Indirect Tax Reform in Bihar: From VAT to GST

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What Informs Political Economy of Tax Design

- Contrary to the dominant assertions within economics, universal ‘efficiency’ considerations did not inform the design and implementation of VAT in various parts of the world.
- Europe- VAT was a mode of ‘economic integration’ of homogenous countries.
- Transition economies – precondition to join the EU
- Latin America – VAT was geared towards the outward orientation of economic policies
- There is no VAT in the USA. Michigan has single business tax. USA has sales tax which varies across states (Range: 5% to 10%)
- **It is only in the developing economies of Asia and Africa – that the economic rationale of VAT – ‘efficiency arguments’ has been central to adoption.**

The Context

- There was no buoyancy enhancing structural break in Bihar’s tax-revenue mobilisation between 1981and 2003 (Rajaraman et al 2005).

- Post-2001 growth sectors of the Bihar economy are the ‘integrated’ sectors with the growth miracle explained by contributions of four sectors – trade hotel and restaurant , real estate, communication, construction (Das Gupta 2010).

- Public Finance is an important driver of Bihar’s economy (with public expenditure accounting for 30-35 percent of GSDP). Bulk of the recent construction boom has been driven by public investment (Nagaraj and Rahman 2009).

- State finances have increasingly become dependent on transfers from the union government (close to 72-75 percent in last two years compared to 40 percent in 2003-04) despite the ‘growth miracle’ (Economic Survey of Bihar 2009-10).

- Bihar’s Tax-GSDP ratio is around 5 percent despite double digit economic growth in last four to five years (Ibid).

- As per the Indian Constitutional arrangements, state governments have no power over design of direct tax.

Tax and Fiscal Reform in Bihar

- Introduction of VAT on April 1, 2003
- More comprehensive fiscal reform initiated since 2005-06 by the first NDA government
- **Overall aim**
  - Step up planned expenditure with a high component of capital expenditure as well as expenditure on operation and maintenance
  - Finance this expenditure as far as possible from internal resources without resorting to huge borrowing
  - Institutionalise fiscal responsibility norms based on the architecture of ‘sound finance’
- **Concerns of policymakers who initiated the reforms**
  - Fiscal deficit had been consistently hovering around 5.5 percent.
  - The government was carrying large amount of unutilised funds. It took an enormous loan which remained unutilised. The state had a revenue surplus.
  - Low level of planned expenditure and even lower level of capital expenditure.
  - Accumulated debt was rising.

Fiscal Reform in Bihar – since 2005-06

- The publication of a White Paper on the state of finances in Bihar.
- The Passing of the Bihar Fiscal Responsibility and Budget Management (FRBM) Act that aims to eliminate the revenue deficit by 2008-09 pays special attention to increase in non-tax revenue and prioritization of capital expenditure.
- The formation of Steering Group of Vision Bihar: Managing Financial Resources - Medium Term Perspective.
- The restructuring of debt by more market borrowings to replace difficult-to-obtain central loans and prioritization of repayment of high-interest loans (e.g. RIDF loan from NABARD).
- The augmentation of tax revenue by rationalisation of tax rates, better tax administration and widening of the tax base.
- A short-lived thrust on capital expenditure for several departments.
- Strengthening of VAT administration in terms of clarification of stages, fixation of rates and inclusion of some commodities that were left out of the purview of VAT before.
- Tax exemptions as incentives for new units – specifically industrial units and modern cinema halls.
- Shift to market borrowings in efforts to mange debt in keeping with FRA norms.

Unbundling the Impact of tax Reforms

- Overview
  - Reduction of rates of stamp and registration duty (from 18% to 10%)
  - Partial Implementation of tax system automation
- VAT
  - **April 1, 2003: VAT implemented in Bihar**
  - **April 1, 2006. Drastic cut on VAT on more than 100 items from 12.5 per cent to 4 per cent while making 27 odd items free from the tax.**
    - Raw Jute was exempted from VAT.
    - Other items which are free from VAT include conch shell, conch shell products, earthen pot, fishnet, fishnet fabrics, and seeds of fish, prawn and shrimp, gur, jaggery and rub gur, handicrafts, household articles made of brass, human blood and blood plasma, indigenous handmade unbranded soap, lac and shellac, mats, locally known as chatai, other than those made of plastic, animal semen including frozen semen.
    - VAT has also been lowered to 4 per cent on household goods such as jugs, mugs, and buckets made of iron and steel, aluminium, plastic or other material, except those made of precious metals.
    - 1 % VAT on following goods:
      - Gold, Silver and other precious metals
      - Articles of gold, silver and precious metals including jewellery made of gold, silver and precious metals.
      - Paddy, Rice, Wheat, Pulses, Flour, Atta, Maida, Suji and Besan

Observations

- Emphasis on expenditure rationalisation rather than revenue mobilisation
- Management of debt and deficit has been the prime focus
- Mismatch in political priorities and fiscal strategy
- Severe external constraint on autonomy due to the increasing financial centralisation at the level of the union government (and by-passing of the second tier of government) in the post-liberalisation period.

