Summary of Economic Survey

Summary of Economic Survey: Eight Interesting Facts about India

- 1. **Indians on the Move:** New estimates based on railway passenger traffic data reveal annual work-related migration of about 9 million people, almost double what the 2011 Census suggests.
- 2. **Biases in Perception:** China's credit rating was upgraded from A+ to AA- in December 2010 while India's has remained unchanged at BBB-. From 2009 to 2015, China's credit-to-GDP soared from about 142 percent to 205 percent and its growth decelerated. The contrast with India's indicators is striking.
- 3. **New Evidence on Weak Targeting of Social Programs:** Welfare spending in India suffers from misallocation: as the pair of charts show, the districts with the most poor (in red on the left) are the ones that suffer from the greatest shortfall of funds (in red on the right) in social programs. The districts accounting for the poorest 40% receive 29% of the total funding.
- 4. **Political Democracy but no Fiscal Democracy:** India has 7 taxpayers for every 100 voters ranking us 13th amongst 18 of our democratic G-20 peers.
- 5. **India's Distinctive Demographic Dividend:** India's share of working age to non-working age population will peak later and at a lower level than that for other countries but last longer. The peak of the growth boost due to the demographic dividend is fast approaching, with peninsular states peaking soon and the hinterland states peaking much later.
- 6. India Trades More than China (As %age of GDP) and a lot within itself: As of 2011, India's openness measured as the ratio of trade in goods and services to GDP has far overtaken China's, a country famed for using trade as an engine of growth. India's internal trade to GDP is also comparable to that of other large countries and very different from the caricature of a barrier-riddled economy.
- 7. **Divergence within India, Big Time:** Spatial dispersion in income is still rising in India in the last decade (2004-14), unlike the rest of the world and even China. That is, despite more porous borders within India than between countries internationally, the forces of "convergence" have been elusive.
- 8. **Property Tax Potential Unexploited:** Evidence from satellite data indicates that Bengaluru and Jaipur collect between 5% to 20% of their potential property taxes.

SECTION I: THE PERSPECTIVE

Summary of Economic Survey: Global Context

The world's "political carrying capacity for globalization" may have changed in the wake of recent developments. In the short run a strong dollar and declining competitiveness might exacerbate the lure of protectionist policies. The rise of the dollar, will have implications for China's currency and currency policy. If China is able to successfully re-balance its economy, the spillover effects on India and the rest of the world will be positive. On, the other hand, further declines in the yuan, even if dollar-induced, could interact with underlying vulnerabilities to create disruptions in China that could have negative spillovers for India

For China, there are at least two difficult balancing acts with respect to the currency. Domestically, a declining currency (and credit expansion) prop up the economy in the short run but delay rebalancing

while also adding to the medium term challenges. Internationally, allowing the currency to weaken in response to capital flight risks creating trade frictions

There were two phases of globalisation (1870-1914, 1945-1985), one phase of hyperglobalisation between 1985-2008, and one phase of deglobalisation in the inter-war period. The question today is what is likely to happen going forward: further globalisation, deglobalisation, or stagnation. These will have potentially important consequences for Indian exports and growth.

During the boom years between 2003-2011 India's real GDP growth averaged 8.2 percent, and exports grew at an annual rate of between 20 and 25 percent (in real dollar terms, for goods and services). So, assume conservatively that India aims to grow at 8 percent for the next decade and that that requires growth in exports of goods and services of 15 percent, respectively.

Next, assume that the world will continue to grow at 3 percent growing forward. Define the political carrying capacity of the world for globalisation as the world's export-to-GDP ratio. The latest figure for that is about 21 percent; assume that it remains stable.

In these circumstances, the problem is the following. India's GDP and export growth alone will imply an increase in the world's export-to-GDP ratio of about 1.3 percentage points. If China's export growth continues at the pace of the last 6 years (7 percent in real terms), that will lead to a further increase in the world's export-GDP ratio of another 1.4 percentage points. In other words, India's export growth will run up against the world's carrying capacity for globalisation. The squeeze will get worse if the world's trade-GDP ratio declines, and considerably worse if China's export juggernaut continues.

From Indias perspective the political carrying capacity for globalization is relevant not just for goods but also services. The worlds service exports to GDP ratio is about 6.1 percent. If India grows rapidly on the back of dynamic services exports the the world's service exports-GDP ratio will increase by 0.5 percentage points—which would be a considerable proportion of global exports. Put differently, India's services exports growth will test the world's globalisation carrying capacity in services. Responses could take not just the form of restrictions on labor mobility but also restrictions in advanced countries on outsourcing.

It is possible that the world's carrying capacity will actually be much greater for India's services than it was for China's goods. After all, China's export expansion over the past two decades was imbalanced in several ways: the country exported far more than it imported; it exported manufactured goods to advanced countries, displacing production there, but imported goods (raw materials) from developing countries; and when it did import from advanced economies, it often imported services rather than goods. As a result, China's development created relatively few export-oriented jobs in advanced countries, insufficient to compensate for the jobs lost in manufacturing — and where it did create jobs, these were in advanced services (such as finance), which were not possible for displaced manufacturing workers to obtain. China with its underlying vulnerabilities remains the country to watch for its potential to unsettle the global economy.

In contrast, India's expansion may well prove much more balanced. India has tended to run a current account deficit, rather than a surplus;

Summary of Economic Survey: Review of developments in 2016-17

A. GDP AND INFLATION

Real GDP growth in the first half of the year was 7.2 percent, on the weaker side of the 7.0-7.75 per cent projection in the Economic Survey 2015-16 and somewhat lower than the 7.6 percent rate recorded in the second half of 2015-16. The main problem was fixed investment, which declined sharply as stressed balance sheets in the corporate sector continued to take a toll on firms' spending plans. On the positive side, the economy was buoyed by government consumption, as the 7th Pay Commission salary recommendations were implemented, and by the long-awaited start of an export recovery as demand in advanced countries began to accelerate. Nominal GDP growth recovered to respectable levels, reversing the sharp and worrisome dip that had occurred in the first half of 2015-16. Inflation this year has been characterized by two distinctive features. The Consumer Price Index (CPI)-New Series inflation, which averaged 4.9 per cent during April-December 2016, has displayed a downward trend since July when it became apparent that kharif agricultural production in general, and pulses in particular would be bountiful. The decline in pulses prices has contributed substantially to the decline in CPI inflation which reached 3.4 percent at end-December.

1.32 The second distinctive feature has been the reversal of WPI inflation, from a trough of (-) 5.1 percent in August 2015 to 3.4 percent at end-December 2016 (Figure 2), on the back of rising international oil prices. The wedge between CPI and WPI inflation, which had serious implications for the measurement of GDP discussed in MYEA (Box 3, Chapter 1, MYEA 2015-16), has narrowed considerably.

Core inflation has, however, been more stable, hovering around 4.5 percent to 5 percent for the year so far. The outlook for the year as a whole is for CPI inflation to be below the RBI's target of 5 percent, a trend likely to be assisted by demonetization. RBIs target: 5 percent RBIs inflation band: 2-6%

Oct 14-Apr 16- WPI was negative.

Summary of Economic Survey: B. EXTERNAL SECTOR

Similarly, the external position appears robust having successfully weathered the sizeable redemption of Foreign Currency Non-Resident (FCNR) deposits in late 2016

The current account deficit has declined to reach about 0.3 percent of GDP in the first half of FY2017.

Foreign exchange reserves are at comfortable levels, having have risen from around US\$350 billion at end-January 2016 to US\$ 360 billion at end-December 2016 and are well above standard norms for reserve adequacy.

In part, surging net FDI inflows, which grew from 1.7 percent of GDP in FY2016 to 3.2 percent of GDP in the second quarter of FY2017, helped the balance-of-payments

The trade deficit declined by 23.5 per cent in April-December 2016 over corresponding period of previous year. During the first half of the fiscal year, the main factor was the contraction in imports, which was far steeper than the fall in exports. But during October- December, both exports and imports started a long-awaited recovery, growing at an average rate of more than 5 per cent (Figure 4a). The improvement in exports appears to be linked to improvements in the world economy, led by better growth in the US and Germany. On the import side, the advantage on account of benign

international oil prices has receded and is likely to exercise upward pressure on the import bill in the short to medium term.

Meanwhile, the net services surplus declined in the first half, as software service exports slowed and financial service exports declined (Figure 4b). Net private remittances declined by \$4.5 bn in the first half of 2016- 17 compared to the same period of 2015-16, weighed down by the lagged effects of the oil price decline, which affected inflows from the Gulf region

Summary of Economic Survey: C. FISCAL

Trends in the fiscal sector in the first half have been unexceptional and the central government is committed to achieving its fiscal deficit target of 3.5 percent of GDP this year (Figure 6a). Excise duties and services taxes have benefitted from the additional revenue measures introduced last year. The most notable feature has been the over-performance (even relative to budget estimates) of excise duties in turn based on buoyant petroleum consumption: real consumption of petroleum products (petrol) increased by 11.2 percent during April- December 2016 compared to same period in the previous year.

