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Commodity Taxation in Bihar

1994-2012

Monica Singhal

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Overview

India is a federal republic of 35 states and territories. The fiscal responsibilities of the states have historically been much larger than what their constitutional powers of taxation can sustain. Income tax is a federal, or Union power, as is the wealth tax, corporate income tax, most customs and excises, travel taxation, and taxation on inter-State trade and services. The states have a weaker list of powers, including land revenue, agricultural income tax, and the larger part of excise, sales, and purchase taxes. Because of this imbalance, the Indian states are reliant on Union transfers for enormous percentages of their revenue. States have historically been eager to develop independent sources of revenue, and sales taxes have proven the best way to do so. In 2008, Union transfers were the source of 80% of state revenue in Bihar; of the remaining 20% about 70% came from state sales and excise taxes (Government of India). The Union and State governments of India are currently planning to implement a goods and services tax (GST), which would replace the existing pastiche of tax rates with a uniform, all-India rate, a process in which Bihar's finance minister has taken a leading role. It is indicative of the importance of sales tax revenues to the states' fiscal health that a key sticking point in Union-State negotiations is the re-apportionment of revenue to the states after it is collected by the Union.

The systematic analysis of commodity taxation in India has been hindered by the historical decentralization of the sales tax system and the resulting lack of comprehensive and comparable tax rate data. This memorandum presents results from new data sources covering the years 1987-2012 (1994-2012 for Bihar). To our knowledge, such a large and comprehensive tax dataset has never been constructed for India, allowing us unique insight into the patterns and evolution of commodity taxation in India. We present discussion of three eras, with a particular focus on Bihar: (1) the pre-VAT period; (2) the post-VAT period; and (3) commodity taxation going forward, under the proposed GST reforms.

Our analysis highlights several important findings. First, the pre-VAT period was characterized by a lack of consistent or economically rational rate structure in Bihar as well as a lack of rate harmonization across states. Second, the VAT reforms appear to have been largely successful in at least two of their goals: simplifying rate structures within states and harmonizing rates across states. Commodity taxes in Bihar have become much closer in general to the India average in the post-VAT period. Third, we discuss some of the likely potential challenges in moving forward with the proposed GST reforms based on our results.

Our tax data comes from two sources: Mahesh Purohit's *Structure and Administration of Sales Taxation in India* (hereafter Purohit) for the years 1987 and 1994, and the commercial data vendor Instavat for 2000 onwards. Purohit regrettably contains no tax data for Bihar in 1987, so we restrict our analysis to the years 1994 to 2004. The data is quite detailed – Purohit, with some amalgamations and simplifications, contains data on hundreds of categories of consumption, and Instavat the full schedules and notifications produced by the state governments, often encompassing thousands of categories of goods.

The Pre-VAT Period

Taxes in Bihar across Commodities and over Time

The Indian sales tax system was designed with a number of competing priorities: to raise revenue, particularly from the affluent; to reduce consumption of socially undesirable goods; and to protect certain types of industry. This array of competing influences resulted in a system that accomplished none of these goals particularly well. As Burgess et al. (1995) noted:

> "Indirect taxation in India is typified by a maze of different rates, which are the result of numerous ad hoc modifications to tax legislation … This rate differentiation has little economic rationale. It is associated with distributional judgments and views on the kinds of goods that should be encouraged in production and is the outcome more of lobbying than logic."

The resulting system was much more complicated than commodity taxation schemes in almost any other part of the world. In 1994, there were at least 20 different sales tax rates on goods in Bihar, and the burden on goods varied from exempt to 25%, often in unpredictable ways. Table 1 presents sales tax rates for a selection of expenditure categories. For small, specific categories like edible oils and kerosene, rates shown are the statutory rate. Rates for larger, less specific categories such as technology are simple means of the largest expenditure sub-categories. In general, progressivity is incorporated into the system by taxing necessities at a lower rate.

