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Indirect Tax Reforms and Welfare Outcomes in India: An Assessment of Equity and Efficiency

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Abstract

Indirect tax reforms have significantly reshaped India's fiscal framework, culminating in the implementation of the Goods and Services Tax (GST) as a unified national indirect tax regime. While GST was introduced to enhance efficiency, reduce cascading effects, and improve revenue mobilisation, its welfare implications remain a critical concern. This study assesses the equity and efficiency outcomes of indirect tax reforms in India by integrating evidence from GST rate notifications, household consumption expenditure patterns from the National Sample Survey (NSS 68th Round), inflation indicators from Consumer Price Index (CPI) releases, and GST revenue collection trends. The findings indicate that GST reforms have involved continuous slab rationalisation and commodity reclassification, including shifts of key construction inputs into higher tax brackets. Consumption-based welfare analysis reveals that rural and lower MPCCE households allocate larger expenditure shares to essential goods such as cereals, fuel, and basic services, making them more vulnerable to indirect tax burdens. Inflationary pressures further intensify welfare stress by reducing real purchasing power. At the same time, GST has strengthened fiscal efficiency through improved revenue mobilisation, although inter-state variation persists. Overall, the study highlights the need to balance revenue objectives with equity-sensitive tax design to ensure inclusive welfare outcomes under India's evolving indirect tax regime.

Keywords: Goods and Services Tax (GST), Indirect Tax Reforms, Welfare Outcomes, Equity and Efficiency, Consumption Expenditure

1. Introduction

The reforms in the indirect taxes have been the key in influencing the fiscal structure and the economic progress of India. The Indian taxation system has been experiencing significant structural change over the last several decades and finally the system has culminated with the Goods and Services Tax (GST) being introduced as a single indirect taxation policy. GST is also one of the most important tax reforms since independence in India, which is intended to substitute the piece-meal system of excise taxes, service taxes, and state-level value-added taxes with a national tax system. The reform was aimed at making the indirect tax structure easier, minimising the effects of cascades, and establishing a common market among states. These wider policy justifications and reform agendas were well stated in the official policy deliberations especially in the Economic Survey which highlighted GST as an enabler of efficiency, competitiveness and revenue productivity in the Indian economy (Ministry of Finance and Government of India, 2018).

GST evolution has to be treated in terms of the historical background of indirect taxation reforms that had the precursors to the introduction of GST. The tax system that was in place before GST was that of a multi-layered taxation, inter-state barriers and inefficiencies which were barriers to the seamless trade and economic integration in India. It has been observed by scholars that GST reform came as a solution to the long existing difficulties in harmonisation of the tax systems among the states and at the same time provide a stable flow in revenue collection. It was a slow and politically complicated reform process because of the various fiscal interests of the federal structure of India. The reason why GST was considered a revolutionary reform by Mukherjee (2015) is because it was aimed at eliminating the inefficiencies of the previous indirect tax system and enhancing the cornerstone of cooperative federalism.

The proposal of GST has also produced a voluminous academic and policy debate, which increasingly, research findings assess its effects on welfare allocation, equity provision, and financial performance. The available literature proposes that GST is not only a tax reform, but a larger overhaul of the Indian system of public finance. The systematic review of GST-related tax reforms shows that researchers are paying increased attention to the welfare implications of the indirect taxation, especially, consumption burden and distributive impacts (Deb, 2018). This new literature offers a basis on which to study the role of indirect tax reforms in determining the consequences of welfare to various socio-economic groups.

One of the major issues which have led to indirect tax reforms is the welfare effect on the citizens especially since indirect taxes influence prices and consumption behaviour. The indirect taxes, as opposed to the direct taxes, are embedded in the prices of goods and services, which implies that the households incur the burden, as exhibited in the expenditure patterns. The indirect taxes tend to be retrogressive in nature as lower income households are more likely to use a greater proportion of their earnings on basic commodities. Welfare economics thus puts forward the importance of examining equity implications, and in addition to the amount of revenue. The use of integrated modelling methods has been popular to assess distributional impact of indirect taxation, and it is emphasised that to comprehend the welfare effects of taxation, household consumption data must be combined with tax incidence models (Savage, 2017).

Alongside equity issues, indirect taxation reforms are directly associated with the inflationary pressures and cost-of-living forces. Indirect tax adjustments can also help in price adjustments; this is because the purchasing power of households is affected. In the long-run, GST was forecasted to stabilise prices because of increased efficiency, but transitional inflationary effects are still one of the main concerns in the welfare analysis. Extensive indicative evidence on the effects of reforms in pricing policies in India shows that the energy and indirect tax changes can have a substantial effect on the results of inflation and growth, which would support the importance of inflation as a welfare channel in indirect taxation literature (Ghosh, 2022). A different aspect of the GST reform is in respect to compliance, administration, and institutional capacity. GST created a technology-based compliance system, such as electronic invoicing, input tax credit system, and multi-stage reporting. Although these steps were supposed to enhance transparency and efficiency in taxation, they also caused compliance costs particularly to small businesses. It is thus important to know how compliance works in the assessment of whether GST is an effective reform. Haines (2017) posits that the GST compliance architecture is very important in determining the effectiveness and operations of the indirect tax system.