Indirect taxes, especially petroleum excises, have held up even after demonetization(Partly because it as exempt) State government finances are under stress (Figure 6b). The consolidated deficit of the states has increased steadily in recent years, rising from 2.5 percent of GDP in 2014-15 to 3.6 percent of GDP in 2015-16, in part because of the UDAY scheme.

Summary of Economic Survey: Outlook for 2017-18

Demonetisation affects the economy through three different channels. It is potentially:

- An aggregate demand shock because it reduces the supply of money and affects private wealth, especially of those holding unaccounted money;
- An aggregate supply shock to the extent that economic activity relies on cash as an input (for example, agricultural production might be affected since sowing requires the use of labour traditionally paid in cash); and
- An uncertainty shock because economic agents face imponderables related to the magnitude and duration of the cash shortage and the policy responses (perhaps causing consumers to deferor to reduce discretionary consumption and firms to scale back investments).

Bond yields rose sharply after November 8, in the US by as much as 58 basis points as of January 19. In India, they had moved in the opposite direction by 32 basis points, a comparative swing of 90 basis points. Similarly, India's stock market had declined by 0.93 percent (Figure 11). 1.52 The decline in interest rates and the outlook triggered a large outflow of foreign portfolio investment, amounting to US\$9.8 billion in November and December, with 60 percent of the decline accounted for by debt outflows (Figure 3c). Curiously, though, the impact on the exchange rate has been relatively modest (Figure 12), perhaps because of intervention by the RBI to stabilize the rupee.

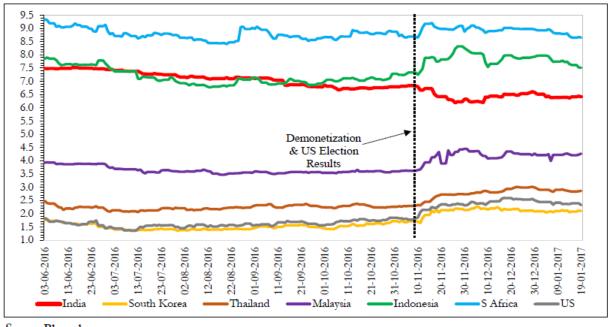


Figure 10. Yields on Government Bonds (%)

Source: Bloomberg

Summary of Economic Survey: Redistribution: Universal Basic Income (UBI) as a radical new vision

The central government alone runs about 950 central sector and centrally sponsored sub-schemes which cost about 5 percent of GDP. But there may be intrinsic limitations in terms of the effectiveness of targeting. Often the very districts that house the most number of poor are the ones facing the greatest shortfall in the allocation of funds. This misallocation has consequences: it results in exclusion of the deserving poor from access to government welfare benefits, leakages to non-poor and benefits to corrupt local actors. States such as Tamil Nadu and Andhra Pradesh, which do not necessarily have the largest number or proportion of poor avail themselves of the program to a greater extent than say Bihar which has many more poor people and a higher poverty rate.

Summary of Economic Survey: Exchange rate policy:

Vigilance and new ways of monitoring since July 2015, the yuan has depreciated about 11.6 percent (December 2016 over July 2015) against the dollar and as a on sequence the rupee has appreciated by 6 percent against the yuan. Given India's need for exports to sustain a healthy growth rate, it is important to track India's competitiveness. India has managed to maintain export competitiveness despite capital inflows and inflation that has been greater than in trading partners.

Reflecting this, India's global market share in manufacturing exports has risen between 2010 and 2015.

Summary of Economic Survey: Trade Policy

Two specific opportunities arise. First, given the discussion in Chapter 7 on the need to promote labor-intensive exports, India could more proactively seek to negotiate free trade agreements with the UK and Europe. The potential gains for export and employment growth are substantial. Based on work

initiated in last year's Survey, we calculate additional \$3 billion in the apparel and leather and footwear sectors and additional employment of 1.5 lakhs with the likely US retreat from regional initiatives such as the Trans-Pacific Partnership (TPP) in Asia and the Trans-Atlantic Trade and Investment Partnership (TTIP) with the EU, it is possible that the relevance of the World Trade Organization might increase. As a major stakeholder and given the geo-political shifts under way, reviving the WTO and multilateralism more broadly could be proactively pursued by India.

Summary of Economic Survey: Climate Change and India

The Paris Agreement on climate change in December 2015 has been one of the shining recent examples of successful international cooperation. However a major setback to the cause of climate change has been created by the large decline in petroleum prices since June. The increase in petrol tax has been over 150 percent in India. In contrast, the governments of most advanced countries have simply passed on the benefits to consumers, setting back the cause of curbing climate change. As a result, India now outperforms all the countries except those in Europe in terms of tax on petroleum and diesel.

Having decisively moved from a regime of carbon subsidies, it is now de facto imposing a carbon tax on petroleum products at about US\$150 per ton, which is about 6 times greater than the level recommended by the Stern Review on Climate Change India's reliance on fossil fuels remains well below China (the most relevant comparator) but also below the US, UK and Europe at comparable stages of development (this echoes the commitment made by India at Heiliengdamm that it would never exceed the per capita emission of advanced countries).

Summary of Economic Survey: Ensuring Women's Privacy

Lack of access to sanitation is widespread and well-documented. In 2011, the Census reported that more than half of the country's population defecated in the open. More recent data shows that about 60 percent of rural households and 89 per cent of urban households (NSSO 2016)10 have access to toilets - a considerably greater coverage than reported by the Census 2011

Summary of Economic Survey: India's Soon-to-Recede Demographic Dividend

2016 was a turning point in global demographic trends. It was the first time since 1950 that the combined working age (WA) population (15-59) of the advanced countries declined (Ip(2015)). Over the next three decades, the United Nations (UN) projects that China and Russia will each see their WA populations fall by over 20 percent. India, however, seems to be in a demographic sweet spot with its working-age population projected to grow by a third over the same period. Theory suggests that the specific variable driving the demographic dividend is the ratio of the working age to non-working age (NWA) population-- an intuitive number, because a magnitude of 1 essentially means that there are as many potential workers as dependents. Both the level and the growth of the WA/NWA ratio have a positive impact on economic activity.

India's demographic cycle is about 10-30 years behind that of the other countries, indicating that the next few decades present an opportunity for India to catch up to their per capita income levels. In addition, India's WA to NWA ratio is likely to peak at 1.7, a much lower level than Brazil and China, both of which sustained a ratio greater than 1.7 for at least 25 years. Finally, India will remain close to

its peak for a much longer period than other countries. A final distinctive feature in India is the large heterogeneity among the states in their demographic profile and evolution.

There is a clear divide between peninsular India (West Bengal, Kerala, Karnataka, Tamil Nadu and Andhra Pradesh) and the hinterland states (Madhya Pradesh, Rajasthan, Uttar Pradesh, and Bihar). The peninsular states exhibit a pattern that is closer to China and Korea, with sharp rises and declines in the working age population. The difference, of course, is that the working age ratio of most of the peninsular states will peak at levels lower than seen in East Asia (West Bengal comes closest to Korea's peak because of its very low TFR). In contrast, the hinterland states will remain relatively young and dynamic, characterized by a rising working age population for some time. According to figures peninsular India will peak around 2020 while hinterland India will peak later (around 2040).

Summary of Economic Survey: UDAY Scheme:

Ujwal DISCOM Assurance Yojana is the financial turnaround and revival package for electricity distribution companies of India (DISCOMs) initiated by the Government of India with the intent to find a permanent solution to the financial mess that the power distribution is in. The scheme comprises four initiatives - improving operational efficiencies of discoms, reduction of cost of power, reduction in interest cost of discoms and enforcing financial discipline on discoms through alignment with state finances. It allows state governments, which own the discoms, to take over 75 percent of their debt as of September 30, 2015, and pay back lenders by selling bonds. Discoms are expected to issue bonds for the remaining 25 percent of their debt. States shall take over 75% of DISCOM debt as on 30 September 2015 over two years - 50% of DISCOM debt shall be taken over in 2015-16 and 25% in 2016-17. States shall take over 75% of DISCOM debt as on 30 September 2015 over two years - 50% of DISCOM debt shall be taken over in 2015-16 and 25% in 2016-17.

