Can we cash in on this unexpected window of opportunity?

The Malcolm S. Adiseshiah 2014–15 Mid-Year Review of the Economy

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Overview

Mythili Bhusnurmath

'Tumultuous', was how NCAER's Mid-Year Economic Review described the first six months of FY14. In contrast, the first six months of 2014-15 is best described as the period when India got its mojo back! The mood of despondency that marked FY 14 has not only lifted, but has been replaced by a sense of purpose and confidence. Indeed we seem perilously close to allowing hubris to overtake us once again. Like in the last few months of the NDA regime!

So what has changed? Why has sentiment turned positive? There is only one answer. After three decades of coalition governments at the centre, elections to the Lok Sabha in May 2014 saw the BJP come to power on its own, winning 280 out of 543 Lok Sabha seats. The invincible majority, combined with the reformist image of the Prime Minister, Narendra Modi, has brought back the 'feel good' factor, both domestically and internationally.

The perception of India, especially among overseas investors and the world at large, has changed. In November 2013, India was part of the Fragile Five, an ignominious grouping of five struggling emerging markets along with Turkey, Indonesia, South Africa and Brazil. But by mid-2014, India was being described in the Western press as the 'only BRIC left standing'!

The feel-good factor has been boosted by a number of developments, starting with the Budget presented in the first week of July 2014 to the revision in the country's rating outlook by Standard and Poor from negative to stable, mid-September and more recently to the spate of reform measures announced in October 2014.

The impact of the changed outlook or the Modi dividend was felt most immediately on the stock market, where strong portfolio inflows ($ 22bn till mid-September) have seen both the BSE and the wider fifty-share Nifty touch record highs. Debt inflows have been higher - $ 12 bn – compared to equity inflows ($ 10 bn). The BSE Sensex touched a lifetime high of 27, 319.85 points on 8 September 2014, gaining close to 26% by mid-September 2014 before taper jitters saw FII (foreign institutional investors) inflows ease and trigger some market correction. By early October, total market capitalization of 5,485 BSE-listed companies stood at Rs 93.77 lakh crore.

The biggest boost after the elections came in the Budget presented early July 2014. Contrary to widespread expectations that the new government would present a more adverse position of the government's finances than in the interim budget, finance minister, Arun Jaitley, chose to largely stick to the estimates presented by his predecessor. Thus the fiscal deficit (FD) to GDP ratio was retained at 4.1% for FY 15 and though there is considerable skepticism about whether the government would be able to adhere to this, both rating agencies and markets seem to have given the FM the benefit of doubt.

There was further good news in store in the form of a fall in oil prices. After initial fears that geopolitical tensions in the Middle East and Ukraine would see oil prices spike, prices cooled to a 16 month low of $ 97 a barrel by mid-September. (By early October 2014, prices had fallen to sub $ 90 a barrel!) From India's perspective, a

decline in oil prices is good news on a number of fronts: the price front, fiscal front and the balance of payments.

On the external front, the position is far more robust than a year ago. Not surprisingly, the rupee has strengthened even as the country's forex reserves crossed the $ 300 billion mark (forex reserves presently stand at $ 320 bn (15 September 2014). Through most of the first six months of FY 15, the rupee traded in the range of Rs 59-Rs 62 to the dollar, a far cry from the low of Rs 68.8 reached in August 2013. However, given the large and continuing inflation differential between India and the US, it would appear the rupee is over-valued at these levels. According to the RBI's annual report for 2013-14, at these levels the rupee is over-valued in terms of both the six-country as well as 36- country REER (real effective exchange rate). Consequently, when the rupee fell 2.1% in September 2014, perhaps, as part of an overdue correction, the central bank (wisely) did not intervene.

On the growth front, it is still too early for the impact of the change in government to be felt on the ground. Nonetheless, first quarter GDP numbers suggest growth might be bottoming out, albeit with some ups and downs. At 5.7%, GDP growth during April – June 2014 is one percentage point higher than in the comparable period last fiscal and is the highest in the previous nine quarters.

Industry, in particular, performed well, with first quarter growth coming in at a heartening 4.2%, up from -0.4% in the comparable quarter of FY14. Indeed this might be revised upwards in view of the upward revision in the May 2014 number to 5.6% from the earlier five percent. Though growth in agriculture and services' sectors was largely unchanged at 3.8% and 6.8% respectively, overall growth was not only well above the sub-five percent growth recorded in both FY 13 and FY14 but was also more broad-based than in the previous quarters/years.

Unfortunately, hopes of a revival in industrial growth, especially in manufacturing, seem to be fading all too soon. After growing at 3.5% in Q1, FY 15, manufacturing output disappointed in both July and August 2014, contracting one per cent and 1.4% respectively. Lacklustre industrial performance, coupled with a contraction in manufacturing sector output in both July and August 2014, suggest we still have a long way to go before we can take recovery for granted.

Despite lingering doubts about whether the recovery is sustainable, particularly in the light of disappointing industrial sector numbers for July and August 2014, India's growth prospects have been re-rated by various agencies. Late September, S&P revised the outlook for India from negative to stable, while retaining its rating at BBB -, the lowest in the investment grade. With this, all three major rating agencies share the same perspective on India.

In terms of numbers, the government has stuck to its original projection of 5.8% and the RBI to its 5-6% range, with a bias to 5.5%. However, international agencies like the World Bank, IMF and the ADB have revised their estimates upwards, with a sharper increase expected in the next, rather than this fiscal.

The World Bank, in its latest South Asia Economic Focus Report, released early October put India's GDP growth in 2014-15 at 5.6%, accelerating to 6.4% in 2015-16,even as it lowered the growth rate for developing countries as a whole. In its Global Economic Prospects (June2014), the Bank had projected India's GDP growth in FY15 at

5.5% even as it cut its projection for global GDP growth to 2.8%, down from its January projection of 3.2%. Likewise, the IMF in its World Economic Outlook (Oct 2014) upped India's growth rate to 5.6% up from 5.4% in its April Outlook with growth increasing to 6.4% next year, even as its October update projected global growth to decline to 3.3% this year, down from its earlier estimate of 3.7%. The Fund has revised down its estimate for global growth next year as well – from its earlier estimate of four percent to marginally below at 3.8%.

Brokerages have been more optimistic with some like Nomura, for instance, raising its GDP estimate for FY 15 to six per cent.

Nominal GDP is expected to get a boost from a revision in the measurement of GDP to take into account under-represented sectors as well as the informal sector which has grown considerably in size over the years. The base year is also to be brought forward from the present 2004-05 to 2011-12. The revision is expected to show the Indian economy is much larger than estimated previously, though it will not change either the rate of growth over the years or the reality of the slowdown from the heydays of close to 10% growth.

In March 2010, when India last revised the national accounts, annual economic growth estimates were adjusted upwards by 0.8 to 1.7 percentage points for four years. The revision almost doubled the estimated contribution to the economy made by coaching and tuition and gave substantially more weight to the construction, trade and hotel industries.

Global outlook

On the global front, the US Federal Reserve continued its phased reduction of bond purchases. At the much-awaited FOMC meet on 16 -17 September, the Fed announced a further cut of $10 bn, prior to bringing the curtain down on the programme in October 2014. At the same time, it renewed its pledge to keep interest rates near zero for a "considerable time," while signaling it could raise borrowing costs faster than expected once it starts moving. Markets rallied in response to the respite as many observers had predicted that the Fed would alter the rate guidance provided since March in view of better data on the US economy.

The Fed statement was virtually unchanged from July 2014. However, new quarterly projections outlining its view on where future interest rates should be show considerable divergence from what financial markets have been betting. Inevitably, markets are nervous. The coming months are bound to be marked by increased volatility in capital, bond and currency markets. For all the talk of increased global co-operation, including at the G-20 meeting in Brisbane in September 2014, the next few months will be marked by each country trying to strengthen its own defences against sudden stops or worse, reversals in capital flow.

The silver lining is that the 'ill-effects' of the withdrawal of liquidity are likely to be offset by recovery in the US resulting in increased demand for goods and services from emerging markets like India.

Latest data show US economy grew 4.6% annualized in the second quarter, up from the earlier estimate of 4.2% and the first quarter's decline in GDP growth, suggesting US recovery may be stronger than anticipated earlier. Whether this will trigger a sooner-than-expected reversal in the present regime of low interest rates remains to be seen.

For now, the International Monetary Fund has warned that the global economy faces a growing risk from big financial market bets that could quickly unravel if investors get spooked by geopolitical tensions or a shift in US interest rates. In this, it is on the same page as the Basel-based Bank for International Settlements that has periodically been cautioning central banks of the dangers of excess leverage.

'By fostering risk-taking and the search for yield, accommodative monetary policies continued to contribute to an environment of elevated asset price valuations and exceptionally subdued volatility', the Bank for International Settlements said in a statement, mid-September.

The performance and outlook for the various sectors is detailed below:

Agriculture

Despite the low and falling share of agriculture in GDP, agriculture was the mainstay of GDP growth in 2012-13 and 2013-14. This is unlikely to be repeated in 2014-15, thanks to a deficient South-West monsoon which accounts for nearly 75 % of the country's total rainfall and plays a crucial rule as about 55-60 % of the area sown is still rain-fed. While the monsoon is important for sowing of kharif crops, it is also crucial for rabi crops as it impacts the ground water level and reservoirs which are critical for rabi crops irrigation.

The delayed onset of the monsoon this year and sub-normal precipitation overall (12% shortfall compared to the long-period average as per the latest estimates of the Indian Meteorological department) is bound to affect agricultural output, particularly in the rain-fed areas. According to preliminary estimates released by the Agriculture ministry the output of kharif food grains is likely to be in the region of 120 million tonnes, a decrease of about 7% over the previous year's estimated output of 129 million tonnes. The shortfall in output is on account of loss in the output of coarse cereals (14%) as well as pulses (18%), and also rice (4%).

NCAER's own estimates show the deficit in the overall food grain output may be slightly lower, approximately 2% to 4%, ie food grain output during the current kharif season may be in the region of 119 to 122 million tones. The difference in estimated output between NCAER's estimates and the ministry of agriculture is due to differences in the methods used to arrive at the estimates. While the ministry's estimates are based on preliminary information supplied by the state governments NCAER's estimates are based on regression models, which incorporate the impact of monsoon rainfall as well as a trend factor.

Lower agricultural production has implications not only for GDP growth (growth in FY 14 was shored up by agriculture) and inflation but also has huge welfare implications since close to 60% of the population is still dependant on agriculture. Food inflation, which was showing some signs of improvement, might again pick up.

The Government has been proactive and has taken a slew of measures such as increasing the minimum export price of onions to discourage exports, restricting fresh positions in potatoes on the futures market, bringing some food items under the ambit of the Essential Commodities Act to crack down on hoarding along with making open market sales of wheat and rice. It has also urged states to amend the APMC (Agriculture Produce Marketing Committees) Act under which farmers are forced to sell to designated buyers and at designated mandis, resulting in a virtual buyers' mafia.

The hope is that the impact of the shortfall in domestic production might be offset by the fall in global crop prices. The rise in food prices might also be more muted this year on account of the lower increase in the minimum support price recommended by the Commission on Agriculture Costs and Prices and accepted by the government as also the stern warning to states that announce additional support over and above the MSP.

Industry

After a welcome growth of 4.2 % in Q1 FY 15, industrial growth disappointed in July and August 2014 registering a growth of just 0.4% Y0Y in each of the two months. The poor performance comes despite a relatively healthy core sector growth of 4.1% and 5.8% in both months. The optimistic view is that it is only a matter of time before the improvement in the performance of core industries gets translated to better performance in industry overall. But for now one will have to wait and watch. More so since extraneous factors such as the Supreme Court ruling on coal blocks, cancelling the allotment of 214 of 218 blocks allotted during the period 1993- 2011, could put a spoke in the wheels of industry's revival.

Within industry, manufacturing proved the biggest disappointment. After recording a 3.5% growth in the first quarter, manufacturing growth contracted in July 2014 and August by one per cent and 1.4% respectively.

The outlook for September 2014 does not look much better as the HSBC's manufacturing purchasing managers' index (PMI), a gauge of factory activity based on data for 500 large companies, has declined steadily. From 53 points in July the index is down to 52.4 and 51 points in August and September respectively. The contraction in capital goods output, normally regarded as a bellwether of industrial growth, in the first two months of the second quarter also lends credence to the view that on the industrial front, we are not out of the woods as yet.

The only consolation is that there are some signs of a turnaround in gross fixed capital formation (GFCF). After a dismal showing in FY14, GFCF grew seven per cent year on year in Q1 FY15. This is the highest since Q1 FY12. Given that the root of the present slowdown can be traced to the decline in the growth in GFCF that started around Q2 FY12, this turnaround, if sustained, could be a harbinger of better times for Indian industry. After all, GFCF rose from 28.7% of GDP in 2007-08 to 32.9% in 2007-08 before declining to 30.4% in 2012-13. The decline was mostly accounted for the private corporate sector whose investment rose from 9.1% in 2004-05 to a peak of 14.3% in 2007-08 before falling to 8.5% in 2012-13.

As of now, anecdotal evidence does not suggest a big revival of investment activity in Q2. However, with the government announcing a number of reform measures

in contentious areas like labour as also its decision to move forward with an ordinance to clear the mess on the coal front, the hope is that investment will pick up.

The unexpected bonanza by way of a lower subsidy bill, thanks to oil prices declining by as much as $ 30 a barrel in Q2 could free up resources for the government. In the interim before private investment picks up, public investment could temporarily step into the breach and create the necessary environment for the former to crowd in.

Services

The services' sector, which has long been the mainstay of India's growth story, is showing signs of flagging. Though the services' sector grew 6.8% in Q 1 FY15, in line with the growth recorded in FY14, it is well below the close-to-double digit growth recorded during the boom years of 2005-06 to 2007-08. Within the services sector, there is wide variance in growth across sub-sectors with sectors like trade, hotels and restaurants and construction showing slower growth compared to community and personal services (9.1%) and finance and insurance sectors (10.4%).

Since month-wise data on the services' sector is not available, the only way to gauge the performance of the sector is to look at the HSBC's Purchasing Managers' Index (PMI) for services. According to this measure, the sector continues to languish. Though the PMI for September 2014 stood at 51.6 points, up from 50.6 in August, it is lower than the number recorded in July (52.2 points) and June (54.4 points). In September 2014, services activity rose in three of the six sub-sectors tracked with the highest rise being seen in post and telecom. On a quarterly basis services PMI for the quarter ended September 2014 stood at 51.46, compared with 51.03 for the quarter ended June 2014.

The signing of the ASEAN free trade agreement in services and investment is expected to boost trade in services in the neighbouring region. The pact will allow India to leverage its competitive edge in the areas of finance, education, health, IT, telecommunications and transport.

This will be especially helpful for balancing India's deficit with ASEAN countries in trade of goods. The India–ASEAN Agreement on trade in goods, which was operationalised in 2010, saw a dramatic improvement in trade with ASEAN and the hope is that this success will be replicated on the services front.

All this, of course, is subject to our addressing the many regulatory and policy bottlenecks that impede growth in this sector. These include establishing a nodal agency or department for services to enable a coordinated institutional approach to removing unnecessary and outdated regulations in the sector; introducing targeted policies to tap opportunities and conduct promotional activities in services; speeding up disinvestment in some service sector PSUs to facilitate the growth of these services; revamping port services and building world class port facilities; and addressing tax and benefit schemes to encourage services exports. Beyond these institutional measures, there is a need to move beyond the IT and business services-led paradigm and to focus on developing a services sector that is more integrally connected with the rest of the economy through backward and forward linkages with industry, growth of employment-intensive services, enhanced productivity and broad-basing of service sector output and trade.

In the context of FTA negotiations, India needs to pursue its interests in services by pushing for greater market access for its service providers through visa facilitation, mutual recognition of qualifications and harmonization of regulatory standards while also putting in place the requisite domestic business environment to encourage investments into the service sector from its partner countries.

Money & Capital Markets

Money and credit markets have been largely stable during the first half year. Though the US Federal Reserve continued its tapering programme (reducing purchases to $15 bn at its September 2014 meeting), stock markets, equity as well as bond, showed no sign of nervousness. Credit markets, on the other hand, remained subdued as banks reeled under the impact of rising non-performing assets.

Growth in bank credit fell to a record five year low at 10.9% as at the end of August, 2014. The last time credit fell to comparable levels was in late 2009, in the aftermath of the financial crisis, before rising to 17% in 2010. Clearly the turnaround in investment sentiment which might be expected to lead to a demand for credit is still in the nascent stage.

Asset-quality continues to decline though the pace of accretion of Non-performing assets has come down. NPAs together with re-structured assets are now placed at close to 11% for the banking sector as a whole with public sector banks showing a higher NPA ratio than their private sector counterparts.

Meanwhile bank deposits grew 13.6 in the period to 22 August 2014, up from 12.6% during the comparable period last fiscal, suggesting financial assets might once again have become attractive following signs that inflationary pressures are abating. In the RBI's fourth bi-monthly monetary policy announcement, all key policy rates were kept unchanged. The Bank is reportedly engaged in discussions with the finance ministry on formalising an inflation target as part of its efforts to put in place a modern monetary policy framework on the lines laid down by the Urjit Patel Committee set up for the purpose.

Equity markets touched new highs, riding on a surge in overseas inflows. Even as primary markets were late to join the party, secondary markets raced ahead. The BSE Sensex touched a record high of 27, 319.85 points on 8 September 2014, before slower FII inflows in response to jitters about the Fed taper led to some correction. Average inflows in August- September were down to about $ 865 mn, down from about $ 2.3 bn during March- July 2014 as jitters about the US Fed's action saw investors turn increasingly nervous. FIIs invested about $ 845 mn in September, the lowest since Feb when they pumped in $ 228 mn.

The US FOMC meet on 16-17 September assuaged some fears but did not demolish them entirely. As expected, the Fed announced its decision to continue tapering or phasing out its quantitative easing programme –it will henceforth buy bonds to the tune of only $ 15 bn and end purchases altogether in October. However, contrary to expectations, it retained what Vox news termed, the four most important words, 'for a considerable time', in relation to the period for which the Fed expects to keep interest rates low after QE ends. US consumer prices declined for the first time in one and a half

years in August 2014, suggesting inflation pressures are still muted, giving the Fed room to keep monetary policy loose for longer. Analysts scoured the fine print of the Fed Chairman, Janet Yellen's press conference for clues of when the Fed might hike interest rates but as of now opinion is divided between the latter part of the first half and the early part of the second half.

External Sector

The year started off with exports registering a relatively strong performance. Imports, on the other hand, were subdued, reflecting the general slowdown in economic activity. As a result the trade balance improved to $ 33 bn in Q1 FY, down from $ 48 bn in the comparable period in FY14. In line with the improvement in the trade balance, the current account deficit, too, improved to 1.7% of GDP during Q1 FY15, down from 4.8% in the comparable period of the last year.

Unfortunately, the improvement proved short-lived. After recording double digit growth in May and Jun 2014, export growth slowed down in the subsequent months. With exports growing just 2.73% in September 2014 even as imports climbed 26%, the trade deficit for September, 2014 rose to an 18-month high of $ 14.2 billion. The cumulative deficit for the first half year FY15 is now estimated at US $ 70.40 billion. This is lower than the deficit of US $ 76.72 billion during April-September, 2013-14.

However, the portents are not too encouraging. Import of gold in particular has shown a sharp uptick,449.7 %, while import of Metalliferous Ores & Other Minerals rose 105.6% over the same period last year. Faced with a rising import bill, despite the fall in oil prices, the government is reportedly toying with the idea of imposing fresh restrictions on the import of the yellow metal.

The slow appreciation of the rupee, combined with uncertain recovery in the rest of the world, is likely to impact export performance in the coming months. More so since the World Trade Organisation (WTO) has reduced its estimate for growth in world trade in 2014 to 3.1%; down from 4.7% estimated in April 2014. The estimate for 2015 is also down to 4.0% down from 5.3% earlier.

However, not everything is bleak on the export front. Over the years, India has diversified its export basket and markets. The EU accounted for 21% of our exports in 2008-09; this came down to 16.4% in 2013-14, partly as a result of the slowdown in the Euro zone but also as a result of a conscious effort to find new markets for our products.

The future of multilateral trade negotiations is in a limbo, particularly after India raised certain objections to linking food subsidies to the agreement reached in the ninth WTO ministerial in Bali on trade facilitation. For now the future of the Doha round does seem clouded in uncertainty but given that each round has taken more time to conclude – not surprising in view of the increasing complexity of world trade – it would be a mistake to read too much into temporary setbacks.

Indeed the relevance and need for the WTO has only increased after the US has embarked on a series of giant regional trade agreements – notably the TPP (Trans Pacific Partnership) and the TTIP (Trans Atlantic Trade and Investment Partnership) – giving preferential access to members. Since India is excluded from both (it is debatable whether India would like to a member of a trade agreement where the US calls the

shots), we need to rally as many other countries as possible to the cause of multilateralism. It is therefore, entirely in our own interests to try and revive the stalled WTO talks.

The new Foreign Trade Policy for 2014-19 which was expected to be announced soon after the Budget is still awaited. Unconfirmed reports speak of a number of new initiatives to promote exports. However, these can at best be seen as short-term props to boost exports. The more enduring policy would be to increase the competitiveness of India's exports and that calls for a host of measures – better infrastructure, less red-tape, better governance etc – all of which are beyond the scope of a Foreign Trade Policy, however well designed.

Prices

On the inflation front, there is some good news. Retail inflation, the new anchor for the RBI, fell to 6.46 % in September 2014, down from 8.59 % in April, helped by sharply lower food inflation. This is the lowest since the new series was introduced in January 2012 and marks the fourth successive month that CPI inflation has ruled below eight per cent, the RBI's target rate for January 2015. Food inflation, which had dipped in June 2014, only to reverse direction again in July 2014, fell to 7.67% in September 2014.

Inflation based on the wholesale price index (WPI) also fell to a 59-month low of 2.38% in September 2014, down from 5.25% in April 2014. The decline in food inflation was even sharper – from 8.6% in April 2014 to 3.52% in September 2014.

Two factors are likely to aid the trend of declining inflation, apart from the base effect of high inflation in the last fiscal. One, the softening of global oil prices; and two, the gradual reduction in global liquidity following the Fed taper.

Though this might be offset to some extent by further easing of liquidity by the European Central Bank and more recently, the People's Bank of China that has pledged to inject $81 bn into the economy. The Bank of Japan, of course, continues to keep monetary policy loose without apparently achieving very much.

The big question, really, is whether it is only a temporary respite on the inflation front and inflation will come back to haunt us or whether we're slowly winning the war against inflation, one battle at a time. The RBI governor clearly believes so judging by his remark early September 2014 that it is premature to cut rates. The RBI's recent fourth bi-monthly policy statement kept all policy rates unchanged as the RBI reiterated its resolve to adhere to the inflation glide path laid out in the Urjit Patel committee.

Nonetheless, inflation expectations remain high, thanks in part to expectations lagging data on the ground. If global prices of food and fuel remain soft, inflation expectations will trend down. Unseasonal rains later in the year, together with the delayed effect of the sub-normal monsoon on the kharif crop and any worsening of global tensions (Ukraine and the Middle East can be counted on to keep global tensions alive!) with its inevitable fallout on oil prices could reverse the trend. Post-October, the base effect on both WPI and CPI will wane and we could well see inflation pick up again.

For now, the RBI's interim target of eight per cent CPI by January 2015 looks well within the realm of possibility. However, the next target on its glide path for inflation – six per cent by January 2016 – looks much more 'iffy'. Much will depend on how much support the RBI gets from the finance minister. If the government sticks to its fiscal deficit target of 4.1% (without resorting to dubious financial engineering of the kind that marked the previous FM's budgets), governor Rajan will have fewer problems to contend with trying to engineer a safe landing (at 4%+/- 2%) post January 2016. But if, as in the past, the fiscal deficit is either breached or is achieved only on paper, the governor will have no alternative but to return to the battlefield and fight the same battles all over again!

Public Finance

The Budget presented in the first week of July 2014 by finance minister, Arun Jaitley, contained few surprises. Contrary to widespread expectations that the new government would present a worse position of the government finances, the FM chose to stick largely to the estimates presented by his predecessor. Thus the fiscal deficit to GDP ratio has been retained at 4.1% for FY 15 and though there is considerable skepticism about whether the government would be able to adhere to this, both rating agencies and markets seem to have given the FM the benefit of doubt.

Nonetheless, lingering doubts remain. In a slowing economy with a high likelihood of a sub-normal monsoon and global recovery far from certain, chances of gross tax revenues growing close to 18 per cent are remote. The net effect of tax giveaways announced by the FM on the direct tax front (Rs 22,200 crore) and additional resource mobilization on the indirect tax front, estimated at Rs 7,525 crore, would normally have resulted in lower tax revenues. Yet the FM assumes tax revenues will grow significantly on the back of higher GDP growth (between 5.4-5.9 per cent) and higher tax buoyancy.

The FM's optimism on the FD is based on an ambitious disinvestment target (Rs 43,425 crore as against Rs 16,027 crore in the revised estimates) and government stake sale of Rs 15,000 cr as against last year's RE of just Rs 3,000 crore. This together with a sharp increase of Rs 19,221 crore under the head of 'other non-tax revenue' is expected to aid the government stick to its FD target. However, bear in mind the fact that the disinvestment target is close to the amount raised in the past three years put together and the FM has just nine months to complete the sale and the grounds for skepticism seem entirely warranted.

Revenue and expenditure trends for the first five months of FY15 seem to buttress this view. Thus the fiscal deficit during the period April – August 2014 has almost touched 75% of the budget estimate for the entire year.

However, there is room for cautious optimism. The reason is that while revenue growth has been lower than in the comparable period last year, expenditure too has grown slower. Non–plan expenditure, the most uncontrollable and unproductive part of government expenditure has grown by little over four percent in the first five months as against 9.4% growth projected in the Budget.

The main contributor to this slower growth has been the welcome reduction in subsidies, thanks to a number of fortuitous factors – the fall in global oil prices and the inability of state governments to roll out the Food Security Act. The subsidy bill during the first five months was only Rs 1.38 lakh crore, down from Rs 1.64 lakh crore during the comparable period last year. The biggest saving is in respect of oil subsidies. As against the price of $ 108 a barrel assumed at the time of the Budget, oil prices were hovering in the range of $ 93-95 a barrel late September (and dipped below $90 a barrel by October 2014), resulting in a substantial saving in the government's oil bill and subsidies too.

Food subsidies are also lower at Rs 62,000 crore during the first five months, thanks to slower-than-expected progress on implementation of the Food Security Act and the government's decision not to buy grain from states that announce special incentives over and above the minimum support price.

Forecast

The NCAER's annual model estimates GDP growth at factor cost in FY 15 at five per cent whereas the quarterly model puts growth at 6.1 per cent. While the growth rate obtained from the annual model is lower than the previous estimate made in July, the growth rate as per the quarterly model is higher than estimated in July 2014, reflecting the heightened degree of uncertainty in the economic environment The assumptions underlying both these estimates are listed in the Forecast chapter.

As far as inflation is concerned, there is much less divergence with both the annual and quarterly models predicting lower inflation, ranging from 3.93 per cent to 4.5 per cent in FY15.

Part II: Special Section

Paper I: Financial inclusion in India: Why distinguishing between access and use has become even more important

The first paper by Indira Iyer, NCAER, traces the development of policies that promoted financial inclusion. It suggests that while universal access is a desirable public good, with a large percentage of accounts lying dormant and the significant use of informal sources of credit, good indicators of success in making financial services more inclusive must call for setting both supply-side numeric targets as well as demand side indicators to track the ongoing use of such services on a longer term basis.

It points out that in the Indian context financial inclusion, by definition, focuses on access to financial services according to a set of various indicators like the percent of households having a bank account or the number of bank branches per 100,000 population. But the share of individuals and firms who *use* financial services is equally important. The lack of use does not necessarily mean a lack of access. Some people may have access but prefer not to use these services due to various barriers like low income, lack of trust, lack of knowledge, and illiteracy while others may lack access itself as no financial services are available in their village. It is important to know whether lack of financial inclusion is mainly due to a lack of demand or a lack of supply, as the strategies to address these will differ.

Starting with the importance of financial inclusion, broadly defined as universal *access* to financial services by the poor and disadvantaged people at an affordable cost (Rangarajan Committee,2008), for economic development and poverty reduction and the various financial services that can be accessed by individuals at formal financial institutions consumers, it concludes that the government has made significant strides in improving access to financial services. In 2011 almost 60% of households in India had access to credit. However, a large percentage of bank accounts lie dormant defeating the very purpose of the availability of formal sources of finance to smooth consumption and decrease risk for the poor and the vulnerable. Therefore, it is time now to move beyond institutional based targets to address the demand side of the financial inclusion.

It points out that both the lack of access and the lack of demand is more acute in rural areas. With the growing commercialization and modernization of Indian agriculture, credit needs in the rural areas is now far greater than before. Without formal access to credit, the rural moneylenders, now posing as suppliers of inputs and consumer goods, for-profit non-banking finance companies (NBFCs), middlemen and buyers of produce, and owners of the land, still continue to have a firm hold on rural credit. But in the present growth-oriented economic climate, efforts to make financial services more affordable and more flexible to rural areas become more important.

With this in mind, there is a need to improve the supply side of credit with more specific and innovative instruments. The author suggests banks could create venture capital funds on a small scale to finance first time entrepreneurs. This would reduce risk for the entrepreneurs and the need for them to look for informal sources of finance at high interest rates. The government could also consider providing greater infrastructure and extension support for enhanced credit flow to agriculture so as to

decrease reliance on informal channels. Other innovative products to promote savings and use of financial services could include an "index based insurance" where payouts are based on a measurable index like rainfall, commodity price etc.

