

Benefits of Goods & Services Tax and Its Impact on Taxpayers' Satisfaction

*Yashwant Kumar Vaid*¹

*Vikram Singh*²

*Monika Sethi*³

Abstract

Indirect tax is imposed by the government on supply of goods and services. In India, the indirect tax regime has been through major modifications and every taxation system implemented had its benefits over its predecessors. The recent indirect tax regime, that is, Goods and Services Tax (GST) is considered as a major reform in indirect taxation. Implementation of GST considerably improved the taxation system in many regards compared to its predecessors. Taking a note of this, the current study was conducted with an aim to empirically identify the benefits of GST, as perceived by taxpayers, not only in theory, but practically as well, and recognize the impact of these benefits on taxpayers' satisfaction. Data were collected from respondents of Raipur city with the help of a questionnaire. Factor analysis and path analysis were employed for the purpose of the study. The major benefits identified were Elimination of Multiple Taxes, Lesser Tax Evasion, and Satisfaction & Convenience. Path analysis was used to identify the impact of these benefits, where Satisfaction & Convenience was treated as a dependent variable and Elimination of Multiple Taxes and Lesser Tax Evasion were considered as independent variables. Based on the results and findings, it was concluded that Elimination of Multiple Taxes and Lesser Tax Evasion had a significant impact on satisfaction. This paper helped identify the areas where the taxpayers were satisfied with the implementation of GST and felt benefited because of it.

Keywords : taxation, goods and services tax (GST), factor analysis, path analysis, benefits, satisfaction

JEL Classification : C380, H200, H250

Paper Submission Date : September 20, 2019 ; **Paper sent back for Revision :** April 20, 2020 ; **Paper Acceptance Date :** April 26, 2020

In layman's terms, tax can be defined as an amount collected by the government from the public in one form or other to generate revenue and funds for its operations. This collected amount is spent for government operations like public transportation, military, infrastructure development, health care, etc. Any entity that pays tax is referred to as a taxpayer. Tax may be a direct tax or an indirect tax based on the nature of tax collection. A tax system must be competitive, effective, and efficient to raise high revenues (Nayyar & Singh, 2018).

A direct tax is defined as a charge imposed on a person or a property based on their income or wealth, etc. Direct tax includes income tax, wealth tax, corporate tax, capital gains tax, etc. An indirect tax is defined as a tax imposed

¹ *MBA Student*, School of Commerce, Management & Research, ITM University, Uparwara, Naya Raipur - 493 661, Chhattisgarh. (E-mail : yashwant.250893@gmail.com) ; ORCID iD : <https://orcid.org/0000-0002-0664-3336>

² *Assistant Professor*, School of Commerce, Management & Research, ITM University, Uparwara, Naya Raipur - 493 661, Chhattisgarh. (E-mail : vikrams@itm university.org) ; ORCID iD : <https://orcid.org/0000-0002-0770-1518>

³ *Head of Department*, School of Commerce, Management & Research, ITM University, Uparwara, Naya Raipur - 493 661. (E-mail : monikas@itm university.org) ; ORCID iD : <https://orcid.org/0000-0002-0157-2292>

DOI : 10.17010/ijf/2020/v14i5-7/153325

on transaction of goods or services between two parties rather than the profit or income from that transaction. In India, indirect tax has gone through major reforms since its establishment. Modified Value Added Tax (MODVAT), Central Value Added Tax (CENVAT), Service tax, State VAT, and Goods and Services Tax (GST) are some of the taxation regimes introduced during the evolution of the indirect tax system in India. The current indirect tax regime implemented across India is Goods and Services Tax (GST), which is considered as a significant upgrade in the taxation system compared to its predecessors (Garg, 2014).

GST was implemented in India on July 1, 2017. The main motto of GST is “One Nation, One Tax,” that is, bringing the whole country under a single umbrella for easier and more convenient tax governance. After being passed through various rounds of changes and modification from its inception in 1999 till its implementation in 2017, GST came into effect from the midnight of July 1, 2017 by implementation of Amendment of the Constitution of India by the Government of India.

Benefits of GST Over its Predecessors

GST has been considered as a major reform in the Indian indirect taxation system. According to many experts and researchers, the general benefits of GST are :

✎ Implementation of GST has led to subsumption of multiple taxes at State as well as Central levels. Pre-GST State and Centre had many different taxes imposed like VAT, CENVAT, octroi tax, luxury tax, purchase tax, excise duty, etc. Post-GST, all these taxes have been subsumed by a single tax, increasing the transparency and simplicity of taxation.

✎ Elimination of cascading effect of tax : Implementation of GST has eradicated the practice of charging tax on tax. This is considered as a major advantage of GST over previous indirect tax systems.

