exporters. So, we have requested the Finance Ministry to reconsider and allow us to maintain the scrip." As per him, the matter is currently under examination by the Ministry of Finance.

The current indirect tax regime provides for lower or no Customs Duty on imports for importers who use those imports in producing goods that are subsequently exported. However, under GST, imports would be subject to IGST (CGST plus SGST) and any exemptions or additional levy will not exist. This would provide level-playing field to domestic manufacturers against importers.

In case of special economic zone (SEZs), the various exemptions provided under different schemes would be limited in their applicability to export duty only. Exports or deemed exports would be zero rated, but sale to domestic tariff area (DTA) would be taxable. Exports from these special zones though will get a leg-up by being more cost competitive, owing to reduced logistics costs.

1.2 BACKGROUND

A comprehensive, solitary indirect multi-stage, destination-based tax which is levied at each point of sale or every value addition is GST. In case of interstate sales, tax will be chargeable to Integrated GST and intra state sales, tax will be chargeable to Central GST and State GST. The expected advantages of this taxation system are discussed below but there are severe disadvantages to the system too which are discussed and are needed to be addressed on immediate basis to help aviation industries keep their head above water.

Advantages of GST:

- Removing cascading tax effect
- Higher threshold for registration
- Composition scheme for small business
- Online simpler procedure under GST

- Lesser compliances
- Defined treatment for E-Commerce
- Increased efficiency in logistics
- Regulating the unorganized sector

TRANSACTION	NEW REGIME	OLD REGIME	DETAILS
Sale inside the State	CGST + SGST	VAT + Service Tax / Central	The revenue collected as tax are distributed equally to the state and central.
Sale to another State	IGST	Central Sales tax + Excise/ Service tax	Only one of tax that is central tax in case of interstate sales. The Central will give the IGST revenue based on the destination of the goods

Table 4: GST Regimes in state and central

Disadvantages of GST in Aviation Sector:

- Aircraft lease/purchase is now taxable
- Increase in maintenance costs
- Compliance cost
- Import of aircrafts and its spare
- Expensive air fares
- ATF (Air Turbine fuel) is now taxable and kept outside of GST purview.

1.2.1 STRUCTURE OF GST AND ITS EFFECTS ON COUNTRY'S ECONOMY

Goods and service taxes are divided into 5 tax slabs. It formulates the collection of tax easier and these slabs are 0% -28%. However, petroleum products, electricity, and alcoholic drinks are not taxed under GST and as a replacement for are taxed individually by the individual state governments, as per the previous tax regime. There is a unique rate of 0.25% on semi-precious stones and rough precious and 3% tax on gold. In addition, access of 22% or other rates on top of 28% GST applies on a few items like aerated drinks, luxury cars, and tobacco products. Before the implication of GST, the statutory tax rate for all the goods was concerning 26.5%, Post implication of GST, mainly goods are in the max range of 18%.

There are three main components for GST in India:

CGST: Collected by the Central Government on sale of goods and services within the same state

SGST: Collected by the State Governments on sale of goods and services within the same state

IGST: Collected by the Central Government for sale of goods and services between two states

1.2.2 CUSTOM DUTIES

The constitutional amendment bill states that the import of goods into India from foreign countries would be termed as inter-state supply of goods and hence, GST will be levied on these transactions. There will be two components to the custom duty tax IGST regime which is basic custom duty and IGST. This policy has been incorporated in the GST model or IGST law. It is proposed that the GST regime on the import of goods would subsume the levy of countervailing duty ('CVD') and special additional duty of customs ('SAD'). AT the time of import into India, the levied GST would be collected by the Customs and should be payable for each transaction, as in case of domestic transactions the IGST is paid against the monthly payment. The importer is likely to report the import transactions and IGST paid on such imports in its monthly returns. Currently, the import related information is captured in multiple returns, where VAT return captures the import purchases while the excise/ service return captures the credit taken on countervailing duties paid on imported goods. Going forward, all this information should form part of the IGST return. As per GST Law, the GST should be paid on the transaction value of imported goods plus any duties/ taxes, etc, levied under any statute other than the GST laws. This means that while paying IGST on the imported goods, basic customs duty ('BCD') should be added to the transaction value of the imported goods. Additionally, other duties such anti-dumping duties, safe guard duties, etc will also continue. This practice is in line with the current regime as well as the global practices where import VAT or GST is payable. Further, the Customs valuation principles have been adopted for GST purposes as well. This will be a new phenomenon that the domestic industry will have to follow especially for services.

These additional taxes in addition to heavy paperwork which are incurred by the aviation industries on their operational costs is a huge burden as airlines import 90% of their spare parts and aircrafts, hence, making the business very tough with very little bracket for profit.

1.2.3 On the fast lane

GST was expected to revolutionize the logistics industry and it was estimated that the logistics sector will witness the profit of $200 billion thanks to no piling of goods in various warehouses and faster movement of the goods due to single uniform tax system across various states. The cost of piling of inventory will go down by 50%. The logistics industry incurs 14% of the GDP as a cost per year, of running the operations which is very high compared to different nations and GST is expected to change this scenario drastically. By 2020, the logistics industry was estimated to be worth $301.89 billion.

As per the experts, "GST will convert a diversified tax regime into one uniform tax rate making India a single market place. This would facilitate seamless transportation of goods across borders with a significantly lower transit time, thereby stepping up demand for logistics services. The GST Bill will also lead to higher vehicle capacity utilization resulting in increased efficiencies at every node of the logistics ecosystem. Overall, this is a positive move that will generate growth opportunities for organized players within the logistics industry," says Abhishek Chakraborty, Executive Director, DTDC Express Limited. "The fixed warehousing overheads of companies across industries will decrease by 30-32% and that will make them more competitive in the international market. Portable and virtual warehousing will become a viable option for many companies. It will also enhance their operational efficiency," says Agarwal of Agarwal Movers Group. Although various logistics players and experts are expecting a short-term inflationary impact on exports, consensus is that GST will, in the long run, increase competitiveness of Indian exporters.

The expectations from GST that not only it would be simplifying the tax structure, it will also bring in huge relief to several players at the operational level as they can now do away with fixed costs of maintaining warehousing across various locations in India but its totally opposite when we talk about aviation industry. GST has not established itself as a boon for aviation industry and one of the worst hit areas, is the logistics sector of the industry which has not overcome the previous obstacles and shortcomings but rather is burdened with more ambiguous and cost incurring policies.

1.3 PURPOSE OF STUDY

GST, a federated tax which is expected to reshape the country's 2.4 trillion-dollar economy and lower the price of goods is receiving criticism. One of the reasons is that it has been affecting the growth of aviation sector. Although, Government has exempted GST on aircraft and spares imported on lease to avoid double taxation but most of the spares parts in this industry are Imported, Re-imported and Transferred on which they must pay heavy amount of tax. Whereas aviation industry didn't have to pay any taxes for spares part before GST. Daily, each airline does millions of transactions during importing of spares parts which are a necessity to make aircrafts fly. Paying huge amount of taxes for the parts on which the aviation industry completely depends is a sudden burden which is drastically negatively impacting the industry financially. There are other areas which are incurring huge costs to aviation industry after the implementation of the GST as we briefly highlighted above, and this project will discuss those areas and the solutions to the shortcomings of the taxation system. This project will also highlight the impact of GST implementation on the aviation industry in terms of import of the parts essential for the aviation industry and the remedial actions to be implemented to resolves these issues.

It is estimated that the combined profit of all airlines in the year 2016 was $122 million after a gap of a decade and also that Indian market is on track and ready to accommodate 100 million passengers but despite of increase in passengers in 2017, almost all airlines recorded losses and one of the major airline went bankrupt and was shut down.

1.4 RESEARCH HYPOTHESIS

Implementation of GST was one of the innovative steps taken by Indian Government, but the outcome of the implementation varies from sector to sector. The main motive of this research is to highlight the impact of GST in aviation industry. This project will be focused on the impact of GST in supply chain and logistics of aviation along with the other areas of aviation. The project will also highlight, how GST contributes to be one of the factors for the fall of Jet Airways and worsening financial stability of Air India.

This will also suggest possible solutions which should be taken to recover from these losses. The project will suggest ideas which will not only help current airlines to maintain their stability but also encourage new businesses to join the industry.

CHAPTER 2: LITERATURE REVIEW

2.1 BROAD RANGE STUDY

Many researchers have a different view on the introduction of GST which is a huge initiative and a leading tax reform which happened in the past decade, by replacing VAT. They have adopted different methodologies to discover the impact of GST on the Indian economy.

Eva, Van et al., [4] they explained how GST has replaced 10 different taxes in the country and unified it into a single tax regime and explained the consequences of the GST tax using seminal model of trade and geography so to include all Indian states. They divided the country into 30 demographic states heterogeneously to study and discuss the barriers of the domestic and international trade, because there is supply and transport of goods in India within states and internationally. They also discuss the change and divergence in the new tax system and old tax system. And studied the impact of the system by creating a model around the import and export of the country. It is suggested that GST will improve the wellbeing of Indian states and overall wellbeing of the country and will bring a uniform and comprehensive policy across the country. It is anticipated that GST will improve the GDP of nation by 4.2%. But there are some drawbacks and limitations to this analysis and the first one is that the model presented by the researchers is a static model and therefore, the impact of this new system cannot be interpreted in long term. The second drawback is the it doesn't account for the service trade which is most important aspect of the domestic and international trade and it is analyzed that the tax rate on service trade will be even higher after the GST implementation and even higher than the old rate and hence will diminish the overall effects of the new tax system. And the third drawback is that the model cannot anticipate the impact on the tax revenue of the country since the model is based on the import and export of the country. Although the study didn't make any distinction in the final goods trade and the intermediate input, the GST is expected to broaden the horizon and tax base by reducing the complexity and increasing the compliance and transparency. Also, increased tax rate on the services will bring in more revenue.