Ultimately, to know what type of financial services that are most needed, there is no shortcut to disaggregating the specific need for specific classes of households in specific areas.

The paper goes on question whether the BC (bank correspondent) model has really delivered on its goal to make financial services more inclusive. With a dismal record of active accounts and a high turnover of agents, it argues this model which is the backbone of the present financial inclusion strategies will need a hard rethink. It argues that in the context of greater access, Micro Finance Institutions (MFIs) could play a significant role in facilitating inclusion, as they are uniquely positioned in reaching out to the rural poor and are more trusted.

As per the NSSO and the NCAER-NSHIE surveys, the majority of poor rural households do not save and invest and lean toward informal sources of credit in times of financial hardship. For this class of the poor, a more comprehensive risk management and poverty alleviation program together with a push towards greater financial literacy and access to financial services is essential.

Other factors too play an important role in the demand for financial services. These include the adequacy, timeliness, affordability and convenience of financial services, the literacy levels of household, their income levels, the risk preferences, religion, distance to a bank and geography. A careful analysis of these factors would have to be done to ensure that the mere chasing of numerical targets of financial access and capturing headlines in the process is translated to something more practical and more meaningful for poor and the disadvantaged in the long run.

Paper II: Inter-linkages between Trade in Services and Goods and Foreign Direct Investment Inflows.

The paper on 'India's Bilateral Trade in Services: Patterns, Determinants and the Role of Trade in Goods' by Seema Sangita, NCAER, explores a nascent dataset to identify some patterns of bilateral trade in services. She also looks at the extent to which India's international trade in goods influence the patterns of bilateral trade in services. The paper hypothesizes that one of the determinants of international trade in services is international trade in goods and tests this in the Indian context using a gravity model framework.

The paper goes on to identify the determinants of the intensive margin of trade and extensive margin of trade at the BOP sectoral level. An increase in the intensive margin of trade is defined as larger exports from each service sector. An increase in the extensive margin of trade, however, refers to expansion of trade into new service sectors

It presents evidence on the existence of complementarities between bilateral trade in services and goods. An increase in exports of goods by 1% is likely to lead to an increase of almost 0.31% in services' exports. Bilateral trade in goods leads to an increase in trade both in the extensive and intensive margin of trade in services.

The results suggest there could be deep inter-linkages between trade of goods and trade of services. In most cases, the coefficient of the trade in goods variable is positive and significant denoting that there is a complementary relationship between trade in goods and services (as opposed to a substitutable one). It would appear trade in services could be an important component of the value added of commodities.

Policy making in India has tended to look at services and manufacturing as distinct from each other rather than holistically. Policies pertaining to international trade, such as tariff decisions or bilateral trade agreements, for instance have, typically, analysed trade in goods and trade in services separately.

However, there is an increasing body of literature that points towards several inter-linkages between these sectors. Hence it is imperative to re-orient policy-formulation to integrate both services and manufacturing sectors within a single framework.

Agriculture

Anil Kumar Sharma

The actual rainfall received during June–September period of the current year is 88% of its long-term average as against the 93±4% estimate made by the India Meteorological Department (IMD) in June and the updated long range forecast of 87±4% made in August. After the huge deficit observed in the early part of the season, the spatial distribution improved though it remained below normal. Rainfall was poor not only in comparison to the normal rainfall, but also in relation to last year's rainfall (2013–14). However, the overall performance of the farm sector during the current year may not be as bad as was anticipated during June and July thanks to an improvement in rainfall conditions during the months of August and September. This has improved the level of water storage in major reservoirs of the country.

A.1 South-west Monsoon

The actual rainfall received during June–September period of the current year has been 88% of its long-term average as against the 93±4 per cent estimate made by the India Meteorological Department (IMD) in June and the updated long range forecast of 87±4 per cent made in August. Hence, though monsoon rainfall for the country as a whole did turn out to be close to the predictions made, judging the performance of monsoon rainfall based on aggregate data at the national level and for the entire season as a whole is not proper as this does not reveal the variations in rainfall during all four months of the season and its spread across various regions/states of the country. For example, of the total 36 agro-meteorological sub-divisions, 24 sub-divisions covering about 70 per cent of the total area in the country have received normal to excess rainfall. The remaining 12 sub-divisions received deficit rainfall. Similarly, a month- by- month analysis of the progress of monsoon rainfall during the season clearly reveals that behaviour of monsoon rainfall this year was marked by huge fluctuations.

The South-west monsoon arrived in Kerala and its adjoining parts about five days later than its normal date of arrival and covered the entire state of Kerala and a few parts of southern India. In the initial two to three weeks, rainfall activity remained confined to virtually some southern and western parts of the country. Further progression of monsoon rainfall was then halted for a long period of time. Thus, due to its late arrival as well as passive activity, the overall rainfall during the month of June remained deficient in all four regions of the country with deficiency levels ranging from 25 per cent in the eastern region to 66 per cent in the western region (Table A.1).

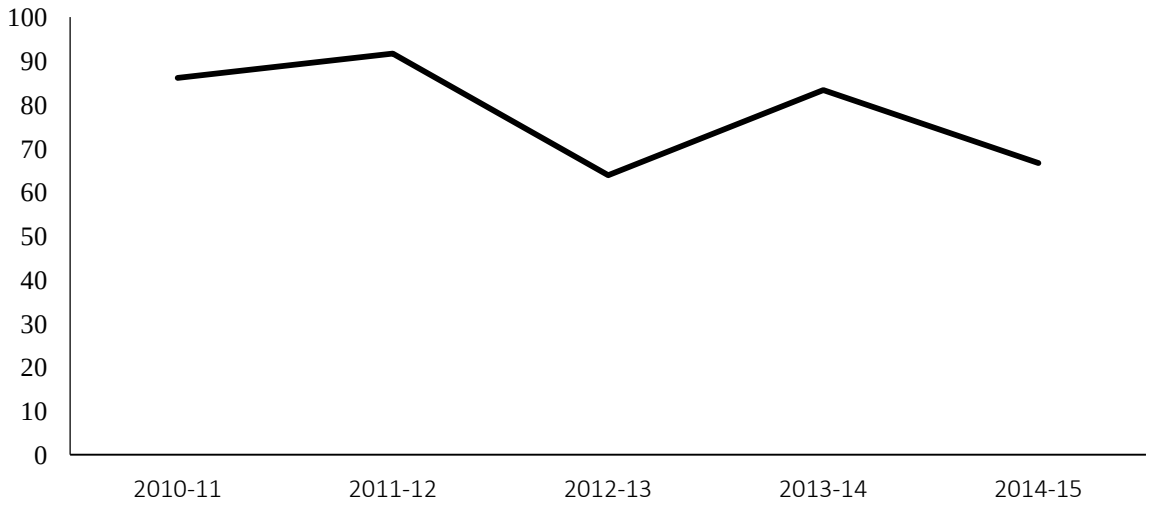
As the season progressed, monsoon started covering more parts of central and remaining parts of western and northern India. But, rainfall during July was also below normal in many parts including west, north-west, and south-west peninsula. While the rest of the country received normal rainfall, rainfall deficiency in some northern states like Haryana, Punjab and some parts of the western region (Marathwada) exceeded 50 per cent. As a result, despite some improvement in rainfall conditions, June-July period of the season ended with a deficiency of 19 per cent at the national level and 32 per cent in the northern region of the country. Though, overall deficiency in rainfall at the national level did witness a decrease from 44 per cent by the end of June to 19 per cent by the end of July.

In the month of August also, rainfall activity witnessed a significant improvement in two of the four regions (eastern and southern), which led to huge changes in the overall monsoon rainfall in many states of the country in these two regions. The overall rainfall deficiency which was 19 per cent till the end of July, however, witnessed, only a marginal reduction 16 per cent by the end of August because the situation in the remaining two regions (western and southern), however, did not see much change.

The momentum of improvement in rainfall conditions observed during the month of August also continued in the month of September. However, in the northern and western regions, deficiency of rainfall was so severe in the first three months of the season that late recovery in September did not make much difference to the overall scenario. This is particularly true for states such as Uttar Pradesh, Haryana, Punjab, and Himachal Pradesh in the northern region and parts of Madhya Pradesh and Marathwada in the western region. Thus, both these regions ended with an overall deficiency in rainfall of 30 per cent and 15 per cent, respectively.

Thus, the spatial distribution of overall seasonal rainfall during 2014–15 remained below normal after observing huge deficits in the early part of the season. Further, monsoon rainfall was not only poor in comparison to the normal rainfall, but also in relation to last year's rainfall (2013–14). This is reflected in the low share of sub-divisions of the country that received normal to excess rainfall (Figure A.1).

Figure A.1: Agro-meteorological Sub-divisions that received Normal Rainfall (%), 2010–11 to 2014–15



Source: India Meteorological Department.

Evidently, in comparison to the year 2012–13, which also witnessed somewhat similar distribution, the spread of overall monsoon rainfall during 2014–15 was marginally better. Thus, considering the huge variations in performance of monsoon rainfall in several parts of the country, this year's monsoon rainfall turned out to be rather poor from an overall perspective. The year clearly witnessed extremely erratic temporal as well as spatial distribution of rainfall – very heavy rains in parts such as Jammu and Kashmir and South Interior Karnataka that led to severe floods and extreme deficiencies in some states such as Haryana, Punjab, Uttar Pradesh, and Marathwada region of Maharashtra.

A.2 Prospects for 2014–15

The impact of poor distribution of seasonal rainfall is evident in the preliminary estimates of kharif output released by the ministry of agriculture. According to these estimates the output of kharif food grains is likely to be in the region of 120 million tonnes, which exhibits a decrease of about seven per cent over the previous year's estimated output of 129 million tonnes. The shortfall in output is on account of loss in the output of coarse cereals (14%) as well as pulses (18%), and also rice (4%).

Our own estimates also show that deficit in the overall food grain output may be slightly lower, approximately two to four per cent, which implies that food grain output during the current kharif season may be in the region of 119 to 122 million tonnes (Table A.2). According to our estimates output of all three components of kharif food grains - rice, coarse cereals, and pulses is expected to be close to the first advance estimates, which have been put out by the ministry.

However, our own estimates for this year's output of oilseeds are less in line with the initial estimates of the ministry, and suggest around 23 per cent decline as against ministry's estimated decline of 12 per cent reduction in the expected output of kharif oilseeds. For cotton also the ministry's estimates place output at about 35 million bales, which is about five per cent lower than last year's output, but estimates computed by us suggest a somewhat lower reduction and even a marginal increase. In the case of sugarcane, the preliminary estimates by the ministry have placed output of sugarcane at about 343 million tonnes, which is about two per cent below last year's output. Our own estimates, however, suggest a modest increase as compared to last year's output of sugarcane. This is largely because sugarcane a completely irrigated crop and is less dependent on monsoon rainfall.

It is important to note that variations in estimated output between our estimates and those prepared by the ministry of agriculture are due to differences in the methods used to arrive at the estimates. While the ministry's estimates are based on preliminary information supplied by the state governments our estimates on the other hand are based on regression models, which incorporate the impact of monsoon rainfall as well as trend factor. Notwithstanding these differences, it is unlikely that the actual rates of growth in agricultural output will be significantly different from estimates arrived at by us.

Going forward the overall performance of this sector during the current year may not turn out to be as bad as anticipated during June and July because of improvement in rainfall conditions during the months of August and September.

This has improved the level of water storage in major reservoirs of the country. As on October 1, 2014 the level of storage in major reservoirs of the country was about 91 per cent of last year's storage level and 102 per of last ten year's average level of storage during the same period. This bodes well for the upcoming rabi season. For most crops the incidence of pests and diseases continues to remain below the economic threshold levels and there have been no reports of any shortages in the supply of fertilisers or other inputs such as seeds, insecticides, and pesticides.

Food inflation may also decline as the trends suggest somewhat better outlook during the year 2014–15 compared to 2013–14 (Table A.3). A few commodity groups like fruits, condiments and spices, and milk have exhibited much higher rates of inflation during the current year, however, commodities that have higher weights in the food basket have experienced lower rates of inflation which include cereals, vegetables, and eggs, meat and fish. As a result, food inflation in April–September period of 2014–15 is much lower at seven per cent compared to last year's rate of close to 13 per cent.

Table A.1: Deviations in the Monsoon Rainfall Indices from the Normal

S. No.	Region	June	June–July	June–August	June–September
1.	Eastern	–24.5	–13.7	–7.8	–6.6
2.	Western	–66.2	–19.4	–20.6	–15.1
3.	Northern	–57.5	–31.9	–34.0	–29.8
4.	Southern	–38.5	–18.4	–0.6	–8.1
	All India	–44.0	–18.8	–16.2	–14.7

Source: Computed.

Notes:

1. These are deviations in regional level rainfall indices computed on the basis of un-irrigated area under foodgrains as weights.
2. The eastern region includes – Assam, Bihar, Jharkhand, Orissa, and West Bengal
3. The western region includes – Chhattisgarh, Gujarat, Madhya Pradesh, Maharashtra, and Rajasthan
4. The northern region includes - Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Uttar Pradesh, and Uttarakhand
5. The southern region includes Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu

Table A.2: Estimated Rates of Growth in Kharif Crop Output during 2014–15

Crops	Estimated Output (Ministry of Agriculture) (Million tonnes/bales*)		Estimated Output and Rates of Growth for 2014–2015	
	2013–14	2014–15 (First Advance Estimates)	Estimated Output (Million tonnes/bales*)	Estimated Rates of Growth (%)
Rice				
Kharif	91.7	88.0	87.2 to 89.6	–2.3 to – 3.6
Coarse cereals				
Kharif	31.5	27.1	26.4 to 26.9	–14.7 to –15.5
Pulses				
Kharif	6.0	5.2	4.9 to 5.1	–15.5 to –16.7
Foodgrains				
Kharif	129.2	120.3	118.5 to 121.6	–5.9 to –7.1
Oilseeds				
Kharif	22.4	19.7	17.2 to 17.5	–22.6 to –23.3
Cotton*	36.6	34.6	34.6 to 37.0	–2.1 to 1.2
Sugarcane	350.0	342.8	359.0 to 369.0	4.1 to 5.7

Source: Computed.

Notes :

1. Estimate I has been worked out using output equations.
2. Estimate II has been worked out using area and yield equations.

Table A.3: Changes in Wholesale Price Indices of Food Articles in 2013–14 and 2014–15 (April – September)

S. No.	Product	Increase in 2013–14 over 2012–13	Increase in 2014–15 over 2013–14
1	Food Articles	12.5	7.2
2	Cereals	16.0	5.6
3	Pulses	–3.7	2.7
4	Vegetables	37.0	–5.0
5	Fruits	3.1	21.7
6	Milk	4.6	10.6
7	Eggs, meat and fish	13.3	3.8
8	Condiments and spices	13.3	24.8
9	Other food articles	–1.6	5.9

Source: Computed.

Industry

Poonam Munjal

The first five months of FY 15 was marred by lack-lustre industrial performance, despite an all-too brief period during Q1 when industry flattered to deceive Industrial growth fell to a revised 0.4 per cent in July 2014 and stayed at that level in August 2014, with manufacturing growth, in particular, seriously impacted. However the PM's ambitious "Make in India" campaign could give a thrust to this sector. The combined efforts of RBI-easing policy rates- and government - taking prompt action on its committed agenda for the industry sector-could help turn around the flagging industrial sector and give an impetus to overall economic growth

I.1 Industry GDP

In April 2014, the growth in factory output rose to 3.7 per cent, its maximum in a year and a half. It improved in the following month when growth touched 5.6 per cent. The growth recorded in these two months pointed towards a recovery under way after a period of slow industrial activity in the previous three years. Industrial production grew 2.9 per cent in 2011-12, decelerated further to 1.1 per cent in 2012–13 and then slipped into the red zone with –0.1 per cent growth in 2013–14. The growth of 3.7 per cent in April 2014 came after months of negative or sub one–per cent growth. An accelerated growth of 5.6 per cent in the second month in a row gave a flicker of hope that the economy could be bottoming out. This was expected to sustain with the industry-friendly Modi government coming into power.

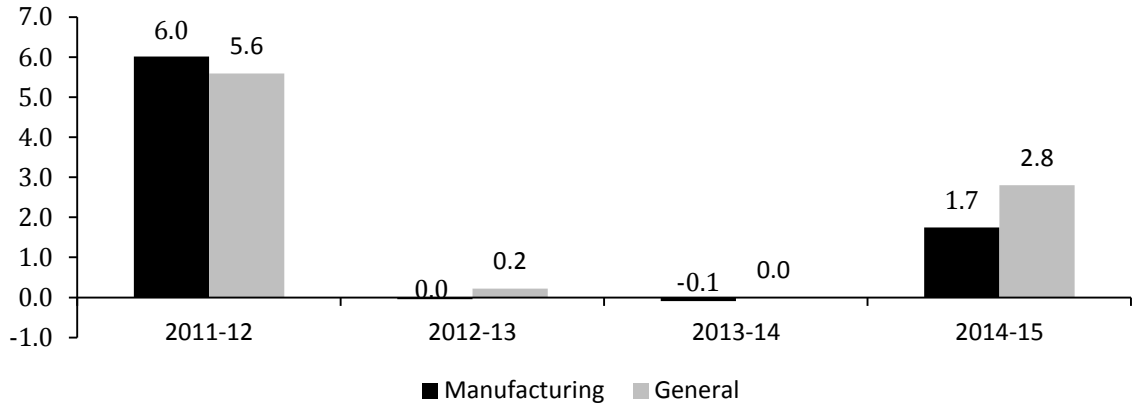
However, such expectations proved short-lived and industrial growth decelerated to 3.9 per cent in June 2014, falling to (a revised) 0.4 per cent in the following month and stayed at that level in August 2014 (Figure I.1). A bigger concern is the manufacturing sector, constituting 75 per cent of the total index of industrial production, which is now in negative territory for the second consecutive month.

Nonetheless, the impressive growth in just first two months of current fiscal helped push industrial growth for the period April–August up to 2.8 per cent. As compared to this, the corresponding period saw a flat growth in 2013–14 after a tad better growth of 0.2 per cent in 2012–13.

In tandem with the Index of Industrial Production (IIP) data, quarterly GDP estimates also exhibited a marked pickup in industrial growth during the first quarter of 2014–15 (Table I.1). After witnessing two quarters of negative growth, industry grew smartly at 4.2 per cent in Q1FY15, on the back of 3.5 per cent growth in manufacturing sector and 10.2 per cent growth in electricity, gas & water supply. Mining sector also contributed its bit by growing at 2.1 per cent. This, coupled with the 6.8 per cent growth in services sector led to the 5.7 per cent growth in overall GDP, the highest in nine quarters.

However, the picture for the following quarter does not appear to be as rosy. The dismal performance of industry production in the first two months of the second quarter poses a serious threat to the overall GDP growth for the quarter.

Figure I.1: Growth in Industrial Production during April–August, 2011–12 to 2014–15



Source: Central Statistics Office.

I.2 Broad Sectors of IIP

The growth in factory output stood at 4.2 per cent during the first quarter of 2014–15 over the same quarter of previous year. This was driven by the 3.8 per cent growth in manufacturing sector, highest in previous three years (Table I.2). Mining sector was clouded with the sub-zero growth for months together till it posted the growth of 0.5 per cent in the third quarter of 2013–14. The growth in this sector picked up steam in the following quarters and stood at 2.9 per cent in the first quarter of 2014–15. However, the Supreme Court's verdict on de-allocating coal mines has already dampened the prospects of the mining sector in the coming months.

The star performer was the power sector which clocked the growth of 11.3 per cent in the first quarter and continued to post double-digit growth in the subsequent two months as well. For the period April–August 2014, growth in power generation stood at 11.6 per cent, on the back of 15.4 per cent growth in thermal power generation and 4.6 per cent growth in nuclear power generation. When compared with the targets, the actual electricity generation for each category (thermal, hydro and nuclear) exceeded the respective targets (Table I.3). As a result there was a close to 142 per cent increase in the addition to power generation capacity during April–August as compared to the same period of the previous year. According to the latest monthly report by Central Electricity Authority (CEA), there was an addition of 3,433 MW during the first five months of previous fiscal year, which increased close to two and a half times, to 8,318 MW, during the corresponding months this year. A number of power projects were commissioned during this period including the 700 MW capacity thermal power project commissioned at Rajpura in Punjab and two power projects of 660 MW capacity each commissioned at Talwandi in Punjab and Sasan in Madhya Pradesh.

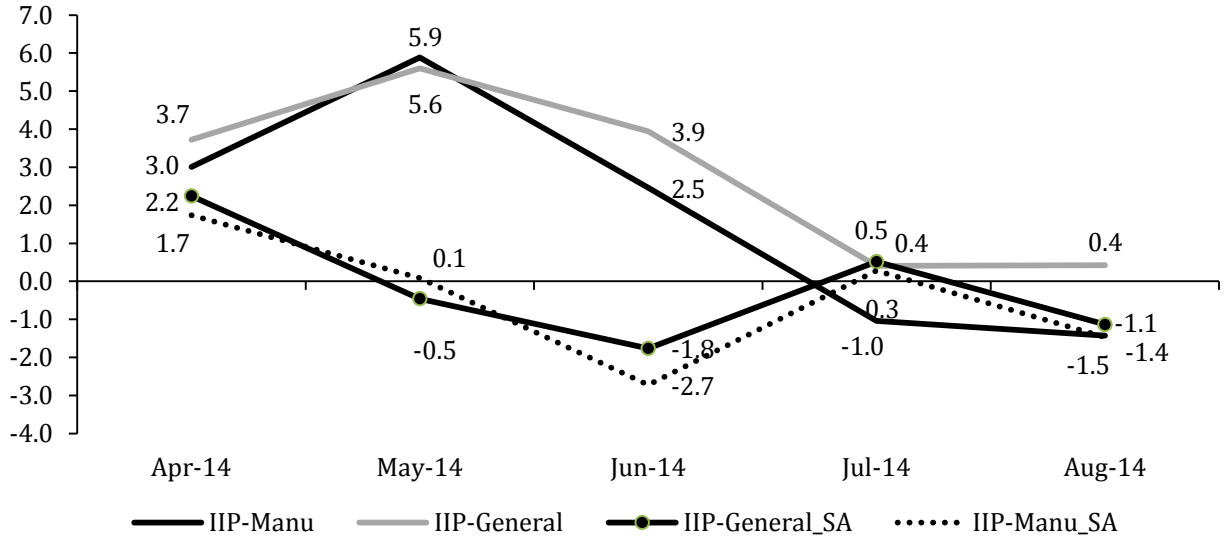
Although electricity generation accounts for only 10.3 per cent of the total index for industry, its noteworthy performance contributed to overall growth in a big way. Industrial growth, barring electricity, would have shrunk by 0.8 per cent in July 2014 and by 1.0 per cent in August 2014.

I.3 Base effect

The industrial growth recorded during the April – August 2014 also owes a lot to the base effect. The graph below plots the actual IIP growth seen in overall and manufacturing index and the same seen in their seasonally adjusted series (Figure I.2). The surge in IIP growth recorded in May 2014, the biggest saving grace for the entire period of April–August, was largely on account of the low base. Overall industrial production saw a decline of 2.5 per cent in May 2013 while manufacturing output fell 3.2 per cent, thereby contributing to the apparent 'recovery' in May 2014.

Meanwhile, the seasonally adjusted series shows that the production for both overall industry and manufacturing fell sharply in this month when compared with the levels of previous month. Overall industrial growth entered negative territory with a contraction of 0.5 per cent while manufacturing growth stood at a meagre 0.1 per cent in May 2014. There was a further deceleration in the following month. Again in July, the high base of the previous year resulted in slow growth this fiscal, albeit there is an improvement in performance as witnessed in deseasonalised series. However, the low growth in August even on a low base is a grave matter of concern.

Figure I.2: IIP growth (% m–o–m on deseasonalised series and % Y–o–Y), April 2014 to August 2014



Source: Central Statistics Office.

I.4 Use-based categories of manufacturing sector

On the use-based classification, basic goods posted a growth of 8.6 per cent during the current year to date (Table I.4). This was driven by the impressive growth in both mining and electricity, which are the main constituents of this sub-sector. However, the healthy growth in this sub-sector, even with its weight of 45.7 per cent, failed to offset the sharp de-growth witnessed in consumer goods. Inflationary

pressures and high interest rates have kept consumer demand low despite the early onset of festive season.

The growth in consumer goods fell by 4.9 per cent during the period April–August 2014 as compared to the same in the corresponding period last year. While growth in consumer non-durable goods stayed muted at 0.9 per cent, consumer durable goods saw a sharp contraction of 12.9 per cent, becoming the biggest laggard in the overall manufacturing sector. More worrisome is the fact that this contraction happened on a low base.

The data at 5-digit level of industry classification for the month of August 2014 reveals that the items that together account for about 65 per cent of the total weight of consumer durables, posted negative growth during August 2014. Of 43 items within consumer durables, there are a total of 22 such items. The items that registered sharp deceleration in production during the said period were telephone instruments including mobile phones (–57%), marble tiles and slabs (–44%), motor cycle tyres (–37%) and wood furniture (–11%).

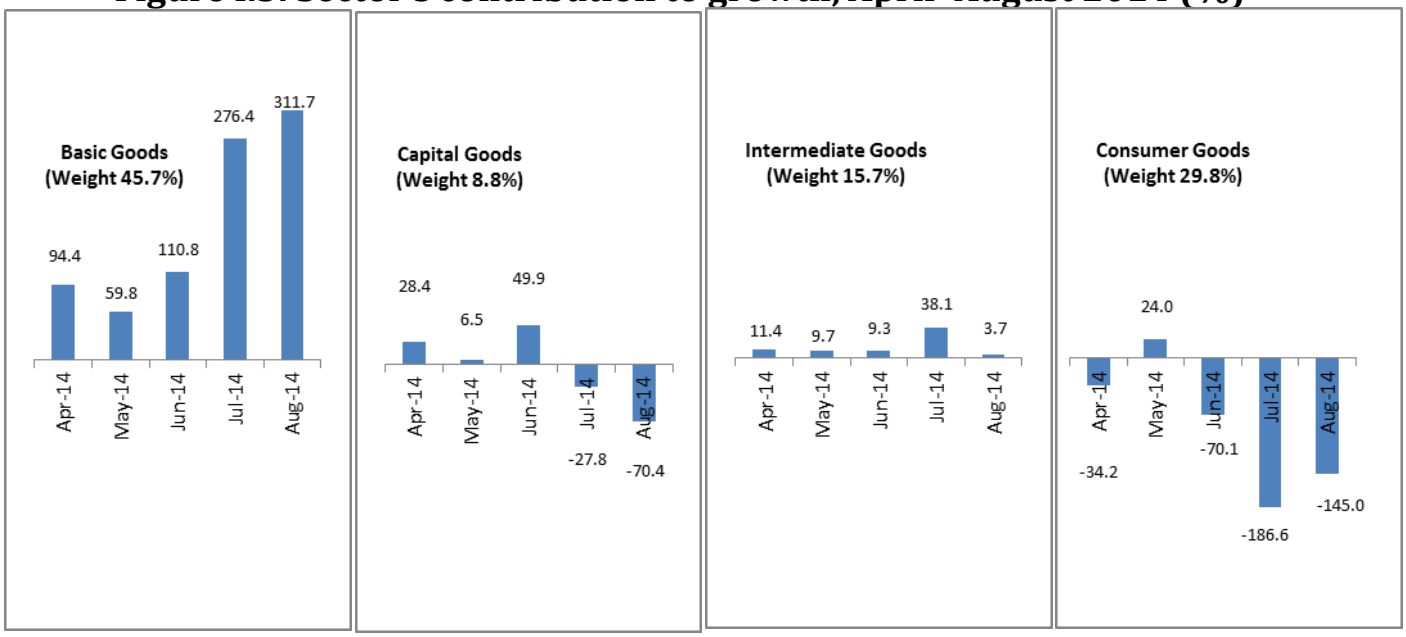
Among consumer non-durables, items that together account for 63 per ecnt of the total weight of this category posted negative annual growth in August 2014. Among these, antibiotics, with the highest weight of 11.2 per cent within the category, showed a decelerated growth of –24 per cent. Others that registered a sharp fall in production were sunflower oil (–74%), polythene bags (–42%) and soyabean extraction (–41%).

Capital goods, on the other hand, benefitted from the low base and managed to post a growth of 4.3 per cent during April–August 2014. However, the plunge seen in July and August raises concerns over capacity expansion in the manufacturing sector. Among the five-digit level of industry items that lie in this category, commercial vehicles which accounts for 22 per cent of the total weight of capital goods, saw a fall in production by 4.6 per cent in August 2014. Among the other items that do not carry significant weight but suffered a huge fall in production are food processing machinery (–62%), agricultural implements (–53.5%), generator (–51%) and computers (–49%). The items that account for only 33 per cent of the total weight of capital goods (31 in number, of the total 73 items) posted positive growth in August over the same month of previous year.

I.5 Contribution to Growth

Figure I.3 presents the contribution of each use-based category in the overall industrial growth during the period of April to August 2014. While contributing 45.7 per cent in the total industry basket, basic goods contributed as much as 311.7 per cent in attaining the overall industrial growth of 0.4 per cent in the latest month of August 2014. On the other hand, 6.9 per cent fall in the production of consumer goods (weight 29.8 per cent) translated into its negative contribution of 145 per cent. The pull-down on account of capital goods in overall growth increased significantly in August as against that in the previous month.

Figure I.3: Sector's contribution to growth, April–August 2014 (%)



Source: Central Statistics Office.

