Analyzing the Good and Services Tax: A System of Nationalized VAT

InfoSphere
A Centre for New Economics Studies Initiative
Aliva Smruti, Ashu Jain, Shikhar Rana
The Goods and Services tax was proposed for the first time in the budget speech of the Union Finance Minister in 2006-07. It was seen as the ultimate step in the transition from a disaggregated indirect tax system.

Stepping forward from the State Value Added Tax (VAT) system to nationalised value added tax, the aim was to create ‘One Tax for All’.

Its benefits could simply be defined as –

“Reforming the tax system is critical to achieve fiscal consolidation, minimise distortions and to create stable and predictable environment for the market to function.”

This Issue of Infosphere aims to give a basic background to the Goods and Services Tax and the debate surrounding it.

Topics covered:
1. Basics of GST
2. Analysis of the revenue generated under GST
3. A comparison of ‘expectation vs. reality’ in the intention-outcomes of GST regime
4. Impairments to the revenue generation process
5. Possible Solution employed by the government
1. **Indirect Tax** - An indirect tax is a tax collected by an intermediary (such as a retail store) from the person who bears the ultimate economic burden of the tax (such as the customer). An indirect tax is one that can be shifted by the taxpayer to someone else. An indirect tax may increase the price of a good so that consumers are actually paying the tax by paying more for the products.

2. **Central excise duty** - A tax which is charged on excisable goods that are manufactured in India and are meant for domestic consumption. The term "excisable goods" means the goods which are specified in the First Schedule and the Second Schedule to the Central Excise Tariff Act 1985.

3. **Sales Tax** – It is a form of tax that is imposed by the State Government on the sale or purchase of a particular commodity within the country. Sales Tax is imposed under both, Central Government (Central Sales Tax) and State Government (Sales Tax) legislation. Sales Tax acts as a major revenue-generator for the various State Governments.

4. **Value Added Tax** – A value added tax (VAT) is a flat tax levied on an item. With a VAT, portions of the tax amount are paid by different parties to a transaction.

5. **Goods and Services Tax** – Nationalized VAT

6. **Tax Cascading** – Tax levied on tax.

7. **Compensation Cess** – A central cess levied to pay any excess requirements by states if any state is not able to meet the assure 14% growth in tax revenue.

8. **Revenue Neutral Rates (RNR)** - It is a structure of different rates established in order to match the current revenue generation with revenue under GST.

9. **The four major brackets of taxes** – 5%, 12%, 18% and 28%
India’s Indirect Tax System

Indirect tax was first introduced in India in the form of excise duty on Indian products as a measure of protection for goods imported from the UK.

1944

Central Excise Duty and State Sales Tax

1991

States began introducing Value Added Tax (VAT) one by one

2005

2006

2017

2021

The 1991 Tax Reform Committee recommended introduction of VAT.

The Empowered Committee of State Finance Ministers (EC) requested to come up with a roadmap and structure for GST aimed at 2010.

States guaranteed 14% tax increase on base year of 2016-17 for next 5 years.

The compensation cess to be only continued for paying back the debt taken due to COVID-19.

Source: Infosphere
The average tax (%GDP) has been the highest under Goods and Services Tax (given data up to 2018).

However, post pandemic there has been a relative decline.
The Debate THEN relevant NOW

1. Changes in goods assignment of a tax bracket
   1. Political tool for populist government
   2. Complicates the filling system
2. State lost its autonomy on goods and services tax but is weighed down by spending requirements (especially since COVID-19)
3. Guaranteed 14% increase in state revenue has increased tax burden but is essential for states to cover for loss.
4. Under GST, small and medium enterprises (MSME’s) operating in the informal sector were made vulnerable and as the country went into lockdowns they were shut all together, crippling a significant employer of the economy.
5. Keeping goods like petrol and diesel out of GST system allowed taxes taken on these to increase, hampering:
   1. Input cost decline
   2. Factory setting up decision of firms

EXPLAINER | India's tax crisis: Why GST needs rationalisation?