Ravish, Raj in his study about Goods and Service tax studied the dual tax CGST and SGST is levied and collected by the state and central government and will be comprehensively applicable to all goods and services. This paper also put some perspective on the expectations of the tax payers and the economist, which is that the export would be given a boost by 3.2%-6.3% after implication of GST because the costs would be mitigated and the tax payers' expectation is that his new tax regime will bring in the neutrality, fairness, simplicity, effectiveness and efficiency. But this paper also throws some light on the drawbacks of the GST implementation, which is due to the loopholes in the system and it is analyzed that GST will be very difficult to coordinate with 29 states and 7 union territories and hence, will bring inflation to the consumer price and will not raise growth.

The difference between the direct and indirect tax is that the direct tax is paid to government in the form of income tax, corporation tax but the indirect tax is levied on the goods and services. Milandeep, Kaur et al., [6] discussed the central tax, state tax, dual taxation system, GDP, direct and indirect taxes in the country. The authors have researched the Goods and service tax from a different frame of references such as:

Model of GST: As per researchers there are 3 models to GST which is the central GST, state GST and the union and state GST. In India there would be the Implementation of dual GST system which is a combination of CGST & SGST, and tax will be levied on all goods and services without any distinction.[6].

- GST to the economy: GST will support in providing more money to the backward states by reducing tax evasions, like Bihar, Jharkhand etc. which will help the country's economy grow by abolition of the bias in the tax for example a person can setup their industry. [6].

- Positively impact the common man: GST is expected to remove the cascading effect of taxes by bringing in the uniform and simplified tax regime, where there will be much smaller tax compliance. GST will help in removing the manufacturing cost boosting more demand because decrease in the price of consumer goods and consequently will lead to increase in supply chain and ultimately increase in the production goods.

- GST might face problems after implementation: There are some challenges and obstacles that GST might face which is taxing the E-commerce which should be integrated and addressed and also political disproportion.

- Place of supply rules: In case of the sale of a property the supply of goods should be the location of the place and the architects and real estate agents providing services should only be taxed at the place of the land located. In the case of mobile services that is, passenger travel services, freight transportation services, telecommunication services, motor vehicles lease/rentals, and E-commerce supplies, rules should be kept in place to decide the supply of goods location because neither there is any fixed location of the supply of these goods and services nor fixed employment associated with these services. In the case of intangible property and other property the place of location of these services is decided on one of these proxies: Place of performance of service, Place of use or enjoyment of the service or intangible property, Place of location/residence of the recipient and Place of location/residence of the supplier.

The research analysis has done on capital goods. As per our review, the researchers have various findings regarding the treatment of various goods and services. Some of them are listed below:

- Treatment of capital Goods: Full and instant input credit would be allowed for tax paid by both CGST and SGST on all purchases of capital goods in which GST would be included [6].

- Treatment of petroleum products: To consumption of the petroleum products must be checked to reduce the external negative impact on these products. To reduce the cascading effect on these products there should be single tax system to reduce the burden because of the multiple tax levied on these products from central and state government. [6]

- Treatment of the power sector: SGST should subsume the electricity duty levied by the state. Article 278 and Article 288 of the Constitution should be amended to enable levy of GST on the supply of electricity to Government at all levels like any other normal goods. The tax system for the power sector should be the same as in case of any other normal goods. GST will help to decrease the cost of power projects and similarly the generation and distribution, which will lead to increase the profitability for the country. Thus, GST is very important in power sector [6].

- Treatment of Transport service: GST would subsume all taxes on vehicles and tax on goods and passengers levied by the state government. All the equipment which are used in transportation, all services of transportations like railways, air road and sea must form an important of GST where both Central and State have concurrent jurisdiction. The tax regime of transportation will be the same as in other normal goods [6].

- Treatment of Financial services: In financial service, there are three methods of taxation. They include the exemption method, the zero- rating method, and full taxation method. The exemption method and zero-rating method are reducing the potential GST base and distorts consumption while a full taxation method significantly enhances the tax base and result in equal treatment of all services. Thus, it is suggested that the financial services should be taxed on the bases of full taxation method [6].

- Treatment of Small-Scale Industries (SSI): The Small-Scale Industries generally deal with various types of taxes therefore in order to reduce the burden of tax on these industries one tax system is suggested. Accordingly, GST in which CGST and SGST would talk and takes acceptable decision about the taxing system of Small-Scale Industries.

2.2 NARROW RANGE STUDY

2.2.1 GST IN INDIAN SCENARIO

Akanksha, Khurana et al., [7] studied that the complete tax regime which is implemented on the manufacture, sales and consumption of goods and services will provide a complete aid to customers and producers by subsuming the various taxes and absorbing the input tax credit set off and service tax credit set off. It is estimated that it will help GDP grow by 2%.

Hitesh, K. Prajapati [10] in his publication talked about the effects of GST after implication and highlighted that the IT sector did not boom and there is another area of contention between the government and the empowered committee which is that the threshold limit of the turnover for dealers.

Shakir, Shaik et al., [11] in their paper stated that GST in the Indian structure will bring commercial benefits which were not focused on by the VAT system and would fundamentally lead to economic development. Hence GST will bring a collective gain for the industry, agriculture, trade, and common consumers as well as the central government and the state government.

Sakharam Mujalde et al., [12], in their paper, have shown that the country which has already implemented GST as its tax regime will face a inhibit inflation and the GDP may increase by 1-2% in comparison to other countries like Canada, New Zealand etc. The challenges of the GST include, flying becoming more expensive, the industry expecting growth and drastically increased tax rate on the services. The insurance penetration will become low and life, health, and motor insurance will become costlier.

GST is a comprehensive, indirect, uniform tax regime which is implemented on the produce, sale, consumption and goods & services across all states in the country. According to the Task Force under the 13th Finance Commission, that GST has most elegant method of elimination of distortions and the utilization of tax, and it's the most well designed, value added tax on goods and services. The major reasons to accept GST is to facilitate the uniform and seamless tax One of the reasons to accept GST is to facilitate seamless credit across the entire supply chain and nation. In this system the service provider and the goods procurement team can get input tax credit because GST is levied on all levels of sale and whenever goods or services are sold these taxes are applied and hence the end user and the consumer is only not getting the tax credit. This is because they take account of GST in the price of the goods and services they sell and can claim credits for the most GST included in the price of goods and services they buy. Habiba, Abbasi [13] in her research on GST classified her finding based on different industries as mentioned below:

Under GST, cab and taxi rides are taxed lower, from 6% to 5%. For those who travel by air, GST is favorable as the tax rate is lowered to 5% for the economy class and 12% for business class. Train fare, meanwhile, is mostly unaffected as the change is minimal, from 4.5% to 5%. Those who travel by sleeper are not affected by the tax rate change.

Pranesh, Debnath [19] discussed that GST, by minimizing exemptions and raising the tax base, the tax rate has been reduced and hence, the tax burden is equally divided the manufacturing and services sectors. Uniform rate then split to state and central. In his paper, the author mentioned the integrated taxation system exclusive of alcohol, tobacco, and petroleum produce. The author concluded that the unified tax regime GST will advance the tax compilation and improve the growth of India's economy by breaking fraudulent activity.

Suresh, P have discussed the GST in India with special emphasis on the Fast-Moving Consumer Goods sector, food industry, IT, Infrastructure sector, and impact on small-scale enterprises. Their findings are that GST will provide relief to the producers by providing the input tax credit set off, service tax credit set off and by subsuming numerous other taxes. It will also break barriers between states and help in building more uniform and standard taxation system across the nation.

Rajesh, Desai et al., in their research findings talk about the overall challenges and opportunities to the Indian economy, the credit mechanism, management, and infrastructure. They also propose that it will decrease the cost of the taxpayer, create harmonization, end cascading effect, and terminate multiple chains of taxation. It is neither a gorilla, nor a chimpanzee, but a genus-like primate. As per their opinion, a single GST rate is best for administrative efficiency.

2.2.2 GST in Tourism Industry

It is believed that the tourism industry in the world is very heavily taxed and there is very specific tax levied on the industry. Forsyth, P et al., [35] in their paper leaving aside issues of international rent extraction or the passing of taxes on to foreign visitors, there do not seem to be strong reasons for taxing tourism differently from other goods and services, although specific levies to correct for related unpriced services or externalities may be called for. There has been a growth in specific tourism taxes, many of which are earmarked for spending on tourism-related projects or promotion. They also say that the most serious problem arises from the market power that countries possess over their tourism services; countries can, and do, impose taxes on tourism for tourism services and pass them on to foreign tourists. Excessive taxation of international tourism will be the result, and this taxation will be very difficult to negotiate away. Since this market power is unevenly distributed across countries, and there is some gain from tourism taxation, even after the taxation of their own travelers is considered, it would not be feasible to obtain agreement to reduce or eliminate such taxation if negotiations are confined to tourism and aviation issues.

