

# State of the Economy : An Analytical Overview and Outlook for Policy<sup>1</sup>

MINISTRY OF FINANCE, GOI\*

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## Abstract

Major reforms were undertaken over the past year. The transformational Goods and Services Tax (GST) was launched at the stroke of midnight on July 1, 2017. And the long-festering Twin Balance Sheet (TBS) problem was decisively addressed by sending the major stressed companies for resolution under the new Indian Bankruptcy Code and implementing a major recapitalization package to strengthen the public sector banks. As a result of these measures, the dissipating effects of earlier policy actions, and the export uplift from the global recovery, the economy began to accelerate in the second half of the year. This should allow real GDP growth to reach 6¾ percent for the year as a whole, rising to 7-7½ percent in 2018-19, thereby re-instating India as the world's fastest growing major economy. The agenda for the next year consequently remains full: stabilizing the GST, completing the TBS actions, privatizing Air India, and staving off threats to macro-economic stability.

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## I. Introduction

### 1.1 *Overview: Short Term*

THE PAST YEAR has been marked by some major reforms. The transformational Goods and Services Tax (GST) was launched in July 2017. With a policy change of such scale, scope, and complexity, the transition unsurprisingly encountered challenges of policy, law, and information technology systems, which especially affected the informal sector. Expedient responses followed to rationalize and reduce rates, and simplify compliance burdens.

At the same time, decisive action was taken to grasp the nettle of the Twin Balance Sheet (TBS) challenge, arguably the festering, binding

<sup>1</sup> Reproduced from Economic Survey 2017-18 Ministry of Finance, Government of India, INDIA

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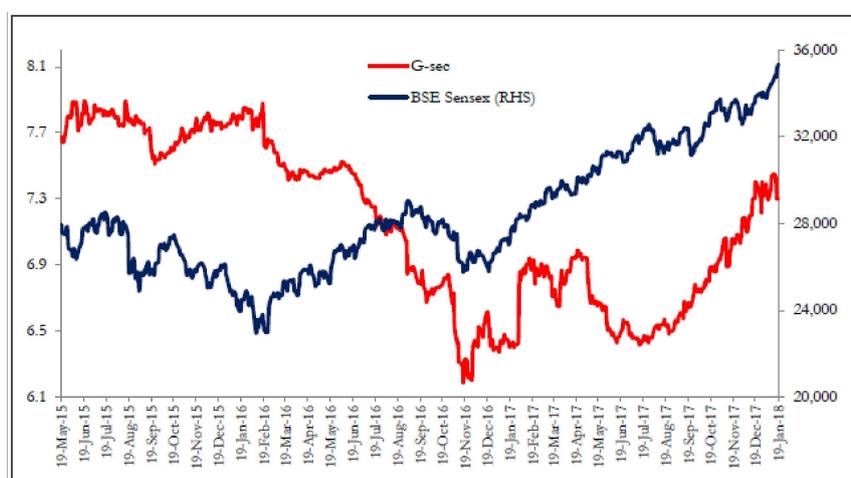
constraint on Indian growth prospects. On the 4 R's of the TBS – *recognition, resolution, recapitalization, and reforms* – recognition was advanced further, while major measures were taken to address two other R's. The new Indian Bankruptcy Code (IBC) has provided a resolution framework that will help corporates clean up their balance sheets and reduce their debts. And in another critical move, the government announced a large recapitalization package (about 1.2 percent of GDP) to strengthen the balance sheets of the public sector banks (PSBs). As these twin reforms take hold, firms should finally be able to resume spending and banks to lend especially to the critical, but-currently-stressed sectors of infrastructure and manufacturing.

Macroeconomic developments this year have been marked by swings. In the first half, India's economy temporarily "decoupled," decelerating as the rest of the world accelerated – even as it remained the second-best performer amongst major countries, with strong macroeconomic fundamentals. The reason lay in the series of actions and developments that buffeted the economy: demonetization, teething difficulties in the new GST, high and rising real interest rates, an intensifying overhang from the TBS challenge, and sharp falls in certain food prices that impacted agricultural incomes

In the second half of the year, the economy witnessed robust signs of revival. Economic growth improved as the shocks began to fade, corrective actions were taken, and the synchronous global economic recovery boosted exports. Reflecting the cumulative actions to improve the business climate, India jumped 30 spots on the World Bank's Ease of Doing Business rankings, while similar actions to liberalize the foreign direct investment (FDI) regime helped increase flows by 20 percent. And the cumulative policy record combined with brightening medium-term growth prospects received validation (as argued for in Box 1 of last year's *Economic Survey*, Volume I) in the form of a sovereign ratings upgrade, the first in 14 years.

These solid improvements were tinged with anxieties relating to macro-economic stability. Fiscal deficits, the current account, and inflation were all higher than expected, albeit not threateningly so, reflecting in part higher international oil prices – India's historic macroeconomic vulnerability.

These dualities of revival and risk have been reflected in the markets, and in market analysis. For example, bond yields rose sharply, leading to an exceptionally marked steepening of the yield curve – even as stock prices continued to surge (Figure 1). Evidently, markets expect rapid growth, which would warrant the run-up in stock prices, but are also pricing in some macro-balance concerns. Similarly, even the ratings upgrade carried warnings of potential macro-economic challenges.



Source: Survey calculations, Bloomberg.

**Figure 1**  
**Two Assets, Two Messages**

Despite major policy reforms and even in the absence of major new actions, the policy agenda remains full. Over the coming year, the government will need to focus on the 4 R's, ensuring that the process of resolving the major indebted cases and recapitalizing the PSBs is carried to a successful conclusion, while initiating reforms of the PSBs that will credibly shrink the unviable ones and signal greater private sector participation in the future. The government will also need to stabilize GST implementation to remove uncertainty for exporters, facilitate easier compliance, and expand the tax base; privatize Air-India; and stave off any nascent threats to macro-economic stability, notably from persistently high oil prices, and sharp, disruptive corrections to elevated asset prices.

If these objectives are achieved, the world economy maintains its growth momentum, and oil prices do not persist at current levels, the Indian economy should resume converging towards its medium-term growth potential that previous *Economic Surveys* have estimated to exceed 8 percent. India would then regain its status as the fastest growing major economy.

### 1.2 Overview : The Medium Term

The twilight of the government's current term is an appropriate juncture to step back and draw broader lessons for the Indian economy going forward.

First, India has created one of the most effective institutional mechanisms for cooperative federalism, the GST Council. At a time when international events have been marked by a retreat into economic nativism and the

attendant seizing of control, Indian states and the center have offered up a refreshing counter-narrative, voluntarily choosing to relinquish and then pool sovereignty for a larger collective cause.

Cooperative federalism is of course not a substitute for states' own efforts at furthering economic and social development. But it is a critical complement, needed to tackle a wide array of difficult structural reforms that involve the states. For example, the "cooperative federalism technology" of the GST Council could be used to create a common agricultural market, integrate fragmented and inefficient electricity markets, solve interstate water disputes, implement direct benefit transfers (DBT), make access to social benefits portable across states, and combat air pollution.

Second, the 2015-16 *Survey* highlighted in Chapter II that facilitating "exit" has been one of India's most intractable challenges, evoking the generalization that over the last 50 years India had gone from "socialism with limited entry to marketism without exit." The IBC resolution process could prove a valuable technology for tackling this long-standing problem in the Indian corporate sector. The recently proposed Financial Resolution and Deposit Insurance (FRDI) bill would do the same for financial firms.

In the case of the TBS challenge, exit has proved particularly intractable because the objectives are many, conflicting, and politically difficult. Policymakers have had to find a way to reduce the debts of stressed companies to sustainable levels. At the same time, they have had to minimize the bill to taxpayers, limit moral hazard, and avoid the perception of favoring controlling equity holders (promoters). The IBC aims to solve these problems through the expedient of transparently auctioning off stressed firms to the highest bidders, excluding those which are toxically blemished. This procedure is still a work in progress: ensuring that timetables are respected and the bidding outcomes are accepted by all parties in the early cases is critical for establishing its credibility.

Third, a major plank of government policy has been to rationalize government resources, redirecting them away from subsidies towards public provision of essential private goods and services at low prices, especially to the poor. Government data suggests that progress has been made in providing bank accounts, cooking gas, housing, power, and toilets (amongst others), holding out the prospect that the lives of the poor and marginalized will improve in meaningful ways (Box 1). The pace and magnitude of this improvement will depend upon the extent to which increased physical availability/provision is converted into greater actual use: toilet building into toilet use, bank accounts into financial inclusion, cooking gas connections into consistent gas offtake, and village electrification into extensive household connections

**Box I**

**Public Provision of Private Goods and Services**

This Box “charts” the progress made in the government’s provision of some key private goods and services. A. Sanitation (“Swachh Bharat”)

A. Sanitation (“Swachh Bharat”)

**Table 1.1**  
**Toilet Coverage and Usage**

	Toilet Coverage (in percent of Households in Rural India)			Toilet usage (in percent of those with Toilets)	
Data Source	Census 2011	NFHS 2015-16	QCI (2017)*	Nov-2017 (SBM-MIS)**	QCI (2017)*
All India - Rural	31	47	63	74	91

**Note:** \* Based on the Swachh Survekshan Gramin 2017 conducted by Quality Council of India as a third party assessment. 1.4 lakh rural households were surveyed across 4626 villages.

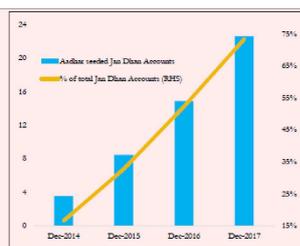
\*\* As reported by Swachh Bharat Mission MIS system.

Source : Census, National Family Health Survey (NFHS) 2015-16

B. Bank Accounts



**Figure 1.1**  
**Jan Dhan Accounts**  
(in crores)



**Figure 1.2**  
**Aadhar-Seeded Jan Dhan Accounts**  
(in crores)

C. Housing – Pradhan Mantri Awas Yojana-Gramin



**Note:** \* Blocks in Yellow represent completed houses under the old Indra Awas Yojana (IAY);

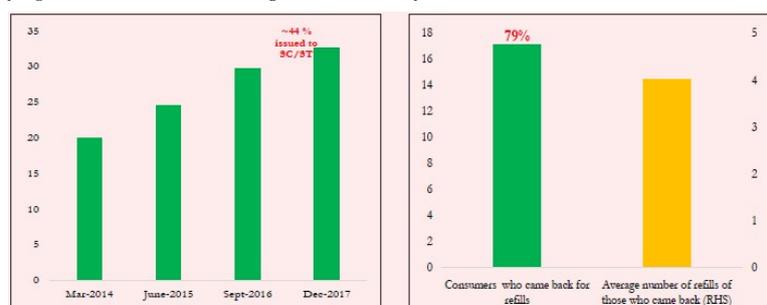
\*\* The green block represents completed houses under the Pradhan Mantri Awas Yojana-Gramin (PMAY-G) as of 20th January 2018. PMAY-G was launched in November, 2016.

Source : MoRD

**Figure 1.3**  
**Rural Houses Completed\* (in lakhs)**

#### D. Gas connections: Ujjwala

Fourth, recent macroeconomic developments are a reminder that the battle for macro-economic stability is never won, that even major victories (such as those post-2014) are always provisional, and that vigilance is always needed.



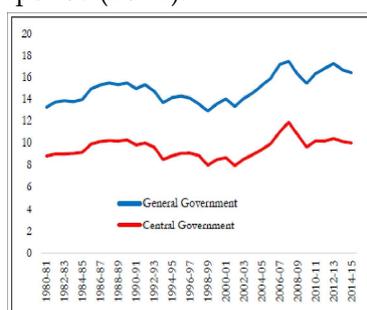
Note: \* Based on data of new connections issued between May 2016 to 30 April, 2017.  
Source: Ministry of Petroleum & Natural Gas.

**Figure 1.4**  
**Ujjwala Connections Issued**  
(Cumulative, millions)

**Figure 1.5**  
**Ujjwala Refills**  
(total in millions and average\*)

Fourth, recent macroeconomic developments are a reminder that the battle for macro-economic stability is never won, that even major victories (such as those post-2014) are always provisional, and that vigilance is always needed.

India has two underlying macroeconomic vulnerabilities, its fiscal and current accounts, both of which tend to deteriorate when oil prices rise. Overcoming the fiscal vulnerability requires breaking the inertia of the tax-GDP ratio. It is striking that the center's tax-GDP ratio is no higher than it was in the 1980s, despite average economic growth of 6.5 percent, the most rapid in India's history (Figure 2). The GST could help break this fiscal stasis, with positive spillovers for macro-economic stability. Also, there is evidence of a noteworthy increase in the number of tax filers in the demonetization-GST period (Box 2).