When the GST was implemented in 2017, there were over 200 items which were in the 28% tax slab, but subsequently the rates on many of these items were cut to 18% or less.

States’ Loss of Fiscal Autonomy in a Centralised Federal System

M. Govinda Rao

Demonetisation and GST: A tale of two economic ‘mis’adventures

The duo are the Modi government’s biggest economic salvos till date, both marred by inadequate planning and shoddy implementation.
GST poses a question on the federal system.

The federal system has a structured distinction between jurisdiction of union and states but with GST, the GST council holds power over major source of state revenue and supersedes their jurisdiction.

This allows the centre to have a say in how a state taxes, which dilutes the federal system power structure.

Source: [Goods and Services Tax](#)
Under PRE-GST SYSTEM
Prior to GST, fiscal powers between the Centre and the States were clearly demarcated in the Constitution with almost no overlap between the respective domains.

The Centre has the powers to levy tax on the manufacture of goods (except alcoholic liquor for human consumption, opium, narcotics etc.) while the States have the powers to levy tax on sale of goods.

In case of inter-states sales, the Centre has the powers to levy a tax (the Central Sales Tax) but, the tax is collected and retained entirely by the originating States.

Under GST SYSTEM
Levying of indirect taxes allowed states to tax goods discriminately to allow maximum tax collection.

This was necessary as states list has subjects which require heavy spending and have very limited resources especially as borrowing is costlier relative to the union government.

With GST, the states no longer have this power. This increases the risk of the federal system breaking down, and centre acquiring higher power than states.
By amalgamating a large number of Central and State taxes into a single tax, GST will mitigate ill effects of cascading and pave the way for a common national market.

There were also proposed benefits from the consumers point of view:
- Reduction in the overall tax burden on goods, which was estimated to be around 25%-30%.
- Transparency to the consumer on the actual burden of indirect taxes on goods and services.

Introduction of GST would also make Indian products competitive in the domestic and international markets owing to the full neutralization of input taxes across the value chain of production and distribution.

This tax, because of its transparent and self-policing character, would be easier to administer.

It would also encourage a shift from the informal to formal economy.

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### Why the need for a Goods and Services Tax?

<table>
<thead>
<tr>
<th>Indirect Tax Systems</th>
<th>Producer</th>
<th>Whole Seller</th>
<th>Retailer</th>
<th>Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Manufacturing Cost</td>
<td>Tax (R=Rs.1 or R=5%)</td>
<td>Bought Price</td>
<td>Value Added</td>
</tr>
<tr>
<td>Central Excise Duty and State Sales Tax</td>
<td>10</td>
<td>1</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>0.5</td>
<td>0.5</td>
<td>10.5</td>
<td>4</td>
</tr>
<tr>
<td>Goods and Services Tax</td>
<td>10</td>
<td>0.5</td>
<td>10.5</td>
<td>4</td>
</tr>
</tbody>
</table>

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Source: Goods and Services Tax(Kavita Rao), extracted by infosphere
The movement of CGST and IGST since July 2017 had been increasing in the pre pandemic period but declined post pandemic.

Beginning of an Economic Slowdown

Global COVID Pandemic

Data from Eway bill GST
<table>
<thead>
<tr>
<th>Year</th>
<th>Average of Difference between actual and calculated of all States *</th>
<th>Standard Deviation of Average Difference*</th>
<th>CESS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2018</td>
<td>10529.3</td>
<td>10106.14</td>
<td>56319.68</td>
</tr>
<tr>
<td>2018-2019</td>
<td>9343</td>
<td>8680.182</td>
<td>87289.28</td>
</tr>
<tr>
<td>2019-2020</td>
<td>10920.40</td>
<td>10222.56</td>
<td>88306.70</td>
</tr>
<tr>
<td>2020-2021</td>
<td>15015.6</td>
<td>14688.08</td>
<td>79146.32</td>
</tr>
<tr>
<td>2021-2022</td>
<td>24634.3</td>
<td>25651.68</td>
<td>22960.95891</td>
</tr>
</tbody>
</table>