2.3 ESSENTIAL POINTS

Supply chain at the order – One transaction, two taxes There is a strong interplay of GST and customs laws in relation to international trade transactions – both export and import, because of various changes such as:

- Components and rates of customs duty computation;
- Change in method of computation;
- Change in policy around customs duty exemptions;
- Change in credit eligibility of IGST paid at the time of import

Customs duty has two components, i.e., basic customs duty ('BCD') and IGST; BCD is not creditable and hence becomes a cost, while IGST is creditable and therefore could be cash flow issue for business. Effective median rate of customs duty has split into a few slabs (depending on the IGST rates of 5%, 12%, 18% and 28%). Accordingly, as against the pre-GST customs duty median rate of approximately 26%, the post GST median rate could range up to approximately 37%.

Method of IGST computation for customs duty purposes has changed from that adopted for CVD and SAD in the past. IGST is computed on the assessable value, as against the differential mechanism prescribed hitherto for products covered under legal metrology and MRP regulations. This will also have a direct impact on the effective customs duty payable on imported goods.

In the past, Government policies/ initiatives were implemented through CVD and SAD exemptions. However, exemptions are no more the norm as it is against the basic construct of GST and is seen as disrupting the credit chain. It is expected that IGST exemptions on import of goods would be minimal as compared to the past IGST credit eligibility policy is more generous and less restrictive. It impacts different businesses in different ways – credit of CVD and SAD was not available for an import and sale business but IGST credits would be eligible on a go forward basis. Similarly, the SAD element which was not available as a credit for service providers, would no more be a cost in the supply chain.

Shefali, Dani [14] reported in his paper that in order to evade the payment of numerous taxes such as excise duty and service tax at the Central level and VAT at the State level, GST would unite these taxes and build a consistent market throughout the country. Incorporation of a range of taxes into a GST system will bring about an efficient cross-utilization of credits. The current system taxes production, whereas the GST will aim to tax consumption. The paper also suggests that the implication of GST will raise the consumer price inflation and it will not collect any revenue for the country. They suggest that the latest tax regime will lessen the cascading of tax, unify the central and state taxes, inefficiencies of the old tax system but it will affect adversely on the poor populace of the country

A comparison was made between the old indirect taxes and new indirect tax regime of GST. The findings of the study show that the strengths of GST include employment opportunities, national market to boost FDI and boost manufacturing and export, uniform price and transparency. The drawbacks are there may be burdens on the Small and Medium-sized Enterprises (SMEs) because of the GST implementation. Under the old excise law, only manufacturing business within a turnover limit of more than Rs. 1.50 crores must pay excise duty. But under GST the tax has been reduced to Rs. 20 lakhs. Saravanan, S et al., [18] have made a detailed comparative study of the effect of GST on the manufacturing sector and service sector. According to them, GST on the service sector gives negative impact on the entire role of the business transaction because of the entire increase in the tax and in the manufacturing sector it has a positive impact given only for the intermediary investors and the final consumers. The manufacturers must pay the exact full amount of taxation and without liberalization of any tax subsidies.

2.4 SUMMARY

Acharya, S [36] in his paper he discussed the tax reform of India from 1969-2005. The paper has been divided into various sections as per the changes in the Indian tax system and the first phase is the model of the tax system and the reality of the tax system. The second section discusses the direct tax reforms, the third phase is the P.V Singh's reform from 1985-87, the fourth phase is the tax reform in the 1990s i.e., the modern tax reform in India and the last phase discussed post-2000 initiatives. The paper portrays the 30 years of enormous progress the Indian tax system has made and India's reforms from 1970, judged by built in revenue elasticity and transparency & the standard economic efficiency, equity. The key issue for further reform includes the integration of CENVAT, low buoyancy of excise with state VAT and broad basing of direct taxes, plethora of complex exemption plaguing customer tariff.

Rao, M. G [39] in his paper portrays the Indian tax structure has come a long way and become far more efficient from the complicated, narrow- based and confiscatory. Over the years, the thrust and direction of reforms have been to look up to minimize distortions and at the same time revenue productivity. The foremost proposal of the reform is to switch the state level sales tax into VAT this year. The fresh focus on tax administration promises well-off dividends. Even though reforms since 1991, much remains to be done to make the tax scheme proficient, international and productive. In corporate tax, sales taxes, excise, customs duty, and revenue absorption on diesel and petrol have high-efficiency costs. The income tax continues to be narrow-based. Reform in the sales tax has only just begun and a lot of leftovers to be complete to progress destination-based trade VAT. The reforms in tax administration promise enlarged revenues and, expectantly, that will offer the elbow room essential for calibrating future reforms.

GST was introduced on 1st of July 1999 during an extended economic slump, which prevailed between 1995 to 2002. During this phase, the PNG economy qualified high budget deficits, interest rates, inflation, and public debt ratio, and discriminatory and distorted indirect taxes, cascading provincial sales taxes, declining revenues from mineral and petroleum sources, and perceived pressures to liberalize trade and investment. There was a fervent search for policy reforms to revamp the economy. The crisis-prone economy did not recover until a commodity price boom emerged in 2002. In another paper of Mawuli, A [45] explains the main GST impacts and emphasizes the adverse impacts on disadvantaged payers. It puts forward suggestions for reforming the GST and minimizing the significant negative impacts.

The tax policies in developing countries are disoriented on numerous magnitudes, knowledge of the large differences among policies those are anticipated in the most favorable tax literature and are in mutually those in developed countries. In this paper, Gordon, R et al., [40] explore how policies which are forecasted change if firms or industries or companies can effectively avoid taxes by conducting all business in cash, thereby avoiding any utilization of the financial sector. The predicted policies are now much closer to those observed.

CHAPTER 3: METHODOLOGY

The India government has started various measures for one of the fastest growing sectors in Indian economy, Aviation, like flexible travel proceedings, liberalization and infrastructure development to ensure safer travel. It is assumed that the implementation of GST has transformed the taxation system and Indian economy with its 'One nation, one market, one tax' principle by accumulating a series of indirect taxes which were charged at multiple levels and varied rates by state and center, hence, making the taxation system uniform and less complex but even after a year of GST shout out, there is ambiguity and differences in implementation of provisions relating to advances and purchases from unregistered vendors, Tax Deducted at Source (TDS) for work contractors and Tax Collection at Source (TCS) for e-commerce players which creates an environment of confusion for the existing business and for those who are looking to start a new business. The airline sector might have some of the positive change in tax rates for economy class travel under GST as compared to the erstwhile service tax regime but got lots of negative impact too.

3.1 The impact of GST on supply chain and logistics part of Indian aviation

3.1.1 Purchase/lease of aircraft and its parts:

Aircraft carriers did not pay any indirect taxes on lease of aircrafts and its parts in India, prior to introduction of GST. Due to a 90% abatement for services of leasing of aircrafts and its parts and since, operating lease agreement did not attract service tax, hence, under financing lease arrangements, service tax was chargeable only on 10% of lease rental value. On import of aircraft by scheduled operators, custom duty was not leviable.

At the initial stages of GST implementation, cost of aircraft import under lease had increased as GST at 5% was applicable on transactions involving leasing of aircrafts and its parts due to restriction of credits. After considering industry representation, even though the government has pegged a "nil" rate for levy of IGST on aircrafts import of aircraft and its spare parts into India has also been exempted from the levy of customs duties under a lease arrangement only, but still huge amount of GST is applicable to purchased items.

For various economic benefits, airlines across the globe are operating aircrafts taken on lease or operating their fleets on lease model which are leased from various leasing companies. Because the lease agreements in India are subjected to VAT, many carriers enter into leasing agreements outside of the country to avoid this levy of tax. Since, the leasing of goods is considered as a service in this GST model, leasing of aircrafts in India by the airlines operating here is still subjected to GST for the all transactions whether executed in India or outside. This is because in the GST model, the region of supply of the leasing aircrafts is considered as the location of the airline. Consequently, along with lease rentals (which is a significant outflow for companies), applicable GST will now be required to be paid upfront. Though GST paid at this stage would be available as credit, realization of this GST will only occur in a gradual manner through sale of air tickets. Therefore, such upfront GST payment is likely to result in significant cash flow blockages for carriers.

3.1.2 Services taken on aircraft:

There are numerous small and heavy tasks performed on the aircraft, e.g. maintenance task, cleaning task and support. Airlines don't perform many of these tasks themselves and outsource it to the MROs. All these tasks such as cleaning, changing seat covers, doing maintenance activities, movement of logistics etc. are some tasks which are normally performed by third party. The cost of all these third-party services have been increased by more than 10% after GST has been implemented, which has had a negative impact on aviation industry.

None of the spares are manufactured in India, which means they need to be imported. Before GST there was no any cost incur during custom clearance and service tax to the third party was very low but new regime has changed the scenario due to which airline has to pay huge amount on clearance of spares parts.

Many of the times airlines face AOG (Aircraft on ground) like critical condition and during that period they may need different type of spares which might not be available in their stock. In such condition, one airline normally sell required parts to other. The GST which has already been paid on the spare parts and double paid when purchasing such parts and hence, highlight the cascading effect of tax.

Since, MROs qualify as 'works contract', they charge both VAT and service tax for the transfer of goods and services. The VAT they charge cannot be set off against service tax and hence, the VAT applied to the services are an additional cost to the airlines. Most airlines outsource these services to foreign MRO companies to save this additional cost.

