ECONOMIC SURVEY
2015-16

ECONOMIC OUTLOOK, PROSPECTS AND POLICY CHALLENGES

» This year's Economic Survey comes at a time of unusual volatility in the international economic environment. There are significant risks of global weakness and non-trivial chances of extreme events. India's economy has become "more entwined with the world". It is thus necessary to fortify the Indian economy against possible spillovers and recalibrate expectations.

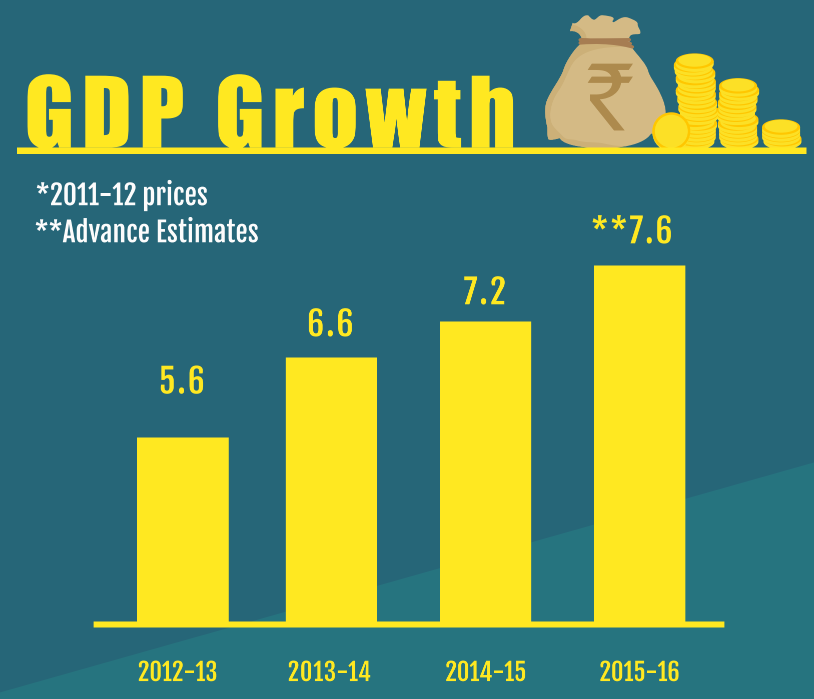
» Amidst this gloomy landscape, India stands out as a haven of stability and an outpost of opportunity. Its macroeconomy is stable, and it is likely to be the fastest-growing economy in 2016. These achievements are especially substantial since they have been accomplished in the face of global headwinds and a second successive season of poor rainfall.

» India stands out internationally as an investment proposition. Our Rational Investor Ratings Index (RIRI) shows that India compares favourably with peer countries in the BBB investment grade and almost matches the performance of A-grade countries.

» Government has increased public investment. Aggregate capital expenditure by government increased by 0.6 per cent in FY15-16. Half of this increase is due to the Centre and the other half is due to States.

» Putting these factors together, we expect real GDP growth to be in the 7 to 73/4 per cent range for 2016-17, with downside risks because of ongoing developments in the world economy. The wider range in the forecast this time reflects the range of possibilities for exogenous developments, from a rebound in agriculture to a full-fledged international crisis; it also reflects uncertainty arising from the divergence between growth in nominal and real aggregates of economic activity.

» India does not have a twin deficit challenge but a twin balance sheet challenge—due to the stressed financial positions of Public Sector Banks and some corporate houses. The twin balance sheet challenge is the major impediment to private investment and a full-fledged economic recovery. Comprehensively resolving this challenge would require 4 Rs : Recognition, Recapitalization, Resolution,and Reform. Banks must value their assets as far as possible close to true value (recognition) as the RBI has been emphasising; once they do so, their capital position must be safeguarded via infusions of equity (recapitalisation) as the banks have been demanding; the underlying stressed assets in the corporate sector must be sold or rehabilitated (resolution) as the government has been desiring; and future incentives for the private sector and corporates must be set right (reform) to avoid a repetition of the problem, as everyone has been clamouring.



*Change in GDP calculation methodology 2014-15 onwards
(base year changed to 2011-12, change from GDP at factor cost to GDP at market price)
**Advance estimates for 2015-2016, 2016-2017

» Resolution of India's twin balance sheet challenge will require actions that are initiated jointly and cooperatively between the government and the RBI. Compared to other central banks, the RBI has a relatively high ratio of shareholder equity to assets that can be leveraged to address the problem.

» In sum, fiscal policy needs to navigate between Scylla and Charybdis. There are very good arguments for a strategy of aggressive fiscal consolidation, as earlier envisaged, and equally good arguments for a strategyof moderate consolidation that can place the debt on a sustainable path while avoiding imparting

ECONOMIC OUTLOOK, PROSPECTS AND POLICY CHALLENGES

a major negative demand shock to a still-fragile recovery. The Union Budget will carefully assess these options.

- Exports declined by 18 per cent in the first 3 quarters of FY15-16, driven by falling commodity prices and flattening services exports. Indeed India's share of world exports of services, after surging in the mid-2000s, has flattened out—despite the US being the major destination for Indian services exports and the Rupee weakening against the USD. These developments have longer-term implications.

ADDRESSING INDIA'S 'TWIN BALANCE SHEETS'

- Resolving the TBS challenge comprehensively would require 4 R's: Recognition, Recapitalization, Resolution, and Reform
- Can resources for recapitalization come from public sector – including RBI – balance sheet ?

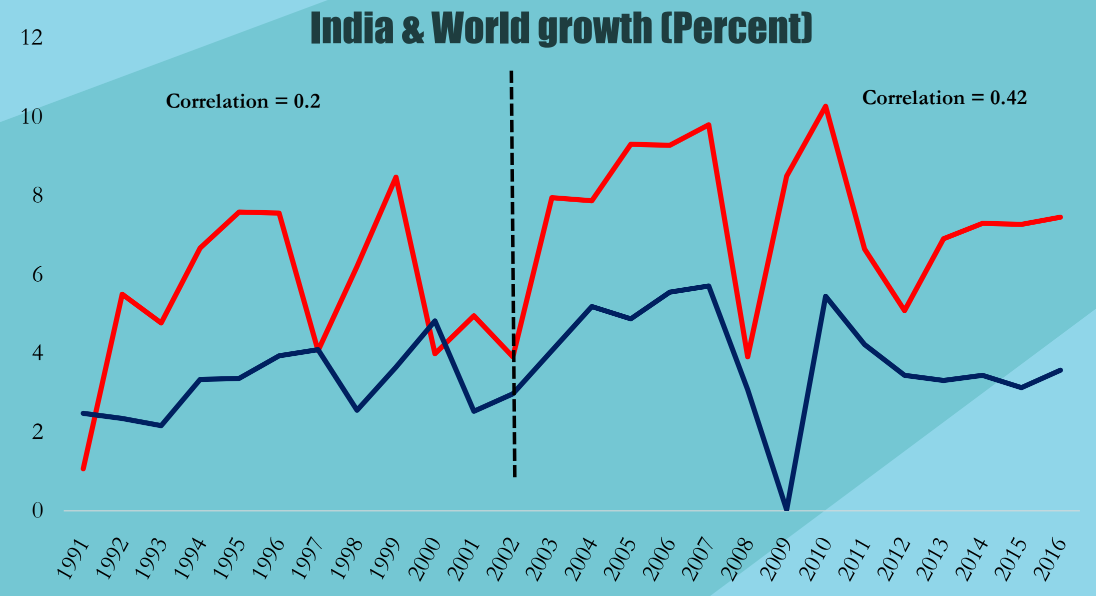
Total Equity as Percent of Balance Sheet of Major Central Banks