India GST Reforms have had a critical effect on the micro, small, and medium enterprises (MSMEs) which are the main pillars of the employment and production system. MSMEs are usually disproportionately disadvantaged about meeting challenging compliance requirements and tax restructuring. According to sector-specific research, GST has changed the business environment that MSMEs operate in by impacting the cost of inputs, supply chain systems, and reporting requirements. According to Siddiq and Prasad (2017), this is a crucial aspect of welfare and equity analysis because GST reforms have not impacted the MSME growth and sustainability in a uniform manner.

With respect to development, there have also been GST reforms associated with even greater aspirations on sustainable economic development and financial empowerment. Reform of the indirect tax is usually explained by the need not only to mobilise revenues but also to achieve inclusive development results. GST has been considered as a move towards the realisation of a more contemporary taxation system that can help in promoting long-term economic growth and increase fiscal capacity. According to Sahoo (2016), GST is a significant step in the Indian process of attaining sustainable development, but its welfare side should be considered with caution, to promote the inclusive benefits.

The complexity of the issue of equity and efficiency can also be clearly illustrated by the structure of GST rates on a goods and services. GST is applied using several tax brackets with a zero-rate imposed on necessities and higher rates are imposed on luxury and sin items. The GST service taxation also cuts across several brackets, an aspect that depicts varied treatment in different sectors. Schedules of the official GST rates are valuable evidence of the way indirect taxation is organized and the possibility of varying tax burdens in various categories of consumption (Goods and Services Tax Council, 2017).

Mobilisation of revenues is commonly used as an efficiency measure of the GST reforms. Among the major expectations of GST was the fact that it would enhance productivity of the indirect tax and generate a significant portion of tax base as well as enhance compliance by the single system. The statistics of revenue collection are thus an important measure of the GST efficiency results. The official information on the gross and net tax collection offers data about the performance of GST reforms and their role in enhancing the fiscal performance of the Indian indirect taxes (Central Board of Indirect Taxes and Customs, 2022a).

The current research paper will analyse the welfare effect of indirect tax reforms in India in particular outcomes of equity and efficiency under GST. The research questions that the study is going to answer are crucial research questions and relate to the effects of consumption-based welfare, equity aspects between the rural and the urban areas and the efficiency of GST in enhancing revenue mobilisation. Through its combination of policy reform, welfare economic views, the impacts of inflation, the compliance views, and the revenue efficiency efforts, the research paper fits the wider range of literature on indirect taxation and welfare results of developing economies.

2. Methodology

The paper uses a systematic approach to analysis in evaluating the welfare effects of indirect tax reforms in India with special reference to the equity and efficiency implications of the Goods and services tax regime (GST). The methods combines a policy level analysis of GST reforms with a household level welfare outcome in terms of patterns of consumption expenditure, and macro level analysis of revenue outcomes. Using the evidence of the official GST notifications, the data of household surveys, inflation indicators, and trends of tax collection, the study will present an in-depth framework to assess the effect of indirect taxation on the allocation of welfare and fiscal efficiency in India (Government of India, Ministry of Finance, Department of Revenue, 2022a). This model is also justified by the nationally representative welfare and inflation data (National Sample Survey Office, 2014a; National Statistical Office, 2021). The evidence of revenue efficiency includes the official statistics of tax collection (Central Board of Indirect Taxes and Customs, 2022a).

2.1 Conceptual Framework

The theory of indirect tax incidence and welfare economics is the theoretical basis behind the conceptual framework of this research. The effect of the indirect tax on the household welfare is mostly as a result of change in price of consumed products and services like GST. The burden of the indirect taxation on income and consumption groups differs greatly as households spend a percentage of their income on essential versus non-essential commodities. In the study, the welfare outcomes are assessed based on two dimensions that are central and they include equity and efficiency. Equity can be described as distributional effect of indirect tax reforms on socio-economic groups, i.e. rural and urban households, and lower consumption classes and higher consumption classes. Efficiency indicates how well the GST reforms enhance mobilisation of revenue, minimise distortions within the tax system and the productivity of the indirect taxation. Hence, the framework is the main trade-off that should be achieved between the realization of revenue efficiency and the need to make the tax burden equitable and not overburdened on vulnerable households.