Overview of Buoyancy of Major Taxes

Tax	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Sales Tax/VAT	1.31	-0.34	1.47	-0.88	0.86	3.48	0.75
State Excise Duty	0.10	-0.43	0.15	1.79	0.85	6.01	1.15
Stamp and Registration Duty	1.29	1.87	-0.42	6.99	0.37	1.29	1.87
Motor Vehicles	-4.36	4.45	-1.71	8.09	0.35	-4.36	4.45
Taxes on Goods and Passengers	0.26	3.14	1.18	3.16	1.43	-0.06	0.26

Source: Economic Survey of Bihar: 2009-10

Assessment of Impact of Tax Reforms in Bihar

During the preceding three years before the introduction of the VAT, Sales Tax in Bihar grew at a trend rate of 9% (nominal); during the succeeding three years since introduction of VAT it grew at 21% (nominal).

Based on real rates of growth of VAT, we investigate:

- How much of this growth is attributable to the reforms in VAT?
- What has been the impact on tax base and spread?
- Implications for GST

Data

•Data on total sales tax collection is available for the period 2001-02 to 2009-10

•Tax circle wise collection figures are available for this entire period which can be mapped on to districts.

•Commodity-wise collection figures are available only for the period 2005-06 to 2009-10. Thus comparisons with the period before is not possible

•Commodity-wise collection figures are not available for the districts

•Data generation processes are such that annual figures are prone to revision upto two years after the release of first set of data.

•There are concerns on the quality and accuracy of the figures.

Research Questions and Method

Questions:

1. What has been the experience of VAT at the district level
2. What are the implications for GST in Bihar

Method:
1. Commodity-wise analysis of VAT
2. District-wise analysis of VAT
3. For both 1 and 2, we measure the composite impact of both trend annual changes (real growth/decline) in collection for each category for the period 2001-02 to 2009-10; as well as the relative share of each category in 1 and 2 in the total VAT/BST pool of Bihar.
4. We measure buoyancy trends at the district level for the period under consideration after adjusting for inflation.
5. Through standard econometric exercises, we separate the ‘economic growth effect’ from the ‘effect of VAT rationalisation’ in accounting for the phenomenal percentage rise in VAT /BST collection. This part is not being presented here.

Existing Base and Spread of VAT in Bihar (2006-07 to 2009-10)

Commodity	Contribution to Total Growth (%) in VAT Collection	Trend Real Growth Rate (%) in VAT Collection	Annual Nominal Growth Rate				Average Share in Total VAT Collection
			2006-07	2007-08	2008-09	2009-10	
Unregistered dealers and works contractors	16.91	70.99	36.65	46.91	127.86	80.31	3.46
Petro products	16.60	7.34	12.60	16.58	19.24	14.12	32.87
Cement	9.55	22.27	44.03	19.95	23.02	64.26	6.23
Telephone	7.17	39.58	58.19	151.79	45.74	-2.95	2.63
Indian Made Foreign Liquor	6.76	27.16	46.16	1.49	59.85	56.05	3.62
Works contract and tds	5.46	31.71	65.49	100.51	31.02	15.76	2.50
Four wheelers & chasis of automobile	4.97	18.46	94.59	27.40	12.35	57.04	3.91
Country liquor	3.63	39.52	26.54	68.15	33.20	63.64	1.33
Coal	2.73	20.56	34.23	66.31	13.83	25.36	1.93
Two and three wheelers	2.64	16.35	34.10	13.01	30.46	36.65	2.34
FMCG	2.48	8.85	31.53	15.67	22.79	15.91	4.06
Pan masala	2.04	131.60	38.27	280.36	161.83	59.10	0.22
Commodities (whose commoditywise contributions to total growth is less than 2 % but higher than 1%)	10.88	14.66	29.19	28.30	19.63	28.67	10.3
Various Commodities (whose commoditywise contributions to total growth is less than 1 %)	11.62	8.54	13.33	17.11	23.73	12.25	18.9
Commodities registering decline in total growth	-3.44	-9.55	29.32	24.79	-14.33	-6.35	5.7