THE CHAKRAVYUHA CHALLENGE OF THE INDIAN ECONOMY

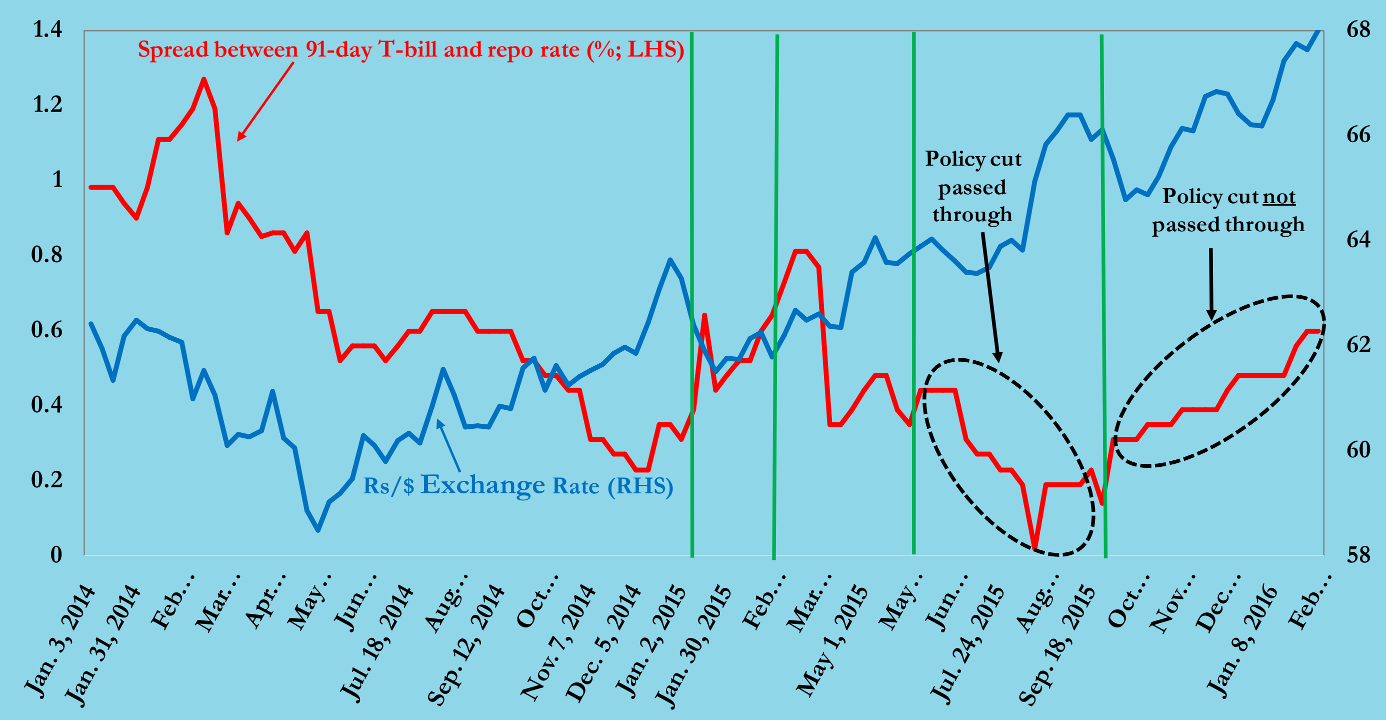
FROM SOCIALISM WITHOUT ENTRY TO 'MARKETISM' WITHOUT EXIT"

- The Charkravyuha legend from the Mahabharata describes the ability to enter but not exit, with seriously adverse consequences. It is a metaphor for the workings of the Indian economy in the 21st century, the legacy of several decades of economic policy making.
- The Indian economy has made great strides in removing barriers to entry for firms, talent, and technology. Less progress has been made in relation to exit. Thus, over the course of six decades, the Indian economy moved from 'socialism with limited entry to "marketism" without exit'. Impeded exit has substantial fiscal, economic, and political costs. We document its pervasive nature which encompasses not just the public sector and manufacturing but the private sector and agriculture. A number of solutions to facilitate exit are possible. The government's initiatives including the new bankruptcy law, rehabilitation of stalled projects, proposed changes to the Prevention of Corruption Act as well as the broader JAM agenda hold the promise of facilitating exit, and providing a significant boost to long-run efficiency and growth.
- Many sectors illustrate the Indian economy's exit problem, including banking, civil aviation, fertiliser, power, labour markets and agriculture.

WHY RECALIBRATE EXPECTATIONS? INDIA "SO ENTWINED" WITH WORLD



LIQUIDITY HAS TIGHTENED AFTER OCTOBER RATE CUT



OUTLOOK FOR GROWTH AND INFLATION

» Real GDP growth projection for FY2017: 7-7.75 per cent

- The wider range reflects the range of exogenous: from a rebound in agriculture to a full-fledged international crisis.
- Uncertainty arising from the divergence between growth in nominal and real aggregates.

» CPI inflation projection for FY2017: 4.5 – 5.0 per cent

- Minimal effect of 7th Pay Commission
- Below-potential growth and rising excess capacity
- Balance sheet stresses of private sector
- Deflationary world environment

» Downside risks

- The most serious risks are global: faltering world growth, extreme financial events, and rising oil prices.

FISCAL: TO CONSOLIDATE AGGRESSIVELY OR GRADUALLY ?

» Fiscal policy must balance maintaining stability (through steadily declining debt and deficit) with purchasing insurance against growth slowdown

PROS

» Government keeps commitment, reinforcing credibility

» Debt and deficit on declining path

» Robust growth right time to consolidate

CONS

» Feasibility when large Pay Commission and infrastructure obligations loom

» Could weaken economy when growth outlook uncertain

SPREADING JAM ACROSS INDIA'S ECONOMY

» One contribution of last year's Economic Survey was to add the phrase 'JAM'—Jan Dhan, Aadhaar, Mobile—to the Indian lexicon. The 'JAM agenda' refers to the potential of large-scale, technology-enabled, real-time cash transfers to improve the economic lives of the poor, and raise economic efficiency by reducing leakages and market distortions. Over the past year much progress has been made in spreading JAM across India's economy.

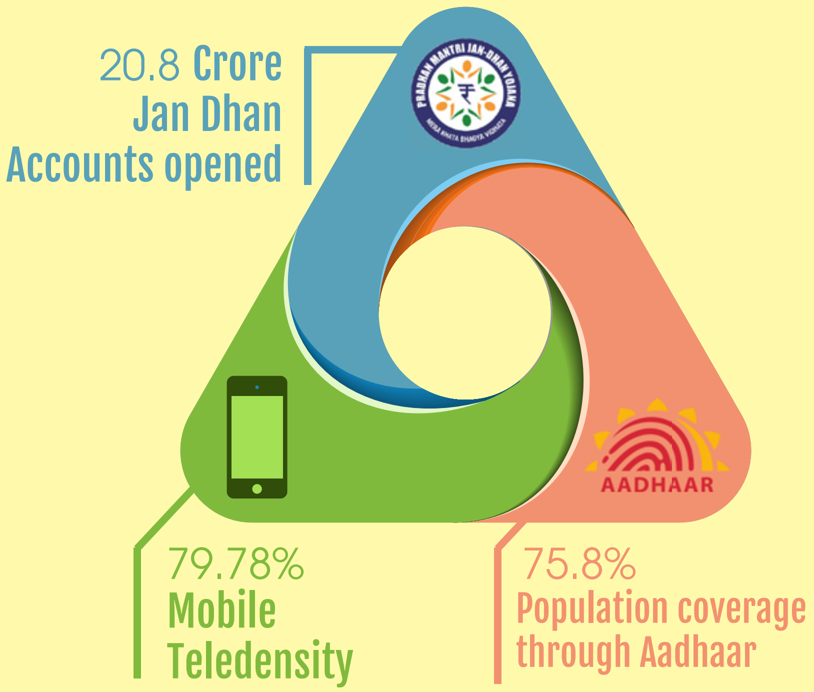
» JAM has three ingredients:

- Government must be able to identify beneficiaries
- Government must be able to transfer money to beneficiaries
- Beneficiaries must be able to easily access their money

» The ingredients of JAM thickened significantly in 2015. Jan Dhan and Aadhaar deepened their coverage at an astonishing rate. On average, over 3 lakh new Jan Dhan accounts and 5 lakhs Aadhaar cards were created every day in 2015. The RBI also licensed 23 new banks, including 10 payments banks.

» Despite Jan Dhan's tremendous progress, the main constraint on JAM's spread is the last-mile challenge of getting money from banks into people's hands. This challenge is especially significant in rural India, where only 27 per cent of villages have a financial access point within 5km. Improving last-mile financial connectivity by developing banking correspondent and mobile money networks is therefore critical to furthering the JAM vision.

JAM Trinity



» We study the first large-scale JAM program—the Pahal scheme of delivering LPG subsidies via DBT. Pahal reduced leakages by about 24 per cent, and seems to have achieved this success with very limited exclusion of genuine beneficiaries. However, when designing JAM schemes in other areas, policymakers should exercise caution in drawing lessons from the LPG case.When deciding where next to spread JAM, policymakers should consider first-mile (beneficiary identification), middle-mile (distributor opposition) and last-mile (beneficiary financial inclusion) challenges.

DIRECT BENEFIT TRANSFER

PAHAL

150 MILLION BENEFICIARIES
Rs. 29000 Crore transfered

» We construct an index to measure states' preparedness to implement two varieties of JAM programs: (i) DBT in urban areas, (ii) DBT in rural areas, and (iii) BAPU—Biometrically Authenticated Physical Uptake. BAPU differs from DBT in that there is no transfer of money. Beneficiaries simply authenticate their identities and physical collect benefits or subsidised goods as they do presently.

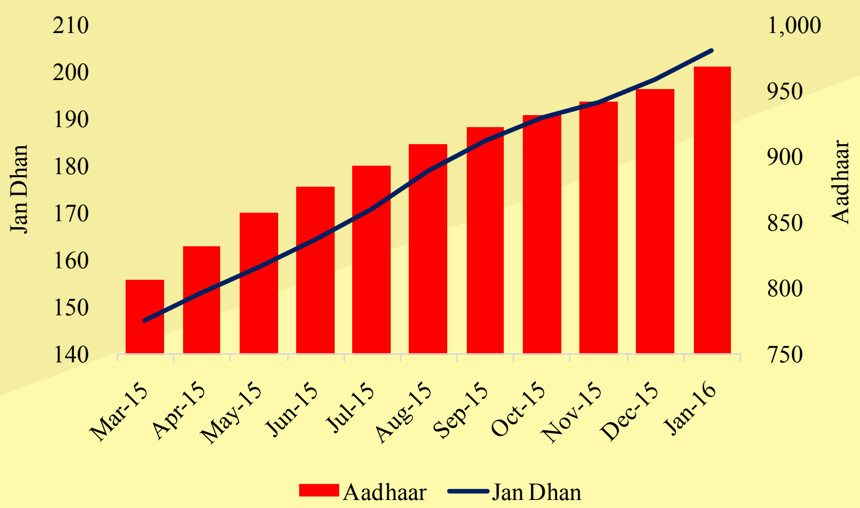
SPREADING JAM ACROSS INDIA'S ECONOMY

Several states seem better prepared for BAPU than DBT due to last-mile financial inclusion constraints.

