Impact of GST on the Sales of BSE-Listed Hotel and **Tourism Companies**

Shivani Gupta¹ Divya Saini² Priti Sharma³ Karambir Gulia 4

Abstract

Purpose: The purpose of this study was to find out whether the Goods and Services Tax caused a considerable difference in the net sales of hotel and tourism companies listed on the Bombay Stock Exchange individually and of the industry as a whole.

Methodology: The independent variable used in this study is the Goods and Services Tax, and the dependent variable is the net sales of hotel and tourism companies. We selected the 34 hotels and tourism companies bearing the Bombay Stock Exchange scrip code, and data regarding the scrip code of companies and their net sales were collected from Prowess IQ. We used the technique of independent and dependent t-tests to complete this study.

Findings: The analysis of the study showed that the net sales of six companies among the selected 34 companies of the study and the net sales of the industry as a whole were significantly affected by the implementation of the Goods and Services Tax.

Practical Implications: This study will benefit businessmen, government policymakers, and stock market investors and guide them in the direction of their investment in this industry.

Originality: Unlike prior research, this research focused on how the net sales of hotel and tourism companies reacted to the enactment of the Goods and Services Tax in India.

Keywords: GST (Goods and Services Tax), hotel and tourism industry, VAT (Value Added Tax), cascading effect, indirect taxation

JEL Classification: H25, H71, K34, L83, L32

Paper Submission Date: February 10, 2023; Paper sent back for Revision: February 20, 2023; Paper Acceptance Date: February 25, 2023

he Central government of the nation imposes the following two types of taxes: direct tax and indirect tax (George & Reddy, 2015). Goods and Services Tax (GST) is an indirect taxation that was introduced in India to replace the existing indirect taxes and combine them into one tax. The efforts for the implementation of GST can be traced back to 2000 when prime minister Shri Atal Bihari Vajpayee introduced the

DOI: https://doi.org/10.17010/aijer/2023/v12i1/172843

¹ Research Scholar, Department of Commerce, Maharshi Dayanand University, Rohtak - 124 001, Haryana.

⁽Email: shivanigupta5714@gmail.com); ORCID iD: https://orcid.org/0000-0003-2996-7146

² Research Scholar, Department of Commerce, Maharshi Dayanand University, Rohtak - 124 001, Haryana. (Email: Divyasaini759@gmail.com); ORCID iD: https://orcid.org/0000-0002-9798-1436

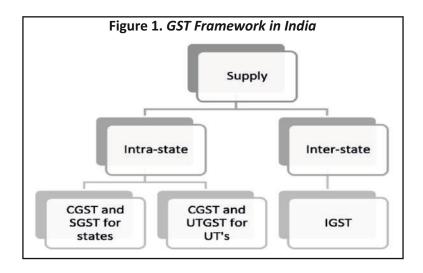
³ Assistant Professor, Department of Commerce, Maharshi Dayanand University, Rohtak - 124 001, Haryana. (Email: Pritisrm04@gmail.com); ORCID iD: https://orcid.org/0000-0002-0773-6673

⁴Assistant Professor; Government College Dubaldhan, Jhajjar - 124 156, Haryana. (Email: karambir.pol.sci.@gmail.com)

concept of GST. GST completed its journey of implementation in India in 17 years and finally came into existence as a law on July 1, 2017, by replacing the indirect taxes at the central and state level. Before GST indirect taxation system was operated by the Union and State governments. This involvement of both governments resulted in the cascading effect of taxes. This cascading effect is the result of the indirect taxation process in which taxes are charged on taxes.

The hotel and tourism industry is the most vital sector for the country because it attracts tourists not only from the domestic country but also from foreign nations as well, thus contributing to the generation of income in the economy and also a good source of bringing foreign exchange in India through foreign tourists. The contribution of this sector to the Indian Gross Domestic Product was 5.01% in 2018–2019 and 5.16% in 2019–2020, and its contribution to employment was 14.87% in 2018–2019 and 15.34% in 2019–2020. Before the introduction of GST, the hotel and tourism industry was loaded with service tax, luxury tax, and "value added tax" (VAT). VAT was applicable on the transaction of goods only, and services were out of its scope. VAT was applicable on food and beverages by the hotels in the form of breakfast, lunch, and dinner, and luxury tax and service tax were applicable on the room services by the hotels. The implementation of GST resulted in the reduction of the load of this industry. GST has vanished the existence of so many indirect taxes and created a single tax GST in replacement of these so many indirect taxes. Thus, GST simplified the Indian Indirect Taxation system. Compared to the current commodity sales tax system, GST mostly complies with Mclure's ideal sales tax system's tenets (Anushuya & Narwal, 2014). However, alcoholic beverages and tobacco are still out of the scope of GST; whereas, petroleum products are in its scope, but only if the GST council issues a notification in this regard.