Commodity wise –trend real growth rate

Trend Real Growth Rate	**2006-07 to 2009-10**
more than 40%	Advertisement tax, Tools, Pan masala, Bhujia, Unregistered works contractors, Diesel oil, Utensils, Sport goods, Ghee & vanaspati
30% to 40%	Telephone, Country liquor, Tea & coffee, Beverages, Sanitary fittings & tiles, Tractors, Processed vegetable & food, Works contract and TDS
20% to 30%	Furniture, Marble and granites, Asbestos, IMFL, Electronic goods, Paper, Tobacco, Jewellery, Hosiery and ready made, Cement, Computer, Coal, Bicycle
10% to 20%	Lubricants, Four wheelers & chassis of automobile, Footwear, Glasses, Edible oil, Two and three wheelers, Electricity duty , Hardware, Food grain, Not tagged with any commodity, Stationery, Iron & steel, Hawai chappals, Stone chips and ballast, Tyres & tubes, Biscuits, Spectacles, Paints
0% to 10%	Luxury and hotel, Consumer durables, FMCG, Auto-parts, Battery, Entertainment tax, Petroleum products, Grocery items, Others @ 4%, Engine & motors, Bricks , Others @ 12.5, Matches, Drugs and medicines, Fast food and cooked food, Ply board, Electrical goods, Plywood, Watch & clock, Crude oil, Fertiliser & insecticides
less than 0%	Fire work, Sewing machine, Gun & rifles, Unregistered dealer (other than Works Contractors), Timber, Moulded luggage, Others (tax free), Kerosene, Dry fruits, Petrol, Crockery, cutlery, glassware & ceramic ware, Staple yarn, Hide & skin, LPG, Plastic goods, Not tagged

Commodity wise contribution to total growth in VAT collection

Contribution to Total Growth	2006-07 to 2009-10
more than 15%	Unregistered Dealer and Works Contractor, Petroleum Products
5% to 15%	Cement, Telephone, Indian Made Foreign Liquor, Works contract and tds
2% to 5%	Four Wheelers & Chasis Of Automobile, Country Liquor, Coal, Two And Three Wheelers, FMCG, Pan Masala
1% to 2%	Tobacco, Iron & Steel, Tractors, Ghee & Vanaspati, Drugs And Medicines, Electronic Goods, Biscuits, Food grain
0% to 1%	Tyres & Tubes, Tools, Beverages, Hosiery And Ready Made, Lubricants, Consumer Durables, Sanitary Fittings & Tiles, Electrical Goods, Computer, Battery, Paper, Asbestos, Not Tagged With Any Commodity, Furniture, Paints, Edible Oil, Auto-parts, Bicycle, Footwear , Fast Food And Cooked Food, Tea & Coffee, Hardware, Marble And Granites, Entertainment Tax, Grocery items, Others @ 12.5, Electricity Duty, Jewellery, Advertisement Tax, Crude Oil, Utensils, Stationery, Bricks, Glasses , Engine & Motors, Stone Chips And Ballast, Luxury And Hotel, Bhujia, Fertiliser & Insecticides, Sport Goods, Processed Vegetable & Food., Others @ 4%, Diesel Oil, Plywood, Watch & Clock, Plyboard, Matches, Spectacles, Hawai, Chappals, Commodities that are not listed
less than 0% (Decline)	Sewing Machine, Fire Works, Petrol, Gun & Rifles, Dry Fruits, Hide & Skin, Timber, Crockery, Cutlery, Glassware & Ceramic ware, Moulded Luggage, Kerosene, Others(Tax Free), Staple Yarn, LPG, Plastic Goods, Unregistered Dealer and Others

Observations VAT/BST: Commodity Base and Spread and Implications for GST

•Contrary to the rationale of VAT, unregistered dealers (other than works contractors), have not found in VAT an adequate incentive.
• Almost 45% of the total growth in sales tax collection after implementation of the changes in VAT which were implemented in 2005-06 are accounted for by 'Sin Goods' -petro products, coal; and country liquor and other goods like electricity duties.
•These together account for around 50 percent of the existing sales tax collection in Bihar.
•These are going to be exempt from GST as per consensus between Finance Commission and Task Force on GST.
•Thus significant chunk of the tax net and tax base of Bihar's consumption driven economy will be out of the ambit of GST.
•Also role of sin goods as inputs has cascading effects which need to be considered in the 'exemption debate'.
• This leads us to conclude that the actual tax base assumed in all calculations of revenue neutral rate (RNR) for states, even those that have assumed a share of 'Sin Goods' in calculation of the tax base, are under-projections; and fail to take on board the structure of the narrow commodity tax base of Bihar's consumption economy. (NEXT SLIDE)
•However, this would be very important for Bihar's overall resources as the amount of compensation required by the state government for moving to GST would depend on a realistic calculation of RNR for Bihar as opposed to under-projections.