» At present the most promising areas for JAM are fertiliser subsidies and within-government transfers for schemes. These are areas under significant central government control and with substantial potential for fiscal savings.

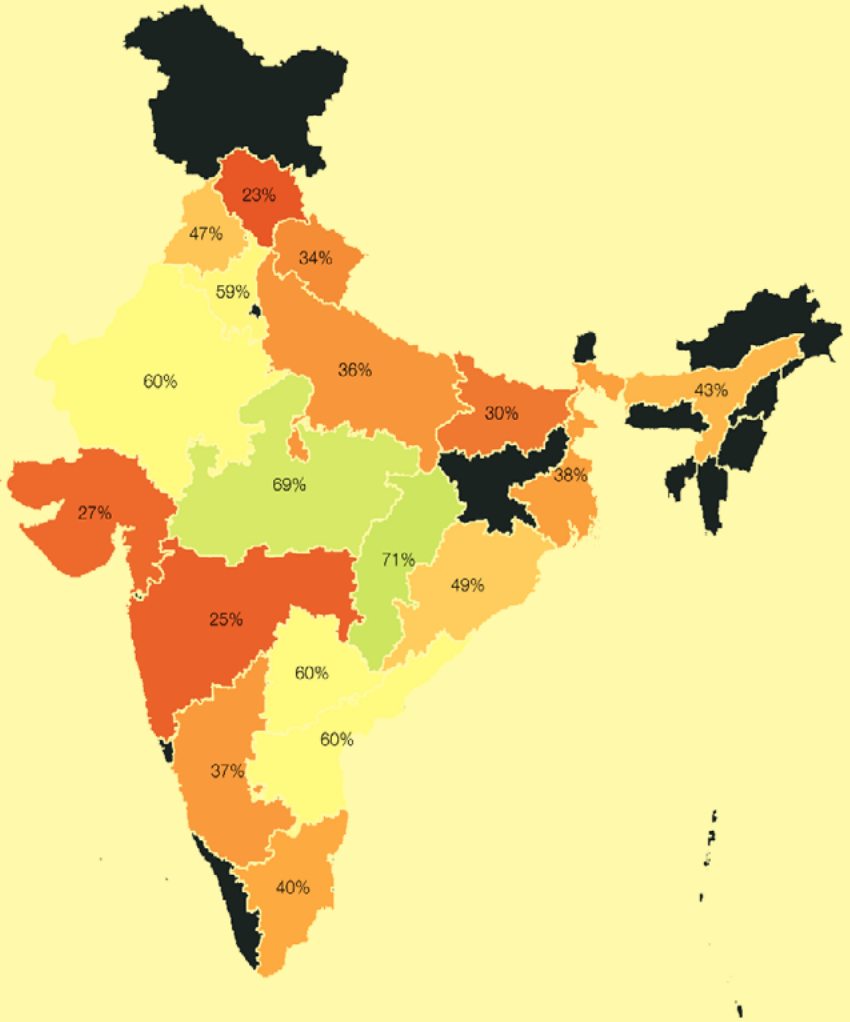
» There are very large benefits from using JAM for government's bread-and-butter expenditure. Local government rely on central transfers to fund key programs in the same way that poor households rely on government subsidies. All receive funds from the same Sarkari financial pipe—which JAM can improve by reducing delays, leakages, and administrative burden. We document how the Bihar government reduced corruption by 14 per cent and idle funds by 26 per cent by sending NREGA payments directly to beneficiaries—rather than layer by layer within government (Centre - State - District - Block - Panchayat). Similar gains are possible from adopting this model for all government payments—not just subsidies, but also salaries

The thickening of JAM -- Jan Dhan & Aadhaar coverage over time



HOW PREPARED ARE STATES TO JAM? SEE JAM PREPAREDNESS INDICES

URBAN



WAY FORWARD FOR JAM?

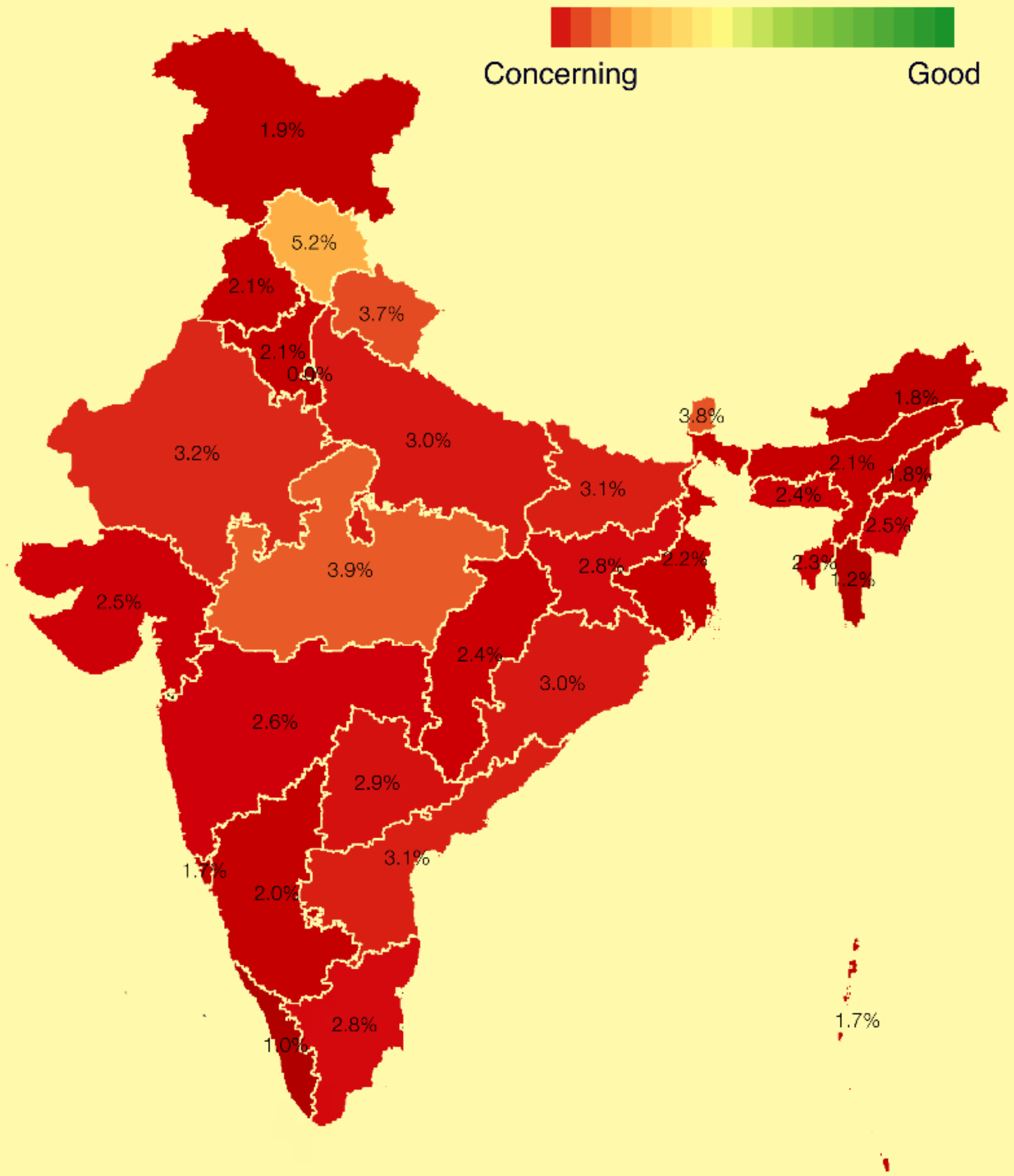
» Improve financial connectivity in rural areas by developing BCs and mobile banking

» Meanwhile move forward on important sectors which center controls:

- Fertiliser
- Government programs (eg. MGNREGA)