2.2 Data Sources and Description

The research is entirely founded on the secondary data collected based on the official government publications and the nationally representative survey datasets. The data sources are chosen to include policy changes, welfare status of households, inflationary patterns and revenue performance post GST. These datasets will enable the study to relate indirect policy changes in taxation with both consumption-based welfare indicators and fiscal performance indicators (National Sample Survey Office, 2014b). Further macroeconomic assistance is pulled with official data series of CPI (Ministry of Statistics and Programme Implementation, 2022).

2.2.1 GST Policy Documents

The official Government of India GST rate notifications and schedules are used in the study to analyse the nature and direction of indirect tax reforms. These are the documents that are proof of rate restructuring, slab rationalisation, and reclassification of commodities under the GST regime. Using Integrated Tax Rate Notifications, specifically, the changes made in 2022, one can discover the most important changes in the tax slab on commodities (Government of India, Ministry of Finance, Department of Revenue, 2022a; Government of India, Ministry of Finance, Department of Revenue, 2022b). Moreover, the services taxation is also interpreted using GST rate schedules which are approved by the GST Council and have various slabs that include no taxation and tax rates at high levels (Goods and Services Tax Council, 2017). These are the policy documents based on which the reform design and development of indirect taxation in India are analysed (Government of India, Ministry of Finance, Department of Revenue, 2022c; Government of India, Ministry of Finance, Department of Revenue, 2022d).

2.2.2 Household Welfare and Consumption Data

Household welfare is determined based on consumption expenditure patterns based on the National Sample Survey (NSS) 68th Round Consumer Expenditure Survey (2011-2012) (National Sample Survey Office, 2014a). The data is a detailed estimate of the household consumption behaviour in rural and urban India and forms a point of reference in measuring welfare exposure to indirect taxation. Analysis of expenditure distribution between food and non-food items, consumption rates of the essential commodities, and rural to urban disparities in welfare susceptibility are analysed using the NSS data (National Sample Survey Office, 2014b). One of the key welfare indicators that has been used in the study is the Monthly Per Capita Consumer Expenditure (MPCE), which is a proxy of the living standards of the households and the economic well-being. The Fractile based on MPCE classification allows the study to understand the distributional effects of various groups of consumption (National Sample Survey Office, 2011).

2.2.3 Inflation and Cost of Living Data

In order to obtain the implications of the indirect tax reforms on the cost of living, the study uses the inflation indicators of the official Consumer Price Index (CPI) releases. The inflationary movements in the reform period are monitored with the help of the CPI and Consumer Food Price Index (CFPI) press releases released by the National Statistical Office (NSO), which is the Ministry of Statistics and Programme Implementation (National Statistical Office, 2021). Further inflation surveillance is based on the later release of CPI (National Statistical Office, 2022). Inflation trends are also applicable since indirect tax changes can help in price adjustments of essential goods and services, hence impacting real consumption welfare, particularly to the lower-income group that uses a higher proportion of its spending in necessities.

2.2.4 Revenue Efficiency Data

The outcomes of GST reforms in terms of efficiency are considered based on government collections of the indirect taxes. The analysis considers state-wise GST collection data between 2017-18 and 2021-22 that gives the change in the performance of GST revenue inter-state (Central Board of Indirect Taxes and Customs, 2018). The current data on revenue is added based on the recent GST data (Central Board of Indirect Taxes and Customs, 2022b). Also, gross and net tax collection indicators are used to assess the stability and buoyancy of indirect tax collections in GST (Central Board of Indirect Taxes and Customs, 2022a). Such datasets are being used to determine whether GST reforms have contributed to the enhancement of revenue mobilisation, fiscal efficiency, and general performance of Indian indirect tax system.

2.3 Variables and Indicators

To operationalise the equity and efficiency measure, the paper uses a system of welfare, distributional, and fiscal measurements. These are indicators that can be used to analyse the exposure to the welfare of households, the equity status of consumption groups, and the trend in efficiency in mobilisation of revenue under GST.

2.3.1 Welfare Indicators

The primary measure of living standards is the Monthly Per Capita Consumer Expenditure (MPCE) used as the measure of household welfare (National Sample Survey Office, 2014a). Secondly, consumption shares of basic commodities like cereals, pulses and edible oils are explored to know how the households are susceptible to indirect taxes. Patterns of expenditure on non-food needs such as fuel, education and medical care are also examined as these areas largely determine the welfare outcomes and household budget allocation.

2.3.2 Equity Indicators

The results of equity are measured by the rural to urban disparity in consumption exposure and in the distribution of expenditure across the MPCE fractile. The paper assesses the comparative burden of GST on expenditure on essential consumption and acknowledges that poor households consume more of their earnings on necessities. Increased proportion

of consumption of essential goods means that they are more vulnerable to indirect tax caused changes in prices, which makes one wonder whether indirect taxation is regressive.