In 1994, milk, meat, fish, eggs, and fresh vegetables were all tax-exempt (Table 1). However, other staples, like paddy, rice, and potatoes, were taxed at rates as high as 5%. Non-staple food items were taxed at a rate near the general rate: spices and dried fruit at 9%, and sweets at 8% in 1994. The same pattern of a higher tax rate on higher value-added items applies in other categories. Readymade clothing was taxed at 7%, almost double the rate of less finished garments, which are included under cotton. Capital goods tended to be heavily taxed; after different types of liquor and fuel, consumer durables like refrigerators, air conditioners, electric heaters, and linoleum were the most highly taxed of all items, at about 16%. There was also some symbolic excess taxation of ostentatiously upper class items; opera glasses at 15% were the most noteworthy example.

Compared to the relatively large variance of tax rates between goods, the over-time variation in tax rates in the pre-VAT era was relatively small. In particular, the pattern of taxes rates on staple foods offset by higher rates on sins, luxuries and consumer durables has held true over the study period. Rates for 1994, 2000, and 2004 are presented in Table 1. Most movement that did exist was upwards rather than downwards. The most consequential change was a large increase in the tax rate on edible oils, from 2% to 9%. Since this is a relatively large expenditure category for most families, this tax change could have had a significant effect on household finances. The tax rate on country liquor (ie, non-Western alcohol like arak and toddy) increased to the same rate as foreign liquor (whiskey, vodka and the like), rather than being tax-exempt. Although this budget share is relatively small on average across households, it is composed of a large number of teetotalers and a smaller number of households (about 5% of the total) who spend at least 5% of their consumption on alcohol. It is on these households that this tax shift fell. This pattern, however, is not uniform: transportation durables and semi-durables, which were taxed at 9% in 1994, saw a dramatic tax decrease by 2000 to 4.5%. By 2004, however, rates were above 1994 levels for cars and motorcycles, at 12%.

Comparisons with Other States

How did the rates in Bihar compare to the rest of India? Table 2 shows consumption tax rates in Bihar, in two neighboring states, and over a sample of most states and territories, all for 2004. The results are easily summarized: Bihar had high taxes relative to most other jurisdictions in the Union. Cereals and pulses were taxed at 4%, compared to 4% in UP and zero in West Bengal. These goods were tax-exempt in most other states and territories; the average rate was 0.9% with a median of zero. Potatoes and onions were similarly taxed at a much higher rate than was usual: 5% in Bihar compared with 0.2% nationwide. Edible oil tax rates were comparable for Bihar and the rest of the country in the early part of the study period, but by 2004 the mean tax rate across states and territories was 1.9%, compared to 9% in Bihar. Figures 1-4 present this information graphically for a number of important goods.

The pattern of higher-than-average taxation is consistent across categories of goods. Medical goods, which are mostly consumed by the upper deciles of the income distribution, were taxed at 8.5% in Bihar, as opposed to 8% in UP, 4.3% in West Bengal and 2.4% in the rest of the country. Similarly, petrol was taxed at over triple the rate in the rest of the country.

The Post-VAT Period

Taxes in Bihar across Commodities and over Time

The VAT reform of 2005 put goods into five schedules, each with its own tax rate: exempt, 1%, 4% (concessional), 12.5% (revenue neutral), and a catch-all of between 10% and 50%.

The goods making up a majority of consumption are now either exempt, or taxed at 1% or 4% (Table 3). A small number of goods, most notably petrol and alcohol, have a sales tax rate in addition to a VAT rate, which tends to be very high. The last class of goods, which make up less than half of consumption, is taxed at 12.5%. Comparing the pre-VAT rates to the post-VAT rates, it is notable that the VAT regime both simplified the tax code and reduced rates -- most staples were exempt or taxed at 1%. Most importantly for low-income households, the tax rate on edible oils was reduced from 9% to 4%. Firewood was also reduced from 7% to tax-exempt.

The practice of selective adjustment of tax rates for certain industries has not been abolished. In 2006, shortly after the introduction of the VAT, the tax rate on raw jute was reduced from 4% to exempt, with the stated goal of expanding the jute industry in Bihar. Rates on a number of other small-bore items were also reduced: conch shells, fishnet fabrics, and indigenous unbranded handmade soap, among others (Business Standard, 2006).