HOW PREPARED ARE STATES TO JAM? SEE JAM PREPAREDNESS INDICES

RURAL

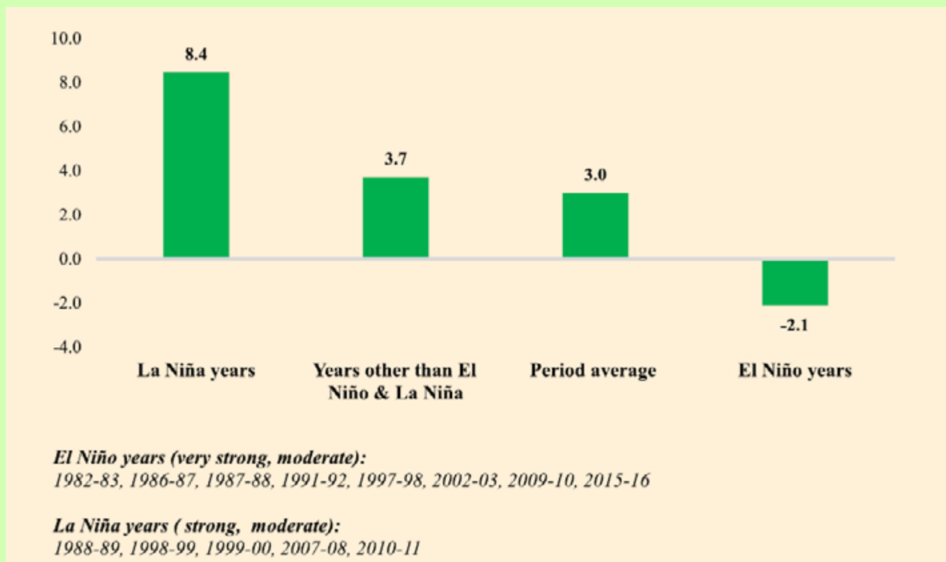


AGRICULTURE: MORE FROM LESS

» Indian agriculture, is in a way, a victim of its own past success—especially the green revolution. It has become cereal-centric and as a result, regionally-biased and input-intensive (land, water, and fertiliser). Rapid industrialization and climate change are raising the scarcity value of land and water, respectively. Evolving dietary patterns are favoring greater protein consumption. To adapt to these changes, agriculture requires a new paradigm with the following components: Increasing productivity by getting "more from less" especially in relation to water via micro irrigation; prioritizing the cultivation of less water-intensive crops, especially pulses and oil-seeds, supported by a favourable Minimum Support Price (MSP) regime that incorporates the full social benefits of producing such crops and backed by a strengthened procurement system; and re-invigorating agricultural research and extension in these crops. Finally, we provide evidence of deep segmentation in Indian agricultural markets which, if remedied, would create one Indian agricultural market and boost farmers' incomes.

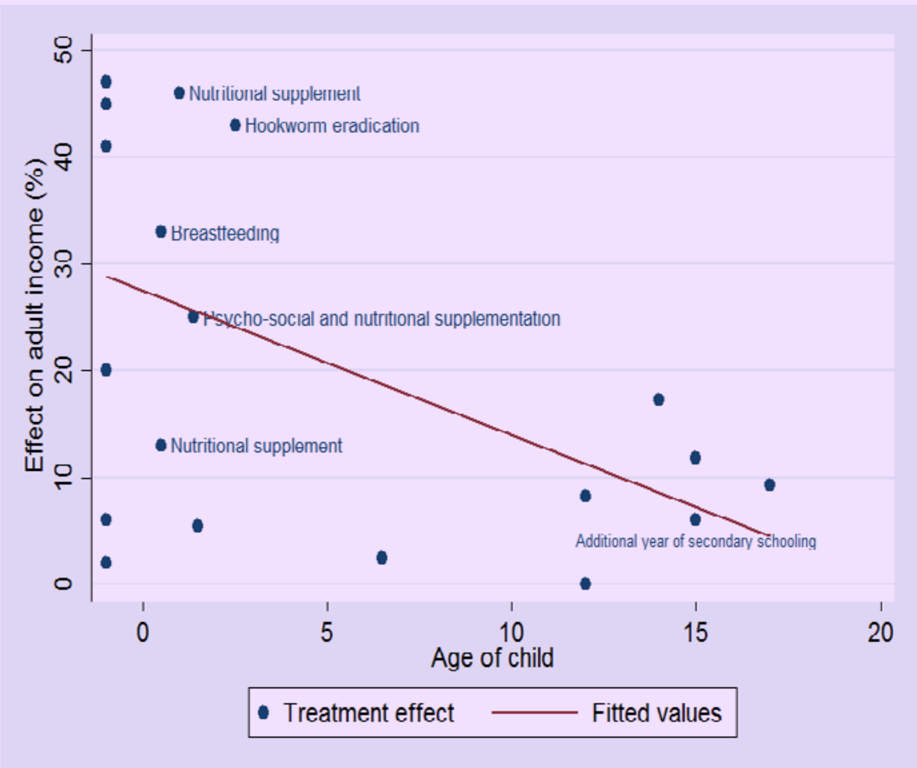
AGRICULTURAL GROWTH

1981-82 to 2015-16(average %)



MOTHER AND CHILD

- Imagine the government were an investor trying to maximise India's long-run economic growth. Given fiscal and capacity constraints, where would it invest? Tomorrow's worker is today's child or foetus, born to and raised by today's mother. This chapter shows that relatively low-cost maternal and early-life health and nutrition programs offer very high returns on investment because: (i) the most rapid period of physical and cognitive development occurs in the womb, so in utero and early-life health conditions significantly affect outcomes in adulthood; and (ii) the success of subsequent interventions—schooling and training—are influenced by early-life development.



- Despite recent progress, India generally under-performs on maternal and child health indicators: pre-pregnancy weights and weight-gain during pregnancy are both low. India is already halfway through its demographic dividend, and taking full advantage requires a healthy and educated population. Making these investments in maternal nutrition and sanitation, and enhancing their effectiveness by working to change social norms, can help India exploit this closing window.

BOUNTIES FOR THE WELL OFF

- Subsidies are usually thought to be for the poor. But a number of government policies and subsidies actually provide benefits disproportionately to the well-off. We find that together these schemes and policies provide a bounty to the well-off of about Rs 1 lakh crore.
- Tax benefits for PPF contributors benefit tax payers, who comprise the top 4 percentiles of India's income distribution.
- LPG is subsidised even though 97 per cent of consumption is by the richest 30 per cent of households.

Other bounties for the well-off include subsidised railway passenger fares for reserved ticket classes like AC, First-Class and Sleeper; and low-taxed gold and aviation turbine fuel.

WHO BENEFITS FROM TAX BENEFITS?

Not Middle Class, not Rich but the Mega Rich

- 10% tax bracket starts at top 5.8 percentile of the income distribution
- 20% tax bracket starts at top 1.6 percentile of the income distribution
- 30% tax bracket starts at top 0.5 percentile of the income distribution

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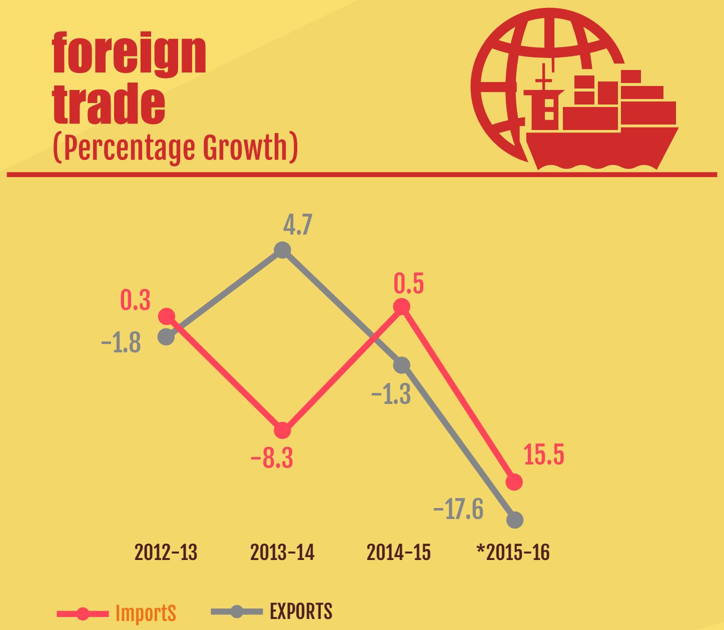
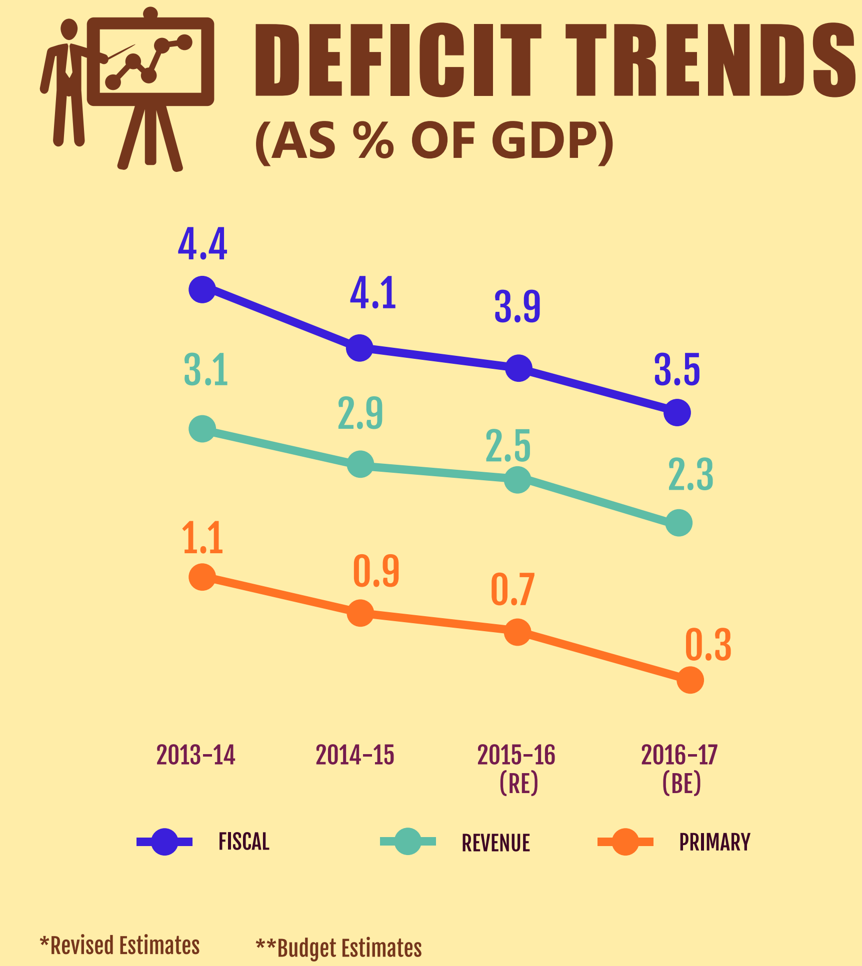
PREFERENTIAL TRADE AGREEMENTS