2.3.3 Efficiency Indicators

The usefulness of indirect tax reforms is estimated through time-related trends in the collection of GST revenue, inter-state disparity in tax mobilisation, and gross in comparison to net collection of taxes (Central Board of Indirect Taxes and Customs, 2022a). These indicators give the level at which GST has enhanced productivity of indirect tax, improved revenue performance and increased firm fiscal performance than the previous indirect tax structures.

2.4 Analytical Approach

The research is based on the mixed method of analysis which combines descriptive results of policy analysis with welfare-incidence explanation. In this way, the research will be able to study the structural design of the GST reforms and its consequences on welfare allocation and fiscal effectiveness.

2.4.1 Descriptive Policy Analysis

In the first phase, the qualitative and descriptive analysis of GST reforms undertaken by using official rate notifications and service tax schedules will be utilised. According to the study, the key changes in GST slabs, reclassification, and rationalisation steps that were implemented during the period of reform are identified (Government of India, Ministry of Finance, Department of Revenue, 2022a). This gives the context of policy that is required to give the welfare outcomes and how the indirect tax reforms bring about the consumption environment.

2.4.2 Consumption-Based Equity Assessment

The evaluation of equity involves the association of the GST rate structures with the household consumption pattern based on the NSS data (National Sample Survey Office, 2014b). The analysis is based on budget balances of essential commodities used by lower MPCE categories, the differentiation of rural and urban populations on the indirect taxation, and the results of taxing necessities at higher rates. This method will give information on whether GST reforms give an excessive burden to poorer households, thus influencing welfare equity.

2.4.3 Revenue Efficiency Assessment

The results of efficiency are analysed with the help of the revenue trends based on the GST collection datasets (Central Board of Indirect Taxes and Customs, 2022b). The paper evaluates the growth and stability of GST revenues, inter-state difference in tax mobilisation ability and indirect tax efficiency improvement compared to the expectations before the reform. The revenue performance is thus considered to be a proxy of the success of GST reforms in enhancing the Indian indirect taxation.

3. Results

This section reflects the research results of the study through the analysis of the GST policy changes household consumption expenditure and the trend in inflation rate and GST revenue collection. Findings are formatted as per the conceptual framework of equity and efficiency where the indirect tax changes are attributed to welfare outcomes in socio-economic groups in India.

3.1 GST Rate Reforms and Structure

The policy papers on GST have been analysed, which shows that the indirect tax changes under GST have comprised of constant rate restructuring and reclassification of commodities. The Government of India and the GST Council have revised the tax schedules periodically to rationalise tax rates and increase the tax base and enhance the efficiency of revenue. Notices released in 2022 show that several goods were reclassified in different tax brackets, and this indicates the changing tax regime based on the desire to balance fiscal goals with sectoral factors.

3.1.1 Changes in GST Schedules and Commodity Shifts

The GST rate structure is organised through multiple schedules corresponding to different tax slabs such as 5%, 12%, 18%, and 28%. The changes in the classification of commodities are also dramatic in the amendments provided by the Notification No. 01/2022. Certain items previously taxed under Schedule I at 5% were omitted, while new items were inserted under Schedule II at 12%. Such reforms depict how the rate rationalisation could be practiced where the goods that are perceived to be non-essential or revenue-relevant are transferred to higher slabs as a way of increasing the tax collection rate.

A notable example of slab revision is the reclassification of fly ash bricks and certain building materials. Under Notification No. 01/2022, fly ash bricks with 90% or more fly ash content, fossil meal bricks, building bricks, and roofing tiles were shifted from the lower 5% category into the 12% tax slab. This change, effective from 1 April 2022, reflects a policy decision to increase taxation on construction-related inputs, which may have downstream implications for housing costs and infrastructure-related consumption expenditure. Such commodity shifts demonstrate how GST reforms can influence relative prices in key sectors of household welfare importance.

3.2 Household Consumption Patterns and Welfare Outcomes

Household welfare outcomes have a strong association with consumption behaviour especially how we spend our money on food and non-food items. The data on NSS consumption expenditure indicates that necessities make a significant proportion of household's budget, particularly among rural and low MPCE populations. Because the indirect taxes are imposed equally

in the channels of consumption, the higher the proportion of expenditure that households spend on necessities the more they will be affected by welfare losses occasioned by indirect tax reforms.

3.2.1 Food Consumption Trends

According to the NSS 68th Round data, there are significant trends in the food consumption habits in India. Cereals are an essential element of household diets, but per capita use of rice has decreased between 2004-05 and 2011-12. The rural usage of rice dropped to 5.98 kg/month per person and the urban consumption dropped to 4.49 kg. They simultaneously saw a significant rise in the proportion of rice being bought under the Public Distribution System and this indicates a developing dependency on subsidised systems to support food security. Consumption of pulses on the other hand, had a slight growth with 705 grams changing to 783 grams and 824 grams to 901 grams of consumption in the rural and urban areas respectively. The consumption of edible oil was also great as it was estimated to be 674 grams per capita per month in rural India and 853 grams in urban India. These findings imply that food consumption is still necessary and price sensitive meaning that indirect tax reforms which impact food-related commodities can have a direct effect on welfare.

