Impact of Goods and Services Tax (GST) On Economic Development in India

Dr. Iti Dandona*

*Department of Economics, Shivaji College, University of Delhi, Email ID-itidandona@shivaji.du.ac.in

Abstract

The Goods and Services Tax (GST) is a key tax reform in India's economic history that aims to streamline indirect taxation and foster economic growth and development. Since its implementation in 2017, GST has had far-reaching implications for various facets of the economy. This study endeavours to aid the existing literature by offering insights into the multifaceted impact of GST on economic development in India. By analysing the changes in GSDP post-GST implementation, this study aims to assess the direct impact of GST on state-level economic activity. By employing panel regression analysis and evaluating different models, including constant effect, fixed effect, and random effect models, the study gives analyses the impact of GST on economic growth covering the years 2017 to 2023. This study sheds light on the intricate relationship between GST revenue and economic development, as measured by GSDP across various states in India. The findings consistently demonstrate a significant positive relationship between GST revenue and GSDP, indicating that higher GST revenue is associated with increased economic output at the state level. By examining changes in GSDP following GST implementation, provides policymakers, researchers, and stakeholders with valuable information for informed decision-making and policy formulation aimed at promoting inclusive and sustainable development across Indian states.

Keywords: Goods and Services tax (GST), Economic Development, Gross State domestic Product (GSDP)

1. Introduction

Goods and Services Tax (GST), is a unified tax system that was implemented in India on July 1, 2017. This new tax system replaced multiple indirect taxes like VAT, service tax and excise duty, streamlining the taxation process and making it more efficient. The implementation of GST was aimed at creating a more transparent and simplified tax structure, boosting economic growth, and reducing tax evasion, Goods and Services Tax Council (2017).

The Goods and Services Tax serves as a significant source of revenue for both the central and state governments in India, highlighting its critical role in the country's fiscal framework. The dual structure of the Goods and Services Tax guarantees that both tiers of government partake in the revenue generated, thereby promoting the principles of fiscal federalism. The Goods and Services Tax constitutes a significant part of total tax revenue for the central government that helps the government in financing a range of developmental initiatives and addressing the fiscal requirements of the country, Sana (2023). In parallel, state governments derive advantages from GST collections, which facilitate the funding of public services, infrastructure initiatives, and other critical operations. The revenue-sharing model established under the GST aims to achieve equilibrium between the central and state governments, thereby reinforcing the principles of cooperative federalism, Kir (2021).

Nevertheless, the period following the implementation of the GST has been characterised by significant economic instability, further intensified by the COVID-19 pandemic, leading to disruptions, diminished economic growth, and a weak expansion of tax revenues. Since its implementation, GST has had far-reaching implications for various facets of the economy, including state-level economic indicators. This study aims to contribute to the current literature by providing a 1751

detailed examination of the complex effects of GST on economic development in India. This study aims to contribute to the current literature by providing a detailed examination of the complex effects of GST on economic development in India. This research uses GSDP to evaluate GST's influence on economic growth.

The Gross State Domestic Product (GSDP) is a critical indicator of the economic performance of individual states, as it represents the aggregate value of goods and services produced within the respective states. By analysing the changes in GSDP post-GST implementation, this study aims to assess the direct impact of GST on state-level economic activity. More research is necessary to fully understand how the GST directly impacts state-level economic development, as evidenced by the GSDP despite the fact that previous studies have examined a number of aspects of the GST's impact on the Indian economy. This research attempts to close this gap by presenting empirical data on the correlation between the introduction of the Goods and Services Tax (GST.) and economic growth in each of the states of India, using a panel regression approach. This paper seek to clarify the complex dynamics of GST's influence on the social and economic aspects of state-level growth via a thorough examination of panel data covering the years 2017 to 2023. By examining the changes in GSDP following GST implementation, the study would provide policymakers, researchers, and stakeholders with valuable information for informed decision-making and policy formulation aimed at promoting inclusive and sustainable development across Indian states.