- While remaining committed to multilateralism, India like many other countries, has negotiated a series of free trade agreements (FTAs), notably with trading partners in Asia. Since the mid-2000s, India's FTAs have doubled to about 42 today. At a time of seismic changes in the international landscape in the form of mega-regional agreements, involving the largest traders—USA, Japan, and the European Union—we review the experience of a few of India's FTAs. Using updated data and methodologies, we find that the economic impact is what might be expected. FTAs have led to increased imports and exports, although the former has been greater. We find that the average effect of an FTA is to increase overall trade by about 50 percent over roughly four years. We also find that the ASEAN FTA has had the greatest impact, possibly because tariff reduction by India has been greater under it. The results also suggest a bigger impact on metals on the importing side and textiles on the exporting side. More work is required to enrich this analysis and to extend it to services so that a definitive assessment can be made of the overall impact of India's FTAs.



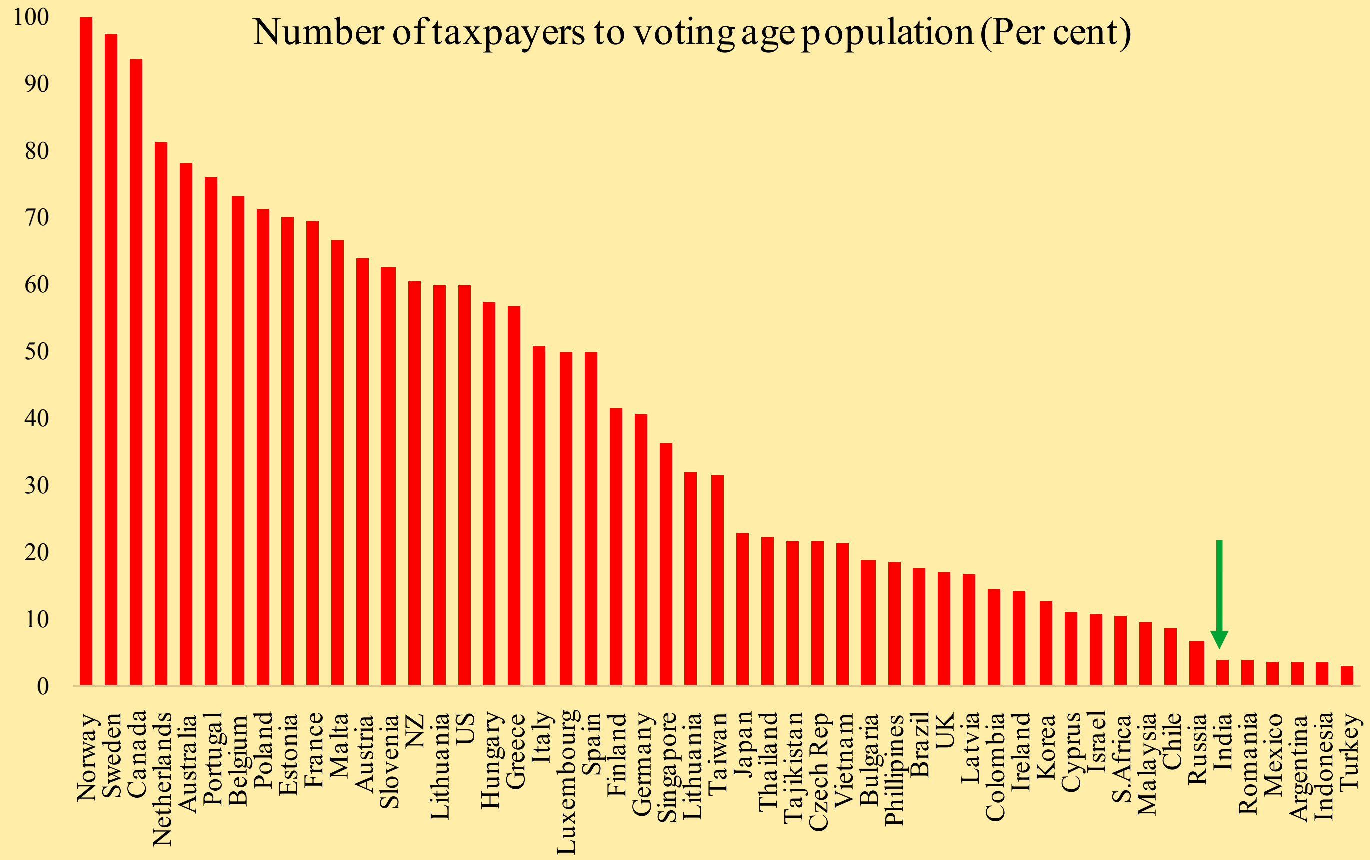
FISCAL CAPACITY FOR THE 21ST CENTURY

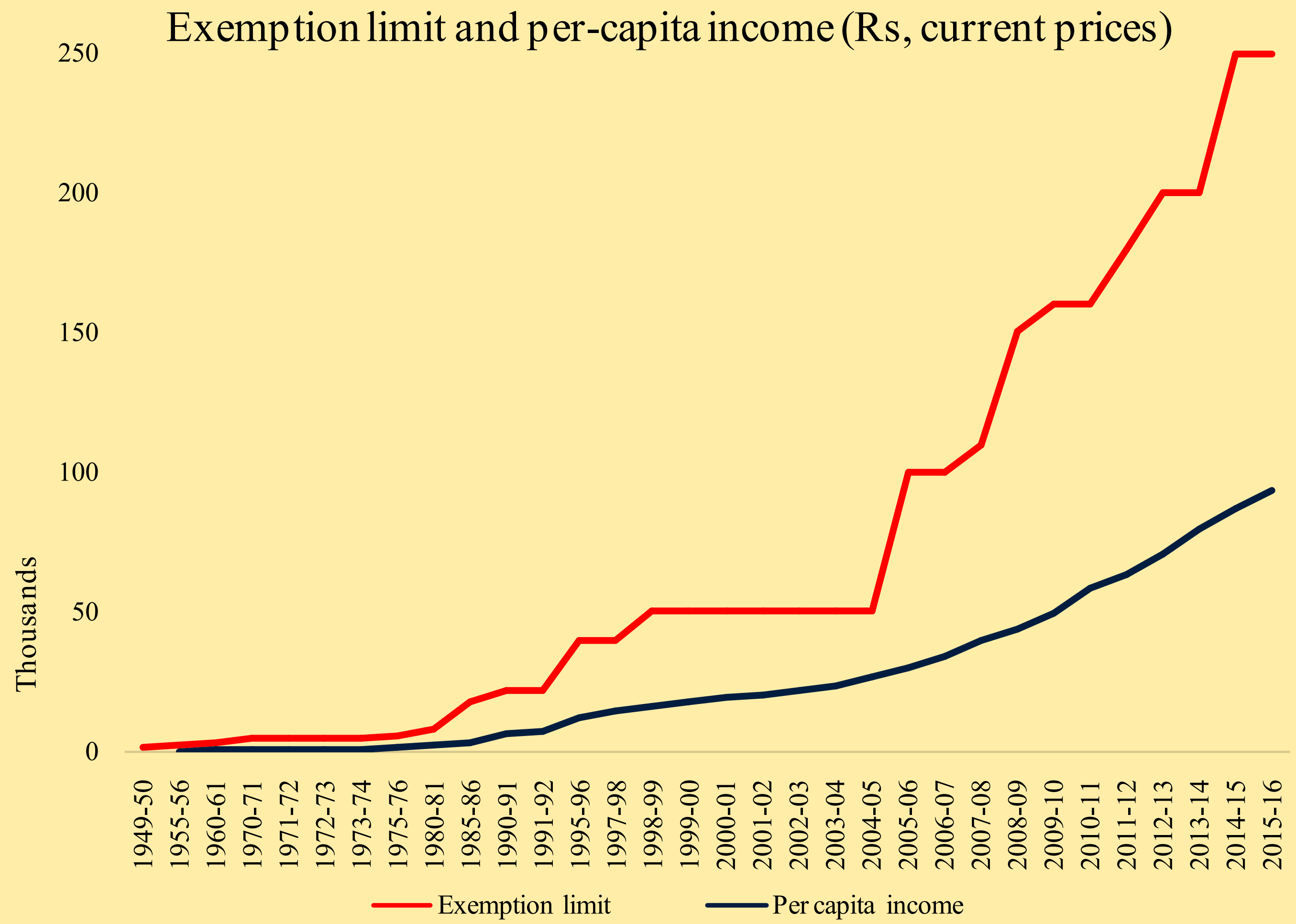
- Controlling for the level of economic development, India neither under-taxes nor under-spends. India does tax and spend less than other politically developed nations, but given that most other democracies took time to strengthen tax capacity, perhaps India is not an outlier on this dimension, either.
- India does stand out in the number of individual income taxpayers, currently about 4 percent (the ratio of taxpayers to voters), far from our desirable estimate of about 23 percent.
- Building long-run fiscal capacity is vital. One low hanging fruit would be to refrain from raising exemption thresholds for the personal income tax, allowing natural growth in income to increase the number of taxpayers. Beyond that, building fiscal capacity is also about creating legitimacy in the state.