3.2.2 Non-Food Welfare Components

Education, medical care, and energy consumption are non-food expenditure items that are crucial welfare levels beyond the basic nutrition. According to NSS evidence, the amount of educational spending of an individual in rural India was about 50 rupees per month per person and in urban India 181.5 rupees per month per person which show significant rural-urban differences in human capital expenditure. Medical care expenditure patterns further suggest that medicines account for nearly 80% of non-institutional medical expenses in rural areas and 75% in urban areas, reflecting the high burden of healthcare costs on household welfare. Energy consumption patterns also reveal unequal access, with electricity consumed by 96% of urban households but only 74% of rural households. LPG usage was reported by nearly 71% of urban households compared to only 21% of rural households, while dependence on firewood remained extremely high in rural areas. Table 1 summarises household consumption and expenditure patterns in the rural and urban areas in India.

Table 1. Selected indicators of household consumption and expenditure in rural and urban India (National Sample Survey Office, 2014a; National Sample Survey Office, 2014b)

| Indicator | Rural India | Urban India |
|-------------------------------------|-------------|-------------|
| Rice consumption (kg/person/month) | 5.98 | 4.49 |
| Wheat consumption (kg/person/month) | ↑ 0.1 | ↓ 0.35 |
| Edible oil consumption (gm/month) | 674 | 853 |
| LPG-using households (%) | 21 | 71 |
| Education expenditure (₹/month) | 50 | 181.5 |

These results demonstrate that indirect taxation on fuel, healthcare, or education-linked services may have uneven welfare implications across regions and income groups.

3.3 Equity Outcomes of Indirect Taxation

Equity results play a key role in the assessment of welfare because indirect taxes are deemed as regressive when the poor households use a larger percentage of their income in the purchase of taxable commodities. The findings indicate that GST reforms aim at raising revenue but create issues of distributional equity, based on differences on consumption-based exposure.

3.3.1 Rural–Urban Differences in Consumption Exposure

The consumption pattern recorded by the NSS records indicates that rural families spend a higher amount of money on necessities like cereals, fuel and cooking energy, as compared to urban families who spend a relatively higher amount of money on services, education and diversified consumption packages. Higher dependence on traditional fuels and the lack of access to modern sources of energy are also demonstrated by rural households. These disparities suggest that GST reforms that impact necessary items or fuel-related products can have a comparatively greater impact on the welfare of rural households, thus expanding consumption inequality.

3.3.2 Regressivity Concerns for Essential Commodities

An indirect taxation would be regressive when basic luxury constitutes a significant portion of the spending by the poor. Figure 1 shows how the burden of GST is decreasing as a ratio of income among MPCE groups.

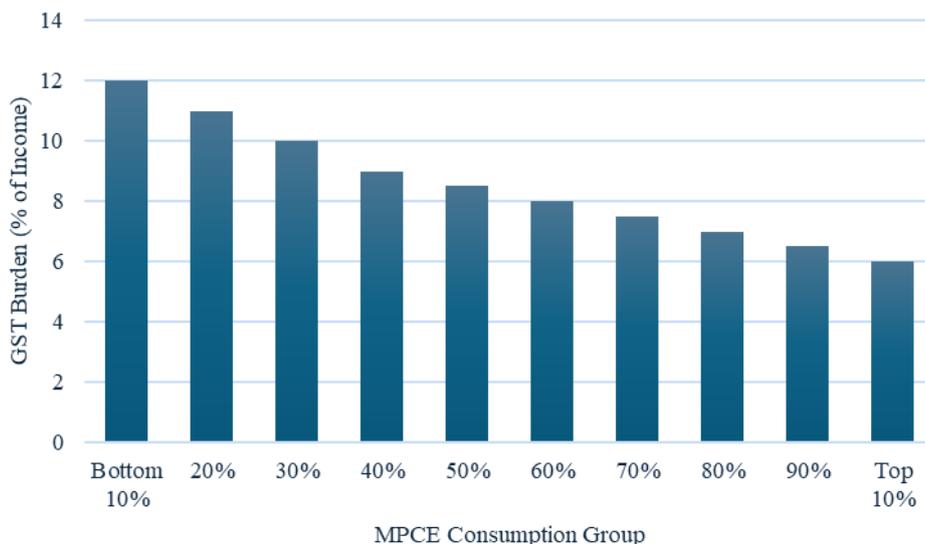


Figure 1. Regressive Burden of GST Across MPCE Consumption Groups (National Sample Survey Office, 2014a; National Sample Survey Office, 2014b)

According to the NSS evidence, food and fuel are still the leading types of consumption, particularly in rural families. As a result, household-related goods that have a strong correlation with GST rate changes or slab shifts can impact poor households in an uneven manner. Even modest tax rates will create strong welfare pressure when consumption is focused on necessities with low alternatives.