Revenue Neutral Rate – Overview of Various Estimates

	Task Force report	NCAER report	Kavita Rao*	Kavita Rao & Pinaki Chakraborty**
Centre	**5 %**			**NA**
All States	**7 %**	In the range of **6.2%** and **9.4%** (combined revenue neutral GST rate)	**14 %** (combined revenue neutral GST rate)	**10.3 %** (all states average)
Bihar	NA	NA	NA	**8.46 %**

Note: NA: Not Available

* Goods and Services tax for India: R. Kavita Rao, Working paper: 2008-57, NIPFP. The calculation is based on total Private Final Consumption Expenditure (PFCE)

** Goods and Services tax for India - An Assessment of the base: R. Kavita Rao and Pinaki Chakraborty, EPW papers, January, 2010

Regional Composition of Growth in Bihar's Sales Tax Collection (2006-07 to 2009-10)

District	Contribution to Total growth in VAT collection	Average (%)Share of Total VAT collection	Annual Variation in VAT collection (CV)
Patna (75.99)	75.99	85.51	25.47
1% to <=3% Vaisali (2.16), Muzaffarpur(1.87), Darbhanga(1.49),W. Champaran(1.46), Purnea(1.26), Gaya(1.25), Katihar(1.13), Nalanda(1.10), Rohtas(1.09)	12.81	6.8	39.09
0.5% to <= 1% Begusarai (1.00), Saharsa (0.95), Saran (0.74), Aurangabad (0.72), Siwan (0.71), Bhagalpur + Banka (0.69), E. Champaran(0.64), Sheohar + Sitamarhi (0.63), Munger (0.55), Madhubani (0.55)	7.19	4.45	36.26
0% to <= 0.5% Jehanabad + Arwal (0.50), Bhojpur (0.46), Gopalganj (0.43), Jamui (0.41), Madhepura +Supaul (0.36), Kaimur (0.31), Khagaria (0.30), Nawada (0.26), Samastipur (0.24), Lakhisarai + Sheikhpura (0.24), Buxar (0.22), Araria (0.15), Kishanganj (0.13)	4.01	3.24	30.25
Total (100)	100.00	100.00	28.16

Regional Composition of Economic Growth in Bihar in the same period

District	Contribution to Total Growth (%)	Average (%) Share of GSDP	CV
Single largest Contribution Patna (23.72)	23.72	24.09	12.37
4 %-5% Contribution Muzaffarpur (4.84), Bhagalpur (4.72), Madhubani(4.09)	13.64	12.3	13.6
3% - 4% Contribution Begusarai (3.8), Madhepura (3.42), Gaya(3.26), E. Champaran (3.26), Darbhanga (3.25), Saran (3.16) Rohtas(3.09), Katihar (3.06)	26.3	23.75	13.59
2% - 3% Contribution Purnia (2.74), Vaishali(2.54), Nalanda(2.37), W. Champaran (2.27), Bhojpur(2.05), Samastipur (2.04), Jehanabad(2.02)	16.03	17.48	11.67
1% - 2% Contribution Araria (1.9), Sitamarhi (1.89), Saharsa(1.88), Munger (1.84), Aurangabad (1.55), Gopalganj (1.55), Khagaria (1.46), Nawada (1.33), Kaimur(1.26), Kishanganj (1.26), Buxer(1.24), Jamui(1.17), Lakhisarai (1.13)	19.46	19.64	12.41
0 – 1% Contribution Siwan (0.85)	0.85	2.6	7.71
Total (100)	100	100	12.22

Tax Buoyancy

Tax Buoyancy estimate (from 2001-02 to 2009-10)	Districts
More than 1.3	Katihar , Jehanabad + Arwal, Madhepura +Supaul, Jamui , Sheohar + Sitamarhi
1.1 to 1.3	Madhubani, Bhojpur , Aurangabad , Saran, Muzaffarpur, Kisanganj, Saharsa, Darbhanga , Nalanda , Vaishali
1 to 1.1	West Champaran , Purnea, Munger, Rohtas, Araria , Nawada, **Patna**, Buxar , Kaimur, Gopalgang
0.5 to 1.0	Lakhisarai + Sheikhpura, Bhagalpur + Banka, East Champaran , **Samastipur**, Gaya **, Khagaria** , Siwan , Begusarai