Note: \* Estimated based on state and central government budgets. 2015-16 and 2016-17 includes UDAY, & 2017-18 includes proposed bank recapitalisation.  
Source: Budget documents, Survey calculations

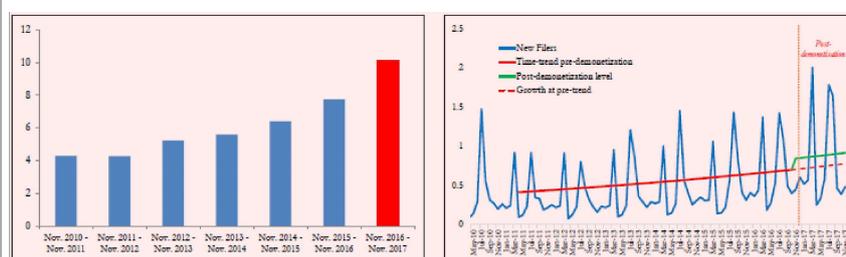
**Figure 2**  
**Tax Revenue**  
(in percent of GDP)

**Box 2**

**The Increase in Taxpayers Post-Demonetization**

One of the aims of demonetization and the Goods and Services Tax (GST) was to increase the formalization of the economy and bring more Indians into the income tax net, which includes only about 59.3 million individual taxpayers (filers and those whose tax is deducted at source in 2015-16), equivalent to 24.7 percent of the estimated non-agricultural workforce. Has this happened and to what extent?

At first blush, there does seem to have been a substantial increase in the number of new taxpayers. Figure 1 compares the total number of new taxpayers in the 13 months since demonetization (November 2016 – November 2017) with previous 13-month time windows.



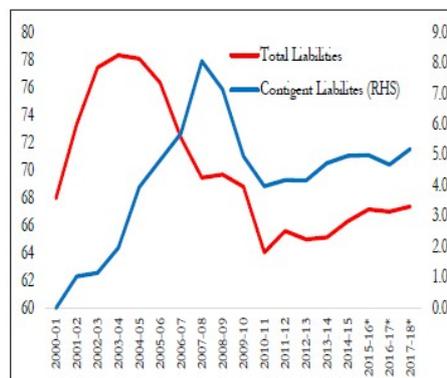
Source : Department of Revenue (CBDT), Survey calculations.

**Figure 2.1**  
New Tax Filers  
(in millions)

**Figure 2.2**  
Monthly New Tax Filers  
(in millions)

After November 2016, 10.1 million filers were added compared with an average of 6.2 million in the preceding six years. A rigorous assessment of the impact of demonetization, however, must account for the pre-existing trend growth in new tax filers. To address this, a regression analysis is undertaken. The result is depicted in Figure 2. Taking seasonality into account it is found that there is a 0.8 percent monthly trend increase in new tax filers (annual growth of ~10 percent). The level of tax filers by November 2017 was 31 percent greater than what this trend would suggest, a statistically significant difference.<sup>1</sup> This translates roughly into about 1.8 million additional tax payers due to demonetization-cum-GST, representing 3 percent of existing taxpayers. Further analysis suggests that new filers reported an average income, in many cases, close to the income tax threshold of Rs. 2.5 lakhs, limiting the early revenue impact. As income growth over time pushes many of the new tax filers over the threshold, the revenue dividends should increase robustly.

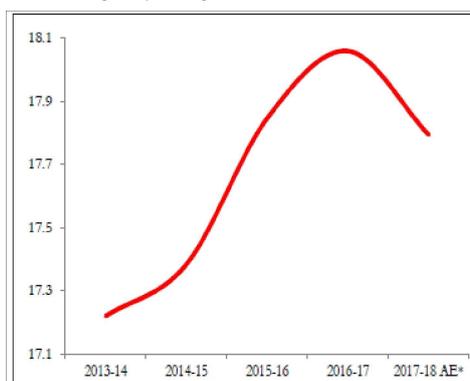
Overcoming the fiscal vulnerability also requires halting the steady conversion of contingent liabilities into actual ones (typically through the assumption of state discom debts and public sector bank recapitalization), which has impeded progress in debt reduction even in the face of solid growth and apparently favorable debt dynamics. Figure 3 shows that contingent liabilities have added about 5 percentage points of GDP to total government debt since 2000-01. Not only the central government but also state governments will need to address this challenge.



Note: \* Estimated based on state and central government budgets. 2015-16 and 2016-17 includes UDAY, & 2017-18 includes proposed bank recapitalisation.  
 Source : Budget documents, Survey calculations;

**Figure 3**  
**Cumulative Contribution of total in millions and average\*  
 Realized Contingent Liabilities\* to General Government Debt**  
 (in percent of GDP)

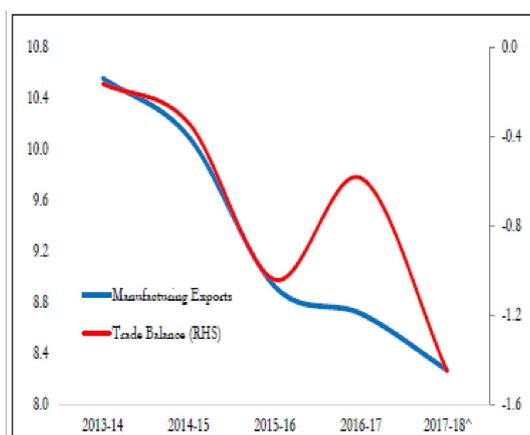
Addressing the current account vulnerability requires raising the trajectory of export growth. Here, an important lesson is the need for macroeconomic policy to support the development strategy. Reviving manufacturing and making the sector internationally competitive have been the twin goals of the Make in India program, underpinned by a strategy of reducing the costs of doing business. As a result, the share of manufacturing in GDP has improved slightly (Figure 4).



Note: \* AE - Advanced Estimates by CSO. Manufacturing exports exclude oil, gold and silver.  
 ^ The 2017-18 trade estimate annualizes April-November trade data, based on the average share of the first 8 months in the yearly total during the last 3 years.  
 Source : DGCIS, Survey calculations.

**Figure 4**  
**Manufacturing Gross Value Added (GVA)**  
 (in percent of GDP)

However, the international competitiveness of manufacturing has not made great strides, reflected in the declining manufacturing export-GDP ratio and manufacturing trade balance (Figure 5).



Note: \* AE – Advanced Estimates by CSO. Manufacturing exports exclude oil, gold and silver.

<sup>^</sup> The 2017-18 trade estimate annualizes April-November trade data, based on the average share of the first 8 months in the yearly total during the last 3 years.

Source : DGCIS, Survey calculations.

**Figure 5**  
**Manufacturing Exports and Trade Balance**  
(in percent of GDP)

The Indian economy's competitiveness has had to contend with the real effective exchange appreciating about 21 percent since January 2014 (Figure 6). Policymakers have struggled to come to grips with the international trilemma, whereby an independent monetary policy and an exchange rate objective cannot co-exist with an open capital account (Rey, 2013; Gopinath, 2017).

The issue is that both competitive exchange rates and open capital accounts are helpful for growth. Changes in price competitiveness can make a major difference to export performance as highlighted in the government's export package for clothing (Box 3). At the same time, open capital accounts attract foreign saving, providing additional funds for investment, which can help growth. So how can policymakers choose between them?

Chapter III of Economic Survey 2017-18 presents some subtle findings from broader cross-country experience, suggesting that additional savings may not necessarily boost growth. Meanwhile, Rodrik (1998) provides evidence that a competitive exchange rate that boosts investment and growth will elicit its own saving. In other words, there is economic evidence suggesting competitive exchange rates are more important for export-led growth. At the same time, Box 4 shows that the domestic political economy of exchange rates favors an open capital account and a stronger, less competitive exchange rate

## Box 3

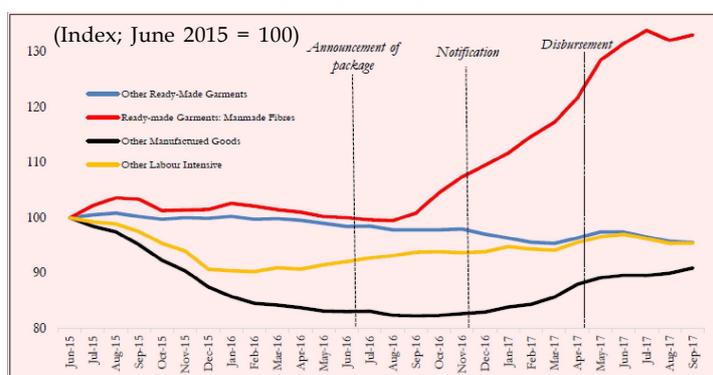
## Do Export Incentives Work? The Clothing Package of 2016

The apparel sector has immense potential to drive economic growth, increase employment, and empower women in India. This is especially true as China's share of global apparel exports has come down in recent years. However, India has not, or not yet, capitalized on this opening. Instead, countries like Vietnam and Bangladesh are quickly filling the space left by China. Thus, in June 2016, the Cabinet announced a Rs. 6,000 crore package for the apparel sector. The largest component of this package were rebates on state levies (ROSL) to offset indirect taxes levied by the states (the VAT) that were embedded in exports. This ROSL was over and above the duty drawbacks and other incentives (e.g., Merchandise Exports from India Scheme (MEIS)) that were given to offset indirect taxes embedded in exports. Prior to the package, duty-drawbacks were between 7.5 percent - 9.8 percent for apparels. After the package, the ROSL increased export incentives by between 2.8 percent - 3.9 percent. A key question is: did the package succeed? To answer this, we use a well-recognized Difference-in-Difference (DD) approach, which allows us to isolate, albeit imperfectly, the impact of the package. Essentially, the approach asks whether the gap between clothing and comparator group export growth increased after the package was introduced. *Annex 1* explains the methodology in greater detail.

Three main findings emerge

- i. The package increased exports of readymade garments (RMG) made of man-made fibres (MMFs)
- ii. The package did not have a statistically positive impact on RMG made of other fibres (silk, cotton, etc.); and
- iii. The impact on MMF-RMGs increased gradually over time; by September 2017, the cumulative impact was about 16 percent over other comparator groups.

The figure below shows the growth in clothing exports compared to other labor-intensive and manufacturing goods, which did not receive ROSL. The positive impact on RMGs made of MMF after the package emerges starkly.



Source : Ministry of Commerce and Industry, Survey calculations.

**Figure 3.1**  
Exports of Ready Made Garments (RMGs) and Selected Other Groups  
(Index; June 2015 = 100)

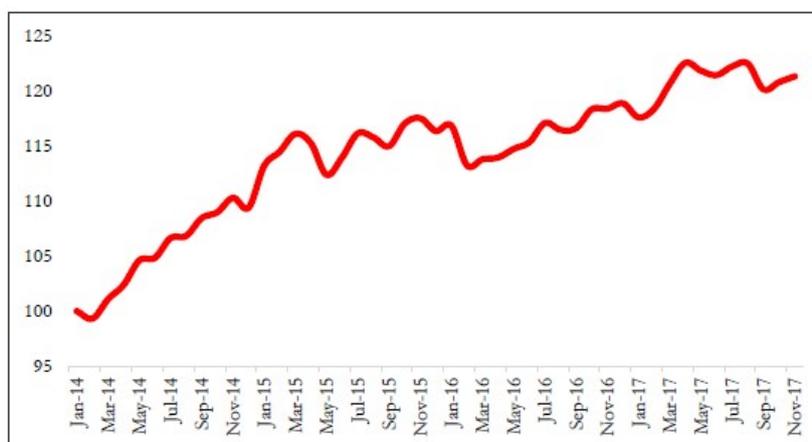
A policy implication is that the GST Council should conduct a comprehensive review of embedded taxes arising from products left outside the GST (petroleum and electricity) and those that arise from the GST itself (for example, input tax credits that get blocked because of "tax inversion," whereby taxes further back in the chain are greater than those up the chain). This review should lead to an expeditious elimination of these embedded export taxes, which could provide an important boost to India's manufacturing exports

**Box 4****Political Economy of Interest and Exchange Rates**

Policy decisions affect various groups differently. As a guide to readers, the table below lists the preferences of different groups in relation to interest and exchange rates, as well as the underlying reasons. For example, strong exchange rates may be preferred by companies that sell non-tradeables and rely on imports for their inputs: the classic case here is power companies that sell electricity to domestic distribution companies and import their capital equipment. Conversely, services exporters such as IT companies will be keen on competitive exchange rates because they sell mainly abroad, while importing very little. A strong exchange rate is preferred by those who equate currency strength with broader national strength.

