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Macroeconomic reforms: Risks, flash points and the way forward

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Working Paper 290

Macroeconomic reforms: Risks, flash points and the way forward

**Jaimini Bhagwati
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November 2014



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Abstract

This Working Paper examines India's growth and employment generation performance over the last ten years in the context of key indicators such as fiscal and current account balances and inflation and suggests priorities for macroeconomic reforms. An improvement in the central Government's finances is seen as a critical pre-requisite but that this should not be achieved on the back of reducing capital expenditures. The Paper reviews the distorted nature of India's labour markets and recommends legislative and the other steps needed to work around constraints. The need for India to widen its relatively narrow tax base is highlighted in the paper. The Paper also indicates the steps which are required to improve the Public-Private Partnership model and how to enhance the probability of crowding-in private investment into the infrastructure sector. The factors which have inhibited the development of Indian bond markets including the shortcomings in the Government Rupee yield curve are explained in the Paper. The Paper reviews the possibility of capital flight and Rupee exchange rate volatility due to an overvaluation of the Rupee's real exchange rate and assesses the quality of India's foreign exchange reserves. This Paper's review of the Indian economy and corresponding reforms takes the global economic environment into account, particularly anticipated developments in G7 countries.

JEL Classification: E00, E02, E22, E29, E31, E62

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Macroeconomic reform: Risks, flash points and the way forward

Jaimini Bhagwati, Abheek Barua and M. Shuheb Khan

1 Introduction: The Demise of Econ101?¹

The word ‘reform’ is typically associated with the ‘long term’. However it would be worthwhile to begin a paper on macroeconomic reforms with a review of the current economic scenario and the more ‘short term’ challenges that these reforms have to address before attempting to put the economy on a sustainable long term growth path. The macroeconomic situation continues to look difficult at best with low growth manifested in a negative output gap (the RBI has assessed ‘potential output’ in its April 2014 monetary policy at 6 per cent and forecast growth for 2014 -15 of 5.5 per cent announced in the September 20 monetary policy review) combined with relatively high inflation. Recent inflation (September and October 2014) data for both consumer price and wholesale inflation have shown a dramatic moderation. However, since inflation is measured year on year, some of the softness is the result of a high base for last year and if one ‘sees’ through the base effects, some reversal of the inflation path is quite likely by December 2014. Stagflation may be too strong a word to describe the current situation since growth is low compared to the recent past but still high compared to that of OECD countries. At the same time, the breakdown of the traditional inverse relationship between output (unemployment) and inflation (unemployment) does make policy making tricky.

High inflation has not just been a problem of persistently elevated food prices although this does certainly play a major role. The ‘core’ component of Consumer Price inflation (CPI) has remained high (although the recent drop in fuel prices have pulled components such as transportation down, leading to some decline in this index). However the medium term stickiness in core inflation suggests significant excess demand in some of its constituent components (particularly services such as education and healthcare) despite the slowdown in aggregate demand in the economy (We discuss this later in the section on inflation.)

Inflation expectations as measured by the Reserve Bank of India’s quarterly survey remains adamantly high although there have been some signals that food inflation may be abating somewhat. Food inflation declined from 9.4% in August 2014 to 7.6 % in September 2014. Wholesale price inflation has come down substantially and more so than CPI inflation due to a rapidly declining core component. This fall in core WPI creates its own set of problems. Seen in conjunction with higher CPI inflation which reflects inflation in wage goods, this could mean a fall in margins particularly for downstream producers and adversely affect the incentive to invest. Sustained high CPI inflation of the past few years has meant that despite faltering growth RBI has remained on guard. Monetary conditions measured both by simple

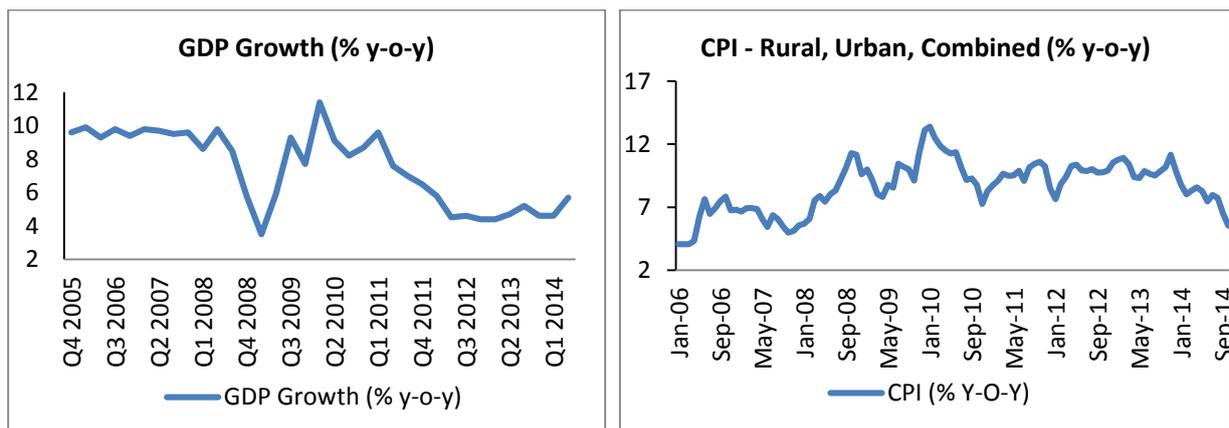
¹ This paper has been written as part of Research Studies conducted under ‘ICRIER-RBI Chair’ headed by Dr. Jaimini Bhagwati. We are thankful to Dr. Subir Gokarn and Dr. Radhicka Kapoor for their valuable comments.

nominal yields, the policy ‘repo’ rate and broader measures of monetary conditions appear tighter than the conditions which prevailed in 2004-05, effectively the first year of last cyclical upturn in the economy. Investment demand remains weak and given India’s increased dependence on upswings in the investment cycle to drive a recovery (Ghate et al, 2011), any sustained upturn in the cycle seems somewhat distant as yet.

All this said, one could draw comfort from the sustained decline in oil prices in global markets. This will only help in keeping inflation down but also help correct other macroeconomic imbalances e.g. the fiscal deficit (through lower subsidies) and the current account deficit given that India is a large net importer of oil. There is also a general moderation in commodity prices which should also help a commodity importer like India.

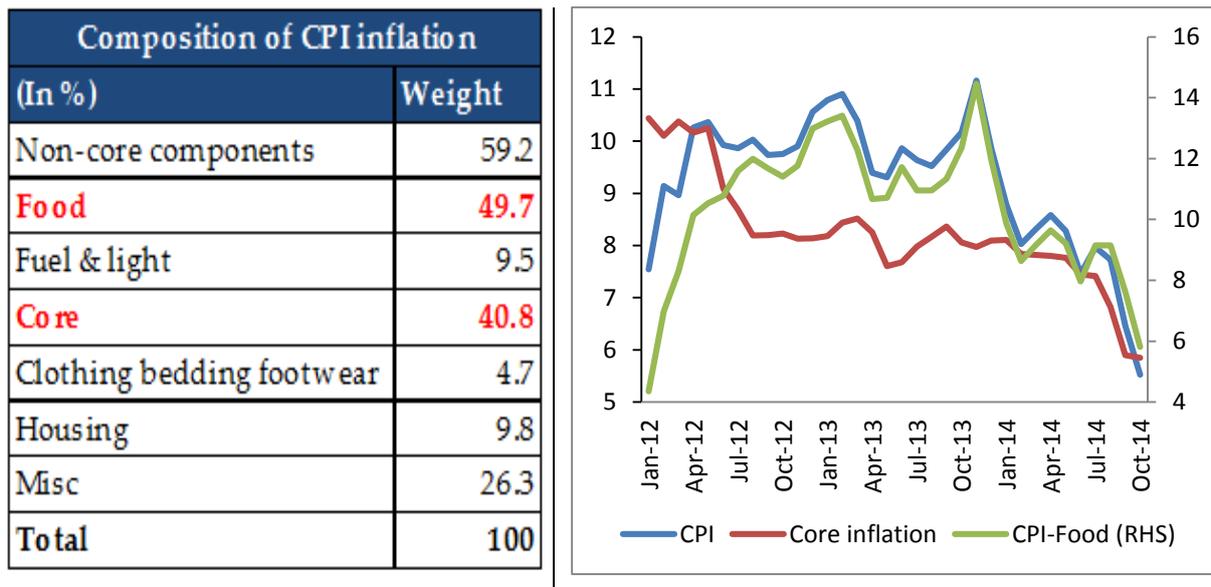
The question is: will oil prices remain soft going forward? We agree with the view that the decade long super-cycle in commodity prices is coming to an end and thus short term spikes driven by a sudden threat to supply notwithstanding, another sustained upswing in commodity prices seems unlikely. As far as oil is concerned, there are various factors at play: weak global growth, US’s reduced dependence on oil because of the ‘fracking’ revolution and Saudi Arabia’s visible resolve not to move with OPEC and seems to be satisfied for now to keep prices low to retain market share in a falling market. We see these as medium term factors, if not long term influences, which are likely to keep a lid on oil prices.

Figure 1: Growth and Inflation



Source: Thomson Reuter DataStream, RBI and Urjit Patel Committee Report on Monetary Policy Reform

Figure 2: Core CPI



Source: RBI, Thomson Reuter DataStream

2 Growth and Inflation: Green Shoots or Yellow Weeds?

This is not to deny some of the improvements that have been visible on the macroeconomic front. For one thing, there have been some improvements recently in both industrial growth and inflation but it is perhaps too early to read a trend. The previous government’s efforts at fiscal consolidation in 2013-14 has resulted in moderation of the fiscal deficit and the first budget of the new government suggests a strong commitment to stay on this path. That said there could be **legitimate discomfort with the ‘quality of adjustment’** of the deficit which has involved a compression of capital expenditure to meeting targets that have led to a rise in the ratio of revenue to capital expenditure.