The work contracts are deemed as services and are subjected to tax in the GST regime and hence, the service tax is applicable for the MRO services whether taken in India or outside, as the services are provided to the air carriers located in India. But the tax applied for the services taken from foreign MROs will pass through on which

VAT will not be applicable and hence preventing the cascading effect of the taxes. In addition, to avoid the lease VAT most airlines renew their lease contract outside of India. As an indirect consequence, end of lease refurbishment of aircrafts, which account for a big chunk of MRO revenues are also undertaken outside India.

On account of the above, MRO operators in India are at a disadvantage. However, the provisions of the Model GST Law combined with the applicability of GST on cross border lease transactions will place MRO operators in India on par with their foreign counterparts. Hence, such things are needed to be amended from this scheme and there should be a way to come up across with same or less percentage as before.

3.1.3 Transportation of goods by air

In case of air transportation of goods, the airlines do not come into direct contact with the shipper. Airlines deal with third parties and they give a price cap to the parties/MRO for providing the services to the shipper. Airlines are not always aware of the actual price at which the space is sold by the agent to the shipper. The agent is responsible to make the payment to the airlines for such services at the pre-agreed rate irrespective of the amount at which the space in the aircraft is finally sold by the agent to the shipper (e.g. an airline company has appointed an agent to sell the space in the aircraft for INR 90/seat with a price cap of INR 140/seat. The agent can sell the space in the aircraft for any amount up to INR 140 to the final customers and he is liable to pay INR 90 to the airlines for such purchase of space by the shipper. The airlines would not be aware of the actual price at which the shipper has procured the space in its aircraft. The entire consideration beyond INR 90 is retained by the Agent X appointed by the airlines as its commission. The GST law defines the "recipient of supply of goods or services" as the one who is liable to make the payment of the consideration for such supply. In the instant case, the shipper is contractually responsible to make the payment to the airlines. Additionally, the shipper has a direct recourse to the airlines for any loss suffered by him during the transportation of goods by air due to negligence on part of the airlines. Thus, the shipper should qualify as the recipient of such services. However, since the airline has no visibility of the amount charged by the agent from the shipper, the airlines should raise an invoice on the agent for the fare recovered from him and should treat him as its customer. However, the place of supply should be determined based on the details of the ultimate shipper. This would ensure that the revenue of GST is accruing to the state where the services are consumed. Additionally, the agent should discharge GST on the rate recovered from the shipper determining the place of supply considering the shipper as its customer, while there is a debate on whether the agent should only charge tax on its commission.

Another aspect to account for is that the Excise duty and CVD (Countervailing Duty) paid on input goods (like spare parts etc.) is the form of Input tax credit on input goods which could be set off against output Service Tax liability. But after the implementation of GST, Input tax credit of GST paid on input goods is available for set off against business class output GST liability only and doesn't set off against economy class. Input tax credit on capital goods Excise duty and CVD (Countervailing Duty) paid on capital goods could be set off against output Service Tax liability. However, VAT paid on such Capital goods was not available for set off since the aviation industry is primarily providing services. Now under GST, ITC of GST paid on Capital goods is available for set off against Business

Class output GST liability only i.e., Input Tax Credit (ITC) not to be set off against Economy class output GST liability.

3.2 Impact on airline policies and structure:

GST is creating an ambiguous environment for airlines to structure their policies and bring changes in order to adjust to new GST regime and operate and function best with minimum operational cost and maximum profit or output, consequently, resulting in unsatisfactory service to passengers and negatively impacting the financial stability of the business.

3.2.1 Impact on air fares

The relaxation provided to the airlines in the form of abatements on the value of air fare has accounted for lower service tax rates on the air travel. The current service tax rate is effectively 6% for economy air tickets (after an abatement of 60% of the value of services) and 9% for non-economy tickets (after an abatement of 40% of the value of services). The cost of the air travel will drastically increase with the GST tax rate of 18%-20%. Though cross credits will be available, these would be insubstantial for a sector that has minimal consumption of goods, other than Aviation Turbine Fuel (which will initially be kept outside the GST regime as discussed below).

The input cross credits are not that much of use for the industry or sector which has minimal consumptions of goods, except for Aviation Turbine fuel (ATF), which is kept outside of the GST purview. The input tax credit is available on economy class purchases but not on the business class ticket purchases on which the GST is charged at 12%.

3.2.2 Different class of travel

Under the GST law, there is no provision defined to determine the taxability of the continuous journey of the passenger, where passenger travels in more than one class.

For example: when the passenger travels in different classes in different legs of the journey on a single ticket issued, in this case the airline is supposed to apply tax as per the class in first leg. Suppose in Delhi-Dubai-London-New York flight where the passenger travels in business class in first leg of Delhi-Dubai flight and economy class in the second leg of Dubai-London-New York, in such cases the airlines must tax the passenger as per business class tax rate for the entire journey from Delhi-New York. Also, there is ambiguity in the discharge of tax rate or tax rate that should be adopted when the passenger opts for a downgrade to economy class from business class or an upgrade from economy to business class. In the case of downgrade, the passenger is refunded the money in the next leg of journey and in case of an upgrade, an additional fee is charged from the passenger.

The airlines or aviation industry faced some major changes after the implementation of GST. There is a huge variation in the tax rate compared to the prior tax. The service tax rates applicable prior to GST on Economy class is 6% and business class is 9% and after implication, the tax rate has charged on economy class is 5% and business class attracts 12% GST on its fares. The economy class has become cheaper due to GST for consumers which is a positive move, but business class has become 3% more expensive in comparison to previous tax system.

3.2.3 Applicability of GST on ancillary charges

The taxation rate of 18% on ticket cancellation or not flying and 12% or 5% on the ticket price is difficult to comprehend. Taxability on cancellation charges and other ancillary services such as date change charges, excess baggage, preferred seat services has been ambiguous since the implementation of GST. To avoid litigation, most airlines are charging 18% GST as a cancellation charge, but the confusion persists whether to charge the concessional rate available for the transport of the passengers by airlines or at the general tax rate which is 18%.

Transport & Logistics FAQ, issued in December 2017, CBIC addressing the taxation issue clarified that the tax will be charged at the same service transport tax of the passengers, but this moved various jurisdiction officers in questioning the low rate adopted by various air carriers.

Some airlines have continued to charge 18% on the ancillary charges, since the validity of the Central Board of Indirect Taxes and Customs (CBIC) FAQ is yet to be confirmed. CBIC should take necessary steps and tariff changes to finalize the tax rate on these charges. In these uncertain times when flight schedules are changing rapidly and cancellations are high, government should take a call on finalizing the tax rate and eliminate ambiguity. Also, on Taxability of Passenger Service Fees ('PSF') and User Development Fees ('UDF') and airport taxes collected by the airlines from the customers on behalf of the airport.

3.2.4 Aviation Turbine Fuel (ATF)

AFT was not included in the GST purview and hence, the central and state government will impose the excise duty and value added tax (VAT) respectively. The cascading effect of the taxes can be effectively seen in this case this the taxes levied are not creditable under this new GST regime. There is strong case of merit of GST rate in air travel because the conditional service tax abatements for the carriers not availing credit for ATF, the increased GST rate combined with the non-inclusion of ATF (which forms 30-35% of the input cost for carriers) will significantly burden the aviation sector.

CENVAT was the type of input tax credit that was available to service credit and was against the input service liability but in the new GST tax system the input service credit is available on both economy and business class. Availing input services can be set off against output GST.

3.2.5 Realignment of ticketing structure

Airport Authorities of India ('AAI')/Airport operator, as per the provisions of Indian Aircraft Rules, 1937 have been empowered to collect PSF and UDF from the passenger in consideration of amenities provided at the airport such as:

- Airport security;
- Passenger facility; and
- Construction, management and operation of the airport, etc.

Directorate General of Civil Aviation' DGCA has mandated that the airlines will be collecting these fees from the passengers on behalf of AAI because the AAI or airport authority cannot administratively collect such fees from the passengers and hence, they authorized the airlines to collect the same. The GST law provides that the expenditure incurred by the supplier as a pure agent of the recipient of supply shall be excluded from the value of supply subject to satisfaction of certain conditions. The air carriers are merely the collector of this tax from the passengers or customers and collect and provide the exact value of tax charged and do not gain profit on the same. The airport operator discharges GST on the amount recovered from the passenger.

Thus, airlines merely act as a pure agent at the time of collection of such airport taxes from the

passengers. In the instant case, airlines may deduct the airport taxes so collected from the amount recovered from the passengers as a pure agent to arrive at the taxable value of supplies.

3.2.6 Place of supply for air travel:

The provisions in the GST has been made to provide a definition and to determine the place of supply of goods and services, where the supplies and services will be taxed. These guidelines divide the place of supply for air travel services under two sub-heads:

Supplies made to customers registered under GST: In this case, the location of the registered customer is considered as the place of the supply, the location is referred with respect to the recipient where the supply has been received. In the situations when the premise of the recipient is undeterminable or are multiple in nature then the place most closely associated or directly concerned with the receipt of supply will be considered as the registered place of the customer. Therefore, carriers will have to determine from ticket to ticket basis for such customers (including individuals, proprietary concerns etc.) qualify as an inter-state supply (subject to Integrated GST, levied by the central government) or an intra-state supply (subject to Central GST (levied by the central government) and State GST (levied by the State governments) on intra- state supplies);

Supplies made to customers not registered under GST: The location from which the passengers starts the journey or embarks the flight is considered as the place of supply and the airlines will pay

GST only if they are located in that location or state and if not they will pay integrated GST, which will increase compliance cost.