3.3.3 Role of PDS in Mitigating Tax Burden

The fact that more purchases are done through the Public Distribution System, especially rice and wheat, implies that subsidised welfare systems are important in alleviating the consumption burden. The NSS points out that since 2004-05, the per capita consumption of PDS rice in rural India increased twofold and in urban India, it increased significantly. This indicates that redistributive safety nets like PDS are still important in correcting the regressive nature of indirect taxes by ensuring that consumption stability is maintained among households that are vulnerable.

3.4 Inflation and Welfare Stress

The trend of inflation is another avenue in which indirect tax reforms can affect the results of welfare. The increasing consumer prices increase the burden of taxation especially among the households with fixed or low income.

3.4.1 CPI Inflation Trends During the Reform Period

The official press releases of CPI indicate that inflation has been a thorn in the flesh over the time in which GST reforms have occurred. For November 2021, CPI inflation was recorded at 4.29% for rural areas, 5.54% for urban areas, and 4.91% at the combined level. Table 2 shows the sector-based consumer price inflation in India of given commodity groups.

Table 2. Sector-wise consumer price inflation across major commodity groups in India (National Statistical Office, 2021)

| Commodity Group | Sector | CPI Index | Inflation Rate (%) |
|--------------------|----------|-----------|--------------------|
| Cereals & Products | Rural | 118.9 | 10.60 |
| Cereals & Products | Urban | 121.2 | 9.68 |
| Cereals & Products | Combined | 119.6 | 10.33 |
| Clothing | Rural | 116.5 | 9.39 |
| Clothing | Combined | 115.8 | 8.94 |

This indicates that urban households faced relatively higher inflationary pressures, although rural households remained vulnerable due to greater expenditure concentration on essentials.

3.4.2 Food Inflation and Cost-of-Living Pressures

The Consumer Food Price Index is another way of measuring food inflation, which remained high. In November 2021, CFPI inflation was 1.09% in rural areas and 3.33% in urban areas. Food forms a large part of household expenditures, particularly in poorer households and as such, inflationary changes coupled with the importance of indirect taxes may lower real purchasing power and aggravate the welfare performance. These results indicate that the inflationary dynamics should be considered during the assessment of the welfare implications of GST reforms.

3.5 Efficiency Outcomes in GST Revenue Collection

The outcomes of efficiency are measured using GST revenue performance and trends on tax collection. One of the major aims of GST reforms is revenue mobilisation, which will enhance the productivity of fiscal policies and indirect taxation.

3.5.1 Trends in Gross and Net GST Collections

The gross and net tax collection datasets indicate that GST has become a central component of India's indirect tax revenues. Figure 2 presents the trend in gross and net GST collections from 2017–18 to 2021–22, highlighting improvements in revenue mobilisation under the GST regime.

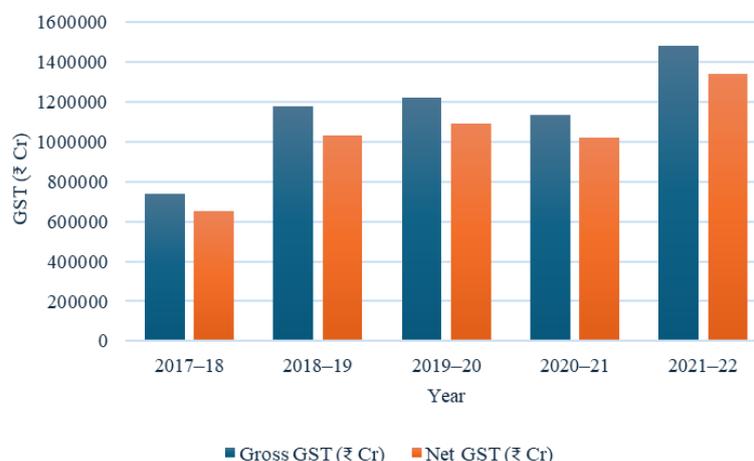


Figure 2. Trends in Gross and Net GST Collections in India (2017–18 to 2021–22) (Central Board of Indirect Taxes and Customs, 2022a)

The upsurges in collections indicate the growth of the tax base and better compliance processes in the long term. The shift to more uniform tax systems under GST implies that the individual tax systems would be efficient in terms of revenue collection relative to disjointed pre-reform indirect tax systems.