- Government of India will not include the debt taken over by the States as per the above scheme in the calculation of fiscal deficit of respective States in the financial years 2015-16 and 2016-17.
- States will issue non-SLR including SDL bonds in the market or directly to the respective banks / Financial Institutions (FIs) holding the DISCOM debt to the appropriate extent.
- DISCOM debt not taken over by the State shall be converted by the Banks / FIs into loans or bonds with interest rate not more than the bank's base rate plus 0.1%. Alternately, this debt may be fully or partly issued by the DISCOM as State guaranteed DISCOM bonds at the prevailing market rates which shall be equal to or less than bank base rate plus 0.1%.
- States shall take over the future losses of DISCOMs in a graded manner.
- State DISCOMs will comply with the Renewable Purchase Obligation (RPO) outstanding since 1 April 2012, within a period to be decided in consultation with Ministry of Power.
- States accepting UDAY and performing as per operational milestones will be given additional
 / priority funding through Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY),Integrated
 Power Development Scheme (IPDS), Power Sector Development Fund (PSDF) or other such
 schemes of Ministry of Power and Ministry of New and Renewable Energy.
- Such States shall also be supported with additional coal at notified prices and, in case of availability through higher capacity utilization, low cost power from NTPC and other Central Public Sector Undertakings (CPSUs).
- States not meeting operational milestones will be liable to forfeit their claim on IPDS and DDUGJY grants

Summary of Economic Survey: The components of aggregate demand: exports, consumption, private investment and government.

Export: IMF's January update of its World Economic Outlook forecast is projecting an increase in global growth from 3.1 percent in 2016 to 3.4 percent in 2017, with a corresponding increase in growth for advanced economies from 1.6 percent to 1.9 percent. Given the high elasticity of Indian real export growth to global GDP, exports could contribute to higher growth next year, by as much as 1 percentage point.

Consumption: The outlook for private consumption is less clear. International oil prices are expected to be about 10-15 percent higher in 2017 compared to 2016, which would create a drag of about 0.5 percentage points. On the other hand, consumption is expected to receive a boost from two sources: catch-up after the demonetisation-induced reduction in the last two quarters of 2016-17; and cheaper borrowing costs, which are likely to be lower in 2017 than 2016 by as much as 75 to 100 basis points. As a result, spending on housing and consumer durables and semidurables could rise smartly. It is too early to predict prospects for the monsoon in 2017 and hence agricultural production. But the higher is agricultural growth this year, the less likely that there would be an extra boost to GDP growth next year.

Private Investment: Since no clear progress is yet visible in tackling the twin balance sheet problem, private investment is unlikely to recover significantly from the levels of FY2017. Some of this weakness could be offset through higher public investment, but that would depend on the stance of fiscal policy next year, which has to balance the short-term requirements of an economy recovering from demonetisation against the medium-term necessity of adhering to fiscal discipline—and the need to be seen as doing so.

Putting these factors together, we expect real GDP growth to be in the 6¾ to 7½ percent range in FY2018. Even under this forecast, India would remain the fastest growing major economy in the world. 1.67 There are three main downside risks to the forecast. First, the extent to which the effects of demonetisation could linger into next year, especially if uncertainty remains on the policy response.

Second, geopolitics could take oil prices up further than forecast. The ability of shale oil production to respond quickly should contain the risks of a sharp increase, but even if prices rose merely to \$60-65/barrel the Indian economy would nonetheless be affected by way of reduced consumption; less room for public investment; and lower corporate margins, further denting private investment. The scope for monetary easing might also narrow, if higher oil prices stoked inflationary pressure.

Summary of Economic Survey: THE ECONOMIC VISION FOR PRECOCIOUS, CLEAVAGED INDIA

Introduction

India has over the years replaced its erstwhile socialist vision with something resembling the Washington Consensus": open trade, open capital, and reliance on the private sector — essentially the same development model that has been tried and proven successful in most countries of Eastern Asia standard measure of openness, the trade-to-GDP ratio (exports + imports as a percentage of GDP. A fundamental truth of geography is that large countries tend to trade less than small countries. Being large makes the benefits of trading with the outside world very low relative to trading within the

country. The opposite is true for small countries: lacking an internal market, their benefits of trading with the world are relatively large and hence they tend to have higher trade-to-GDP ratios. large countries such as China, India, Brazil, the United States, and Japan have low trade (below 50-55 per cent) ratios. But India is "above the line", meaning that it trades far more than would be expected for a country of its size — a stark turnaround from the pre-1991 situation when India was an undertrader.

Figure 1(a). Trade (of Goods and Services) to GDP ratio.

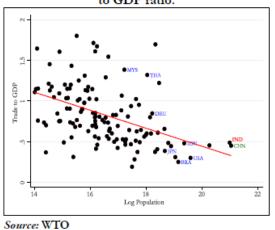
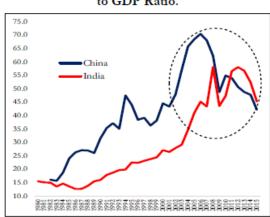


Figure 1(b). Trade (of Goods and Services) to GDP Ratio.



Source: WTO

Despite significant capital controls, India's net inflows are, in fact, quite normal compared with other emerging economies. Figure 2(b) shows that India's FDI has risen sharply over time. In fact, in the most recent year, FDI is running at an annual rate of \$75 billion, which is not far short of the amounts that China was receiving at the height of its growth boom in the mid-2000s.

Summary of Economic Survey: The Road to be Traversed

Three lingering features capture the doubt that it has not yet traversed the distance toward some vague and unspecifiable end-point that could be described as desirable or optimal. First, there has been a hesitancy to embrace the private sector and to unambiguously protect property rights, combined with continued reliance on the state to undertake activities that are more appropriately left to the private sector (Kochhar et al. 2006). Second, state capacity has remained weak (Pritchett 2009), as can be seen from poor delivery of essential services (Rice and Patrick 2008). And third, redistribution has been simultaneously extensive and inefficient (Kohli 2012).

Possible Explanations

There is abundant caution in bureaucratic decision-making, which favours the status quo. In the case of the twin balance sheet problem mentioned above, it is well-known that senior managers in public sector banks are reluctant to take decisions to write down loans for fear of being seen as favouring corporate interests and hence becoming the target of the referee institutions, the so-called "4 Cs": courts, CVC (Central Vigilance Commission), CBI (Central Bureau of Investigation) and CAG (Comptroller and Auditor General). This encourages ever-greening of loans, thereby postponing a resolution of the problem.

Redistribution by the government is far from efficient in targeting the poor. Chapter 9 evaluates the effectiveness of existing programs to help the poor, through subsidies and through government programs such as MGNREGS (Mahatma Gandhi Rural Employment Guarantee Scheme), SSA (Sarva Shiksha Abhiyaan), ICDS (Integrated Child Development Scheme), etc. It finds that welfare spending suffers from considerable misallocation:

India is amongst a handful of countries—Botswana, Mauritius, Jamaica, Trinidad and Tobago, and Costa Rica—which are perennial democracies

SECTION II: THE PROXIMATE

Summary of Economic Survey: Demonetization: To Deify or Demonize?

India's action is not unprecedented in its own economic history: there were two previous instances of demonetisation, in 1946 and 1978, the latter not having any significant effect on cash. There have been reports of job losses, declines in farm incomes, and social disruption, especially in the informal, cash-intensive parts of the economy but a systematic analysis cannot be included here due to paucity of macro-economic data. India's demonetisation is unprecedented, representing a structural break from the past. This means that forecasting its impact is hazardous.

In the wake of the demonetisation, the government has taken a number of steps to facilitate and incentivize the move to a digital economy. These include:

- Launch of the BHIM (Bharat Interface For Money) app for smartphones. This is based on the new Unified Payments Interface (UPI). Launch of BHIM USSD 2.0, a product that allows the 350 million feature phone users to take advantage of the UPI. Launch of Aadhaar Merchant Pay, aimed at the 350 million who do not have phones. This enables anyone with just an Aadhaar number and a bank account to make a merchant payment using this biometric identification. Aadhar Merchant Pay will soon be integrated into BHIM and the necessary POS devices will soon be rolled out. Reductions in fees (Merchant Discount Rate) paid on digital transactions and transactions that use the UPI. There have also been relaxations of limits on the use of payment wallets. Tax benefits have also been provided for to incentivize digital transactions.
- Encouraging the adoption of POS devices beyond the current 1.5 million, through tariff reductions.

RBI survey data indicates that during December 2016 digital wallets accounted for just Rs 95 billion in transactions and UPI only Rs 7 billion, compared to Rs 314 billion for debit (excluding RuPay and ATM transactions) and Rs 270 billion for credit cards. Still, they are growing rapidly. The impact on the digitally excluded category can be gleaned via transactions in the Aadhaar-Enabled Payments System (AEPS).