Despite the reduction in many tax rates, tax revenues increased in the period immediately following reform, from 3,347 crore in 2004-05 to 5,085 crore in 2007-08 (Government of Bihar, 2008). Although economic growth in Bihar was extremely rapid over this period (17.7% in 2006), this increase is larger than what would be expected from economic growth alone. The reform reduced both the direct cost – paying the rate – and the indirect cost – filling out the paperwork -- of complying with the tax regime, potentially increasing compliance.

In 2011, Bihar increased the 4% tax bracket to 5%, and the 12.5% bracket to 13.5%. Since the 2005 reforms, most other states have also increased their concessional rate from 4 to 5%, and adjusted their revenue neutral rate to 13.5 or 14.5%. Despite this, the overwhelming characterization of the post-VAT tax regime should be one of stability. With the exception of rice, all the consumer goods we surveyed remained in the same VAT schedule. All other movement that we observed was restricted to industrial goods only. Those goods that remained under a partial sales tax and VAT regime, like alcohol and petrol, were subject to much larger swings in tax rates. For example, the sales tax on petrol increased from 24.5 to 27% in 2007, and the country liquor tax from 34 to 50% in 2006.

Comparisons with Other States

In the post-VAT period, Bihar has moved much closer to the Indian norm in terms of taxation. In most states, the petrol tax amounts to something between 18% and 25%, including sales tax and VAT. Rice is generally exempt, edible oils in the 0-5% range, and clothing at 4% or 5%. This is precisely where Bihar falls. Table 3 presents figures for a Bihar, Uttar Pradesh, and West Bengal for a selection of goods. The tax on alcohol varies widely from exempt to 60%, and Bihar's rate of taxation at 50% is high, but not uncommonly so. Bihar’s revenue neutral rate, at 13.5%, is near the average across states. Figures 5-8 present this information graphically for a number of key commodities.

Moving Forward: The Proposed GST Reforms

There are at least two major challenges in moving forward with the GST reforms: first, the need to further harmonize rates across states into single, unified rates on commodities; and second, to ensure that states are able to maintain their existing levels of tax revenue.

Our results suggest that the VAT reforms went a long way to harmonizing rates across states, but some challenges remain. Goods which tended to remain under a partial or full sales tax regime (such as petrol) continue to exhibit large variation across states. Bringing these goods under a GST system may be particularly challenging. In addition, individual states may wish to retain particular tax preferences for certain products or industries. Bihar’s current tax regime is generally well aligned with the all-India average rates. However, there are certain exceptions, such as the case of raw jute, discussed above.

Predicting the effects of the proposed reforms on revenue is extremely challenging and will of course depend on the specific structure ultimately adopted. The experience of Bihar does suggest that harmonizing and simplifying the tax system may have beneficial effects on revenue. While it is difficult to attribute all of the pre-post VAT reform difference in revenue to the reform itself, it is notable that tax revenue in Bihar increased substantially following the reforms despite an overall reduction in rates.