In addition, the exact meaning and interpretation of the location of service provider is very ambiguous in the GST model. The fixed establishment of a supplier that is most directly concerned with the provision of services is included as a location. It is not clear whether ticketing counters,

baggage counters will qualify as fixed establishments under the Model GST Law.

3.2.7 Tax impact for international flights

Under the previous indirect taxation system, international air travel was subjected to service tax on the ticket fare for both the return and outgoing leg, (less applicable abatements), if the air travel commences in India. However, air travel commencing outside India is not subject to service tax.

Under the Model GST Law, air travel commencing outside India will now be subject to GST in India, if provided to customers registered under the GST.

In addition, the Model GST Law has provisions that a return journey will be treated as a separate journey and will be taxable in India, if such services are provided to customers registered under GST in India. However, where customers are not registered in India, the return journey will not be taxable.

3.2.8 Compliance cost

In the previous tax system, the airlines needed to make only single registration but in the GST regime the airlines need to register in all states where the supply of aircrafts parts takes place and from where the flight originates or embarks. There is 28% tax on all the parts and aircrafts which are moved inter-state drastically increasing the operating cost of the airlines by significantly increasing the compliance cost. As a result of this many engines, are kept on hold in customs subsequently impacting the smooth operations of the airline industry. In addition, the carrier will also be required to upload onto the GST Network, invoice wise details of supplies made to registered persons.

3.3 Inequality of treatment for companies

Capital goods is the term defined in the GST regime to mean the goods, the value of which is capitalized in the books of accounts of the person claiming the credit. The international airlines have their head office outside of India and their branches in the country and such airlines are neither required to file the details of their capital assets of the Indian offices or stations under any regulatory provisions, law or statues in the country nor to maintain books of accounts in India by way of an exemption notification under the Companies Act,2013. The assets these companies purchase in India are capitalized in the books of accounts of the Head office outside India and not in the books of accounts of the branch in India.

Due to dispensation under separate law, of books of accounts are maintained in India for the International airlines having their branches in the country, but this exemption of the Indian branches cannot be the mere reason for the non-applicability of the capital goods provisions. The provisions of the GST should be implicated as per normal conditions in conjunction with the provisions prescribed under other laws in India. Hence, all goods, which would have ordinarily been capitalized as per the generally accepted accounting principles in India, had the airlines been maintaining books of accounts in India, should be treated as capital goods for the purpose of applicability of GST provisions in India. Moreover, the capital assets are capitalized in the books of accounts of the head office; thus, potentially satisfying the substantive requirement of law.

3.4 The inexplicit opinions of the experts

The senior executive and industry experts forecasted that there would be many difficulties and obstacles lying ahead for aviation industry, when GST was introduced. While GST is extremely helpful to the manufacturing sector, there are certain difficulties in store for the services sector, including airlines," said the finance chief of an Indian carrier, who spoke on the condition of anonymity. The airline experts fear that the implementation of GST will drastically increase the operational cost and increase the air travel fares disrupting cash flow. The main problems forecasted by various industry experts are:

3.4.1 Expensive air fare

After implementation of GST there has been increased off by Rs 400 or more in each ticket, which is certainly not negligible," said Samyukth Sridharan, chief operating officer at travel portal Cleartrip. "The government will need to make an exception for the airline sector as the current service tax ranges from 5.6% to 9% of the base fare, which is considerably less than the GST rate that is being spoken about, of 15-18%," said Sharat Dhall, president of travel portal Yatra. Currently, an airline needs to pay 6% service tax on economy class tickets and 9% on
Business class, which is transferred to the customer.

"A normal service provider would pay 15.5%, but airlines get a 60% relaxation on economy class tickets and 40% on business class, hence they have to pay 6%-9%. While the government hasn't yet specified taxes for specific industries, the normal GST is supposed to be at 17%-19%; on some 'demerited' goods such as luxury cars it will be 40% while on some concessional goods and services, it will be 12%. Airlines might come under the 17%-19% bracket (instead of 6%-9% now), which will lead to higher ticket prices," said Anita Rastogi, partner, indirect taxes at PricewaterhouseCoopers India.

3.4.2 Increase in operational cost.

One of the industry experts of IndiGo airlines said, "GST plays a very important role on shut down of Jet airways, they could have survived if GST didn't roll out." Also, he added ground reality of logistics is almost 99% of parts are imported and every month airlines are paying Crore of rupees to government in the name of GST and custom clearance.

3.4.3 Cost due to lease/purchase of aircraft.

"Our aircraft was imported before July 8, 2017, and the customs department is of the view that the aircraft would be subjected to 5% on import. This, we believe, is not fair," said a senior executive. "On Friday, the planes were still parked on the tarmac at the Delhi airport awaiting clearance from the customs and excise department. Inability to deploy the aircraft at a time when demand for air travel is increasing at a quick pace is causing revenue loss for the airlines, even as they also incur cost on rental. Although, this is the case of 3 years back but each time if Government comes up with such kind of step, they should be clear, systematic and come up with idea which can create win-win situation for all the parties. ", reported a top news agency.

3.4.4 Credit claim on ATF

"What happens now is that if an airline pays 14% tax on ATF, it can claim it as credit while paying the service tax on tickets. That is the central excise tax on ATF being set off against the service tax paid on tickets. In simpler terms, airlines can claim the money. But now with service tax being replaced by GST and ATF outside its purview, one can't be set off against the other," said Rastogi.
Presently ATF attracts Excise Duty @ 11% and VAT (which varies from state to state) up to 30%. Airline companies may be allowed to take input credit of GST paid on ATF resulting into reduction in the cost of operation," FICCI suggested. Besides, zero custom duty and uniform rate of GST of 5% on all types of aircraft imports spares and other logistics, including private category, it added

3.4.5 Increase in the compliance costs.

"Currently all freighter airlines are required to register under the Service Tax Act in any one state. The returns are filed twice a year. GST proposes monthly returns and if network industries like Express Delivery Services which are present all over the country are asked to register in all the states, then the compliance requirements for Express Industry would increase substantially.", commented an industry expert in anonymity.

"Over a thousand GST tax returns would need to be filed as against two at present, leading to huge amount of compliance requirements and oversight from multiple tax administrators. There will also be input credit blockages leading to price increases due to non-availability of credit in the absence of single registration for network industries," said Vijay Kumar, chief operator office of lobbying body Express Industry Council of India.

3.5 The potential remedial actions

3.5.1 Measures to reduce cascading tax effect

There has been a significant increase in the compliance cost of the airlines after the implementation of GST as the airlines have to register in every state, they are providing services and with the ever-evolving law they are struggling and grappling in order to align with GST regime to cope up. There should be measures taken by government to reduce this cascading effect of tax by exempting the inter-state movement of aircrafts, spare parts and engines and reduced rate for the lease premiums.

3.5.2 Representation for MRO exemption

Recently the GST rate on MRO aircraft maintenance, repair and overhaul services has been reduced from 8% to 5% as a relief to the MRO business and ailing aviation industry in accordance to the lesser flight schedules in early 2020. The decision has been taken in the 39th GST council meeting and announced on 14th March 2020, by the union finance minister Nirmala Sitharaman. This is due to the exemption which was sought by the MRO industry from the government on the tax levied on its services, since, after the GST implementation, getting MRO services in India was a costlier business for airlines than getting these services from foreign MROs and since no custom duty is levied on the spares and aircrafts which are imported after getting their services from broad and 18% GST implemented on the MRO services in India is far more expensive . This was not only preventing the MRO business to grow but also was a huge obstacle for the aviation sector to seek services in India. The government has also taken additional steps to support the MRO business by defining the place of supply of service as the location where the airline is based.

Undoubtedly, the above-mentioned measures will help the MRO business to grow in India which will consequently help aviation sector to be more comfortable in seeking services within India and contributing in boosting the economy. The aviation sector in India is in very primary stages of development given the limited number of competitors in market. The MRO business will grow when parallelly aviation sector grow. The dependency on the international counterparts of the airlines will continue till the time the Indian MRO industry grows and competency. Till that time the additional GST of 5% is a burden on aviation sector and the flyers too. And lastly, the government has rationalized the MRO tax regime, and this will increase the Aircraft component repairs and airframe maintenance business to Rs 2,000 crore from R 800 crore in three years.

"To reduce GST rate on Maintenance, Repair and Overhaul (MRO) services in respect of aircraft from 18 percent to 5 percent with full ITC (input tax credit) and to change the place of supply for B2B MRO services to the location of recipient. This change is likely to assist in setting up of MRO services in India. Domestic MRO will also get protection due to 5 percent tax paid under section 3(7) of the Customs Tariff Act, 1975 on most imported goods (sent abroad for repairs) as this tax is not available as credit," the government had said on March 14, 2020.

Today, the government said major engine manufacturers in the world would set up engine repair facilities in India in the coming year and convergence between defense sector and the civil MROs will be established to create economies of scale. Maintenance cost for airlines will come down, it added.

"Idea of allowing defense aircraft MRO to private players could be important. Globally countries are aiding airlines. There is salary support and other packages. We must compete with these airlines in the future. We are asking for measures beyond money or loans. We are asking for inclusion of aviation turbine fuel under GST regime. We are asking for airport charges. We must look at reducing fixed costs," Singh told CNBC-TV18 after the announcements.