Summary of Economic Survey: Introduction

Countries that have attempted demonetization in the past

Singapore: 1967Ghana:1982Myanmar 1985

- Myanmar 1987
- Australia 1988
- Brazil 1990
- Brazil 1993
- Soviet Union 1991
- Russia 1993
- Iraq 1993
- Euro 1999
- Singapore 1999
- Canada 2011
- Denmark 2012
- Sweden 2013-16
- Singapore 2014
- North Korea 2009
- Cyprus 2013
- Greece 2015
- Australia 2015
- Venezuela 2016
- Singapore
- Canada
- Denmark
- Sweden
- Zimbabwe
- Pakistan
- Euro Area



Introduction

More than four-fifths of the non-performing assets were in the public sector banks, where the NPA ratio had reached almost 12 percent. Around 40 percent of the corporate debt it monitored was owed by companies which had an interest coverage ratio less than 1, meaning they did not earn enough to pay the interest obligations on their loans. Corporate sectors were under stress. Not just a small amount of stress, but one of the highest degrees of stress in the world. At its current level, India's NPA ratio is higher than any other major emerging market (with the exception of Russia), higher even than the peak levels seen in Korea during the East Asian crisis

How can this possibly be explained?

Typically, countries with a twin balance sheet (TBS) problem follow a standard path. Their corporations over-expand during a boom, leaving them with obligations that they can't repay. So, they default on their debts, leaving bank balance sheets impaired, as well. This combination then proves devastating for growth, since the hobbled corporations are reluctant to invest, while those that remain sound can't invest much either, since fragile banks are not really in a position to lend to them.

This model, however, doesn't seem to fit India's case. True, India had boomed during the mid-2000s along with the global economy. But it sailed through the GFC largely unscathed, with only a brief interruption in growth before it resumed at a rapid rate. According to conventional wisdom, this happened because Indian companies and banks had avoided the boomperiod mistakes made by their counterparts abroad. More precisely, in this view, they were prevented from accumulating too much leverage, because prudential restrictions kept bank credit from expanding excessively during the boom, while capital controls prevented an undue recourse to foreign loans.

If this narrative is correct, then it is puzzling that India nonetheless wound up with a twin balance sheet problem. Conversely, if the narrative is wrong and India followed the classic path to the TBS problem, then it is unclear why the consequences have seemed so minor.

One reason for the modest consequences comes readily to hand. In other TBS cases, growth was derailed because high NPA levels had triggered banking crises. But this has not happened in India. In fact, there has not even been a hint of pressure on the banking system. There have been no bank runs, no stress in the interbank market, and no need for any liquidity support, at any point since the TBS problem first emerged in 2010. And all for a very good reason: because the bulk of the problem has been concentrated in the public sector banks, which not only hold their own capital but are ultimately backed by the government, whose resources are more than sufficient to deal with the NPA problem. As a result, creditors have retained complete confidence in the banking system.

For some years, it seemed possible to regard TBS as a minor problem, which would largely be resolved as economy recovery took hold. But more recently it has become clear that this strategy will not work. Growth will not solve the problems of the stressed firms; to the contrary, the problems of the stressed firms might actually imperil growth.

The origins of the NPA problem lie not in the events of the past few years, but much further back in time, in decisions taken during the mid-2000s. During that period, economies all over the world were booming, almost no country more than India, where GDP growth had surged to 9-10 percent per annum. And the next step seemed clear: the country was going to join the path blazed by China, in which double-digit growth would persist for several decades. Firms made plans accordingly. They launched new projects worth lakhs of crores, particularly in infrastructure-related areas such as power generation, steel, and telecoms, setting off the biggest investment boom in the country's history. This investment was financed by an astonishing credit boom, also the largest in the nation's history, one that was sizeable even compared to other large credit booms internationally.

And this was just the credit from banks: there were also large inflows of funding from overseas, with capital inflows in 2007-08 reaching 9 percent of GDP. All of this added up to an extraordinary increase in the debt of non-financial corporations. But just as companies were taking on more risk, things started to go wrong. Costs soared far above budgeted levels, as securing land and environmental clearances proved much more difficult and time consuming than expected. At the same time, forecast revenues collapsed after the GFC; projects that had been built around the assumption that growth would continue at double-digit levels were suddenly confronted with growth rates half that level. As if these problems were not enough, financing costs increased sharply. Firms that borrowed domestically suffered when the RBI increased interest rates to quell double digit inflation. And firms

that had borrowed abroad when the rupee was trading around Rs 40/dollar were hit hard when the rupee depreciated, forcing them to repay their debts at exchange rates closer to Rs 60-70 dollar.

Higher costs, lower revenues, greater financing costs — all squeezed corporate cash flow, quickly leading to debt servicing problems. By 2013, nearly one-third of corporate debt was owed by companies with an interest coverage ratio less than 1 ("IC1 companies"), many of them in the infrastructure (especially power generation) and metals sectors. By 2015, the share of IC1 companies reached nearly 40 percent, as slowing growth in China caused international steel prices to collapse, causing nearly every Indian steel company to record large losses.

The government responded promptly by imposing a minimum import price, while international prices themselves recovered somewhat, thereby affording the steel industry some relief. Even so, the IC1 share remained above 40 percent in late 2016. What distinguished India from other countries was the consequence of TBS. Even as Indian balance sheets have suffered structural damage on the order of what has occurred in crisis cases, the impact on growth has been quite modest. What could possibly explain India's exceptional experience? In part, and as mentioned in the first section, the unusual structure of its banking system, which ensured there would be no financial crisis. But other factors also played a role, including the unusual structure of the economy. India has long suffered from exceptionally severe supply constraints, as the lack of infrastructure has hindered expansion of manufacturing and even some service activities, such as trade and transport. These constraints were loosened considerably during the boom, as new power plants were installed, and new roads, airports, and ports built. As a result, there was ample room for the economy to grow after the GFC, even as the infrastructure investments themselves did not prove financially viable. So, the legacy of the historic mid-2000s investment boom was a curious combination of both TBS and growth. In comparison, the US boom was based on housing construction, which proved far less useful after the crisis. Perhaps the most important difference between India and other countries, however, was the way in which the financial system responded to the intense stress on corporations. In other countries, creditors would have triggered bankruptcies, forcing a sharp adjustment that would have brought down growth in the short run (even as the reconfiguration of the economy improved long run prospects). But in India this did not occur. Instead, the strategy was, as the saying goes, to "give time to time", meaning to allow time for the corporate wounds to heal. That is, companies sought financial accommodation from their creditors, asking for principal payments to be postponed, on the grounds that if the projects were given sufficient time they would eventually prove viable.

Initially, this request seemed reasonable. For a start, the "giving time to time" strategy had worked well in the previous business cycle, during the early 2000s. At that time, nonperforming loans had also reached high levels, but they then subsided a few years later when demand picked up and commodity prices recovered. This seemed sensible to assume the same might happen this time too, because India would eventually need the infrastructure capacity that was being installed. Accordingly, banks decided to give stressed enterprises more time by postponing loan repayments and restructuring them. They also extended fresh funding to the stressed firms to tide them over until demand recovered.

As a result, total stressed assets have far exceeded the headline figure of NPAs. To that amount one needs to add the restructured loans, as well as the loans owed by IC1 companies that have not even

been recognised as problem debts – the ones that have been "evergreened", where banks lend firms the money needed to pay their interest obligations.

Market analysts estimate that the unrecognised debts are around 4 percent of gross loans, and perhaps 5 percent at public sector banks. In that case, total stressed assets would amount to about 16.6 per cent of banking system loans – and nearly 20 percent of loans at the state banks

Summary of Economic Survey: Is the Strategy Sustainable?

In principle, a financing strategy can indeed be sustainable. But for this to occur one of two scenarios would need to materialise. Under the "phoenix" scenario, accelerating growth would gradually raise the cash flows of stressed companies, eventually allowing them to service their debts.

Under the "containment" scenario, the NPAs would merely need to be limited in nominal terms. Once this is done, they would swiftly shrink as a share of the economy and a proportion of bank balance sheets, since GDP is growing at a nominal rate of more than 10 percent. In that way, the twin balance sheet problem, while never being explicitly solved, could simply fade away in importance.

But more recently the picture has changed dramatically aggregate cash flow in the stressed companies – which even in 2014 wasn't sufficient to service their debts – has fallen by roughly 40 percent in less than two years. These companies have consequently had to borrow considerable amounts in order to continue their operations. Debts of the top 10 stressed corporate groups, in particular, have increased at an extraordinarily rapid rate, essentially tripling in the last six years. Stressed companies are consequently facing an increasingly difficult situation. Their cash flows are deteriorating even as their interest obligations are mounting – and if they borrow more, this will only cause the gap to widen further.

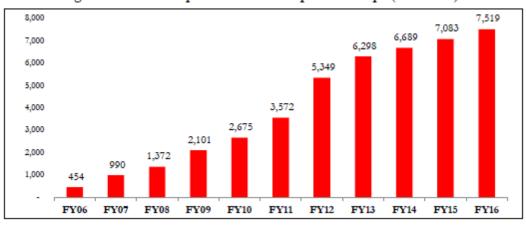


Figure 7. Debt of Top Ten Stressed Corporate Groups (Rs billion)*

Source: Credit Suisse database. *Includes bank debt, bonds, External Commercial Borrowings, and other debt.