Group	Preference	Reasons
Manufacturers, services exporters, and farmers	Low interest rates, weak currency	Profits increase, even if some inputs are imported, since market share grows. This applies both to exporters (clothing) and firms producing for domestic market but competing with imports (steel, aluminium). Software exporters with high domestic value added will favor weak rupee.
Exception: Import-intensive Domestically oriented firms	No strong preference Low interest rates	Weaker rupee increases export revenues but increases import costs manufactures Profits increase; debt burden declines
Infrastructure companies (especially power and renewables)	Strong currency, low interest rates	Strong currency reduces costs without affecting revenues, which are earned in rupees. Costs fall because firms typically import capital equipment, financed with dollar loans. Low interest rates reduce debt service burden on domestic loans.
Households	High interest rates	Returns on savings increase. Household saving far outweighs household borrowing.
Equity investors-Domestic	Low interest rates	Corporate profits increase, so returns rise.
Equity investors - Foreign	Low interest rates, strong currency	Combination boosts dollar returns. Tension: low rates typically lead to weaker currency.
Bond investors-Domestic	Falling interest rates	Generates capital gains. Banks prefer low rates; other investors (such as LIC) prefer high rates.
Bond investors-Foreign	High but falling interest rates, strong currency	Combination maximizes dollar returns. Tension: falling rates weaken currency.
Government	Low interest rates	Low rates reduce debt service. Extra growth or inflation increases revenues.
Non-economic actors	Strong currency	Strong currency equated with national economic strength.

A fifth lesson is this: while there are significant social and economic benefits to attacking corruption and weak governance, addressing those pathologies entails challenges. In the case of the GST and demonetization, informal cash-intensive sectors of the economy were impacted. In the case of the TBS, the decision to ban promoters of firms with non-performing loans from the IBC auctions may have been necessary to minimize moral hazard going forward; otherwise firms would have an incentive to default on their loans, then offer to repay them at a discount. But it carried the possibility of fewer bidders and lower prices in the auctions of insolvent firms.



Source: IMF, Survey calculations.

**Figure 6**  
**Real Effective Exchange Rate (REER-IMF) (January 2014=100)**

In the case of spectrum, coal, and renewables, auctions may have led to a winners' curse, whereby firms overbid for assets, leading to adverse consequences in each of the sectors; but they created transparency and avoided rent-seeking with enormous benefits, actual and perceptual.

The lesson is that policy design must minimize these costs wherever possible. More specifically, there should be: greater reliance on using incentives and carrots than on sticks; greater focus on addressing the flow problem (the policy environment that incentivizes rent-seeking) than the stock problem; and more recourse to calibrated rather than blunt instruments (such as bans, quantitative restrictions, stock limits, and closing down of markets, including futures markets).

The sixth lesson relates to the ongoing international and national debate on the role of markets and states, private capital and public institutions. All over the world, there is a reassessment of the respective roles of the two with a clear tilt toward greater state involvement. The new international case is based on the need to redistribute to check growing inequality and cushion against the impact of globalization. It is also based on the need to regulate, for example, the financial sector to minimize risks and the technology sector to check growing market power and its misuse as a communications medium.

But India is in a grey zone of uncertainty on the role of states and markets. Limitations on state capacity (center and states) affect the delivery of essential services such as health and education. At the same time, the introduction of technology and the JAM (Jan Dhan – Aadhaar – Mobile) architecture, now enhanced by the Unified Payments Interface (UPI), holds the potential for significant improvements in such capacity.

The ambivalence relating to the private sector relates to the experience with Indian capital. The private sector has always had to struggle with the stigma that came with being midwived in the era of the license-quota-control Raj. Some of this stigma was washed away during the IT boom that started in the 1990s, because the sector had developed on intrinsic competitive merit rather than proximity to government, had adopted exemplary governance standards, listed on international stock exchanges, and thrived in the global market place. All these developments improved the credentials of Indian capital.

But then stigmatization was reinforced in the mid-late 2000s, because of the intense rent-seeking and corruption associated with the allocation of spectrum, coal, land, and environmental permits. The infrastructure boom of that period bequeathed the TBS problem of today. As a result, the public concluded that promoters had little skin in the game, that India had “capitalism without equity,” and that instead of limited liability there was very little liability, all further exacerbated the negative perception of Indian capital.

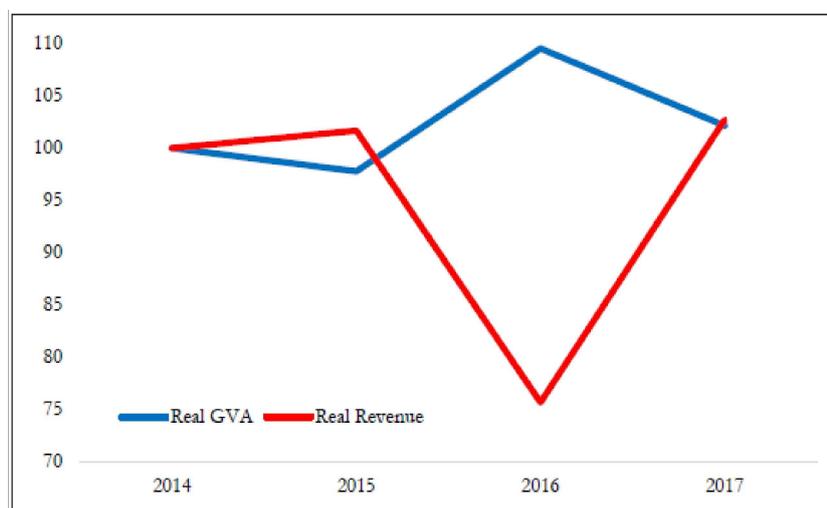
Now, even the IT sector is confronting governance challenges, as its model of providing low-cost programming for foreign clients comes under threat from rapid technological change. So, one might say that India had moved from “crony socialism to stigmatized capitalism.” It is that *zeitgeist* (or *Maahaul*) of stigmatized capitalism – an accumulated legacy inherited by the government – that made policy reforms so difficult and makes the recent progress in addressing the Twin Balance Sheet challenge noteworthy.

Finally, last year’s Economic Survey 2016-17 (Volume 1, Chapter II) identified the unfinished agenda in terms of three meta-challenges: addressing inefficient re-distribution; accelerating the limited progress in delivery of essential public services, especially health and education; and correcting the ambivalence toward property rights, the private sector, and price incentives.

In the light of new analysis done for this Survey and of a broader retrospective evaluation, it is worth re-emphasizing one and adding two others. The issue that needs re-emphasizing is education. Looking at the looming technological headwinds, and the (small) risks of there being a stall in India’s convergence process, the education challenge cannot be addressed soon enough given India’s learning outcomes (see Box 1 in Chapter 5 of Economic Survey 2017-18). Healthy and educated individuals, with the ability to adapt and learn on an ongoing basis, need to be the core of the future labor force. Those individuals must include high numbers of women; for this to happen, they will need to have a status and role comparable to men. Chapter 7 suggests that India lags behind on this dimension.

The first new issue – yet in some ways the oldest issue – is agriculture. Successful economic and social transformation has always happened against the background of rising agricultural productivity. In

the last four years, the level of real agricultural GDP and real agriculture revenues has remained constant, owing in part to weak monsoons in two of those years (Figure 7). And the analysis in Chapter 6 suggests that climate change – whose imprint on Indian agriculture is already visible – might reduce farm incomes by up to 20-25 percent in the medium term. The government’s laudable objective of addressing agricultural stress and doubling farmers’ incomes consequently requires radical follow-up action, including decisive efforts to bring science and technology to farmers, replacing untargeted subsidies (power and fertiliser) by direct income support, and dramatically extending irrigation but via efficient drip and sprinkler technologies.



**Note:** Values for 2016 and 2017 Crop GVA estimated using real agriculture GVA to Crop GVA ratio for previous years. Real revenue (output times prices received by farmers and deflated by the CPI for agriculture) is a proxy for real incomes; Agriculture GVA is based on the financial year while real revenue is based on the calendar year.

**Source :** AGMARKNET, Survey calculations.

**Figure 7**  
**Agriculture : Real GVA and Real Revenue (Crops: 2014 = 100)**

The other issue is the challenge of employment. The lack of consistent, comprehensive, and current data impedes a serious assessment (although Box 5 cites new evidence that suggests formal sector employment is substantially greater than hitherto believed). Even so, it is clear that providing India’s young and burgeoning labor force with good, high productivity jobs will remain a pressing medium-term challenge. An effective response will encompass multiple levers and strategies, above all creating a climate for rapid economic growth on the strength of the only two truly sustainable engines – private investment and exports.

**Box 5****New Estimates of Formal Sector Non-Farm Payrolls**

Assessments of the employment challenge are hampered by a lack of timely data. Recognizing this, the government authorized the NITI Aayog to provide new guidelines for filling this lacuna, and the next comprehensive survey of employment is under way. In the meantime, the digitization of government data and the introduction of the GST have provided an opportunity to make some preliminary estimates of formal employment. Chapter 2 provides details; here the main findings are summarized. Formal employment can be defined in at least two senses. First, when employers are providing some kind of social security to their employees. Second, when firms are part of the tax net. Accordingly, Table shows a 2x2 matrix of payrolls, based on these definitions. The NSSO's 73rd Survey Round is used to identify firms that are neither part of the tax or social security net. This is the pure informality cell in the sense that firms are outside both the tax and social security nets.<sup>2</sup>

**Table 5.1**  
**Formal Non-Farm Payroll by Social Security and Tax Definitions**

		Enrolled in EPFO/ESIC					
		Number of Firms/Enterprises (lakh)			Employees (crore)		
		Yes	No	Total	Yes	No	Total
Registered	Yes	4.0	88.3	92.3	4.5	6.7	11.2
under GST	No	0.9	619.8	620.6	1.5	9.2	10.8
		4.9	708.1	712.9	6.0	15.9	22.0

The Table 5.1 shows that from a social security perspective formal employment amounts to 6 crores, to which we must add an estimated 1.5 crore of government workers (excluding defense), for a total of 7.5 crores. Since the non-agricultural workforce (again adding government to the figure in the table) is estimated at 24 crores according to the 68th Round (2011) of the NSSO Employment-Unemployment Survey, formal employment under this definition is equivalent to 31 percent of the non-agricultural workforce.

Meanwhile, from a tax perspective formal employment is 11.2 crores; adding government employment yields a total count of 12.7 crores. This implies that nearly 54 percent of the non-agricultural workforce is in the formal sector. Of course, not all the firms that pay GST are formal, in the common-use sense of the term. As Chapter 2 shows, many small, below-the-threshold firms have registered for the GST so they can secure tax credits on their purchases. Against this, the figure excludes many formal workers in sectors outside the GST such as health and education.

Notwithstanding the caveats regarding the specific numbers, the broad conclusion is likely to be robust: formal payrolls may be considerably greater than currently believed.

**II. Recent Developments****2.1 The Global Outlook : Baseline and Risks**

According to the International Monetary Fund (IMF), the global economy is experiencing a near-synchronous recovery, the most broad-based since 2010. In 2017, roughly three-quarters of countries experienced improvements in their growth rates, the highest share since 2010. The latest World Economic Outlook (WEO) of the IMF shows global GDP growth accelerated to around 3.6 percent in 2017 from 3.2 percent in 2016, and the forecast for 2018 has been upgraded by 0.2 percentage points to 3.9 percent. Although rebounding, global growth is still well below levels reached in the 2000s.

One reason why the recovery has spread around the globe is that world trade in goods and services has finally emerged from its torpor, registering 4.7 percent real volume growth in 2017 compared with 2.5 percent in 2016. Another reason is that commodity producers such as Russia, Brazil, and Saudi Arabia, which for the past few years been suffering from depressed prices, have benefitted from the upswing in demand. Commodity prices increased smartly in 2017, led by petroleum, whose price rose by 16 percent to reach \$61 per barrel by the end of the year.

Even as global growth and commodity prices have surged, inflation has remained remarkably quiescent, remaining below 2 percent in the main advanced regions. Consequently, monetary policies in the US, Eurozone and Japan have remained highly accommodative despite a strong recovery. These unusual settings – rapid growth, ultra-low interest rates – at a late stage in the economic cycle have produced the rarest of combinations: record-high high bond prices and stock market valuations, both at the same time.

The consensus forecast calls for these conditions to be sustained in 2018, as companies respond to buoyant demand conditions by stepping up investment, some governments (such as the US) embark on expansionary fiscal policies, while advanced country monetary policies remain stimulative and world trade continues to grow briskly.

What are the risks? Of course, there are the usual geo-political and geo-economic risks: war in the Korean peninsula; political upheaval in the Middle East; aggressive output cuts by Saudi Arabia (and Russia) in advance of the planned listing of the Saudi Arabian oil company, Aramco, which could force oil prices even higher; a final reckoning from China's unprecedented credit surge in the form of capital controls, slowdown in growth, and a sharply depreciating currency with consequences for the global economy (Economic Survey, 2016-17, Chapter 1); and trade tension that could lead to skirmishes, and then spiral out of control.