✎ Compared to previous indirect tax regimes, GST has been acknowledged as much easier and simpler to deal with. GST is said to be easy to comply with.

✎ Composition scheme for smaller companies : It is a scheme presented under GST for businesses with a turnover under INR 1 crore. Composition scheme allows them to pay a fixed rate of GST on their general turnover, eliminating the need to manage dreary formalities, though this scheme can only be availed by few like manufacturers, producers, traders, eateries not serving liquor, and so on. Downside being that anyone enrolled for this scheme can't claim input tax credit. Any entity dealing with interstate supplies ; producing ice-cream, pan masala, or tobacco ; and a business operating over a web-based portal like an e-commerce site can't enroll themselves for this scheme.

✎ GST has reduced the price of manufacturing due to lesser tax burden on manufacturers and traders compared to pre-GST. Introduction of e-way billing system abolished many checkpoints on state borders, thus freeing the manufacturers from the hassle of material required for production being stuck at checkpoints for indefinite time periods, resulting into slow production and loss of time on logistics. GST has made interstate business more efficient due to reducing the amount of paperwork involved in business.

✎ GST has reduced tax evasion with the help of GST Network (GSTN). GSTN acts as a single source or portal of information for stakeholders, government, or taxpayers. Authorities can track each transaction on a GST network.

This leads to reduction in leakage and prevention of tax evasions. Post-GST revenue from tax collection has increased and the tax base has been broadened significantly.

➤ GST allows the Centre to work with the States in controlling and collecting taxes. Pre-GST, State governments were the sole authority for governing the State taxes. Now, a single tax GST is imposed which is then further divided into two parts, one for Centre and other for State or Union Territory. This is due to GST being based on a dual tax structure.

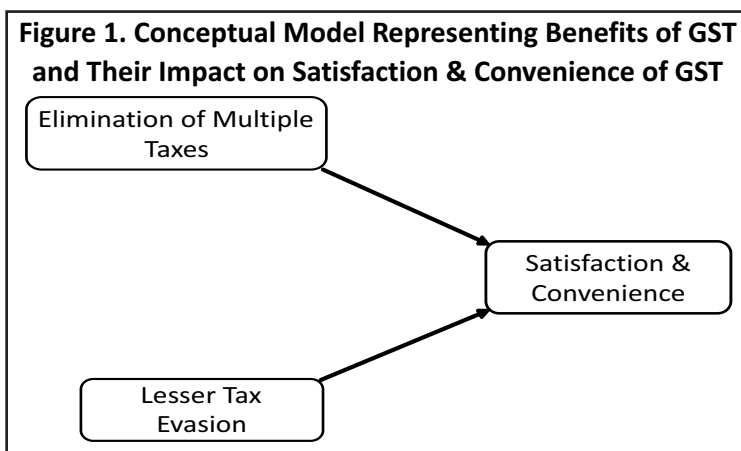
➤ Revenue for States as well as Centre has increased post-GST. Though GST has reduced tax rates for many categories, it has widened the tax base which can be directly related to increased revenue from taxes.

➤ Effects on Pricing : GST has had a positive effect on pricing of goods and services. The effect of reduced tax burden on manufacturers/traders and increased business efficiency is directly reflected on pricing for consumers. This is though not applicable for some goods and services where the new tax rates post-GST are higher than before. Many experts believe that GST, in the short run, may increase the prices of some goods or services, but in the long run, it will reduce the prices of all goods and services.

Literature Review

Ample literature is available on GST and its benefits due to GST being considered as a major upgrade over its predecessors. India is not the only country to have implemented GST, and hence, researchers from all around the world have expressed their opinion and facts about GST and its impact on the nations and economies. Dahal (2010) listed an end to cascading effect, increase in revenue, cost reduction, elimination of multiple taxes, reduction in corruption, and increased business efficiency as benefits of GST.

Kumar (2017) listed single tax, elimination of tax multiplicity, reduced tax burden, control on tax leakage, simplicity and ease of administration, easy compliance, uniformity of tax structure, and introduction of composition scheme as some of the benefits of the new GST regime. Garg (2014) narrated an end to cascading effect, increase in States' and UTs' revenue, elimination of tax multiplicity, single base computation, and reduced tax burden, etc. as opportunities and benefits of GST. Option to claim input tax credit on services post GST implementation is also considered as a huge positive of GST. Most researchers believe that GST may increase the



prices of some goods in the short run, but from a long run point of view, GST will reduce the prices due to lesser tax burden passed on to consumers and tax evasion would be controlled.