I.6 Performance at the Two-digit level

Of the 22 industries at the 2-digit level, 12 industries posted a decelerated growth during April–August 2014 (Table I.5). Of these, four industries which clocked double-digit negative growth were radio, TV and communication equipment & apparatus (–21.4%); office, accounting & computing machinery (–15.8%); furniture, manufacturing n.e.c. (–15.2%); and machinery & equipment n.e.c. (–12.9%). Only two industries grew at double-digits, both exceeding and touching the 30 per cent mark. These two industries were wearing apparel, dressing and dyeing of fur (41.7%) and electrical machinery & apparatus n.e.c. (29.7%).

I.7 Performance of Core sectors

Unlike overall industry, the infrastructure industries – coal, crude oil, natural gas, petroleum refinery products, fertilisers, steel, cement and electricity (together carrying the weight of 38 per cent in the total industry) performed much better by posting a growth of 4.4 per cent during April–August 2014 over the same period in previous year. It is evident that while core sectors which largely comprises of basic and intermediate goods have performed well, it is the non-core sector – comprising particularly of capital goods and consumer goods – which led to the slow growth of over industry.

Of the eight core sectors, five showed positive growth with cement and electricity production growing at double-digit rate of growth (Table I.6). Coal production grew at a robust 7.2 per cent during April–August 2014. However, the coal production growth numbers might tumble, next month onwards. The Supreme Court's ruling, dated 25th August 2014, that 218 coal blocks were awarded illegally is expected to take a toll on domestic coal production as only 30 coal blocks operated following the ruling, the total capacity of which is only 10 per cent of the total production. Within a

month of this ruling, SC cancelled 214 coal block allocations from 1993 to 2010, sparing two coal blocks of Reliance Power and one each of NTPC and SAIL. The mass cancellation of awards is bound to increase the country's reliance on imports as two-third of country's electricity generation depends on coal.

On the other hand, the production of natural gas, the sector which is long awaiting the implementation of pricing reforms and thus depends heavily on imports, has been posting negative growth since December 2010. Production of crude oil and refinery products also shrank in all the months of current fiscal year, except in June 2014 when these grew at a snail's pace of 0.1 and 1.2 per cent, respectively.

I.8 Outlook

Making India a global manufacturing hub is clearly the Prime Minister, Narendra Modi's one of the top agenda. His ambitious "Make in India" campaign is expected to give a thrust to the country's manufacturing sector, thereby creating a multitude of job opportunities. However, concrete policy actions will be required to implement this initiative. As of now, the manufacturing activity is sadly lagging behind.

The RBI's policy stance also weighs heavily in favour of combating inflation (which is already showing signs of moderation) rather than growth. The combined efforts of RBI easing the policy rates and government taking prompt actions on its committed agenda for the industry sector might help in turning around the flagging industrial sector and give an impetus to the overall economic growth.

Table I.1: GDP growth – Quarterly estimates by sector

		Agriculture	Industry	Mining & quarrying	Manufacturing	Electricity, gas & water supply	Services	Overall GDP
2011–12	Q1	6.5	10.1	*0.3*	*12.4*	*8.5*	6.7	7.6
	Q2	4.0	8.2	*–4.6*	*7.8*	*10.3*	7.0	7.0
	Q3	5.9	6.9	*–1.9*	*5.3*	*9.6*	6.5	6.5
	Q4	3.4	6.3	*5.8*	*4.7*	*5.4*	6.1	5.8
2012–13	Q1	1.8	0.3	*–1.1*	*–1.1*	*4.2*	7.2	4.5
	Q2	1.8	–0.4	*–0.1*	*0.0*	*1.3*	7.6	4.6
	Q3	0.8	1.7	*–2.0*	*2.5*	*2.6*	6.9	4.4
	Q4	1.6	2.1	*–4.8*	*3.0*	*0.9*	6.3	4.4
2013–14	Q1	4.0	–0.4	*–3.9*	*–1.2*	*3.8*	7.2	4.7
	Q2	5.0	2.6	*0.0*	*1.3*	*7.8*	6.3	5.2
	Q3	3.7	–0.4	*–1.2*	*–1.5*	*4.7*	7.2	4.6
	Q4	6.3	–0.2	*–0.4*	*–1.4*	*7.2*	6.4	4.6
2014–15	Q1	3.8	4.2	*2.1*	*3.5*	*10.2*	6.8	5.7

Source: Central Statistics Office

Table I.2: IIP – Broad sectors (% growth, y–o–y)

	Mining	Manufacturing	Electricity	General
	141.57	**755.27**	**103.16**	**1000.00**
		Annual		
2011–12	–2.0	3.0	8.2	2.9
2012–13	–2.3	1.3	4.0	1.1
2013–14	–0.6	–0.8	6.1	–0.1
		Quarterly		
2013–14 Q1	–4.7	–1.1	3.5	–1.0
2013–14 Q2	–0.2	1.4	8.4	1.9
2013–14 Q3	0.5	–1.6	5.0	–0.8
2013–14 Q4	1.8	–1.6	7.6	–0.4
2014–15 Q1	2.9	3.8	11.3	4.4
		Monthly		
Apr–14	1.7	3.0	11.9	3.7
May–14	2.5	5.9	6.7	5.6
Jun–14	4.5	2.5	15.7	3.9
Jul–14	1.2	–1.0	11.7	0.4
Aug–14	2.6	–1.4	12.9	0.4
		April–August		
2012–13	–1.7	0.0	4.8	0.2
2013–14	–3.6	–0.1	4.6	0.0
2014–15	2.5	1.7	11.7	2.8

Table I.3: Electricity Generation (Billion Units, BU) – Targets and Achievement

	April–August 2013	April–August 2014		% Achievement	y–o–y % growth
	Actual	**Target**	**Achievement**		
Thermal	315.706	346.589	364.237	105.1	15.4
Hydro	66.739	61.457	64.661	105.2	–3.1
Nuclear	13.425	14.049	14.042	100.0	4.6
Bhutan Import	3.47	2.547	2.918	114.6	–15.9
Total	399.34	424.642	445.858	105.0	11.6

Source: Central Electricity Authority

Table I.4: IIP – Use–based categories (% growth, y–o–y)

	Basic Goods	Capital Goods	Intermediate Goods	Consumer Goods	Consumer Durables	Consumer Non–Durables	General
	(456.82)	(88.25)	(156.86)	(298.08)	(84.60)	(213.47)	(1000)
April–August							
2011–12	7.6	7.4	0.9	4.4	4.5	4.3	5.6
2012–13	2.8	–14.4	1.0	3.2	5.1	1.6	0.2
2013–14	0.2	0.7	2.4	–1.6	–11.2	6.8	0.0
2014–15	8.6	4.3	2.5	–4.9	–12.9	0.9	2.8
Monthly							
Apr–14	8.6	13.4	3.0	–4.8	–7.7	–2.7	3.7
May–14	7.5	4.2	3.5	4.6	3.6	5.2	5.6
Jun–14	10.0	23.3	2.4	–9.7	–23.4	0.6	3.9
Jul–14	7.4	–3.9	3.0	–7.7	–20.9	2.4	0.4
Aug–14	9.6	–11.3	0.3	–6.9	–15.0	–0.9	0.4

Table I.5: IIP, 2–digit industries (% growth, y–o–y)

		April–August			Monthly				
	Weight	**2012–13**	**2013–14**	**2014–15**	**Apr–14**	**May–14**	**Jun–14**	**Jul–14**	**Aug–14**
Food products and beverages	15.7	16.6	–0.8	–1.2	10.22	9.24	1.80	4.15	8.52
Tobacco products	61.6	–3.6	–5.5	0.3	7.87	35.27	–0.94	–11.95	5.60
Textiles	27.8	–1.6	8.1	3.6	6.00	7.23	1.49	2.07	–1.67
Wearing apparel; dressing and dyeing of fur	5.8	–8.9	–3.7	41.7	–22.37	9.87	–5.80	–7.44	–10.14
Luggage, handbags, saddlery, harness & footwear; tanning and dressing of leather products	10.5	6.3	4.0	7.7	5.00	11.26	10.57	4.76	10.90
Wood and products of wood & cork except furniture; articles of straw & plating materials	10.0	–4.4	–2.8	–3.0	–1.82	1.58	–6.14	5.91	4.20
Paper and paper products	10.8	5.4	1.0	1.3	1.93	1.32	3.15	–2.11	4.39
Publishing, printing & reproduction of recorded media	67.2	9.1	14.8	2.8	–5.27	–5.95	–4.89	–6.90	–6.09
Coke, refined petroleum products & nuclear fuel	100.6	5.9	4.2	8.3	1.41	–3.34	1.32	–5.01	–4.56
Chemicals and chemical products	20.2	0.8	3.0	8.5	–4.62	3.86	2.19	6.10	–5.31
Rubber and plastics products	43.1	–1.2	2.8	–2.5	–0.76	1.75	3.62	7.47	5.25
Other non–metallic mineral products	113.4	2.9	3.8	–0.2	6.26	7.20	9.45	11.96	4.58
Basic metals	30.8	15.5	1.5	–2.9	14.25	11.80	11.74	12.53	19.08
Fabricated metal products, except machinery and equipment	37.6	14.5	2.6	–7.8	5.83	4.05	–0.46	–2.19	–9.68
Machinery and equipment n.e.c.	3.1	–1.7	2.2	–12.9	4.75	8.65	4.69	4.77	5.14
Office, accounting and computing machinery	19.8	11.9	–5.7	–15.8	–21.15	–31.55	–60.52	–31.11	–43.93
Electrical machinery and apparatus n.e.c.	9.9	2.0	–31.8	29.7	65.48	34.95	69.12	–6.22	–17.77
Radio, TV and communication equipment & apparatus	5.7	1.1	12.6	–21.4	–31.75	–40.32	–62.94	–58.32	–48.75
Medical, precision and optical instruments, watches and clocks	40.6	–5.3	12.7	–8.0	–5.46	–0.40	3.48	–0.82	1.79

Motor vehicles, trailers and semi–trailers	18.2	15.5	–3.0	–4.6	–14.58	–7.27	7.34	0.35	–2.09
Other transport equipment	30.0	17.3	–1.7	3.0	6.63	13.95	7.72	17.05	14.33
Furniture; manufacturing n.e.c.	141.6	1.8	–7.8	–15.2	–7.59	61.55	–13.44	–17.30	–0.48

Table I.6: Growth in core sector (% growth, y–o–y)

	Overall Index	Coal	Crude Oil	Natural Gas	Petroleum Refinery Products	Fertilizers	Steel	Cement	Electricity
April–August									
2011–12	5.9	–2.3	6.1	–8.9	4.6	1.2	11.6	4.1	9.4
2012–13	6.3	7.4	–0.6	–12.0	25.6	–7.9	2.8	8.3	4.9
2013–14	4.2	0.2	–1.6	–17.0	4.6	1.8	13.3	3.1	4.4
2014–15	4.4	7.2	–1.2	–5.8	–2.7	2.8	2.0	11.0	11.3
Monthly									
Apr–14	4.2	3.3	–0.1	–7.7	–2.2	11.1	3.1	6.7	11.2
May–14	2.3	5.5	–0.3	–2.2	–2.3	17.6	–2.0	8.7	6.3
Jun–14	7.3	8.1	0.1	–1.7	1.2	–1.0	4.2	13.6	15.7
Jul–14	2.7	6.2	–1.0	–9.0	–5.5	–4.2	–3.4	16.5	11.2
Aug–14	5.8	13.4	–4.9	–8.3	–4.3	–4.3	9.1	10.3	12.6

India's Service Sector: A Mid-Year Review of Performance and Outlook

Rupa Chanda[1]

Although the service sector has been a driver of growth, many regulatory and policy bottlenecks remain. There is a need to move beyond the IT and business services-led paradigm and focus on developing services that are better integrated with the rest of the economy through backward and forward linkages. Complementary regulatory frameworks and domestic reforms also need to be put in place to support liberalization in various services. In the context of FTA negotiations, India needs to pursue its interests in services by pushing for greater market access for its service providers. from partner countries.

S.1 Introduction

India's service sector has emerged as the largest and the fastest growing sector of the economy. The sector accounted for 57 per cent of GDP in 2013–14 without construction and for 64.8 per cent of GDP if one includes construction activity. In the global context, among the top 15 countries in terms of economic size, in 2012, India ranked 10th in terms of its overall GDP and 12th in terms of its services GDP.[2] The sector consists of a wide range of activities from modern, technology-intensive services such as IT, telecommunication and audiovisual services to others with high employment linkages such as tourism and distribution services and others with high linkages with industry such as transport and other infrastructure services.

Services have consistently registered the highest growth among all sectors of the economy and have helped drive India's overall GDP growth for the past decade and more. The CAGR for services GDP at 8.5 per cent for the 2000–13 period has exceeded that for overall GDP at 7.1 per cent. Globally, India had the second fastest growing services sector, after China over the 2000–13 period. Services have also contributed significantly to India's foreign investment flows and exports. India has had the fastest growth in services exports among all leading service exporters, with a CAGR of 20.2 per cent over the 2001-13 period. However, the sector's share in employment has remained low at 28.1 per cent in 2012, when compared with its very high contribution in GDP.

This chapter provides an overview of the Indian service sector's performance in the 2013-14 financial year and specifically in the first half of the current 2014–15 financial year (FY) and outlook for the remainder of FY 2014–15. It also highlights some important domestic and international developments in this sector. The chapter concludes with a summary of various regulatory and institutional issues that need to be addressed in the service sector to improve the latter's growth prospects in the near term.

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[2] Most of the discussion in the introduction and subsequent section is based on the Economic Survey, 2013-14, unless mentioned otherwise.

S.2 Services Performance in 2013–14

The services sector has registered sub-normal growth in the last two years, reflecting the effects of the continued global and domestic slowdown. In FY 2013–14, the services sector grew at 6.8 per cent, marginally lower than in 2012–13 (Table S.1). This deceleration was due to slower growth in the subsectors of trade, hotels and restaurants and transport, storage and communications which slowed from 5.1 per cent in FY 2012–13 to 3 per cent in FY 2013–14. Construction also registered very slow growth at 1.6 per cent in 2013–14. The subsectors of financing, insurance, real estate and business services, however, registered high growth of 12.9 per cent with banking and insurance showing the highest growth at 11.8 per cent followed by the real estate, ownership of dwelling and business services subsectors at 10 per cent. The worst performing subsectors were railways at 0.3 per cent followed by hotels and restaurants at 0.5 per cent. Overall, the service sector exhibited mixed performance across its different sub-segments in FY 2013–14. Table S.1 shows the overall and sub-sectoral performance of India's service sector for the past few years.

India's share in world services exports has increased over the past two decades, from 0.6 per cent in 1990 to 3.3 per cent in 2013, higher than its share in world merchandise exports.

India's services exports have grown more rapidly than for the world through most of the past decade, but in FY 2013–14, services export growth decelerated from 5.4 per cent in FY 2012–13 to 4.8 per cent, lower than for the world. Software services exports, which constituted 46 per cent of total services exports registered slower growth in FY 2013–14 at 5.4 per cent as compared to 5.9 per cent in FY 2012–13 while travel services registered negative growth of 0.4 per cent. Financial services exports grew very strongly at 34.4 per cent in FY 2013–14.

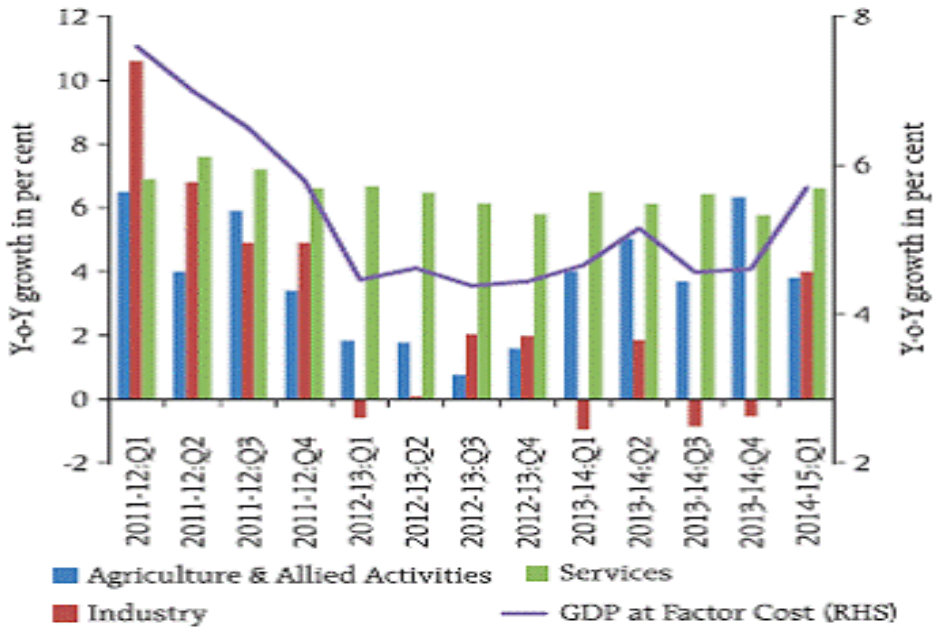
The service sector attracted a significant share of FDI, accounting for 45 per cent of cumulative FDI equity inflows for the April 2000–March 2014 period. As per the DIPP, cumulative FDI inflows in services amounted to US $40,197 million between April 2000 and June 2014. The leading recipient sectors were financial and non-financial services, construction, telecommunications, computer hardware and software and hotels and tourism. Other services receiving FDI included trading, information and broadcasting, consulting, hospital and diagnostic, education, air transport, ports and retail services. Together these services accounted for 54.7 per cent of total FDI inflows for the 2000–01 to 2013–14 period. However, FDI inflows to these leading sectors declined sharply by 37.6 per cent to US$ 6.4 billion compared to an overall growth of 6.1 per cent in total FDI inflows in 2013–14.

Services inflation is not captured in the WPI and is partially captured in the CPI through items like medical care, education, recreation, transport, communication and housing. Preliminary price indices which have been developed for certain services indicate a fall in telecom and banking services inflation in recent years, mild inflation for postal services and a sharp increase in inflation for railway services.

S.3 Services performance and outlook in 2014–15

Following the deceleration in services growth in the last two years, there are signs of a growth revival in this sector in FY 2014–15. Alongside overall GDP which grew by 5.7 per cent in Q1 of FY 2014–15, services grew by 6.6 per cent, up from 5.8 per cent in Q4 of FY 2013–14 and higher than the growth registered by industry and agriculture in the first quarter of FY 2014–15. Figure S.1 shows the quarterly GDP growth performance of the three broad sectors of the economy between 2011 until the first quarter of FY 2014–15 while Table 2 shows the quarterly sub-sectoral performance within individual sectors for FY 2013–14 and the first quarter of FY 2014–15.

Figure S.1: Overall and sectoral quarterly GDP growth, 2011–12 Q1 to 2014–15 Q1 (%)



Source: RBI, Monetary Policy Report, September 2014, http://rbi.org.in/scripts/PublicationsView.aspx?id=16048#I2 (accessed October 8, 2014)

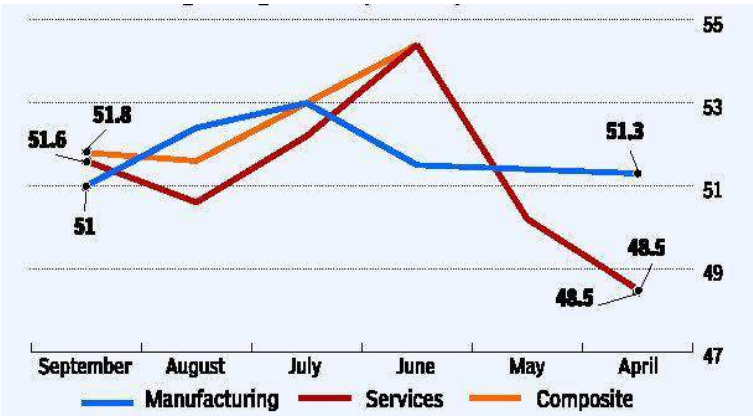
As shown in Table S.2, within the service sector, growth has varied across subsectors. Segments such as community, social and personal services and finance, insurance, real estate and business services have shown good performance with growth rates of 9.1 per cent and 10.4 per cent, respectively in Q1 of FY 2014–15 while segments such as trade, hotels and restaurants and construction have registered lower growth rates.

Among the services sectors, some key indicators indicate improved activity. For instance, the net tonne kilometres and passenger kilometres grew at 3.3 per cent and 5.5 per cent, respectively in the first quarter of FY 2014–15. Other transport segments such as civil aviation, cargo handled by civil aviation and cargo handled at major ports registered growth rates of 7.5 per cent, 6.2 per cent and 4.3 per cent, respectively. These

are indicative of improved economic activity this financial year, given the linkage between segments like transport and passenger services with overall industrial activity.

Various indices and estimates from the first half of FY 2014–15 similarly indicate an expansion in India's services business and outlook for the service sector. The Markit-HSBC Services Purchasing Managers Index (PMI) which is calculated on the basis of responses received from 350 purchasing managers of private companies across various services (hotels and restaurants, transport and storage, financial intermediation, renting and business activities, post and telecommunication and other services), where a value above 50 indicates expansion in activity, has shown ups and downs in the first six months of this financial year. The index rose to 50.2 in May from 48.5 in April 2014, for the first time signalling expansion in the service sector in nearly a year, following a rebound in new business orders. The index touched a 17 month high in June 2014 at 54.4 points but fell in August to 50.6 before rising to 51.6 in September 2014, unlike the manufacturing PMI which continued to show a decline. Overall, there is an indication of expansion in services activity, also corroborated by the first quarter expansion reflected in the national accounts figures released by the Central Statistical Organization. Figure S.2 shows the HSBC PMI for the first two quarters of 2014–15.

Figure S.2: HSBC Purchasing Manager Index, April to September 2014–15



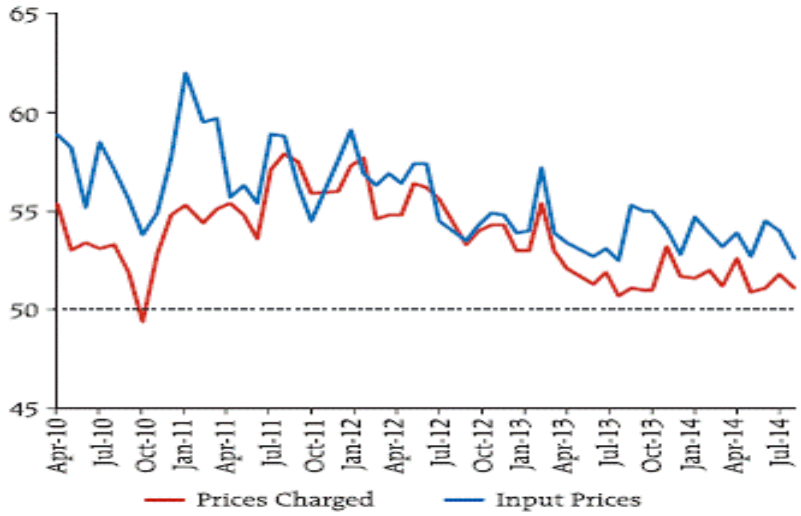
Source: http://www.thehindubusinessline.com/economy/india-services-growth-quickened-in-sept-hsbc-pmi/article6477810.ece (accessed October 8, 2014)

The September survey found that business activity rose in half of the six subsectors that are covered, the strongest expansion taking place in post and telecommunications. The survey noted a solid overall pick up in the pace of services activity since August 2014. This expansion has been linked to an increase in new work intakes as opposed to manufacturing where there has been a deceleration in the growth of new orders. There is also evidence of job creation in the service sector in September

with employment rising across the private sector for the first time since June this year.[3] Overall, business sentiment among Indian services companies was strong in September, in anticipation of improved demand.[4]

The September survey also showed that inflationary pressures for inputs eased in the service sector and had moderated from their recent peak in 2011. They were the lowest since November 2009. Output prices of service firms rose moderately in recent months. Figure S.3 shows the output and input price movements in services as captured by the PMI for services. It highlights the moderation in both input and output prices for services over the past year.

Figure S.3: PMI Services (seasonally adjusted) for Input and Output Prices, April 2010 to July 2014

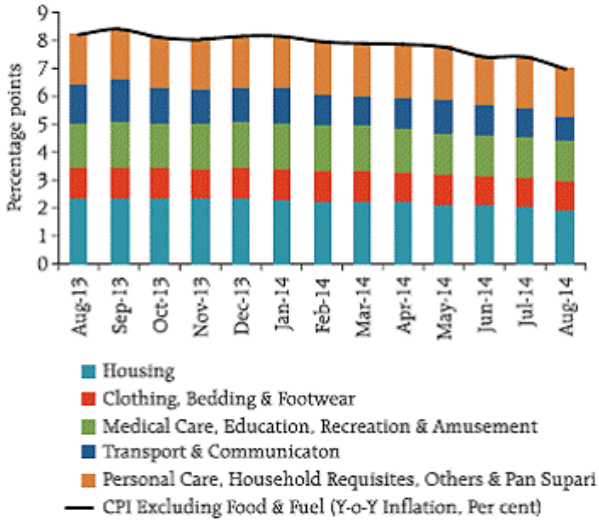


Source: HSBC India Services PMI

Figure S.4 shows the contribution of various service sector activities to the CPI. It highlights the moderation in services inflation and decline in inflation for certain components such as transport and communication and medical care, education and recreation and amusement services between August 2013 and 2014.

[3] http://pib.nic.in/newsite/PrintRelease.aspx?relid=109185
[4] http://www.business-standard.com/article/news-cm/moderate-expansion-of-private-sector-activity-in-september-2014-hsbc-india-services-pmi-114100700246_1.html

Figure S.4: Sub-groups' Contribution to CPI, excluding Food and Fuel Inflation, August 2013 to August 2014

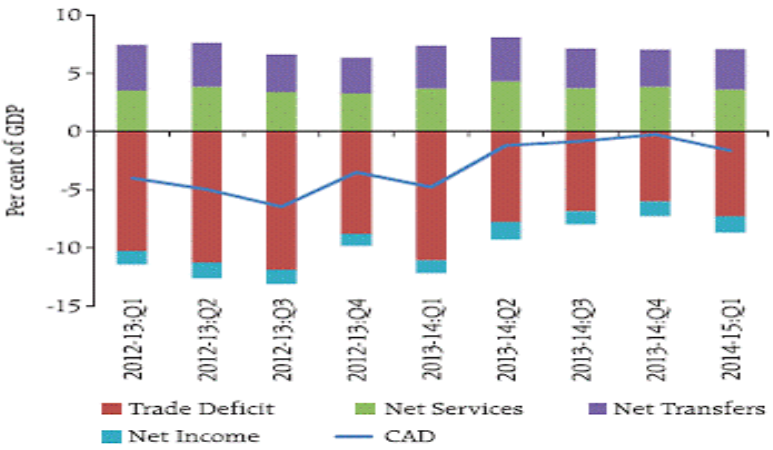


Source: RBI, Monetary Policy Report, September 2014, http://rbi.org.in/scripts/PublicationsView.aspx?id=16048#I2 (accessed October 8, 2014)

On the trade front, the trade balance in services was in surplus for July 2014 at an estimated US $6,522 million (Rs. 39,170.22 crores), with services receipts of US$ 13,344 million (Rs. 80,142.2 crores) and payments of US$ 6,822 million (Rs. 40,971.98 crores).[5] There has been a small improvement in net exports of services in the first quarter, which together with a slight decline in the merchandise trade deficit has contributed to an improvement in the current account deficit (including POL and gold) in Q1 of 2014–15 which shrank to 1.7 per cent of GDP compared to 4.8 per cent of GDP in the corresponding first quarter of 2013–14. Figure S.5 shows the quarterly trends and composition of the current account deficit since 2012–13 until the first quarter of the current financial year.

[5] RBI Press Release, September 15, 2014

Figure S.5: Composition of the Current Account Deficit, 2012–13(Q1) to 2014–15(Q1)



Source: RBI, Monetary Policy Report, September 2014, http://rbi.org.in/scripts/PublicationsView.aspx?id=16048#I2 (accessed October 8, 2014)

The IT and Business Process Outsourcing sector, which is the main contributor to India's services exports grew at an estimated 10.3 per cent in FY 2013–14 in revenue terms, rising from US$ 95.2 billion in FY 2012–13 to US$ 105 billion in 2013–14 (estimated), according to National Association of Software and Services Companies (NASSCOM). Within overall revenues, export revenues increased by an estimated 13 per cent in 2013–14 while domestic revenues declined by one per cent.

S.4 Service sector projections for 2014–15

All indicators point to an expansion in business activity in services in FY 2014–15. There are signs of a growth revival in the aviation sector with the entry of new players such as Air Asia and Tata-SIA. Signs of revival in major economies such as the US and in global trade are expected to spur growth in the tourism and shipping segments of the service sector. There is also some optimism about increased investment and growth in services such as railways, insurance, telecommunication and aviation where FDI liberalisation and regulatory reforms have been proposed. However, fiscal restraint by the Central government could dampen the growth of segments like community, social and personal services. Most other segments are expected to show a slow turnaround or moderate growth in the second half of FY 2014–15.

The IT-ITeS services sub-sector is projected to grow by 12 per cent in revenue terms in FY 2014–15, with export revenue growth and domestic revenue growth projected at 13–15 per cent and 9–12 per cent, respectively. Increased discretionary spending and demand from the US and Europe is expected to spur India's exports of IT and IT-enabled services. However, although India will retain its competitive advantage in the near future and continues to be 30 per cent cheaper than the nearest low-cost country, its IT-ITeS sector will increasingly face challenges due to protectionism,

increased competition, exchange rate volatility and wage inflation which could dampen its growth prospects.