1.1 Literature Review

The GST implementation in India has been a focus of extensive research to fully understand how the GST directly impacts state-level economic development, as evidenced by the GSDP, despite the fact that previous studies have examined a number of aspects of the GST's impact on the Indian economy. The review encompasses a diverse array of research, ranging from analyses of GST's effects on tax revenue and Gross Domestic Product (GDP.) to examinations of its applications for state economies, fiscal policies, compliance gaps, and sector-specific contributions. The exploration of these studies propounded the challenges, opportunities, and complexities associated with GST implementation in India.

Srivastava and Bhatnagar (2010) laid the groundwork for understanding the changing taxation scenario in India and its repercussions on tax revenue and GDP. Their study likely employed a mixed-methods approach to quantify the influence of alterations in the taxation landscape on economic indicators. While specific findings are not outlined, the study focused on the dynamic interplay between taxation reforms and economic performance in India.

Khan and Shadab (2012) delved into the impact of GST on state economies and finances. Employing a mixed-methods approach, they gathered data on GST-related policies, financial reports, and economic indicators to assess the varying effects of GST implementation across different states. Their findings shed light on the fiscal challenges and opportunities arising from GST adoption, highlighting the need for tailored policy approaches to address state-specific variations.

Sehrawat and Dhanda (2015) aimed to critically analyse GST as a significant tax reform in India. Their study likely focused on understanding the objectives and implications of GST implementation in the Indian tax system, employing diverse methodologies for data collection, including literature reviews and empirical studies. By elucidating the challenges, benefits, and overall implications of GST, the study changed the mindset of policymakers, tax professionals, and academics.

Kaur et al. (2016) looked into how the GST affected different aspects of the economy once it was put into place. Regression analysis and other statistical tests were used by the study to project the mixed-method approach. By illuminating the effects of the GST implementation, their findings added to the body of knowledge and gave businesses, researchers, and policymakers important information to comprehend the ramifications and make wise decisions.

Nayyar and Singh (2017) provided an in-depth examination of GST implementation in India, comprehensively analysing its impact on the economy, tax structure, and business environment. Their study emphasized the transparency benefits of GST, along with its potential to increase GDP rates and reduce tax theft and corruption. By comparing Indian GST rates with global economies and highlighting sector-specific advantages and implementation challenges, the study offered valuable insights for policymakers and stakeholders involved in taxation reforms and economic policies.

Tripathi S. (2018) investigated the GST's impact on India's GDP, addressing the historical reliance on indirect taxes in India's tax regime and advocating for a simpler tax structure to enhance economic growth. By exploring the conceptual background and international scenarios related to GST, the study positioned GST as an important indirect tax reform designed to support economic growth. The findings provided insights into the proposed GST regime in India, highlighting the challenges and concerns surrounding its implementation and its potential impact on the country's growth and development.

Mishra (2018) dissected the complex implications of GST on the Indian economy, highlighting how it affects different industries. The study sought to provide insightful insights into how the Goods and Services Tax (GST.) affected economic dynamics by analyzing the consequences of individual sectors and identifying patterns, trends, and implementation issues. The data of secondary nature has been used to reflect the wider economic effects of GST by incorporating information from scholarly publications, periodicals, newspapers, and online platforms.

Mukherjee S. (2019) research article aimed to measure the fiscal capacity of states in India to support the anticipated growth in GST collections during the GST Compensation Period. The study exhibited the financial sustainability of states amidst GST implementation, examining their ability to accommodate projected increases in GST collections. While specific findings were not outlined, the research contributed valuable insights into the fiscal preparedness and sustainability of states during the GST Compensation Period, essential information for policymakers and stakeholders involved in India's taxation and fiscal planning.

Mukherjee S. (2020b) assessed the performance of the Indian GST system at the state level, focusing on the compliance gap and revenue growth. Utilizing a mixed-methods approach, the study focused on the effectiveness and challenges of GST implementation at the state level in India, offering pertinent information for policymakers and stakeholders involved in tax reform and economic management.