FISCAL CAPACITY: BUT NUMBER OF TAXPAYERS UNUSUALLY LOW

- The ratio of tax payers to voters is ~ 4 per cent while it should be ~23 per cent for a country at its level of economic and political development
- Solutions: Not increasing exemption limits
- Building legitimacy in state: Delivering public goods for all





STRENGTHENING THE STATE: FISCAL RELATIONS WITH RICH AND POOR

DOES INDIA UNDER-TAX AND UNDER-SPEND ? YES, ...ACTUALLY NO

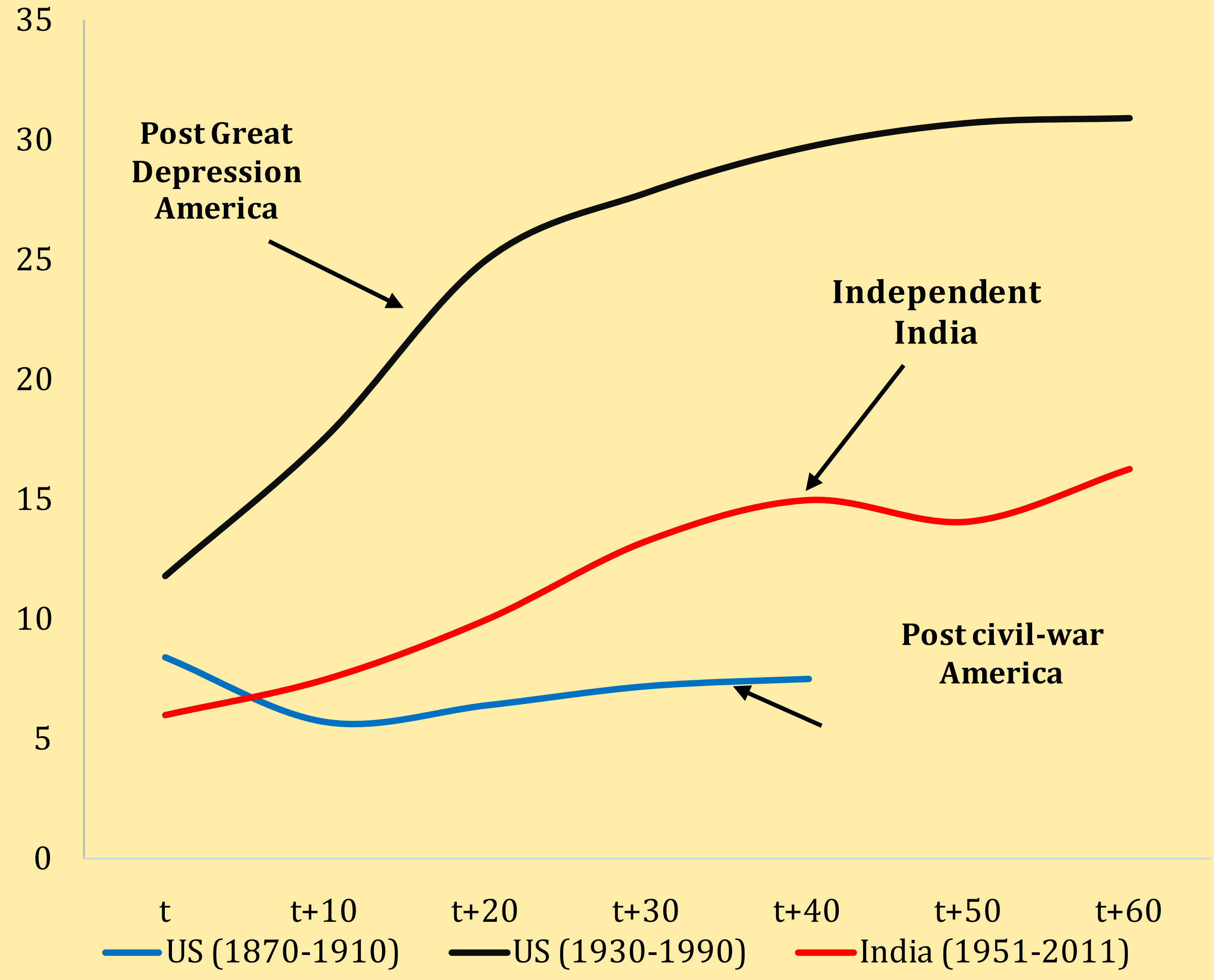
Yes, in a simple comparison

Share as per cent of GDP

Country	Total Tax	Total Expenditure	Expenditure in human capex*	Income tax	Individual Income tax	Property tax	Indirect Tax
China	19.4	29.7	7.2	5.3	--	2.0	12.7
India	16.6	26.6	5.1	5.6	2.1	0.8	10.1
Brazil	35.6	40.2	11.0	7.3	2.3	2.0	15.7
Korea	24.3	20.0	8.4	7.1	3.7	2.5	7.5
Vietnam	22.2	28.0	8.8	8.4	--	--	--
South Africa	28.8	32.0	10.7	15.0	--	1.4	10.2
Turkey	29.3	37.3	7.2	5.9	4.1	1.4	13.5
Russia	23.0	38.7	7.2	7.2	--	1.1	7.1
UK	32.9	41.4	13.4	11.7	9.1	4.0	10.8
US	25.4	35.7	13.3	12.0	9.8	2.9	4.4
EMEs Avg	21.4	30.9	7.5	7.4	2.2	1.0	10.8
OECD Avg	34.2	42.8	11.6	11.5	9.5	1.9	11.0

Actually, No because India is a young democracy which did not experience upheavals (war)

Path of tax ratios-India and US (2 periods)



PIKETTY IN INDIA: GROWING CONCENTRATION OF INCOMES AT THE TOP (TILL 2013)