S.5 Recent policy developments in services

There have been several important policy developments in the first half of FY 2014–15 that are pertinent to the service sector. In the latest Union Budget, the composite cap in the insurance sector is proposed to be increased from 26 per cent to 49 per cent for companies with full Indian management and control, subject to Foreign Investment Promotion Board (FIPB) approval. The objective is to address the shortage of capital in the insurance industry by bringing in new players into the segment. The increased FDI ceiling is expected to bring in players across the life, general and health insurance segments and also brokers from overseas markets. There is a pending Bill on Insurance Amendment which is to be considered in Parliament before the increased FDI can be brought into effect through legislation. Several other proposals have been tabled for the financial services sector, such as a framework for licensing small banks, setting up six new debt recovery tribunals for public sector banks, allowing banks to raise long term funds for lending to the infrastructure sector with minimum regulatory pre-emption and implementation of the suggestions of the Financial Sector Legislative Reforms Commission with the enactment of the Indian Financial Code and measures to develop the debt, securities and derivatives markets. The Union budget has also eased various conditions for investment in the construction sector to encourage the development of smart cities. There is also a proposal to allow FDI in the Indian Railways so as to enable the creation of world class rail infrastructure. In railway operations, FDI has been proposed in PPP projects for suburban corridors, high speed train systems and dedicated freight lines.

India has also been actively negotiating broad-based comprehensive economic cooperation and partnership agreements that encompass services and investment, with various trading partners, including the EU, Canada, Australia and New Zealand. These agreements, once concluded are expected to boost India's services exports to these countries and also help attract investments in services and other sectors from these countries. An important recent development in this context has been the signing of a Free Trade Agreement (FTA) in services and investments between India and the 10 member ASEAN in September 2014, building upon the earlier FTA in goods that was signed in 2011. The member countries are expected to get the agreement ratified by their Parliaments, following which the FTA will be formally adopted in the next India-ASEAN Summit next year. India's key interests in this agreement relate to the movement of natural persons (intra-corporate transferees, business visitors and contractual service suppliers). The expanded India-ASEAN FTA is expected to facilitate the mobility of professionals between India and the ASEAN countries and also create opportunities for investments. India hopes to leverage its strengths in the areas of finance, education, health, IT and telecommunications through this pact and balance its merchandise trade deficit with the ASEAN countries.

Another important FTA India is currently negotiating is the Regional Comprehensive Economic Partnership Agreement (RCEP), which includes the ASEAN members plus China, Australia, Japan, Korea and New Zealand. The RCEP is expected to provide Indian service providers with enhanced market access opportunities to the

wider Asia-Pacific market and to bring about much needed regulatory harmonization with these countries. There is, however, concern among Indian industry regarding the competitive threat this FTA would pose due to China's membership in this mega trading bloc.

S.6 Outlook

Although the service sector has been a driver of growth in the Indian economy, many regulatory and policy bottlenecks which impede growth in this sector remain.

Various challenges need to be addressed in the near term, some of which have been outlined in the latest Economic Survey. These include establishing a nodal agency or department for services to enable a coordinated institutional approach to removing unnecessary and outdated regulations in the sector; introducing targeted policies to tap opportunities and conduct promotional activities in services; speeding up disinvestment in some service sector PSUs to facilitate the growth of these services; revamping port services and building world class port facilities; and addressing tax and benefit schemes to encourage services exports.

Beyond these institutional measures, in order to realize the long term growth prospects of this sector, there is a need to move beyond the IT and business services-led paradigm. We need to focus on developing a services sector that is more integrally connected with the rest of the economy through backward and forward linkages with industry, growth of employment-intensive services, enhanced productivity and broad-basing of service sector output and trade.

Pending bills concerning FDI liberalisation in areas such as retail, education, insurance services need to be passed to provide increased transparency and clarity on the investment scenario for services. Complementary regulatory frameworks and domestic reforms also need to be put in place to support liberalisation in various services.

In the context of FTA negotiations, India needs to pursue its interests in services by pushing for greater market access for its service providers through visa facilitation, mutual recognition of qualifications and harmonization of regulatory standards while also putting in place the requisite domestic business environment to encourage investments into the service sector from its partner countries.

Table S.1: Share and Growth of India's Services Sector, at factor cost, 2000-01 to 2013-14

	2000–01		2011–12@		2012–13*		2013–14**	
	Share	Growth	Share	Growth	Share	Growth	Share	Growth
Trade, hotels and restaurants	14.5	5.2	17.4	1.2	17.2	4.5	24.0	3.0
Trade	13.2	5.0	15.9	1.0	15.8	4.8	––	--
Hotels and restaurants	1.3	7.0	1.5	3.8	1.4	0.5	--	--
Transport, storage and communication	7.6	9.2	7.3	9.4	7.5	6.0	--	--
Railways	1.1	4.1	0.7	7.5	0.8	0.3	--	--
Transport by other means	5.0	7.7	5.4	8.6	5.6	6.6	--	--
Storage	0.1	6.1	0.1	2.9	0.1	8,6	--	--
Communication	1.5	25.0	1.1	11.2	1.1	6.5	--	--
Financing, insurance, real estate and business services	14.1	3.5	16.5	11.3	17.2	10.9	18.5	12.9
Banking and insurance	5.4	-2.4	5.7	12.9	5.9	11.8	--	--
Real estate, ownership of dwelling and business services	8.7	7.5	10.7	9.9	11.4	10.0	--	--
Community, social and personal services	14.7	4.6	13.8	4.9	14.3	5.3	14.5	5.6
Public administration and defence	6.5	1.9	5.9	4.2	6.0	3.4	--	--
Other services	8.2	7.0	7.8	5.4	8.2	6.8	--	--
Construction	6.0	6.1	8.2	10.8	8.1	1.1	7.8	1.6
Total services	51.0	5.1	54.9	6.6	56.3	7.0	57.0	6.8
Total services (including construction)	57.0	5.2	63.1	7.1	64.4	6.2	64.8	6.2
Total GDP	100.0	4.1	100.0	6.7	100.0	4.5	100.0	4.7

Source: Economic Survey, 2013-14, Chapter 10, Table 10.2, p. 176
Note: Shares are in current prices and growth in constant prices.
* refers to first revised estimates, @ to second revised estimates,
** to provisional estimate

Table S.2: Quarterly Real GDP Growth by Sectors, FY 2013–14 and FY 201415 Q1 (%)

Sector	2013–14		2013–14				2014–15
	Share	Growth	Q 1	Q2	Q3	Q 4	Q 1
I. Agriculture, forestry & fishing	13.9	4.7	4.0	5.0	3.7	6.3	3.8
II. Industry	18.7	-0.1	-0.9	1.8	-0.9	-0.5	4.0
(i) Mining & quarrying	1.9	-1.4	-3.9	0.0	-1.2	-0.5	2.1
(ii) Manufacturing	14.9	-0.7	-1.2	1.3	-1.5	-1.4	3.5
(iii) Electricity, gas & water supply	1.9	5.9	3.8	7.8	5.0	7.2	10.2
III. Services	67.4	6.2	6.5	6.1	6.4	5.8	6.6
(i) Construction	7.4	1.6	1.1	4.4	0.6	0.7	4.8
(ii) Trade, hotels, transport & communication	26.4	3.0	1.6	3.6	2.9	3.9	2.8
(iii) Financing, insurance, real estate and business services	20.6	12.9	12.9	12.1	14.1	12.4	10.4
(iv) Community, social & personal services	12.9	5.6	10.6	3.6	5.7	3.3	9.1
IV. GDP at factor cost	100.0	4.7	4.7	5.2	4.6	4.6	5.7

Source: RBI, Monetary Policy Report, September 2014, http://rbi.org.in/scripts/PublicationsView.aspx?id=16048#I2 (accessed October 8, 2014)

Money and Capital Markets

Mythili Bhusnurmath

Money and credit markets have been largely stable during the first half of FY 15. Though the US Federal Reserve continued its tapering programme, stock markets, equity as well as bond, showed no immediate sign of nervousness with both the BSE Sensex and the NSE Nifty scaling new highs. The relative calm of H1FY 15 is likely to prove the proverbial lull before the storm as markets brace for the consequences of the US Fed reversing the easy money policy in place since August 2008.

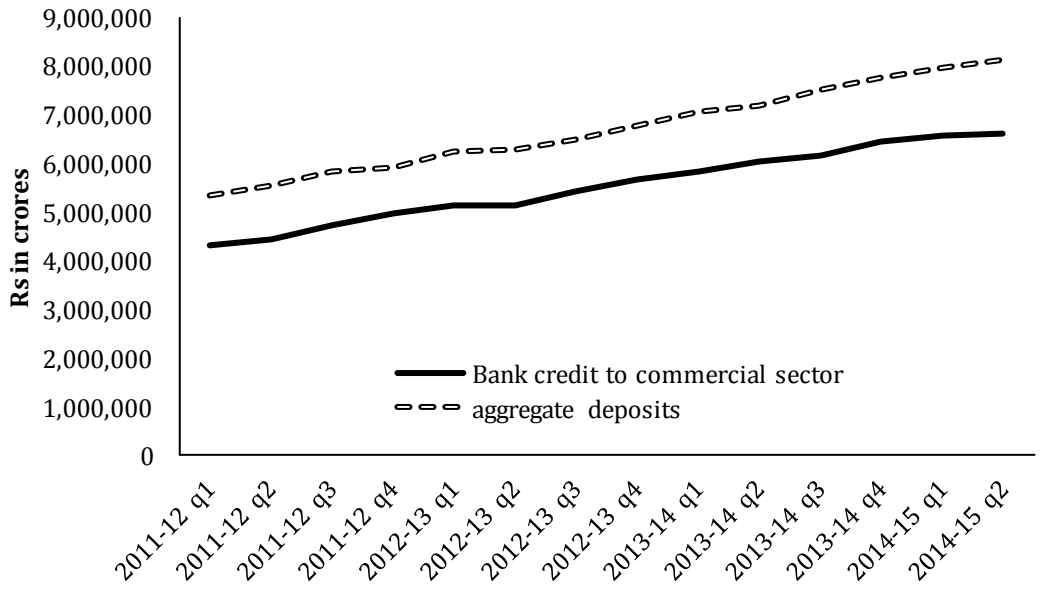
M.1 Bank Credit & Deposit Growth

Credit markets remained subdued during H1FY15 as banks reeled under the impact of rising non-performing assets. Growth in bank credit fell to a record five year low at 10.9% by September, 2014. The last time credit fell to comparable levels was in late 2009, in the aftermath of the financial crisis, before rising to 17% in 2010. Till mid-September 2014, credit disbursements by banks recorded a growth of just 10.9% compared to 17% in the comparable period last year. Apart from retail loans that continue to show a healthy growth, there is virtually no demand for loans from other sectors such as large corporates. With a large number of projects stalled at various stages and banks having burnt their fingers in infrastructure finance, there is a marked slowdown in bank lending.

Clearly the turnaround in investment sentiment which might be expected to lead to a demand for credit is still in the nascent stage. Meanwhile bank deposits grew 13.6 in the period to 22 August 2014, up from 12.6% during the comparable period last fiscal, suggesting financial assets might once again have become attractive following signs that inflationary pressures are abating. In the interim, banks are investing more of their deposits in government securities; or like State Bank of India are selectively reducing the interest rate on their deposits.

On a sectoral basis, bank credit to agriculture grew 18.8% in August 2014 compared to 12.1% in August 2013. However credit to industry decelerated sharply to 7.6% in August 2014, down from 17.3 % a year ago. The slowdown was particularly marked in sectors such as infrastructure, basic metals, textiles, chemicals and food processing industries. The Supreme Court ruling cancelling 214 of the 218 coal blocks allocated during the period 1993 – 2011 is bound to act as a further dampener on bank credit for infrastructure projects as loans to many of the end users of coal from these blocks have turned non-performing.

Figure M.1: Bank Credit Deposit



M.2 Asset quality

Asset-quality continues to decline though the pace of accretion of non-performing assets has come down. NPAs together with re-structured assets are now placed at close to 11% for the banking sector as a whole with public sector banks showing a higher NPA ratio than their private sector counterparts.

According to the RBI's Financial Stability Report (June 2014), the level of gross non-performing advances as percentage of total gross advances for the entire banking system declined to four per cent in March 2014 from 4.2% in September 2013. The net non-performing advances (NNPAs) as a percentage of total net advances also declined to 2.2 % in March 2014 from 2.3% in September 2013. This improvement in asset quality was due to lower slippage of standard advances to non-performing advances and a seasonal pattern of higher recovery and write-offs that generally take place during the last quarter of the financial year as also sale of NPAs to asset reconstruction companies in the light of the Framework on Revitalising Stressed Assets. Stressed advances also declined to 9.8 % of the total advances from 10.2 % between September 2013 and March 2014. Public sector banks continued to register the highest stressed advances at 11.7 % of the total advances, followed by old private banks at 5.9%.

Five sub-sectors: infrastructure, iron and steel, textiles, mining (including coal) and aviation services account for a significant share of stressed advances. The share of these five stressed sub-sectors to the total advances of scheduled commercial banks is close to 24 %, with infrastructure accounting for 14.7 %. Not surprisingly, the share of these five sub-sectors in total advances is the highest for public sector banks at 27.3 %.

M.3 Basel 3 and banks' capital requirements

The capital adequacy of banks is quite comfortable at 12.9% in March 2014. However, the RBI estimates banks will require additional capital of Rs 4.15 lakh crore

between June and March 2019 when the new Basel norms come into operation in India. Of the total capital required by public sector banks (PSBs) Rs 90,000 crore will have to come from the government if it intends to maintain its current stake in these banks.

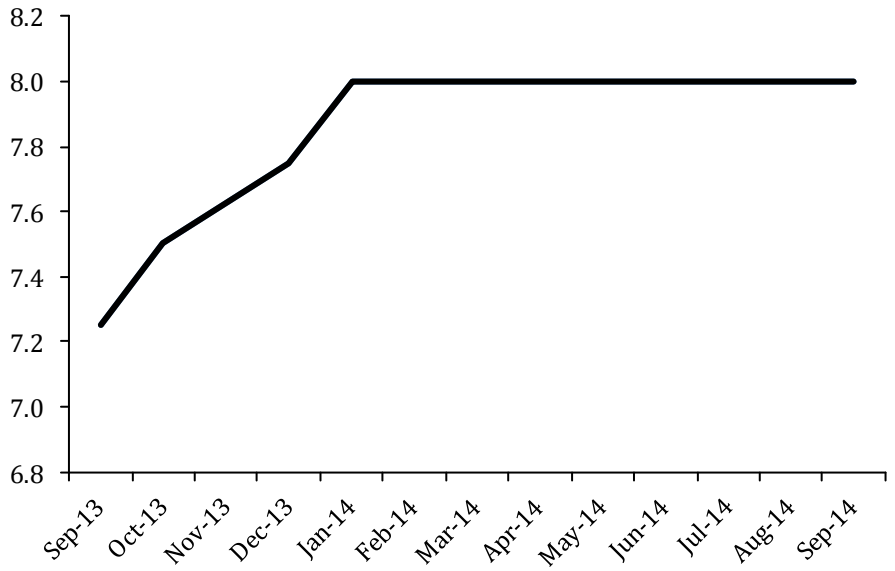
In view of the government's strained finances, this is going to be a near-impossible task. This is where the government should take serious note of the Nayak Committee recommendations and allow (PSBs) to tap the market, even if in the process the government's own share falls to below 50%

M.4 RBI's monetary policy announcement: Sept 2014

The RBI held its repo rate unchanged at eight percent right through the first half of FY15. The previous hike by 25 basis points was done at its Review in January 2014. In its fourth bi-monthly monetary policy announcement on 30 September, the RBI again held all policy rates unchanged at eight per cent (repo), four per cent (CRR) and 22% (SLR). While stating the Bank is on course to achieve its near-term inflation target of eight per cent by January 2015, it was less sanguine on the six percent target for January 2016, saying the risks to achieving that target are on the upside.

However, in keeping with its policy of phasing out sector-specific refinance, the RBI has been reducing the eligibility of banks for export credit refinance. In its September 2014 policy, the Bank reduced the export credit refinance from 32 to 15% with effect from 10 October 2014. Meanwhile in a bid to develop the term money market, the RBI has been conducting a number of variable rate auctions for periods beyond overnight lending. Presently the Bank provides liquidity under overnight repos at 0.25% of the bank-wise net demand and time liabilities (NDTL) at the LAF (liquidity adjustment facility) repo rate and under seven and 14-day repos up to 0.75% of NDTL

Figure M.2: Repo Rate



The RBI's tight rein on repo rates seems to be yielding dividends. Inflation, as measured by both the consumer price index and the wholesale price index, is trending down. CPI inflation is down from 8.59% in April 2014 to 6.46 % in September 2014, while the WPI is down from 5.5% to 2.38% over the same period. However, CPI food inflation remains sticky at nine per cent plus even though WPI based inflation is down to 2.38%

M.5 Developmental Efforts

The first half year saw the RBI in overdrive undertaking a number of actions aimed at financial sector development. Early in the first half, the RBI gave in-principle approval for setting up two new banks to Bandhan and IDFC. Both entities have been given 18 months to commence operations. In May, the RBI released the report of the Nayak committee set up to review the governance of bank boards. The committee made a number of sweeping recommendations on improving corporate governance notably on transferring government's stake in PSBs to a bank holding company to ensure arms-length relationship.

Following its in-principle approval of banking licence for two entities – Bandan Microfinance and IDFC in April 2014 - the RBI came out with draft guidelines for licensing small and payments banks based on the recommendations of the Nachket Mor committee in July 2014. The RBI has sought comments on these guidelines after which it is expected to frame final guidelines that it hopes will further the cause of financial inclusion; a cause that seems dear to the PM's heart, going by the missionary zeal with which the government and all its agencies have been roped into the new Jan Dhan Yojna announced by the PM on Independence Day.

Under the scheme which aims to ensure access to financial services to an additional 7.5 crore households by January 2015, two bank accounts will be opened per household. In addition an accident insurance of Rs one lakh and a life insurance of Rs 30,000 will also be extended. After six months, each account holder will also become eligible for an overdraft of Rs 5000. Given the overwhelming presence of public sector banks in the Indian banking sector, it is no surprise that the scheme got off to a roaring start. Banks vied with each other to open new JDY accounts, setting aside reservations they might have had on the wisdom of such ventures. As of 8 September 3.02 crore accounts had been opened and deposits to the tune of Rs 1500 crore, mobilised.

While the insurance premium would reportedly be paid out of the Social Security Fund maintained by the LIC, there is no such succour available to banks which will, in all probability, have to bear the cost of servicing a large number of accounts with no/small balances.

July 2014 saw the RBI issue a draft circular on issue of partial credit enhancement on corporate bonds and put out draft guidelines for setting up and operating a trade receivables discounting system. It also issued instructions to banks on permissible flexibilities in loan restructuring and refinancing with a view to mitigating their asset-liability mismatches while extending loans to infrastructure and core industries.

M.6 International Developments

The US FOMC meet on 16-17 September assuaged some fears but did not demolish them entirely. As expected the Fed announced its decision to continue tapering or phasing out its quantitative easing programme –it will henceforth buy bonds to the tune of only $ 15 bn and end purchases altogether in October. However, contrary to expectations, it retained what Vox news termed, the four most important words, 'for a considerable time', in relation to the period for which the Fed expects to keep interest rates low after QE ends.

The Fed also released quarterly economic and interest rate projections till 2017 from its 17 policy makers, suggesting a faster pace of rate hikes than envisaged in June 2014. The median of the projections was 1.375 % for December 2015, up from 1.125 in the June projection while the projection for December 2016 moved up to 2.875 % from 2.50%. The blueprint of its exit strategy, outlining the key measures it plans to take in its move towards a normal monetary policy calls for ending/phasing out reinvestments after the Fed begins to raise interest rates.

US consumer prices declined for the first time in one and a half years in August 2014, suggesting inflation pressures are still muted, giving the Fed room to keep monetary policy loose for longer. Analysts scoured the fine print of the Fed Chairman, Janet Yellen's press conference for clues of when the Fed might hike interest rates but as of now opinion is divided between the latter part of the first half and the early part of the second half.

RBI governor, Raghuram Rajan has warned against the dangers of an abrupt reversal in global interest rates saying this could result in substantial damage to the world economy. He also cautioned against the consequences of keeping interest rates lower than warranted – altering the price of capital for a substantial period of time we are distorting investment decisions.

M.7 Government Securities Market

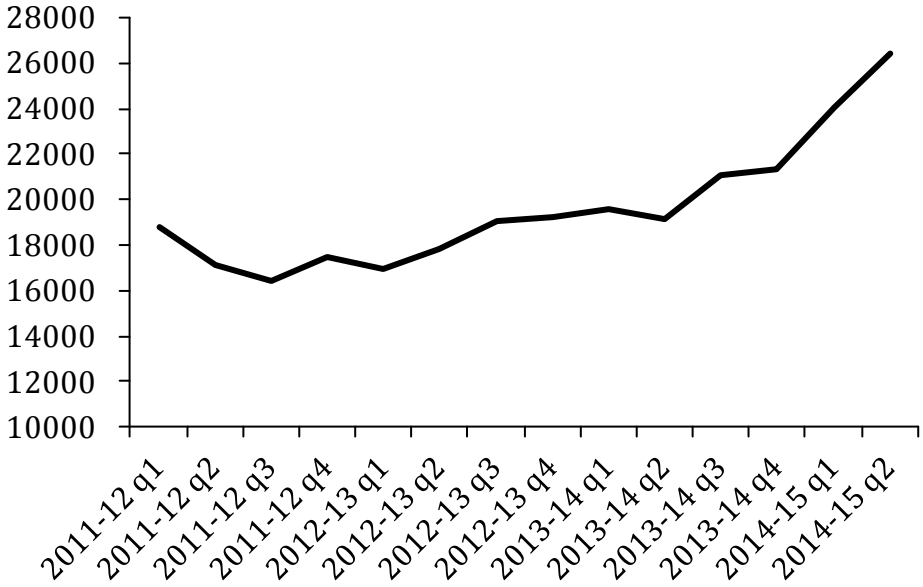
In the government securities market yields moved up marginally in July on account of geo-political tensions but then softened by August-September, with the 10-year yield moving down to 8.5% on 29 September, down from 8.7% at the end of June 2014. The government completed its borrowing for the first half without any problem. Indeed the first half borrowing target was reduced by Rs 16,000 crore as the government ended the previous fiscal with a cash surplus of Rs 16,000 croreLikewise the borrowing calendar for the second half year has been reduced by Rs 8000 crore.

Sovereign bonds yields are at a global low. In Japan, 10 year sovereign yields are in the range of 0.5-0.6 %, in Germany at about one per cent and in the US at 2.5% - all historical lows. In September the ECB lowered its key refinancing rate from 0.15% to 0.05% and is now charging banks for keeping their reserves with the ECB. The effort, quite clearly, is to get banks in Europe to lend in a bid to get the Euro zone economy moving once again and also ward off the fear of deflation as inflation edged lower to 0.3% in August 2013 against the ECB target of two percent.

M.8 Capital Markets

The somber mood in the credit market was more than offset by the euphoria in the stock market. Equity markets, in particular, touched new heights riding on a surge in overseas inflows with the BSE Sensex gaining close to 26% by mid-September 2014. All but one of the 30 stocks in the S&P BSE Sensex have risen this year, up from 16 in 2013, as the benchmark index surged 26 percent for the best performance among the world's 10 biggest markets. The last time a rally was this comprehensive, in 2003, the Sensex extended its advance for another four years.

Figure M.3: BSE sensex



After aggressive buying in the first five months of FY 15, mutual funds turned sellers in September as markets turned jittery on fears of the Fed Open Markets Committee (FOMC) meet on 16 and 17 September. According to Sebi data, equity fund managers net sold shares worth Rs 310 crore in the first half of September as against Rs 15,000 crore invested during May- August.

It is not only domestic investors who seem to be turning to the stock market again. Overseas investors have been piling in, including through the more notorious P-note or participatory note route. According to Sebi, after rising to a six year high of Rs 2.24 lakh crore in June 2014, P-note issuance fell in July only to rise again in August to Rs 2,11, 499 crore from Rs208, 284 crore in July 2014. The silver lining is that the share of P-notes in total FII investment has fallen to 10.3% in August, down from 10.6% the previous month and well below highs (in the range of 50%) seen a few years ago before Sebi tightened disclosure norms.

Unfortunately, the euphoria (marked by markets racing ahead of improvements in broad macroeconomic fundamentals) was confined to secondary markets. Primary markets were noticeably absent in the opening months though there was some pick up towards the closing months of the half year.

IPO filings have picked up pace though the trend of declining filings continues. According to Prime Database against 27 filings in 2012 and 20 in 2013, there have been

only six filings in the year to date. Filings with Sebi are a key lead indicator of public issues in the pipeline. However since the whole process up to the launch of the IPO takes anywhere between four – six months, depending on whether Sebi raises any query or not, it is unlikely that we will see a return to the days of frenzied IPO activity. The previous low was in 2004 when there were only seven filings.

Two recent issues, Snowman Logistics and Sharda Cropchem have seen large over-subscriptions, with the former listing at a hefty premium to the issue price, suggesting the IPO market might be heading for a revival. With government's disinvestment programme expected to kick off in the early months of the second half of FY15, markets are expected to get a further boost in the coming months.

Indian markets are not alone in experiencing a bull run. Globally, stock markets are on a roll. After a five month rally, the US S&P 500 corrected briefly in July only to rise once again in August when it touched 1,992 after a series of upbeat economic reports indicating recovery in the US is stronger than anticipated earlier. The trend continued unabated in September when the index closed to touch 2000 early September. The Dow Jones Industrial average also rose to cross 17,100 on 4 September as markets brushed aside somewhat disappointing news on the jobs front.

In tandem with the improvement in US numbers – second quarter show annualized growth at 4.6% as against the expected four per cent and the decline of 2.1% in the first quarter - the US dollar has been strengthening.

The first half of the year saw Sebi keep pace with the RBI in initiating a number of measures to increase confidence and encourage more retail participation in the stock market. A number of measures related to IPOs and offers-for-sale were announced to rejuvenate the market. Sebi also finalized the guidelines for Real Estate Investment Trusts and Infrastructure Investment Trusts and framed new guidelines aimed at improving corporate governance. These include capping the number of independent board memberships that can be held and make it compulsory for companies to disclose the compensation of their CEOs (chief executive officers).

The market regulator is shortly expected to issue a discussion paper on reducing the timeline for follow-on offers (FPOs) and is expected to join forces with the RBI to discipline 'wilful defaulters' ie borrowers who have wilfully or deliberately not repaid their bank loans. At present, there is no restriction on such entities accessing the capital market. It has started work on designing a mandatory 'annual memorandum of information' for listed companies that will increase market transparency and make disclosure requirements less cumbersome.

M.9 Outlook

The relative calm of H1FY 15 is likely to prove the proverbial lull before the storm as markets brace for the consequences of the US Fed reversing the easy money policy in place since August 2008. In the run-up to the hike in interest rates, markets are likely to turn increasingly volatile. The best defence for countries like India is to use the intervening months to strengthen their domestic economies and build up a war chest of forex reserves.

External Sector

Rajesh Chadha and Anjali Tandon

The world economy is entering a slippery growth phase. Downside risks have grown during the past six months. The way ahead does not appear to be encouraging with the two major engines of growth in the developing world, China and India, failing to live upto their promise.

World trade discipline has been diluted due to the slow pace of the multilateral trade negotiations and complicated initiation of multiple regional trade agreements. The WTO estimates that world trade will grow more slowly than expected in 2014 and 2015. Global merchandise trade is forecast to grow 3.8 per cent this year and 5.1 per cent next year, lower than the previous estimate from April, which predicted increases by 4.3 per cent and 5.3 per cent, respectively. This does not bode well for India.

E.1 World Economic Outlook

Prospects of world economic growth in 2014 have become bleaker during April–October 2014. The upbeat growth forecast at 3.7 per cent announced in the *World Economic Outlook* of April 2014 has been revised downward to 3.3 per cent in October 2014 (Table E.1).[1] Thus the growth is expected to be nearly the same as it was in 2012 and 2013.The growth projection for 2015 has also been lowered. The advanced economies are struggling to come out of the shadows cast by the financial crisis and the subsequent debt crisis. The developing countries including China, India and ASEAN-5 are trying to come to grips with the lower rates of growth persisting during the last three years. While the advanced countries are expected to grow by 1.8 per cent in 2014 the emerging market and developing economies might grow by 4.4 per cent.

The United States maintains its growth pace of 2012 and 2013 at 2.2 per cent. Germany promises growth acceleration from 0.5 per cent in 2013 up to 1.4 per cent in 2014[2]. Japan loses its growth sheen of 1.5 per cent posted in 2012 and 2013 and slows down to 0.9 per cent in 2014. The United Kingdom matches the growth rate of the global economy posting 3.2 per cent in 2014 up from 1.7 per cent in 2013.

The world trade volume is expected to grow by 3.8 per cent in 2014 compared to 3 per cent in 2013. However, much of this gain would benefit the advanced economies. Exports of the advanced economies would grow by 3.6 per cent in 2014 compared with 2.4 per cent in 2013. The corresponding numbers for the emerging market and developing economies are contrary at 3.9 per cent and 4.4 per cent, respectively.

The downside risks for the world economic growth have increased over the last six months. The worsening geopolitical tensions and struggling financial markets pose short-term risks to the global economic recovery.