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Figures

Tables, 2004

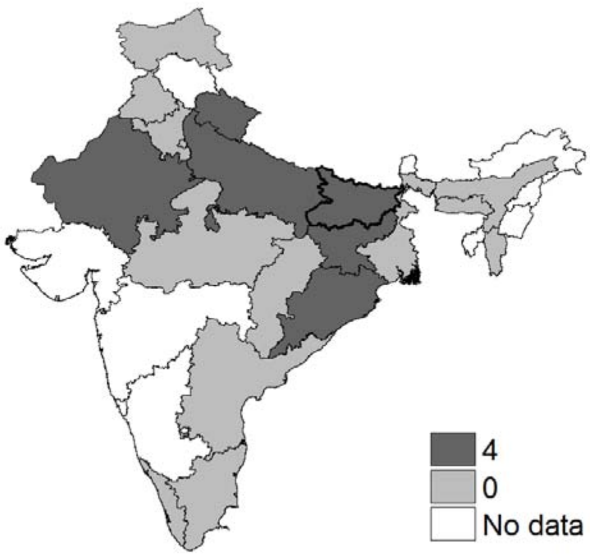

Figure 1 : Rice

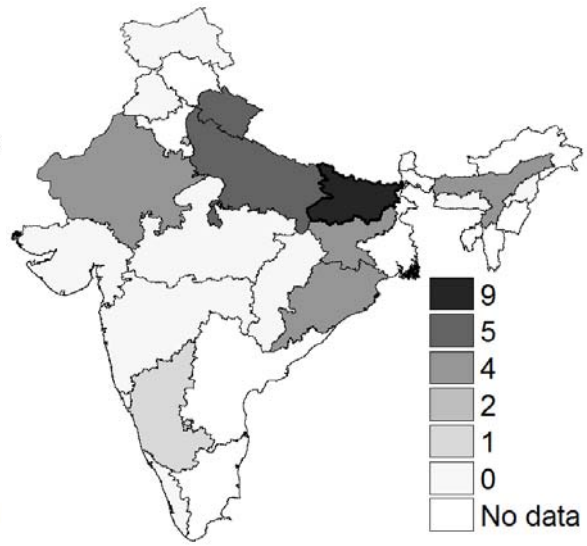

Figure 2: Edible Oils

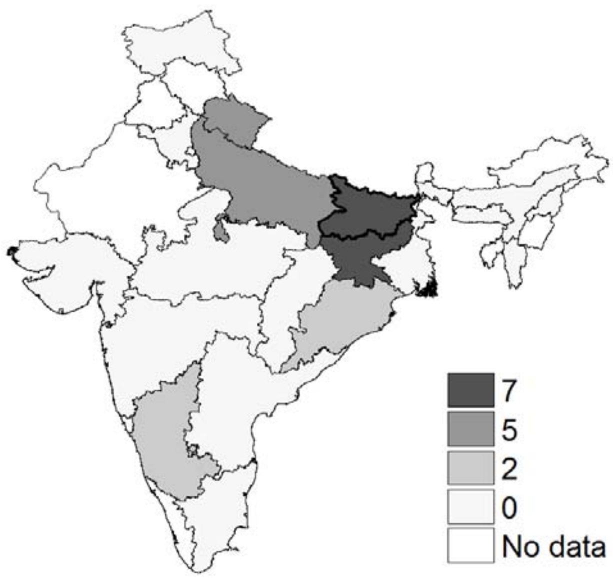

Figure 3 : Firewood

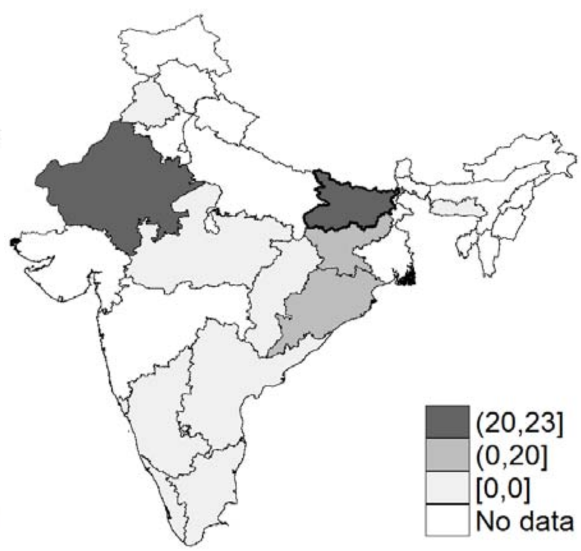

Figure 4: Petrol

Taxes, 2012

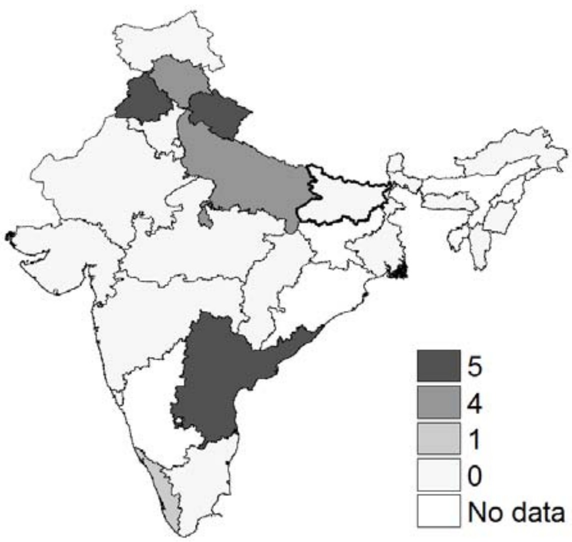

Figure 5 : Rice

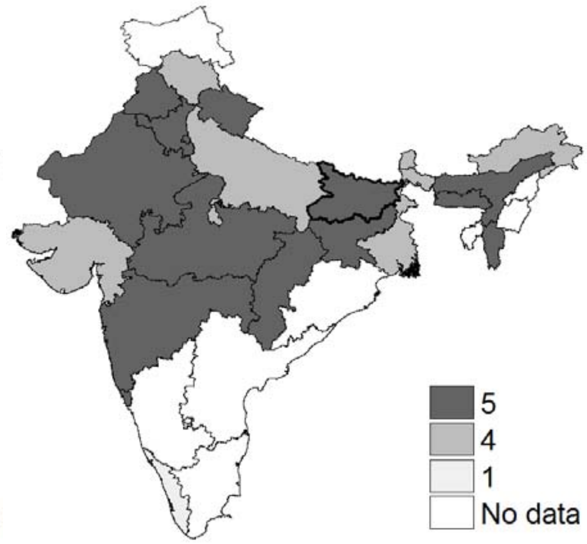

Figure 6: Edible Oils

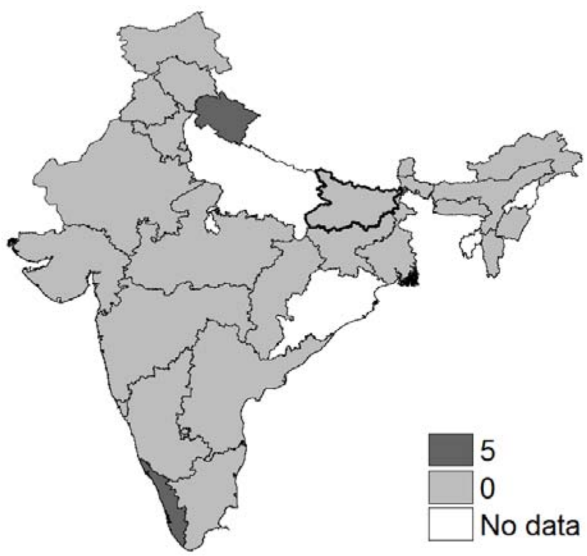

Figure 7 : Firewood

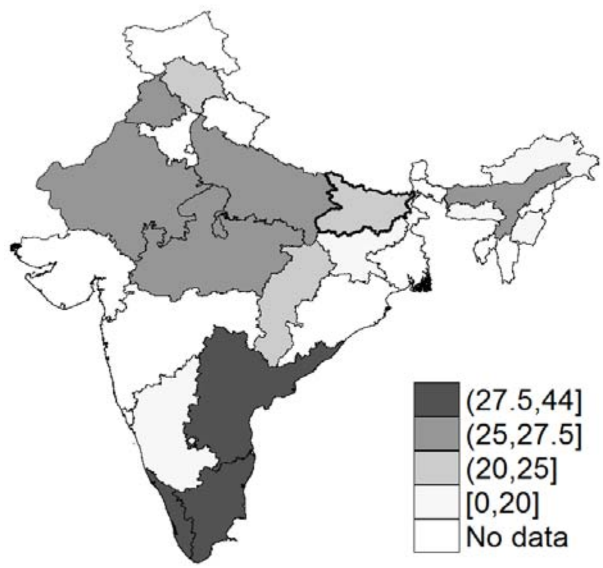

Figure 8: Petrol

Tables

Table 1: Tax Rates in Bihar; Select Commodities

	1994	2000	2004	2010
Cereals and pulses	4	4	4	1
Atta, maida, suji	4	4	4	1
Milk	.	0	0	0
Ghee	8	.	.	4
Vanaspati ghee	9	.	.	4
Edible oil	2	9	9	4
Meat and fish	0	.	.	0
Eggs	0	0	0	0
Potatoes and onions	5	5	5	0
Fresh fruit and vegetables	0	0	0	0
Spices	9	9	9	4
Tea	0	.	.	4
Biscuit	9	9	9	0
Sweets	6	6	8	0
Processed	.	8	10.7	4
Country liquor	0	25	25	50
Firewood	7	7	7	0