Kumar (2012) classified the benefits of GST between traders and government. According to him, simpler tax regime, broader tax base, increased revenue, improved compliance, etc. are some of the benefits of GST for the government, while reduction in multiplicity of taxes, simpler tax regime, development of a common market, neutral taxes, and elimination of double taxation would be the benefits for traders or manufacturers. Shokeen, Banwari, and Singh (2017) stated that the simplicity of GST would result into easier government administration and implementation of GST. Figure 1 shows the conceptual model proposed for the study based on the literature reviewed on the subject.

Motivation for the Research

While studying the literatures published on GST, we came across multiple conceptual studies that explained in brief the benefits of GST over previous indirect taxation systems. According to a study conducted by Nath (2017), implementation of GST reduced the cascading effect of indirect tax system ; subsumed taxes ; improved logistical efficiency ; and had a positive impact on employment, FMCG, information technology, and manufacturing sector. Similarly, Nishita (2014) detailed that GST, after its implementation, would broaden the tax base, simplify India's taxation structure, reduce tax burden and manufacturing cost, etc. Rupa (2017) identified advantage of GST leading to eliminating disputes on the tax matter due to same tax rates, GST being a destination-based tax removing economic distortions, and widening of tax base.

Likewise, there are many literatures talking about these benefits, but very few papers are available that have dealt with the practicality of these benefits or conducted an empirical study to validate these benefits. We felt the need to identify whether all these benefits, that are so much discussed in papers, are being felt by the taxpayers. Thus, this study was conducted to identify, from a taxpayers' point of view, the aspects or dimensions that have had a positive impact from implementation of GST.

Objectives of the Study

This research, conducted two years after the implementation of GST, that is, in 2019, has the following objectives :

- To identify and validate the dimensions that represent benefits of GST as felt by taxpayers after implementation of GST.
- Identify the impact of the benefits of GST on taxpayers' satisfaction and convenience from GST.

Hypotheses of the Study

The study validates whether the identified benefits have or do not have a significant impact on satisfaction and convenience level of GST. Based on this, the below hypotheses have been proposed :

- **H1** : Elimination of multiple taxes does not have a significant impact on convenience and satisfaction.
- **H2** : Lesser tax evasion does not have a significant impact on convenience and satisfaction.

Research Methodology

(1) Data Collection : Data were collected with the help of a questionnaire prepared after extensive review of studies published on GST. The questionnaire was shared with 400 respondents from Raipur city in the form of an online questionnaire that was convenient to access. Data collection took place over a duration of two weeks and a total of 248 responses were received. The time period of the study is from April – September 2019. The responses were then checked for data consistency and sanitized. Cases with missing responses and no variance were removed and 222 responses were retained for the purpose of the study. Since the objective is to identify the dimensions that lead to satisfaction, convenience sampling was used since requirements of random sampling like locating the chosen items, population homogeneity, etc. had a high cost associated with them and were difficult to achieve (Semeijn, Van Riel, Van Birgelen, & Streukens, 2005). Table 1 represents the demographics of the respondents. It is evident from Table 1 that there is no sampling bias.

From the 222 respondents, 66.2% respondents were male while the remaining 33.8% were female. Out of the total respondents, 38.3% were in the age group of 20 – 25 years, 27.5% were from the age category of 26 – 35 years, 21.2% were in the age group of 36 – 45 years, and 25% were above 45 years of age ; 91% of the respondents were either graduates or postgraduates and 9% had completed a diploma course or intermediate ; 37.4% of the respondents were employed in the private sector, 34.7% were running their own business, 25.2% were students, and 2.7% were employed in government jobs. Annual earning of 32.5% of the respondents was less than INR 250,000, 27.1% earned between INR 250,001 – 500,000, 29.6% of the respondents fell in the INR 500,001 – 1,000,000 income bracket, and 10.8% earned more than INR 1,000,000 annually.

Table 1. Profile of the Respondents

Demographic Variables	Category	Percentage
Gender	Male	66.2%
	Female	33.8%
Age (Years)	20 – 25	38.3%
	26 – 35	27.5%
	36 – 45	21.2%
	46 – 55	23%
	Above 55	2.7%
Educational Qualification	Intermediate	5.9%
	Diploma	3.2%
	Graduate	51.8%
	Postgraduate	39.2%
Occupation	Government Job	2.7%
	Private Job	37.4%
	Self Employed	34.7%
	Student	25.2%
Income (in INR)	< 250,000	32.5%
	250,001 – 500,000	27.1%
	500,001 – 1,000,000	29.6%
	> 1,000,000	10.8%

(2) Sample Size Adequacy Assessment : Bollen (1989) suggested having several cases per free parameter or indicators in the study. Bentler (1989) suggested a 5 : 1 ratio of sample size to indicators. The level of communalities which were near to or more than 0.7 were considered for factor analysis (Fabrigar, Wegener, MacCallum, & Strahan, 1999). A thumb rule of having at least 10 observations or cases per item is adequate (Nunnally, 1967). Based on this, a target sample size of near about 200 respondents was found to meet the requirements.