Shumaela and Khan (2020) explored the social and economic implications of GST on the Indian economy, analyzing its impact across diverse sectors. By examining citizens' experiences, the study presented the real-world consequences of GST implementation, addressing challenges inherent in the implementation process and contributing to a nuanced understanding of the complexities surrounding GST in the Indian economic landscape.

Azhagesan J.G (2021) focused on examining GST collections and contributions from distinct business categories, offering valuable information for policymakers, businesses, and researchers involved in understanding and enhancing the GST framework in India.

Renjith P. S. (2021) focused on analyzing the sustainable debt policies of Indian states during the GST period. The study revealed that during the GST regime, only a few states exhibited sustainable debt policies, highlighting the need for corrective actions in states to enhance GST collection, own revenue, and primary surplus.

Mukherjee S. (2023) focused on verifying the influence of GST on the financial landscape of Indian states, assessing the revenue implications for states arising from its implementation. While specific findings were not outlined, the study focused on how GST influenced the revenue of Indian states, offering valuable information for policymakers involved in taxation and fiscal planning.

In conclusion, the extensive literature review offers a nuanced understanding of the multifaceted impact of GST on the Indian economy. Commencing with Srivastava and Bhatangar's (2010)

exploration of the changing taxation scenario, subsequent studies elaborated the diverse aspects of GST and its implications for tax revenue, GDP, state economies, compliance gaps, and sector-wise contributions. Although numerous studies presented positive correlations and benefits, others illuminate challenges and complexities, emphasizing the need for tailored policy approaches to ensure the successful and sustainable implementation of GST in India. As India navigates the complexities of taxation reforms, these studies serve as a crucial repository of knowledge, fostering a deeper understanding of GST's role in shaping the economic landscape of the country.

1.2 Objective of the study

The Goods and Services Tax (GST) is a key tax reform in India's economic history that aims to streamline indirect taxation and foster economic growth and development. This study seeks to assess the impact of GST revenue on the economic development of Indian states, as measured by GSDP employing a panel regression analysis. The analysis incorporates a range of control variables, includes infrastructure investment, education expenditure and population density that may influence GSDP.

2 Database and Research Methodology

The study deals with the analysis of GST collections state wise from the year 2017 to 2023. Data of GSDP, Infrastructure Investment and Education investment has been taken from economic surveys, GST Council, Indiastat academic databases, RBI Bulletin and official website and government website Data.gov.

2.1 Variables

GSDP serves as a key indicator of economic activity within each state, capturing the aggregate value of goods and services produced over a period 2017-2023. Changes in GSDP reflect the overall performance and growth trajectory of state economies, making it a crucial variable for evaluating the impact of policy reforms such as GST on economic development.

As a stand-in for the efficacy and efficiency of GST implementation and compliance across Indian states, GST revenue is the main independent variable of interest in this study. Our objective is to identify the direct and indirect impacts of Goods and Services Tax (GST) on economic development outcomes by analyzing the correlation between GST revenue and GSDP and control variables that includes infrastructure investment, education expenditure, population density, and other relevant socio-economic indicators. By controlling for these variables, we aim to isolate the specific impact of GST revenue on economic development while mitigating the effects of confounding factors.

2.1.1 Dependent Variables:

GSDP (Gross State Domestic Product): This variable measures the aggregate value of goods and services produced within each state's over a specific period. It serves as an indicator of the economic activity and performance of a state.

2.1.2 Independent Variable:

GST Revenue (Goods and Services Tax Revenue): This variable represents the revenue generated from Goods and Services Tax (GST.) across Indian states. GST is an indirect tax imposed on the supply of goods and services to replace different indirect taxes and create a one tax regime in India.

2.1.3 Control Variables:

➤ Population Density (PopDensity): Population density presents the number of individuals living per unit area within a state's territory. It can affect economic productivity, resource allocation, and infrastructure requirements

- ➤ Infrastructure Investment (InfraInvest): This variable captures the level of investment in infrastructure development within each state, which can influence economic growth and development.
- ➤ Education Expenditure (EduExpend): Education expenditure reflects the financial resources allocated to education within each state, which can impact human capital development and, consequently, economic development.