GST framework is based upon inter-state and intra-state supply (refer to Figure 1). When the supply of goods and services takes place between the parties located in the same state, it is called intra-state supply; on the contrary, when parties are located in different states, it is called inter-state supply. The provisions of the GST are generally understood by the taxable persons (Mour & Paul, 2021).



This study has been conducted to measure the impact of GST on the sales of Bombay Stock Exchange (BSE)-listed hotels and tourism companies. The previous studies conducted on GST had taken into consideration how the GST has affected tobacco products, make in India, the consumer price index (CPI), and Indian tax revenue. Basumatary (2022) revealed that the Union Territory's economic growth was significantly influenced by both government capital spending and its tax revenue in addition to many other factors but did not take into

consideration how the GST had affected the sales of the hotel and tourism industry. This study will shed light on this unexplored area related to GST and provide information on the various practitioners and policymakers of this industry regarding the response of sales to GST implementation.

Literature Review

Kumar et al. (2019) attempted to investigate the barriers to GST implementation. This study identified 12 barriers to GST implementation. Among these 12 barriers, some major barriers identified were a shortage of skilled manpower for operating the GST process, ambiguous GST provisions, political opposition, and insufficiency of policy for the proper division of tax. Techniques used by the researcher are interpretive structural modeling (ISM) and MICMAC analysis. John et al. (2019) examined the impact of GST on tobacco products. They reported that a GST slab of 28% and the imposition of a compensation cess would result in increasing the prices of tobacco products, including cigarettes, bidis, and smokeless tobacco. This study also claimed that tax would reduce the consumption of GST products and increase the government's tax revenue. However, we also suggest that the tobacco tax revenue of the state will decrease, but this loss in revenue can be covered through a compensation cess. This study stated that GST would increase the complexities of the tobacco taxation system and also suggested that excise duty should be imposed on tobacco products along with GST.

Ojha and Vrat (2019) highlighted the effect of GST on making in India. They stated in their study that GST has reduced production costs, logistics costs, transportation costs, and the revenue of producing state, as well as increased compliance for MSME, ease of doing business, formality in operations, and investments (but it needs time for growth), exports and revenue of state consuming supplies. This study used a system dynamic approach and reported that GST would facilitate and support the Make in India initiative. Madathil and Ashitha (2019) conducted a study to measure the impact of GST on CPI in India. The period of CPI data used for the study was from July 2016 – July 2018. Data were divided into the following two parts: the pre-GST period and the post-GST period. Paired t-test was used, and the study concluded that GST had no significant impact on CPI India.

Paliwal et al. (2019) undertook a study to measure the Indian tax revenue response to GST. They used a semi-logarithmic analysis of covariance (ANCOVA) regression model to achieve the research objective. Using the dummy variables of VAT and GST, they asserted decreased responsiveness of Indian tax revenue to GDP, that is, the reduced tax liability of consumers and corporations. Garg and Anand (2019) attempted to analyze the impact of GST on exports of the carpets and flooring industry. Paired t-test was used by the researchers to achieve the objective. Data related to variables of carpet export were collected from 2017–2018 to 2018–2019. The data analysis concluded that India's carpet and flooring industry exports were not significantly affected by the GST decision taken in the country.

Goodchild et al. (2022) conducted a study to measure the impact of imposing duty and GST both on the bidis. In the earlier tax regime, small manufacturers of bidis were exempted by the Centre from duty, and big manufacturers were also charged with lower GST rates. All tobacco products are placed in the slab of 28% under the GST, but manufacturers of bidis are also subjected to a 40 lakh sales turnover cap, that is, tax exemption of GST is also available to the manufacturer of bidis. To achieve the study's objective, the researchers used gap analysis and elasticity of demand of bidis. This study found that the elimination of exemption available to small producers would reduce bidi consumption by 6% of smokers (2.2 million adults). They also concluded that this would bring down the bidi smoking rate from 7.7% to 7.5% and would generate tax revenue of 14.8 billion Indian

Mukherjee (2020) attempted to estimate the GST efficiency across Indian states. The researcher stated that understanding tax revenue depends on the estimation of tax potential. Tax capacity and efficiency determine the tax potential. This study reported that the level of economic activity and structural composition of the (state) economy were the important factors for determining the GST capacity of states. The scale of the economy of any state depends on the structural composition of GST. This study finally reported that states with higher agriculture had lower GST capacity. States with a huge availability of natural resources were expected to have lower GST capacity. The study concluded that GST had reduced the tax capacity of states.