3.5.2 State-wise GST Performance Comparison

The GST collection data on a state-by-state basis indicates that there is inter-state difference in the ability to mobilise revenue. In Figure 3, the variation in GST revenue mobilisation between states is shown, and this shows that the performance of taxes between Indian states has been varied largely.

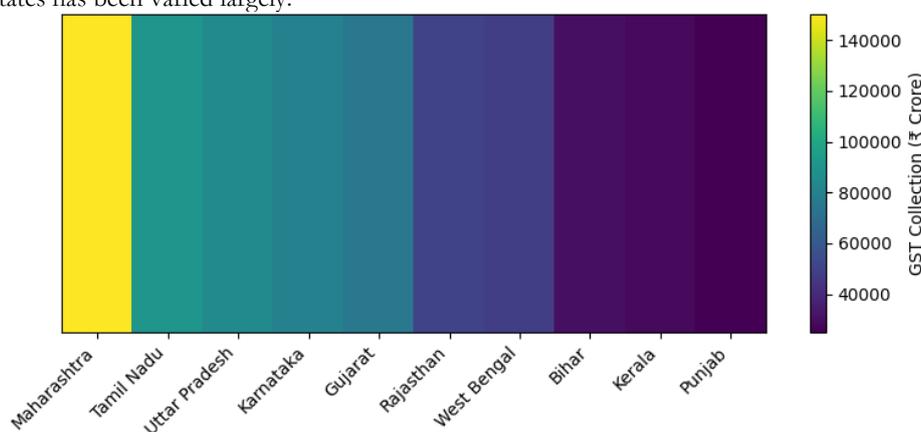


Figure 3. Heat Map of State-wise GST Performance (Central Board of Indirect Taxes and Customs, 2018; 2022b)

Variation in industrial bases, consumption patterns and level of compliance are some of the differences that cause uneven GST performance among states. This kind of variation implies GST efficiency performance is not equal across the country and fiscal gains are regional economic structure based.

3.5.3 Implications for Revenue Efficiency

Overall, GST reforms have helped in enhancing indirect tax revenue mobilisation, but efficiency improvement is still associated with the ongoing rationalisation, compliance improvement and enhancements to the administration. These findings portray that though GST has enhanced fiscal efficiency; there is a problem on equity that stems because of the consumption-based sphere of indirect taxes and the susceptibility of the poorer households to price and tax impacts.

The findings show that through the commodity changes and rationalisation of slabs, GST reforms have drastically transformed the Indian system of indirect taxation, and this has had a significant implication on the distribution of welfare. Household consumption behavior shows that necessities are still core in the results of welfare, and equity issues about the retrogressive weight of indirect taxation are brought up. Welfare stress continues to increase because of inflationary pressures, and GST

revenue trends indicate a positive trend in fiscal efficiency. Combined, the results indicate the necessity of mitigating revenue goals with policy actions that are sensitive to equity in securing inclusive welfare outcomes in case of indirect tax reforms.

4. Discussion

Here, the results of the research are discussed in terms of indirect tax reforms as GST and the implications of the same on welfare outcomes in India. The debate is organized based on equity and efficiency and using the available academic materials, the results are interpreted and the overall importance of GST reforms on households and fiscal policy highlighted. Findings of the research point to the fact that GST reform has brought about a change in the indirect tax system in India in terms of rationalisation of the slabs and reclassification of commodities in India. Such changes have an impact on household welfare in the main form of burden channels consumption since the indirect taxes have an impact on the prices of goods and services consumed by households. Such a shift of some commodities to a higher tax bracket implies that GST reforms continue to change and keep on changes to realize their revenue targets. GST has thus become one of the most radical changes in the taxation system in India that has transformed the production and consumption choices in all the sectors (Deshmukh et al., 2022).

One primary welfare implication of the results is the divergent indirect taxation within consumption groups. Because the proportion of essential goods makes up a large portion of spending by the lower income households, price adjustments caused by the tax can decrease the real purchasing power and welfare. The equity aspects of GST reforms are thus very dependent on the household consumption behaviours particularly by the rural and economically disadvantaged groups. Distributional outcomes are the main issue because tax policy reforms like GST entail a complicated trade-off between equity and the administration structure of the tax system (Rajagopalan, 2022). In the findings, it is also evident that the effects of welfare can be specifically applicable in rural regions, since households there devote bigger proportions of their expenditures to such necessities as food and cooking energy. This suggests that the GST reforms can be even more welfare-based among the vulnerable groups, which again reinforces the need to implement equity-based reform interventions.