The current account deficit has contracted (1.7% of GDP for FY14 compared to 3.7% in FY13) largely on the back of a steep decline in gold demand and decreasing oil prices but demand for gold has gone up in the last two months. However, given the strong counter-cyclicality of net exports (Ghate et al) and the fact that the burden of this correction was largely borne by these two items, there is little room for complacency, even if oil prices remain low (Brent crude oil price has come down from about \$116 per barrel in April 2014 to \$ 86 as of 17 October 2014), on this front especially if, as one hopes, the economy begins to recover.

3 Global Environment: Will gentle Janet go for a hike?

Given the greater integration of both the markets for goods and services as well as the domestic financial system with the global economy, a quick review of the global situation is warranted. A number of economic activity markers point to a recovery in the US which is likely to be sustained. For one thing, labour market conditions have improved substantially and the unemployment gap (the actual rate of unemployment minus the natural rate) is now

zero or even marginally negative after being positive for many years. The much-tracked Institute of Supply Managers (ISM) diffusion indices for manufacturing and non-manufacturing and other indicators such as retail sales and industrial loan growth have moved up sharply. This improvement in underlying conditions is leading to a recovery in aggregate demand that, in turn, is slowly spilling over to prices. Both the headline consumer price index and its core component have started to move up.

This uptick in demand and labour market conditions has given the US Federal Reserve room to pare its ‘unconventional’ Quantitative Easing (QE) down from its peak level of 85 billion US dollars per month to 35 billion USD in August 2014. It has since been wound down entirely by end October 2014. Although the prospect of this withdrawal of QE seems factored into global asset markets, the key question is how would markets react when the Fed begins to hike its ‘policy’ Fed Funds rate currently in the 0-0.25 per cent range. The Fed remains non-committal on the timing of a rate hike. However, most forecasters have advanced their forecasts of a rate hike from a range of end-2015 to early 2016 to the first quarter or the middle of 2015. The US yield curve, particularly the 2 year bond, has already begun to price this in and if recent history is any indicator, the yield curve tends to move up to ‘price this in’ ahead of an actual hike.

Figure 3: US inflation trends

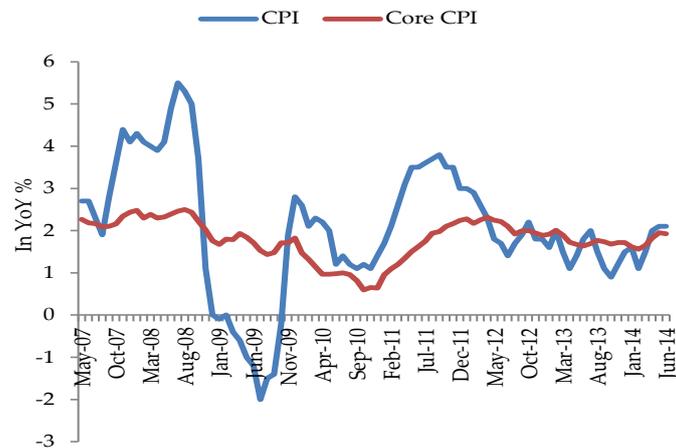


Figure 4: Actual versus the natural rate of unemployment (US)



There are two implications of economic recovery in the US:

- First there is the possibility of a sharp recovery in exports of both goods and services since the cyclical components of US GDP and Indian exports are known to be correlated positively (Exports of goods to the US are currently 12% of total exports and 63% of IT service exports). However, there has to be a conscious effort to exploit this through quick improvements on the supply side for exports, particularly merchandise through diligent implementation of reforms including labour laws;
- A number of studies (IMF, 2012) show that US short term rates and variations in the term structure of the US yield curve have a significant impact on portfolio flows to emerging markets (EMs). The same study shows that unconventional monetary policies have had a large influence on capital flows. Other studies (Ahmed and Zlate, 2013) show that the sensitivity of flows to emerging markets to differentials between local and US interest rates has actually increased. Going forward, emerging economies can no longer take this supply for granted. Thus India's macroeconomic strategy going forward has to take these risk factors into account. These are not necessarily short term developments – future changes in US monetary policy would mark a marked shift in the international capital regime which may persist as long as over the next decade.

However, the developed world is displaying signs of two-track growth. Europe continues to falter with the negative output gap getting worse and deflationary pressures intensifying. The fact that the region's woes are not confined to its periphery (Germany's output growth contracted by 0.2 per cent in the second quarter of 2014). One quarter may not be sufficient evidence but a number of indicators suggest that this could be the beginning of a trend. There is growing expectation in international financial markets that the European Central Bank would be forced to adopt a full-fledged QE programme on US lines. However given its conservatism, the QE programme is unlikely to be of the same magnitude as that of the US. Japan has stepped up its QE programme with an increase in liquidity infusion to 80 trillion

Yen (\$712 billion) annually towards achieving its target inflation rate of 2 per cent and thwart the recession that has set in yet again triggered by a consumption tax hike in April this year.

India's response should be to get a larger share of a shrinking international capital pie in order to bridge its hard currency funding gaps and ensure an adequate flow of resources to finance its investment needs. Rising growth levels and its reiterated visible execution of reforms are integral to this 'signaling' process.

4 Macroeconomic Reform Agenda: Beyond the text-book

An improving global economic outlook could give some impetus in the long term to the Indian economy (the risk of diminished capital flows notwithstanding). However overcoming domestic challenges seem more important at this stage. Many of the challenges fall outside the domain of macroeconomic policies. For instance, Government indecision and policy uncertainty are broadly acknowledged to be among the most important factors for the slowdown in economic growth over the past few years. These have to be reversed urgently.

Again, text-book macroeconomic reforms – reducing import duties, removing a variety of quantitative restrictions – the proverbial low hanging fruit have long been plucked. There seems to be some rethinking about the suitability of FTAs. It is not that FTA partners are taking undue advantage of India and raising their exports while we have not been able to do likewise. It is more that our reform agenda particularly in the infrastructure sector has stuttered or come to a grinding halt because of variety of reasons including court orders and this is impinging on our competitiveness in trade. The even more difficult challenges ahead are of reforming factor markets (labour, land are the obvious areas) --of building new markets (a term finance market for instance) and meeting the challenges of globalization head on through improved external sector management.

It may be somewhat repetitive to cover every aspect of a comprehensive macroeconomic reform agenda not just because of the number of issues involved but also because so much as already been written on many of these issues. We thus select some of the issues that we find are critical.

5 Some Not-So Instant Remedies for Labour Pains

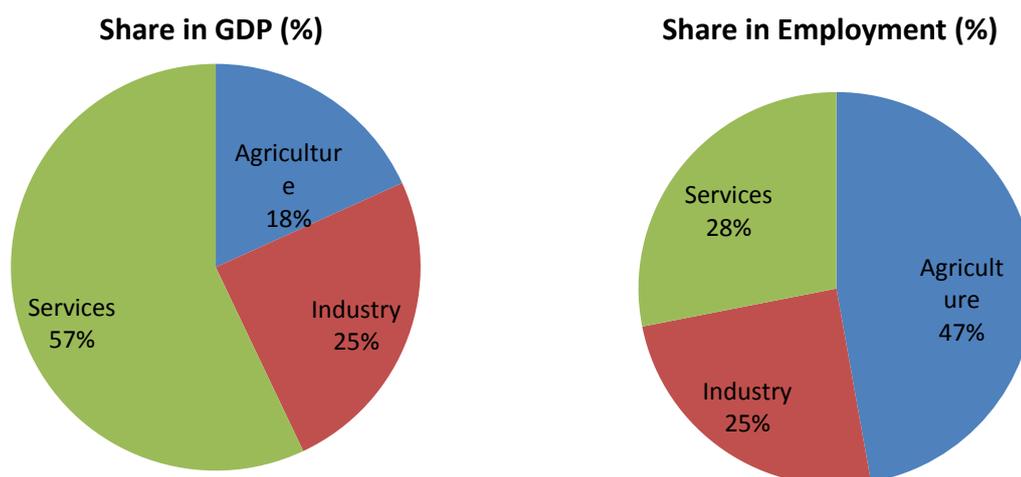
India is one of the few economies where the issues related to growth (and macroeconomic policy in general) and employment has traditionally been put in different analytical silos. We believe that an important step towards labour market reform is to at least recognize that the growth rate of the economy is fundamentally linked to the objective of increasing employment. The specific issues that labor market reforms need to address are the following.

First, despite a marked pick-up in GDP growth in the post-liberalization period, employment growth has been falling over the last three decades. The average annual employment growth was about 2.4 per cent in the 1970s. In the 1993-94 to 2009-10 period, it averaged around 1.65 per cent. In fact this post-liberalization average was shored up by a somewhat

spectacular and unexplainable blip in employment growth to 2.8 per cent between 1999-2000 and 2004-05. In the 2004-05 to 2009-10 period, in which GDP grew at unprecedented rates job growth collapsed to virtually zero. The overall employment elasticity of output when averaged over the 1999-2000 to 2009-10 period was 0.18 compared to a global average of 0.3 per cent per cent (Planning Commission, 2012). This pattern of what appears to be relatively ‘jobless’ growth needs to be reversed. Although NSS data does take into account employment in the unorganized sectors these numbers need to be viewed with a measure of caution. Over time the mobility between rural, semi-urban and urban areas of those looking for any kind of work has risen considerably. This has led to the growth of many types of informal and seasonal employment which suggests that there are varying levels of underemployment between those who are fully employed and those who are not.

Second, from a macroeconomic perspective, reforms have to correct the lopsided pattern of employment. This imbalance is due to three factors: a) the sluggish movement of labour from the farm to the non-farm sector; b) the relatively small share of manufacturing in the economy; and c) the low employment intensity of services (the dominant sector of the economy in terms of share). Thus agriculture that contributes 14 per cent to GDP employs 49 per cent of the work force, manufacturing that contributes 16 per cent employs 13 per cent and services that contributes 58 per cent employs a relatively meager 27 per cent.