Mishra et al. (2020) attempted to perform a comparative study to measure the impact of COVID-19, demonetization, and GST on the financial market of India. MS-VAR model was used to measure the impact and to achieve the objectives of the study. This study reported that stock prices and stock returns were positive during the GST period, and the volatility of this market was lower during the GST period compared to the COVID-19 period. They also reported that the flow of FII was more volatile during the GST phase.

Khoja and Khan (2020) undertook this study to measure the impact of GST on the cascading effect of Indian indirect taxation and revenue performance. The generalized method of moments (GMM) technique was used by the researchers to complete this study. Variables used by the researchers were customs duty, excise duty, service tax, wealth tax, national output, other taxes, an index for industrial production, gross capital formation, and total imports. Gross tax revenue was the combination of all indirect taxes used as variables. Data related to 1990–1991 to 2016–2017 were used by the researchers for the study. This study reported that GST has resulted in decreased cascading effects and increased revenue of tax. Tax revenue of most of the Indian states has increased significantly even after the technical complexities.

Maheshwari and Mani (2022) attempted to analyze the benefits of GST implementation using the analytical hierarchy process (AHP). From the literature review, 13 benefits were identified, and these were analyzed using AHP. Data were collected from 30 respondents. This study divided these 13 benefits into the following three categories: major benefits, intermediate benefits, and minor benefits. Major benefits of GST reported were the disappearance of cascading effect, increased threshold for registration, availability of ITC, and defined treatment of e-commerce.

John and Dauchy (2021) undertook the study to estimate the trends in the affordability of tobacco products in India's pre-GST and post-GST periods. This study reported that bidis, cigarette, and smokeless tobacco have become more affordable in the past 10 years, and the implementation of GST has emphasized the increased accessibility of cigarette and tobacco products but did not cause any change in the affordability of bidis. This study concluded that states with higher VAT in the period before GST experienced increased affordability of tobacco products and vice-versa. This study suggested that to increase the prices of tobacco products, increased excise duty and charge of compensation cess on tobacco products are required.

Mallick (2021) conducted a study to measure the influence of governance quality and ICT infrastructure on indirect tax revenue mobilization. The study stated that GST is nothing but an extended form of VAT. This study reported that the abovementioned two factors do not significantly positively affect tax revenue mobilization. The reason for this shocking result provided by the researcher is the opportunity for taxpayers to avoid tax liability by performing transactions beyond the system of ICT and leaving no trace behind.

Dhar and Khandelwal (2022) performed a research study to measure how supply chain management was affected by the GST. This study was based on primary data, and the researcher used the Partial least square structural equation modeling technique to analyze the data collected through the questionnaire. This study reported a significant and positive relationship between inbound logistics, supply chain operations, and outbound logistics with productivity in the GST scenario. This study also reported that GST has played a moderating role in all these abovementioned direct relationships.

Sahoo and Nayak (2021) made efforts to analyze the impact of GST on the hotel industry. Data for this study were collected from a sample of 15 hotels in Bhubaneshwar city in Odisha. Collected data were analyzed by the chi-square test. This study reported a significant relationship between customer satisfaction and their buying behavior, customer clarity about the hotel industry, GST rates, and problems faced by hoteliers in handling their customers.

Solanki (2021) attempted to measure the impact of GST on the automobile sector's financial statement. The *t*-test was used to achieve this objective. Data related to the company's profitability and liquidity ratio were collected. The analysis of data provided the results that GST has not caused any significant difference in the pre-GST and post-GST profitability and liquidity ratio of the automobile sector.

Bhalla et al. (2022) examined the impact of tax reforms, demographic factors, and firms' characteristics on small and microenterprises' financial performances. This study reported that the tax reform of India, which resulted in the implementation of GST, has augmented the financial performance, that is, return on equity and investment of micro and small enterprises.

Singhal et al. (2022) attempted to assess the reaction of India's foreign trade to GST implementation. Imports and exports from India were used as a measure of India's foreign trade. This study used the technique of vector error correction model (VECM) to measure the short-term and long-term impact of GST. This study finally reported that GST implication had increased the exports in the short as well as long run; whereas, the import of GST has increased after the implementation of GST. The reason for the increase in imports was the ease of Indian commercial operation after the implementation of GST.

John et al. (2022) attempted to measure the price elasticities and implications of GST on the affordability of aerated or sugar-sweetened beverages and tax revenue. This study reported the price elasticities of aerated or sugar-sweetened beverages between -1.04 to -0.83 from low- to high-income households and mentioned that their affordability has increased in the past 13 years. This study concluded that government should impose 29% GST on these products to decrease their consumption and increase the tax revenue by about 10% and 27%.