Data from Eway bill GST, calculation by Infosphere

*All values in Rs. Crores

Each state was suppose to have a revenue growth of at least 14% but that did not manifest and there was a requirement for compensation.
Key implications for the Economy

1. It was able to mitigate the cascading effect without tax (% GDP) declining.

2. The states’ collection of taxes however was lower than expected for the entire 4 years.

3. The compensation cess created additional tax burden for the consumers.

4. The revenue growth starts declining along with economy decline.

5. Actual revenue declined with the pandemic.
The Case Of ASEAN Countries

The extent of the impact of GST varies depending on the governance, compliance cost, and economic distortion.

Secondary data of the real GDP, household final consumption expenditure (HCE), general government final expenditure (GCE) for Philippines, Singapore and Thailand was gathered since year 1960 till 2020 from the World Bank database.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Effects on Log GDP(current US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households and NPISHs Final consumption expenditure (current US$)</td>
<td>2.78e^13</td>
</tr>
<tr>
<td>General government final consumption expenditure (current US$),</td>
<td>-2.64e^12</td>
</tr>
<tr>
<td>After implementing of GST, in Philippines</td>
<td>-10.02%</td>
</tr>
<tr>
<td>After implementing of GST, in Singapore</td>
<td>17. 17%</td>
</tr>
<tr>
<td>After implementing of GST, in Thailand</td>
<td>-40.93%</td>
</tr>
</tbody>
</table>

If all other variables are fixed, the GDP in the Philippines and in Thailand was reduced by 10.02431% and 40.9296% respectively after implementing the GST. Only in Singapore, the GDP increased by 17.17177% during the period of implementing the GST, all significant at 0.1 significance level.

Based on work of Saravanan Venkadasalam, International Conference on Economics, Education and Humanities (ICEEH'14) Dec. 10-11, 2014 Bali (Indonesia)
GDP growth lower than anticipated; an economic distortion

- With decrease in GDP growth rate, especially with lockdown, indicate a weak consumption demand.

- Thus, sales of goods, especially durable goods like – furniture, etc decline.

- As sales decline the revenue generated also declines—the decline mostly happens in goods under the higher tax bracket thus the decline in GST is much more than the rate of decline in consumption.
The constant changes to the GST system created further challenges to the smooth functioning of the new system.

The government issued about 833 notifications over a period of four years from 2017 to 2021, to modify the GST system.

Multiple changes in the law have led to wrong interpretations.

Further, based on these slabs and rules companies made major decisions and when the regulations change, the already impacted businesses which are bearing with the new laws face even more constraints.

Thought!!!

Most of the countries took long time for GST stabilization and for India the focus should be on steady increase in revenue collection from the new indirect tax regime rather than tinkering with rates.
What is an e-way bill and its objectives?

Implemented in 2018, an E-way bill is a mechanism to ensure that goods being transported comply with the GST Law and is an effective tool to track the movement of goods and check tax evasion.

The e-way bill provisions aim to remove the ills of the erstwhile way bill system prevailing under VAT in different states, which was a major contributor to the bottlenecks at the check posts.

Moreover different states prescribed different e-way bill rules which made compliance difficult. The e-way bill provisions under GST will bring in a uniform e-way bill rule which will be applicable throughout the country.

The physical interface will pave way for digital interface which will facilitate faster movement of goods. It is bound to improve the turnaround time of vehicles and help the logistics industry by increasing the average distances travelled, reducing the travel time as well as cost.

Source: Eway bill GST
How does it increase GST collections?

<table>
<thead>
<tr>
<th>Feature</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>It blocks the generation of multiple EWBs on one Invoice/ Document, so if the EWB is once generated using an invoice number or document number, then none of the other parties can generate another EWB using the same invoice number.</td>
<td>This leads to reduced generation of EWBs on the same invoice number and has increased the tax compliance</td>
</tr>
<tr>
<td>Blocking/unblocking of EWB due to non-filing of Returns. If the GST registered taxpayer has not filed Return 3B for the last two successive months in GST common portal, then the GSTIN is blocked for further EWB generation.</td>
<td>Improved tax compliance at the GST Common portal.</td>
</tr>
</tbody>
</table>

Thus, blocking of EWBs for non-filing of Returns has helped significantly in tax compliance. Reports on blocked taxpayers and their corresponding EWB transactions give a fair estimation of the tax liability. It has helped the officers in pursuing the tax collection thereby increasing the same.