But perhaps the main risks lie on the macro-finance front in advanced economies. These stem from three, inter-related, sources

- i. Asset valuations (price-equity ratios) tend to revert to their mean. And the faster and higher they climb, especially so late in the economic cycle, the greater the risk of sharp corrections.
- ii. Simultaneously high valuations of both bonds and equities tend to be briefly lived because they suffer from an acute tension: if future earnings and economic growth are so bright, justifying high equity prices, interest rates cannot be forever so low.
- iii. And if interest rates rise – or if markets even sense that central banks will need to shift their stance – both bond and equity prices could correct

sharply. A plausible scenario would be the following. The IMF is now forecasting that advanced country output gaps will close in 2018 for the first time since the Global Financial Crisis. As this occurs, wages would start rising, eating into profits (which would prick equity valuations); and as inflation rises in tandem, policy makers would be forced into raising rates, deflating bond valuations and further undermining share prices.

What would happen to growth if asset prices correct? Surely, the impact would be far smaller than it was in 2007-09, because advanced countries are far less vulnerable than they were a decade ago. In particular, the leverage tied to these assets is much lower, which would minimize contagious propagation; while banks are much better buffered, with higher levels of capital and core deposits, and lower levels of risky assets.

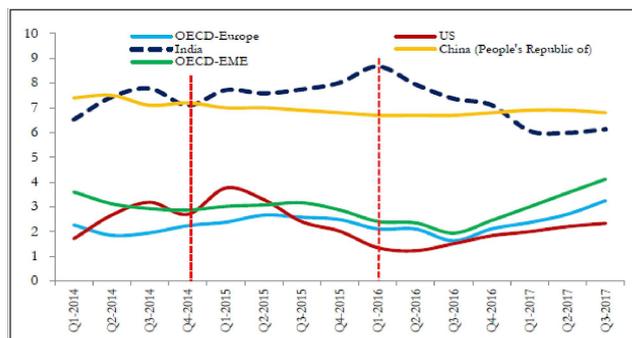
Even so, there would be some consequences. For one, a large decline in wealth would force advanced country consumers to cut back on their spending, which in turn would lead firms to curtail their investments. And if this happens, monetary and fiscal policies would have much less room for expansionary manoeuvre since interest rates are already low while government debts are high. And the political implications of yet another decline in asset prices, the second in a decade, could also be significant, with effects that are difficult to imagine.

In sum, assessing future risks hinges on two calls: interest rate policy and asset valuations. On policy, extraordinarily low rates have, to paraphrase Paul Krugman, become “an obsession in search of a justification.” Initially justified by the dislocations caused by the Global Financial Crisis, then by large output gaps, they are now defended on the grounds that inflation remains weak, even as the slack in product and labor markets is disappearing rapidly. Will the gathering new evidence on closing output gaps and rising employment dispel that obsession?

On valuations, the prognosticator must navigate a narrow strait: steering clear of the “Cry of Wolf” trap (bond prices will finally, finally correct, having defied the prediction of correction in each of the last several years), without succumbing to the siren call of “This Time is Different” (stock valuations are sustainable this time because interest rates will remain at historic lows).

### **III. Understanding India’s (Temporary) “Decoupling”**

Projecting India’s growth for 2018-19 requires understanding what happened in 2017-18. The latter was unusual, especially when set against the international context. Figure 8 illustrates why.

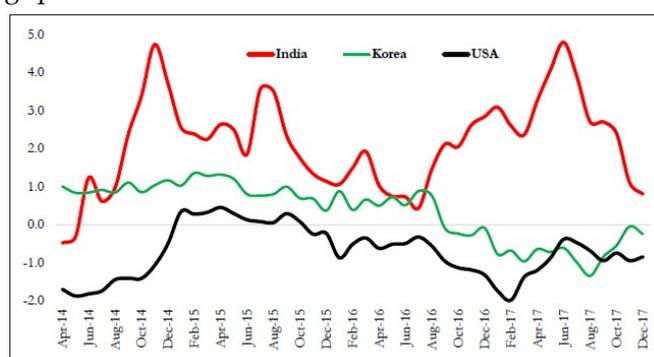


Source : OECD, Survey calculations. Growth rate of seasonally adjusted real GDP

**Figure 8**  
**India's Comparative Growth, (2014Q1-2017Q3)**

Until early 2016, India's growth had been accelerating when growth in other countries was decelerating. But then the converse happened. The world economy embarked on a synchronous recovery, but India's GDP growth – and indeed a number of other indicators such as industrial production, credit, and investment – decelerated. Any explanation would need to explain this change in fortunes, this “decoupling” of Indian growth from global growth, identifying the factors that caused India to forge its unique path. Five explanations suggest themselves.

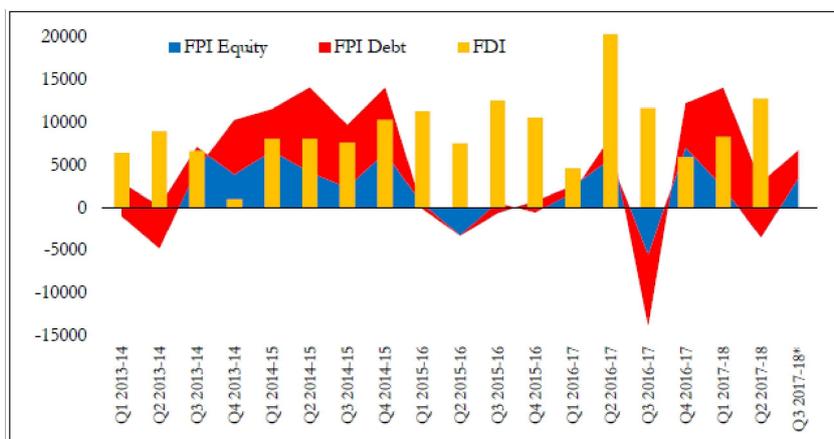
First, India's monetary conditions decoupled from the rest of the world. Figure 9 shows that until the middle of 2016, real policy interest rates were following the global trend downwards. Since then, the downward drift has continued in most other countries, with rates falling on an average by 1 percentage point between July and December 2016 in the US. But in India, for the same period, average real interest rates increased by about 2.5 percentage points.



Source: Survey calculations

**Figure 9**  
**Real Policy Interest Rates in India and Selected Economies,**  
**(April 2016-December 2017)**

This tightening of monetary conditions contributed to the divergence in economic activity in two ways. First, it depressed consumption and investment compared to that in other countries. Second, it attracted capital inflows (Figure 10), especially into debt instruments, which caused the rupee to strengthen, dampening both net services exports (Figure 11) and the manufacturing trade balance (Figure 12). Between early-2016 and November 2017, the rupee appreciated by another 9 percent in real terms against a basket of currencies (Figure 6).



Note : \* Data for FDI is not available for Q3

Source: RBI, Survey calculations.

Figure 10

Net Capital Inflows (US\$ million)

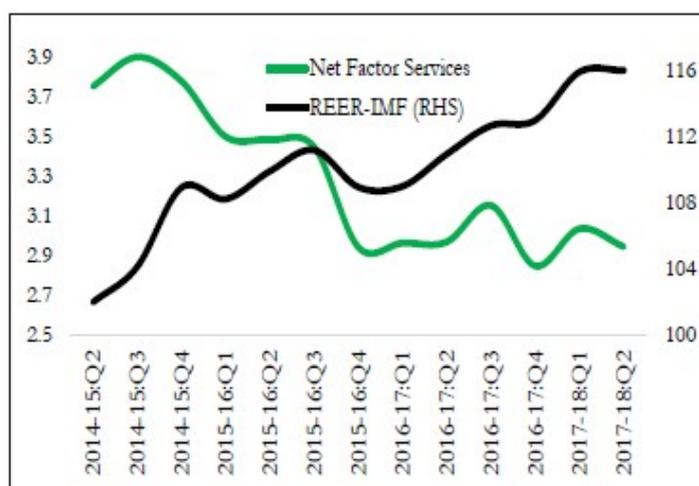
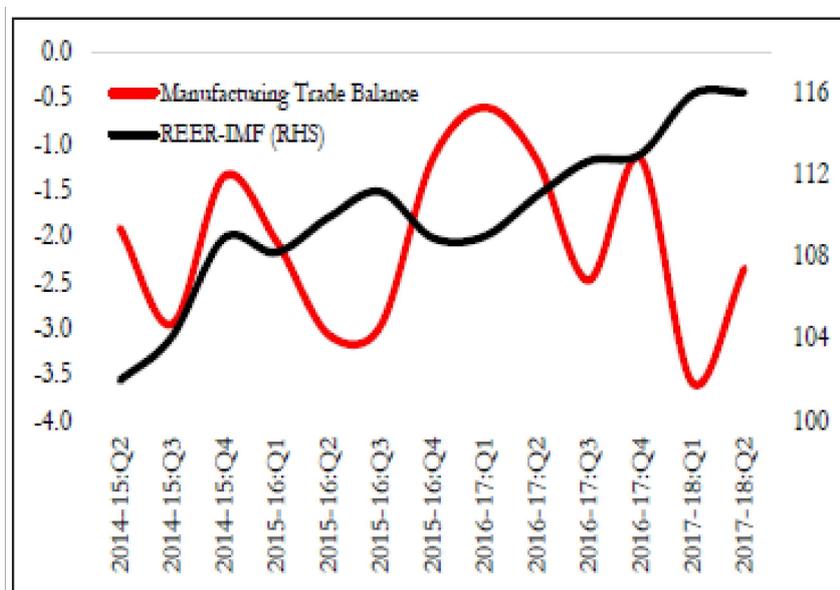


Figure 11

Services Balance (in percent of GDP) and REER (3MMA, April 2014 = 100)

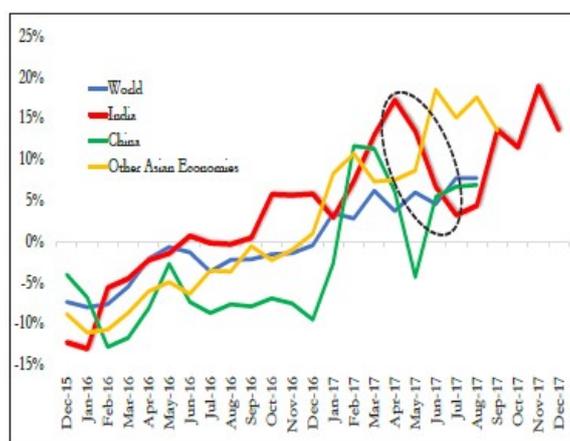


**Figure 12**  
**Manufacturing Trade Balance (percent of GDP) and REER**  
 (3MMA, April 2014=100)

The second and third factors were one-off policy actions: demonetization and GST. Demonetization temporarily reduced demand and hampered production, especially in the informal sector, which transacts mainly in cash. This shock largely faded away by mid-2017, when the cash-GDP ratio stabilized. But at that point GST was introduced, affecting supply chains, especially those in which small traders (who found it difficult to comply with the paperwork demands) were suppliers of intermediates to larger manufacturing companies.

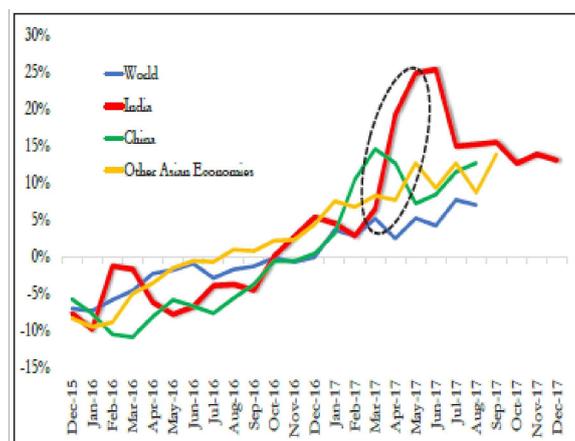
The previous *Economic Survey*, Volume 2, Chapter I had documented the impact of demonetization on the informal sector by measuring the increased demand for MNREGA employment. There is other evidence—indirect and not dispositive—that hints at the supply impacts from the combination of demonetization and GST.

Figures 13 and Figures 14 plot the growth of manufacturing exports and imports. They show that beginning March-April 2017 until September 2017, export growth decelerated while import growth accelerated sharply, a pattern not observed in other Asian emerging economies or the world as a whole. This suggests that the economy experienced a competitiveness impact in the demonetization/GST periods.