The medium-term risks include below-potential growth in advanced as well as the emerging market and developing economies. While Germany and the UK are

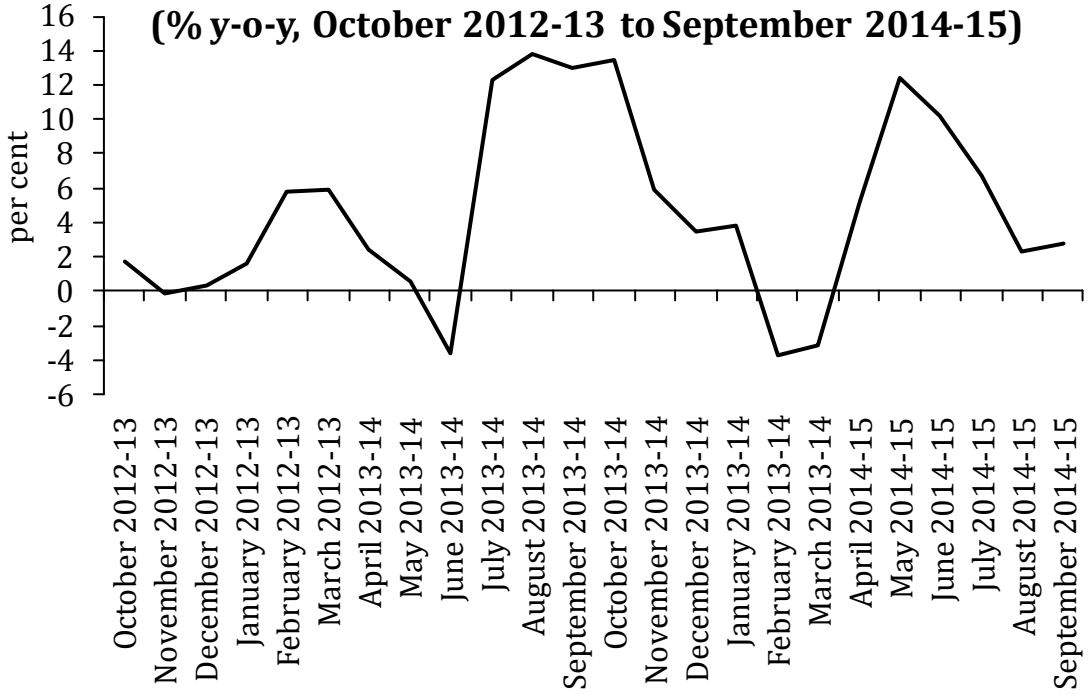
[1] The discussion in this section is based on the details provided in the *World Economic Outlook*, October 2014, IMF.
[2] However, Germany is estimated to slowdown during Q4 of 2014.

exceptions in the advanced economies only India and Mexico show some promise among the emerging market and developing economies.

E.2 India's merchandise trade

The external sector did not present an encouraging picture during 2013–14. While merchandise exports increased by 4 per cent and touched US$ 312.4 billion, imports declined by 8.1 per cent to US$ 450.9 billion. The slowdown in imports was mainly due to reduction in gold imports that dropped from 1,037 tonnes in 2012–13 to 664 tonnes in 2013–14 even as oil imports increased 2.2 per cent. Non-oil imports declined 13.3 per cent. The trade deficit on merchandise goods narrowed to US$ 138.6 billion, a decline of 27.2 per cent over the previous year.

Figure E.1: Growth in India's Total Exports (% y-o-y, October 2012-13 to September 2014-15)

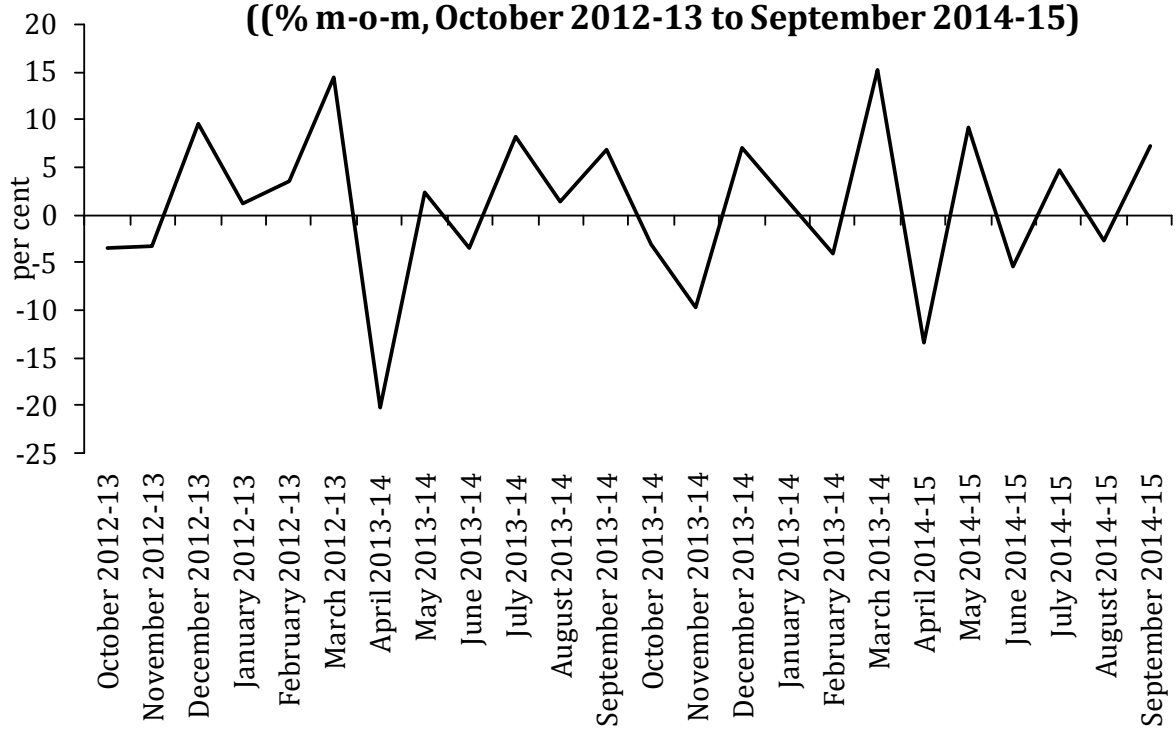


Recent data for the first half, H1: 2014–15, shows a nearly stable growth of 6.5 per cent in merchandise exports when compared with H1: 2013–14. Data on monthly exports shows that the year 2013–14 ended in negative export growth during the months of February and March on a year-on-year (y-o-y) basis (Figure E.1). However, export growth has not only remained in positive territory since April 2014 but also recorded a double digit growth during May and June. The month-over-month (m-o-m) growth pattern for exports exhibited frequent fluctuations during successive months (Figure E.2).

Cumulative imports during the first six months increased by 1.6 per cent to US$ 234.1 billion. This is encouraging compared with the negative growth of (–) 2.5 per cent during first half of the last fiscal. Non-oil imports recovered from the negative growth zone that prevailed during the last year. Notable growth in imports of gold and

metalliferrous ores & metal scrap is observed during September 2014 that expanded at 449.7 and 105.6 per cent, respectively.

Figure E.2: Growth in India's Total Exports ((% m-o-m, October 2012-13 to September 2014-15)



E.3 Composition of exports

India's merchandise exports comprise predominantly manufactured goods that accounted for 61.5 per cent of total exports during 2013–14. Within the manufactured goods category, the shares of engineering goods, gems & jewellery, chemicals & related products, textiles and readymade garments are 22.4, 12.9, 9.8, 5.3 and 4.8 per cent, respectively. Exports of petroleum products accounted for another 19.8 per cent of total exports followed by agriculture & allied exports with a share of 13.6 per cent. The share of ores & minerals is 1.8 per cent. During 2013–14, exports of most broad categories registered positive growth except for ores & mineral and gems & jewellery.

The composition of exports has remained broadly unchanged during April–August 2014–15. Total exports grew at 7.4 per cent during first five months of the ongoing fiscal with positive growth in important product categories. Exports of agriculture& allied products declined. Exports of ores & minerals also declined due to domestic supply constraints. Within the manufactured goods category, exports growth of gems & jewellery products continued in the negative zone. The decline is attributed to low exports of gold jewellery due to non-availability of gold. Exports of significant categories within the manufactured goods sector such as chemicals & related products grew at 9.5 per cent while engineering goods grew at an even higher rate of 24.4 per cent during the period. It is heartening to note to double digit growth in exports of labor-intensive products such as leather & leather manufactures and readymade

garments both of which expanded 19 and 17.9 per cent, respectively. Exports of petroleum products registered a growth of 15.7 per cent.

E.4 Destination of Merchandise Exports

The pattern of international trade has changed over the past years with the emergence of intra-regional trade. Likewise for India, the Asian region has become the most important exporting partner with a share of 49 per cent during 2013–14. Other important export destinations for India include Europe and the Unites States of America with export shares of 19.7 and 17.6 per cent, respectively. The share of exports to Africa has been close to 10 per cent.

During the period April–August 2014–15, regional distribution of exports remained largely unchanged. The top 20 export destinations accounted for 68.1 per cent of total exports. India's leading export partners included USA (13.8 per cent), UAE (10.5 per cent), Saudi Arabia (4.6%), Hong Kong (3.8%) and China (3.8%).[3] Exports to as many as 15 of the top 20 countries increased during April–August 2014–15 while exports to Hong Kong, Singapore, UK, the Netherlands and Japan declined. Interestingly, exports to Brazil accelerated the most. India's exports to Brazil comprise manufactured products, followed by commodities and semi-manufactured goods. The most important exported product is diesel and here volumes have picked up recently.

E.5 Composition of Merchandise Imports

India's commodity imports declined 8.4 per cent during 2013–14 mainly on account of lower imports of non-oil products due to weak domestic demand. Non-oil imports accounted for 63 per cent of total imports and declined by 13.2 per cent. The decline has been ascribed to constraints on gold imports that slowdown significantly by 46.6 per cent. Further, imports of each of the three major product categories namely chemicals & related products, capital goods and electronics declined during the year.

Growth in aggregate imports continues to be in negative growth zone during April–August 2014–15 with a contraction of 2.4 per cent. However, import demand of specific commodities has responded positively. Import of crude petroleum and products increased by 1.8 per cent while that of non-oil products declined 4.6 per cent. Major non-oil products that registered a revival of imports include chemicals & related products (8.7%) and electronic goods (8.5%). Overall, imports of manufactured goods declined by 7.3 per cent. The imports of agricultural & allied products and ores & minerals increased by 34 and 5 per cent, respectively.

E.6 Sources of Imports

Like exports, the importance of intra-regional trade is recognized for imports as well. During 2013–14, imports from Asia accounted for 59 per cent of total imports

[3] Figures in parenthesis refer to shares in corresponding total merchandise trade flows (exports or imports).

followed by 16.7 per cent from Europe, 12.8 per cent from America and 8.5 per cent from Africa.

During April–August 2014–15, much of India's import requirements continued to be sourced from Asia (58.4%). The cumulative share of top 20 import sourcing countries was 74.4 per cent indicating greater concentration in imports as compared with for the exports. The growth pattern has been mixed across source countries with an increase observed for imports from eight of the top 20 countries. These include China, Qatar, Nigeria, South Korea, Belgium, Malaysia, Iran and Singapore.

E.7 Balance of Payments

The merchandise trade deficit declined from US$ 50.5 billion in April–June 2013 to US$ 34.6 billion in the April–June 2014–15. This significant decline was enabled by increase of merchandise exports by 10.6 per cent and decline in imports by 6.5 per cent. The surplus on invisibles was 26.8 billion in April–June 2014. The earnings from exports of software services touched US$17.5 billion. The current account deficit (CAD) thus touched US$ 7.8 billion which is lower than a much higher CAD of US$ 21.8 billion in the corresponding quarter of 2013–14 (Table E.2). Consequently, the CAD declined from 4.8 per cent of the GDP to 1.7 per cent of the GDP. There is a surplus of US$ 19.8 billion on capital account. Gross FDI inflows increased from US$ 8.1 billion during April–June 2013–14 to US$ 10.2 billion during April–June 2014–15[4]. With CAD at US$ 7.8 billion, capital account surplus at US$ 19.8 billion and *errors and omissions* at US$ 0.8 billion the balance overall balance of payments showed a surplus of US$ 11.2 billion (19.8 *minus* 7.8 *minus* 0.8) in April–June 2014–15.The foreign exchange reserves increased correspondingly by US$ 11.2 billion.

E.8 Outlook

The world economy is entering a slippery growth phase. Downside risks have grown during the past six months. The way ahead does not appear to be encouraging with the two major engines of growth in the developing world, China and India, failing to live upto their promise.

What does this entail for India? World trade discipline has been diluted due to the slow pace the multilateral trade negotiations and complicated initiation of multiple regional trade agreements. The external sector is going through an uncertain phase.

Two issues need serious attention. The first is with regard to the thrust of reforms that would boost the total factor productivity of the economy. The second issue deals with a careful and comprehensive view and review of India's participation in regional trade negotiations. India has recently signed an agreement on services and investment with the ASEAN (Box E.1). It is high time we had a comprehensive assessment of the benefit-cost analysis of India's already signed agreements as well as a careful evaluation of the future path.

[4] More recently, cumulative FDI equity inflows increased by 42 percent during April–August 2014–15 as compared with last year.

Box E.1: India formally signs Trade in Services and Trade in Investments Agreement with ASEAN

India has formally signed the Trade in Services & Trade in Investments Agreement with ASEAN. The Services Agreement will open up opportunities of movement of both manpower and investments from either side between India and ASEAN. Nine out of ten ASEAN countries have signed the same. Philippines is completing its domestic procedure and it is expected to sign soon. It may be mentioned that India-ASEAN Agreement on Trade in Goods was signed in 2009 and became effective from 2010. The Trade Agreement has boosted the total trade between India and ASEAN substantially in the past four years.

Key features of the Trade in Services Agreement:

- The Trade in Services Agreement with the ASEAN contains all features of a modern and comprehensive agreement on Services and is in line with the other bilateral agreements that India has signed so far. Some of the important Articles contained in the Agreement are ones on transparency, domestic regulations, recognition, market access, national treatment, increasing participation of developing countries, joint committee on services, review, dispute settlement and denial of benefits.
- Both India and ASEAN Member States have taken GATS plus commitments in various Services and modes of supply. Each ASEAN Member State has tabled individual schedule of commitments which are equally applicable for India and other ASEAN Member States. India on the other hand has tabled three schedules of commitments one for Philippines, one for Indonesia and one for the remaining eight ASEAN Member States. It was also agreed by India that in order to increase participation of the least developed countries no additional requests would be tabled to the CLMV countries (Cambodia, Lao, Myanmar and Vietnam). All the three schedules tabled by India are well within the existing autonomous regime of India.
- A brief annex on Movement of Natural persons (one of the key areas of interest for India) has been included in the Agreement. This Annex defines Business Visitors, Intra Corporate Transferees (Managers, Executives and Specialists) and Contractual Service Suppliers. This will help provide commercially meaningful market across in ASEAN for our professionals, including those from the IT/ITES sector. Independent professionals have not been defined in the Annex.

Source: Quoted from the Press Release, Ministry of Commerce and Industry, Government of India, 9 September, 2014. http://commerce.nic.in/pressrelease/pressrelease_detail.asp?id=3116

Table E.1: Growth of Global Output and Trade (%, y-o-y)

	2012	2013	Projections	
			2014	2015
World Output	3.4	3.3	3.3	3.8
Advanced Economies	1.2	1.4	1.8	2.3
United States	2.3	2.2	2.2	3.1
Euro Area	–0.7	–0.4	0.8	1.3
Germany	0.9	0.5	1.4	1.5
France	0.3	0.3	0.4	1.0
Italy	–2.4	–1.9	–0.2	0.8
Spain	–1.6	–1.2	1.3	1.7
Japan	1.5	1.5	0.9	0.8
UK	0.4	1.7	3.2	2.7
Emerging Market and Developing Economies	5.1	4.7	4.4	5.0
Commonwealth of Independent States	3.4	2.2	0.8	1.6
Russia	3.4	1.3	0.2	0.5
Emerging and Developing Asia	6.7	6.6	6.5	6.6
China	7.7	7.7	7.4	7.1
India[1]	4.7	5.0	5.6	6.4
ASEAN-5[2]	6.2	5.2	4.7	5.4
Latin America and the Caribbean	2.9	2.7	1.3	2.2
Brazil	1.0	2.5	0.3	1.4
Mexico	4.0	1.1	2.4	3.5
World Growth Based on Market Exchange Rates	2.4	2.5	2.6	3.2
World Trade Volume (goods and services)	2.9	3.0	3.8	5.0
Imports				
Advanced Economies	1.2	1.4	3.7	4.3
Emerging Market and Developing Economies	6.0	5.3	4.4	6.1
Exports				
Advanced Economies	2.0	2.4	3.6	4.5
Emerging Market and Developing Economies	4.6	4.4	3.9	5.8
Commodity Prices (U.S. dollars)				
Oil	1.0	–0.9	–1.3	–3.3
Nonfuel (average based on world commodity export weights)	–10.0	–1.2	–3.0	–4.1

Source: World Economic Outlook, IMF, October 2014

Notes: [1] data and forecasts are presented on a fiscal year basis.
[2] Indonesia, Malaysia, Philippines, Thailand and Vietnam.

Table E.2: Overall Balance of Payment in India (US$ million)

	April–June 2014 P			April–June 2013 PR		
	Credit	Debit	Net	Credit	Debit	Net
A. CURRENT ACCOUNT						
I. MERCHANDISE	**81,712**	**116,360**	**–34,648**	**73,909**	**124,393**	**–50,484**
II. INVISIBLES (a+b+c)	**57,474**	**30,686**	**26,788**	**57,049**	**28,354**	**28,695**
a) Services	37,568	20,499	17,069	36,522	19,655	16,868
i) Travel	4,232	3,838	394	3,825	2,999	826
ii) Transportation	4,452	3,931	521	4,134	3,696	438
iii) Insurance	537	304	234	503	263	240
iv) G.n.i.e.	132	248	–115	130	300	–169
v) Miscellaneous of which :	28,213	12,178	16,035	27,930	12,397	15,533
Software Services	17,533	519	17,014	16,484	350	16,134
Business Services	7,066	6,306	761	7,263	6,696	567
Financial Services	1,581	1,415	166	1,799	2,390	–591
Communication Services	450	262	188	635	426	209
b) Transfers	17,561	1,149	16,413	18,001	1,343	16,658
i) Official	50	263	–213	131	265	–134
ii) Private	17,512	885	16,626	17,870	1,078	16,792
c) Income	2,345	9,039	–6,694	2,526	7,357	–4,830
i) Investment Income	1,501	8,350	–6,849	1,777	6,784	–5,007
ii) Compensation of Employees	844	689	155	750	573	177
Total Current Account (I+II)	**139,186**	**147,046**	**–7,860**	**130,958**	**152,747**	**–21,789**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**80,837**	**60,229**	**20,607**	**65,201**	**58,938**	**6,263**
a) Foreign Direct Investment (i+ii)	11,810	3,642	8,168	10,486	3,998	6,488
i. In India	10,247	1,957	8,291	8,129	1,653	6,476
Equity	7,459	1,904	5,555	5,619	1,526	4,093
Reinvested Earnings	2,059		2,059	2,059	0	2,059
Other Capital	729	53	677	451	127	324
ii. Abroad	1,562	1,685	–123	2,357	2,346	11
Equity	1,562	695	867	2,357	1,091	1,266
Reinvested Earnings	0	276	–276	0	276	–276
Other Capital	0	714	–714	0	978	–978
b) Portfolio Investment	69,027	56,587	12,440	54,715	54,939	–225

	April–June 2014 P			April–June 2013 PR		
	Credit	**Debit**	**Net**	**Credit**	**Debit**	**Net**
In India	68,858	56,393	12,465	54,203	54,665	–462
FIIs	68,858	56,393	12,465	54,183	54,665	–482
ADRs/GDRs	0	0	0	20	0	20
Abroad	169	194	–25	512	274	237
2.Loans (a+b+c)	**34,134**	**32,271**	**1,863**	**37,577**	**33,931**	**3,647**
a) External Assistance	1,215	1,265	–50	1,043	751	292
i) By India	16	129	–113	12	62	–50
ii) To India	1,200	1,136	63	1,031	689	342
b) Commercial Borrowings(ST, MT&LT)	32,918	31,006	1,913	36,534	33,179	3,355
3. Banking Capital (a+b)	**24,064**	**24,179**	**–115**	**25,989**	**15,664**	**10,325**
4. Rupee Debt Service	**0**	**56**	**–56**	**0**	**25**	**–25**
5. Other Capital	**8,156**	**10,626**	**–2,470**	**5,924**	**5,578**	**346**
Total Capital Account (1 to 5)	**147,190**	**127,360**	**19,830**	**134,692**	**114,136**	**20,556**
C. Errors & Omissions		**791**	**–791**	**887**	**0**	**887**
D. Overall Balance (A+B+C)	**286,376**	**275,197**	**11,179**	**266,538**	**266,884**	**–346**
E. Monetary Movements (i+ii)	**0**	**11,179**	**–11,179**	**346**	**0**	**346**
i) I.M.F.						
ii) Foreign Exchange Reserves	0	11,179	–11,179	346	0	346
(Increase - / Decrease +)						

Source: Monthly Bulletin, RBI, October 2014, Press Release, RBI, 1 September 2014
Notes: PR: Partially Revised. P: Preliminary.

Prices

Bornali Bhandari

Inflation has declined on account of falling food inflation and fall in the price of crude oil. The dramatic fall in price of crude oil between July and September internationally has changed the outlook for the rest of the year and over the medium-term as well. The price of crude oil is expected to remain below $100 a barrel for 2015. Statistical analysis suggests that the RBI will meet its inflationary target of eight per cent in January 2015. However, uncertainties arising from an uneven temporal and spatial monsoon and geo-politics may exert an upward pressure, making the achievement of its target of six percent in January 2016 problematic.

P.1 Macroeconomic Background

During Financial Year (FY)13 and FY14, Gross Domestic Product, (GDP at factor cost) was below five per cent. Investment growth was 0.8 per cent in 2012–13 and –0.1 per cent in 2013–14. India, it was widely believed, was in the grip of "stagflation" - high inflation and low economic growth. However, policymakers had no choice but to keep nominal interest rates high (real interest rates were negative till December 2013 and are below two per cent as of August, 2014) because of high inflation expectations, high fiscal and current account deficits. Inflation especially retail inflation continued to be high, nearing nine to ten per cent in the second half of 2013–14. However, things changed almost dramatically especially in the last three months.

The economy seems to have turned around since Q4, FY14 with growth rate above five per cent in the first quarter of 2014–15. But uncertainties remain. The index of industrial production remains volatile. The twin deficits - current account and fiscal deficits - have been brought under control. The results of the national elections ushered in positive sentiments but the monsoon played spoilsport with uneven temporal and spatial rainfall.

Despite the 12 per cent deficit in rainfall, food inflation has fallen (13% in 2013–14:H2 to 2014–15:H1) especially fruits and vegetables inflation (from 26.7% in 2013–14:H2 to 7% in 2014–15:H1). World economic growth suffers from multi-polar growth disorder with positive economic signals coming from the United States (US) while, Germany and China slowed down[1]. Since April 2014, a weak economy combined with low food inflation has been putting downward pressure on inflation rates. However, the icing on the cake came after July, 2014. Price of crude oil started falling rapidly since July 2014 and fell below $100 a barrel in September. Specifically the price of Brent Crude Oil fell from $111.87 per barrel in June 2014 to $97.34 in September. Currently (21 October, 2014) price of Crude Oil is $85.4[2]. As a reference point the last time Brent Crude Oil was below $100 a barrel was before February 2011. This dramatic fall in a span of three months has certainly changed the expectations/outlook. Most forecasts

[1] World Economic Outlook October 2014.
http://www.imf.org/external/pubs/ft/weo/2014/02/images/WEOinfo_1099.pdf.
[2] http://www.oil-price.net/.

suggest that the crude oil price is going to remain below $100 a barrel over the next one year signaling further good news for the current account deficit. The fall in price of world crude prices gave policy space to the Central Government to de-regulate price of diesel from October 18, 2014, which may have a positive impact on fiscal deficit.

Therefore, the one major thing that seemed to have put a brake in the growth story of India in more ways than one in the last two years, inflation seems to have abated. However, risks remain. The full impact of the deficit rainfall will be felt in the third quarter of the current fiscal. Further, inflation expectations continued to remain high in double digits in October 2014 (Reserve Bank of India's Inflation Expectations Survey of Households, Round 37). The perceptions to the risks may have deterred the Reserve Bank of India from yet lowering interest rates in September 2014. That story may change too in November 2014. However, the long-run question that remains whether the policymakers will be able to use this breathing space (at least in the short run) effectively to deal with India's infrastructural and structural problems to ensure that inflation does not go above the targeted rate in the near future.

P.2 Overall Inflation Trends

Given the difficult macroeconomic background described in the above section, the weakening of inflation in the first half of 2014–15 cannot be emphasized enough. All indicators of inflation especially retail inflation indicators are showing this weakening trend (Table P.1). The headline inflation (WPIINFL) as measured by the Wholesale Price Index (WPI) with base year 2004–05 was at five per cent in the first half of 2014–15 on a year-on-year (y-o-y) basis. Calculated on a month-on-month basis, the depersonalised WPIINFL also falls between the second half of 2013–14 (6.2%) and first half of 2014–15 (4.8%).

The various measures of retail inflation rates are calculated on a y-o-y basis from the following price indices: Consumer Price Index (CPI) of Industrial Worker (Base Year, 2001), CPI of Agricultural Labour (Base Year 1986–87), CPI Rural, CPI Urban and CPI Combined (Base Year 2010). Retail inflation ranged from 6.9 per cent (CPI Industrial Worker) to 7.7 per cent (CPI Combined) in the first half of 2014–15. For the last 18 months, core inflation has averaged around 4.2 per cent.

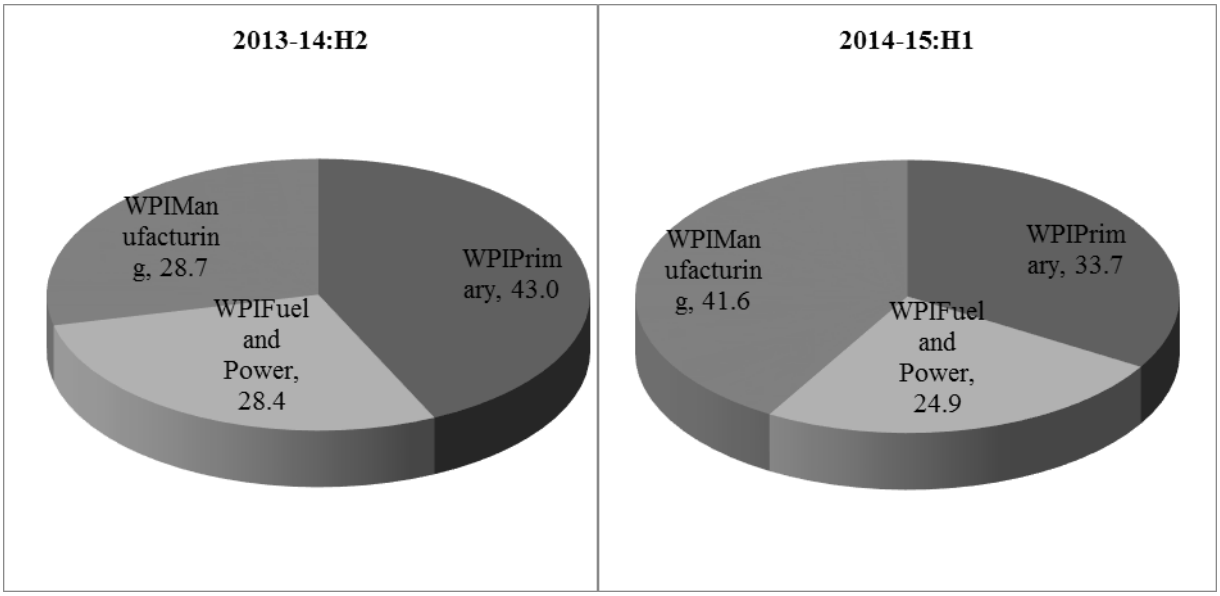
P.3 De-composition of Inflation: WPI Data Trends

Both Primary Articles (10.2% in 2013–14:H2 to 6.2% in 2014–15:H1) and fuel & power (10.5% in 2013–14:H2 to 7.4% in 2014–15:H1) show significant slowdown in inflation in the first half of this financial year as compared to the last half of the financial year. Manufacturing inflation shows a slight uptick (3.1% in 2013–14:H2 to 3.8% in 2014–15:H1). Figure P.1 shows the change in the contributors of inflation between 2013–14:H2 and 2014–15:H1 with the contribution of manufacturing inflation significantly changing between the two sets of six-month periods.

Quarterly data shows that primary articles inflation has been mainly driven by all of its components - food inflation (from 8.9% in 2014–15:Q2 to 5.7% in 2014–15:Q3), non-food articles inflation (from 2.5% in 204–15:Q2 to 3.92% in 2014–15:Q3) and minerals inflation (from 5.2% in 204–15:Q2 to –1.9% in 2014–15:Q3).

Table P.2 shows the different components of food inflation. Fall in fruits and vegetables inflation is significant between the second half of the last fiscal year and the first half of the current fiscal year. Milk, condiments and spices and other food articles show significant increases between the two periods. The two categories – milk and condiments & spices are the only ones which still show double digit inflation amongst all the components of food.

Figure P.1: De-composition of WPI Inflation (%y-o-y), 2013–14:H2 and 2014–15:H1



Note: Base Year: 2004–05 for WPI.
Source: Office of the Economic Advisor.