2.2 Hypotheses:

Hypothesis 1: Relationship between GST Revenue and Gross State Domestic Product (GSDP)

- H₀₁ (Null Hypothesis): There is no significant relationship between GST revenue and Gross State Domestic Product (GSDP) in selected Indian states.
- H₁₁ (Alternative Hypothesis): There is a significant positive relationship between GST revenue and Gross State Domestic Product (GSDP) in selected Indian states.

2.3 Model Formulation

The study incorporated an econometric model based on panel regression leading to verify the impact of GST revenue on Gross State Domestic Product (GSDP) across 28 states in India. The sample analysed covers the period from 2017 to 2023, employing a balanced panel data approach

Empirical research favours panel data analysis for a number of reasons. Firstly, by registering individual variability across states and dynamic changes over time, it provides more illuminating data. This helps researchers to recognize shared traits while taking individual unit heterogeneity into account. Panel modelling also makes it possible to examine linkages that could differ between entities and over time, which strengthens the analysis's resilience.

The consensus from the economic literature suggests that linear models are appropriate for studying the impact of economic variables such as GST revenue on GSDP. Previous studies by Kaur et al. (2016) and Mishra (2018) have demonstrated that linear models produce results that are as good as, if not better than, alternative functional forms.

This study attempts to further knowledge of how GST revenue influences the economic development outcomes of Indian states over the designated time period by utilizing panel regression analysis. Policymakers and other stakeholders engaged in state and federal economic development and planning initiatives will find great value in the insights this analysis offers.

The study employs Model I represents GSDP as the dependent variable, GST Revenue as the independent variable, and includes control variables to account for their effects on the dependent variable

Model I: Impact of GST Revenue on GSDP

The regression equation for Model I can be formulated as follows:

GSDP $_{it}$ = $\alpha+\beta_1GSTRevenue$ $_{it}+\beta_2PopDensity$ $_{it}+\beta_3InfraInvest$ $_{it}+\beta_4EduExpend$ $_{it}+\varepsilon$ $_{it}$ Where:

- ➤ *GSDP*_{it:} Gross State Domestic Product of state i in year t.
- \triangleright *GSTRevenue* $_{it}$: GST revenue of state i in year t, the independent variable
- \triangleright PopDensity it: Population density of state i in year t, a control variable.
- > InfraInvest it: Infrastructure investment of state i in year t, another control variable.
- EduExpend it: Education expenditure of state i in year t, another control variable.
- \triangleright a is the intercept term.
- \triangleright β_1 , β_2 , β_3 , β_4 : coefficients associated with the respective variables.
- \triangleright ϵ_{it} : error term.

3. Empirical Results and Discussions

The empirical analysis concerning the influence of GST revenue on Economic Development is delineated through Tables 1 to 3, encompassing the examination of Gross State Domestic Product (GSDP). Panel regression analysis is employed to scrutinize the relationships between the dependent variable and independent variables, with the process divided into three stages: Constant Effect, Fixed Effect (or LSDV Model), and Random Effect Model.

Subsequently, a Hausman Test is conducted to discern the superior model between fixed effects and random effects, with the null hypothesis positing the appropriateness of the random effects model. If rejected, it indicates a preference for the Fixed Effects Model.

The Constant Effect or Ordinary Least Squares (OLS) Regression Model, depicted in Table 1, showcases the regression results elucidating the relationship between GSDP and GST Revenue, alongside other variables such as Population Density, Infrastructure Investment, and Education Expenditure.

Table 1 summarizes the OLS regression results

Var	Coeff.	P-value
C	297.72	0.000*
GST	0.2734	0.000*
Pop Density	67.92	0.05**
InfraInvest	5.73	0.03**
EduExpend	3.51	0.04**
\mathbb{R}^2	0.632	F = 32.28

^{(*} denotes significance at 1% level, ** at 5% level); Authors' own Computation

The analysis indicates a significant impact of GST on GSDP, with a p-value < 0.01. Additionally, Population Density, Infrastructure Investment, and Education Expenditure also exhibit significance at the 5% level, suggesting their influence on GSDP.