With over 650 aircraft grounded since March 25, a large section of employees on mandatory leave without pay, rising liabilities and zero cash flow, today's set of measures were eyed with great expectations.

"What we needed for survival was direct cash infusion to pay salaries for the period of Government-ordered grounding, Govt-backed credit lines or loans to get back on our feet and sustain losses while demand recovers, waiver of all statutory dues for 6 months to allow airlines to rebuild their balance sheet," a senior official at an airline said post the announcements by Finance Minister Nirmala Sitharaman.

3.5.3 Taxation on interstate movement of parts:

The supply of goods and services to an individual without a consideration will be subject to GST as per the new GST law for an inclusive scope of the term "supply". The movement of the spares and engine parts between two states or the stations of an organization located in different states is only to get repair and maintenance services and not for the consumption by other stations and hence, GST should not be levied on these items. A new circular 2 in this respect has been issued which clarifies that the movement of rigs, tools, spares, engines and all the goods on wheels like crane between two stations in two different states will neither treated as supply nor the service except for the cases where these goods are further meant to be supplied and hence, these parts wouldn't be liable for GST.

3.5.4 Cascading effect on ATF

The ATF (Airline Turbine Fuel) is currently kept outside of the GST purview and ambit. Since Jan 2017 there has been significant increase in the ATF prices, and hence, the aviation industry has sought out to include ATF in the GST purview. Bringing ATF in the GST ambit and allowing input tax credits on the same will help cushion the airlines from the burden of increased ATF prices. This can further be passed on to customers with more affordable and cheaper pricing of tickets. The unavailability of the ITC (input tax credit) and ATF been kept out of the GST purview is creating hardships for the aviation industry. The removal of ATF from the GST should also be considered by the government to decrease the operational cost of already burdened sector with high taxation and royalty costs.

3.5.5 Government' Required action:

The Airports Authority of India (AAI) collects overflight charges from foreign airlines that do not land in India but use Indian airspace. These overflight charges are invoiced directly to the head office of airlines located outside India and GST is being levied. While the definition of 'India' at Section 2(56) of the CGST Act includes Indian airspace, the question is, what is the place of such 'deemed supply'. It seems that none of the specific provisions of Section 13 of the IGST Act cover this supply, which leads us to the default provision, stipulating place of supply to be the location of service recipient. As the service receiver is located outside India, this transaction seems to qualify as 'export'. Therefore, AAI, which is under government control, should re-examine the position of taxability of overflight charges.

From the above discussion, while the government has attempted to resolve some of the issues, the measures however, have fallen short of industry expectations. In the present scenario, tax reforms are not merely necessary but indispensable. Though the industry is eagerly awaiting significant measures such as financial package, tax relief etc., resolution of extant issues will certainly be a step in the right direction.

CHAPTER 4: FINDINGS & ANALYSIS

We have elaborately discussed the various aspects of the Indian Aviation which has been drastically affected by the new tax regime in our previous chapter. In this chapter, we are going to support our research with tabulated data and graphical representation. As the industrial subject matter expert's opinion back our hypothesis we are therefore going to validate the study with comparisons of the industry data for the years before and after implementation of GST. Finally, we are going to make analyze our findings from the industrial data and reach to conclusion of the research.

4.1 Descriptive analysis

The below tabular data represents the 4 main aspects of the aviation industry greatly affected by the GST regime, which we discussed in our previous chapter i.e. the market share or financial stability, the profit of the aviation carriers, the maintenance check of the aircrafts inside and outside of India and the total expenditure in logistics of the aviation industry. The shift in the figures and numbers can be seen easily seen. The share market, profit have gone down drastically, the Maintenance check are all outsource to companies outside of India and the total expenditure in logistics has increased drastically.

Year	Aviation Market Share	Total profit of aviation (per 100 Billion)	Difference of maintenance check (Inside-outside India)	Total expenditure in logistics ($ million)
2012	19.81	2.10	50	1.90
2013	16.10	3.20	53	2.20
2014	18.23	3.50	63	2.60
2015	15.77	4.60	87	3.20
2016	14.25	4.40	70	5.00
2017	13.30	5.10	24	9.60
2018	12.46	2.5	-35	14.00
2019	12.20	3.2	-24	20.00
2020	11.80	3.6	-8	13.00

Table 5: Analysis of different factors pre and post GST

4.1.1 The overall market share value of the industry

As we have discussed the impact of GST on the aviation industry share value and market or in other words the financial stability of the airlines, which has been graphically demonstrated below. The overall shares of the various aviation carriers have drastically decreased over the years after the GST regime expect for an exception or two.

The states the share value of the airlines has been greatly hampered and is reduced from 19.8% to 11.8% in the span of 3 years.

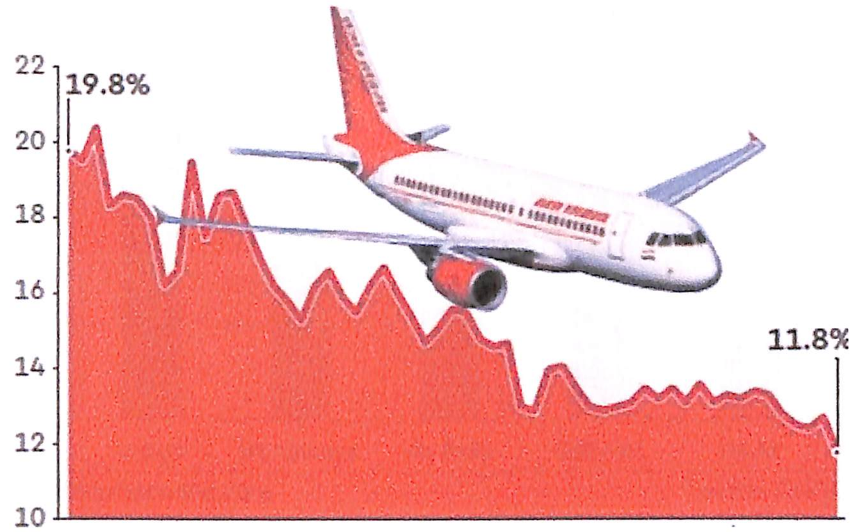

Figure 3: Decrease of Market share post GST of Indian aviation

4.1.2 The comparison between various aviation carriers

In this section we will be graphically comparing the market share value of various aviation carriers before and after GST. The graphs represent the market share value of various aviation competitors like: Indigo, Jet Airways, AirIndia, Spicejet & Goair before and after implementation of GST regime. As its evident form the graphs that the market share has gone down for all carriers after the implementation of GST , hence, highlighting financial instability.

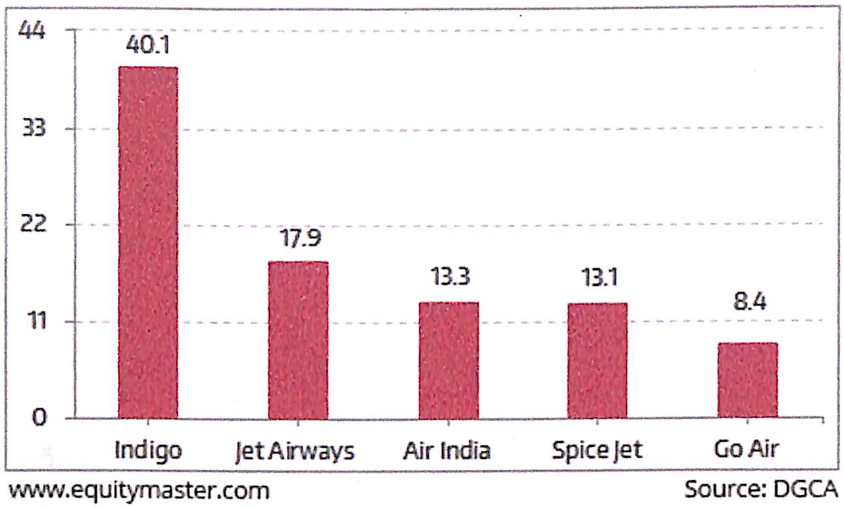

Figure 4: Market shares of Indian aviation before GST

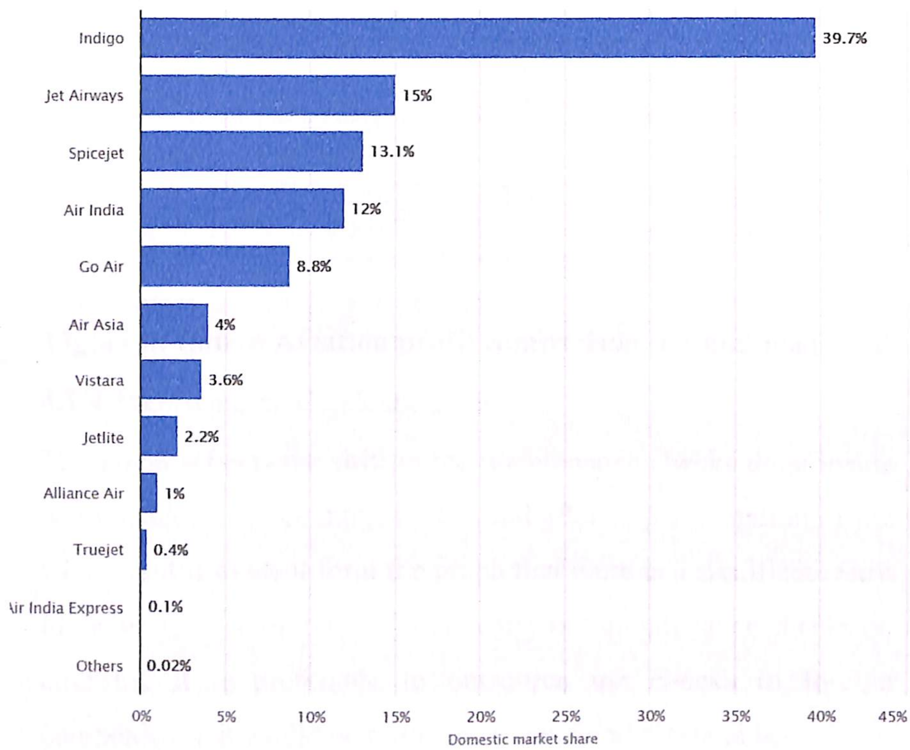

Figure 5: Market Share of Indian aviation after GST

4.1.3 Profit comparison of the carriers

The graphs represent the profit made by the Indian carriers before and after implementation of GST. As it is evident that the profit has drastically gone down from the graph, we could strongly say that GST was not a boon for aviation industry and instead created an ambiguous, difficult environment for the companies to even stay afloat in market, forget about thriving and conquering the competition.