Sharma et al. (2022) investigated the effect of GST on the food sector in Hyderabad. The t-test was used to achieve the objective, and the results revealed that GST positively impacted the sales and profits of the food industry. This study also analyzed the purchase invoices and reported that restaurant owners will now spend less on purchasing their raw materials.

Research Gap

From the above literature, it is clear that studies on the impact of GST are very diversified. The impact of GST on the CPI, Indian tax revenue, exports of carpets, hotel industry, automobile sector, tobacco products, and bidis has already been considered. However, we did not find any study measuring the effect of GST on the net sales of BSE-listed hotel and tourism companies. The hotel and tourism sector selected for this study is the most attractive and revenue-generating sector for any economy. It attracts tourists not only from the domestic region but also from international countries. These international tourists bring foreign exchange with them and provide support to that nation's foreign exchange reserve. Hence, we undertook the abovementioned study.

Objective

The objective of this study is to investigate the impact of GST on the sales of BSE-listed hotel and tourism companies individually and the industry as a whole.

Research Methodology

This is a secondary data-based study in which a descriptive cum analytical research design has been used to achieve the study objective. The data related to this study were collected from the prowess IQ database. The sampling frame of this study consists of 105 companies available in the prowess database with BSE scrip code, and each company is the sampling unit for the research. Among this sample frame, only 51 companies showed the result of market capitalization on September 2021. Among these 51 companies, data for net sales were available only for 34 companies; therefore, these 34 companies constituted the sample of this study. The data collected were analyzed using the techniques of paired *t*-test and independent sample *t*-test, and the software of SPSS was used for performing this study. The quarterly net sales data of selected companies was obtained for the period ranging from July–September 2013 to April–June 2021, that is, 8 years.

Hypotheses

The following hypotheses were proposed for individual net sales data of companies:

\$\top\$ **H01:** GST did not cause any significant dissimilarity in the net sales of hotel and tourism companies selected for this study (individually).

\$\top\$ Ha1: GST caused a significant dissimilarity in the net sales of hotel and tourism companies selected for this study (individually).

The following hypotheses were proposed for the net sales data of the industry as a whole:

HO2: Net sales of the hotel and tourism industry in the prior-GST and post-GST periods have no considerable difference.

\$\top \textbf{Ha2:} \text{ Net sales of the hotel and tourism industry in the prior-GST and post-GST periods have a considerable difference.

Data Analysis and Results

We used quarterly net sales data to measure whether GST has caused a significant difference in the net sales of hotel and tourism companies. The impact of GST on the net sales of companies has been analyzed using an independent sample *t*-test, and the industry has been analyzed using paired *t*-test. SPSS software has been used to apply *t*-tests to our data. The results of the *t*-test have been presented in Table 1.

Table 1. t-test on Net Sales Data of Hotel and Tourism Companies

| Companies | Market | Levene's Test | <i>p</i> -value | <i>t</i> -test | <i>p</i> -value | Null Hypothesis |
|--|----------------|---------------|-----------------|----------------|-----------------|-------------------|
| | Capitalization | F- value | • | | | Rejected/ |
| | (₹ Crore) | | | | | Not Rejected |
| Indian Hotels Co. Ltd. | 21561.26 | 6.06 | 0.02 | -0.159 | 0.875 | H01: not rejected |
| E I H Ltd. | 8060.94 | 10.44 | 0.003 | 1.426 | 0.170 | H01: not rejected |
| Mahindra Holidays & Resorts India Ltd. | 4927.08 | 1.171 | 0.288 | -0.104 | 0.918 | H01: not rejected |
| India Tourism Development Corporation Ltd. | 3615.18 | 1.32 | 0.25 | 4.22 | 0.00 | H01: rejected |
| E I H Associated Hotels Ltd. | 1222.69 | 2.24 | 0.140 | 0.99 | 0.32 | H01: not rejected |
| Taj G V K Hotels & Resorts Ltd. | 910.74 | 21.63 | 0.00 | 0.49 | 0.62 | H01: not rejected |
| Oriental Hotels Ltd. | 688.5 | 14.4 | 0.001 | 1.65 | 0.10 | H01: not rejected |
| Sayaji Hotels Ltd. | 444.96 | 10.04 | 0.003 | -0.844 | 0.409 | H01: not rejected |
| Speciality Restaurants Ltd. | 347.72 | 12.81 | 0.001 | 0.88 | 0.391 | H01: not rejected |
| Royal Orchid Hotels Ltd. | 266.85 | 18.70 | 0.00 | -0.452 | 0.657 | H01: not rejected |
| Asian Hotels (East) Ltd. | 217.59 | 19.39 | 0.000 | 2.19 | 0.042 | H01: rejected |
| Sinclairs Hotels Ltd. | 215.28 | 1.071 | 0.309 | 0.300 | 0.766 | H01: not rejected |
| Benares Hotels Ltd. | 211.28 | 2.95 | 0.096 | -0.030 | 0.976 | H01: not rejected |