Change in buoyancy during Pre-VAT & Post VAT regime

Change in buoyancy during Pre-VAT & Post VAT regime	Districts
Marginal Increase in elasticity	Khagaria ,Patna, Samastipur
Decline	Bhagalpur + Banka, Sheohar + Sitamarhi, Araria , Bhojpur , Darbhanga , Madhubani, Kisanganj, West Champaran , Aurangabad , Jehanabad + Arwal, Katihar , East Champaran , Muzaffarpur Madhepura +Supaul, Nawada, Buxar , Lakhisarai + Sheikhpura, Saharsa, Begusarai , Nalanda Rohtas, Saran, Gaya , Kaimur, Vaishali , Siwan , Munger, Purnea, Jamui , Gopalgang

Observations: Regional Spread of VAT and Implications for GST

•76% of the growth in tax collection after implementation of VAT rationalisation is accounted for by Patna district. The rest 37 districts together account for just 24% of the growth.
•Post-VAT, there seems to have been a negative impact on elasticity in most districts.
•This is in keeping with the recent trend of led lopsided and highly volatile economic growth in its regional dimensions.
•GST abstracts away from the issues of regional disparity within the state in its assumption of an uniform tax spread within the state in the projection of its potential gains. Thus it completely ignores the structural constraints of low-income states like Bihar with limited diversification of the economy.
•Such issues of spread are not just confined to low-income states like Bihar. Bulk of the resources of states like Andhra Pradesh and Maharashtra are accounted for by Hyderabad and Mumbai areas.

Together, the commodity and district spread demonstrates that the existing debate on GST (where concerns of equity has been confined to polemics around whether food should be taxed) and the assumptions on which VAT had been implemented, has failed to take into account the structural limits of the consumption base of a primarily agrarian low income economy.

Contextualising the Implications for the GST Process

Context

•Roll out in next couple of years.
•Dual rate GST has been agreed to on principle by the major states and the federal government.
•Roll out plan to be carried out through a 'Grand Bargain' which is tied to a grant by the 13^{th} Finance Commission.
•A Special Committee of Ministers have been empowered to finalise the GST roll out.
•The empowered Committee has rejected the 13^{th} Finance Commission's approach

Concerns from the states in the GST debate:

•Various taxes of state Government (including of local bodies) are to be subsumed under GST, but collection of property tax by local bodies has not been addressed in detail in any of the reports stated earlier.
•Process of Input Tax credit (ITC) is not clear
•If all services are to be taxed, then each and every category of service requires proper definition, specially for designing rules for inter-state transaction.
•What will happen to previous tax laws
•If goods and services are to be taxed separately, then what is the rationale for an uniform tax rate?

Unresolved/Unaddressed Issues in Bihar taken up at IGC India-Bihar and the Centre for Economic Policy and Public Finance, ADRI, Patna:

•Tax base and RNR at the state level - Design Considerations (learning from VAT)
•Historically weak state level tax institutions – Implementation considerations
•Fiscal autonomy

What Did Not Get Addressed in the reforms of 2005-06?

•Why is Bihar's Tax-GDP ratio so low (around 5 percent) even when compared to other low-income states in India? This is despite the high economic growth recorded in recent years in the state. The State’s Own Tax Receipts to GDP has increased marginally from about 4.56 percent in 2004-05 to about 5.47 percent in 2009-10. In this period, the economy according to official estimates grew by 11 percent.

•Are evasion and non-compliance higher in Bihar compared to the rest of India?

•If not, does the low tax-GDP ratio have a causal connection with the higher shares of informal and non-monetised sector in the economy compared to the national average?

•Tax Reforms have design flaws by assuming extension of the tax base at the state level without progressive structural transformation of the economy – cart before the horse?

The Political Economy Context

1. Conventional wisdom states that Bihar has a high consumption base and a low production base as opposed to the more developed states. However, based on our analysis, we urge on all experts to consider the narrow spread of Bihar's (and other low income states') consumption base – regional, sectoral, social.

2. The constraints on the states like Bihar due to
   - changes in centre-state relationship in the post-liberalisation period due to the contradiction between financial centralisation and political decentralisation.

   - eroding role of Finance Commission as 'neutral arbiter', despite constitutional mandates and provisions.

3. Conflict between inflation targeting macroeconomic strategy and 'development' goals.
4. The political strengthening of the 'trader' lobby in the last decade in Bihar.

5. The failure of the 'sound finance' macroeconomic framework to resolve any of the above

Thank you