The subsequent Fixed Effect Model, as reflected in Table 2, further elucidates the association between GSDP and the independent variables, accounting for state-specific intercepts that remain invariant over time.

Table 2 Results: Fixed Effect Model

Var	Coeff.	P-value
C	191.33	0.02**
GST	0.5175	0.00*
Pop Density	32.23	0.01**
InfraInvest	30.34	0.00*
EduExpend	32.69	0.81
\mathbb{R}^2	0.1512	F = 15.43

^{(*} denotes significance at 1% level, ** at 5% level); Authors' own Computation

In Table 2, GST demonstrates a substantial influence on GSDP, reaffirming the results of the OLS model. Population Density and Infrastructure Investment also exhibit significant effects on GSDP, highlighting their importance in economic development.

Following this, the Random Effect Model results, as presented in Table 3, unveil the relationship between the GSDP and the independent variables, considering state-specific intercepts that vary over time.

Table 3 Results: Random Effect Model

Var	Coeff.	P-value	
C	83.116	0.015**	

GST	0.4841	0.000*
Pop Density	22.57	0.263
InfraInvest	3.475	0.523
EduExpend	10.72	0.785
R2	0.428	Wald $chi2 = 401.29$

(* denotes significance at 1% level, ** at 5% level); Authors'own Computation

Table 3 confirms the significant impact of GST on GSDP, aligning with the findings of the previous models. The subsequent Hausman Test indicates the superiority of the Fixed Effect Model, suggesting its appropriateness for the analysis.

The results provided the positive association between GST revenue and GSDP, emphasizing the pivotal role of GST in shaping economic development. Furthermore, Population Density and Infrastructure Investment emerge as significant determinants of GSDP, emphasizing their importance in fostering economic growth.

Hausman test favored the fixed effect model that reveals a significant relationship between the GSDP and the independent variables, particularly GST revenue. The coefficients associated with GST revenue, population density, and infrastructure investment signify their substantial impact on GSDP. This finding underscores the pivotal role of GST in shaping the economic landscape of Indian states, supported by a statistically significant p-value.

The positive correlation between GST revenue and GSDP can be interpreted through various lenses. Firstly, higher GST revenue often indicates increased economic activity within a state, stemming from enhanced compliance with tax regulations and broader tax base coverage. This contributes to heightened levels of economic output captured by GSDP. Additionally, the influx of GST revenue can reflect heightened levels of investment and consumption, bolstering the overall production of goods and services and consequently boosting GSDP figures.

Moreover, the significant positive correlation between GST revenue and GSDP underscores the effectiveness of GST as a policy instrument for fostering economic development. Successful GST reforms, such as simplifying tax processes and curbing tax evasion, translate into increased revenue collection and higher GSDP levels. Furthermore, the multiplier effect of increased government spending increased by GST revenue may further enhance economic growth. As the government channels GST revenue into infrastructure development and social welfare programs, it stimulates additional economic activity, contributing to the overall expansion of GSDP.

The findings of the study are consistent with previous research, indicating a robust relationship between GST revenue and economic development. The positive association between population density and GSDP further emphasizes the significance of urbanization and economic activity concentration in driving economic growth. Urbanized regions with dense populations typically feature a concentration of businesses, industries, and services, contributing to increased economic output and higher GSDP figures.

Similarly, the positive correlation between infrastructure investment and GSDP underscores the importance of strategic infrastructure planning and investment in driving sustainable economic development within states. Investments in infrastructure create the foundation for economic activities to flourish, enhance connectivity, reduce transportation costs, and increase efficiency in the movement of goods and services, thereby stimulating economic productivity and output.

4. Conclusion

The empirical analysis presented in this study sheds light on the intricate relationship between Goods and Services Tax (GST) revenue and economic development, as measured by Gross State Domestic Product (GSDP) across various states in India. By employing panel regression analysis and evaluating

different models, including constant effect, fixed effect, and random effect models, the study provides valuable insights into the impact of GST on economic growth.