Source : International Trade Statistics (ITC) & DGCIS

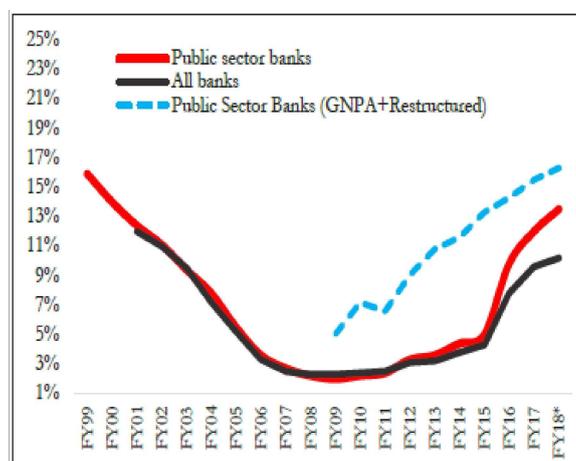
**Figure 13**  
**Growth of Manufacturing Export Value**  
 (Year-on-year, 3 month moving average)



Source : International Trade Statistics (ITC) & DGCIS.

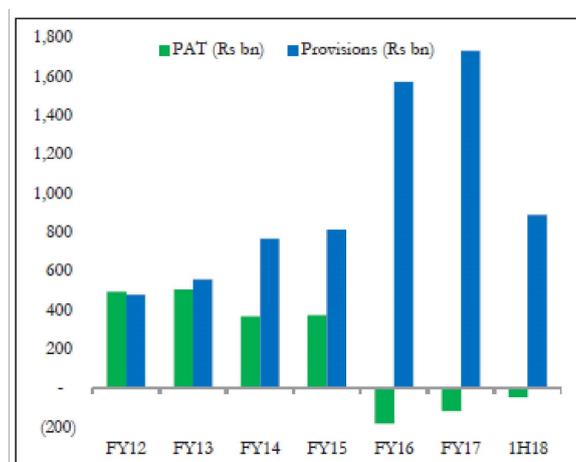
**Figure 14**  
**Growth of Manufacturing Import Value**  
 (Year-on-year, 3 month moving average)

The fourth factor exerting a drag on the Indian economy was the TBS challenge. This has been a drag for some time and its effects have cumulated as the non-performing assets have increased, the financial situation of stressed firms and banks have steadily worsened. During the past three years, profits of the PSBs have plunged into negative territory as provisioning against the bad loans increased substantially (Figures 15 and Figures 16). This, in turn, has impaired banks' ability to supply credit to industry.



**Note:** \* Number for FY18 is up to September 2017.  
**Source:** RBI, Credit Suisse, Survey calculations;

**Figure 15**  
**GNPA ratio (in percent of gross advances)**



**Note:** \* Number for FY18 is up to September 2017.  
**Source:** RBI, Credit Suisse, Survey calculations;

**Figure 16**  
**Profitability and Provisioning of Public Banks (₹ billion)**

The final factor was oil prices. In the last three fiscal years, India experienced a positive terms of trade shock. But in the first three quarters of 2017-18, oil prices have been about 16 percent greater in dollar terms than in the previous year (Table I). It is estimated that a US \$10 per barrel increase in the price of oil reduces growth by 0.2-0.3 percentage points, increases WPI inflation by about 1.7 percentage points and worsens the CAD by about US \$9-10 billion dollars

**Table I**  
**Oil Price Changes (Indian basket of crude)**

Period	US\$/bbl	₹/bbl
2014-15 over 2013-14	-10.1%	-9.1%
2015-16 over 2014-15	-46.2%	-42.7%
2016-17 over 2015-16	-11.4%	-7.9%
2017-18* over 2016-17	15.9%	11.5%

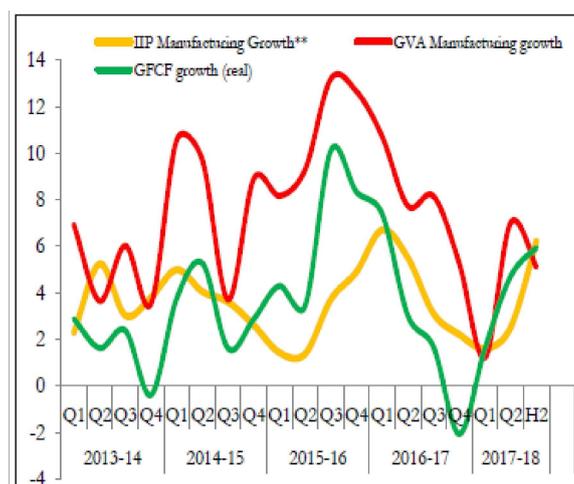
**Note:** \* Change calculated as a nine-month year-on-year growth.

**Source :** Petroleum Planning & Analysis Cell (PPAC), Survey calculations.

#### IV. Outlook For 2017-18

##### 4.1 Economic activity

The key question going forward is whether the economy has troughed, and if so at what pace it will recover toward its medium term trend. High frequency indicators do suggest that a robust recovery is taking hold as reflected in a variety of indicators, including overall GVA, manufacturing GVA, the IIP, gross capital formation (Figure 17) and exports.

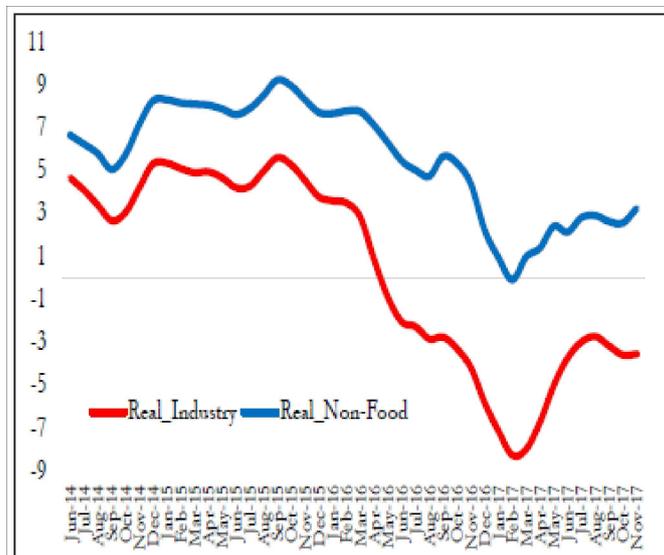


**Note:** \* The last data points for GVA, GFCF based on data for H2.  
\*\* IIP for Q3 is based on data from October and November;  
\*\*\* Deflated using average of CPI and WPI.

**Source :** CSO, Survey calculations;

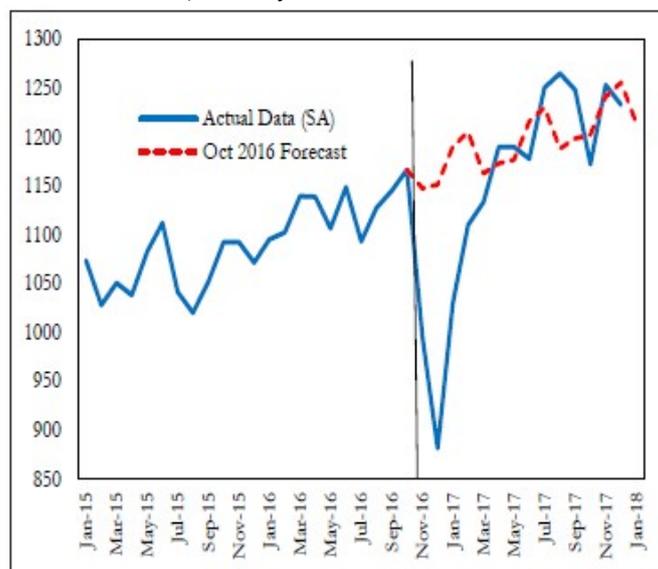
**Figure 17**  
**GVA, GFCF and IIP (Year-on-year, percent)**

Similarly, real non-food credit growth has rebounded to 4 percent in November 2017 on a year-on-year basis, while the squeeze on real credit to industry is abating (Figure 18). Moreover, the flow of nonbank resources to the corporate sector, such as bond market borrowing and lending by NBFCs, has increased by 43 percent (April-December 2017 compared to the same period a year ago), substituting in part for weak bank credit. Rural demand, proxied by motor cycle sales, and auto sales, while not yet back to its pre-demonetization trend, are recovering (Figures 19 and Figures 20)



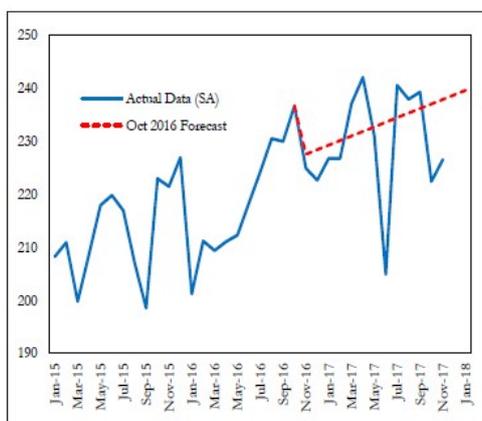
**Note:** \* The last data points for GVA, GFCF based on data for H2.  
 \*\* IIP for Q3 is based on data from October and November;  
 \*\*\* Deflated using average of CPI and WPI.  
**Source :** CSO, Survey calculations;

**Figure 18**  
**Real Credit Growth\*\*\* (Industry and Non-Food Credit, 3MMA, YOY)**



**Source :** Society for Indian Automobile Manufacturers, Survey calculations.

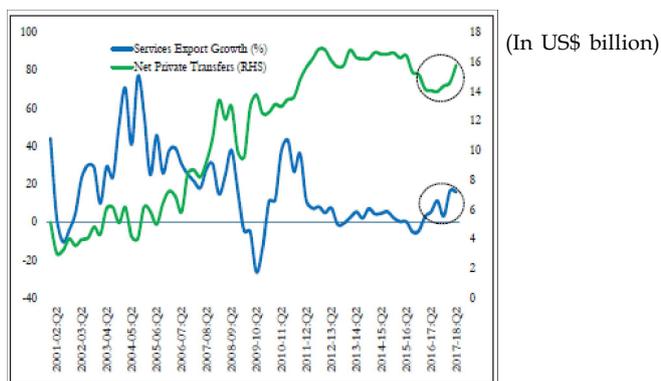
**Figure 19**  
**Sale of Motorcycles**  
 (Seasonally adjusted, in thousands)



Source : Society for Indian Automobile Manufacturers, Survey calculations.

**Figure 20**  
**Sale of Passenger Cars** (Seasonally adjusted, in thousands)

Perhaps most significantly, the behavior of manufacturing exports and imports in the second and third quarters of this fiscal year has started to reverse. The re-acceleration of export growth to 13.6 percent in the third quarter of FY2018 and deceleration of import growth to 13.1 percent (Figures 13 and Figures 14), in line with global trends, suggest that the demonetization and GST effects are receding. Services export and private remittances are also rebounding (Figure 21).

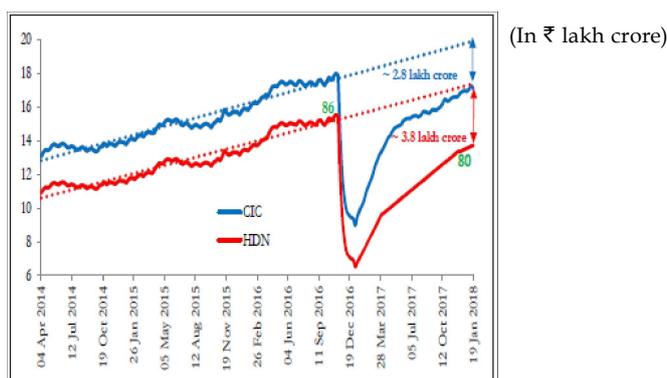


Source : RBI, Survey calculations.

**Figure 21**  
**Services Export Growth (percent) and Net Private Remittances**

On demonetization specifically, the cash-to-GDP ratio has stabilized, suggesting a return to equilibrium. The evidence is that since about June 2017 the trend in currency is identical to that pre-demonetization (Figure 22). The stabilization also permits estimation of the impact of

demonetization: about Rs. 2.8 lakh crores less cash (1.8 percent of GDP) and about Rs. 3.8 lakh crores less high denomination notes (2.5 percent of GDP)



Source : RBI, Survey calculations; Numbers in green denote HDN as share of CIC.

**Figure 22**  
**Currency in Circulation (CIC) and High Denomination Notes (HDN)**

A final, important factor explaining the growth recovery is fiscal, which is providing a boost to aggregate demand. For reasons related to smoothening the transition, GST revenues will only be collected for 11 months, which is akin to a tax cut for consumers. Meanwhile, overall revenue expenditure growth by the central and state governments at remains strong at 11.7 percent (April to November). Cyclical conditions may also lead to lower tax and non-tax revenues, which act as an automatic stabilizer.