At the same time, corporate stress seems to be spreading. For much of the period since the Global Financial Crisis, the problems were concentrated in the large companies which had taken on excessive leverage during the mid-2000s boom, while the more cautious smaller and midsize companies had by and large continued to service their debts. Starting in the second half of 2016, however, a significant

proportion of the increases in NPAs – four-fifths of the slippages during the second quarter came from mid-size and MSMEs. In short, stress on the corporate sector is not only deepening; it is also widening.

There is yet another reason why the economy may not be able to grow out of its debts: the problem itself is beginning to take a toll on growth. As noted in the first section, countries with TBS problems tend to have low investment, as stressed companies reduce their new investments to conserve cash flow, while stressed banks are unable to assume new lending risks. And this seems to be happening in India, as well. Private investment, which had been soaring at the height of the boom, slowed sharply to a 5 percent growth rate by 2010-11. By 2015-16, it had actually started to shrink, and in 2016-17 so far it seems to have contracted by more than 7 percent. To cushion the impact on the overall economy, public investment has been stepped up considerably, but this has still not been sufficient to arrest a fall in overall investment.

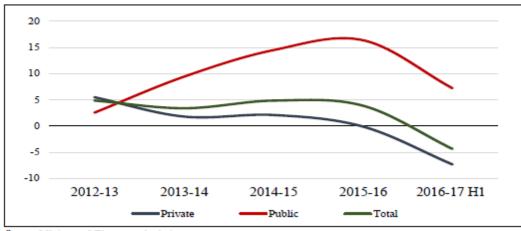


Figure 8. Growth in Real Gross Fixed Capital Formation (per cent)

Source: Ministry of Finance calculations.

In the short run, the economy can continue to expand briskly on the back of consumption, with firms fulfilling demand by using the capacity that was built up during the boom years. But over the medium term the downward trend in investment will need to be reversed.

Meanwhile, TBS is taking a heavy toll on the health of the public sector banks. At least 13 of these banks accounting for approximately 40 per cent of total loans are severely stressed, with over 20 per cent of their outstanding loans classified as restructured or NPAs. With such a large fraction of their portfolios impaired, it has become extremely difficult for them to earn enough income on their assets to cover their running and deposit costs. Banks around the world typically strive for a return of assets (ROA) of 1.5 per cent or above, shown in the red line in figure 9a. But Indian public sector banks are much below this international norm. In fact, their ROA has turned negative over the past two years. And as a result, investors are no longer willing to pay "full price" for public sector bank shares: share prices have fallen to just two-thirds of their book value

Summary of Economic Survey: What needs to be done?

The RBI has over the past few years introduced a number of mechanisms to deal with the stressed asset problem. Three of these mechanisms are particularly notable. For some time, the RBI has been encouraging the establishment of private Asset Reconstruction Companies (ARCs), in the hope that

they would buy up the bad loans of the commercial banks. This strategy, however, has had only limited success. Many ARCs have been created, but they have solved only a small portion of the problem, buying up only about 5 percent of total NPAs at book value over 2014-15 and 2015-16. The problem is that ARCs have found it difficult to recover much from the debtors. Thus they have only been able to offer low prices to banks, prices which banks have found it difficult to accept. So the RBI has focussed more recently on two other, bank-based workout mechanisms. In June 2015, the Strategic Debt Restructuring (SDR) scheme was introduced, under which creditors could take over firms that were unable to pay and sell them to new owners. The following year, the Sustainable Structuring of Stressed Assets (S4A) was announced, under which creditors could provide firms with debt reductions up to 50 percent in order to restore their financial viability. Their success, however, has been limited; while two dozen firms have entered into negotiations under SDR, only two cases have actually been concluded as of end-December 2016. The S4A scheme recognises that large debt reductions will be needed to restore viability in many cases. But public sector bankers are reluctant to grant writedowns, because there are no rewards for doing so. To the contrary, there is an inherent threat of punishment, since major write-downs can attract the attention of investigative agencies. Accordingly, bankers have every incentive to simply reschedule loans, in order to defer the problems until a later date. To address this problem, the Bank Board Bureau (BBB) has created an Oversight Committee which can vet and certify write-down proposals. But it remains open whether it can change bankers' incentives.

The government has promised under the Indradhanush scheme to infuse Rs 70,000 crores of capital into the public sector banks by 2018-19. But this is far from sufficient, and inherently so, because there is a principal-agent problem, arising from the separation of the institution with financial responsibility (the government) from its decision-making agent (the state banks). If the government promises unduly large funds in advance, the banks may grant excessive debt reductions. But banks do not receive sufficient assurance of funding, they will not be able to grant companies enough debt relief.

Could the new Bankruptcy Law provide a viable alternative way forward? In some ways, going down the path of bankruptcy would make sense for cases where the writedown needs are particularly large, which

makes them ill-suited for S4A and SDR in the first place. The problem is that the new bankruptcy system is not yet fully in place. One possible strategy would be to create a 'Public Sector Asset Rehabilitation Agency' (PARA), charged with working out the largest and most complex cases. Such an approach could eliminate most of the obstacles currently plaguing loan resolution.

It could solve the coordination problem, since debts would be centralised in one agency; it could be set up with proper incentives by giving it an explicit mandate to maximize recoveries within a defined time period; and it would separate the loan resolution process from concerns about bank capital.

Of course, all of this will come at a price, namely accepting and paying for the losses. But this cost is inevitable. Loans have already been made, losses have already occurred, and because public sector banks are the major creditors, the bulk of the burden will necessarily fall on the government (though the shareholders in the stressed enterprises may need to lose their equity as well). That said, the capital requirements would nonetheless be large. From where would this funding come? Part would

need to come from government issues of securities. This would increase the debt stock, but could actually strengthen the government's financial position if establishing PARA hastens the resolution of the stressed asset problem, since doing so would reduce the amount that would ultimately be needed to compensate banks for the losses on the bad loans.

A second source of funding could be the capital markets, if the PARA were to be structured in a way that would encourage the private sector to take up an equity share. In addition, capital markets could help replenish the capital of the public sector banks, if the government were willing to sell down its holdings.

A third source of capital could be the RBI. The mechanism for doing this is straightforward. The RBI would (in effect) transfer some of the government securities it is currently holding to public sector banks and PARA. As a result, the RBI's capital would decrease, while that of the banks and PARA would increase. There would be no implications for monetary policy, since no new money would be created. To paraphrase the learned economist

Mr. Holmes, "Once you have eliminated the impossible, whatever remains, no matter how difficult, must be the solution."

Summary of Economic Survey: Fiscal Rules: Lessons from the States

Introduction

The problem of fiscal management is the lure of eternal procrastination. India like several other countries, embarked in the mid-2000s on an ambitious project of fiscal consolidation, adopting fiscal rules aimed at curbing fiscal deficits. The most well-known and best-studied part of this project was the Fiscal Responsibility and Budget Management (FRBM) Act, adopted by the centre in 2003. This Act was mirrored by Fiscal Responsibility Legislation (FRL) adopted in the states, laws that were no less important than the FRBM, since states account for roughly half the general government deficit.

Summary of Economic Survey: Summary of the Fiscal Responsibility Legislation

The overall deficit was not allowed to exceed 3 percent of GSDP at any point, while the revenue deficit was to be eliminated by 2008/9 (later extended to 2009/10). The 12th Finance Commission allowed states to borrow directly from the market, in the hope that investors would also exercise some discipline, by pushing up interest rates on states whose fiscal position had not improved.

Summary of Economic Survey: Impact on Deficits

Summary of Economic Survey: Clothes and Shoes: Can India Reclaim Low Skill Manufacturing?

Nearly every successful economic growth take-off in post-war history in East Asia has been associated with rapid expansion in clothing and footwear exports in the early stages. Apparels and Leather sectors offer tremendous opportunities for creation of jobs, especially for women.

Summary of Economic Survey: Why Clothes and Shoes?

A historic opportunity – China vacating; space filled by others and not India. India has an opportunity to promote apparel, leather and footwear sectors because of rising wage levels in China that has resulted in China stabilizing or losing market share in these products

Summary of Economic Survey: Review of Economic Developments

Summary of Economic Survey: Introduction

The investment to GDP ratio has not only been lower than the desirable levels but has been consistently declining over the last few years. This trend needs to be reversed at the earliest in order to realise higher and lasting economic growth. Similarly, the savings rate will have to be raised, so that investment can be financed without resorting to high dose of external financing. After remaining fairly stable for much of the last two years, international prices of crude oil have started to trend up. This along with rise in the prices of other commodities like coal, etc. could exert inflationary pressure and have the potential to adversely impact the trade and fiscal balances.