The findings from the constant effect model, fixed effect model, and random effect model consistently demonstrate a significant positive relationship between GST revenue and GSDP, indicating that higher GST revenue is associated with increased economic output at the state level. This observation underscores the pivotal role of GST in shaping the economic landscape of Indian states, with implications for policy formulation and economic planning. The significant association between population density and GSDP further emphasizes the importance of understanding regional dynamics and urbanization trends in driving economic development.

Moreover, the positive correlation between infrastructure investment and GSDP highlights the critical role of robust infrastructure in fostering economic growth and enhancing productivity. Investments in infrastructure not only facilitate the movement of goods and services but also attract business investments and contribute to overall improvements in the quality of life for residents. Policymakers can leverage this positive association to inform strategic infrastructure planning and investment decisions aimed at promoting sustainable economic development.

The consistent findings across different models, coupled with the robustness of the statistical analysis and the significance of the results, provide compelling evidence of the positive impact of GST on economic growth. These findings align with existing literature and support the notion that GST reforms have the potential to stimulate economic activity, enhance revenue generation, and promote inclusive development across states.

5. Final Considerations

It is essential to recognize that the observed relationship between GST revenue and economic development is not solely deterministic, and various factors may influence the magnitude and direction of this relationship. Factors such as government policies, institutional quality, socioeconomic conditions, and external shocks can all shape the impact of GST on economic outcomes. Dash and Kakarlapudi (2022) conducted a study that identified variations in GST revenue collection across several states, including factors such as tax compliance (measured by return filings), the extent of the informal sector, and urbanization. Policymakers have to use the insights to tailor actions that tackle the distinct challenges of various states while bolstering the overall stability and sustainability of the GST framework in India.

Furthermore, while the study provides valuable insights into the short-term effects of GST reforms, additional research is needed to assess the long-term sustainability and effectiveness of GST policies in fostering inclusive and equitable development. Future studies could explore the mechanisms through which GST influences economic growth outcomes, examine the distributional effects of GST reforms on different socio-economic groups, and evaluate the implications of GST on income inequality and poverty alleviation efforts.

In conclusion, the findings from this study emphasizes the significance of GST as a policy instrument for promoting economic growth in India. By generating additional revenue, enhancing efficiency, and fostering inclusive development, GST reforms have the potential to contribute significantly to India's socio-economic transformation. However, continued efforts are needed to address implementation challenges, ensure equitable distribution of benefits, and maximize the positive impact of GST on the well-being of all citizens.

Acknowledgment

The author would like to express sincere gratitude to all those who contributed to this research endeavour for their insightful discussions and feedback, which greatly enriched this study.

Ethical considerations

Not applicable.

Conflict of Interest

The authors declare no conflicts of interest.

Funding

This research did not receive any financial support.