The Central government took a few proactive steps to manage food inflation, including[3]:

- Liquidation of five million tonnes of rice and 10 million tonnes of wheat from the stocks of Food Corporation of India (FCI).
- Raising the minimum export price of onions to restrict exports.
- Relaxing import norms to ease supply of onions.
- Advising state governments to de-list fruits and vegetables from the APMC Act, and include onions and potatoes under the Essential Commodities Act. In places such as Delhi traders were also 'raided' for 'hoarding' onions.
- Desisting from extravagant hikes in MSP and accepting the recommendations of the CACP on raising MSP

[3] Gulati, A. 2014. Delayed seeds of reform. The Financial Express. http://www.financialexpress.com/news/delayed-seeds-of-reform/1285016. September 3. Accessed 22 October, 2014.

- Informing states that give bonus on top of the MSP that the FCI would not accept all the procurement done by those states.

The exact effectiveness of government measures is difficult to discern but one can infer that they did probably contribute to moderating inflation/inflation expectations in the short run. For example, onion inflation has been negative since February 2014 and the brouhaha made about onions does not match the actual numbers.

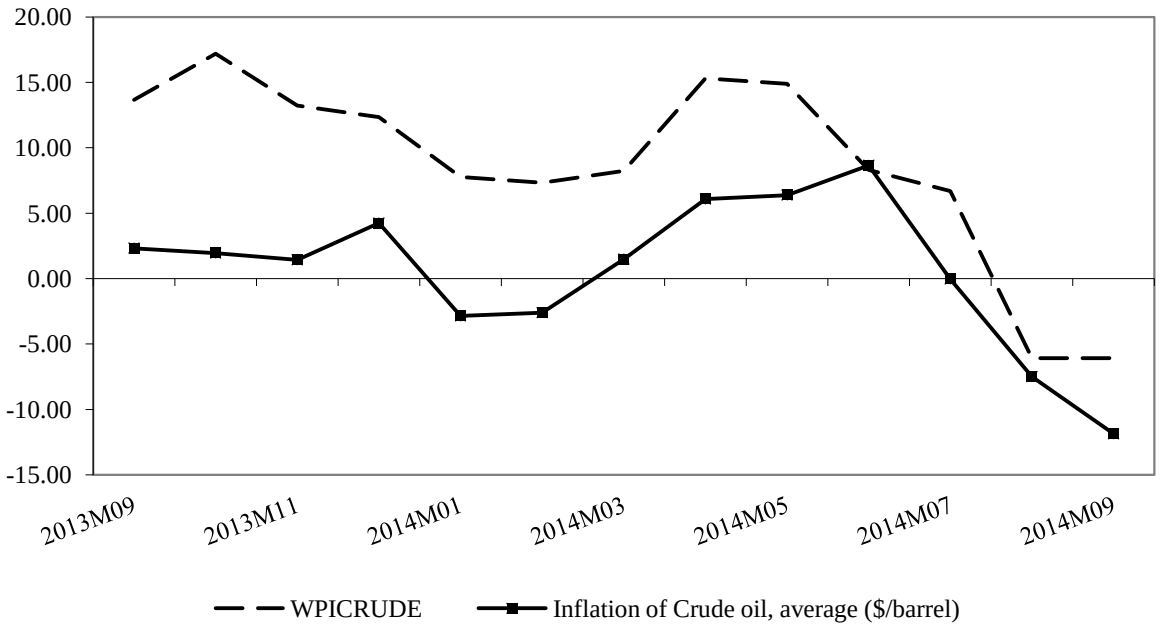
Sonna et al. (2014) use time series analysis to analyse food inflation from 1998–99:Q1 to 2012–13:Q4[4]. The authors find that real rural wages have played a dominant role in the determination of overall food inflation in India in the long-run. The long-run impact of protein inflation on food inflation is found to be weak. The long-run impact of hikes in Minimum Support Price (MSP) of food crops, namely, rice and wheat and input cost inflation (except wages) on food inflation was also limited.

In the short-run, the impact on food inflation stems from the same factors that are important in the long-run viz., increases in rural real wages, MSP and input price pressures.

P.4 Global Inflation

International Crude Oil Inflation has fallen dramatically after July 2014 (Figure P.2). The reasons behind this fall are explored in Box P.1.

Figure P.2: Comparison of Inflation of WPI Crude Oil and Average International Crude Oil (%y-o-y), September 2013–September 2014



Note: Base Year: 2004–05 for WPI.
Source: Office of Economic Advisor and World Bank Pink Sheets.

[4] Sonna, T., Joshi, H., Sebastian, A. and U. Sharma. 2014. Analytics of Food Inflation in India. RBI Working Paper Series. *W P S (DEPR): 10 / 2014*. www.rbi.org.in. Accessed October 21, 2014.

Figure P.1 compares the crude oil inflation internationally versus domestically. Domestic crude oil inflation started falling after May 2014 compared to July 2014 internationally. Comparatively, the price of crude oil has fallen relatively more sharply internationally than domestically. Another interesting point to note from this graph is that domestically crude oil inflation has been higher than internationally. However, after July 2014, there is a convergence even though the domestic inflation remains marginally higher than the international inflation in crude oil.

Box P.1: Crude Oil

Figure P.2 shows the fall in price of crude oil internationally since July. As mentioned earlier, price of crude oil on October 21, 2014 was $85.4 per barrel. The market has been hit simultaneously by slow demand due to economic slowdown in advanced economies and excess supply. The IEA *Oil Market Report* (*OMR*) for October "reduced its forecast of global oil demand for 2014 by 0.2 million barrels per day (mb/d) from the previous month, to 92.4 mb/d, on lower expectations of economic growth and the weak recent trend. OPEC crude oil output surged to a 13-month high in September, led by Libya's continued recovery and higher Iraqi flows". There have been high levels of production from North American shale gas formation. Even total US crude oil production is forecasted to reach record levels. Further, giant refineries have been constructed in Asia and Middle East. It has been hypothesized Saudi Arabia has not intervened in the market because it has only two options – accept a period of lower prices to retain market share or increase prices and lower market share. It has chosen the former. Overall, prices are forecasted to be lower for the rest of 2014 and 2015. However, the geopolitics in the region especially the Middle-East continues to be a challenge.

Sources: Chazan, G. 2014. Refining overcapacity hits oil majors. www.ft.com. Accessed October 22, 2014.

IEA. 2014. IEA releases Oil Market Report for October. http://www.iea.org/newsroomandevents/news/2014/october/iea-releases-oil-market-report-for-october.html. October 14. Accessed October 22, 2014.

Raval, A. 2014. Saudi Arabia keeps the oil market guessing. http://www.ft.com/intl/cms/s/0/9ab77884-57cd-11e4-8493-00144feab7de.html?siteedition=intl. October 20.

Commodity Inflation numbers show negative inflation for food, metal and energy. The IMF World Economic Outlook forecasts continue to predict negative rates of inflation for all three commodities through 2015. This is explained by the low demand especially for food and energy due to the uneven economic growth plaguing the world.

Table P.4 shows global inflation across the World, Advanced and Emerging and Developing Economies. India's inflation is getting closer to the average of Emerging and Developing Economies if one uses CPI indicators. WPI inflation is already quite close to the World average.

P.5 Inflation Outlook

A simple ARIMA (Auto-Regressive Integrated Moving Average) forecasting model suggests that WPI inflation will decrease in the third quarter to 1.84 per cent and then increase again to 4.27 per cent. Similar trends are predicted for CPI inflation too. ARIMA models suggest that CPI inflation will reduce further in November and December of 2014 and thereafter will vary between seven and eight per cent. The problem with ARIMA forecasting models is that they are based on trends. However, the trends of last five years are very different from today.

Therefore, one may infer that there is very little possibility that inflation will go back to close to double digits; but inflationary pressures or at least uncertainties will remain. Especially with kharif production decreasing, there is a chance that food inflation may flare up again thereby affecting overall inflation next quarter. Overall, long-term structural and infrastructural changes are key to solving long-term inflation[5].

Will the Reserve Bank of India (RBI) meets its targeted rate of inflation of eight per cent in January 2015? The ARIMA forecasts support RBI's own inflation outlook that there is a good probability that it will be successful. To quote the RBI –"Latest readings on sensitive components of food prices suggest that they may have peaked after monsoon related increases. The softening of international commodity prices, particularly crude oil, metals and chemicals, is feeding through into an abating of key input prices domestically. Wages, though still sticky, are decelerating, facilitating smaller increases in minimum support prices than in the past. Also, the stability in the exchange rate since January this year is supportive of disinflation. Furthermore, the effects of past monetary policy tightening are operating through the slack in various segments of the economy to bring down inflation excluding food and fuel. Nevertheless, there are upside risks to inflation from the skewed spatial and temporal distribution of the monsoon and from geo-political tensions which could jeopardise the near- term outlook if they materialize" (RBI, 2014)[6].

[5] For example, Sonna et al. (2014) points out the need to improve agricultural productivity. Sonna, T., Joshi, H., Sebastian, A. and U. Sharma. 2014. Analytics of Food Inflation in India. RBI Working Paper Series. *W P S (DEPR): 10 / 2014*. www.rbi.org.in. Accessed October 21, 2014.
[6] Reserve Bank of India. 2014. The Monetary Policy Report. http://rbi.org.in/scripts/PublicationsView.aspx?id=16048#II2. September 30. Accessed October 22, 2014.

Table P.1: Major Indicators of Inflation, 2013–14 and 2014–15 (% y-o-y)

Frequency	*Year: Month*	*WPIINFL*	*CPI Industrial Worker*	*CPI Agricultural Labour*	*CPI Rural*	*CPI Urban*	*CPI Combined*
Half-Yearly	2013–14:H1	5.5	10.2	12.8	9.3	10.0	9.6
	2013–14:H2	6.2	8.7	10.5	9.8	8.8	9.4
	2014–15:H1	5.0	6.9	7.2	8.2	7.1	7.7
Quarterly	2013–14:Q1	4.8	10.7	12.6	9.3	9.8	9.5
	2013–14:Q2	6.6	10.8	12.9	9.3	10.1	9.7
	2013–14:Q3	7.1	10.6	12.4	10.8	9.9	10.4
	2013–14:Q4	5.4	6.9	8.5	8.9	7.7	8.4
	2014–15:Q1	5.8	6.9	8.1	8.6	7.4	8.1
	2014–15:Q2	3.8	6.7	7.0	7.8	6.9	7.4
Monthly	2014: M4	5.5	7.1	8.4	9.2	7.7	8.6
	2014: M5	6.2	7.0	8.1	8.9	7.6	8.3
	2014: M6	5.7	6.5	7.7	7.9	6.8	7.5
	2014: M7	5.4	7.2	8.0	8.4	7.4	8.0
	2014: M8	3.7	6.8	7.2	8.3	7.0	7.7
	2014: M9	2.4	N.A.	N.A.	6.7	6.3	6.5

Notes: 1. Base Year: 2004–05 for WPI, 2001 for CPI Industrial Worker, 1986–87 for CPI Agricultural Labour and 2010 for CPI Rural, Urban and Combined. 2. CPI Industrial Worker and CPI Agricultural Labour does not include the September data.
Sources: Office of the Economic Advisor, Labour Bureau and Central Statistical Organisation

Table P.2: Year-on-Year Inflation Rate of Major Categories in Food Articles in WPI, 2013–14 and 2014–15

Frequency	Year: Month	Food Articles	Food Grains (Cereals and Pulses)	Fruits and Vegetables	Milk	Eggs, Meat and Fish	Condiments and Spices	Other Food Articles
Half-Yearly	2013–14:H1	12.3	11.7	19.4	4.5	13.1	13.4	-1.8
	2013–14:H2	13.0	6.5	26.7	7.5	12.2	20.9	-9.3
	2014–15:H1	7.4	5.3	7.0	10.7	4.0	24.8	6.1
Quarterly	2013–14:Q1	8.2	14.3	2.7	4.2	11.4	14.8	2.9
	2013–14:Q2	16.7	9.6	37.8	4.9	15.2	11.9	-5.7
	2013–14:Q3	17.3	6.7	44.1	6.5	13.7	21.3	-10.0
	2013–14:Q4	8.8	6.4	9.3	8.5	10.8	20.6	-8.5
	2014–15:Q1	8.9	5.8	8.6	9.9	11.0	18.6	5.5
	2014–15:Q2	5.7	4.4	5.2	11.4	-2.9	30.9	6.2
Monthly	2014: M4	8.7	6.3	9.2	9.2	10.2	15.7	0.6
	2014: M5	9.6	6.3	9.8	9.6	12.5	18.7	7.1
	2014: M6	8.3	4.7	6.8	10.8	10.2	21.5	9.1
	2014: M7	8.5	4.9	12.1	10.5	1.6	30.4	9.4
	2014: M8	5.2	4.4	4.8	12.2	-5.9	33.1	5.7
	2014: M9	3.5	4.0	-0.5	11.6	-4.1	29.3	3.5

Note: Base Year: 2004–05.
Source: Office of the Economic Advisor, Government of India

Table P.3: Commodities Prices (2005=100), 2013:Q1 to 2014:Q3

Year: Quarter	Food	Metal	Energy
2013Q1	181.1	199.4	193.6
2013Q2	183.4	176.5	183.9
2013Q3	175.6	177.0	195.2
2013Q4	170.2	178.6	191.3
2014Q1	176.6	171.1	190.3
2014Q2	181.0	165.3	193.6
2014Q3	165.9	169.7	184.3

Source: IMF World Economic Outlook, October 2014

Table P.4: Global Aggregates: Headline Inflation (% y-o-y)

Year: Quarter	World	Advanced Economies	Emerging and Developing Economies
2012Q1	3.3	1.5	5.1
2012Q2	3.3	1.3	5.3
2012Q3	3.6	1.5	5.7
2012Q4	3.3	1.2	5.5
2013Q1	3.2	1.2	5.1
2013Q2	3.5	1.7	5.3
2013Q3	3.4	1.6	5.2
2013Q4	3.3	1.5	5.1
2014Q1	3.3	1.3	5.3
2014Q2	3.6	1.5	5.7
2014Q3	3.3	1.2	5.5

Source: IMF World Economic Outlook, October 2014

Public Finance

Mythili Bhusnurmath

Contrary to widespread expectations that the new government would present a more adverse position of the government's finances, the FM chose to broadly stick to the estimates presented by his predecessor, P Chidambaram. However, the portents were not too encouraging through most of the first half-year of FY 15 due to uncertainties on the growth front. But luck seems to favouring the FM. Oil prices are down sharply, the summer rains have not been as bad as feared initially and the disinvestment target no longer looks as insurmountable as earlier, thanks to buoyant stock markets. If the government uses this window of opportunity to push through structural reforms like complete de-regulation of the oil sector, better targeting of subsidies and so on, it would go a long way towards putting public finances on a more even keel.

PF.1 Budget 2014-15

Budget 2014-15 was presented by the new finance minister Arun Jaitley against the backdrop of a slowdown in both global and domestic economic growth but a vastly 'improved' fiscal position and lower current account deficit.

The main thrust of the Budget is on early revival of the investment cycle to spur economic growth and continue down the path of fiscal consolidation. Hence there are a large number of sector-specific measures and incentives, notably encouraging banks to lend long-term to infrastructure projects through flexible loan structures, extending the 10-year tax holiday to power sector undertakings that begin generation, distribution and transmission of power by March 2017, providing incentives for real estate and infrastructure investment trusts, developing 100 smart cities and so on.

Contrary to widespread expectations that the new government would present a more adverse position of the government's finances, the FM chose to broadly stick to the estimates presented by his predecessor, P Chidambaram. Thus the gross fiscal deficit (GFD) to GDP ratio was retained at 4.1% for FY 15 while the rolling targets indicated in the Medium Term plan aim to reduce the fiscal deficit to 3.6% of GDP and 3.0% of GDP in 2015-16 and 2016-17 respectively, in line with targets set in October 2012.

The FM's optimism on the GFD is based on an ambitious disinvestment target (Rs 43,425 crore as against Rs 16,027 crore in the revised estimates) and government stake sale of Rs 15,000 cr as against last year's RE of just Rs 3,000 crore. This together with a sharp increase of Rs 19,221 crore under the head of 'other non-tax revenue' is expected to help the government stick to its FD target. However, given that the disinvestment target for FY15 is close to the amount raised in the past three years taken together and the fact that the FM has just nine months to complete the stake sale the scepticism do not seem out of place.

Add to this the fact that he's made no attempt to cut expenditure - on the contrary total expenditure is higher than in the interim budget - and the final fiscal deficit number certainly looks 'daunting' as the FM himself put it in his Budget speech!

Revenue receipts are estimated to expand by 17% in 2014-15 as compared to 2013-14 led by an estimated 20% rise in net tax revenues, based on expectations that GDP would grow by a nominal 13.4% in 2014-15. Gross revenue receipts for 2014-15 have been revised upwards by Rs. 22,700 crore in the July budget compared to the interim budget estimates on account of higher non-tax revenues of Rs. 31,800 crore (led by dividends & profits and receipts from communication and transport), offset by lower net tax revenues of Rs. 9100 crore (mainly on account of direct tax concessions).

While direct tax rates have been kept unchanged, a number of concessions have been extended. Thus the tax exemption limit has been increased, the investment limit under Section 80C of the Income Tax Act has been raised and deduction for loans on self occupied properties has been increased by Rs. 50,000. Despite these giveaways, personal income tax collections are estimated to rise by 20% in 2014-15 which seems rather optimistic given the subdued growth in GDP and the modest 9% growth in April-May 2014.

Corporate income tax collections are estimated to rise 14% in 2014-15 though here again a number of concessions have been extended to encourage corporates to invest. An investment allowance at the rate of 15% has been extended to manufacturing companies investing in excess of Rs. 25 crore a year in new plant and machinery upto March 31, 2017. The 10 year tax holiday for entities that begin generation, transmission and distribution of power by March 31, 2017 has also been extended by another 10 years.

On the expenditure side, both capital and plan expenditure are budgeted to rise, though there is a welcome re-prioritisation in favour of capital rather than non-plan expenditure. Revenue expenditure is budgeted to increase by 14% in 2014-15 relative to 2013-14. While non plan revenue expenditure is expected to rise by a conservative 9% in 2014-15 plan revenue expenditure is expected to rise by a healthy 29%.

Overall, tax revenues (net to centre) are estimated to grow at close to 20% in 2014-15 as against just 10% in 2013-14. If revenues have been 'over-estimated', expenditures seem under-estimated. Fertiliser subsidies, for instance, have been projected at Rs 66,000 crore in 2014-15, the same as in 2013-14. But with the price of natural gas slated to increase sharply this fiscal, fertilizer subsidy is also likely to increase.

In absolute terms, the revenue deficit and fiscal deficits are expected to increase in 2014-15 as compared to the revised estimates for 2013-14. However, the effective revenue deficit is estimated to decline marginally to Rs. 2.1 lakh crore in 2014-15 from Rs. 2.3 lakh crore in 2013-14

As a percentage of GDP, all the fiscal measures are set to improve in 2014-15 relative to 2013-14. However, keeping the fiscal deficit at 4.1% of GDP for 2014-15 seems a tall order, given the optimistic assumptions for nominal GDP growth (13.4%) and net tax revenue growth (20%).

Inevitably, Budget estimates for 2014-15 have been criticized as unduly optimistic. Revenue-led fiscal consolidation depends critically on a revival of the investment climate and growth. As in FY14, budget estimates of gross tax revenue are based on nominal GDP growth of 13.4%, a number that looks a bit optimistic at the time of this Review. Assuming an inflation rate of 8%, a nominal rate of growth of 13.4%

would imply a real GDP growth of about 5.5%. With second quarter GDP growth likely to be closer to five percent, a lot will depend on strong growth revival in the second half of FY15

Some of the initial scepticism about the Budget numbers has dissipated in the period since July 2014 when the FM presented the Budget thanks to a number of fortuitous factors, notably the dramatic fall in global oil prices and the relatively more manageable shortfall in summer rains. However, data on actual government revenues and expenditure trends till August 2014 is not exactly encouraging. With growth likely to be lower than the 5.4-5.9% projected in the Budget, it may be difficult to achieve the growth in gross and net tax revenue envisaged in the Budget. Indeed gross tax revenue growth during the first five months of FY 15 was lower than in FY 14, despite the higher GDP growth. The other major item on the receipts side - disinvestment receipts – could become problematic if the government does not move ahead quickly while there is still appetite for Indian equities, especially among overseas investors.

The good news is that the government stuck to the small and steady increase in diesel prices and a combination of that plus the fall in oil prices has reduced the subsidy on diesel to zero. With petrol prices already linked to global prices, only two products – LPG and kerosene continue to be subsidised. On LPG, we already have a blueprint (gradual reduction in the number of subsidised cylinders) that was tried and withdrawn by the UPA government before the elections. It is hoped the BJP government will seize the opportunity of its huge mandate to go back to that plan once the Assembly elections in a number of key states is over (ie by the end of the year).

The PM's Jan Dhan Yojna under which an additional 15 crore bank accounts are to be opened for the presently unbanked is expected to hugely reduce the leakage in various welfare schemes of the government and reduce the subsidy burden. The impact of the National Food Security Act on food subsidies is expected to be contained.

Despite all these positives, lingering doubts remain. In a slowing economy with a high likelihood of a sub-normal monsoon and global recovery far from certain, chances of gross tax revenues growing close to 18% are remote. The net effect of tax giveaways announced by the FM on the direct tax front (Rs 22,200 crore) and additional resource mobilization on the indirect tax front, estimated at Rs 7,525 crore, is likely to result in lower tax revenues. Yet the FM assumes tax revenues will grow significantly on the back of higher GDP growth (between 5.4-5.9 per cent) and higher tax buoyancy.

However, both rating agencies and markets seem to have given the FM the benefit of doubt. For now! Indeed the upward revision in the rating outlook announced by international rating agency, S &P was driven almost entirely by the improvement in government finances.

PF.2 Performance 2014-15

As in FY14 the first half of FY15 saw expenditure run ahead of revenues. Tax revenues always accrue with a lag even as there is no let up in government expenditure. As a result public finances continue to be under strain. The hope is that once growth picks up, revenue collections will also grow. Meanwhile, the government has pressed ahead with its plans for disinvestment – early September, the Cabinet cleared a stake

sale in three PSUs – Coal India ltd, ONGC and NHPC. The sale of 10% in CIL, five per cent in ONGC and 11.36% in NHPC is expected to garner approx Rs 43, 800 crore at prices prevailing in early September; that's more than the target for disinvestment (Rs 43,425 crore) in the FY 15 Budget.

According to the numbers released by the Controller General of Accounts, the fiscal deficit during the first five months of the year has already reached 75% of the budget estimate the same as in the comparable period of FY14. Total expenditure during April-August 2014 grew slightly slower than in the comparable period last fiscal on account of slower growth in both plan and non-plan expenditure. However, total receipts also grew slower – receipts in the first five months amounted to 21.7% of BE as against 23% in the comparable period last fiscal. (Table PF.1)

As of now the jury is still out on whether the FM will be able to adhere to the 4.1% target for the GFD that he has set for himself. While there is high likelihood of a shortfall in tax revenues target due to slowdown in growth, lower subsidies on account of lower oil prices globally and partial deregulation of oil (petrol and diesel) prices and higher divestment proceeds could help meet the GFD.

The appointment of an Expenditure Management Commission, headed by the former RBI governor, Bimal Jalan, is expected to provide government with a blueprint for better expenditure management. However, it is not the first time such a Commission has been set up. It remains to be seen whether the government will have the political courage to implement measures suggested by any such Commission. The problem, as with many other things in India, is lack of political will to carry through much-needed but tough measures.

PF.3 Trends in Receipts and Expenditure

As is to be expected in a slowing economy, the growth in both direct and indirect tax receipts has lagged Budget estimates. According to the Finance Ministry, net direct tax collections rose only 7.09 % to Rs.2.69 lakh crore in the first six months of the current fiscal as against Rs.2.51 lakh crore in the same period in the previous year. However, gross direct tax collections were up 15 % at Rs.3.46 lakh crore during the April-September period of 2014-15 fiscal, as against Rs.3.01 lakh crore a year-ago and the BE of Rs.7.36 lakh crore for FY.

Gross collections of corporate taxes increased 15.31 % to Rs.2.22 lakh crore during April-September from Rs.1.93 lakh crore in the year-ago period. Gross collections of personal income tax, including Securities Transaction Tax and wealth tax, were up 14.37 % at Rs.1.24 lakh crore in the first six months of the current fiscal, from Rs.1.08 lakh crore in the year-ago period.

On the advance tax front, the news is a little better. Advance tax collections have shown a growth of 15.28 % during the first half of the year as against 7.66 % in the same period last year. Tax deducted at source (TDS) has also grown slower at 9.47 % in April-September of 2014-15 against 14.22 % in the same period last year.

On the indirect tax front ie excise, customs and service tax, it is the same (none-too-happy) story.. According to the finance ministry, collections inched up 5.8 % in April-September of FY15 to Rs 2,41,811 crore as against Rs 2,28,619 crore in the

corresponding period a year ago. This is well below the 25 % increase envisaged in the Budget for FY 15 and the budget estimate of Rs 6,23,244 crore for FY15. Excise collections fared poorly, with collections actually contracting 0.6% during the first half year while customs collections fared better at 5.5% to Rs 89,324 crore during the April-September period as against Rs 84,643 crore in the same period a year ago.

Service tax collection, on which a great deal of hope is pinned in view of the rising share of the services sector in GDP, has been the saving grace. Service tax revenues grew 13.1 % to Rs 77, 466 crore during the first six months of the year, up from Rs 68, 506 crore in the comparable period last fiscal. Clearly, the government's efforts to widen the service tax net by introducing a negative list of services that are exempt from taxation rather than identifying specific services for taxation has paid off.

On the expenditure front, both plan and non-plan expenditure during the first five months of FY 15 has been less than in the comparable period last year. Some of the saving at least on the non-plan expenditure side is doubtless on account of the saving in subsidies, both food and oil.

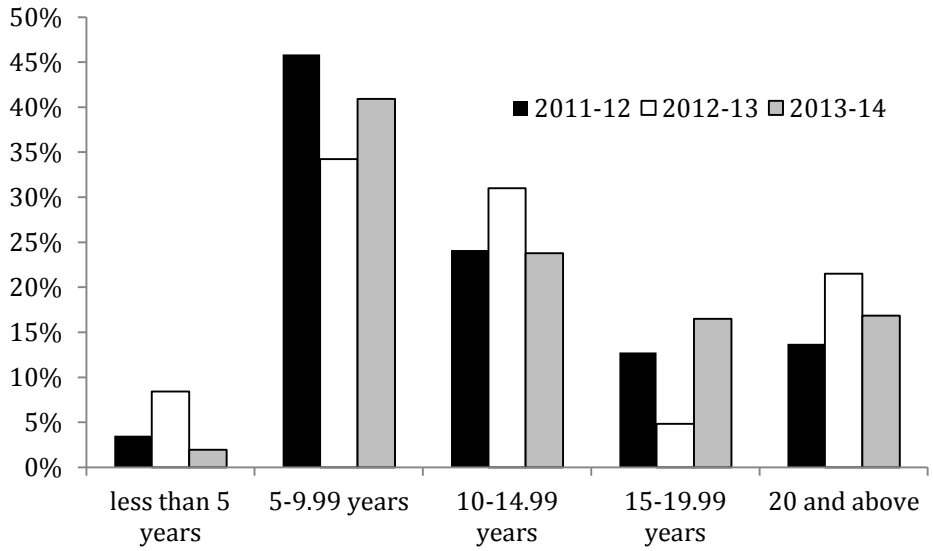
PF.4 Government Borrowing Programme

Gross borrowings have been pegged at Rs. 6 lakh crore in 2014-15, 6.4% higher than the level in 2013-14. Net long term borrowings are placed at Rs. 4.61lakh crore in 2014-15, marginally higher than the borrowings of Rs. 4.54 lakh crore in 2013-14.

In 2013-14, the RBI switched Rs. 31 crores of securities maturing in 2014-15 and 2015-16 for longer term securities with institutional investors. Additionally, securities amounting to Rs. 15.6 crores were bought back in March 2014. In continuation with this strategy of easing the redemption pressure in the near term, further buy-back/switching of shorter tenor securities worth Rs. 500 billion is proposed in 2014-15.

One of the remarkable successes of the RBI has been in elongating the maturity profile of government through switch operations and by issuing securities of longer maturities even as it has kept yields within manageable limits (Fig PF.1)

Figure PF.1: Maturity of government debt



Source: *RBI*

The borrowing calendar for the first half of the year was announced in March 2014 and has likewise gone through without much problem. In fact the government reduced its borrowings by Rs 16,000 crore. Yields on Treasury Bills showed a declining trend especially towards the latter part of H1 FY15 thanks to strong FII inflows. The RBI increased the sub-limit for FIIs in govt securities by another five billion dollars (within the overall cap of $ 30 billion) in view of the strong interest from FIIs. As at the end of September bond yields were in the range of 8.4 %, higher than the yields in September 2013 (8.14%) but well below the range of 8.6% seen earlier in the year.

PF.5 Bond yields

Bond yields have eased after the panic in the market during late May - September saw yields rise sharply to over nine per cent. For most of the first half of FY15, yields have stayed in 8.5% range but they are one percentage point higher than in April 2013. The fear is that as and when US interest rates reverse and portfolio inflows become outflows, interest rates in India will rise as well. (Figure PF.2)

Figure PF.2: GSEC 10 year yield

Source: *PNB Gilts*

PF.6 State Government Finances

The performance of State governments on the fiscal front is mixed, with some states exhibiting a welcome degree of responsibility while others continue to lag. A notable feature of Budget 2014-15 is the sharp increase in funds transferred to states. All plan schemes under which central assistance is provided to states/UTs have been re-structured and funds for centrally sponsored schemes which were hitherto under the central plan outlay have been placed with the administrative ministries for transfer to the states (as central assistance to state/UT plans) through their consolidated funds. With this change in the accounting practice, the central assistance to state plans has increased by 1.7 percentage points to 2.6 % of GDP in 2014-15 over 2013-14. The recommendations of the Fourteenth Finance Commission due later this year are likely to see a further increase in share of funds going to the States.