Kerosene	6	6	6	4
Cooking gas	9	.	.	1
Cotton	4	4	2	0
Hosiery	5	0	.	4
Readymade clothing	1	7	7	4
Footwear	8	0	0	4
Other hobbies	.	9	10.7	4
Maps and books	0	.	.	0
Medical	7	8	8.5	4
Petrol	9	16	21.5	24.5
Tech	.	11.7	12.6	4
Jewellery	4	4	4	1
Utensils	8	.	12	4
Bicycles	8	.	.	4
Motorcycle	9	10	12	4

1994 data from Purohit; 2000 onwards from Instavat

Period indicates missing data

Table 2: Comparison of Tax Rates, 2004

	Bihar	UP	W. Bengal	Other
Paddy	3	.	0	1.6
Rice and grains	4	4	0	0.9
Milk	0	0	.	0.1
Edible oil	9	5	.	1.6
Eggs	0	0	.	0
Potatoes and onions	5	.	.	0.2
Fresh fruit and vegetables	0	0	0	0.6
Dry fruit	9	4	0	2.9
Gur	7	.	0	0.9
Spices	9	5	0	1.5
Sweets	8	.	.	4.2
Tobacco	0	0	0	0.7
Country liquor	25	.	0	5
Foreign liquor	25	.	0	6.8
Firewood	7	5	0	1
Kerosene	6	10	20	2.5
Cotton	2	2	0	0.9
Hosiery	0	4.5	0.5	1.5
Readymade clothing	7	5	0	1.4
Footwear	0	6	3	2.8
Stationary	8.3	4.3	0	3.4
Medical	8.5	8	4.3	2.4
Toilet soap	12	10	11.3	6.5
Tooth brush/paste	12	.	0	5.8
Hair oil	12	.	0	6.9