| Asian Hotels (North) Ltd. | 177.61 | 20.77 | 0.000 | 1.21 | 0.239 | H01: not rejected |
|---------------------------------------|--------|-------|-------|--------|-------|-------------------|
| Prajay Engineers Syndicate Ltd. | 141.62 | 3.23 | 0.08 | 2.30 | 0.028 | H01: rejected |
| Byke Hospitality Ltd. | 128.91 | 0.012 | 0.914 | 4.097 | 0.00 | H01: rejected |
| Kamat Hotels (India) Ltd. | 124.64 | 25.78 | 0.000 | 0.153 | 0.88 | H01: not rejected |
| Graviss Hospitality Ltd. | 107.12 | 9.45 | 0.004 | 2.190 | 0.040 | H01: rejected |
| International Travel House Ltd. | 74.27 | 46.99 | 0.000 | 1.563 | 0.138 | H01: not rejected |
| C H L Ltd. | 67.59 | 13.10 | 0.001 | 2.039 | 0.056 | H01: not rejected |
| Gujarat Hotels Ltd. | 60.13 | 27.53 | 0.000 | 1.264 | 0.223 | H01: not rejected |
| Savera Industries Ltd. | 56.42 | 36.95 | 0.000 | 1.615 | 0.125 | H01: not rejected |
| Royale Manor Hotels & Industries Ltd. | 51.9 | 2.89 | 0.09 | 1.313 | 0.199 | H01: not rejected |
| T G B Banquets & Hotels Ltd. | 26.59 | 2.417 | 0.131 | 6.208 | 0.000 | H01: rejected |
| H B Estate Developers Ltd. | 23.45 | 11.39 | 0.002 | -0.065 | 0.925 | H01: not rejected |
| Jindal Hotels Ltd. | 22.91 | 4.76 | 0.037 | 0.937 | 0.359 | H01: not rejected |
| Phoenix Township Ltd. | 19.72 | 8.396 | 0.007 | -1.495 | 0.150 | H01: not rejected |
| Reliable Ventures India Ltd. | 15.07 | 8.573 | 0.006 | -0.427 | 0.67 | H01: not rejected |
| Viceroy Hotels Ltd. | 14.29 | 32.67 | 0.000 | 1.716 | 0.105 | H01: not rejected |
| Ras Resorts & Apart Hotels Ltd. | 11.12 | 7.55 | 0.010 | 0.908 | 0.374 | H01: not rejected |
| H S India Ltd. | 10.17 | 28.70 | 0.000 | -0.075 | 0.941 | H01: not rejected |
| Cindrella Hotels Ltd. | 7.78 | 0.001 | 0.982 | 0.765 | 0.450 | H01: not rejected |
| Howard Hotels Ltd. | 6.48 | 2.31 | 0.138 | 1.024 | 0.315 | H01: not rejected |
| Lords Ishwar Hotels Ltd. | 4.26 | 6.465 | 0.016 | -1.666 | 0.110 | H01: not rejected |

Table 1 depicts the results of the independent *t*-test on the net sales data of hotel and tourism companies. With the *t*-test, results of Levene's test have also been presented in Table 1. Levene's test is applied to check the equality of variance between the two-sample series. Table 1 shows that the *p*-value of Levene's test of 11 companies is greater than 0.05, which results in the non-rejection of the null hypothesis of Levene's test, that is, 11 companies among the 34 companies fulfill the assumption of the equality of variance between the samples and rest of companies do not fulfill that assumption. Therefore for 11 companies, the *t*-test results following the assumption of the equality of variance have been given, and for the rest of the 23 companies, *t*-test results are taken in which equality of variance has not been assumed. Now coming to the *t*-test, six companies among 34 companies have a *p*-value less than 0.05, and the rest of the 28 companies have a *p*-value greater than 0.05. A *p*-value of lower than 0.05 causes the null hypothesis rejection. The null hypothesis for each company is GST did not cause a considerable disparity in the sales of hotel and tourism companies, whereas the alternate hypothesis is GST caused a considerable disparity in the sales of hotel and tourism companies. Out of 34 hotel and tourism companies, *t*-tests for six companies support the alternate hypothesis of the significant impact of GST on the hotel and tourism companies, and the rest of the 28 companies support the null hypothesis that GST has no significant impact on the sales of hotel and tourism companies.