Summary of Economic Survey: Fiscal Developments

Summary of Economic Survey: Prices

The inflation in India is repeatedly being driven by narrow group of food items. Pulses continued to be the major contributor of food inflation (Figure 8b). The prices of pulses, in particular tur and urad, remained persistently high from mid 2015 to mid 2016 due to shortfall in domestic and global supply. Since July 2016, pulses prices except gram dal prices have been declining growing to near normal monsoon, increase in the Rabi pulses sowing and buffer build up by the Government.

While the headline inflation has dropped sharply in the recent months, the CPI based core inflation (exclusive of food and fuel group) has remained sticky so far during this fiscal year (Table 5). CPI based refined core inflation (exclusive of food & fuel group, petrol & diesel) has been averaging around 5 per cent in the current fiscal year. Inflation for Pan, tobacco & intoxicants, Clothing & footwear, Housing and Education groups continued to be above 5 per cent and the major contributors of the core inflation. Inflation for the 'Transport & communication' group has been rising in recent months Likewise, comparatively higher gold price in the international market this financial year has contributed towards sticky core inflation.

Summary of Economic Survey: Monetary Management and Financial Intermediation

The Government amended the Reserve Bank of India Act, 1934 during the current financial year. The amended Act provides for inflation target to be set by the Government, in consultation with the Reserve Bank, once in every five years and further provides for a statutory basis for the constitution of an empowered Monetary Policy Committee (MPC). As per the revised monetary policy framework, the Government has fixed the inflation target of 4 per cent with tolerance level of +/- 2 per cent. The policy rate was reduced by 25 basis points to 6.25 per cent in its first meeting held on October 4, 2016. Hence the reverse repo rate under the Liquidity Adjustment Facility (LAF) remains 5.75 per cent, and the Marginal Standing Facility (MSF) rate is 6.75 per cent. The RBI took a number of measures to strengthen the corporate bond market in India. It accepted many of the recommendations of the Khan Committee to boost investor participation and market liquidity in the corporate bond market. The

new measures as announced by the RBI include: (a) Commercial banks are permitted to issue rupee-denominated bonds overseas (masala bonds) for their capital requirements and for financing infrastructure and affordable housing; (b) brokers registered with the Securities and Exchange Board of India (SEBI) and authorized as market makers in corporate bond market permitted to undertake repo / reverse repo contracts in corporate debt securities. This move will make corporate bonds fungible and thus boost turnover in the secondary market; (c) banks allowed to increase the partial credit enhancement they provide for corporate bonds to 50 per cent from 20 per cent.

This move will help lower-rated corporates to access the bond market; (d) permitting primary dealers to act as market makers for government bonds, to give further boost to government securities by making them more accessible to retail investors; and (e) to ease access to the foreign exchange market for hedging in over the counter (OTC) and exchange-traded currency derivatives, the RBI has allowed entities exposed to exchange rate risk to undertake hedge transactions with simplified procedures, up to a limit of US\$30 million at any given time.

Summary of Economic Survey: India's Merchandise Trade

In line with subdued global growth and trade, India's exports declined by 1.3 per cent and 15.5 per cent in 2014-15 and 2015-16 respectively. The trend of negative growth was reversed somewhat during 2016-17 (April-December), with exports registering a growth of 0.7 per cent. During 2016-17 (April- December) Petroleum, oil and lubricants (POL) exports constituting 11.1 per cent of total exports declined by 9.8 per cent while non POL exports grew by 2.2% USA followed by UAE and Hong Kong were the top export destinations. Value of imports declined in 2015-16, mainly on account of decline in crude oil prices resulting in lower levels of POL imports.

Summary of Economic Survey: Balance of Payments

Summary of Economic Survey: Current account

Despite moderation in India's exports, India's external sector position has been comfortable, with the current account deficit (CAD) progressively contracting from US\$ 88.2 billion (4.8 per cent of GDP) in 2012-13 to US\$ 22.2 billion (1.1 per cent of GDP) in 2015-16. The CAD further narrowed in 2016-17 (H1) to 0.3 per cent of GDP. During 2016-17 (April-December), on y-o-y basis, the rupee depreciated by 3.4 per cent against US dollar as compared to the depreciation of Mexican peso (14.4 per cent), South African Rand (8.6 per cent) and Chinese renminbi (6.3 per cent). The rupee depreciated in terms of nominal effective exchange rate (NEER) against a basket of 6 and 36 currencies during April-December 2016. However, the 6-currency and 36-currency REER (Trade-based; Base year: 2004-05=100) appreciated by 6.1 per cent and 5.6 per cent, respectively as at end- December 2016 over end-March 2016.

Summary of Economic Survey: External Debt

At end-September 2016, India's external debt stock stood at US\$ 484.3 billion, recording a decline of US\$ 0.8 billion over the level at end-March 2016, mainly due to a reduction in commercial borrowings and short term external debt. Fixed investment rate in the economy has consistently declined in the past few years, more so the private investment. Raising the growth rate of the economy will to a great extent depend on quickly reversing this downward trend in the investment.

Summary of Economic Survey: Outlook for the Economy for the Year 2017-18

CSO in its first AE estimated the economy to grow by 7.1 per cent in the current year. 155 Agriculture and Food Management. As per the first advance estimates of the CSO, growth rate for the agriculture and allied sectors is estimated to be 4.1 per cent for 2016-17.

Summary of Economic Survey: Industrial, Corporate and Infrastructure Sectors

As per the first advance estimates of the CSO, growth rate of the industrial sector comprising mining & quarrying, manufacturing, electricity and construction is **projected to decline from 7.4 per cent in 2015-16 to 5.2 per cent in 2016-17**

Summary of Economic Survey: Services Sector

As per the first advance estimates of the CSO, growth rate of the services sector is projected to grow at 8.8 per cent in 2016- 17, almost the same as in 2015-16

Summary of Economic Survey: Social Infrastructure, Employment and Human Development

As per the Reserve Bank of India data, expenditure on social services by Centre and States, as a proportion of GDP was 7.0 per cent during 2016-17 (BE), with education and health sectors accounting for 2.9 per cent and 1.4 per cent respectively

Despite the challenges faced by the government in providing affordable health services to the population, there have been some notable achievements in the health sector. Life expectancy has doubled and infant mortality and crude death rates have reduced sharply. India's total fertility rate (TFR) has been steadily declining and was 2.3 (rural 2.5 & urban 1.8) during 2014. Infant Mortality Rate (IMR) has declined to 37 per 1000 live births in 2015 from 44 in 2011. The challenge lies in addressing the huge gap between IMR in rural (41 per 1000 live births) and urban (25 per 1000 live births) areas. The Maternal Mortality Ratio (MMR) declined from 301 maternal deaths per 100,000 live births during 2001-03 to 167 maternal deaths per 100,000 live births during 2011-13. The high levels of anaemia prevalent among women in the age group 15-49 have a direct correlation with high levels of MMR.

Programmes have been initiated by the government towards attaining the objective of inclusive society like the Accessible India Campaign. For social empowerment, the 'Nai roshni' scheme for leadership development of minority women, 'Padho Pardesh', a scheme of interest subsidy on educational loans for overseas studies for the students belonging to the minority communities, etc. are being implemented. For skill development and economic empowerment of minorities, schemes like 'Seekho Aur Kamao' (Learn & Earn), Upgrading Skill and Training in Traditional Arts/Crafts for Development (USTTAD) and 'Nai Manzil'- a scheme to provide education and skill training to the youth from minority communities are in operation.

The Department of Empowerment of Persons with Disabilities (DEPwD) launched 'Accessible India Campaign (Sugamya Bharat Abhiyan)' as a nation-wide Campaign for achieving universal accessibility for Persons with Disabilities (PwDs) with a focus on three verticals: Built Environment, Public Transportation and Information & Communication Technologies. Further, the "Rights of

Persons with Disabilities Bill – 2016" passed by the Parliament aims at securing and enhancing the rights and entitlements of PwDs. The bill has proposed to increase the reservation in vacancies in government establishments from 3 per cent to 4 per cent for those with benchmark disability and high support needs.

Summary of Economic Survey: Climate Change

On 12th December, 2015, 196 Parties to the United Nations Framework Convention on Climate Change (UNFCCC) adopted the historic Paris Agreement. The Paris Agreement sets the path for the post-2020 actions based on the Nationally Determined Contributions (NDCs) of the Parties. The Paris Agreement entered into force on 4th November 2016. The 22nd Session of the Conference of Parties (COP 22) to UNFCCC was held from 7-19 November 2016 in Marrakech, Morocco. The main thrust of COP 22 was on developing rules and action framework for operationalizing the Paris Agreement and advance work on pre-2020 Actions. At COP 22, Parties agreed to a deadline of 2018 for the rule book. India ratified the Paris Agreement on 2nd October 2016. India's comprehensive NDC target is to lower the emissions intensity of GDP by 33 to 35 per cent by 2030 from 2005 levels, to increase the share of non-fossil fuels based power generation capacity to 40 per cent of installed electric power capacity by 2030, and to create an additional (cumulative) carbon sink of 2.5–3 GtCO2e through additional forest and tree cover by 2030. Currently, India's renewable energy sector is undergoing transformation with a target of 175 GW of renewable energy capacity to be reached by 2022. As a result of various actions in the right direction, India attained 4th position in global wind power installed capacity after China, USA and Germany.