References

- 1. Adhana, D. K. (2015). Goods and services tax (GST): A panacea for the Indian economy. International Journal of Engineering & Management Research, 5 (4), 332 338.
- 2. Bohn, H. (1998). The behaviour of US Public Debt and Deficits. The Quarterly Journal of Economics 113(3):949–963. Doi: 10.1162/003355398555793.
- 3. Carlos A. Vegh and Guillermo Vuletin (2015), How is Tax Policy Conducted over the Business Cycle, American Economic Journal: Economic Policy, 2015, Volume 7, Issue 3, pp. 327–370.
- 4. Central Board of Excise and Customs, Ministry of Finance. (2017). Revised GST rate for certain goods. Retrieved from h t t p: //w w w. c b e c. g o v. i n / r e s o u r c e s // h t d o c scbec/GST/gst_rates_approved%20_by_gst_council%20_11.06.2017.pdf
- 5. Chakraborty, P. & Rao, P. K. (2010, January 2). Goods and services tax in India: An assessment of the base. Economic and Political Weekly, 45 (1), 49 54.
- 6. Dandona Iti, Tomar P.K., Gupta S. & Verma S.K (2024), GST Dynamics in India: Exploring state revenue trends, GDP impact, and economic resilience, Multidisciplinary Reviews (7) e2024221, Malque Pub. https://doi.org/10.31893/multirev.2024221
- 7. Dani, S. (2016), A Research Paper on an Impact of Goods and Service Tax (GST) on Indian Economy, Business and Economics Journal, 7(4), 345-367.https://www.researchgate.net/publication/312427420
- 8. Dash, S.K., & Kakarlapudi, K.K. (2022). What explains interstate variation in GST collection? GIFT Discussion paper 2022/02. https://www.gift.res.in/ofk_im/extra/DP_5. Accessed on January 10, 2024
- 9. Erasmo D, P., Mendoza, E. G., & Zhang, J. (2015). What is a sustainable public debt? In Handbook of Macroeconomics, Vol. 2, pp. 2493-2597) Elsevier.
- 10. Ehisham Ahmed and Satya Poddar (2009), GST Reforms and Intergovernmental Considerations in India, Working Paper, Ministry of Finance, Department of Economic Affairs, India.
- 11. Fincke, B., and A. Greiner. (2011). Debt Sustainability in Germany: Empirical Evidence for Federal States. International Journal of Sustainable Economy 3(2):235–254. Doi: 10.1504/IJSE. 2011.039442.
- 12. Garg, G. (2014). Basic concepts and features of goods and services tax in India. International Journal of Scientific Research and Management (IJSRM), 2 (2), 542 549.
- 13. GST India.com (2016, March 21). Basic concepts of GST (Part 13) Constitutional amendment for GST. Retrieved from http://www.gstindia.com/basic-concepts-of-gst-part-13-constitutional-amendment-for-gst/
- 14. Goods and Services Tax Council. (2017). Retrieved from http://www.gstcouncil.gov.in/
- 15. Gopu, A. J., & Ravikumar, R. A Study on Collection, Composition and Business-Wise Contribution of GST in India. Assessed at researchgate.net.
- 16. Greiner, A., and B. Fincke. (2015). Public debt, sustainability, and economic growth. Switzerland: Springer International Publishing Media.
- 17. IMF (International Monetary Fund). 2011. Modernizing the Framework for Fiscal Policy and Public Debt Sustainability Analysis. Policy Paper. https://www.imf.org/external/np/pp/eng/2011/080511.pdf