Table 2 exhibits the results of the dependent *t*-test on the net sales data of the hotel and tourism industry. To check the impact of GST on this industry, pre-GST and post-GST average sales of hotel and tourism companies have been calculated, and on these average sales, paired *t*-test has been applied to see whether GST has caused a significant difference in the net sales of this industry or not. Table 2 shows that the *t*-value for this data is 2.692, and its *p*-value is 0.011, which is less than the significance level of 5%, that is, the null hypothesis is rejected. This rejection leads to the conclusion that GST caused a considerable change in the net sales of the hotel and tourism industry.

Table 2. t-test on Net Sales Data of the Hotel and Tourism Industry

| Name of the Companies | Pre-GST Average Net Sales (₹ Crore) | Post-GST Average Net Sales (₹ Crore) |
|--|-------------------------------------|--------------------------------------|
| Indian Hotels Co. Ltd. | 546.983125 | 557.51375 |
| E I H Ltd. | 332.201875 | 279.459375 |
| Mahindra Holidays & Resorts India Ltd. | 230.788125 | 231.960625 |
| India Tourism Development Corporation Lt | d. 105.994375 | 72.658125 |
| E I H Associated Hotels Ltd. | 60.50375 | 52.430625 |
| Taj G V K Hotels & Resorts Ltd. | 64.6775 | 61.08125 |
| Oriental Hotels Ltd. | 78.595 | 65.846875 |
| Sayaji Hotels Ltd. | 36.8775 | 41.47625 |
| Speciality Restaurants Ltd. | 75.563125 | 69.33125 |
| Royal Orchid Hotels Ltd. | 21.725625 | 22.748125 |
| Asian Hotels (East) Ltd. | 24.545 | 19.258125 |
| Sinclairs Hotels Ltd. | 9.22125 | 8.78875 |
| Benares Hotels Ltd. | 11.90375 | 11.960625 |
| Asian Hotels (North) Ltd. | 60.011875 | 51.8225 |
| Prajay Engineers Syndicate Ltd. | 15.6175 | 10.598125 |
| Byke Hospitality Ltd. | 52.906875 | 31.25375 |
| Kamat Hotels (India) Ltd. | 36.0825 | 35.414375 |
| Graviss Hospitality Ltd. | 11.461875 | 8.4775 |
| International Travel House Ltd. | 47.344375 | 40.025625 |
| C H L Ltd. | 14.529375 | 11.106875 |
| Gujarat Hotels Ltd. | 0.810625 | 0.69875 |
| Savera Industries Ltd. | 16.175 | 13.576875 |
| Royale Manor Hotels & Industries Ltd. | 5.2675 | 4.4675 |
| T G B Banquets & Hotels Ltd. | 35.30625 | 14.019375 |
| H B Estate Developers Ltd. | 16.349375 | 16.5575 |
| Jindal Hotels Ltd. | 8.405 | 7.590625 |
| Phoenix Township Ltd. | 3.32125 | 4.15125 |
| Reliable Ventures India Ltd. | 3.628125 | 3.80625 |
| Viceroy Hotels Ltd. | 19.8275 | 16.27 |
| Ras Resorts & Apart Hotels Ltd. | 2.034375 | 1.87125 |
| H S India Ltd. | 5.449375 | 5.491875 |
| Cindrella Hotels Ltd. | 1.130625 | 1.008125 |
| Howard Hotels Ltd. | 2.23625 | 1.87375 |
| Lords Ishwar Hotels Ltd. | 1.285625 | 1.585625 |
| t-test | <i>t</i> -value | Sig. |
| | 2.692 | 0.011 |

Managerial and Theoretical Implications

This study has shown how the sales of hotel and tourism companies have reacted to the GST implementation. This study can be used by the business person belonging to this industry to better understand how the GST has reduced the complexities of taxation of their industry and affected their sales and what measures they can take to improve their sales in the coming years, that is, how they can frame their business policy, which will be suitable to the current taxation regime. Apart from that, the Central government and GST framing authority can also take a dig to identify the weaknesses and adverse or unfavorable policies of GST that can be improved to help the hotel and tourism industry to grow and improve their sales, for example, the further cuts in GST rate applicable to hotels can be performed. The limit of tax exempted hotel rent can be improved from 1,000–2,000. This will attract more customers toward this industry, and the loss of government revenue can be recovered from the increased rush of customers toward this industry in the form of increasing foreign exchange of government due to international tourists and increased direct tax from the hotel owners and companies. This study can also be helpful for stock market investors because, based on the performance of this industry after GST implementation, they can make their decision regarding the investment or withdrawal of their investment in this sector of the economy.