With India's initiative, International Solar Alliance (ISA) was launched, which is envisaged as a coalition of solar resource-rich countries to address their special energy needs and will provide a platform to collaborate on addressing the identified gaps through a common, agreed approach. 24 countries have signed the Framework Agreement of ISA after it was opened for signature on November 15, 2016. ISA is expected to become inter-governmental treaty-based organization that will be registered under Article 102 of the UN charter after 15 countries ratify the Agreement. With legal framework in place, ISA will be a major international body headquartered in India.

Government of India has established the National Adaptation Fund for Climate Change to assist States and Union Territories to undertake projects and actions for adaptation to climate change. Rs. 182.3 crore has been released for 18 projects for sectors including agriculture and animal husbandry, water resources, coastal areas, biodiversity and ecosystem services. India is also one of the few countries in the world to impose a tax on coal. This coal cess which has been renamed as "Clean Environment Cess" in the Union Budget 2016-17 funds the National Clean Environment Fund (NCEF). The Clean Environment Cess has been doubled in the 2016-17 budget from Rs. 200 per tonne to Rs. 400 per tonne. The proceeds of the NCEF are being used to finance projects under Green Energy Corridor for boosting up the transmission sector, Namami Gange, Green India Mission, Jawaharlal Nehru National Solar Mission, installation of SPV lights and small capacity lights, installation of SPV water pumping systems, SPV Power Plants and Grid Connected Rooftop SPV Power Plants.

Summary of Economic Survey: Universal Basic Income

UBI has three components: universality, unconditionality, and agency (by providing support in the form of cash transfers to respect, not dictate, recipients' choices).

Summary of Economic Survey: The Conceptual/Philosophical Case for UBI

Universal Basic Income is a radical and compelling paradigm shift in thinking about both social justice and a productive economy. It could be to the twenty first century what civil and political rights were to the twentieth. From Tom Paine to John Rawls, nearly every theory of justice has argued that a society that fails to guarantee a decent minimum income to all citizens will fail the test of justice. It should be evident to anyone that no society can be just or stable if it does not give all members of the society a stake.

The poor in India have been treated as objects of government policy. Our current welfare system, even when well intentioned, inflicts an indignity upon the poor by assuming that they cannot take economic decisions relevant to their lives. An unconditional cash transfer treats them as agents, not subjects. UBI liberates citizens from paternalistic and clientelistic relationships with the state. In India in particular, the case for UBI has been enhanced because of the weakness of existing welfare schemes which are riddled with misallocation, leakages and exclusion of the poor.

Summary of Economic Survey: The Conceptual Case against UBI

The first is whether UBI reduces the incentive to work – a worldview encapsulated in the quote by Gandhiji above; critics conjure up images of potential workers frittering away their productivity. This argument is vastly exaggerated. For one thing, the levels at which universal basic income are likely to be pegged are going to be minimal guarantees at best; they are unlikely to crowd incentives to work.

Summary of Economic Survey: Why Universalize?

The Budget for 2016-17 indicates that there are about 950 central sector and centrally sponsored subschemes in India accounting for about 5 percent of the GDP by budget allocation. Food Subsidy or Public Distribution System (PDS) is the largest programme followed by Urea Subsidy and the Mahatma Gandhi National Rural Employment Guarantee Scheme. The largest 7 central welfare schemes are: PDS – food & kerosene, MGNREGS, the Sarva Shiksha Abhiyaan (SSA), the Mid Day Meal (MDM) scheme, the Pradhan Mantri Gram Sadak Yojana (PMGSY), the Pradhan Mantri Awas Yojana (PMAY) and the Swachh Bharat Mission (SBM).

Summary of Economic Survey: How Can a UBI Overcome These Issues?

The simplicity of the process also implies that the success of a UBI hinges much less on local bureaucratic ability than do other schemes. In addition, by focusing on universality, UBI reduces the burden on the administration further by doing away with the tedious task of separating the poor from the non-poor.

Summary of Economic Survey: Insurance against Risk and Psychological Benefits

Poverty component of vulnerability (risk of sudden income/ consumption shortfalls) dominates the idiosyncratic and aggregate components. Slightly more than 50 percent of rural households across India face one or more forms of shock, with the most prominent being aggregate shocks (crop loss,

water borne diseases, loss of property, cyclones, drought, etc.). In their data, about 60 percent of individuals use personal savings to cope with these shocks. Government assistance comes a distant second with only close to 10 percent of individuals accessing it. The third most prominent option, at 6 percent, is borrowing from friends. In the face of such prominence of shocks, a guaranteed basic income can provide a basic form of insurance.

SECTION III: THE PERSISTENT

Summary of Economic Survey: Income, Health and Fertility: Convergence Puzzles

Convergence means that a state that starts off at low performance levels on an outcome of importance, say the level of income or consumption, should see faster growth on that outcome over time, improving its performance so that it catches up with states which had better starting points.

Summary of Economic Survey: Finding 1: Income/Consumption Divergence Within India

In terms of income convergence, Indian states offer a striking contrast to the catch-up that is happening globally and within. Poorer countries are catching up with richer countries, the poorer Chinese provinces are catching up with the richer ones, but in India, the less developed states are not catching up; instead they are, on average, falling behind the richer states. The driving force behind the Chinese convergence dynamic has been the migration of people from farms in the interior to factories on the coast, raising productivity and wages in the poorer regions faster than in richer regions. The Indian puzzle is deeper still because in Chapter 11 it can be seen that, contrary to perception, trade within India is quite high. And that chapter also documents that mobility of people has surged dramatically—almost doubled in the 2000s. These indicate that India has porous borders

Summary of Economic Survey: Finding 2: Health Convergence within India with Room for Improvement against International Standard

The fact that convergence is occurring in key health indicators within India suggests that there are no traps of the sort described earlier that prevent technologies from flowing freely within the country.

Summary of Economic Survey: Finding 3: Fertility: Exceptional Performance

Perhaps one of the most striking developments over the past decade has been in fertility. First, 12 Indian states out of the reporting 23 states have reached levels of fertility that are below the replacement rate (2.1). Second, like in the case of LE and IMR but unlike income, there is evidence of strong convergence across the states.

Summary of Economic Survey: One Economic India: For Goods and in the Eyes of the Constitution

India's internal trade-GDP ratio at about 54 percent is comparable to that in other large countries. Contrary to perception and to some current estimates, it seems that India is highly integrated internally, with considerable flows of both people and goods. The first-ever estimates for interstate trade flows indicate that cross-border exchanges between and within firms amount to at least 54 per cent of GDP, implying that interstate trade is 1.7 the current system of indirect taxes which perversely favours interstate trade over intra-state trade, especially in the cases of final consumption items,

exempted goods, or goods that are input tax credit ineligible. If true, the GST by ironing out these oddities may normalise interstate trade

Summary of Economic Survey: Section 1: One India: Internal Trade in Goods

While international barriers to trade have been studied extensively, less attention has been devoted to studying the impact of trading networks and other barriers (political and cultural) to trade within countries. The estimation of these barriers to intra-national trade for India has hitherto been challenging due to the absence of a comprehensive interstate trade dataset.

Summary of Economic Survey: Does India Trade More Than Other Countries?

India's aggregate interstate trade (54 per cent of GDP) is not as high as that of the United States (78 per cent of GDP) or China (74 per cent of GDP) but substantially greater than provincial trade within Canada and greater than trade between Europe Union (EU) countries (which is governed by the "four freedoms": allowing unfettered movement of goods, services, capital, and people)

Summary of Economic Survey: Relationship Between Interstate Trade and Manufacturing

The large manufacturing states Gujarat, Maharashtra and Tamil Nadu have a positive balance of trade highlighting their competitive manufacturing capabilities. This positive balance is also a feature of Delhi (7.4 per cent), Haryana (26.1 per cent) and UP (4.2 per cent), reflecting the large value additions occurring in the manufacturing hubs of the National Capital Region, namely Gurugram and NOIDA. Gurugram and NOIDA, respectively, make otherwise agricultural Haryana and UP manufacturing powerhouses (by Indian standards).