Figure 5: Structure of Indian Economy



Source: Thomson Reuter DataStream

Third an effort has to be made to reverse the growing ‘informalisation’ of the work-force. The share of contract labour, for instance, in manufacturing has grown from 13 per cent in 1995 to 34 per cent in 2010-11. Since wage earnings of informal workers is typically much lower than that of formal workers, this entails a drop in the returns on labour and de-facto increase in the returns on other factors particularly capital. This could create problems for private consumption demand in the economy. This is certainly not to suggest that the organized sector needs to take on high cost workers given extant laws. Casual work in

manufacturing or construction is one way to reduce the burden on the agriculture sector to employ workers. However, wages are low, work conditions often dismal and there is extreme uncertainty regarding termination for casual labour. Thus a transfer of labour away from the farm sector through a lop-sided contract model in favour of the employer can at best be a 'second best' solution. The better solution would be to create more formal employment in the organized sector but at terms that are less onerous for employers.

Finally, there is the problem of 'graduate' unemployment. The rate of unemployment among graduates including those who are technically trained in 2011-12 was 18 per cent. If this is seen in conjunction with anecdotal evidence of labour shortage in industry and the steady escalation in nominal wages of between 11 to 15 per cent in the organized sector, the disconnect between the supply of higher education and skill formation. While the solutions lie in the domain of education reforms, from a macroeconomic perspective, it suggests very low productivity of large sections of the graduate work force that is bound to be a drag on growth.

Thus, the quality of college education is problem and quick development of usable skills, say an apprenticeship model on the lines of the German system for apprentices in Small and Medium Enterprises is possibly the answer. The National Skills Development Corporation needs to work closely with industry to introduce such models on a scalable basis.

Much of the challenge of linking growth with increasing formal employment lie in ensuring a step jump in the share of the manufacturing sector, the so-called missing middle as Anne Krueger described it (Krueger, 1999) in the path of transition from a low income to a middle income economy. The absence of flexibility in the labour market that has its roots in the Industrial Disputes Act of 1947 itself acts as a major impediment and the need to overhaul it is well established. However this has to be done in a way that meets the needs of both workers and firms.

A bargaining process between trade unions and enterprises needs to produce the terms of separation that unions agree to in accepting loss of job security. A starting point for the negotiation could be the recommendations of the second National Labour Commission that retrenched workers be paid a separation amount of 45 days' pay for every year worked. This alone might not do. Some form of social security, again appropriately designed so that it meets the needs of firms, workers and government (that might need to contribute to this), for both formal and informal workers is critical.

There cannot be a blanket argument against contract labour (firms should be allowed the flexibility to take on short-term employees) but the wide gap between employment conditions for contract and regular workers has led to increasing incidents of industrial strife that is (at least in some regions) vitiated the manufacturing environment.

Box 1: Germany's Apprenticeship Model

Germany's education system, both at the secondary level and beyond, puts an unusually high focus on vocational, or skills-oriented, training that encompasses a wide variety of occupations—everything from industrial mechanics to retail sales. Around the ages of 16 to 18, more than half of all German students opt to enter the country's so-called "dual-system" (so named because it splits education between the workplace and classroom) by applying for training contracts with employers. If they are accepted, they spend two or three years training with a company, while also receiving taxpayer-subsidized education that is designed to meet industry needs. A job is usually waiting for them upon completion—resulting in a low unemployment rate. The apprentice programmes are monitored closely by chambers of commerce that could either be regional or sectoral (the German Plastics and Packaging association for instance)

Other apprenticeship models have not been as successful. In Canada which also has a nationwide scheme, apprenticeships are generally limited to the skilled trades—carpenters, electricians, pipefitters and the like—and attract older people with "significant" labour market experience. Only about half of the registered apprentices actually complete their programs due to factors such as the costs associated with in-class training (when apprentices are paid) to concerns about job prospects when they are done.

Unlike in Germany, these training schemes do not offer employment after the vocational programmes are over.

In India, there were just 250,000 industrial apprentices in 2013 compared to 3 million in Germany has 3 million. If the so-called 'skills-gap' has to be bridged in India, there is a need for a more flexible and appropriate apprenticeship scheme with much higher participation. A major deterrent has been the 1961 Indian Apprenticeship Act, an outdated but draconian law that makes the process of hiring apprentices highly cumbersome and imposes harsh penalties for small deviations from the provisions of the Act. Industry has sought that clauses which make promoters and managers liable for imprisonment for non-compliance with the rules be dropped and sweeping inspection powers be moderated. The Labour Ministry has also been urged to drop the restrictions that prevent firms from deploying apprentices from outside state limits and the mandated in-house training infrastructure. If a company outsources training of its own employees, it should be allowed to train apprentices outside too. Amendments to the law, proposed since 2009, have been held up in inter-Ministerial conflicts. Indian industry appears to be convinced that well-structured apprenticeship schemes could address the 'skills-shortage' they face to a considerable degree. It is now up to the States and Central Government along with the National Skills Development Corporation to facilitate apprentice training.

A discussion on labour reform would be incomplete without some discussion of Rajasthan's efforts to change its labour laws. The state government has taken advantage of the fact that labour is on the 'concurrent' list and has enacted a number of changes in its labour laws. For one, industrial establishments employing up to 300 workers are now outside the purview of the industrial disputes act and in effect allowed to retrench employees without seeking the prior permission of the Government. In addition, the threshold of the number of employees required for the purpose of applicability of the Factories Act has been increased from 10 to 20 (in electricity-powered factories) and from 20 to 40 (in factories without power). This is expected to reduce bureaucratic delays. Finally, membership of 30 per cent of the total workforce needs to be recorded for a union to obtain recognition, up from 15 per cent, a move that will halt productivity losses out of politically motivated petty strikes. While this is certainly encouraging, there are two sets of concerns. For one, it remains to be seen whether

Rajasthan is an isolated instance or whether other states take a cue from Rajasthan. Labour reform remains a politically sensitive issue and the risk is that the demands of ‘realpolitik’ could get in the way of sensible economics for other states.

Second the increase in floor for both the Industrial Disputes Act (IDA) and the Factories is somewhat small in our opinion. For instance we would claim that a floor of at least a thousand workers for the IDA would be imperative in introducing a palpable degree of flexibility in labour markets.

6 Infrastructure challenge

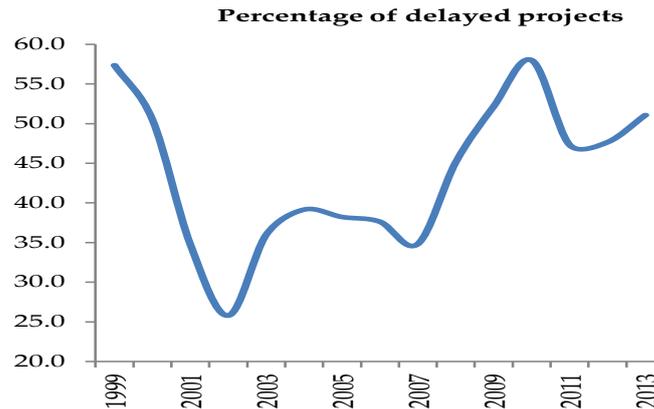
The claim that poor infrastructure remains the key impediment to India’s growth has become a cliché. The sluggish growth in infrastructure has an adverse impact on the supply side, lowering Total Factor Productivity that is manifested ex-post in a rising incremental capital output ratio (ICOR). On the demand side it is a critical source of investment demand. The fact that the government with its fiscal constraints cannot entirely fund projects that will address this need is also well established. During the Twelfth Plan period (2012-17) the Government of India (GOI) has a target to invest 10% of GDP in infrastructure.

About 50% of infrastructure investment is to come from the private sector. This is a significant increase as compared to the recent past. In the Tenth Plan, investment from private sector was about 25% of the total investments of Rs 9.06 trillion, and in the Eleventh Plan, the same number was about 36% of the total investments. The government expects much of this through the Private Public Partnership (PPP) route. It more than high time to revamp this model and though this is institutional in nature it should be part of the macroeconomic reform agenda.

Of course, the immediate priority should be urgent implementation of a large pipeline of infrastructure projects (some PPP, others entirely private or public projects) that have reached financial closure but have faced last mile implementation issues in two key areas – environmental and forest regulations and land acquisition. This has created both supply bottlenecks and has impaired bank balance sheets leading to a surge in non-performing and restructured loans.

The solution to the problem lies in quick execution by resolving some of the regulatory issues that are pending. The Cabinet Committee on Investments (CCI) of the previous government appeared to make a start by ensuring better coordination across the Ministries involved in project clearance and also reaching out to state governments. However despite assurances of ‘clearance’, a number of these projects are yet to see the shovels hit the ground. Thus it is imperative to clear this backlog of pending projects. The government needs to get the coal to the thermal power stations to get these going. The recent Supreme Court judgment on the illegality of coal bloc allocation has introduced a strong element of uncertainty in this sphere and we can only hope that this will be resolved soon. Further, we need iron ore and sand mining to be put back on stream with environmental safeguards which would satisfy the Courts and society at large.

Figure 6: % of delayed central sector projects



Source: Ministry of Statistics and Programme Implementation

6.1 PPP and the Art of Infrastructure Maintenance (and creation)

Going forward, a viable PPP policy has to address some critical imbalances. If we exclude oil and gas, telecom and energy which have seen significant private interest, the other two sectors where private interest is visible are roads and urban infrastructure. There seems to be hardly any private interest in railways, health, education and agriculture. It is not clear that there will be private interest in PPP projects to provide low cost education at primary, secondary or higher levels. The experience in the US is for local governments to set up fully funded government schools and universities in convenient locations and the tuition fees are subsidized or at cost. The geographical spread of PPP projects is also narrow with six states accounting for 75 per cent of PPP projects.