PF.7 Outlook

The finance minister has bravely accepted the challenge of adhering to the fiscal deficit target of 4.1% of GDP laid down by his predecessor. However, the jury is still out on whether he will be able to stick to this, especially since the FD in the first five months of FY 15 has already crossed 75% of the target for the year, as in the comparable period last year. For now luck seems to be favouring the FM, thanks to the sharp decline in global oil prices, but we will have to wait and see. Quite possibly, the government will ruthlessly cut down on expenditure, especially plan expenditure, in the coming months in a bid to adhere to its target.

Table PF.1: Government Receipts and Expenditure April-August

	Budget estimates	Actuals to Aug 14	% of actuals to BE	Comparable period FY14
Revenue receipts	1,189,763	270,455	22.7	23.9
Non-debt capital receipts	73,952	4,334	5.9	8.7
Total receipts	1,263,715	274,789	21.7	23
Non-plan expenditure	1,219,892	475,095	40.6	43.2
Plan expenditure	575,000	177,623	30.9	33.0
Total expenditure	1,794,892	672,718	37.5	39.8
Fiscal deficit	531,177	397,929	74.9	74.6
Revenue deficit	378,348	324,764	85.8	87.4
Primary deficit	104,166	244,053	234.3	160.9

Source: Controller general of accounts

Forecast

Bornali Bhandari

The annual model is predicting GDP factor cost growth rate to be 5 per cent whereas the quarterly model is predicting 6.1 per cent growth rate. These show the prevailing uncertainties in the economy and which direction the economy takes will depend on the factor that dominates. The good news is that both the annual and quarterly models are predicting downward pressure on inflation ranging from 3.93 per cent to 4.5 per cent in 2014–15.

F.1 Introduction

India has had economic growth rates below five per cent for two consecutive years in a row. With the arrival of the new stable government, the euphoria was evident. And then when the first quarter showed economic growth above five per cent, it seemed that positive sentiments had translated to reality. Unfortunately, the indicators coming out of the second quarter are giving mixed signals. On one hand there is the negative news: spatially and temporally uneven rainfall, slow growth in industry, slow growth in credit and weak growth in rest of the world. On the other hand, falling inflation due to both falling food and fuel inflation have given us reason to hope. However, as we take stock with the half of the current financial year over, the path forward remains uncertain. With a variety of policy measures, the government has been trying to boost sentiments and revitalise investment spending. There is still reason for hope and recovery in the prevailing uncertainty. However, the growth is far too uneven to say anything with confidence about the future, both statistically and figuratively.

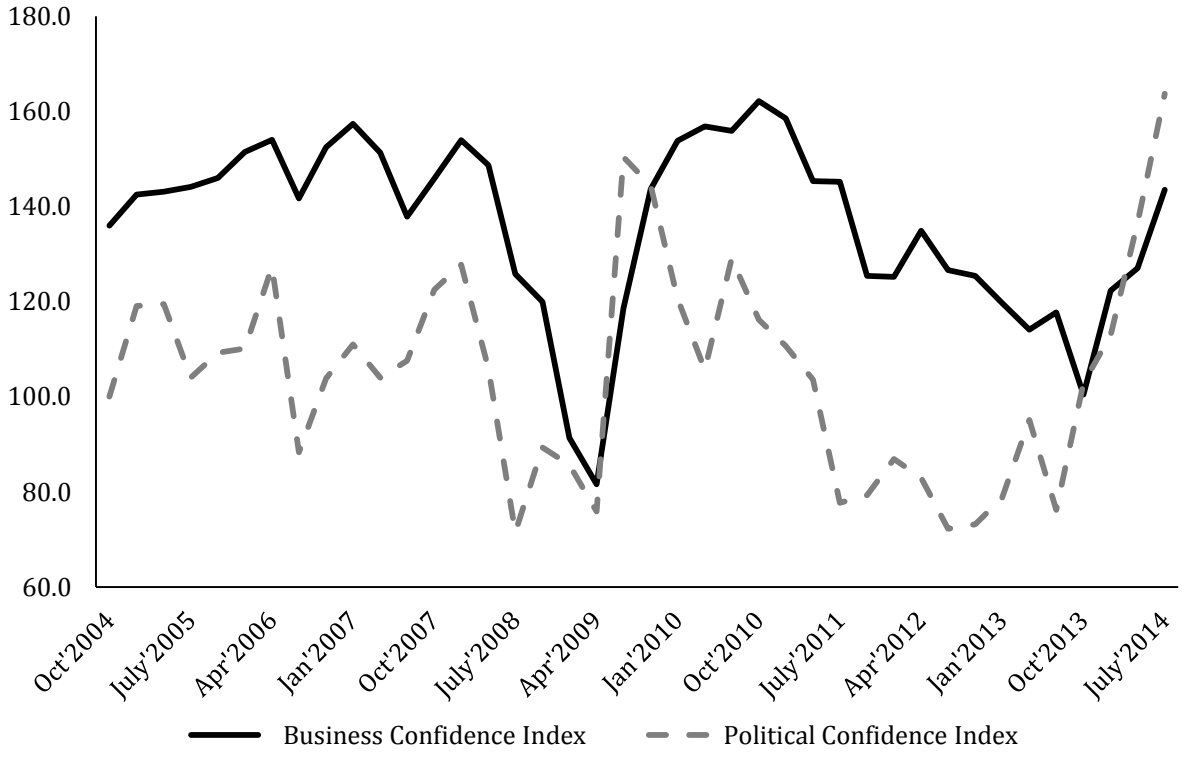
F.2. Backdrop

The Indian economy has been stagnating for the last two years. Gross Domestic Product (GDP) at factor cost had grown at 4.5 and 4.7 per cent in 2012–13 and 2013–14, respectively. Investment growth was 0.8 per cent in 2012–13 and –0.1 per cent in 2013–14. Headline inflation had shown signs of weakening (Wholesale Price Index inflation was 5.4% in 2013–14:Q4 on a year-on-year, y-o-y basis) but retail inflation was still high, varying between 6.9 and 8.5 per cent in 2013–14:Q4 on a y-o-y basis.

The current financial year started on a positive but uncertain note. There were three main issues – outcome of National Elections 2014, weather and the World Economy. The first uncertainty resolved on a positive note with a single party winning majority after three decades giving a semblance of "stability". Subsequently held state elections indicate continuing support for the same party at least in the North and the West but not so much in the East. The euphoria over the outcome of the national elections was reflected in the rise of business sentiments especially during the pre-Budget days. The NCAER Business Confidence Index (BCI) conducted in June 2014 (period between the new party coming to power and the Budget being presented) rose by 13 per cent between April and June 2014. The NCAER Political Confidence Index also increased (Figure F.1). The BSE Sensex increased by 14.9 per cent in April and by 22.6

per cent in May 2014. Overall in 2014–15:Q1, the BSE Sensex increased by 22.8 per cent on a y-o-y basis (Table F.1).

Figure F.1: Business Confidence Index and Political Confidence Index, October 2004 to July 2014



Source: NCAER

The various policies announced by the Government of India starting with the Budget in July 2014 was explicitly done to encourage private investment. Opening up previously closed sectors like railways to foreign direct investment (FDI), single window clearance, promoting smart cities, linking up the North-Eastern states via railway etc. set the right tone to promote investment. However, the structural reforms needed to boost the Indian economy were still missing in the Budget. Since then, the government has announced a variety of measures to encourage inclusive growth and increase ease of doing business in India (Table F.2 shows India's rankings across various parameters in the Ease of Doing Business in India) – *Pradhan Mantri Jan Dhan Yojana* (Prime Minister People Wealth Plan) to encourage financial inclusion, labour market reforms (The government introduced the Factories Amendment Bill, 2014, and the Apprentices Amendment Bill, 2014, in the Lok Sabha, the lower House of Parliament, this month, and within a week, on 14 August, the latter was approved by the Lok Sabha.[1]), 'Make in India' initiative to boost the manufacturing sector, Digital India

[1] Nanda, P.K. 2014. Labour market reforms: Can Modi govt pull off what no earlier regime has attempted? http://www.livemint.com/Politics/BVhf7QbiY10fDbs2M3IT3M/Labour-market-

mission and *Swacch Bharat* (Clean India) campaign. The Prime Minister has visited a number of foreign countries like United States and Japan to further encourage economic ties between countries. Plus diesel pricing was de-regulated in October 2014. This was "easy" with Crude Price Oil falling below $100 in the last one month and predicted to stay below $100 for the next one year. Further the price uncertainty associated with natural gas pricing (discussed in NCAER Mid-Year Review 2013) has also been addressed.

Two separate news items with economic implications over the last six months were: the Supreme Court cancelled coal licenses of more than 200 mines and India backed out from signing the (World Trade Organisation) WTO Trade Facilitation Agreement. While India may have had valid reasons for not signing the Agreement, but its timing and way of exiting did leave a negative imagery of the country. Following the Supreme Court Judgment, the Central Government has now allowed commercial mining of coal by private operators thereby ending Coal India's monopoly.

The second uncertainty at the beginning of this year, the monsoon was resolved in a negative note. Rains were temporally and spatially uneven (discussed in detail in the Agricultural chapter). There were floods in various parts of the country. Lately there was a cyclone which devastated Vishakhapatnam. Overall there was a 12 per cent deficit in rainfall. The North-Western India suffered the most with deficit to the tune of 21 per cent and Southern Peninsula the least with seven per cent. The RBI Monetary Policy Document released on September 30 mentions that the deficit is higher if one uses a production weighted rainfall index. The Central Water Commission reports that out of the 85 reservoirs, 71 reported more than 80 per cent of normal storage (as of October 1, 2014).

The third uncertainty regarding the rest of the world remains. As per the IMF World Economic Outlook (WEO), April 2014, world economy would show weak recovery. World output was forecasted to grow by 3.6 per cent in 2014 and 3.9 per cent in 2015 with the US and Germany leading the recovery. Fast forward to the current, IMF WEO October 2014, forecasts that world output is to grow at 3.3 per cent in 2014 and 3.8 per cent in 2015. There is a divergence between the major economies. While the United States is recovering, Germany and China are slowing down. United States (US) is recovering with 5.9 per cent unemployment rate and real GDP grew at an annual rate of 4.6 per cent in the second quarter. In contrast, the German Business Confidence fell in October 2014[2]. The ASEAN growth rate is forecasted to be 4.7 per cent in 2014, which is lower than 2013. The IMF WEO October 2014 lists the major trends about the following countries:

- "Weaker activity in Russia and the Commonwealth of Independent States (CIS). For the former, this reflects a sizable decline in investment and large capital

reforms-Can-Modi-govt-pull-off-what-no-earlie.html?utm_source=copy. Accessed 28 October 2014.

[2] Buell, T. 2014. German Business Confidence Falters Again in October. http://online.wsj.com/articles/german-business-confidence-falters-again-in-october-ifo-survey-shows-1414401955. Accessed October 28 2014.

outflows following the intensification of tensions with Ukraine. For the latter, it reflects weakness in Ukraine and spillovers from the Russian slowdown.

- Slower growth in Latin America—particularly in Brazil, where investment remains weak and GDP contracted in the first and second quarter.
- Stagnant euro area growth, with an output contraction in Italy, no growth in France, and unexpected weakness in Germany in the second quarter.
- Weaker-than-forecast GDP expansion in Japan. Weaker activity in China in the first quarter. In response, the Chinese authorities have implemented measures to buttress activity, which have supported faster growth in the second quarter" (IMF WEO October 2014).

With the US economy recovering, tapering off is a significant possibility. The IMF WEO Outlook 2014 analyses that the impact of tapering off will depend on the strength of India's economic links with the US.

The IMF WEO Economic Outlook October 2014 also mentions geopolitical risks, which could affect confidence negatively and push up oil prices. The J.P. Morgan "Eye on the Market" released on July 21, 2014 shows that even with the unstable geopolitics around the world, these war zone countries comprise only three per cent of GDP and therefore it is unlikely that they are going to significant impact the growth patterns.

However, as the discussion on geopolitical risks rages, the emphasis on the now clichéd word – uncertainty, cannot be overemphasized. The price of crude oil started falling rapidly since July 2014 and fell below $100 a barrel in September. Specifically the price of Brent Crude Oil fell from $111.87 per barrel in June 2014 to $97.34 in September. Currently (21 October, 2014) price of Crude Oil is $85.4[3]. As a reference point the last time Brent Crude Oil was below $100 a barrel was before February 2011. This dramatic fall in a span of three months affects expectations/outlook. None of the forecasts predict prices below $95 a barrel. This has happened because of oversupply in the market.

F.3 Macroeconomic Background

The first set of numbers from 2014–15 show that GDPFC grew at 5.7 per cent in the first quarter on a y-o-y basis. This was only marginally down from the first quarter of 2013–14:Q1 (4%). The industrial sector grew at 4.2 per cent in 2014–15:Q1. In contrast, in 2013–14, industry had grown at 0.4 per cent. The services sector maintained its growth rate from last year at 6.8 per cent in the first quarter of 2014–15. Essentially this re-bound in GDP growth rate was driven by the turnaround of the industrial sector. Within the industrial sector, it was the electricity, gas and water supply sector which showed the massive improvement (10.2%). The good news is that Gross Fixed Capital Formation (GFCF) or investment showed growth of seven per cent in the 2014–15:Q1 on a year-on-year (y-o-y) basis.

The indicators from the second quarter, unfortunately, are not so rosy. The first advance estimates show that "due to delayed/deficient rainfall, area coverage under most of the crops during current kharif season has declined. Erratic rainfall and dry

[3] http://www.oil-price.net/.

spells in several parts of the country have also impacted productivity of crops. Due to lower area coverage and productivity, production of most of the crops is expected to be lower than their record production levels achieved during the last year. As per First Advance Estimates for 2014–15, total production of Kharif Foodgrains is estimated at 120.27 million tonnes which is lower by 8.97 million tonnes as compared to production of 129.24 million tonnes of foodgrains achieved during Kharif 2013–14" (Ministry of Agriculture, 2014)[4]. However, NCAER estimates suggest that the decline is going to be around two to four per cent.

The Index of Industrial Production (IIP) shows growth of barely 0.4 per cent for July and August 2014 (Table F1). Here again it is the double digit growth in the Electricity sector which is leading the growth process of IIP. Despite the slew of measures by the Central Government, the manufacturing sector has slipped into negative territory for two consecutive months. It is not surprising that Bank Credit to the Commercial Sector (BCC) growth has slowed down in the second quarter. Again there are conflicting evidence from the economy. On one hand, the Centre for Monitoring Indian Economy (CMIE) data suggests an uptick in new investment proposals in September 2014. On the other hand, the HSBC Purchasing Managers' Index (PMI) for manufacturing shows a fall from August to October 2014[5].

Other indicators from the services sector shows improvement. The PMI for Services for India shows decline from July to September and is showing an uptick in October 2014. Other indicators like, cargo handled at major ports shows growth of 3.1 per cent during the period April to August, 2014 on a y-o-y basis. In contrast the corresponding period in 2013 shows –13.9 per cent growth. Between April to July, the average growth of the total number of telephone subscribers was –5.3 per cent in 2013. In 2014, this corresponding number was 4.5 per cent. Between April to September 2013 the average growth rate of tourist arrivals in India was 2.7 per cent. The corresponding average growth rate in 2014 is 12.2 per cent.

The improvement in cargo handled at major ports is linked directly to the improvement in the external sector. Here while exports showed high growth in the first quarter and shows signs of slowing down in the second quarter (Table F.1), imports show significant improvement in the second quarter especially in September 2014. The interesting observation is about net services, which shows –2.6 per cent growth between April to August of 2014 in dollar terms. The rupee versus US dollar has depreciated: it was Rs 59.1/US$ in 2013 versus Rs 60.3 in 2014. The good news on the external front is that during April to August 2014, net Foreign Institutional Investment (FIIs) shows triple digit negative growth rate but Foreign Direct Investment (FDI) equity inflows shows double digit growth rate on a y-o-y basis. Evidently a mix of good macro fundamentals and wooing foreign investors has worked. Price of Crude Oil shows weakening in the second quarter.

The significant change is the moderation in inflation of both Wholesale Price Index (WPI) and the various measures of retail inflation. However, inflation expectations continued to remain high in double digits in October 2014 (Reserve Bank

[4] Ministry of Agriculture, Government of India, Press Information Bureau, 2014. 120.27 Million Tonnes of Foodgrains Production Estimated: 1ST Advance Estimates of Major Kharif Crops Released. http://pib.nic.in/newsite/PrintRelease.aspx?relid=109839.
[5] http://www.tradingeconomics.com/india/manufacturing-pmi.

of India's Inflation Expectations Survey of Households, Round 37). The RBI still did not lower interest rate in its latest monetary policy announcement.

Overall, the economy remains very weak and the economic growth is uneven and more importantly volatile. The sharp fall of the price of Crude Petrol in three months, sudden slowing down of Germany, the fall in agricultural growth, the slowdown in manufacturing are elements which can take the economy in various paths depending on which factor outweighs the other, in the short-run.

Another very important lesson from the last six months that is coming out is that sentiments do not translate into reality necessarily. For broad-based sustainable economic growth, the government has to work harder on long-term structural reforms. For example, building 100 smart cities is a good idea to give fillip to infrastructure. For smarter cities to run on a sustainable basis, one needs change in people and institutions along with infrastructure[6]. The physical infrastructure is the necessary but not sufficient condition.

F.4 Quarterly Assumptions for 2014–15

Assumptions for 2014–15:

- **Prices –** This is given the ARIMA model and shows weakening of prices in the third quarter of 2014–15 but rises again in the fourth quarter of the current fiscal. The average WPI inflation is forecasted to be 3.93 per cent in 2014–15.

- **Rainfall –** With the latest data available, we assume 17.1 per cent fall in rainfall on a y-o-y basis in quarters two, three and four. This is because of the six per cent surplus in rainfall in 2013 and 12 per cent in rainfall in 2014. This is lower than the 22 per cent y-o-y change assumed in the July 2014 forecasts.

- **BSE –** We use ARIMA to predict the movement of the BSE. On average, we assume a 29.1 per cent increase in BSE. This is significantly higher than the 22.8 per cent increase in BSE assumed in the earlier quarter.

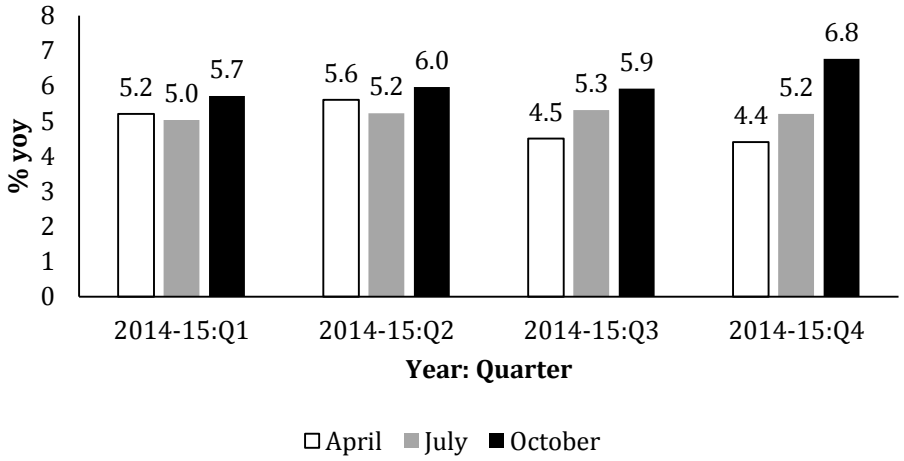
- **Bank Credit to the Commercial Sector (BCC) –** We had earlier assumed a modest 15.8 per cent increase in 2014 over last year (14.6 per cent in 2013) in nominal terms. In real terms, this was an increase of 10.8 per cent versus the increase of eight per cent last year. After examining the data over the last two quarters, the assumption is significantly changed. Now we assume a y-o-y change of 11.6 per cent in the nominal BCC. This amounts to real BCC changing by 7.35 per cent in 2014. Real BCC grew by 6.8 per cent in the first two quarters of 2014–15. Essentially one is predicting/hoping that there may be an uptick in the BCC in the fourth quarter.

- **Total Expenditure at the Central Level –** This assumption of 10 per cent is retained from the previous quarter based on the budget documents.

[6] http://www.ibm.com/smarterplanet/us/en/smarter_cities/overview/.

Based on the above assumptions, Figure F.2 shows the Quarterly GDP Growth Rate estimates for 2014–15. The average GDP growth rate at factor cost is forecasted to be 6.1 per cent in 2014–15. The forecasts are revised upwards from July 2014.

Figure F.2: Quarterly GDP Growth Rate Estimates for 2014–15



Source: NCAER

F.5 Annual Assessments for 2014–15

The current forecast is the fourth revision of real GDP growth rate for 2014–15 after the first forecast was made in January 2014, second in April 2014 and third in July 2014.

We have projected real GDP growth at 5.6 per cent in January 2014, 5.1 per cent in April 2014 and 5.7 per cent in July 2014. However, the October forecast shows a drop in real GDP growth rate to five per cent. The current forecast incorporates changes in key macroeconomic parameters during the past three months.

The key assumptions on which the forecast is based are the following.

- **Rainfall:** The y-o-y change in rainfall is 17.1 per cent. This is lower than the 22 per cent fall in rainfall assumed earlier.

- **BSE:** This number is further revised upwards from 22.8 per cent (July 2014) to 25 per cent. This is due to the upward trend seen in the first half of the current financial year. However, this assumption is lower than what is assumed in the quarterly forecasts. That latter is purely based on ARIMA. Whereas here, we adjust our expectations because of the risk factor that is associated with tapering off, when India might experience outflows. Further if the economic slowdown in the world deepens or even uneven, there might be an adverse effect on the external sector in terms of exports, which in turn might dampen business sentiments. Of course, if domestic industrial production does not pick up in the next two quarters, we might be in deeper trouble.

- **World GDP growth:** As mentioned earlier, the IMF World Economic Outlook October 2014 has downgraded economic growth rates for the world. It is now

assumed that real world GDP will grow at 3.3 per cent in 2014 and 3.8 per cent in 2015.

- **International crude oil price:** From the World Economic Outlook October 2014, we assume –0.1 per cent growth in 2014 and –3.3 per cent growth in 2015. In April, 2014, it was assumed the international crude oil price will grow at 0.1 per cent in 2014.

- **Non-fuel commodity prices in the international markets:** From the World Economic Outlook October 2014, we assume –3.0 per cent growth in 2014 and –4.1 per cent in 2015. Earlier we had assumed –3.5 per cent change in 2014 from the IMF April 2014 Outlook.

- **FDI net inflows and net invisibles receipts:** Based off the current numbers and significant changes in policy, here we revise assumption upwards from the previous 40 per cent on a y-o-y basis to 47 per cent. Net invisibles y-o-y growth is assumed to grow at five per cent. This is lower than the previous quarter assumption of 10 per cent. The assumption is lowered based off the first quarter numbers where we see negative y-o-y growth of net invisibles (–6.6%). Further slowing down of the rest of the world indicates that this trend may only continue.

- **Foreign institutional investment:** We assume 100 per cent improvement over the previous fiscal year, given the large FII inflows seen over the last six months.

- **Domestic energy price index (WPI for fuel, power, light and lubricants):** WPI energy prices are assumed to increase by five per cent in the current fiscal. This is a revision downwards based off the numbers in the first two quarters and current indications of crude price of oil falling (Table F.2).

- **Interest and exchange rates:** We continue to assume the LIBOR to be 0.2 per cent. The exchange Rate is assumed to be Rs 60.9 per dollar. This represents a marginal depreciation from October 2014. The exchange rate was assumed to be Rs 60 per US dollar in July 2014.

- **Central government finances:** From the Budget Documents, one shows disinvestment Revenue to be Rs 63,425 crore. Further, we calculate the changes in the effective tax rates of both direct and indirect taxes.

In addition to above assumptions, we have also made an intercept adjustment in private investment functions to capture the changes in investment in both industry and agriculture.

The revised assessment places overall GDP growth, in constant 2004–05 prices, at 5.0 per cent in 2014–15 (Table F.3). In essence, the GDP growth rate for 2014–15 can vary between 5.0 per cent and 6.1 per cent. This is too wide a range and generally reflects the prevailing uncertainties in the economy. The Reserve Bank's Baseline and Professional Forecasters' Median Projections projects GDP for 2014–15 to be at 5.5 per cent. The World Bank is predicting 5.6 per cent. The IMF is predicting 5.6 per cent.

Table F.1: Recent Trends in Selected Economic indicators

% Change YOY	2013–14	2013–14	2013–14	2013–14	2014–15	2014–15	2014–15	2014–15
	Q1	Q2	Q3	Q4	Q1	July	August	September
I. Growth Environment: IIP								
Manufacturing	-1.1	1.4	1.3	-1.6	3.8	-1.0	-1.4	
Mining and Quarrying	-4.7	-0.2	3.7	1.8	2.9	1.2	2.6	
Electricity	3.5	8.4	8.6	7.6	11.3	11.7	12.9	
General	-1.0	1.9	1.4	-0.4	4.4	0.4	0.4	
II. Price environment								
WPI(New Base)								
Primary articles	6.5	13.0	11.2	6.8	7.6	7.0	6.8	3.9
Fuel, power etc	7.7	12.9	11.9	10.1	9.6	7.4	4.5	1.3
Manufacturing	3.3	2.7	3.8	3.3	3.8	4.1	3.5	2.8
Rice or paddy	18.7	20.3	15.3	13.2	11.9	8.1	5.4	6.9
Wheat	13.3	10.0	6.7	6.5	2.9	1.1	0.7	-0.5
Edible oils	1.0	-2.6	-1.2	-1.1	-0.7	1.0	-0.4	-1.6
All commodities	4.8	7.1	7.1	5.4	5.8	5.4	3.7	2.4
CPI								
Industrial workers	10.7	10.8	10.6	6.9	6.9	7.2	6.8	
Agricultural labour	12.6	12.9	12.3	8.5	8.1	8.0	7.2	
Combined	9.5	9.7	10.6	8.4	8.1	8.0	7.7	6.5
III. Monetary/ Capital market variables								
Sensex	15.1	7.3	10.2	11.2	22.8	33.9	43.1	37.4
M3	12.7	12.9	14.2	13.4	12.2	12.7	13.1	12.9
RM	7.1	7.7	10.7	14.4	9.8	10.9	11.1	9.3
Bank credit to commercial sector	14.4	16.1	14.2	13.9	13.0	12.7	10.5	9.4
LIBOR (3 months, %)*	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
IV. External account								
Exports (merchandise)	-0.3	11.9	7.5	-1.2	9.3	6.7	2.4	2.7
Imports (merchandise)	5.1	-9.3	-15.3	-12.6	-6.9	6.3	2.1	26.0
Exchange rate Rs/US$ (+ depreciation/- appreciation	3.5	12.8	12.9	14.0	7.0	1.3	-3.3	-4.7
Brent $/barrel*	103.0	110.1	109.0	107.9	109.8	107.0	101.9	97.3
Forex Currency Assets (US$)	-0.7	-4.6	2.5	-5.5	13.1	16.6	17.8	15.9

Notes: Conversion from monthly to quarterly: Most are averages except BCC, Exports and Imports have been summed and M3, RM, Foreign currency assets - last month values have been taken as quarterly values

* These are actual values and not YOY change

Sources: Official statistics accessed from a number of sources.

Table F.2: Ease of Doing Business

Ease of Doing Business	2013 (out of 189 countries)	2014 (out of 189 countries)
Overall Ranking	131	134
Starting a Business	177	179
Dealing with Construction Permits	183	182
Getting Electricity	110	111
Registering Property	91	92
Getting Credit	24	28
Protecting Investors	32	34
Paying Taxes	159	158
Trading Across Borders	129	132
Enforcing Contracts	186	186
Resolving Insolvency	119	121

Source: Doing Business, World Bank

Table F.3: GDP Forecasts for 2014–15

Item	2012–13(RE)	2013–14(PE)	NCAER forecast for 2014–15 January 2014	NCAER forecast for 2014–15 April 2014	NCAER forecast for 2014–15 July 2014	NCAER forecast for 2014–15 October 2014
			% change y-o-y			
			Real GDP			
- Agriculture	1.4	4.7	2.1	3.0	2.7	2.0
- Industry	1.0	0.4	3.8	1.9	4.2	2.3
- Services	7.0	6.8	7.1	6.9	7.0	6.9
Total	**4.5**	**4.7**	**5.6**	**5.1**	**5.7**	**5.0**
Exports ($ value)	-1.8	4.0	14	16.6	18.8	5.8
Imports ($ value)	0.3	-8.1	14.4	19.6	25.6	12.8
Inflation (WPI)	7.4	6.0	6.0	6.1	6.4	4.5
			% of GDP at market prices			
Current account balance*	4.8	2*	–3.0	–3.5	-2.8	–2.6
Fiscal Deficit (Centre)	4.9	4.6	4.9	4.5	4.5	4.3

Notes: Forecast Based on Annual Model. *RBI
AE: Advance Estimates; ***PE:*** Provision Estimates * Surplus (+)/deficit (–).
Sources: Central Statistical Organisation and NCAER.