Summary of Economic Survey: Patterns of Interstate Trade: Arms-length Trade

Uttarakhand, Himachal Pradesh and Goa (seen earlier to possess the highest trade to GSDP ratios) are predominantly trade balance deficient. This may be because we do not observe import side intrafirm trade flows. It is likely that these states' special status (in terms of tax exemptions) would encourage firms to allocate some intermediate stages of their production process there, followed by intrafirm exports. Observing the intrafirm net export flows is, however, not possible because even though the export side of this

Summary of Economic Survey: Patterns of Interstate Trade: Intrafirm trade

Goa, Gujarat and Maharashtra, relative to other states, are as open to intrafirm trades as they are to arms-length trades. On the lower end of intrafirm trade openness are Uttar Pradesh (8.4 per cent), Rajasthan (11.8 per cent) and West Bengal (15.5 per cent). The fixed cost of setting up companies in these states may potentially be causing frictions in intrafirm trade flows in these states.

Summary of Economic Survey: Why Does India Trade so Much?

Under the current system, states levy a value-added tax on most goods sold within the state, the centre levies a near VATable excise tax at the production stage. Sales of goods across states fall outside the VAT system and are subjected to an origin-based non-VATable tax (the Central Sales Tax, CST). It turns out that the CST – far from acting as a tariff on interstate trade – may actually provide an

arbitrage opportunity away from a higher VAT rate on intra-state sales in some cases. The crucial determinant of whether the CST acts as a tariff is whether the buyer can receive an input tax credit (ITC) on the purchase if done within state20. The input tax credit is the defining feature of a VAT — without this you are taxed not just on your value addition but on the entire sale value. Most states provide a "negative list" of commodities that do not receive input tax credits even within state.

Summary of Economic Survey: Conclusion

Contrary to the caricature, India's internal trade in goods seems surprisingly robust. This is true whether it is compared to India's external trade, internal trade of other countries, or gravity-based trade patterns in the United States. For example, the effect of distance on trade seems lower in India than in the US. Hearteningly, it seems that language is not a serious barrier to trade. There is enormous variation across states in their internal trade patterns. The analysis does leave open the possibility that some proportion of India's internal trade could be a consequence of current tax distortions, which are likely to be normalized under the GST. One market and greater tax policy integration but less actual trade is an intriguing future prospect.

Summary of Economic Survey: Section 2: One India: Before the Law

Articles 301-304 provide a layered set of rights and obligations. Article 301 establishes the fundamental principle that India must be a common market: 301. Freedom of trade, commerce and intercourse. Subject to the other provisions of this Part, trade, commerce and intercourse throughout the territory of India shall be free. Articles 302-304 both qualify and elaborate on that principle. Article 302 gives Parliament the power to restrict free trade Article 303 (a) then imposes a most-favored nation type obligation on both Parliament and state legislatures; that is no law or regulation by either can favor one state over another Article 304 (a) then imposes a national treatment-type obligation on state legislatures (apparently not on Parliament); that is, no taxes can be applied to the goods originating in another state that are also not applied on goods produced within a state. This Article refers only to taxes and not to regulations more broadly.

The WTO has a membership of 164 countries with widely varying income levels and political systems: for example, the ratio of per capita GDP of the richest countries is more than 60 times that of the poorest, while the corresponding ratio within India is less than 5. Also, the WTO has democracies like the US and Europe and non-democracies like China whereas all Indian states are democratic. So, it cannot possibly be argued that the Indian states should have greater freedom than countries in the WTO on the issue of creating a common market.

At the time of the drafting of the Constitution, and given the considerable anxieties of holding together a large and disparate nation, the demands for respecting states' sovereignty were understandably strong. Nearly 70 years on, the sense of nationhood and unity is strong, and anxieties about territorial integrity have faded. Cooperative federalism is becoming an increasingly important governance dynamic. Reflecting this, the country has unanimously passed a landmark Constitutional amendment to implement the GST which should result in a common market

Summary of Economic Survey: India on the Move and Churning: New Evidence

While internal political borders impede the flow of people, language does not seem to be a demonstrable barrier to the flow of people. Results from a gravity model indicate that political borders depress the flows of people, reflected in the fact that, controlling for distance, labour migrant flows within states are 4 times the labour migrant flows across states. the co-existence of diverging incomes and consumption alongside the equalizing forces of internal integration of goods, people and capital is a mystery waiting to be deciphered.

The 'Other Indias': Two Analytical Narratives (Redistributive and Natural Resources) on States'

'Redistributive Resource Transfers' (RRT). RRT to a state is defined as gross devolution to the state adjusted for the respective state's share in aggregate gross domestic product (definition D1). Thus RRT is not identical to gross devolution.

Summary of Economic Survey: Impact of Natural Resources

There is another way that the original development view has been overturned. Initially, economists saw natural resources as a way out of the low saving-low capital development trap. But with the benefit of hindsight it has become clear that economies with abundant natural resources have actually tended to grow less rapidly than resource scarce economies. First, the exploitation of natural resources generates rents, which lead to rapacious rent-seeking (the voracity effect) and increased corruption.

Second, natural resource ownership exposes countries to commodity price volatility, which can destabilise GDP growth. Finally, natural resource ownership — like foreign aid -- makes countries susceptible to "Dutch Disease".

Summary of Economic Survey: From Competitive Federalism to Competitive Sub-Federalism: Cities as Dynamos

Recent initiatives by the Government provide opportunities for urban rejuvenation. The Fourteenth Finance Commission (FFC) grant to ULBs for 2015-2020 is almost 277 per cent higher than the grant recommended by its predecessor. With the higher devolution of taxes to the states and grants to the ULBs, the overall public funds available for urban rejuvenation have increased. As a follow to the flagship programme (JNNURM) started by the Centre in 2005 across 65 cities, the Government has launched several new initiatives to rejuvenate urban areas. Some of the key schemes are - Smart Cities Mission, AMRUT, Swachh Bharat Mission (SBM), HRIDAY, Digital India, Skill development, Housing for All, Metro transport etc. The emphasis is now laid on strong convergence between area based and project-based schemes so as to exploit synergy and optimize benefits while avoiding costs overlap.

Summary of Economic Survey: Smart Cities Mission

Smart Cities Mission (SCM) is a holistic city rejuvenation programme for 100 cities in India, The SCM initially covers five years (2015-16 to 2019-20) and may be continued thereafter based on an evaluation. Under the SCM, the core infrastructure elements in a smart city include:

- adequate water supply
- assured electricity supply

- sanitation, including solid waste management
- efficient urban mobility and public transport
- · affordable housing, especially for the poor
- robust IT connectivity and digitalization
- good governance, especially e-Governance and citizen participation
- sustainable environment
- safety and security of citizens, particularly women, children and the elderly
- health and education

The strategic components of area-based development in the SCM are city improvement (retrofitting), city renewal (redevelopment) and city extension (Greenfield development) plus a pan-city initiative in which smart solutions are applied covering larger parts of the city.

AMRUT

Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was launched on 25.06.2015 to improve basic urban infrastructure in 500 cities/ towns which would be known as Mission cities/ towns. The Mission is being operated for five years from financial year 2015–16 to 2019–20 and aims to cover all cities and towns with a population of over one lakh with notified Municipalities, including Cantonment Boards (civilian areas) and certain other cities like capital towns, some cities on stem of main rivers and tourist and hill destinations. The components which are to be covered under the Mission are: water supply, sewerage, septage, storm water drains, urban transport, in particular, with the focus on facilities for non-motorised transport and development of green space and parks with special provision for children-friendly components in 500 cities & towns.

Summary of Economic Survey: HRIDAY

The Government launched the National Heritage City Development and Augmentation Yojana (HRIDAY) scheme on 21st January, 2015, with a focus on holistic development of heritage cities. The scheme aims to preserve and revitalise soul of the heritage city to reflect the city's unique character by encouraging aesthetically appealing, accessible, informative and secured environment. With a duration of 27 months (completing in March 2017) and a total outlay of \$ 500 crore, the scheme is being implemented in 12 identified cities namely, Ajmer, Amaravati, Amritsar, Badami, Dwarka, Gaya, Kanchipuram, Mathura, Puri, Varanasi, Velankanni and Warangal. The scheme is implemented in a mission mode.

Summary of Economic Survey: Swachh Bharat Mission

The Swachh Bharat Mission (SBM) was launched on 2nd October, 2014, with a target to make the country clean by 2nd October, 2019. All 4041 statutory towns as per census 2011 are covered under SBM. The programme includes elimination of open defecation, conversion of unsanitary toilets to pour flush toilets, eradication of manual scavenging, municipal solid waste management and bringing about a behavioural change in people regarding healthy sanitation practices. Under the solid waste management state/cities are being encouraged to come out with innovative solutions and MoUD supports them technically and financially. Some of the initiatives being taken are waste to energy, composting plants, capping of the dumpsites. All the initiatives are being supported by capacity building efforts to empower the Municipal Authorities to carry out their functions properly.