A first step would be to look beyond the BOT/BOOT PPP structure that has dominated in India. For one thing, international experience has shown that ‘new’ sectors like health-care and education would need more hybrid structures for any private interest to emerge. Second, even in more conventional segments like roads, aligning the PPP structure to the risk preference of private investors is key. Early stage project risks involve political risks, construction, risk, regulatory risk and so on (Economic Survey, 2014).

In an asymmetric information environment, the government traditionally has an advantage in assessing these risks. The second stage risks include traffic/usage related risks and regulatory risks that are much lower than first stage risks. BOT projects end up bundling all these risks together. PPP projects can only be viable if these risks and stages of the project are unbundled and are offered in pieces to the private sector. There could be a problem in the sense that the government is likely to have to play the biggest role in the first stage. That would typically involve large budgetary outlays that are paid to the construction (EPC contractor). Efforts have to be made to expand the group of private participants in the first stage of the process. Better governance that should reduce policy uncertainty and the creation

of regulators that are truly at arms' length from the government could achieve this. This is not to suggest that these elements are not important to other stages.

The success of 'sectoral enablers' like the National Highway Authority of India (NHAI) in developing the National Highway Development Programme is well known. More such enabling agencies are needed for the many sectors that need either PPP or stand-alone private or public sector projects. That said, the question of why despite extensive effort by the NHAI to collaborate with states to build capacities in creating bankable projects did not meet with much success needs to be addressed. One also needs to find out why the Pradhan Mantri Gram Sadak Yojana for rural roads was relatively successful and did not run into the kind of land acquisition problems that the highway programme did. It is possible that the PMGSY communicated a sense of clear benefit to local communities and that communities themselves put in an effort to acquire land for these projects. A model that creates a sense of local benefit or interest needs to be explored.

In fact, state-level capacity in creating financially viable project offerings is critical. Infrastructure building is not merely about large-scale national projects. Smaller state level projects would also need PPP support. However, they lack the capacity to structure projects and need institutional assistance.

Private sector bids for both BOT and pure operation and maintenance contracts have often been made on the basis of completely unrealistic projections of traffic volume or usage of the infrastructure. While we agree that contracts should ab-initio be inviolable, one could think of some mechanism by which under stringent conditions and with adequate penalties some of these conditions can be reviewed.

Taking a step back, it is not clear that PPP is necessarily the most effective way forward in India for projects in the infrastructure and social sectors. Although there are resource constraints much of this could be attributed to our narrow and shallow tax base and some very leaky entitlement schemes. It would be prudent to take a case by case rather than a sweeping one size fits all approach and involve the private sector more on a consultancy basis to incorporate international best practices if there is reluctance on their part to absorb project risks which they feel cannot be quantified or suitably hedged.

Whether PPP or some model is used to fund infrastructure, the question of where additional funds will come from remains unanswered. The exemption of CRR and SLR requirements for funds raised for long term lending as well as the removal of priority sector lending commitments on these funds announced in the July 2014 budget do create incentives for banks to lend to infrastructure projects. However, the problem is that banks already face severe capital constraints and unless they are recapitalized (banks need 175000 crores to meet Basel III norms alone; then there is the pressure from bad loans estimated at roughly 12 per cent of all assets if restructured loans are taken into account). Public funds are limited for recapitalization as their use will strain fiscal balances and thus a complete overhaul of the banking system including privatization of some state owned banks seems to be the only solution. For infrastructure funding, alternative sources of long term funds are essential and

this can only be done if there is a deep and liquid market for domestic corporate bonds that both local and foreign investors can access. These could be supplemented by issuances in international markets (IFC's recent issue of \$163 million of 'masala' bonds is an example). The necessary conditions for a deep local bond market include the evolution of a benchmark yield curve and reduced draft on resources by the government i.e. lower fiscal deficit (these are issues we take up later)

7 The long and long of capital markets

The imperative to develop market for long term funds, principally a corporate bond market has to be highlighted in any discussion on Indian macroeconomic policy. Currently firms involved in long term projects are principally dependent on bank funding. The maturity mismatch inherent in this along with rising non-performing loans is a key risk for financial stability.

Recent global experience makes a clear case for developing multiple sources for long term funds. In comparative terms, European firms are more dependent on bank financing than US corporates. It is always better to have additional alternatives. The US has been relatively ruthless in allowing many of its second tier banks to fold up post the 2008 meltdown. Europe has not been as surgical. Hence, although the comparison is not fair, the additional funding source namely the corporate bond market has helped the US climb out of the hole it dug for itself in the run up to 2008 somewhat faster than Europe.

With this as a backdrop we would suggest that having additional sources of funding is a worthwhile objective for India i.e. irrespective of whether the funding is for PPP projects or any other project or venture. Of course, with deep and liquid corporate and for that matter municipal bond markets investors would be prepared to invest for longer maturities. Liquidity is of great importance i.e. we need market makers in such bonds. Not much has been done in a systematic sense to also develop municipal bond markets in India. This would be an intermediate credit between government and private corporates and would add to the spectrum of available credits in which investments can be made.

While there has been copious discussion on the various steps to kindle a corporate bond market, it might be worthwhile to highlight some of the critical factors that continue to warrant close attention. The one pre-requisite that underpins the entire agenda for boosting this market is the creation of an arbitrage-free yield curve that can serve as a benchmark for pricing debt. Some of the measures that come to mind are that:

There is an urgent need to wean Small and Postal Savings, Employees Provident Fund and other government sponsored provident fund and other savings schemes away from administered interest rates. These administered rates compete with both bank deposit rates and with bond yields, impede transmission of monetary policy and create undesirable kinks in the yield curve. The discrete revisions that are made to these rates ostensibly to reflect market conditions but these should be more closely linked to changes in market rates.

We also recognize the need to further liberalize interest rates banks are allowed to set. Although considerable deregulation has been achieved, a further step forward would be to free interest rates on foreign currency borrowings e.g. ECBs that continue to be set by the RBI in terms of maximum spreads over LIBOR.

Speculation is critical in any asset market to help build positions both on the long and short side of the bond market. This leads to efficient price discovery. Currently banks take positions on interest rates principally through the overnight indexed swap (OIS) market and some limited short selling subject to a number of conditions. We suggest unrestricted short-selling of government securities to promote an arbitrage free government yield curve.

Allow bank participation in trading of interest rate futures to improve market determination of domestic interest rates; Banks are currently not allowed to run an interest futures book on behalf of clients. This effectively means a restriction on the 'size' of the positions that banks can take in interest rate futures. The larger problem of adding volume to this market can perhaps be addressed by allowing banks to take positions on behalf of their clients. Risks can effectively be measured through margining requirements.

To develop the domestic private debt market further we also need to: (i) rationalize stamp duties which are high and vary from state to state across the country; (ii) choose one entity between NSE's WDM and RBI's NDS for trading in all debt securities and allow stock-brokers to trade; (iii) allow more extensive repos in corporate bonds and (iv) clarify legal regime in terms of creditor rights versus those of borrowers (RBI had recently called for a bankruptcy code); and (v) Set up a data-base for corporate bonds.

We also recommend the full implementation of a Public Debt Office, separate from RBI and Government, for management of Government debt.

The government securities market is both highly illiquid except for certain tenors and is also extremely fragmented. The government needs to issue bonds at all maturities instead of focusing on a just a few tenors. Consolidation is imperative through buyback by the RBI and elimination of illiquid securities which have proliferated at many tenors and the reissuance of more 'popular' liquid bonds.

Government securities (GSecs) constitute an overwhelming fraction of the term debt market in India. Consequently, it can be argued that unless trading in GSecs which are principally held by banks increases it would be difficult to widen and deepen bond markets. Banks do not have to mark-to-market (MTM) such securities which are held to maturity (HTM) as part of their SLR requirements. Currently, banks hold more than the stipulated levels of SLR holdings. If this is driven mostly by the comfort factor of not having to MTM their bond portfolios, it could be argued that lowering SLR levels and thereby the volume of securities which are exempt from MTM norms may induce banks to trade GSecs more actively. However, the same result can be achieved by limiting the fraction of holdings which are exempt from MTM requirements irrespective of SLR levels. Further, trading in GSecs by

banks is also likely to be driven by the need to book profits or other balance sheet requirements.

The Government should carefully consider issuing fixed rate bonds in hard currency e.g. global bonds in US dollars, to take advantage of what are possibly the lowest global interest rates ever (although the time window has narrowed as the US is likely to raise interest rates within 2015). This would help to set benchmarks for other Indian borrowers and also augment FX reserves at a cost lower than by providing much higher than prevailing G7 market interest rates for NRI deposits. In 2000, the government through the State Bank of India issued India Millennium Deposits at a significant (40 basis point mark up over the prevailing NRI deposit rates to counter a build-up in Balance of Payments stress). Sovereign bond issues at this time in more benign conditions could achieve the same goal of reserve enhancement at much lower cost.

Further, conceivably sovereign bonds could be issued at longer maturities than NRI deposits. Sovereign issuance has been taboo in the past because the RBI and for that matter many in the Ministry of Finance felt that once Government starts issuing in hard currency this would inevitably lead to the government issuance in high volumes way beyond its capacity to service. That, in our opinion, is unlikely -- the Government cannot behave as an irresponsible teenager.

8 Fiscal Consolidation: Dear Prudence, Won't You Come Out to Play?

Fiscal policy has historically played an important role in achieving a range of objectives, particularly the government's role in 'development spending' in the pre-liberalization period. However multiple claims on government expenditure, particularly subsidies and the sheer size of Government which entailed large operating expenses including a large salary bill. Given a low tax base Government, relied heavily on deficit financing or simply monetization of debt by the RBI. Heavy dependence on public spending aided by easy deficit financing and the consequent absence of any market discipline resulted in steady accumulation public debt in India.