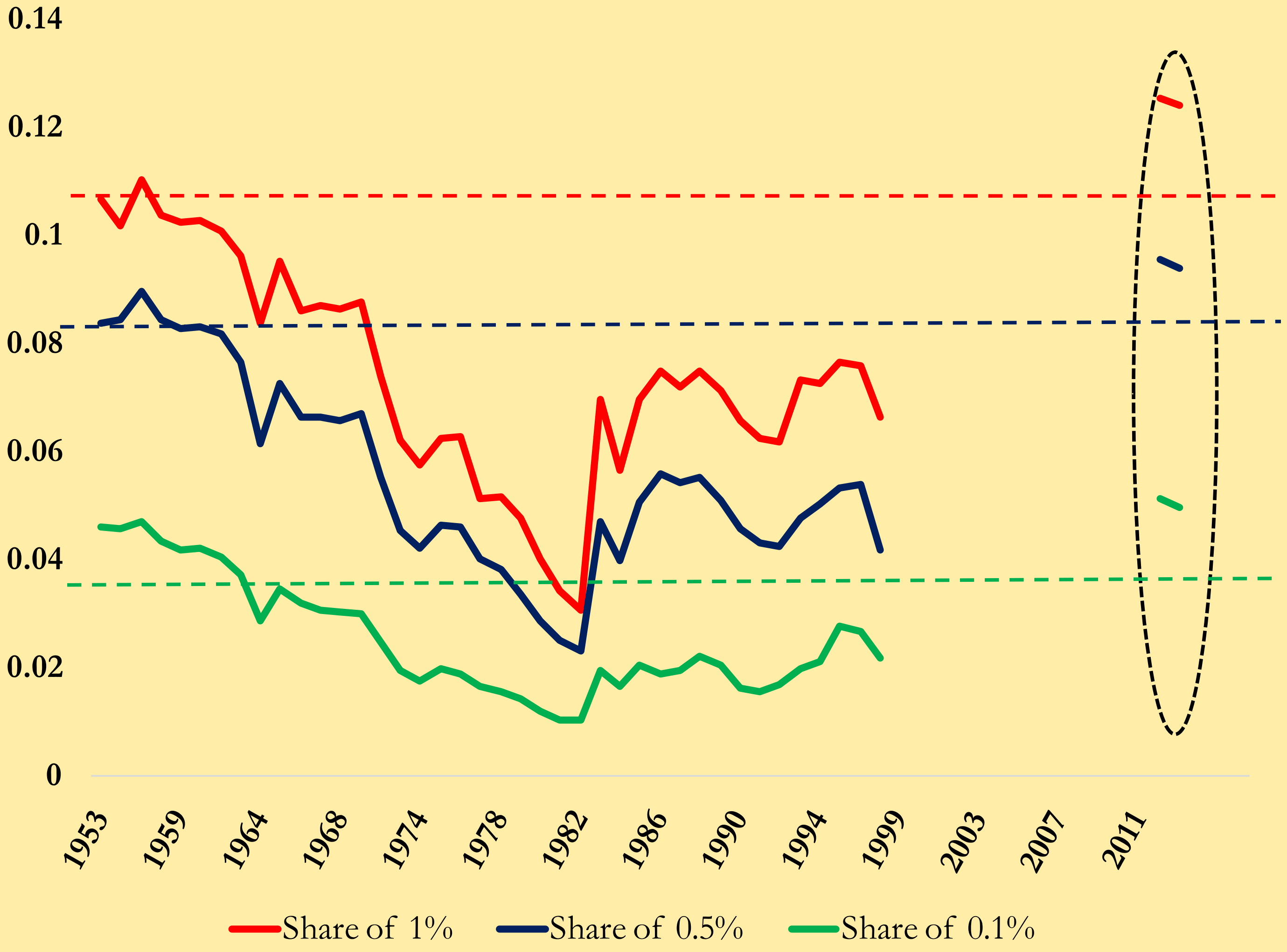


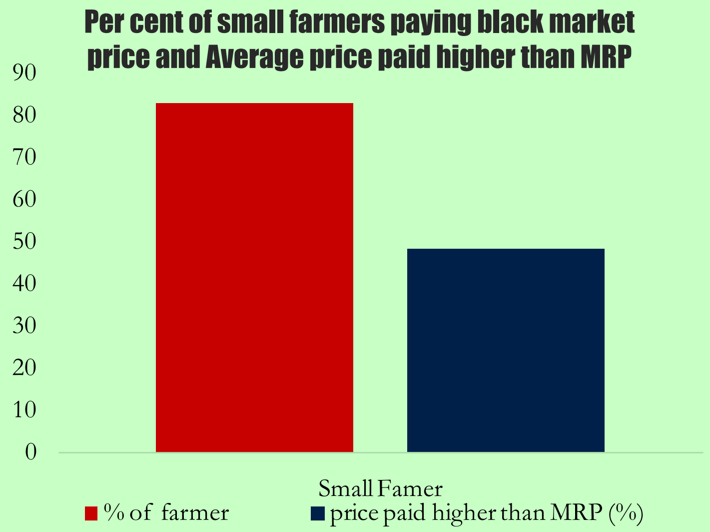
Table: Top Personal Income Distribution						
	Share of top 1 percent		Share of top 0.5 percent		Share of top 0.1 percent	
	1998	2012	1998	2012	1998	2012
USA	15.2	18.9	11.6	14.7	6.2	8.4
UK	12.5	12.7	9.1	9.2	4.4	4.6
India	9.0	12.6	7.0	9.6	3.6	5.1

REFORMING THE FERTILISER SECTOR

- The fertiliser sector has seen significant recent reforms. These include neem-coating urea which has likely reduced diversion to industrial uses, and gas-pooling to induce efficiency in production.
- Fertiliser accounts for large fiscal subsidies after food—about Rs 73,000 crore or 0.5 percent of GDP. Nearly 70 per cent of this amount (about Rs 50,300 crore) was allocated to urea, the most commonly used fertiliser.
- We estimate that only 17,500 crores of the urea subsidy—about 35 per cent—reaches small farmers. Fertiliser subsidies suffer from 3 types of leakages—(i) leakages to the black market, (ii) leakages to inefficient fertiliser manufacturers and (iii) leakages that prevent small farmers from deriving full benefits from the subsidy.
- 51 per cent of farmers were forced to buy urea in the black market at prices above the Maximum Retail Price, according to the 2012-13 Cost of Cultivation Survey. Moreover, small farmers more likely to have to buy urea in black market than large farmers. Urea leakages to the black market are driven by a violation of the One Product One Price principle. This principle says that products which are essentially the same should be charged essentially the same price. Otherwise, there will be incentives to divert the subsidised commodity from eligible to ineligible consumers. The 75 per cent subsidy on agricultural urea creates a strong incentive to divert urea to industry diverting urea to industry and possibly across the border to Bangladesh and Nepal.
- Controlled imports are another feature of the fertiliser sector. Currently only 3 firms are allowed to import urea into India, and the import timings and quantities of these "canalised firms" are also controlled.This restricts the ability of supply to respond to unexpected changes in fertiliser demand due to climatic and other market conditions.
- Decanalising urea imports would allow fertiliser supply to respond more flexibly to changes in demand. This would reduce the likelihood of shortages, decrease blackmarketing and consequently benefit the small farmer.
- Leakages can be further reduced by bringing the JAM agenda of delivering subsidies via DBT to fertiliser.

FERTILISER: THE BLACK MARKET AND LEAKAGES

- Policies lead to black-market and hurt the small farmer
- 80 per cent of small farmers buy urea at prices greater than MRP
- They pay 50% greater than the administered price



Of total urea subsidy (Rs 50,300 Cr)

i. 24% goes to inefficient firms (Rs 12000 Cr)

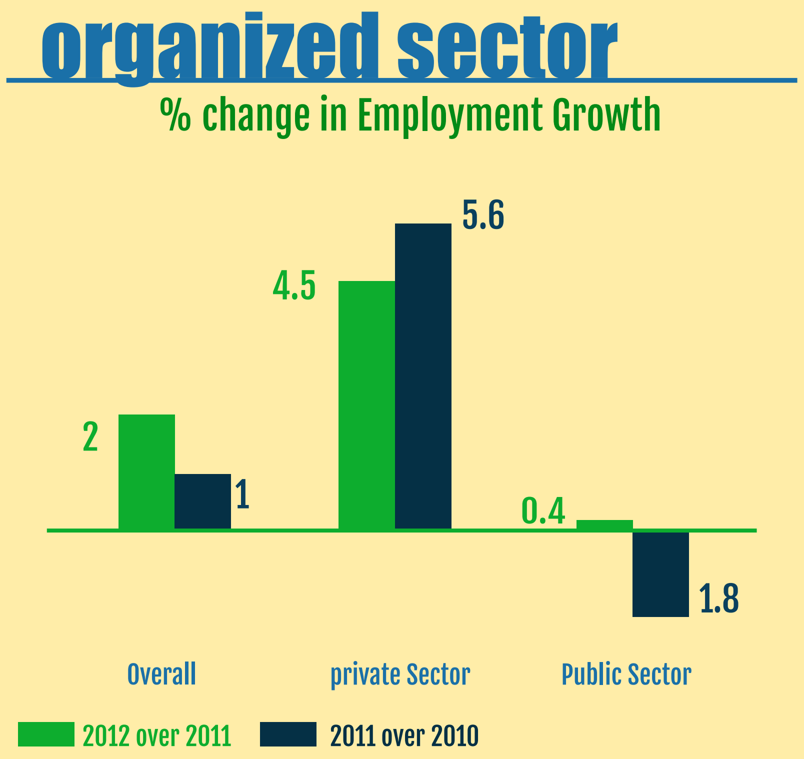
ii. of the remaining 41% get diverted (Rs15,700 Cr)

iii. of the remaining 24 % goes to large farmer (Rs 5400 Cr)

iv. only 35% goes to small farmers (Rs 17100 Cr)

Time is ripe for DBT…..

STRUCTURAL CHANGES IN INDIA'S LABOUR MARKETS



» India must create millions of "good"—safe, productive, well-paying—jobs to exploit its demographic dividend. These jobs tend to be in the formal sector. This chapter studies constraints on formalisation and reviews ongoing developments that are responding to these constraints.

» Use of contract labour has increased significantly over the past decade: from 12 per cent of all registered manufacturing workers in 1999 to over 25 per cent in 2010. Contract labour appears to ease constraints on larger manufacturers, leading researchers to conclude that they boost manufacturing GDP. However, any overall assessment of contractualisation must take into account its impact on worker protection and employers' incentives to invest in workers' skills.

» The dynamic of competitive federalism is at work, with states competing to attract employment-intensive, high-quality manufacturing companies. Attracting good companies is important not just because of its impact on employment and growth today, but also because it affects what products a country can profitably manufacture in the future. Some products, like mobile phones, can help India produce other high-tech products and climb technology ladders, leading to faster medium-term growth.