Conclusion

GST is an indirect tax in India that is a replacement for a large number of Indian indirect taxes. GST has curbed the problem of cascading effect of taxes. GST implementation was the major tax reform, and we attempted to measure the impact of this reform on the sales of BSE-listed hotel and tourism companies individually and the industry as a whole. In this study, we collected a sample of 34 BSE-listed companies. Net sales quarterly data of these 34 companies were collected from the Prowess IQ database for the period from July–September 2013 to April–June 2021. We used the independent *t*-test and paired *t*-test techniques to analyze companies' data individually and the industry as a whole. From this study, it is clear that GST caused a significant difference in the net sales of six hotel and tourism companies, and the rest of the 28 companies' net sales data did not show any significant difference in the prior GST and post-GST period. When aggregate data of these companies were taken to identify the impact of GST on sales of the hotel and tourism industry, the results of paired *t*-test showed that GST caused a considerable dissimilarity in the net sales of the hotel and tourism industry.

Limitations of the Study and Suggestions for Future Research

This study has only been performed on the hotel and tourism sector of the Indian economy, while the scope of GST is large and its impact on other industries should also be studied. The limitation of this study is that the sample size is limited to 34 companies listed on the BSE, which is less than 50% of 105 companies; the period of study is 8 years only, divided into two parts: before GST and after GST. The focus of this study is on one sector only. Apart from this, we have only studied the net sales aspect of these hotels. In the future, further studies can be performed related to the impact of GST on manufacturing sector performance, such as the fast-moving consumer goods sector, electronic items sector, and particularly those goods that lie in the 28% tax bracket of the company. Primary data-based studies can also be performed to identify the perception of customers toward GST and the prices of goods and services after GST.

Authors' Contribution

Dr. Priti Sharma developed the idea for the study and prepared the quantitative and qualitative designs. Divya Saini undertook the task of gathering good-quality papers from reputed journals for the study and filtered the

important research papers based on keywords. Dr. Karambir Gulia undertook the task of performing the literature review and developing the practical implications of this study. Shivani Gupta performed the analytical methods and structured this study in the form of a paper.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

Funding Acknowledgement

The authors received no financial support for the research, authorship, and publication of this article.

References

- Anushuya, & Narwal, K. P. (2014). The existing commodity sales tax system and the proposed Indian GST: An analysis using Mclure's Mclure's ideal sales tax system. *Arthshastra Indian Journal of Economics & Research*, 3(2), 12–19. https://doi.org/10.17010/aijer/2014/v3i2/55970
- Basumatary, J. (2022). Effects of tax revenue and capital expenditure on economic growth: A case study of the Union Territory of Puducherry, India. *Arthshastra Indian Journal of Economics & Research*, 11(2), 8–21. https://doi.org/10.17010/aijer/2022/v11i2/172209
- Bhalla, N., Kaur, I., & Sharma, R. K. (2022). Examining the effect of tax reform determinants, firms' characteristics and demographic factors on the financial performance of small and micro enterprises. *Sustainability*, 14(14), 8270. https://doi.org/10.3390/su14148270
- Dhar, K., & Khandelwal, U. (2022). Impact of Goods and Services Tax on supply chain management. *Business Perspectives and Research*, 10(3), 379–395. https://doi.org/10.1177/22785337211015403
- Garg, Y., & Anand, N. (2019). Impact of GST on the exports of carpets & floorings industry in India. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(2), 1990–1994. https://doi.org/10.35940/ijrte.B2038.078219
- George, R., & Reddy, Y. V. (2015). Corporate taxes in Goa: An analysis. *Arthshastra Indian Journal of Economics & Research*, 4(2), 47–55. https://doi.org/10.17010/aijer/2015/v4i2/65547
- Goodchild, M., Munish, V. G., Sinha, P., Tullu, F. T., & Paul, J. (2022). Revisiting the tax treatment of bidis in India. *Tobacco Control*, *31*(3), 432–437. https://doi.org/10.1136/tobaccocontrol-2020-056056
- John, R. M., & Dauchy, E. (2021). Trends in affordability of tobacco products before and after the transition to GST in India. *Tobacco Control*, 30(2), 155–159. https://doi.org/10.1136/tobaccocontrol-2019-055525
- John, R. M., Dauchy, E., & Goodchild, M. (2019). Estimated impact of the GST on tobacco products in India. *Tobacco Control*, 28(5), 506–512. https://doi.org/10.1136/tobaccocontrol-2018-054479
- John, R. M., Tullu, F. T., & Gupta, R. (2022). Price elasticity and affordability of aerated or sugar-sweetened beverages in India: Implications for taxation. *BMC Public Health*, 22(1), 1372. https://doi.org/10.1186/s12889-022-13736-2
- 62 Arthshastra Indian Journal of Economics & Research January March 2023