There was a spurt in public debt in India in the late 1980s and in the 1990s, Government had followed an expansionary fiscal policy partly as a counter-cyclical device and also a more 'structural' attempt to break out of a 'low growth trap'. Public expenditure of the central Government increased from 14.37 per cent of GDP in 1981-82 to 19.42 per cent of GDP in 1986-87. Total gross tax revenue increased from 9 per cent in 10.14 per cent of GDP in this period.

There was some payoff from this endeavour. The economy achieved a higher growth rate; GDP growth increased from a growth rate of 3.5 per cent in earlier decades to 5.8 per cent during the 1980s. However, this policy proved unsustainable and given the close link between fiscal imbalances and external balances, culminated in the balance of payment (BoP) crisis of 1991. The fiscal deficit increased from 4.9 percent of GDP in 1981-82 to 8.1 percent in 1986-87. The combined debt to GDP ratio increased from 47.9 per cent in 1981-82 to 64.9

per cent in 1986-87 and further to 72.9 per cent in 1991-92. Due to accumulation of large public debt and high borrowing cost, the central Government's interest payments increased from 1.8 per cent of GDP in 1980-81 to 4.0 per cent of total expenditure in 1991-92.

Liberalization post 1991 along with the pressure from agencies such as the IMF led to growing awareness of the need to pursue a path of fiscal consolidation and to do away with automatic monetization of government debt. In 1994 the RBI and government signed a deal through which the creation of ad hoc Treasury bills to fund the deficit (the dominant method of monetization) was phased out over three years i.e. by 1996-97.

Figure 7: Internal Debt and Fiscal Deficit (% of GDP)

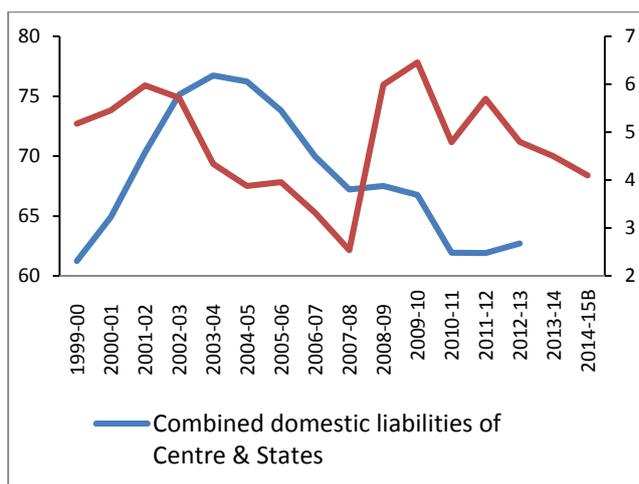
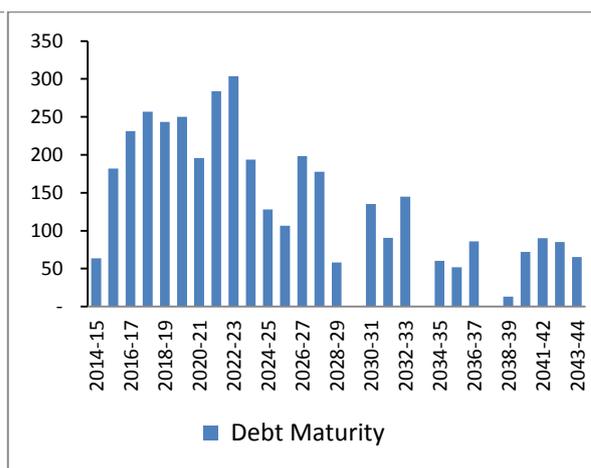


Figure 8: Debt Redemptions Profile (Thousand Crore)



Source: RBI, Economic survey

The next big watershed in fiscal consolidation was the Fiscal Responsibility and Budget Management Act (FRBM), which was enacted in 2004. This Act is similar to the Maastricht Treaty and Stability and Growth Pact (SGP) of the European Union and aims to bring down the fiscal deficit to 3 per cent of GDP. Further, the FRBM Act targeted a zero Revenue Deficit and Primary Surplus by 2008-09. High economic growth and better performance of the manufacturing and services sectors helped to keep tax revenues buoyant in subsequent years. As a result India was successful in achieving the FRBM target by 2007- 2008 (Economic Survey 2007-08). ‘Off-budget’ items such as oil and fertilizer bonds however remained a problem and were they included in the budget, the FRBM target might not have been achieved.

Box 2: Widening the Tax Base in India

Government has relied heavily on deficit financing since independence due to its relatively low tax base. Among its peers India's tax to GDP ratio is lowest. A high degree of informality, non-compliance and tax delinquency are responsible for low tax buoyancy. Government of India has commissioned a study** to assess the unaccounted income. Previous studies have shown that a significant portion of the economy is outside the tax net.

Tax GDP Ratio

	2009	2010	2011	2012
Brazil	14.8	14.6	15.7	15.4
India	9.6	10.2	8.8	10.7
Malaysia	14.9	13.7	15.3	16.1
Italy	22.9	22.6	22.4	23.2
Russian Federation	13.0	13.0	15.0	15.1
South Africa	25.4	25.7	26.0	26.5
China	10.5	10.5	10.6	n.a

Source: World Bank

Note: Tax revenue refers to compulsory transfers to the central government

Union budget documents show that less than 3 percent of the population pays income tax in India. Only 42,800 people reported income above Rs. 1 Crore (Union Budget, 2013-14) which seems low if compared with other indicators of income and wealth. The Capgemini and RBC Wealth Management report indicated that there were 125,500 dollar millionaires in India in 2011 (NDTV, 2013). KPMG International's report also puts the number of Indians with high network at about 1,25,000 (Gurumurthy, 2013). Similarly, the luxury car sales numbers are also at variance with the official count of people with income above Rs. 1 Crore. In 2013, car companies sold 30,000 units of luxury cars in India (The Hindu, 2013).

Despite services being the largest sector of the economy, service tax receipts amounts to only 1.4 percent of the GDP. Since the introduction of service tax in 1994, its scope and applicability of the tax has been widened successively.

The move to a negative list approach in 2012 has further broadened the tax net, resulting in a higher growth in revenues in recent years. However, real estate remains a major challenge. This sector is notorious for the prevalence of cash transactions to avoid taxes and also to hide the source of income. Regular updating of circle rates to keep pace with market prices is likely to improve the tax collection from real estate. Aligning the circle rate with market should be easier under the new land acquisition law. Linking the property ownership with the UID (*Aadhar*) cards would reduce the practice of *benami* properties.

In the primary sector, taxing agriculture income remains a sensitive issue. Tax exemption to agriculture sector not only leaves a large segment of the economy out of the tax ambit but also creates perverse incentive to show non-agricultural income as agricultural income.

Complexity of tax laws creates room for evasion and avoidance. Exemption mechanisms designed to stimulate certain sectors has further eroded the tax base. Simplifying the tax code along with the rationalizing the subsidy regime is required to increase tax revenue. Introduction of GST is likely to simplify the tax and broaden the tax base. Some measures to improve the tax base could be following.

- Strengthening mechanisms for monitoring and enforcing compliance
- Increasing the use of data mining to identify tax offenders
- Closer scrutiny of tax returns of people visiting tax havens
- Lowering the expense amount for which PAN is required

** Government of India commissioned 21 March 2011 to study the black economy in India. Study is being conducted by National Institute of Public Finance and Policy (NIPFP) National Institute of Financial Management (NIFM) and National Council of Applied Economic Research (NCAER). It was expected to be completed by within 18 months; however, it has not been submitted so far.

India's fiscal balance has deteriorated after the global financial crisis as it responded with counter-cyclical measures including tax cuts and increases in expenditures. Apart from the large fiscal stimulus to deal with the financial crisis of 2007-08, implementation of the recommendations of the Sixth Pay Commission and populists schemes before the general

elections of 2009 (such as a waiver on farm loans) also adversely affected the fiscal consolidation process. Since then India has been struggling to rein in the fiscal balance through substantial reductions in capital spending. Deceleration in growth over last three years has made the task challenging. A few things need to be noted here:

- Despite a deteriorating balance sheet, the probability of a sovereign debt crisis is very low for India. Unlike many advanced economies (the economies on the Eurozone periphery certainly come to mind in this context), most of the public debt in India is domestically held, primarily by public sector banks. Thus the possibility of a sovereign debt crisis on the recent European lines remains remote.
- Nevertheless, high fiscal deficits leave little room for expansionary monetary policy, increase the risk of external sector imbalances and dampen private investment, growth and employment (Kelkar Committee report 2012).
- It is a fact that despite a period of extremely low growth and a relatively high fiscal deficit that ensued, the debt to GDP ratio of the central government has not quite ballooned over the last few years and is currently about 60 per cent of GDP. This is mainly due to the high levels of inflation since nominal GDP has grown faster than the rate at which nominal debt has grown. However, if this brings a sense of comfort at first glance, we argue that this is comfort is unwarranted.
- An additional factor which has to be considered in our debt management strategy is the bunching up of debt repayments in the next few years. Repayments have to be made from fresh borrowings and this adds to the borrowings undertaken to finance the annual fiscal deficit (gross borrowings are higher than the net borrowings by the quantum of repayments). Though repayments flow back to borrowers (principally banks) and are thus not technically a net draft on the financial system, the gross borrowing levels often determine the bond yield levels and thus large gross borrowings could mean rising government bond yields.