» The relocation of labour-intensive manufacturing to smaller cities and towns has both commercial and social advantages. Employers benefit from lower rental and labour costs, and create "good" jobs. This is especially the case with industries like apparel, which employ mostly women. When apparel firms relocate to rural areas, they create "suitable" jobs for women which can otherwise be rare in towns that have rapidly urbanised.

» Because of mandatory employment benefits, the wedge between total and take-home salaries is significantly larger for lower earners than for higher-earners. For example, a worker earning Rs 5,500 a month has mandatory deductions from salary of about 15 per cent, while a worker earning Rs 55,000 a month has mandatory deductions of only about 0.5 per cent. The centre can boost formal sector job growth by expanding employees' choice regarding their employment benefits, especially for the poor.

» Challenge is to create "good"—safe, productive, well-paying, dignified—jobs

- These tend to be in formal sector

» Three developments

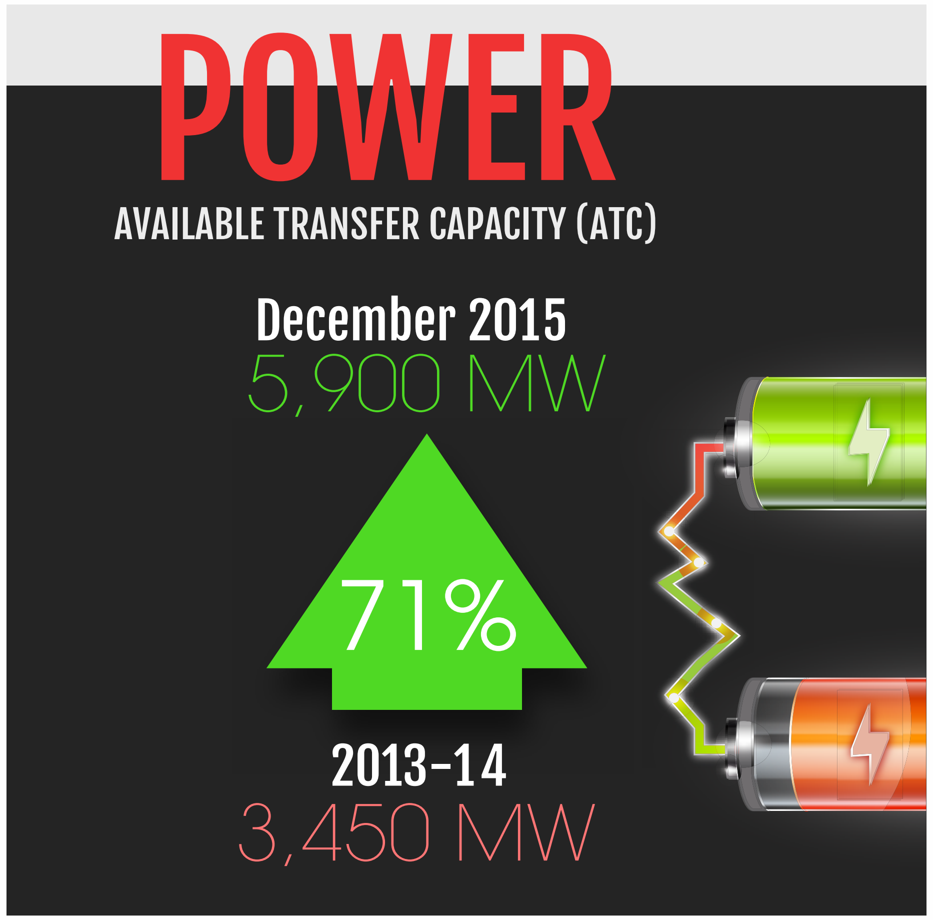
- Contractualisation of labour
- Competitive federalism
- Relocation of labour-intensive manufacturing to second tier cities and towns

» Mandatory deductions from employees' salaries higher for poor than rich workers (15% versus 0.5%)

POWERING ONE INDIA

» Since 2014, several sweeping changes have taken place in the power sector.

- There has been record addition to generation capacity. 2014-15 marked the highest ever increase in generation capacity: 26.5 GW, much higher than the average annual addition of around 19 GW over the previous five years.
- There has been a comprehensive initiative to improve the health and performance ofpower distribution companies—UDAY, the Ujwal DISCOM Assurance Yojana.



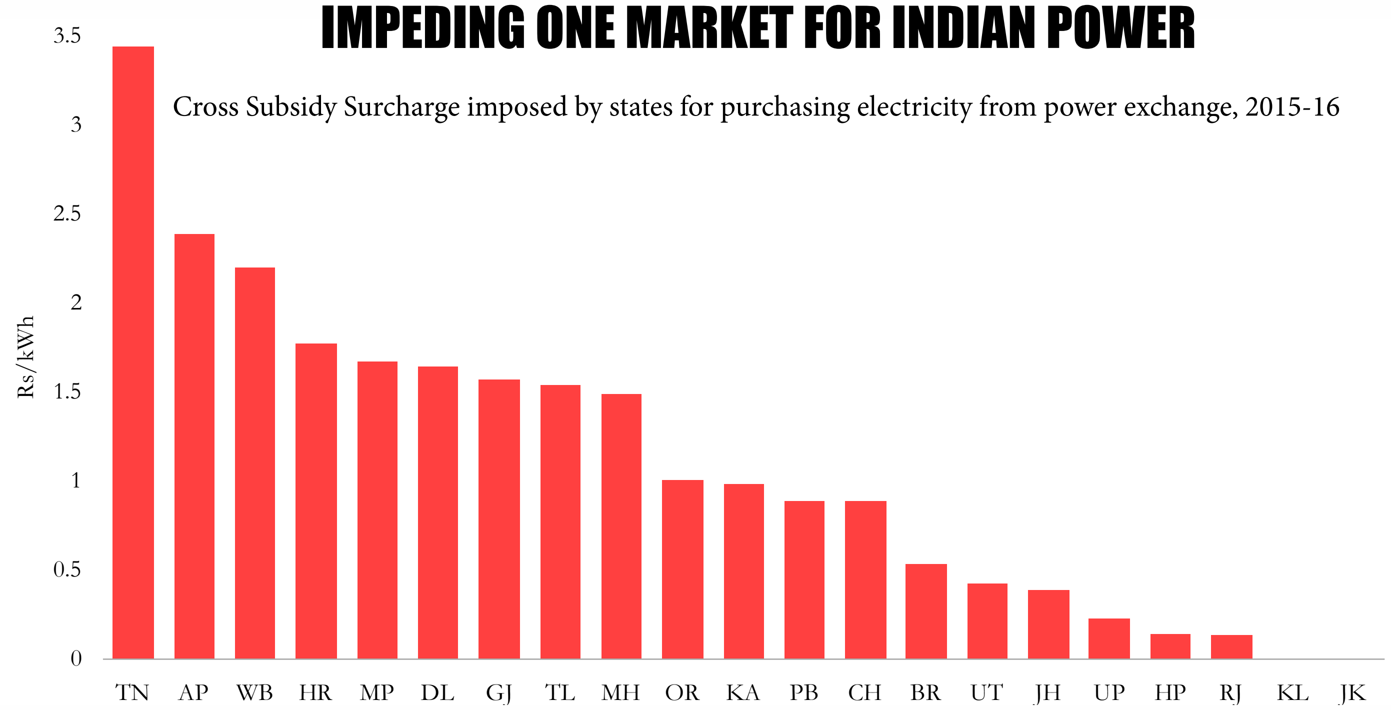
- Power tariff schedules are currently complex. For example, in certain states there are separate tariffs for poultry farms, pisciculture, wetland farms (above and below a certain size), mushroom and rabbit farms, etc. By contrast, other energy products are characterised by a single price—or at most a few prices—across end users.
- Capacity enhancements in the power sector are unprecedented. These measures have helped to reduce India's peak electricity deficit to 2.4 per cent, the lowest ever.
- Nevertheless, firms may be shifting from purchasing electricity from utilities to generating their own power.

* 47 per cent of firms report using a diesel generator.

* Between 2006-07 and 2014-15, electricity procurement from utilities grew by 4.6 per cent annually, slower than the 9.3 per cent growth in self-generation.

- The combination of increased generation capacity and demand shifting towards self-generation is reflected in plant load factors that are currently 62 per cent.
- Cross-subsidy surcharges and non-price regulatory measures are key tools for balancing DISCOMS' equity and access considerations, but they may also hinder the creation of a nationwide electricity market.
- Compared to other developing countries, India's domestic power tariff schedules have greater scope for progressivity. Increases in tariffs for rich households can be achieved while maintaining or reducing tariffs for the poor.

POWER: TARIFF AND NON-PRICE REGULATIONS IMPEDING ONE MARKET FOR INDIAN POWER



CONCLUSION

» **Last year's Survey :** Robust, decentralized democracies outside of crises will undertake "incremental" reforms

» **Achievements :** A number of individually incremental but collectively meaningful reforms have been enacted

» **Pending agenda**

- GST
- Strategic disinvestments
- Twin Balance Sheet
- Subsidy rationalization (rich and poor)

» **The promise of India**

- Accelerated structural reforms at the center
- Competitive federalism at the states
- Good economics becoming good politics all over India