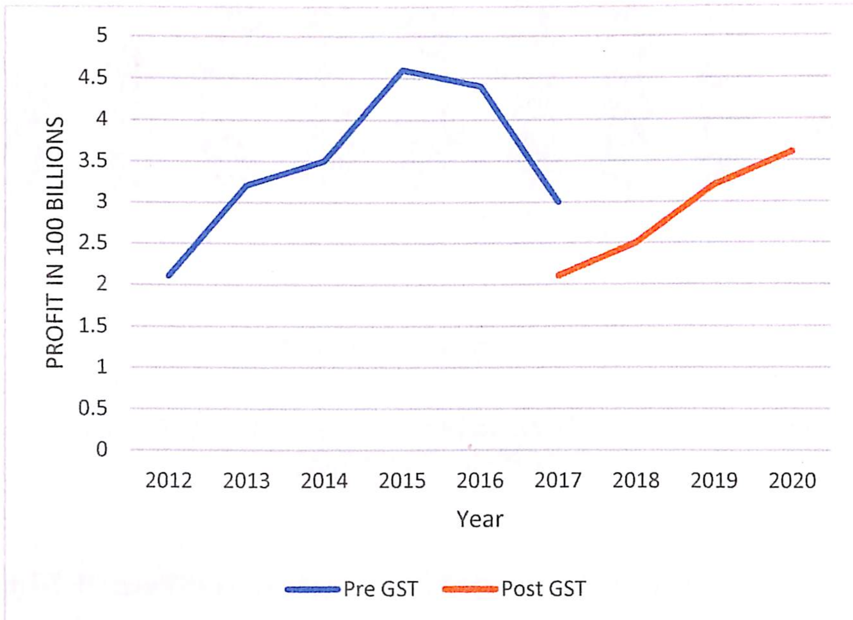

Figure 6: Indian Aviation profit comparison pre and post GST

4.1.4 Maintenance check statistics

The graph reflects the shift in the maintenance checks done inside and outside of the country, before and after implementation of the GST. As it is evident form the graph that there is a significant shift in the preference of the carriers to carry out maintenance checks on aircrafts. It is preferable to outsource the checks to foreign companies as it would be more convenient and reasonable.

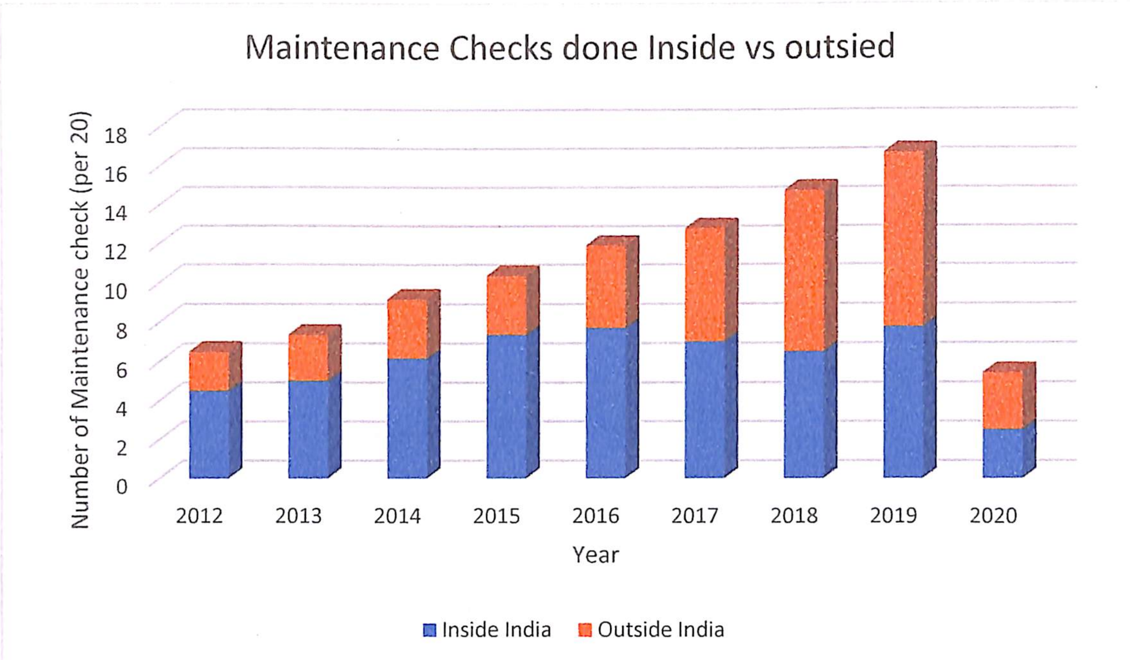

Figure 7: Comparison of Maintenance check done Pre-GST and Post GST (2017)

4.1.5 Expenditure in logistics and spares movement

A drastic increase in the cost of logistics and spares movement is reflected in the graph, indicating a very significant increase in the operational cost of the carriers. Also, the ambiguous policies and requirements around the intrastate, interstate, cross borders spare movement and heavy penalties, tax and paperwork at custom duties, greatly impact the overall logistics cost.

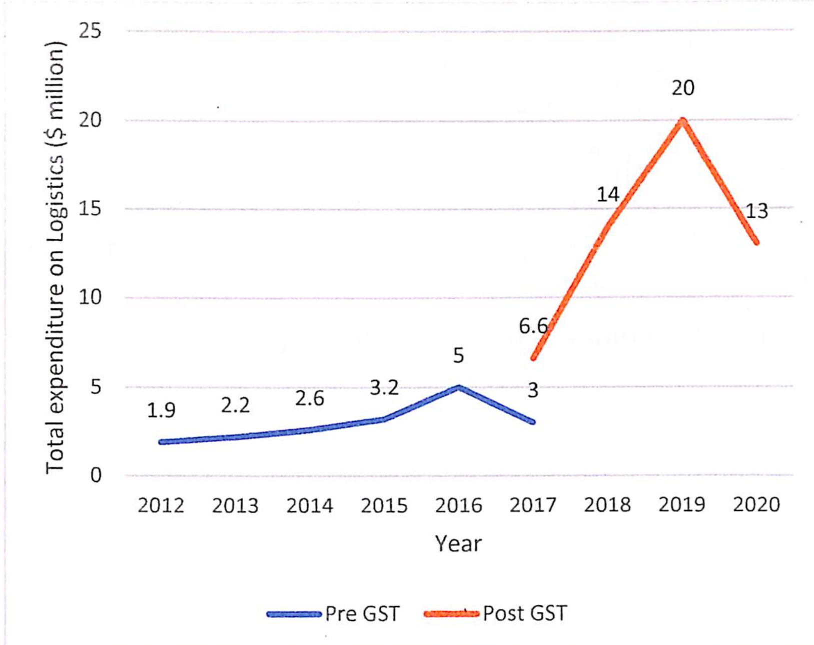

Figure 8: Comparison of total expense of Indian Aviation Industry in spares part purchase and logistics (Including GST).

4.1.6 Impact on Airfares and AFT cost

The 5% tax of economy class, 12% on business class and ambiguous 18% on cancellation and ancillary charge, is another very key aspect of the functioning of the aviation carriers which is very difficult to comprehend. Moreover, keeping the ATF cost out of the GST purview is another negative impact for the industry as demonstrated in the tables below.