Shaving goods	10.7	5	0	6.5
Petrol	21.5	.	.	5.8
Motor lubricants	21.5	20	0	5
Tech	12.6	7.7	1.5	3.3
Musical instruments	8	12	0	4.1
Jewellery	4	1	.	0.5
Utensils	12	5	0	2.3
Oven	8	10	0	3.6
Motorcycle	12	12	0	4
Car	12	12	0	5.8
Tyres and tubes	6.5	10	0	2
Clock/watch	13	16	4	4.6

Other states is mean of state tax rates.

Other states include Pondicherry, Delhi, Chandigarh, Tamil Nadu, Rajasthan, Punjab, Orissa, Mehalaya, Maharashtra, Madhya Pradesh, Kerala, Karnataka, Jammu and Kashmir, Haryana, Guajrat, Assam, and Andhra Pradesh.

Table 3: Comparison of Tax Rates, Selected Commodities for 2012

	Bihar	UP	W. Bengal	Other
Cereals and pulses	0	4	0	0.9
Milk	0	0	0	0
Edible oil	5	4	4	4.6
Potatoes and onions	0	0	0	0
Sugar	0	0	0	1
Country liquor	50	4	0	21.8
Firewood	0	0	0	0.4
Cotton	5	4	4	4.8
Readymade clothing	5	4	0	4.9
Petrol	24.5	26.5	25	23.0
Jewellery	1	1	1	1
Car	5	12.5	4	12.4
Total	8.0	5.0	3.2	6.2

Other states is mean of state tax rates.

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