All this said, while the direction of the indicators is positive, their *level* remains below potential. IIP growth (April-November 2017 over same period in the previous year) is 3.2 percent, real credit growth to industry is still in negative territory, and the growth in world trade remains less than half its level of a decade ago. Moreover, even though the cost of equity has fallen to low levels, corporates have not raised commensurate amounts of capital, suggesting that their investment plans remain modest (Box 6). In other words, the twin engines that propelled the economy's take-off in the mid-2000s – exports and investment – are continuing to run below take-off speed.

#### Box 6

##### The Stock Market Boom and Equity Raising

Normally, when stock prices boom, as they have done in the past two years, firms issue more equity publicly, taking advantage of the reduced cost of capital to embark on new investment projects. This happened in the mid-2000s and again around 2010. In the last two years, especially in the first eight months of this year, there has once again been a pick-up in equity-raising activity. If current trends continue, the number of issues and their value could double the levels recorded in the previous six years (Table).

Year	No. of Issues (Public)	Value (Rs. Crore)	Total Public	Private Total
2007-08	722	140,844	-	140,844
2008-09	677	65,439	-	65,439
2009-10	483	115,270	-	115,270
2010-11	504	114,529	-	114,529
2011-12	378	40,729	-	40,729
2012-13	514	78,408	-	78,408
2013-14	483	73,575	17,909	91,484
2014-15	534	67,151	11,348	78,499
2015-16	444	88,558	3,657	92,215
2016-17	540	89,994	12,952	102,946
2017-18 (8 months)	425	144,529	8,390	152,919

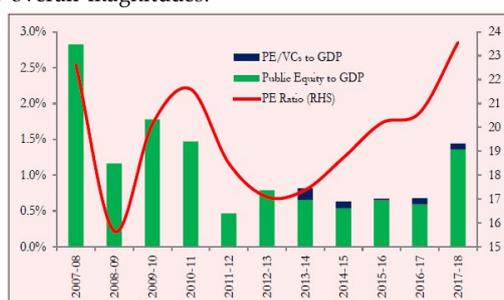
**Note:** Public includes Public Issues (IPO), Rights Issues, Qualified Institutional Placement (QIP), Preference Issues, Follow-On Public Offer (FPO), and Institutional Placement Program (IPP). Private includes private equity and venture capital.

**Source :** RBI, SEBI and previous Economic Surveys.

How do these magnitudes compare with the previous periods of stock market euphoria? Figure 6.1 illustrates total capital raised—through public and private placements—over the last decade as a percent of GDP to make the temporal comparison accurate. The red line depicts the price-earnings ratio. The green bars show that capital raising this year has picked up substantially but remains below levels reached in 2007-08, the peak of the previous boom despite the fact that the cost of capital is at similarly low levels: a price-earnings ratio of 25 implies equity costs of roughly 4 percent (Figure).

Of course, there has been a similar experience in the US (of limited public offerings) but there is one crucial difference: the US private corporate sector is stashed with cash because of high profits and weak investment opportunities. Firms face a capital feast not famine. But this is not the case in India, as firms face significant capital needs, arising from low levels of profit and cash, and high leverage (debt-to-equity) ratios. That is the puzzle.

Some have argued that firms have stepped up their capital raising significantly, but not through public issues; they have instead tapped private equity (PE), venture capital (VC), and mergers and acquisitions (M&A). But Figure 1 which includes private capital (blue shaded bars) shows that while these have indeed gone up, they do not significantly alter overall magnitudes.

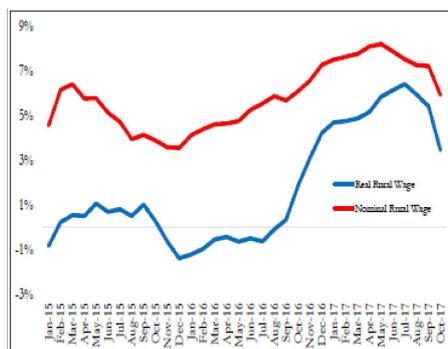


Source: RBI, BSE, past Economic Surveys.

**Figure 6.1**  
**Capital Raising (in percent of GDP)**

In sum above Figure 1 shows that the traditionally strong correlation between the P/E ratio and total capital raised has weakened. One possible implication is that while firms' assessments of growth and investment prospects have improved, they still remain subdued.

Meanwhile, developments in the agriculture sector bear monitoring. The trend acceleration in rural wages (agriculture and non-agriculture), which had occurred through much of 2016 because of increased activity on the back of a strong monsoon, seems to have decelerated beginning just before the kharif season of 2017-18 (Figure 23) but it is still greater than much of the last three years. Three crop-specific developments are evident. Sowing has been lower in both kharif and rabi, reducing the demand for labor. The acreage for kharif and rabi for 2017-18 is estimated to have declined by 6.1 percent and 0.5 percent, respectively. Pulses and oilseeds have seen an increase in sowing, but this has translated into unusually low farmgate prices (below their minimum support price, MSP), again affecting farm revenues. The so-called TOP perishables (tomatoes, onions, and potatoes) have meanwhile fluctuated between high and low prices, engendering income uncertainty for farmers.

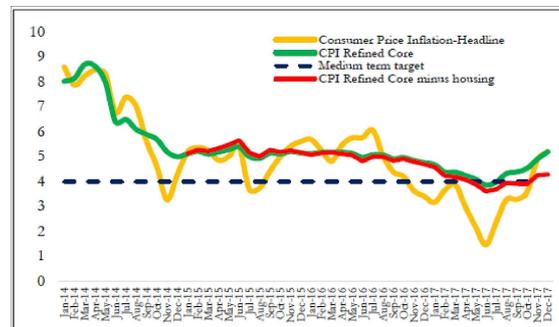


Source: Labour Bureau, Survey calculations.

**Figure 23**  
**Real and Nominal Rural Wages Growth**  
(In percent, 3 month moving average)

The CSO has forecast real GDP growth for 2017-18 at 6.5 percent. However, this estimate has not fully factored in the latest developments in the third quarter, especially the greater-than-CSO-forecast exports and government contributions to demand. Accordingly, real GDP growth for 2017-18 as a whole is expected to be close to 6.75 percent. Given real GDP growth of 6 percent in the first half, this implies that growth in the second half would rebound to 7.5 percent, aided by favorable base effects, especially in the fourth quarter.

Average CPI inflation for the first nine months has averaged 3.2 percent and is projected to reach 3.7 percent for the year as a whole. This implies average CPI inflation in the last quarter of 5 percent, in line with the RBI's forecast. Therefore, the GDP deflator is expected to grow by 3.6 percent for 2017-18, somewhat higher than the CSO's forecast of 2.8 percent. Consequentially, nominal GDP growth is estimated at 10.5 percent, compared with the CSO's 9.5 percent estimate.



**Note :** \* CPI Refined Core is obtained by stripping out the volatile food and fuel components.

**Source :** MoSPI, Survey calculations.

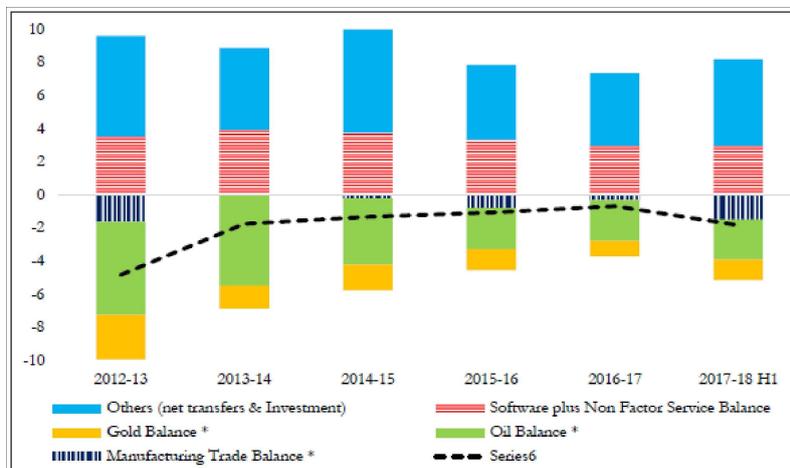
**Figure 24**  
**Inflation: CPI and Variants\***  
(percent, year-on-year)

#### 4.2 Macroeconomic indicators

After 13 months of continuously under-shooting the inflation target by an average of 130 basis points, headline inflation for the first time crossed the RBI's 4 percent target in November, posting a rate of 5.2 percent in December 2017 (Figure 24). The recent upswing in inflation stems from rising global oil prices (not all of which has been passed on to consumers), unseasonal increases in the prices of fruits and vegetables, and the 7th Pay Commission housing rent allowances, which mechanically increase inflation. Stripped of all these factors, underlying inflation has been increasing at a more modest pace, reaching 4.3 percent at end-December – in part because firms are passing the incidence of GST on to final consumers only gradually.

The current account deficit has also widened in 2017-18 and is expected to average about 1.5-2 percent of GDP for the year as a whole. The current account deficit can be split into a manufacturing trade deficit, an oil and gold deficit, a services deficit, and a remittances deficit (Figure 25). In the first half of 2017-18, the oil and gold balance has improved (smaller deficit of US\$47 billion) but this has been offset by a higher trade deficit (US\$18 billion) and a reduced services surplus (US\$37 billion), the latter two reflecting a deterioration in the economy's competitiveness.

Despite these developments, the overall external position remains solid. The current account deficit is well below the 3 percent of GDP threshold beyond which vulnerability emerges. Meanwhile, foreign exchange reserves have reached a record level of about US\$ 432 billion (spot and forward) at end-December 2017, well above prudent norms.



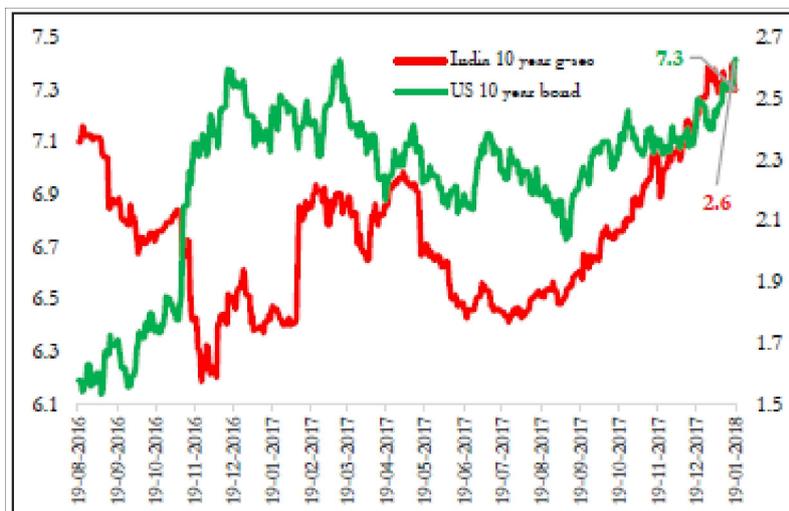
**Note :** \* - Based on Customs data.

**Source :** RBI, Survey calculations; \*

**Figure 25**  
**Current Account Balance (in percent of GDP)**

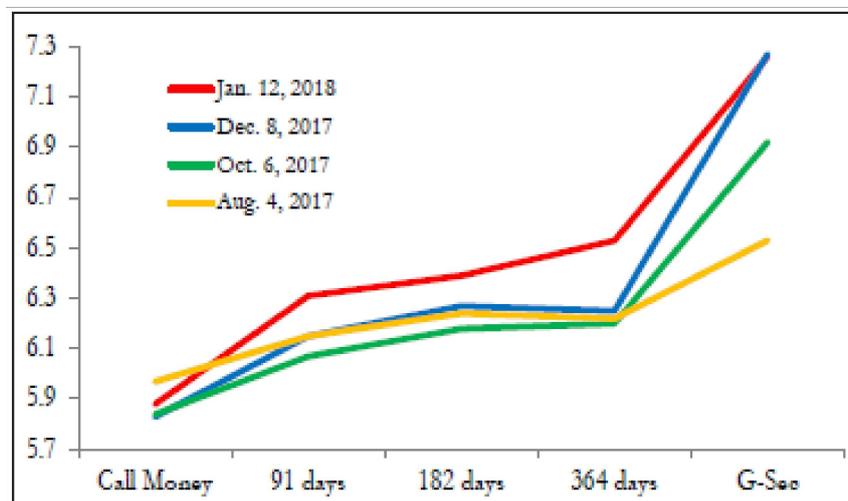
#### 4.3 Fiscal developments

Bond yields have increased sharply (Figure 26) since August 2017, reflecting a variety of factors, including concerns that the fiscal deficit might be greater-than-budgeted, expectations of higher inflation, a rebound in activity that would narrow the output gap, and expectations of rate increases in the US. As a result, the yield curve has become unusually steep (Figure 27).