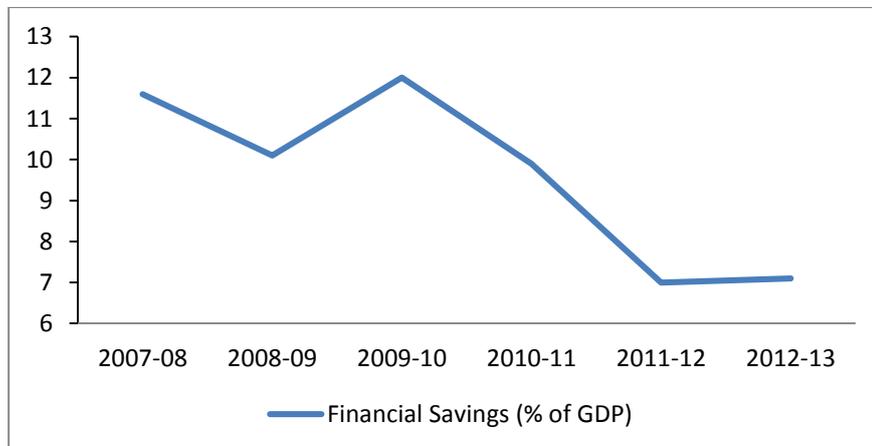
8.1 The collateral damage of inflating ourselves out of a Debt Trap

Inflation is known to have an asymmetric impact on borrowers and lenders. Borrowers gain as the nominal value of their debt declines and lenders lose. The Indian government has effectively used this to 'inflate' its way out of a debt spiral. Statutory pre-emption like the Statutory Liquidity Requirement (SLR) which amounts to financial repression has forced banks to hold government debt at yields far below what inflation or inflationary expectations have warranted. Sluggish growth has meant that banks have invested in government bonds in excess of their SLR requirements keeping bond yields down in the process.

There is however no free lunch. The distortion created by Government borrowing at relatively low yields on the back of high inflation has impacted household savings behavior. Household savings in financial assets (that can be channeled by the markets to finance investments) has dropped from 9.9 per cent in 2010-11 to 7.09 per cent in 2011-12.

Households sought high returns in alternative physical assets such as gold or real estate that have been perceived to be hedges against inflation. This decline in financial savings is cause for concern and adversely impacts resources available to finance long term growth. The solution to this lies in fiscal consolidation.

Figure 9: Financial Savings (% of GDP)



Source: Economic Survey 2013-14

8.2 A weight loss plan for the Fisc

India introduced the FRBM Act to push for fiscal prudence at the centre. This was then introduced for States. Recent history shows that the Act has been far more successful for States than for the Centre. This is perhaps not surprising. There have been incentives such as increased central funds transfer for the irrigation and power linked to the progress of fiscal consolidation.

However, the lack of an independent body to enforce fiscal discipline makes it easier for the central government to overlook self-imposed rules. The FRBM Act was suspended in 2008 in the wake of the global financial crisis. The UPA government announced a new path for consolidation in 2012-13; while there could be some political pressure and pressure from the sovereign rating agencies to stick to this path, the exact penalties remain fuzzy.

One step forward in making the FRBM somewhat binding would be to make exceptions to the rule (the so called weasel clauses) rare and make parliamentary censure more stringent.

Besides, a cash-based accounting system severely compromises the transparency of the fiscal numbers. The fact that expenditures are measured in terms of actual payments made rather than dues accrued by the government makes it possible for the government simply roll big-ticket payments to the following year and show a smaller deficit (a phenomenon seen for oil and fertilizer subsidy payments repeatedly). It is imperative then to move to an accrual based budget system for the central Government.

The copious discussion on two critical issues that has been made over the years in various forums— tax reform and subsidy control —has held us back from launching into an extensive discussion on them, we certainly do not mean to deemphasize their importance. We recognize that implementing the Goods and Service Tax (GST) is a politically challenging task that involves a change in the constitution, the economic case for an integrated indirect tax is compelling. The hurdles to implementing the Direct Taxes Code (DTC) are fewer and hope that it is implemented in the next budget.

Subsidies accounted for a whopping 2.3 per cent of GDP in 2013-14 and need to be brought not substantially. Two things are imperative –a) a move towards direct cash transfers along with an efficient identification system i.e. the UID and b) an alignment of the prices of all fossil fuels with international prices.

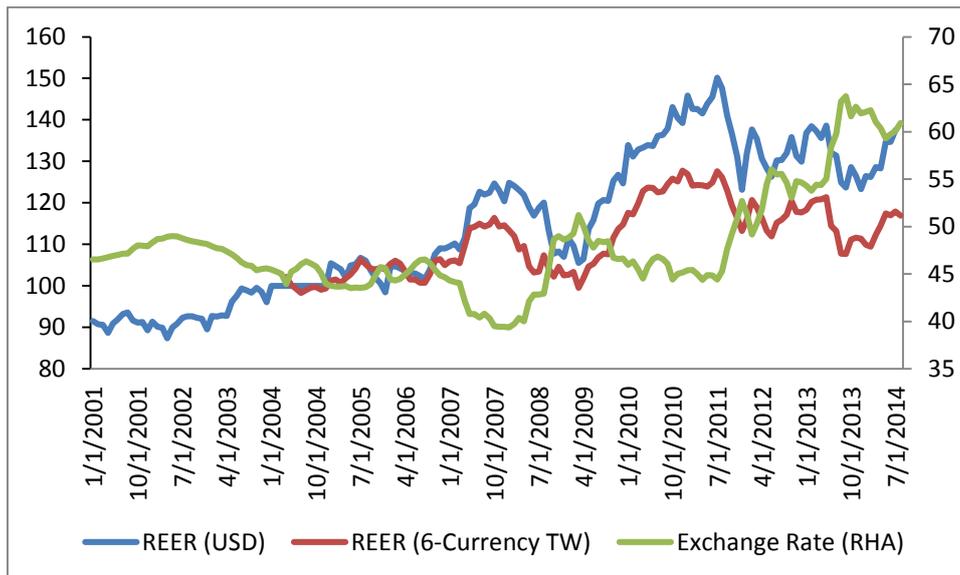
9 The External Sector: The Buck Should Stop Here

The rupee has seen periods of large nominal and real appreciation on the back of strong capital flows. The new CPI based REER that looks at the real value of the rupee versus six major currencies showed a level of 117 in August 2014 compared to 2004-05, the base year. In the past the RBI has intervened when the Rupee’s REER was seen to deviate from its base year value by more than 5 per cent and this suggests that the Indian rupee is indeed overvalued and the RBI should allow a nominal depreciation of the Rupee to correct for this.

It could be argued that a relatively “free” float of the Rupee is a better option than management of the Rupee exchange rate against targets for current account balances. The Rupee is mostly convertible on the capital account for non-Indians and almost entirely non-convertible for an average Indian except for specific end-use purposes. It follows that there is an unstated concern among policy makers that there could be net capital flight if the capital account is made mostly convertible for Indians.

In general, the fact that Rupee overvaluation has tended to be pro-cyclical (that is the rupee appreciates when times are ‘good’) or has reflected a large difference in growth between India and developed countries should not come as surprise. Capital inflows chase high yields or returns that tend to rise in periods of high growth. To the extent that there is a surplus over the current account, there is an upward pressure on the exchange rate in the absence of active intervention to thwart this. However as the rupee appreciates in real terms the pressure for it to correct and return to a ‘fair value’ also increases. This has often been driven by sudden drying up of net capital inflows driven by a spike in both local and global risk factors. Thus unchecked rupee appreciation has two consequences:

Figure 10: REER and Nominal Exchange Rate



Source: Thomson Reuter DataStream

- It erodes export competitiveness (we find a significant relationship between export growth and the RBI’s 6 country index with a three to four quarter lag);
- It also makes imports cheaper and both these forces tend to push up the trade and current account deficits.

As the rupee deviates from its fair value, the probability of a sharp depreciation also rises leading to increased ‘currency risk’ which could impede capital flows. The problem is that this depreciation is neither predictable nor orderly. ‘Correction’ is typically associated with episodes of a sharp rise in volatility. That is, market participants may be unable to hedge or even plan their business activities adequately and to that extent there could be market disruptions or panic reactions. That would be counterproductive to the objective of building stable and predictable or ‘hedge-able’ foreign exchange markets and possibly result in a lower appetite for Indian equity and debt securities and for undertaking the related underlying real sector transactions.

<p>Box 3: Which index should we take?</p> <p>Is a 6 country or 36 country trade weighted index necessarily relevant for India? The first represents a basket of ‘buyer nation’ currencies while the second is a comprehensive index that includes the currencies of competitors. Which gauge do we use if the two move in different directions? A key fact needs to be borne in mind. Almost all our exports and imports are invoiced in US\$. For example, oil and gas are significant both in terms of imports and exports.</p>	<p>Imports are from West Asia/Gulf and Nigeria etc. However, all oil and gas imports are invoiced in US\$. Thus instead of mechanically focusing on one single index, measuring movements in the Rupee-US\$ nominal and real exchange rates give us a reasonable measure of how our imports and exports would be impacted. Further, most Indian firms/banks which hedge their foreign exchange exposures tend to do this taking into account the nominal value of the Rupee-US\$ exchange rate.</p>
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We believe that this can be avoided through active exchange rate management of the RBI (simply dollar buying by the central bank) to cap the currency's real value. We understand that this entails quasi fiscal costs if the rupee liquidity created by central bank intervention is mopped up (sterilized) through Monetary Stabilization Scheme (MSS bonds). The cost emerges from the difference in interest rates offered on domestically issued MSS (which is pegged to domestic interest rates) and the returns earned on dollar holdings that tend to be much lower. The sucking up of rupee liquidity through MSS bonds could result in domestic interest rates adjusting upwards with consequent negative implications for borrowings and investments.

On balance, we believe that these costs are worth incurring since the overall cost should be thought as the cost of insuring against exchange rate and broader market disruptions. A somewhat facetious but appropriate analogy would be that of life insurance premiums. Policy holders do not grudge having to pay life insurance premiums if they do not expire before the life insurance policy expires.

The need to intervene and buy dollars also stems from the need to add to our stock of foreign exchange reserves. Despite a recent increase in the stock, most metrics would suggest that we need to work towards a greater level of adequacy. The ratio of foreign exchange reserves to external debt for instance has dropped from 112 per cent in 2009 to just 71 per cent in 2013. The ratio of short-term (defined as residual maturities of one year irrespective of original maturities) debt to foreign exchange reserves has risen from 18 per cent to 33 per cent in this period.