(3) Measurement Instrument : A questionnaire was used as a survey instrument for the study. The questionnaire consisted of 23 items prepared after an extensive literature review. The questionnaire consisted of close ended questions where respondents were provided with specific options to choose from. A 7-point likert scale was used to collect the responses, ranging from 1 for *very strongly agree* to 7 for *very strongly disagree*. The items in questionnaire were divided into two sections. The first section dealt with respondents' demographics, while the second section dealt with their agreement or disagreement to statements about benefits of GST.

Data Analysis and Results

Data analysis was carried out in two stages. In the first stage, the data collected were passed through exploratory factor analysis for dimension reduction and identification. The second phase included validating and confirming a model derived from the dimensions or factors identified in the first phase using confirmatory factor analysis and identify their impact on satisfaction and convenience level of GST using structural equation modeling.

(1) Exploratory Factor Analysis (EFA) : Exploratory factor analysis is used to extract and identify the dimensions that represent benefits of GST felt and perceived by consumers. EFA was performed by using principal component method of analysis and applying Varimax rotation. A criterion chosen for extraction was Eigen value of the extracted factor or dimension should be greater than one.

The appropriation of data was checked by recommendations from Hair, Black, Babin, Anderson, and Tatham (2006). As per the results depicted in Table 2, the KMO measure of sampling adequacy is found to be 0.942 and Bartlett's test of sphericity gives a chi-square value of 3326.962 at significance $p = 0.000$. Also, taking into consideration Coakes and Steed (2001), a KMO measure of sampling adequacy of 0.6 or more is considered acceptable. Taking both the recommendations into account, the data were found to be appropriate for the study.

Reliability can be defined as the ability of a scale to produce consistent results. The reliability of a scale can be checked with the help of Cronbach's alpha coefficient (Cronbach, 1951). According to Hair et al. (2006), a scale is considered reliable if its Cronbach's alpha coefficient is equal to or greater than 0.6.

✎ Cronbach's alpha coefficient for Satisfaction & Convenience is equal to .853, which shows excellent reliability.

Table 2. Results of KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.942
Bartlett's Test of Sphericity	Approx. Chi-Square	3326.962
	Degree of Freedom	253
	Sig.	0.000

Table 3. Exploratory Factor Analysis Results

Factor	Symbol	Factor 1	Factor 2	Factor 3	Communalities
Satisfaction & Convenience (<i>SC</i>)	<i>ST1</i>	.662			.619
$\alpha = 0.853$	<i>ST2</i>	.747			.715
	<i>ST3</i>	.671			.674
	<i>ST4</i>	.681			.636
Lesser Tax Evasion (<i>LTE</i>)	<i>LT1</i>		.774		.637
$\alpha = 0.828$	<i>LT2</i>		.721		.650
	<i>LT3</i>		.723		.696
Elimination of Multiple Taxes (<i>EMT</i>)	<i>ET1</i>			.754	.572
$\alpha = 0.860$	<i>ET2</i>			.721	.685
	<i>ET3</i>			.724	.673
	<i>ET4</i>			.767	.711
	<i>ET5</i>			.710	.636
% of Variance		21.854%	20.729%	19.357%	
Cumulative %		21.854%	42.583%	61.940%	

Note. See Appendix for item statements.

✎ Cronbach's alpha coefficient for Lesser Tax Evasion is equal to .828, which shows excellent reliability.

✎ Cronbach's alpha coefficient for Elimination of Multiple Taxes is equal to .860, which shows excellent reliability.

Other than this, the overall Cronbach's alpha coefficient of 23 items is equal to .949, which shows excellent reliability of the scale.

Data extraction is done through principal component analysis method and Varimax rotation. The items are loaded onto three factors. These factors are then considered for further analysis. Eigen value of these factors is greater than one. Table 3 shows the extracted factors with their item loadings. A minimum loading of 0.66 is set as a threshold for any item to be considered in any of the three factors. Items with loading less than 0.66 were ignored. It was also taken care that an item loaded in a factor is not appearing with a high loading in another factor. The first factor - Satisfaction & Convenience has four items loaded on it and it explains 21.854% of the variance. The second factor - Lesser Tax Evasion has three items loaded onto it and explains 20.729% of the variance. The third factor - Elimination of Multiple Taxes has five items loaded onto it and it explains 19.357% of the variance. These three factors explain a cumulative variance of 61.94%.

The explanation of the factors is as follows. The item statements are explained in the Appendix.

✎ **Factor 1 - Satisfaction & Convenience (SC) :** The first factor, that is, Satisfaction & Convenience explains the opinion of taxpayers in reference to the different rates of GST and their satisfaction with these rates. It explains the simplicity of GST and the ease of working with GST as well as the positive effect of GST on prices and consumers' satisfaction with this.