Source: Bloomberg; RBI.

**Figure 26**  
**10-year G-sec Yields : India and US**



Source : Bloomberg; RBI, Survey calculations.

**Figure 27**  
**Yield Curve**

The fiscal deficit for the first eight months of 2017-18 reached 112 percent of the total for the year, far above the 89 percent norm (average of last 5 years), largely because of a shortfall in non-tax revenue, reflecting reduced dividends from government agencies and enterprises. Expenditure also progressed at a fast pace, reflecting the advancing of the budget cycle by a month which gave considerable leeway to the spending agencies to plan in advance and start implementation early in the financial year. Partially offsetting these trends will be disinvestment receipts which are likely to exceed budget targets.

GST revenue collections are surprisingly robust given that these are early days of such a disruptive change (See Box 7). Government measures to curb black money and encourage tax formalization, including demonetization and the GST, have increased personal income tax collections substantially (excluding the securities transactions tax). From about 2 percent of GDP between 2013-14 and 2015-16, they are likely to rise to 2.3 percent of GDP in 2017-18, a historic high. Precise estimates of the government's contribution to this improvement vary depending on the methodology used. An econometric exercise yields an estimate of ₹ 40,000 crores over the two fiscal years of 2016-17 and 2017-18.<sup>3</sup> Another<sup>3</sup> based on comparing the difference in actual tax buoyancy in 2016-17 and 2017-18 over the previous seven-years' average buoyancy, yields an estimate of about ₹ 65,000 crores (both exclude the ₹ 25,000 crores collected under the Income Disclosure Scheme and Pradhan Mantri Garib Kalyaan Yojana). Thus, the sum of all government efforts increased income tax collections, thus far, between ₹ 65,000 and ₹ 90,000 crores. These numbers imply a substantial increase in reported incomes (and hence in formalization) of about 1.5 percent to 2.3 percent of GDP.

**Box 7**  
**Understanding GST Revenue Performance**

Confusion, even anxiety, abounds about revenue performance so far after five months of collections under the new GST. This confusion is understandable given its newness and complexity. Confusion has also arisen because of the attempt to view this through the narrow lens of the states or the center; of uncertainty about the build-up of balances in the IGST and their sharing; and of the fact that only 11 months revenues will be collected. To be sure, uncertainty will not be definitively lifted until the GST stabilizes later this year. But the provisional assessment is this: revenue collection under the GST is doing well, surprisingly so, for such a transformational reform. Understanding revenue performance requires identifying all the taxes that the GST replaced from an All-India perspective: VAT for the states, and the excise and service taxes as well as the countervailing duties/special additional duty (SAD) on imports. Together these amounted to ₹ 9.7 lakh crores in 2016-17 (Table 7.1).

In the first five months of GST, the actual collections by categories are shown in column 2. Thus far, collections are running at a rate of Rs. 10.5 lakh crore (five-month average, annualized). But at least two corrections need to be made to this number. First, CGST (The Center's) collections are running well below SGST (The States') collections (they should be identical by construction) because of a large stock of unutilized credit available in respect of the old excise and service tax. This is expected to decline over time. In the steady state, CGST collections should be close to SGST collections. Against this, we need to adjust the IGST for a much higher steady-state level of refunds, estimated at an additional ₹ 50,000 crores.

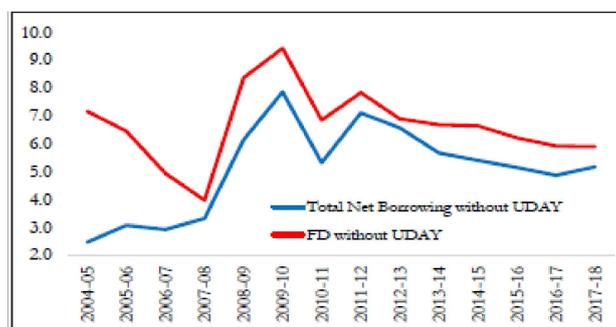
**Table 7.1**  
**Pre- and Post-GST Revenue**  
**Collections (in lakh crore)**

	2016-17		2017-18	
	Annual		Monthly Average of July-Nov (annualized)	Estimated Annual Steady State revenues
States	4.4	SGST	2.5	2.5
Center	5.3	CGST	1.7	2.5
Excise	1.4	IGST	5.4	4.9
Service	2.5	Cesses	0.9	0.9
CVD/SAD	1.4			
Total	9.7		10.5	10.9
Estimated Growth of GST			12.0%	

Column 3 shows notional steady-state taxes after these corrections are made. They amount to ₹ 10.9 lakh crores, representing growth of 12 percent. Given nominal GDP growth of 10.5 percent projected in the *Survey*, buoyancy amounts to 1.14, above the historical buoyancy for indirect taxes of 0.9. In the initial phase of such a large disruptive change, this performance is noteworthy. The GST promises to be a buoyant source of future revenues.

As a result of the budget overruns, the central government's fiscal deficit until November 2017 was ₹ 6.1 lakh crore compared to the budgeted Rs. 5.5 lakh crore. In contrast, state governments seem to be hewing closely to their targeted fiscal consolidation – in part because the center has guaranteed them a large increase in their indirect tax take, as part of the GST agreement.

Reflecting largely fiscal developments at the center, a pause in general government fiscal consolidation relative to 2016-17 cannot be ruled out. In addition, the measured deficit for 2017-18 will include ₹ 80,000 crore (0.5 percent of GDP) in capital provided to public sector banks. But this will not affect aggregate demand, as reflected in international accounting practice which deems such operations as financing ("below-the-line") rather than expenditure.



Source : Central and State government Budget documents, Survey calculations.

**Figure 28**  
**Total Net Borrowings and Fiscal deficit**  
 (General Government, percent of GDP)

In the case of borrowing by the states, markets have perhaps inadequately taken into account the fact that higher market borrowings by them does not reflect higher deficits; rather about ₹ 50,000 crore or 0.3 percent of GDP of market borrowings is due to changes in the composition of financing, away from higher cost NSSF borrowings toward lower cost market borrowings. This lack of strict correspondence between the deficit and borrowings at the central and state levels (Figure 28) is discussed in greater detail in Box 8. For general government, about ₹ 40,000 crores represents greater market borrowings that is not due to deficits – a fact which markets apparently have not internalized.

#### Box 8

##### Do Government Market Borrowings Reflect the Underlying Fiscal Deficit?

Since late July 2017, interest rates on 10-year government securities (g-secs) have been climbing steadily, rising from about 6.4 percent to 7.3 percent on January 1, 2018. Over that period, the outlook for policy rates has deteriorated as the RBI has shifted from rate-cutting to a more hawkish stance. But this shift would not seem to warrant a nearly 1 percentage point increase in long-term rates. Neither would the changes in international rates, which have only increased modestly. So, what explains the sudden rise in g-sec rates?

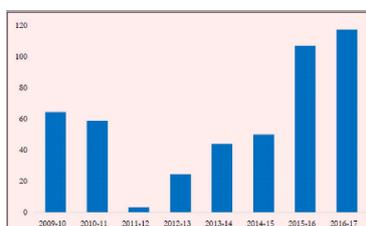
The key factor seems to be financial market concerns that government issuances of g-secs will be greater than earlier anticipated. Certainly, concerns that fiscal deficits of the general (central and state) government might be larger than targeted are real. But even if fiscal over-runs do occur, this does not automatically mean that market borrowings will be greater than anticipated; put differently, market borrowings do not necessarily reflect the underlying fiscal deficit. That's because in India market borrowings are determined not just by the fiscal deficits but also by a distinctively Indian arrangement, the National Small Savings Fund (NSSF).

Essentially, the government gets deposits from the public – independent of its deficit-induced borrowings – in the form of various savings schemes to the public, encompassed in the NSSF. Currently, these schemes offer above-market rates, risk-free investment options, and favorable tax breaks, both at the time of deposit and withdrawal, not available in most regular savings schemes. The *Economic Survey* of 2015-16 had estimated the magnitude of the implicit subsidies to small savers under the NSSF. But what is relevant here is that the flows into the NSSF are autonomous, determined by their perceived attractiveness, rather than the size of the fiscal deficits. The following identity captures the idea.

Net Market Borrowings = Fiscal Deficit- NSSF net flows.<sup>4</sup>

If NSSF net flows increase, for any given fiscal deficit, market borrowings should decline; and vice versa. Market borrowings and hence the supply of g-secs are endogenous to these autonomous flows. So it's perfectly possible for market borrowing to increase, even when the fiscal deficit decreases or remains constant.

Net NSSF flows are large, amounting to ₹ 1.2 lakh crore in 2016-17 as Figure 8.1 shows, representing about 24 percent of that year's central government deficit.<sup>5</sup> In 2017-18, they could be larger still. Part of the reason is that an NSSF saving rates have fallen much more slowly than market rates (especially on deposits), while the income tax exemption limit for NSSF saving has been increased to ₹ 1.5 lakh under section 80C of the Income Tax Act.



Source : Central Government budget documents, Survey calculations.

**Figure 8.1**

**Annual NSSF Flow (Net, ₹ thousand crore)**

At the level of the central government, these additional flows have been so robust that the reliance on market borrowings has declined. For example, in 2016-17 central government market borrowings declined by about ₹ 90,000 crores even though the fiscal deficit remained broadly flat in rupee terms.<sup>6</sup> As a result, as Figure 2 shows, market borrowings have declined by 1.7 percent of GDP since 2013-14, even though the fiscal deficit has declined by only 1 percent of GDP.

At the level of the state governments, the converse has been true. The states have chosen to reduce their reliance on the NSSF in order to reduce their borrowing cost (market rates are substantially lower than NSSF rates). But the consequence has been to increase market borrowings. In 2016-17, market borrowings increased by about Rs. 83,000 crores even though the combined state government deficit increased by only around Rs. 47,000 crores, with the rest expected to go towards repayment of NSSF liabilities. Put another way, market borrowings *increased* by 0.2 percent of GDP more than the fiscal deficit. (Figure 8.3).



Source : Central and States government budget documents, Survey calculations.

**Figure 8.2**  
**Central Government Market Borrowing and Fiscal Deficit**  
(In percent of GDP)

**Figure 8.3**  
**State Government Market Borrowing and Fiscal Deficit**  
(In percent of GDP)

A final point is worth mentioning. Exogenous flows into the NSSF sometimes do not get fully offset by reductions in market borrowings and instead get reflected in accumulation of government cash balances or used for financing other government operations. In such a case, changes in liabilities will be at variance with fiscal deficit estimates. Similarly, some off-balance sheet transactions will add to government liabilities but not to the measured deficit.

Another factor contributing to the rise in bond yields has been stepped-up Open Market Operations (OMO) by the RBI. This amounted to a net sale of about ₹ 90,000 crores during April-December 2017-18 (compared to a net redemption of ₹ 1.1 lakh crores during the same period in 2016-17) to sterilize the impact of foreign flows, themselves induced by high interest rates (Figure 9).

## VII. Outlook For 2018-19

The outlook for 2018-19 will be determined by economic policy in the run-up to the next national election. If macro-economic stability is kept under control, the ongoing reforms are stabilized, and the world economy remains buoyant as today, growth could start recovering towards its medium term economic potential of at least 8 percent.

Consider the components of demand that will influence the growth outlook. The acceleration of global growth should in principle provide a solid boost to export demand. Certainly, it has done so in the past, particularly in the mid-2000s when the booming global economy allowed India to increase its exports by more than 26 percent per annum. This time, the export response to world growth has been in line with the long-term average, but below the response in the mid-2000s. Perhaps it is only a matter of time until exports start to grow at a healthy rate. Remittances are already perking up, and may revive further due to higher oil prices.

Private investment seems poised to rebound, as many of the factors exerting a drag on growth over the past year finally ease off. Translating this potential into an actual investment rebound will depend on the resolution and recapitalization process. If this process moves ahead expeditiously, stressed firms will be put in the hands of stronger ownership, allowing them to resume spending. But if resolution is delayed, so too will the return of the private capex cycle. And if this occurs public investment will not be able to step into the breach, since it will be constrained by the need to maintain a modicum of fiscal consolidation to head off market anxieties.

Consumption demand, meanwhile, will encounter different tugs. On the positive side, it will be helped by the likely reduction in real interest rates in 2018-19 compared to the 2017-18 average. At the same time, average oil prices are forecast by the IMF to be about 12 percent higher in 2018-19, which will crimp real incomes and spending—assuming the increase is passed on into higher prices, rather than absorbed by the budget through excise tax reductions or by the oil marketing companies. And if higher oil

prices requires tighter monetary policy to meet the inflation target, real interest rates could exert a drag on consumption.