- Khoja, I. A., & Khan, N. A. (2020). Goods and services tax, cascading, and revenue performance: Analyzing Indian commodity taxation market. Journal of Public Affairs, 20(3), e2109. https://doi.org/10.1002/pa.2109
- Kumar, M., Barve, A., & Yadav, D. K. (2019). Analysis of barriers in implementation of Goods and Service Tax (GST) in India using interpretive structural modelling (ISM) approach. Journal of Revenue and Pricing Management, 18, 355–366. https://doi.org/10.1057/s41272-019-00202-9
- Madathil, J. C., & Ashitha, T. (2019). Before and after GST: Impact in CPI (Consumer Price Index) of India. *International Journal of Research and Analytical Reviews*, 6(2), 167–186.
- Maheshwari, T., & Mani, M. (2022). Benefits of Goods and Services Tax implementation in India: An analytical hierarchy process approach. Journal of Public Affairs, 22(3), e2578. https://doi.org/10.1002/pa.2578
- Mallick, H. (2021). Do governance quality and ICT infrastructure influence the tax revenue mobilisation? An empirical analysis for India. Economic Change and Restructuring, 54, 371-415. https://doi.org/10.1007/s10644-020-09282-9
- Mishra, A. K., Rath, B. N., & Dash, A. K. (2020). Does the Indian financial market nosedive because of the COVID-19 outbreak, in comparison to after demonetisation and the GST? Emerging Markets Finance and Trade, 56(10), 2162–2180. https://doi.org/10.1080/1540496X.2020.1785425
- Mour, D. K., & Paul, T. (2021). A perception study of taxable persons on Goods and Services Tax in the Guwahati City of Assam. Arthshastra Indian Journal of Economics & Research, 10(1), 27-40. https://doi.org/10.17010/aijer/2021/v10i1/159884
- Mukherjee, S. (2020). Goods and Services Tax efficiency across Indian states: Panel stochastic frontier analysis. *Indian Economic Review, 55*, 225–251. https://doi.org/10.1007/s41775-020-00097-z
- Ojha, R., & Vrat, P. (2019). Implications of Goods and Services Tax reform on the Make in India initiative: A system dynamics perspective. Systems Research and Behavioral Science, 36(4), 551-563. https://doi.org/10.1002/sres.2570
- Paliwal, U. L., Saxena, N. K., & Pandey, A. (2019). Analyzing the impact of GST on tax revenue in India: The tax buoyancy approach. International Journal of Economics and Business Administration, 7(4), 514–523. https://doi.org/10.35808/ijeba/364
- Sahoo, A. P., & Nayak, Y. D. (2021). Impact of GST on hotel industry A study in Bhubaneswar City in Odisha. International Journal of Innovative Research in Engineering & Management (IJIREM), 8(3), 8–11. https://doi.org/10.21276/ijirem.2021.8.3.1
- Sharma, B., Arora, R., & Sharma, G. (2022). Food Industry: Experiencing positive impact after goods and service tax implementation. Materials Today: Proceedings, 52(Part 3), 1726-1732. https://doi.org/10.1016/j.matpr.2021.11.341
- Singhal, N., Goyal, S., Kumari, S., Nagar, S., & Tyagi, A. (2022). Implication of Goods and Services Tax (GST) implementation in India on foreign trade. Finance: Theory and Practice, 26(3), 241-251. https://doi.org/10.26794/2587-5671-2022-26-3-241-251
- Solanki, K. R. (2021). A study of financial statement analysis of selected automobile companies in India with special reference to Goods and Services Tax. Vidhyayana - An International Multidisciplinary Peer-Reviewed E-Journal, 7(2), 2454–8596. https://j.vidhyayanaejournal.org/index.php/journal/article/view/99

About the Authors

Shivani Gupta is an M.Phil. Scholar at Maharshi Dayanand University. She is currently enrolled in the Ph.D. program at Maharshi Dayanand University. Her area of study is finance.

Divya Saini is a Doctoral Scholar at Maharshi Dayanand University, Rohtak. Her area of study is finance.

Dr. Priti Sharma is an Assistant Professor at Maharshi Dayanand University. Her area of study is finance. She has great experience and a huge number of publications in research journals.

Dr. Karambir Gulia is an Assistant Professor at Government College Dubaldhan, Jhajjar, Haryana. His area of study is political science. He has great experience and a huge number of publications in research journals.