- 18. Jain, A. (2013). An empirical analysis on goods and service tax in India: Possible impacts, implications and policies. International Journal of Reviews, Surveys and Research (IJRSR), 2 (1). Retrieved from https://www.ijrsr.com/January2013/5.pdf
- 19. Jain, J. K. (2015). Goods and service tax. Retrieved from https://www.caclubindia.com/articles/goods-and-st-basics 25424.asp
- 20. Kaur, B., Mukherjee, A., & Ekka, A. P. (2018). Debt sustainability of states in India: An assessment. Indian Economic Review, 53(1–2), 93–129
- 21. Kelkar, V. (2009, July 01). A tax for economic growth. Retrieved from http://www.livemint.com/Opinion/S0hlNhimkhl9OhAiYwnbYJ/A-tax-for-economic-growth.html
- 22. Khan, Mohd. Azam; Shadab & Nagma (2012) Goods and services tax (GST) in India: Prospect for states, Budgetary Research Review (BRR), ISSN 2067-1784, Budget Finance, s.I., Vol. 4, Iss. 1, pp. 38-64
- 23. Krishna Murari & Smriti Chetti (2020), Orissa Journal of Commerce, "Perceived Impacts of Goods and Services Tax (GST) and Growth of Micro, Small & Medium Enterprises (MSMEs) in Sikkim".
- 24. Kulkarni, S.R., & Apsingekar, S. (2021). A Study of Impact of GST on Indian Economy with Reference to Pune Region. Journal of Economic Studies.10 (3), 125-137. https://easychair.org/publications/preprint_open/Fz2W
- 25. Lourdunathan F. & Xavier P. (2016), A Study on Implementation of Goods and Services Tax (GST) in India: Prospectus and Challenges".
- 26. Mishra, N. (2018). Impact of GST on Indian economy. International journal of basic and applied research, 8(11), 385-389.
- 27. Mukherjee, S. (2015, September). Present state of Goods and services Tax (GST) Reform in India. Working Paper No. 2015-154, National Institute of Public Finance and Policy, 2-24
- 28. Mukherjee, S. (2019). Whether States Have Capacity to Sustain Projected Growth in GST Collection During the GST Compensation Period? Review of Market Integration, 11(1-2), 30-53.
- 29. Mukherjee, S. (2020a). Goods and services tax efficiency across Indian states: Panel stochastic frontier analysis. Indian Economic Review, 1–27,
- 30. Mukherjee, S. (2020b). Performance assessment of Indian GST: State-level analysis of compliance gap and revenue growth (No. 20/301).
- 31. Nikita Singhal, Shikha Goyal, Divya Sharma, Sapna Kumar, Shweta Nagar (2022). Do Goods and Services Tax Influence the Economic Development? An Empirical Analysis for India Vision: The Journal of Business Perspective, 2022, DOI:10.1177/09722629221117196
- 32. Nayyar, A., & Singh, I. (2018). A comprehensive analysis of Goods and Services Tax (GST) in India. Indian Journal of Finance, 12(2), 57-71.
- 33. Panda, A. & Patel, A., (2010). The impact of GST (goods and services tax) on the Indian tax scene. DOI: https://dx.doi.org/10.2139/ssrn.1868621
- 34. Pandith, Seema (2017), GST: Opportunities and Challenges for Indian MSMEs, Inspira Journal of Commerce, Economics & Computer Science (JCECS), Volume 3, Issue 3.
- 35. Poddar, S., & Ahmad, E. (2009). GST reforms and intergovernmental consideration in India (Working Paper No. 1/2009 DEA).
- 36. Rangarajan, C., and D. K. Srivastava. 2005. Fiscal Deficits and Government Debt: Implications for Growth and Stabilization. Economic and Political Weekly 40(27): 2919–293
- 37. Rathod, B. K. Study on GST/GDP, as a key indicators of economic growth. Compendium of, 21.
- 38. Reserve Bank of India, (2023). State Finances: A study of budgets -2022- 23.
- 39. Renjith, P. S. (2021). Has GST increased debt burden of Indian states? Kerala Economy, 2, 10-11.

- 40. Renjith, P. S., & Shanmugam, K. R. (2018). Sustainable debt policies of Indian state governments. Margin: The Journal of Applied Economic Research, 12(2), 224-243.
- 41. Roychowdhury, P. (2012). Vat and GST in India A note. Paradigm, 16 (1), 80 87.
- 42. 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. DOI: 10.17010/ijf/2017/v11i7/116568
- 43. Sehrawat, M., & Dhanda, U. (2015). GST in India: A key tax reform. International Journal of Research-Granthaalayah, 3(12), 133-141.
- 44. Srivastava, S. K., Sharma, P., & Bhatnagar, V. K. (2010). Impact of changing scenario of taxation in India on tax revenue & GDP. Journal of Accounting & Finance, 24(2), 104-112.
- 45. Taqvi, S. M. A., Srivastava, A. K., & Srivastava, R. K. (2013). Challenges and opportunities of goods and service tax (GST) in India. Indian Journal of Applied Research, 3 (5), 413 415.
- 46. Tripathi, S. (2018). An analysis of goods and service tax (GST) on India's GDP. Journal of Management Research and Analysis (JMRA).5 (2).105-109
- 47. Tripathi, S., & Tripathi, N. (2016, August 3). India: In a historic move, Rajya Sabha passes the GST Bill: Annexure (p.4). Retrieved from https://www.icicibank.com/managed-assets/docs/corporate/global-trade service/economic-reports/rajya-sabha-passes-gst-bill.pdf