✎ **Factor 2 - Lesser Tax Evasion (LTE) :** The second factor, that is, Lesser Tax Evasion explains taxpayers' opinion regarding GST's benefit of controlling and reducing tax evasion. It is perceived that post GST implementation,

there has been an increase in the number of taxpayers as compared to the pre-GST period. Introduction of GST and GST network has led to a positive effect on controlling tax evasion and reduced tax evasion.

✚ **Factor 3 - Elimination of Multiple Taxes (EMT)** : The third factor explains the taxpayers' opinion about the elimination or subsumption of many taxes post - GST. This factor represents the benefit felt due to the elimination of multiple State and Central level taxes as well as elimination of tax on tax post-GST. With GST, there is a single tax charged on goods and services and GST has replaced many indirect taxes.

(2) Reliability & Validity : The reliability and validity of the items is checked. Composite reliability, also known as construct reliability, can be defined as the ability of the instrument to produce consistent results. Validity is the degree of accuracy of the research. Validity implies whether the data is related to the constructs being measured. There are two validities being checked here :

✚ **Composite/Construct Reliability (CR)** : The consistency should be high. Thumb rule for construct reliability states that the CR value of 0.7 or greater accounts for good reliability.

✚ **Convergent Validity** : Items loaded in the factors or dimensions should share high proportion of variance between them (Hair et al., 2006).

✚ **Discriminant Validity** : The factors or dimensions identified should be truly distinct from each other and show high uniqueness (Hair et al., 2006). Factors should not exhibit high correlation with other factors to achieve discriminant validity (O'Leary-Kelly & Vokurka, 1998).

The CR value for all three factors identified is well over the preferred threshold value of 0.7, which represents acceptable construct reliability. For acceptable convergent validity, the average variance extracted (AVE) of each factor should be greater than or equal to 0.5 and AVE of a factor should be greater than its mean shared variance (MSV) (Hair et al., 2006). Looking at Table 4, we see that AVE values of all factors are greater than 0.5 and MSV is less than AVE for all the cases. Thus, convergent validity has been achieved.

For discriminant validity, the square root of AVE should be greater than the absolute values of correlation coefficient of each construct. In Table 4, the bold values represent the square roots of AVE values for each factor, and as observed, the absolute values of correlation coefficient are less than the AVE values for all the factors. Thus, discriminant validity has been achieved.

Table 4. Calculated Values for Convergent & Discriminant Validity

Factor	CR	AVE	MSV	EMT	LTE	SC
EMT	0.858	0.571	0.555	0.755		
LTE	0.832	0.626	0.496	0.642	0.791	
SC	0.868	0.603	0.555	0.745	0.704	0.776

Note. *Bold values represent square root of AVE.

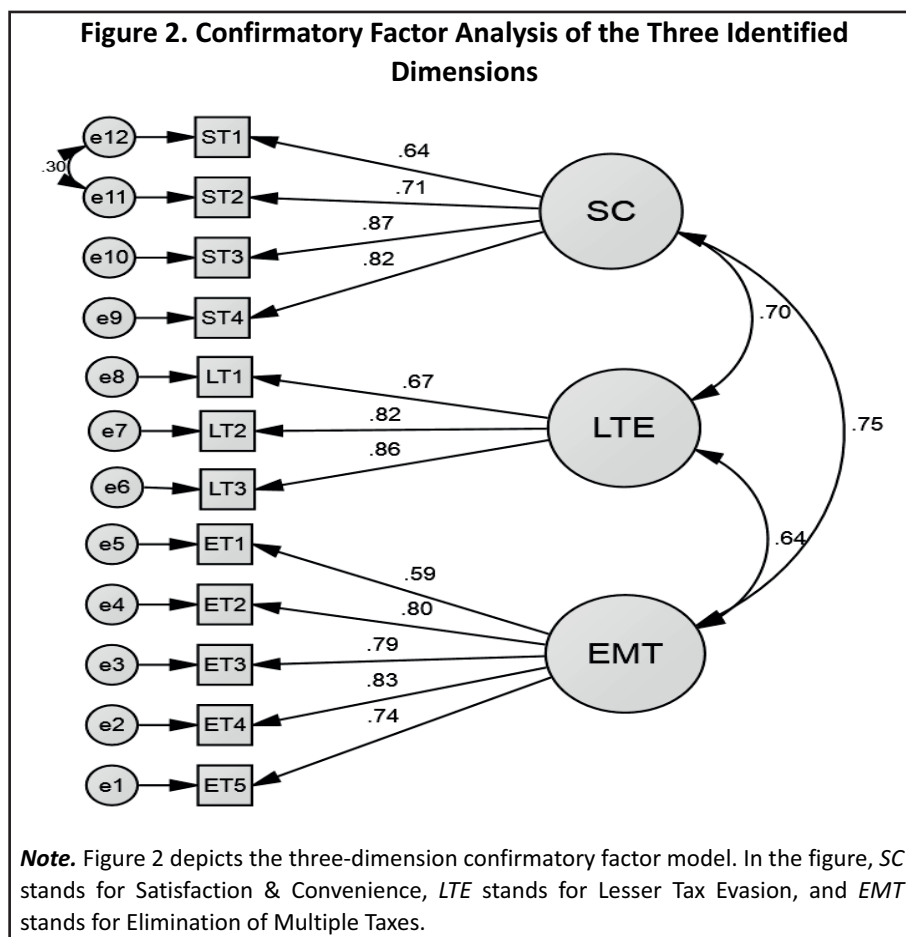
(3) Confirmatory Factor Analysis (CFA) : A confirmatory factor analysis is carried out to validate the three-dimension model derived from factor analysis. AMOS 21 is used to carry out the validation tests. Figure 2 shows