9.1 The Quality of Foreign Exchange Reserves: Too Much Hot Money?

We also have concerns about the 'quality' of reserves. We measure the quality of reserves in relation to the potential short term outflows that could leave Indian shores in a hurry and lead to sharp depreciation. We measure this as the sum of short term debt (of residual maturity of less than one year) and the potentially volatile component of our stock of foreign equity investments. This is currently a sizeable 66 per cent of our total reserves of 315 billion US dollars, up from 42.4 per cent in 2009-10. This is not to suggest that this entire outflow will take place over a short period. The initial withdrawal of equity investments would lead to a sharp drop in stock prices and this itself would tend to act as brake on further selling and outflows. By contrast, FII invest in GoI short-term debt securities may not be rolled over and this happened when there was a major capital outflow in July-August 2013. That is, if a sizeable fraction of reserves were to exit Indian markets, it could induce a sharp rise in volatility in the currency markets. This could potentially erode reserves since the RBI may need to sell dollars from its chest of reserves to stem a 'run' on the currency.

9.2 The Bond Index question: A Good Idea But Not For Now

A suggestion that largely came from market participants in the wake of the sharp rise in currency volatility in the May to September 2013 was for the government to make an effort towards getting Indian government securities in a globally accepted bond index such as JP-

Morgan Government Bond Emerging Market Diversified Bond Index (GBI-EMGD) index. The argument was that the inclusion itself would induce fund managers to increase the weight of Indian bonds in their portfolios. Estimates made in September 2013 showed that the immediate flows could range between 20 and 35 billion US dollars. Inclusion itself would create a steady investor base for G-Secs and this could spill over to corporate bonds if the right market structure was in place. There would be other collateral benefits as well. If more funds were available from foreign sources, the pressure on domestic banks to fund the government deficit would ease and that in turn could enable the RBI to implement policy changes for example a reduction in the statutory liquidity ratio (SLR).

This inclusion would be contingent on removing the cap on foreign holdings in government bonds, currently at 30 billion dollars. While this might be a proposal worth considering in the long term, we would tend to be careful about any measure that enhances external debt levels in a scenario where debt relative to reserves is already high. The possibility of rising volatility in government bond prices because of foreign institutional activity remains (though the relation between volatility and foreign participation is weak for most Asian economies) and we cannot afford this in a situation where government borrowings are relatively high. We are not rejecting this proposal altogether – we merely believe that this is not the right time to implement it.

9.3 Tax on Short-term Capital Inflows? Samba Economics

Any discussion of taxing foreign capital inflows has to refer to Brazil that has experimented with this measure somewhat extensively. After a fairly brief period of no taxes on foreign capital, transactions taxes were reintroduced in March 2008 at the rate of 1.5% on fixed-income investments. Investments related to equities remained exempt from taxes until later. The tax was reduced to zero in October 2008, the peak of the global financial crisis, when the exchange rate came under depreciation pressures.

A 2% tax on fixed-income and equity inflows was reintroduced in October 2009. The tax was increased to 6% (IOF tax) in two stages in October 2010 but then brought back to 2% in January 2011. The tax was dropped entirely in 2012. The consequences of Brazil's efforts to tax capital inflows seems somewhat ambiguous. Studies have shown that the impact in controlling inflows was insignificant although the reduction or the removal of the tax seems to have spurred capital inflows.

Box4: Market stabilisation bonds

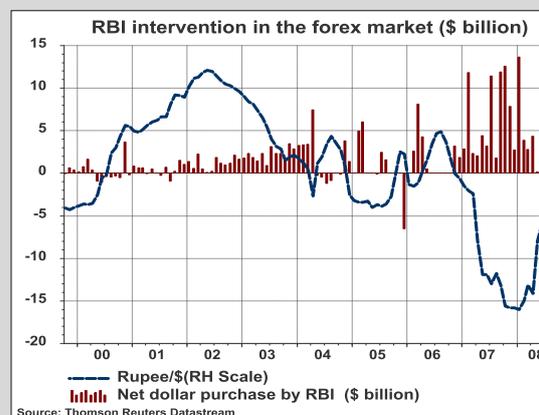
The RBI moved to a managed floating exchange rate policy in 1994. Since then it has been intervening at times in the market to contain excessive volatility in the value of the Rupee. Steady capital inflows combined with the current surplus exerted an upward pressure on the Rupee in early 2000s. However, despite large scale intervention by RBI, the Rupee appreciated from 48.91 per dollar in April 2002 to 43.93 per dollar in April 2004 (chart). The Rupee liquidity created by dollar purchases was sterilised through selling of government securities. However, the ban on the creation of ad hoc Treasury Bills in late 1990s and large scale sterilisation between 2002 and 2004 resulted in a sharp reduction in RBI's holding of government securities. This restricted RBI's ability to manage the exchange rate and Rupee liquidity.

Market stabilization bonds were introduced in 2004 to address this situation. MSS bonds have the same attributes as the Treasury Bills or dated securities. However, Government holds cash balance equivalent to the bills and securities issued under MSS with RBI, which ensures ring-fencing of the proceeds. Interest payment on bills/securities outstanding under the MSS is paid from the government budget (RBI 2004).

The fiscal cost of sterilization or the interest payment on MSS bonds has been highlighted as major hurdle to manage exchange rate. However a simple measure based on the difference between interest rates in G7 currencies and Rupee interest rates does not capture the fiscal cost of intervention. Interest rate parity (both covered and uncovered) both suggest that the interest rate differential would equal the depreciation of the higher interest rate currency. Thus if perfect interest parity were to hold there would be no fiscal cost of intervention since at the time of maturity of the dollar instrument, the higher rupee proceeds due to depreciation would exactly equal the loss due to the difference in interest rates.

However, perfect interest parity usually does not hold ex-post, and the wedge between the interest differential (that is typically higher) and depreciation could constitute the fiscal cost of stabilization.

Our estimate shows that for \$1 billion sterilization the net interest payment would be approximately \$ 75 million (chart).



	Cash balances under MSS (Rs. billion)	RBI intervention in the forex market (Rs billion)
2004-05	642.11	936.4
2005-06	290.62	360.4
2006-07	629.74	1215.0
2007-08	1705.54	3147.7
2008-09	887.73	-1603.4
2009-10	27.37	-119.5
2010-11	0	77.0
2011-12	0	-965.2
2012-13	0	-142.6
2013-14	200	543.9

Source: Ministry of Finance, Thomson Reuter Datastream

While we take note of Brazil's somewhat mixed experience with taxes on capital flows, we believe that the idea of a flexible tax on inflows is worth exploring. It is certainly a better option that constantly tinkering with the quantitative limits on capital inflows such as external commercial borrowings, participatory notes or FCCBs. (ECB limits, for example, were lowered raised in 2007 in response to the flood of dollars only to be raised again in 2009 as the global crisis erupted. This form of stop-go policies are disruptive and makes decision-making difficult. In a situation where the vagaries of monetary policy of the developed economy central banks both inflates and deflates asset bubbles, there need to be some safeguards against an unwarranted flood of capital without going to the extreme of imposing

quantitative controls. This could be a flexible tax that can be raised or lowered depending on capital flow conditions. This should not be viewed as policy ‘flip flop’ but instead policy sensitivity to market conditions. However, such taxes should be fine-tuned for inflows which are considered relatively more volatile. For instance, flows associated with Participatory Notes or short maturity Treasury bills.

In the above context, there has been an upsurge of net FII inflows in fiscal 2014-15 amounting to \$40 billion, most of it after the new government took over in May 2014 in anticipation of an improved policy environment. About \$24 billion has been invested in GoI debt securities and the remainder in equity (FIIs can invest a maximum of \$30 billion in GoI securities).

9.4 Managing Gold Markets: Bullion Banter

A discussion on macroeconomic reforms would be incomplete without reference to managing the supply and demand for gold in India. The fluctuating appetite for gold has an impact on both internal balances (the availability of financial savings for instance) and external balances such as the current account deficit.

A successful policy for minimizing the volatility in internal and external balances created by gold has to address both demand and supply. On the demand side, bringing inflation down would raise real yields on monetary instruments and reduce savings in physical assets e.g. gold. However, this might not entirely do away with the demand for gold. India’s increasing demand for gold reflects: (a) societal mores and the widening of middle-income circles; (b) a need to hedge against inflation and country risks specific to India; and (c) preference for flexibility and anonymity to invest, in small or large amounts, in a liquid and potentially appreciating asset.

Thus, the objective would be, as the RBI’s Working Group to review gold imports and gold loans by NBFCs, points out a need to introduce new gold-backed financial products which mimic returns on gold but do not involve parallel physical imports of gold, thus creating an incentive for households to hold them rather than physical gold. On the other hand there could be instruments that incentivize gold holders to offload their stock of gold in the domestic market and create an active domestic market for gold.

Among the many that may be considered are: Modified Gold Deposit Scheme (gold taken as a deposit is recycled for meeting domestic demand and given back at the time of maturity); Gold Accumulation Plan (the product is a saving plan catering to even small buyers of gold in which gold imports are deferred till the time of actual delivery of gold); Gold Linked Account (the entire transaction takes place outside India and import of gold is not involved and the exposure of the issuer is hedged through forward contracts on exchanges such as the London Metals Exchange); Gold Pension Product (the customer surrenders gold to the bank on agreement to receive streams of monthly pension till the customer passes away).

The mechanism of lending against gold as collateral by both banks and NBFCs itself results in the monetization of gold and brings supplies from domestic holders into the market. However, as is widely recognized, it is imperative to regulate the market carefully. Banks should also be allowed to buy gold from retail holders in order to give a boost to the domestic market. Domestic wholesale trading is also important to support a market. For this, there is also a need for a ‘market maker’ perhaps in the form of the proposed bullion corporation. Finally, banks will have an incentive to hold gold only if it is liquid – thus a repo window against gold as collateral might be useful.