Putting all these factors together, a pick-up in growth to between 7 and 7.5 percent in 2018-19 can be forecasted, re-instating India as the world's fastest growing major economy. This forecast is subject to upside potential and downside risks.

The biggest source of upside potential will be exports. If the relationship between India's exports and world growth returns to that in the boom phase, and if world growth in 2018 is as projected by the IMF, then that could add another ½ percentage point to growth.

Another key determinant of growth will be the implementation of the IBC process. Here timeliness in resolution and acceptance of the IBC solutions must be a priority to kick-start private investment. The greater the delays in the early cases, the greater the risk that uncertainty will soon shroud the entire IBC process. It is also possible that expeditious resolution may require the government to provide more resources to PSBs, especially if the haircuts required are greater than previously expected, the ongoing process of asset quality recognition uncovers more stressed assets, and if new accounting standards are implemented.

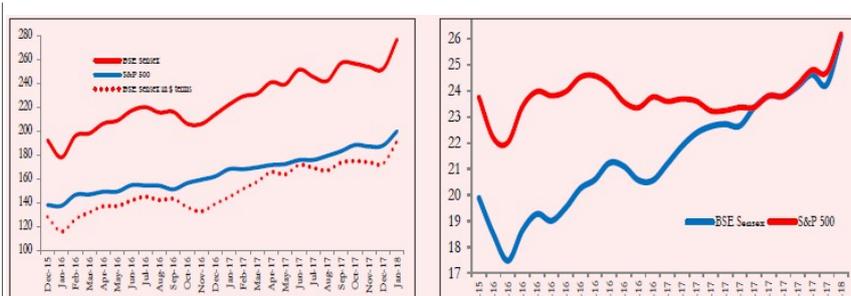
Persistently high oil prices (at current levels) remain a key risk. They would affect inflation, the current account, the fiscal position and growth, and force macroeconomic policies to be tighter than otherwise.

One eventuality to guard against is a classic emerging market "sudden stall" induced by sharp corrections to elevated stock prices. (Box 9 suggests that India's stock price surge is different from that in other countries but does not warrant sanguine-ness about its sustainability.) Savers, already smarting from reduced opportunities in the wake of demonetization, from depressed gold prices, and from lower nominal interest rates, would feel aggrieved, leading to calls for action. Stock price corrections could also trigger capital outflows, especially if monetary policy unwinds less hesitantly in advanced countries and if oil prices remain high. Policy might then have to respond with higher interest rates, which could choke off the nascent recovery. The classic emerging market dilemma of reconciling the trade-off between macro-stability and growth could then play itself out.

#### Box 9

##### Understanding the Stock Market Boom: Is India Different?

Over the past two fiscal years, the Indian stock market has soared, outperforming many other major markets. As Figure 1 shows, since end-December 2015, the S&P index has surged 45 percent, while the Sensex has surged 46 percent in rupee terms and 52 percent in dollar terms. This has led to a convergence in the price-earnings ratios of the Indian stock market to that of the US at a lofty level of about 26 (Figure 9.2). Yet over this period the Indian and US economies have been following different paths. So what explains the sudden convergence in stock markets?



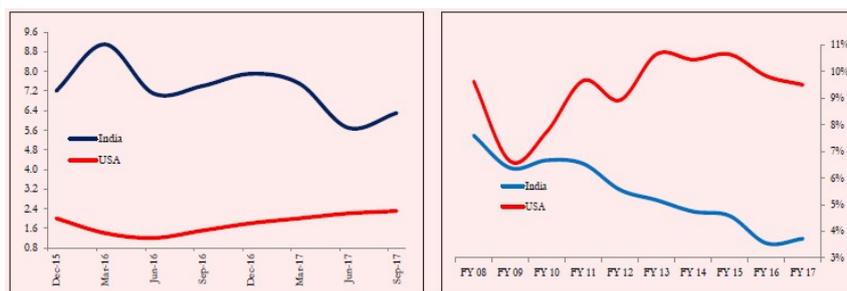
Source : BSE, Yahoo finance, Survey Calculations.

**Figure 9.1** US and India Stock Market, Performance December 2015-January 2018  
**Figure 9.2** US and India Price- Earnings Ratios, December 2015-January 2018

The paths of the Indian and US economies have differed in three striking ways:

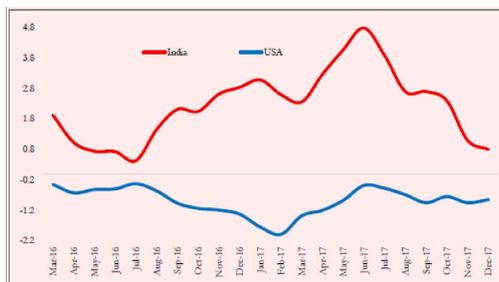
- i. The stock market surge in India has coincided with a deceleration in economic growth, whereas US growth has accelerated (Figure 9.3).
- ii. India's current corporate earnings/GDP ratio has been sliding since the Global Financial Crisis, falling to just 3½ percent, while profits in the US have remained a healthy 9 percent of GDP (Figure 9.4). Moreover, the recently legislated tax cuts in the US are likely to increase post-tax earnings.
- iii. Critically, real interest rates have diverged substantially. Rates in the US have persisted at negative levels, while those in India have risen to historically high levels. Over the period of the boom, US real rates have averaged -1.0 percent, compared to India's 2.2 percent, a difference of 3.2 percentage points (Figure 9.5).

What, then, explains the stock market convergence? Two factors seem to be at work. First, expectations of earnings growth are much higher in India. Indeed, it was such expectations that lie at the origin of the stock market boom. In early 2016-17, signs emerged that the long slide in the corporate profits/GDP ratio might finally be coming to an end. Investors reacted to this news with alacrity, bidding up share prices in anticipation of a recovery they hoped lay just ahead. Accordingly, the ratio of prices to current earnings rose sharply.



Source : RBI, Survey calculations.

**Figure 9.3** US and India, Real GDP Growth December 2015 -end- December 2017  
**Figure 9.4** US and India Corporate Profits (% of GDP)



Source : Survey Calculations.

**Figure 9.5**  
**Real Interest Rate: India & US**

By 2017-18 signs began to accumulate that the profit recovery was not obviously around the corner. But at that point a second factor gave the market further impetus. That factor was demonetisation.

The price of an asset is not solely determined by the expected return on that asset. It is also determined by the returns available on other assets. As pointed out in last year's *Economic Survey*, the government's campaign against illicit wealth over the past few years—exemplified by demonetisation—has in effect imposed a tax on certain activities, specifically the holding of cash, property, or gold. Cash transactions have been regulated; reporting requirements for the acquisition of gold and property have been stiffened. In addition, rupee returns to holding gold have plunged since mid-2016, turning negative since mid-2017 (Figure 9.7). In addition, previously, stock prices had suffered because reporting requirements were higher on shares than purchases of other asset. But the attack on illicit wealth has helped to level the playing field.

All of this has caused investors to re-evaluate the attractiveness of stocks. Investors have accordingly reallocated their portfolios toward shares, with inflows through stock mutual funds, in particular, amounting in 2016-17 to five times their previous year's level (Figure 9.8). Accordingly the equity risk premium (ERP, the extra return required on shares compared with other assets) has fallen (Figure 9.9).<sup>8</sup>

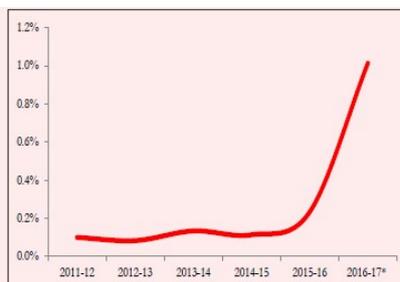
Does this imply that Indian P/E ratios have reached a higher "new normal"? Perhaps. It's possible that the portfolio shift set in train by the campaign against illicit wealth will result in a sustained reduction in the ERP. But it is worth recalling that a similar assessment was made in the US after its ERP fell sharply in the late 1990s-early 2000s. A few years later, the technology bubble collapsed, then the Global Financial Crisis occurred. The ERP surged to new heights and still hasn't reverted to its previous trough.

Beyond ERPs, sustaining current stock valuations in India also requires future earnings performance to rise to meet still-high expectations. And this outlook, in turn, depends on whether a significant economic rebound is this time well and truly around the corner.

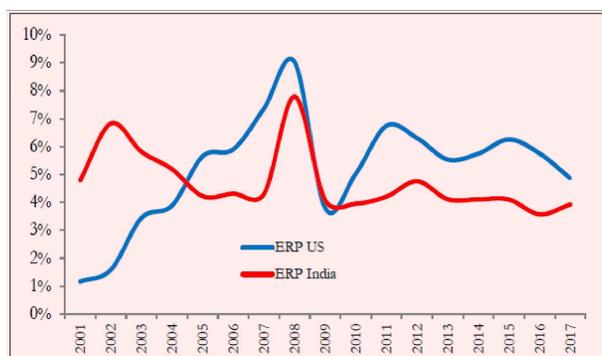


Source : RBI.

**Figure 9.6**  
**Returns from Gold (in percent)**



**Figure 9.7**  
**Flows into Mutual Funds (percent of GDP)**



Source : Survey Calculations.

**Figure 9.8**  
**US and India, Equity Risk Premiums**

In sum, the Indian stock market surge is different from that in advanced economies in three ways: growth momentum, level and share of profits, and critically the level of real interest rates. Low levels of the latter have been invoked to justify the high valuations in advanced economies. By that token, India's valuations should be much lower. So, what appears to be driving India's valuations are a fall in the ERP reflected in a massive portfolio re-allocation by savers towards equity in the wake of policy-induced reductions in the return on other assets.

But sustaining these valuations will require future growth in the economy and earnings in line with current expectations, and require the portfolio re-allocation to be semi-permanent. Otherwise, the possibility of a correction in them cannot be ruled out.

A key policy question will be the fiscal path for the coming year. Given the imperative of establishing credibility after this year, given the improved outlook for growth (and hence narrowing of the output gap), and given the resurgence of price pressures, fiscal policy should ideally have targeted a reasonable fiscal consolidation. However, setting overly ambitious targets for consolidation — especially in a pre-election year — based on optimistic forecasts that carry a high risk of not being realized will not garner credibility either. Pragmatically steering between these extremes would suggest the following: a modest consolidation that credibly signals a return to the path of gradual but steady fiscal deficit reductions.

Against this overall economic and political background, economic management will be challenging in the coming year. If the obvious pitfalls (such as fiscal expansion) are avoided and the looming risks are averted that would be no mean achievement.

### Notes

1. Specifically, we estimate the following regression:  $\text{Log } F_m = \alpha T + \beta (\text{D-GST}) + \text{FEm}$  where  $F_m$  is the number of new filers in month  $m$ ,  $T$  is the time trend,  $\text{D-GST}$  is a dummy for the post-November 2016 period; and  $\text{FE}$  are month fixed effects to account for seasonality in tax filing. The coefficient  $\alpha$  indicates the trend growth in filers while  $\beta$  (or strictly speaking  $e^{\beta} - 1$ ) measures the extent to which the level of filers is greater post-November 2016 after accounting for the natural trend growth in new tax filing.
2. The NSSO conducted a survey of unincorporated non-agricultural enterprises (excluding construction) between July 2015 and June 2016. Details of the methodology used in arriving at these estimates are discussed in Annexure 1 of Chapter II of Economic Survey 2017-18.
3. This estimate is based on an econometric exercise similar to the one in Box 2. Personal income tax receipts are regressed on GDP (quarterly) while controlling for seasonality. There is a statistically significant increase in revenues beginning 2016-17.
4. Here NSSF includes net flows into other public accounts such as state provident funds and advances and deposits.
5. The Fourteenth Finance Commission (FFC) had given an option to the states to opt out of NSSF financing.
6. Net market borrowing includes amounts under Major Head 6003, excluding securities to the NSSF and securities to international institutions.
7. Equity Risk Premium (ERP) has been calculated using Ashwath Damodaran's model ("Equity Risk Premium (ERP: Determinants, Estimation and Implications - The 2017 Edition", Stern School of Business) for the US. The net present value of the future cash flows from owning the portfolio of stocks has been calculated by dividing the future stream into two periods: an initial period of high growth for first five years followed by a second (infinite) period of steady-state growth rate. The cash flows are assumed to come from dividend payout or buyback of the stocks. Whenever ERP equals the NPV, the current stock price is equal to 0. For India, the initial period nominal growth rate is taken as 12 percent, and the steady state is a 5 years-moving average of past growth. For the USA, initial period nominal growth rate is taken as 5 percent. The India dividend payout is assumed to be 70 %.