the model with standardized regression weights and the standardized path coefficients. The model is checked for its validity and model fit is found to be acceptable. All loadings are found to be strong ranging from 0.59 – 0.87 and the loadings are statistically significant.

(4) Model Fit : The model fit index calculation results are as follows :

- ✦ The ratio of chi - square minimum (92.935) and degree of freedom (50) is found to be an excellent fit. The value of CMIN/DF is equal to 1.859. Value between 1 and 3 is acceptable.
- ✦ Comparative fit index (CFI) is calculated at 0.97. CFI equal to or greater than 0.90 is considered acceptable.
- ✦ Goodness of fit index (GFI) is calculated at 0.937. GFI equal to or greater than 0.90 is considered acceptable.
- ✦ Root mean square error of approximation (RMSEA) is calculated at 0.062, which is acceptable.
- ✦ Standardized root mean square residual (SRMR) is calculated at 0.07. SRMR value less than 0.08 is acceptable.

Based on the criteria recommended by Kline (2005), the model fit is found to be acceptable.



(5) Path Analysis : It is assumed that Elimination of Multiple Taxes and Lesser Tax Evasion do not have a significant impact on Satisfaction & Convenience. To test this hypothesis, the model is passed through path analysis by keeping Satisfaction & Convenience as a dependent variable and Elimination of Multiple Taxes and Lesser Tax Evasion as independent variables. The hypothesis is then tested by running regression on the model. The *R* - square value of the model is calculated at .743, which means 74.3% of the variance in Satisfaction & Convenience of GST can be explained by Elimination of Multiple Taxes and Lesser Tax Evasion. Figure 3 shows the SEM diagram of the results.

It is observed from the results that both Elimination of Multiple Taxes and Lesser Tax Evasion have a significant impact on Satisfaction & Convenience at $p < 0.000$. As per the criteria mentioned by Syed and Tripathi (2020), both the hypotheses H1 and H2 are rejected at a confidence interval of 5%. Looking at the standardized coefficients, it can be concluded that compared to Lesser Tax Evasion, Elimination of Multiple Taxes has more impact on Satisfaction & Convenience. Table 5 shows the path analysis results.

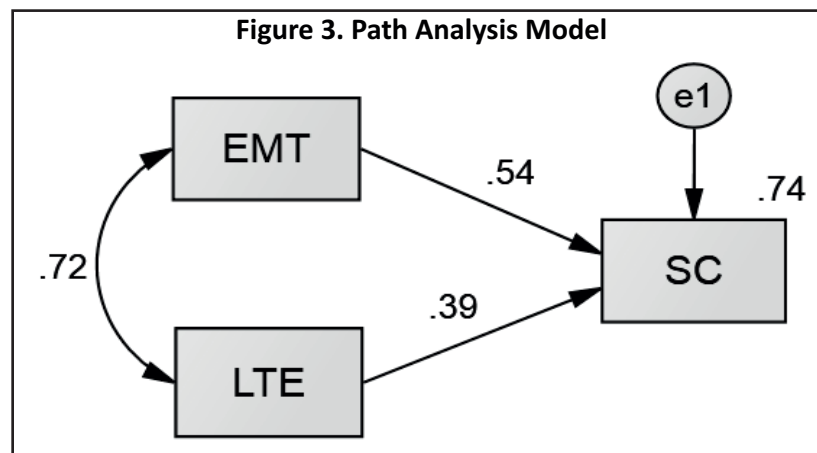


Table 5. Model Summary and Coefficient Results from Regression Analysis

Dimension	Regression Weight	Standardized Regression Weight	C.R.	<i>P</i>	<i>R</i> - Square
Constant	.302	.110	2.749	.006	.743 ($p < 0.05$)
$SC \leftarrow EMT$.591	.540	11.024	.000	
$SC \leftarrow LTE$.443	.389	7.929	.000	