Economic Class Fare under Service Tax		Economy class fare under GST regime	
Fare/charge	Amount	Fare/charge	Amount
Base Fare (Rs)	3000	Base Fare	3000
Airline Fuel Charge	700	Airline Fuel Charge	700
CUTE Charge	50	CUTE Charge	50
Tax and other charges		Tax and other charges	
Passenger Service Fee	239	Passenger Service Fee	239
User Development Fee	150	User Development Fee	150
Airline Service Tax @6%	180	Airline Service Tax @5%	150
Other Surcharge	12	Other Surcharge	12
Total	4331	Total	4301

Business class fare under Service Tax		Business class fare under GST regime	
Fare/charge	Amount	Fare/charge	Amount
Base Fare (Rs)	15000	Base Fare	15000
Airline Fuel Charge	2800	Airline Fuel Charge	2800
CUTE Charge	200	CUTE Charge	200
Tax and other charges		Tax and other charges	
Passenger Service Fee	700	Passenger Service Fee	700
User Development Fee	400	User Development Fee	400
Airline Service Tax @9%	1350	Airline Service Tax @12%	1800
Other Surcharge	100	Other Surcharge	100
Total	20550	Total	21000

Table 6: Comparison of amount pre and post GST

CHAPTER 5: INTERPRETATION OF THE RESULTS

The interpretation of the analysis represented by tabular data and graphs, is that it very accurately and precisely supports our research hypothesis on the impacts of GST on aviation industry and the key areas which have been evidently drastically impacted are also the major role players in maintaining the operations and functioning of an airline .The basic understanding of our analysis is that the financial stability of the aviation carriers is definitely shaken and they are struggling to stay afloat in the market. Aviation sector has always been very ruthless and demanding and require a lot of excellent managerial & business skill to even stay in market. All the challenges already faced by the industry to strive and thrive in this competitive market is coupled with the negative impacts GST had on the major operating areas of the airlines. As it is evident that the profits and market share are going down and the logistics and maintenance sector is tremendously affected and disrupted. The ambiguous requirements, policies and laws in some other operational areas double the challenges of the industry, which is already barely even capable of keeping its head above water in these changing environments. Not only these factors affect the industry internally, but business is impacted externally because of unhappy customers due to high airfares and ambiguous policies. The industry is even void of the input service credit on very expensive ATF, and in addition all the MRO services and compliance cost are a great example of double taxation and cascading effect of tax, which is negatively impacting the aviation sector.

CHAPTER 6: CONCLUSION

GST has many disadvantages on the aviation industry and has received a lukewarm reception from stakeholders in the aviation sector. The anticipated increase in cost of fuel has not been well received although GST is likely to give a boost to the MRO sector (as the incentive for carriers to undertake MRO services outside India is reduced). ATF may be excluded from the GST regime, as this sector is already plagued with high tax and royalty burden. The challenges of the operating costs and high tax of ATF is burdening the domestic aviation industry, although this sector has seen some steady growth in the last decade. The integrated tax on the parts which are reimported after repair is not available as a credit to airlines and the services offered by the domestic MRO sector is also taxed at 18%, which has recently been reduced to 5% by the government in March 2020. The COVID-19 pandemic which is engulfing almost all sectors across the globe is also looming hard on aviation sector. The severe impact on the business started way before the pandemic kicked in the country, in the form of cancellation of the flight bookings and vacation travels. As it is very uncertain as to when the things will return to normalcy, the adverse negative effect of the pandemic is likely to be continued for a much ling time frame. As it would be very difficult to influence the apprehension in the minds of flyers, it would be very daunting task for the stakeholders of the aviation industry to restore the growth of the sector to pre-pandemic position.

The already ailing industry has been plagued with 18% of the tax on the MRO services. In addition, the airlines have now been burdened with additional tax liability of 5% on receipt of services from foreign MROs. The additional liability has arisen on account of deeming the place of supply of these services performed outside India as the location of the recipient i.e. location of domestic airlines receiving the services. For the industry, a transition into any new tax regime is usually fraught with several challenges and issues. While some of these are one time-short term issues, some others are long term and recurring and could have a lasting impact on the business. With GST in the anvil, it would be prudent for the industry to identify and understand some of these potential issues. Such an understanding is imperative for timely implementation of measures to overcome these issues and avoid potential disruptions they could cause to the business.

Indian Government recently has recently come up with relaxation on MRO business i.e. decreased the GST cost from 18% to 5%, which will help to get more foreign customers in India and finally will boost our economy. But here the cost still is more than many of the foreign nations, so Government bring separate tax slabs for all the aircraft items including ATF to remain competitive with foreign market.

Lately, import of aircraft and its spare parts was exempted from customs duties. Under GST there is an exemption on aircraft import via leasing route. This move has bought big relief to civil aviation industry by resolving the issue of double taxation.

CHAPTER 7: BIBLIOGRAPHY

1. Kanade, A. (2017). Analysis of the Impact of GST in a Strategic Way. *SSRN Electronic Journal.* doi: 10.2139/ssrn.3006580
2. Bhasker, G. V. (2017). Research on an Impact of Goods and Service Tax GST on Indian Economy. *International Journal of Trend in Scientific Research and Development*, Volume-1(Issue-6), 1051–1054. doi: 10.31142/ijtsrd5788
3. Shree, E. T. (2019). A Study on GST and its Implementation in India. *International Journal for Research in Applied Science and Engineering Technology*, 7(9), 694–697. doi: 10.22214/ijraset.2019.9094
4. Swetha, V. S., & Kanade, S. (2019). GST And Its Impact on Various Sectors. *Paripex Indian Journal of Research*, 1–4. doi: 10.36106/paripex/8507215
5. Priya, D. C. J., & C, H. M. (2018). Impact of GST on the Indian Economy. *International Journal of Trend in Scientific Research and Development*, Volume-2(Issue-2), 60–63. doi: 10.31142/ijtsrd5898
6. Rastogi, S., & Agarwal, S. K. (2018). Zero Rated GST on Indian SEZs: An Analysis. *Journal of Advances and Scholarly Researches in Allied Education*, 15(9), 124–131. doi: 10.29070/15/57940
7. Lee, L.P. "A Study on the Effects of a Goods & Services Tax (GST) on Hong Kong", pp:1-25.
8. Arnold, J. B. Brys, C. Heady, A. Johansson, C. Schwellnus and L. Vartia, 2011. Tax policy for economic recovery and growth. The Economic Journal, 121: 59-80.
9. Emran, S.M. and J.E. Stiglitz, 2005. On selective indirect tax reform in developing countries. Journal of Public Economics, 89: 599–623.
10. Hakim, T. A., Karia A. A, and I. Bujang, 2016. Does goods and services tax stimulate economic growth International evidence. Journal of Business and Retail Management Research 10(3):137-146 ·

11. Nisa, Syeedun and Nisa, Zaibun, Economic Reforms and its Impact on Developing Countries - A Case of India (March 2008). Available at SSRN: https://ssrn.com/abstract=1112583 or http://dx.doi.org/10.2139/ssrn.1112583
12. McNabb, K. and P. LeMay-Boucher, 2014. Tax structures, economic growth and development. ICTD Working Paper, 22.
13. Piggott, J. and J. Whalley, 2001. VAT base broadening, self-supply, and the informal sector. American Economic Review, 91: 1084–1094.

APPENDIX A: HSN CODE and GST Rates

HSN code is 6- or 8-digits code for different products which are arranged in order to import in legal way. It can help to achieve uniform classification for defined Tax regime. It also helps to identify rate of tax applicable to individual products. This code is acceptable worldwide and approx. 98% of international trade stock is classified in terms of HSN.

India, member of WCO (World Customs Organization) also uses HSN codes to calculate GST amount, hence it is compulsory to include HSN number in Tax Invoices for GST. India uses 8 digits HSN code to make it systematic and globally accepted. Similarly, below are the HSN code and GST rates applicable for aircrafts, satellites and parachutes, which comes under Chapter 88.

Rates (%)	Products Description	HSN Codes	Export and Import HSN Codes
18%	Balloons and dirigibles, gliders and other non-powered aircraft	8801	88010010, 88010020, 88010090
5%	Other aircraft (for example, helicopters, aeroplanes), other than those for personal use.	8802	88021100, 88021200, 88022000, 88023000, 88024000
28%	Aircrafts for personal use	8802	88021100, 88021200, 88022000, 88023000, 88024000
5%	Parts of goods of heading 8802	8803	88031000, 88032000, 88033000, 88039000

18%	Parachutes (including dirigible parachutes and paragliders) and rotochutes; parts thereof and accessories thereto and parts thereof	8804	88040010, 88040020
18%	Aircraft launching gear, deck arrestor or similar gear; ground flying trainers and parts thereof	8805	88051010, 88051020, 88051030, 88052100, 88052900
NIL	Spacecraft (including satellites) and suborbital and spacecraft launch vehicles	88026000	-

Figure 9: Different GST rates on air-space

Appendix B: Claim - GST Return

All the manufacturers, suppliers, dealers and consumers, all the taxpayers can claim tax returns with the GST department every year online. It can be filed using different apps and software or online, and filing has become easy than before. Below steps can be taken for filing GST returns:

- Go to the GST portal (**www.gst.gov.in**).
- Based on PAN number and state code 15-digit GST identification number will be provided.
- Respective tax invoices need to be uploaded and unique reference code will be generated to each invoice.
- Post uploading all the required return (outward, monthly, inward etc.) need to be filed. In case of any errors, refiling and correcting options are available.
- Outward supply returns to be filed in GSTR-1 form at the GST Common Portal (GSTN) on or before 10th of the following month.
- Outward supplies furnished by the supplier's details are available in GSTR-2A.
- All the details (outward supplies, file details of credit and debit notes) must be verified and validate by recipient.
- Inward supplies details of taxable products can be furnished in GSTR-2 form.
- The inward supplies details which are made available by recipient in GSTR-1A can be accepted or rejected for modifications.

A late fee will be charged on taxpayer if he/she fails to file on time. As per the guidelines total fine amount will be Rs. 200 per day (including Rs. 100 each for SGST and CGST). However, the maximum fine amount of Rs.5,000 can be charged. Meanwhile, IGST doesn't attract any late fee for delayed. Not only late charges taxpayer but also required to pay interest rate of 18% p.a. in addition. Day count will be started from the deadline of filing till the actual payment is made.