Source: Eway bill GST
1. The system of GST has been able to nullify the cascading effect which in theory should allow for reduction of input cost, equate the cost of setting up of factory and store houses nearby, making the industries more competitive and reduce the total tax burden on a consumer.

2. This however, did not manifest as the system of GST had two major problems – unanticipated GDP decline and design faults.

3. The decline in GDP created a economic distortion due to which the sales in the economy reduced, especially in the higher bracket, and thus the tax revenue reduced.

4. The one possible addressable is the flow of design- the incoherent listing under the four brackets, the constant changing of brackets increasing the administration cost of the actual filling and increasing unfamiliarity creating confusions, procedure of compensation, etc.

5. Most of these settled with the duration, however, the incoherent listing under the four brackets has still not been properly addressed.

6. There was evasion of taxes even under this system, this was one of the major flaws which was then rectified using the E-way bill.

7. Another component affecting the firms decision is petrol as it is a extremely costly input, not including this under GST allowed for input costs to remain high and change with location.
Politics of GST on Petroleum Products!

When GST was introduced petroleum products namely petrol, diesel, natural gas, kerosene, crude oil, etc. were kept outside the purview of GST coverage. There is also no clamour to include it under GST. This is because it is both in the interests of the states and the Centre to have it like this. The Centre charges an excise duty on these products while the states levy VAT which gives both these entities leeway to increase it to reinforce government coffers or to decrease it to encourage economic activity. If petroleum products were brought under the highest 28% slab of GST it would see a significant reduction in prices with a huge lowering of taxes collected on it by the government.

Can the states meet requirements for revenue without compensation cess?

The spending requirements of states governments increases during recessions to restart the economy. With the pandemic a constant spending higher than before has been required. As compensation cess has been withdrawn more resources are needed at a time tax revenue is falling and borrowing is costly. The only way is to tax on the goods still not under GST increasing there costs.
For any inputs, comments or clarifications please contact The Centre for New Economics Studies at cnes@jgu.edu.in.

Thank you!
**Actual Regression result**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 183</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>99.563475</td>
<td>67</td>
<td>1.48602202</td>
<td>F(67, 115) = 204.26</td>
</tr>
<tr>
<td><strong>Residual</strong></td>
<td>0.83664988</td>
<td>115</td>
<td>0.007275216</td>
<td>Prob &gt; F = 0.0000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.400125</td>
<td>182</td>
<td>0.551649038</td>
<td>R-squared = 0.9917</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adj R-squared = 0.9868</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Root MSE = 0.08529</td>
</tr>
</tbody>
</table>

| LogofGDPcurrentUS | Coef.   | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|-------------------|---------|-----------|-------|-----|---------------------|
| HouseholdsandNPISHsFinalcons | 2.78e-13 | 5.27e-13 | 0.53  | 0.598 | -7.65e-13 to 1.32e-12 |
| Generalgovernmentfinalconsump  | -2.64e-12 | 1.52e-12 | -1.74 | 0.085 | -5.66e-12 to 3.74e-13 |
| AfterimplementingofGSTinTh    | -.409296 | .0476095 | -8.60 | 0.000 | -.5036013 to -.3149907 |
| AfterimplementingofGSTinSi    | .1717177 | .0534749 | 3.21  | 0.002 | .0657941 to .2776412 |
| AfterimplementingofGSTinPh    | -.1002431| .0543771 | -1.84 | 0.068 | -.2079537 to .0074675 |

* Households and NPISHs Final consumption expenditure (current US$), General government final consumption expenditure (current US$), After implementing of GST, in Thailand, After implementing of GST, in Singapore, After implementing of GST, in Philippines