Findings and Discussion

The purpose of this study is to identify and empirically validate the benefits of GST and its impact on consumers' satisfaction and convenience. Exploratory factor analysis (EFA) extracts three dimensions from data collected for the study that represent taxpayers' opinion about benefits of GST, namely Satisfaction & Convenience ($\alpha = 0.853$, % of variance = 21.854%), Lesser Tax Evasion ($\alpha = 0.828$, % of variance = 20.729%), and Elimination of Multiple Taxes ($\alpha = 0.860$, % of variance = 19.357%). Cumulative variance of these three factors is 61.94%.

Once the factors are identified from EFA, a model is derived based on these factors. Confirmatory factor

analysis (CFA) is conducted to validate the derived model. The main objective of CFA is to validate the model fit and check if it falls in the acceptable criteria. The scale and identified dimensions are tested for reliability and validity by calculating Cronbach's alpha coefficient, CR, AVE, and MSV. The results indicate good reliability and validity of the scale. CFA results indicate a good model fit. The model fit indices calculated are : CFI = 0.97 (>0.90), GFI = 0.937 (>0.90), CMIN/DF = 1.859 (Between 1 and 3), RMSEA = 0.062 (<0.08), and SRMR = 0.07 (<0.08).

Path analysis is conducted by making Satisfaction & Convenience a dependent variable and Lesser Tax Evasion and Elimination of Multiple Taxes as independent variables. The results indicate that both the independent variables have a significant impact on the dependent variable in the model, and the R -square value is calculated at 0.743 ($p < 0.000$). The standardized regression weight (standardized β) of Elimination of Multiple Taxes is 0.540 and for Lesser Tax Evasion, the value is 0.389 at $p < 0.05$. Based on the results, the hypotheses H1 and H2 have been rejected. It is identified that the factor - Elimination of Multiple Taxes has more impact on the dependent variable.

Implications

The study aims at identifying and validating the benefits of GST felt by taxpayers two years after its implementation. As observed from the results and findings of the study, compared to the benefits of GST discussed theoretically, practical benefits being felt by the taxpayers are limited to lesser tax evasion and elimination of multiple taxes. Respondents did feel that GST is convenient compared to its predecessors. The results of the study are a strong indication of the fact that the benefits of GST, that were thought of while modelling the regulations for GST, are perceived well. Taxpayers do feel a sense of satisfaction because of these benefits. The results of this study could also be used to highlight the strengths of GST and the areas of its shortcomings.

Conclusion

The scale designed for the study proves to be reliable and valid for measuring the benefits of GST felt by consumers. The initial concept designed for the study considered several benefits derived from an extensive literature review. The questionnaire was designed by keeping in mind these benefits derived from literature. After data collection and extraction, the results indicate that not all the benefits mentioned in the previous studies were identified by consumers. Instead, the study produces only three factors which are identified as benefits of GST, namely Satisfaction & Convenience, Lesser Tax Evasion, and Elimination of Multiple Taxes.

These measured benefits are then validated with the help of confirmatory analysis and the model fit is found to be acceptable. Then the path analysis is implemented to identify whether the factors have an impact on satisfaction. It is concluded that Lesser Tax Evasion and Elimination of Multiple Taxes have a significant impact on taxpayers' Satisfaction & Convenience levels, with Elimination of Multiple Taxes having a more significant impact. It is also identified that not all the taxpayers were able to differentiate between elimination of cascading effect of taxes and subsumption of taxes by implementation of Goods and Services Tax.

Limitations of the Study & Scope for Further Research

The study is limited to calculating satisfaction & convenience level of GST from its benefits and does not take into account other factors, direct or indirect, related to GST like the opportunities, complications, challenges, etc. in implementation of GST as they could also have a significant impact on the satisfaction and convenience level of

GST. In this study, the two major benefits have been measured and validated. The scale could be improved by adding more variables to identify other dimensions that would have an impact on taxpayers' satisfaction levels. This study is limited to respondents from Raipur, Chhattisgarh. A more extensive research at the national level can be conducted by expanding the demographic boundaries and increasing the sample size for a better representation of a larger target population to develop a better understanding of the perceived benefits of GST and their impact on taxpayers' satisfaction. The reliability and validity instrument used in this study can also be used again by moderating, if needed, for future research and study the relationship of these constructs with taxpayers' satisfaction level of GST for a larger demographic. The demographic variables like gender, income, or profession could be used as moderators to check if they moderate the relationship between the benefits of GST and taxpayers' satisfaction from those benefits.