On a less optimistic note it needs to be kept in mind that all such proposals will be weighed by households against the flexibility and most importantly *anonymity* of holding gold in smaller lots in its physical form.

10 Inflation Management: Not By Money Alone

We believe that the primary drivers of inflation are massive demand-supply mismatches in critical items such as food while relatively loose monetary conditions appear to have played a role in sustaining these inflation pressures and transmitting them to more generalized inflation through various channels (rural wage inflation which ultimately results in urban inflation). These are not ‘supply shocks’ in the text-book sense in that they are temporary (except in the case of purely seasonal supply bottlenecks for items such as vegetables) but reflect structural imbalances (outdated marketing regulations for instance) that have been neglected for too long.

The challenge of managing the food economy is not discussed here. However we need to emphasize two aspects. Food is not the only component of the commodity basket that has shown a persistent mismatch in demand and supply. There are ‘structural’ imbalances in other categories – particularly services e.g. healthcare and education—have been responsible for keeping core consumer price inflation (core CPI i.e. CPI stripped of food and fuel). In its bid to bring CPI inflation down to the 6 per cent target level by the end of 2015, the RBI will face challenges in bringing these components down. Clearly, there is little that the RBI can do in terms of resolving the primary imbalances in supply and this has to be left to the Government.

Table 1: Inflation (% y-o-y)

	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14
CPI (Urban & Rural)	11.2	9.9	8.8	8.0	8.3	8.6	8.3	7.5	8.0	7.7	6.5	5.5
WPI	7.5	6.4	5.1	5.0	6.0	5.5	6.2	5.7	5.4	3.9	2.4	1.8

Source: Thompson Reuters DataStream

Table 2: Household Inflation Expectations -Current, Three-month Ahead and One-year Ahead (% Inflation rate, median)

Survey Period Ended	Current	Three-month ahead	One-year ahead
13-Sep	11	14.5	16.0
13-Dec	13.2	13.9	16.0
14-Mar	13.3	12.9	15.3
14-Jun	13.3	14.0	15.0

Source: RBI

There is also the problem of stickiness in inflation expectations as measured by the quarterly inflation expectations survey which has remained somewhat unmoved by RBI's hiking of rates. One (credible) hypothesis is that unless inflation in food and services were to show sustained signs of moderation, inflation expectations would remain unchanged. This simply buttresses our argument that the supply side needs to address both comprehensively and with a sense of urgency.

We endorse the shift in the RBI's target from wholesale price inflation (WPI) to CPI. We also believe that a target for inflation – now set at 8 per cent for the end of 2014 and 6 per cent for end-2015—was imperative to serve as a 'nominal anchor' for inflation. The idea of a gradual shift to this target level – the so-called 'glide path' for inflation – instead of a rigid short term target also appears sensible given the many related issues that need to be resolved were inflation to be brought back to a sustainably lower path. We believe that, the softness in short-term inflation notwithstanding, there is little room for monetary easing at this stage. For now, the central bank needs to be vigilant and keep rates on hold.

That said, one needs to be aware and avoid the pitfalls of inflation targeting. The experience of the Eurozone and other European economies suggests that inflation targeting central banks tend to be somewhat recalcitrant about cutting rates even when deflationary pressures surface and growth decelerates. Thus flexibility is key -- the new monetary framework should not degenerate into a 'target chase', ignoring collateral costs.

11 Conclusions

- In the period mid May 20014-mid November 2014 the 50 stock Indian equity index called Nifty has gone up by 17 %. In this period net investments of domestic mutual funds in equity and debt have been Rs. 255 billion and Rs. 2729 billion respectively and foreign institutional investors (FIIs) have invested Rs. 590 billion and Rs. 1214 billion.
- Institutional and retail investor sentiment has been buoyant and in addition to reflecting a glut in global liquidity these record equity index levels Indian capital

markets are probably also pricing in higher overall investments and growth in the next few years.

- Government debt as a percentage of GDP has moved from 83% to 66% in the last 10 years. This does not reflect prudent balance between government's spending and expenditure but is a reflection of the elevated levels of both wholesale and consumer price inflation and the latter hit a maximum of 12% in 2010 to help towards crowding in private investment and lower inflation expectations. Government needs to improve its fiscal balances and over the next few years move from cash to accrual based budgeting. An explicit recognition of contingent liabilities reduces the risk of negative surprises.
- The Government has initiated or announced its intention to push for reforms and speedier implementation on several fronts and, for example, these include: deregulation of diesel prices, land acquisition legislation, labour laws and coal mining. Of course, it is the pace of actual implementation which would gradually and sustainably raise savings at a national level and thereby economy-wide investments.
- In terms of the international macroeconomic environment, GDP growth in the US in the last quarter was 3.5%. However, the Eurozone appears to be about slip back into recession since the numbers from its largest economy, namely Germany have been disappointing at 1.2 %. Japanese growth has yet to pick up and China is slowing down to 7.3 %.
- Brent crude oil prices have come down from around \$115 per barrel in April 2014 to around \$80 per barrel in November 2014 and gold prices have come down by 9 % over the same period. This should have a calming influence on Indian inflation and reduce its current account deficit as it is a net oil and gold importer (net gold imports have surged in the last few months).
- The US Federal Reserve stopped purchasing government and select mortgage securities, that is, Quantitative Easing 3 came to a close in October. However, on October 31, 2014, the Japanese central bank announced its decision to raise its purchases of debt securities to about \$57 billion per month sharply raising the probability of higher volumes of Yen carry trade and associated risks of pushing up Indian capital markets beyond rational levels.
- On a net basis, taking the Indian central government's reformist measures and changes in projections for global economic growth and capital flows into account, it is not yet clear that RBI should ease interest rates even by end March 2015. The impact of real Rupee interest rates on household savings behaviour which is invariably reflected in the growth rates of bank deposits should not be underestimated.
- The RBI and Government's stance on the Rupee's exchange rate have not been explained clearly in any forum or publication. Using CPI inflation differentials

between India and six of its major trading partners the Rupee's REER is overvalued. The argument that higher productivity gains in India explain this rise in REER is factually incorrect. Estimates by Conference Board show that total factor productivity has registered negative growth in the last two years.

- As an emerging capital deficient economy, India could sustain current account deficits of 1-1.5% of GDP over say the next ten years. However, though mercantilist policies can be counterproductive, this should not mean that India should perpetually run large trade deficits driven mostly by faulty real sector policies but also to an extent by an overvalued Rupee exchange rate.
- In a socially volatile India where only about 10% of the 500 million work force is in the formal sector, the need for speedy reforms to boost sustainable employment opportunities in sectors other than farming cannot be overstated. In this context, even as legislative reforms are pursued at the central and state government levels, opportunities for vocational training linked to specific private sector firms need to be supported, such that these grow exponentially.

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Appendix:

Box: Capital Controls

India has adopted a step-by-step approach towards capital account liberalisation. It has been cautious about allowing outflows (capping the amounts that households are allowed to hold in foreign currency) and particularly careful about not adding to the stock of debt inflows as the debt servicing creates a charge on the current account. However, persistent current account deficits has meant that the central bank and government have necessarily had to seek financing from external sources by easing restrictions on capital inflows

However, the economy has also witnessed phases in which capital inflows have far exceeded its absorption capacity (as determined by the CAD). This has exerted pressure on the exchange rate to appreciate. To contain these 'excess' capital inflows, India has preferred administrative capital control measures over price based measures (Shome et al 2012). Apart from limits on FII equity holding and FDI in sectors such as banking, FII investments in government and corporate bonds are regulated through cumulative investment limits (\$30 billion for Government debt and \$ 51 billion for corporate bonds). External commercial borrowings (ECBs) and short-term trade credits are controlled by all-in-cost ceilings (300/500 bps + LIBOR for ECBs).

However, at times, faced with large capital inflows, capital control measures have been inadequate. For instance, in 2007-08, while the current account deficit was moderate, there were massive capital inflows (Table). The Government responded by reducing the all-in-cost ceilings on ECBs and trade credit and lowering the interest rates on NRI deposits. These measures could not, however, contain the excess capital inflows partly due to absence of instruments to contain FII investments in equity.

Thus the RBI intervened heavily and its net purchase amounted to \$75 billion (table) to contain the appreciation of the Rupee. While the Rupee liquidity needs of the growing Indian economy absorbed a significant proportion of it --- the public's holdings of Rupees increased by \$ 21 billion and this did not enter the banking system. The rest of the liquidity created by the dollar purchases which entered the banking system posed a risk to both financial stability and inflation.

Excess liquidity was sterilized through Open Market Operation (OMOs), Market Stabilization Scheme (MSS) and increase in Cash Reserve Ratio (CRR) (Rakesh Mohan, 2009).

	Net capital inflow	Current account balance	Net forex purchase
\$ billion			
2006	38	-9	21
2007	94	-8	75
2008	34	-31	-11
2009	38	-26	-6
2010	71	-55	2
2011	60	-63	-13
2012	85	-92	-11
2013	60	-49	4

Source: Thomson Reuters DataStream

Exchange rates are highly sensitive to FII inflows. We suggest that government/RBI should strengthen their ability to manage capital flows through a low but flexible tax which can be raised or lowered in response to the quantum of capital inflows without resorting to quantitative controls. It could reduce the need for foreign exchange intervention by RBI.

Brazil is one recent example of a country using taxes to moderate capital inflows without significant damage to its reputation with foreign investors. Brazil has taxes on international financial transactions (*Imposto de Operações Financeiras* or IOF in Portuguese) since 2008 to manage volatile capital inflows. During period of excess capital inflows the tax was increased. As the inflows dried up due to domestic factors or international liquidity conditions (the financial meltdown in global markets for instance) the tax was reduced or dropped.

While there have been some critics of Brazil's apparently 'inconsistent' tax on foreign exchange flows policy, others have seen this as the Brazilian government's adaptability and ability to respond to quickly changing situations in the international financial flows.

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