The paper highlights the inherent trade off amidst equity and efficiency in indirect taxation. On the one hand, GST reforms have consolidated the mobilisation of revenue and helped to make the Indian indirect tax system more effective. The increase in the GST collections observed implies improved fiscal ability and improved tax compliance which is essential in empowering public finances. The empirical evidence shows that the efficiency of GST is different in Indian states, which implies that the reform has increased the tax productivity with an uneven regional performance (Mukherjee, 2020). This difference is attributed to the disparity in economic structure, capacity of adhering and consumption levels across states. Conversely, indirect taxation is still accompanied by the welfare pressures that are important especially in the presence of inflationary pressure and tax reforms. Increase in consumer prices can make GST heavier on the household particularly households that cannot easily change the consumption pattern. The post-GST inflationary issues need to be scrutinized especially cautiously because the indirect taxes have the potential to increase the impacts of cost-of-living pressures that outweigh impact on the lower-income households (Kumar & Dash, 2021). Therefore, although GST reforms make the fiscal system more efficient, they also have equity problems since consumption-based taxation is more likely to put a relatively higher proportional burden on poorer households. The strike between these conflicting goals continues to be a policy issue that is of significant concern to the indirect tax system in India.

The results of the present research are in line with the available literature that considers GST as the landmark reform and one that has significant macroeconomic effects. GST has been greatly debated to be a structural reform which would help to establish a common national market, lower cascading impact of taxes, and enhance growth opportunities. GST is a long-term reorganization of the Indian taxation system that could have a positive impact on the GDP growth due to the efficiency and competitiveness levels (Kumar, 2017). Sectoral research are also pointing out that GST reforms produce varying effects among industries and consumer markets. GST has played a significant role in Indian retail, changing the pricing, supply chain, and consumption behaviour, which consequently impacts the outcomes of household welfare (Deepak and Singh, 2018).

Economic modelling frameworks have also been used to analyse GST reforms in terms of efficiency and redistribution. Dynamic CGE methods prove that GST can enhance allocative efficiency and growth and create redistribution effects necessitating compensatory welfare (Bhattarai, 2017). The wider literature also implies that the effects of GST are widespread to the competitiveness and exports in the industries. The GST can affect the performance of the industrial sector and competitiveness in exports through indirect tax incidence variation across the production networks (Thowseaf & Millath, 2016). Generally, the research is in line with the literature on indirect tax in developing economies; the reforms to promote efficiency frequently create issues in terms of regressivity and distribution of welfare.

The results of the study have significant policy implications to the need to ensure that indirect tax reforms facilitate inclusive welfare processes. Although GST has improved the mobilisation of revenue and minimised the fragmentation within the tax system, the equity implications of taxing basic goods and services are also high. Policymakers must thus make sure that rate rationalisation is not applied disproportionately to poor households, especially in rural regions. GST can be considered not only as a fiscal reform but also as the move towards sustainable economic development that needs the support of the policies that safeguard vulnerable populations and work toward the welfare goals (Sahoo, 2016). Moreover, the reforms of the GST are discussed theoretically, where the emphasis is on the need to shape the system of taxation in such a manner that it is easy to comply with and at the same time bring fairness and equity. As an element of the GST reforms, equity-sensitive aspects, e.g. targeted exemptions, compensation strategies, or redistribution policies, should be strengthened (Shukla and Kushare, 2017). The research hence suggests that reforms on GST should be accompanied by a gradual welfare policy, including the introduction of an improved social safety net and a prudent slab design of necessities so that efficiency gains are not achieved at the expense of rising inequality.

5. Conclusion

This paper has discussed welfare implications of indirect tax reforms in India giving particular attention to the equity and efficiency outcome of the GST regime. The evidence indicates that GST has revolutionised the indirect tax structure of India with the slab rationalisation, commodity reclassification and a single compliance system with the aim of reinforcing the productivity of revenue. The reforms on the GST have been dynamic with policy adjustments that include reallocating the amount of selected goods to higher tax brackets in the quest to achieve fiscal efficiency. Nevertheless, the welfare assessment using the patterns of NSS consumption expenditures suggests that indirect taxation will have disproportionate taxation in terms of socio-economic classes. The rural households and the poorer consumption classes are still more vulnerable because they are more prone to the essential commodities and also because of their reliance on traditional fuels and their low substitution capacity. The level of inflation also increases the stress in welfare by reducing the real purchasing power especially to the vulnerable households. Though safety nets like the Public Distribution System are used to reduce the regressive effects, equity is still a problem with the consumption-based tax structure. In terms of efficiency, GST has helped in better revenue collection and fiscal capacity however the disparities in the benefits are evident in terms of state-to-state differences. The results highlight the core trade-off between attaining tax efficiency and distributional fairness. Then, GST reforms in future should focus on equity-sensitive rate structuring, specific exemptions on necessities, and a more powerful redistributive mechanism that would ensure that the gains of efficiency are not at the cost of higher inequality. Indirect tax reforms in India need a balanced strategy to be used in order to support inclusive and sustainable welfare in India.

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