Authors' Contribution

Yashwant Kumar Vaid and Vikram Singh came up with the idea for this empirical study while Yashwant Kumar Vaid was working as an intern in the field of indirect taxation. Based on the idea of the study, past literatures were extracted and thoroughly studied to identify the benefits of GST that are discussed in theory and a hypothetical model was developed based on the literatures studied by all the three authors. Dr. Monika Sethi guided and supervised Yashwant Kumar Vaid and Vikram Singh throughout the study. Yashwant Kumar Vaid and Vikram Singh designed the questionnaire and collected the data. After cleaning the collected data, Vikram Singh and Yashwant Kumar Vaid performed the data analysis part using SPSS 22.0 and AMOS 21.0. Yashwant Kumar Vaid wrote the manuscript in consultation with both Vikram Singh and Dr. Monika Sethi.

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 Acknowledgment

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

References

- Bentler, P.M. (1989). *EQS, structural equations, program manual, program version 3.0*. Los Angeles : BMDP Statistical Software, Inc.
- Bollen, K. A. (1989). *Structural equations with latent variables*. John Wiley & Sons, Inc.
- Coakes, S. J., & Steed, L. G. (2001). *SPSS analysis without anguish*. Milton : John Wiley & Sons Australia Ltd.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(1), 297–334.
- Dahal, R. (2010). *Goods and service tax in India – Challenges and opportunities*. <https://dx.doi.org/10.2139/ssrn.1682260>

- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272–299.
- Garg, G. (2014). Basic concepts and features of good and service tax in India. *International Journal of Scientific Research and Management (IJSRM)*, 2(2), 542–549.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6). Upper Saddle River : Prentice Hall.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed). New York : Guilford.
- Kumar, P. (2012). Goods and services tax – One India, one market. *Journal of Global Research & Analysis*, 6, 111.
- Nath, B. (2017). Goods and services tax : A milestone in Indian economy. *International Journal of Applied Research*, 3(3), 699–702.
- Nayyar, A., & Singh, I. (2018). A comprehensive analysis of Goods and Services Tax (GST) in India. *Indian Journal of Finance*, 12(2), 57–71. <https://doi.org/10.17010/ijf/2018/v12i2/121377>
- Nishita, G. (2014). Goods and Service Tax : It's impact on Indian Economy. *International Research Journal of Commerce Arts and Science*, 5, 126–133.
- Nunnally, J. C. (1967). *Psychometric theory*. New York, NY : McGraw-Hill.
- O'Leary-Kelly, S. W., & Vokurka, R. J. (1998). The empirical assessment of construct validity. *Journal of Operations Management*, 16(4), 387–405.
- Rupa, R. (2017). GST in India : An overview. *International Education & Research Journal*, 3(2), 88–89.
- Semeijn, J., Van Riel, A.C.R., Van Birgelen, M.J.H., & Streukens, S. (2005). E-services and offline fulfillment : How e-loyalty is created. *Managing Service Quality*, 15(2), 182–194.
- Shokeen, S., Banwari, V., & Singh, P. (2017). Impact of Goods and Services Tax bill on the Indian economy. *Indian Journal of Finance*, 11(7), 65–78. <https://doi.org/10.17010/ijf/2017/v11i7/116568>
- Syed, A. A., & Tripathi, R. (2020). Macroeconomic vulnerabilities and their effect on nonperforming loans in Indian commercial banks. *Indian Journal of Finance*, 14(2), 34–49. <https://doi.org/10.17010/ijf/2020/v14i2/150555>

Appendix

Variable Statements

- ST1** – Introduction of GST has reduced prices of goods.
- ST2** – I am satisfied with GST rates for different items.
- ST3** – Working with GST is simple.
- ST4** – GST is easy to understand.
- LT1** – Introduction of GST has increased the number of taxpayers.
- LT2** – Introduction of GST Network has reduced tax evasion.
- LT3** – GST has a positive effect on controlling tax evasion.
- ET1** – Tax on tax is an inefficient taxation system.
- ET2** – Introduction of GST has eradicated tax on tax system.
- ET3** – Introduction of GST has replaced many indirect taxes.
- ET4** – Elimination of tax on tax is a good step.
- ET5** – There are no multiple taxes charged in GST.
-

About the Authors

Yashwant Kumar Vaid is an MBA student at ITM University, Raipur, Chhattisgarh. His research interests are taxation, financial inclusion, and international trade.

Vikram Singh is an Assistant Professor at ITM University, Raipur, Chhattisgarh. His research interests are financial markets, taxation, and economics.

Dr. Monika Sethi is Head of Department at School of Commerce, Management & Research, ITM University, Raipur, Chhattisgarh. Her research interests are organizational behaviour, organizational development, organizational change, and taxation.