PART - III

Financial Inclusion in India: Why distinguishing between access and use has become even more important

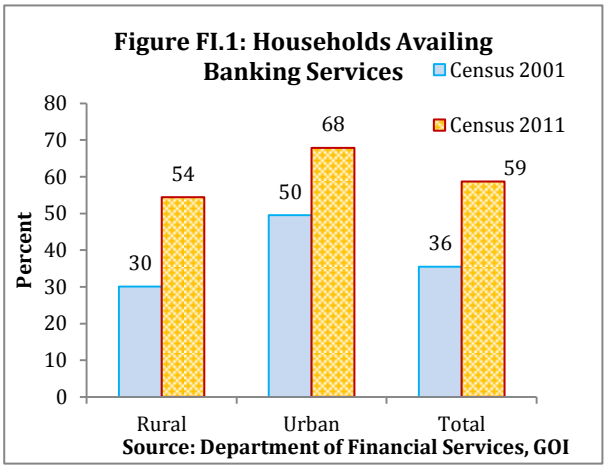
Indira Iyer

The Jan Dhan Yojana (JDY) was launched on August 28, 2014 and, gauging by the 1.5 crore bank accounts that were opened on a single day, signalled accelerated efforts by the government to make financial inclusion a key goal to change lives, reduce risks, and make a broader section of the population a part of the growth process. Starting from 1969 with the nationalization of banks, there have been steady improvements in making financial services more accessible and affordable for the poor. This paper traces the development of policies that promoted financial inclusion and suggests that while universal access is a desirable public good, with a large percentage of accounts lying dormant and the significant use of informal sources of credit, good indicators of success in making financial services more inclusive are setting both supply-side numeric targets as well as demand side indicators to track the ongoing use of such services on a longer term basis.

FI.1 Financial services: Access and use

Financial inclusion is important for economic development and poverty reduction and is broadly defined as universal access to financial services by the poor and disadvantaged people at an affordable cost (Rangarajan Committee,2008). The various financial services that can be accessed by individuals at formal financial institutions include deposits, loans, savings, insurance, and payments and remittance facilities. It is important to make financial services more extensively available as it encourages individuals to invest in education, save for contingencies and retirement, insure against risk, and most importantly in the Indian context, frees them from usurious moneylenders. Over the past decade, the transaction costs to provide financial services have fallen both due to using newer technologies like mobile banking, mobile payments, and internet banking, as well as a shift towards a more innovative delivery strategy of using Business Correspondents (BC) to reach out to more distant consumers.

In India, by the very definition of financial inclusion, the focus of the rhetoric has primarily been on access to these services according to a set of various indicators like the percent of households having a bank account or the number of bank branches per 100,000 population. But equally important is the share of individuals and firms who use financial services. The lack of use does not necessarily mean a lack of access. Some people may have access but prefer not to use these services due to various barriers like low income, lack of trust, lack of knowledge, and illiteracy while others may lack access itself as no financial services are available in their



village. It is important to know whether lack of financial inclusion is mainly due to a lack of demand or a lack of supply, as the strategies to address these will differ.

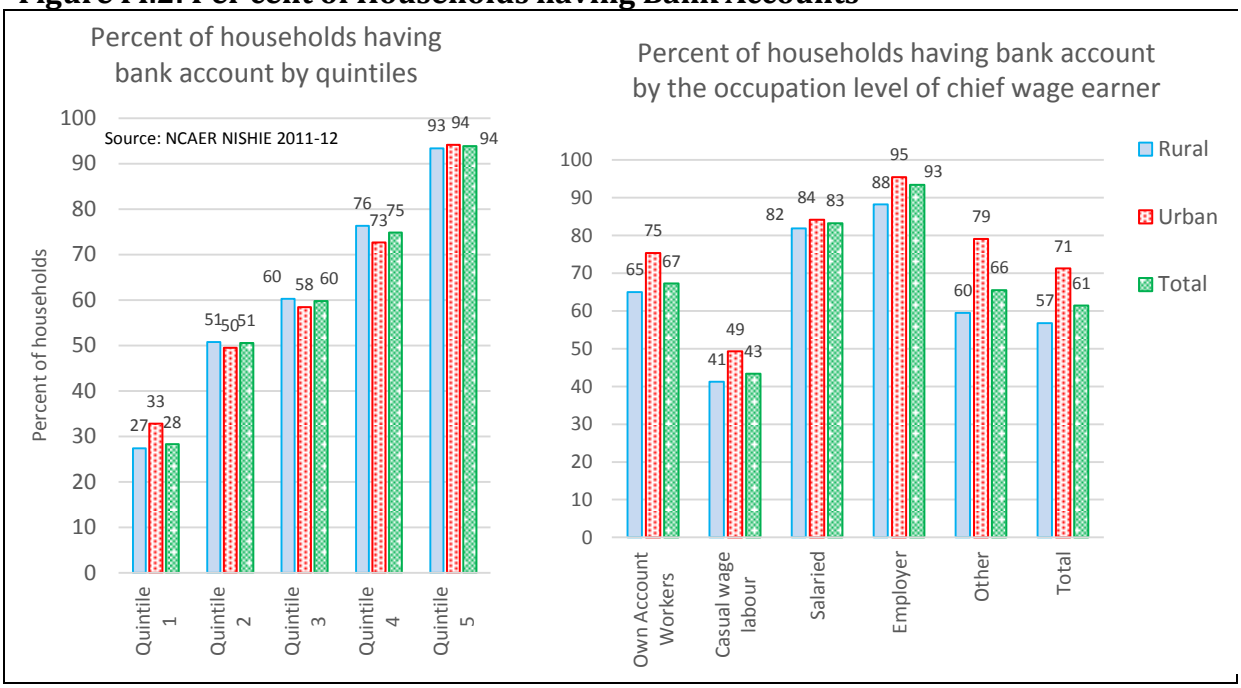
The Department of Financial Services, Government of India data reveal that India has made substantial progress in making financial services available to the poor (Figure FI.1). Between 2001 and 2011, the number of household having a bank account in rural areas has increased from 30 per cent to 54 per cent displaying a growth of eighty percent. While the growth in the urban areas was more modest at 37 per cent, in 2011 over two-thirds of households had a bank account. Overall, in 2011 almost 60 per cent of households in India had access to credit.

Of greater interest is whether these bank accounts are actually used by households. According to the World Bank's Global Financial Development Report (2014) only 11 per cent of those who had a bank account made savings and only eight per cent took loans. Equally alarming are the number of bank accounts that are opened and lie dormant. The RBI 2011–12 Annual Report indicates that almost 75 per cent of savings accounts lie dormant. These figures get more dismal if we look at the Bank Correspondents. Surveys by InterMedia (2013–14) and Microsave (2012) indicate that almost 80 to 96 per cent of these accounts in rural areas are dormant. If financial inclusion is to ultimately translate into ensuring that the poor and the disadvantaged have affordable credit to smooth consumption and reduce risks, then of equal if not greater importance is to look at not just access to financial services but use of such services on a long term basis.

FI.2 Are we reaching the targeted groups?

Unsurprisingly, the most underserved are those in the greatest need for financial services – the bottom 40 per cent. The NCAER-NSHIE 2011–12 survey indicates that on average, less than 30 per cent of those in the bottommost quintile have a bank account, and about 50 per cent of household falling in the second quintile have bank accounts (figure FI.2). Financial access is greater in rural than in urban areas in the second, third and fourth quintiles. However, a large proportion of these accounts in rural areas are not being used on a consistent basis. It is also seen that the lack of financial access is the largest among the casual wage laborers, with only about 40 per cent of the casual wage labor having a bank account. However, a large fraction of these accounts are only used to withdraw payments from MNREGA into these accounts. For the most part, the rural poor have to rely on informal sources of finance for credit.

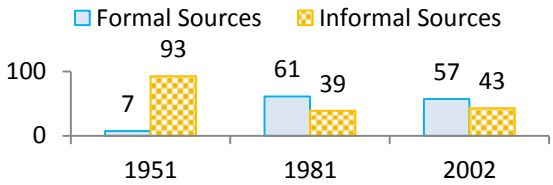
Figure FI.2: Per cent of Households having Bank Accounts



The rural credit market in India has improved but is still markedly fragmented. The RBI data[1] indicate that the share of formal credit in rural areas has increased from 3.9 per cent in 1951 to 51.8 per cent in 2002. In the rural sector, the co-operative societies and the commercial banks were the two most important credit agencies in the rural sector. These two agencies together share 91 per cent of the entire amount of debt advanced by the institutional agencies and account for 52 per cent of the outstanding cash debt.

While policy interventions have resulted in formal sources of credit increasing, what remains a matter of concern is the limited access to institutional credit by the small and marginal farmer who own more than 80 per cent of the agricultural holdings. The Report of the Task Force (2010) on 'Credit Related Issues of Farmers' has observed that "…more disquieting feature of the trend was the increase in the share of moneylenders in the total debt of cultivators. There was an inverse relationship between land-size and the share of debt from informal sources. Moreover, a considerable proportion of the debt from informal sources was incurred at a fairly high rate of interest"[2]. It is seen that in the rural credit

Figure FI.3: Sources of Credit in Rural India



Source: All India Debt and Investment Survey

[1] RBI WP 05/2013: Persistence of Informal Credit in Rural India: Evidence from 'All-India Debt and Investment Survey'

[2] About 36 per cent of the debt of farmers from informal sources had interest ranging from 20 to 25 per cent. Another 38 per cent of loans had been borrowed at an even higher rate of 30 per cent and above, indicating the excessive interest burden of such debt on small and marginal farmers.

market, the households prefer to use informal sources of credit (Figure FI.3) despite the fact that the interest rates are much higher since informal sources do not insist on punctual repayment, normally lend without collateral, and also give loans for personal purposes as marriage and litigation. In addition, there is a wide regional disparity in access. As per the NSSO data, farm households not accessing credit from formal sources as a proportion to total farm households is especially high at 95.91 per cent, 81.26 per cent and 77.59 per cent in the North Eastern, Eastern and Central Regions respectively. These numbers are staggering, and goes to show that even if on average 54 per cent of rural household have a bank account as per the 2011 Census, the actual purpose of more inclusive access is not translating to affordable credit for the poor.

FI.3 The Supply Side: Policy and Infrastructure

The new buzzword called "financial inclusion" is not something totally new. Efforts to make financial services more inclusive have been taking place over the last forty years, and can be traced to a fundamental policy shift that began in 1969 with the nationalization of fourteen privately held banks. This led to greater access to financial services by a larger section of the population as well as greater geographical reach and functional diversification of credit. Soon after the nationalization of the banks, priority sector lending and lending to the small-scale sectors increased significantly. In addition, 196 Regional Rural Banks (RRBs) were also set up between 1975 and1987. All these efforts resulted in bank branches increasing from 8,187 branches in 1968 to 59,752 in 1990. Most of the expansion in reach was targeted to the priority sectors and rural areas, with bank branches in rural areas increasing from 18 per cent in 1968 to 60 per cent in 1990, the share of agriculture in total bank lending increasing from 2.2 per cent in 1968 to 16 per cent in 1990, and the share of the lending to the small-scale sector increasing from close to negligible to 15 per cent during the same period.

The banking sector reforms in the 1990s led to a policy shift. The emphasis now shifted more to increasing the efficiency and profitability of the financial sector. As neither priority sector lending nor rural banking were as profitable as lending in the urban areas, over 5000 rural branches were closed down between 1994 –2006 and the share of rural banks in total banks fell drastically from close to 60 per cent in 1994 to 38 per cent. The share of credit to the agriculture and small-scale industry also declined from around a high of 30 per cent in 1994 to about 19 per cent in 2006. There is no doubt that there was a steady neglect of the banking needs of the rural population in the post liberalisation period.

With the twin objectives of now ensuring both greater financial inclusion and outreach of the banking sector, while at the same time maintaining profitability margins, the RBI in 2006 permitted banks to use the services of intermediaries in providing financial and banking services. This saw the birth of the Business Correspondents (BCs) model. Business Correspondents are retail agents engaged by banks for providing banking services at locations other than a bank branch or an ATM. BCs enable a bank to expand its outreach and offer limited range of banking services at low cost, particularly where setting up a brick and mortar branch is not viable. All these efforts resulted in an increase in households having a bank account from 36 per cent in 2001 to 59 per cent in 2011.

Efforts towards greater access to financial services in the last few years include the "Swabhimaan" campaign in 2011 which aimed to further extend banking facilities to over 74,000 habitations having population in excess of 2,000 using both Business Correspondents Agents (BCAs) as well as setting up Ultra Small Branches (UCBs) to supervise and mentor the BCAs. The Direct Benefit Transfer (DBT) scheme launched in January 2013 also involves initiatives for greater financial inclusion as the beneficiaries of all the 29 welfare schemes under this umbrella, including the transfer of cash subsidy for domestic LPG cylinders, have to open bank accounts.

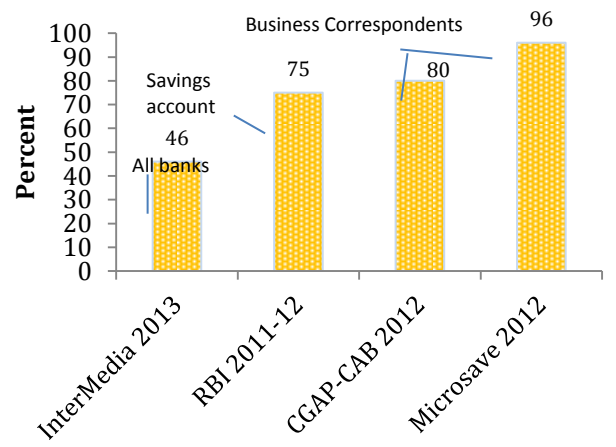
More recently, the Jan Dhan Yojana (JDY) launched in August 2014 aims to provide universal access to banking facilities through a BC or a bank branch, zero-balance bank accounts with overdraft facility of Rs 5,000 after six months and RuPay debit card (domestic card payment network which competes with MasterCard and Visa) with inbuilt insurance cover of Rs 1,00,000. In the second phase starting from 15th August 2015, the focus of JDY would be to provide additional financial services such as micro insurance and pension schemes meant for unorganised workers. However, like the financial inclusion strategies since 2005, the JDY also relies heavily on the BC model.

The BCs model continues to be an integral part of the business strategy for achieving greater financial inclusion. However, there are indications that the BC model may not be delivering on making financial services more inclusive and affordable.

In March 2014, over 3,30,000 BCs were operating in rural areas covering close to 40 per cent of the villages, and 60,000 were operating in urban areas. While the BC model does increase reach, it does not necessarily translate into use. According to the Consultative Group to Assist the Poor (CGAP) and the College of Agricultural Banking (CAB) 2012 survey, an astonishing 80 per cent of zero bank balance accounts were lying dormant (Figure I.4). Some of the active accounts were used only for a single purpose, viz to withdraw the entire payments from NREGA into these accounts in a single transaction.

There are further challenges in the BC model that also that make it unsatisfactory. The 2012 CGAP- CAB survey indicated that 47 per cent of the banking correspondents they attempted to contact were untraceable. Of those that were traceable, close to 16 per cent had not carried out a single transaction till date. Even more dismal figures come out from a 2013 survey by Microsave[3] covering five districts of Uttar Pradesh and Bihar. The Microsave survey found that of the 1,141 Customer Service Points (CSPs) of BCs registered in

Figure FI.4: Dormant bank accounts



[3] MicroSave India Focus Note 105, "The Curious Case of Missing Agents in Rural India," and "IFC Mobile Money Scoping Study 2013."

the official records only four per cent of them conduct transactions on a regular basis. Hence, while access to bank accounts have gone up, its use continues to be bleak with the rural poor having no choice but to rely on informal sources of credit for their financial needs.

FI.4 The demand Side: Factors determining the use of financial services

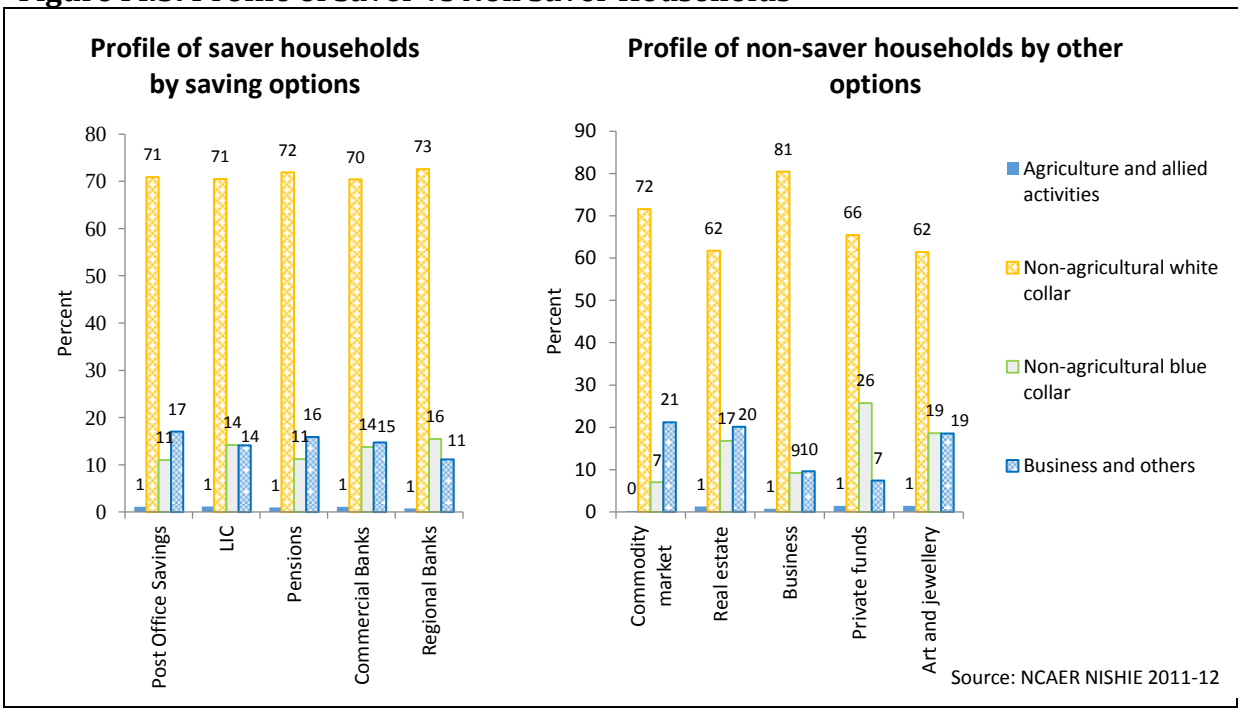
Households face many barriers which impede use of financial services even if they have access. For instance, household may lack the financial capability to save and invest, they may not trust the banking service model available to them, they may lack knowledge of the available financial instruments, may be risk averse, or maybe the distance to the nearest service centre may be a deterrence. Using mainly survey data, some of these factors are discussed below.

Who saves?

As per the NCAER- NSHIE 2011–12 survey and the InterMedia FII 2013 Tracker Survey, the majority of the households do not participate in the financial markets. For household that choose to save, close to 60 per cent of savings in formal savings market either in post office savings, LIC, pension schemes, commercial banks or regional banks is done by the literate population with 11–15 years of schooling (Figure FI.5) . This evidence is very telling as it calls for greater outreach programs in financial literacy specifically targeted to the poor and illiterate.

But even more crucial is whether the poor and illiterate have the financial capacity to save. Over 70 per cent of the savings in formal institutions is done by non-agricultural white collar workers. The poorer and more disadvantaged group of agricultural and allied activities households form just one per cent of the savings in formal institutions. Hence, even though bank accounts have been opened for these poorer households, it points to the fact that these are just numbers with a very low percentage of these accounts actually being used by the poor.

Figure FI.5: Profile of Saver vs Non Saver Households

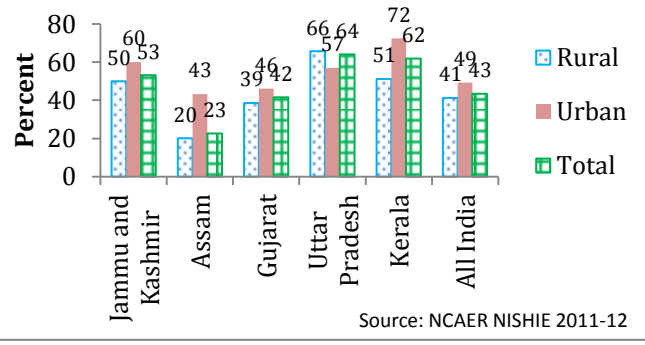


For the significant percentage of households who neither use formal savings options nor participate in financial markets, the options available to them include commodity futures, investment in real estate, direct capital investment in business, private funds, and investment in precious metals like gold and art. Not unexpectedly, the agricultural and allied activities households again form less than one per cent of those who save by other options. This corroborates the concerns raised by the Report of the Task Force (2010) that the rural poor use informal sources of credit leading to greater indebtedness of the cultivators. Hence, it is patently clear a financial inclusion package targeting the poor would not just offer just access to finance, but would also offer easy and viable financial alternatives with a drive towards promoting financial literacy. The financial inclusion strategies will necessarily also have to go hand in hand with strategies to increase the capabilities and incomes of the rural poor so that they also have disposable income to save and invest.

Financial capacity

In India, the casual wage labour comprise 38 per cent of all households at the All-India level, while at the state level it varies widely. While at the All-India level, almost 50 per cent of casual labor have bank accounts, how many of these are used on a consistent basis remains to be seen. In Assam, casual wage labour comprise 13 per cent of the households of which only a fourth have bank accounts, while in Uttar Pradesh, casual wage

Figure FI.6: Percent of casual wage labor who have a bank account



labour account for a third of household with almost two-thirds of them having bank accounts (Figure FI.6). A-priori, due to the low earning and repayment capacities of the casual laborers, the demand for financial services by over a third of the households is likely to be very low, even if they have access. A large number of surveys have documented that the casual wage labor lean more towards informal sources of finance in times of economic hardships. Hence, to differentiate between access and usage becomes even more important as just chasing and satisfying numeric targets will have no real impact on making the lives of the poor better.

First response on facing financial emergencies

Most poor households face economic hardships on the death of the chief wage earner, with a major sickness of any household member, if there is a crop loss or a business loss or a loss due to a natural disaster, if there is a sudden loss of a job, or if there is a marriage of a household member. The NCAER– NSHIE data indicate that at the all-India level, the chief reason for economic hardships are due to a major illness (58%) followed by a marriage of a household member (19%). Of immense significance is the first response in coping with these financial emergencies. In response to medical emergencies, close to half the households take a loan. Since most of poor are in rural areas, and since a large part of the loans in rural areas are from informal sources, greater emphasis on medical insurance cover at reasonable cost and campaigns to improve financial literacy would make financial services more inclusive for the disadvantaged.

Risk aversion

Measuring attitudes towards risk affects saving and investment behavior of households. The NCAER NSHIE data indicate that the majority of the household surveyed (53 per cent) fall into the least risk taker category. The degree of risk taking is higher in urban cities compared to rural areas. It is also found that risk-tolerance increases with educational levels. The degree of risk was highest among investors with more than 15 years of schooling at the all-India level. It was also found that, on average, females take fewer risks than males. Married investors were also seen to take fewer risks than their unmarried counterparts.

The risk behavior and the use of a wider range of financial instruments increase with the income level of households. Investment in risky assets is seen to decline with the age of the person. It is also seen that the business and white collar workers hold more risky assets than blue collar workers. Hence, when planning a policy of financial inclusion and the use of savings and investment to smooth consumption, the demographic profile of the region should first be studied before a menu of options is marketed and offered to generate adequate demand.

Building trust

At the all-India level, the predominant sources of savings and investment by households are in savings accounts in banks (33 per cent), followed by investment in gold (24 per cent), insurance (13 per cent) and cash at home (11 per cent). Other investment options like fixed deposits, public provident fund, stock market, post office (Indira vikas patra, National saving certificate, etc), real estate, and self -help groups/chit-funds did not have much appeal to investors. As per the NCAER-NSHIE survey, the main reason for investments in cash lying idle at home and in bank savings account was that the investors considered this "trustworthy". Other factors like the rate of returns, simplicity, flexibility, liquidity and tax benefits were not major factors in decision making. Tax benefits scored the least with less than one percent of the investors being influenced by these measures. Hence, building trust in other forms of investment which yield greater returns should hence be a significant part of any financial inclusion strategy for the poor.

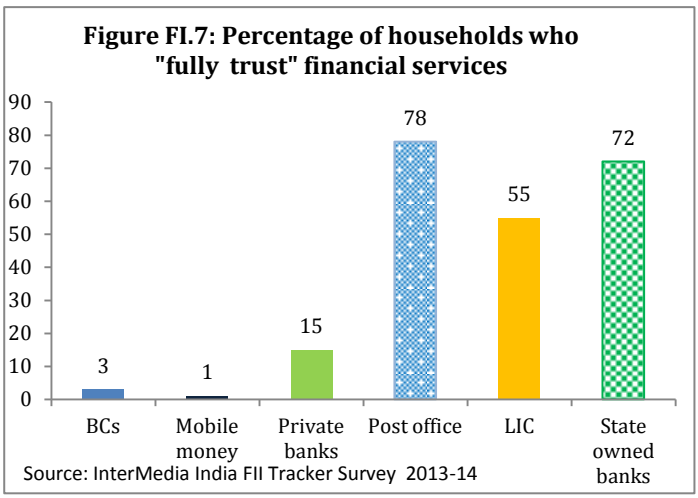


Figure FI.7: Percentage of households who "fully trust" financial services
Source: InterMedia India FII Tracker Survey 2013-14

Building trust in financial intermediaries also is of paramount important. As per the InterMedia India FII Tracker Survey (2013), only three per cent of household fully trust BCs with their financial transactions (Figure FI.7). If you couple this fact that over 47 per cent of the BCs are not traceable after they open an account, then the two factors of lack of trust and absence alone will probably explain why 80 to 96 per cent of accounts opened by BCs lie dormant.

Distance and geography

Needless to say proximity to a service center will ensure greater participation. The NCAER- NSHIE data suggest that there is an inverse relationship between having a bank account and the distance to the bank (Figure FI.8). As per the 2011 Census, even though nearly 70 per cent of Indians live in rural areas, only 37 per cent of the total bank branches in the country are in rural areas. The BC model has helped banks cover more than 200,000 villages (37% of all villages in India) in a span of only eight years. But with low levels of trust in BCs and the lack of follow up activities by the BCs, the shorter distances to banks remains just a number on paper.

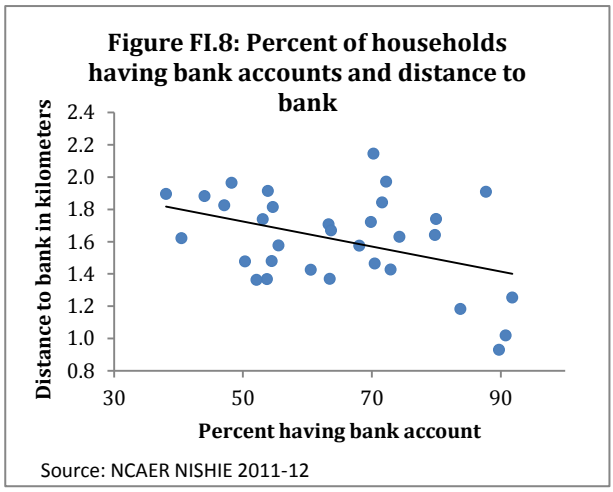


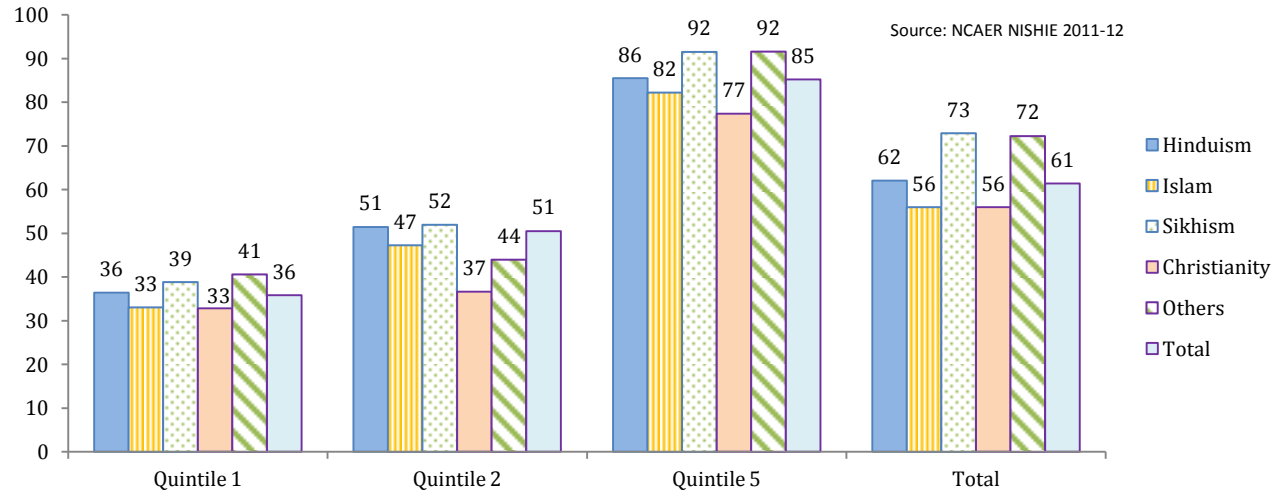
Figure FI.8: Percent of households having bank accounts and distance to bank
Source: NCAER NISHIE 2011-12

Realizing the need to have a more comprehensive definition of financial inclusion to include both access and use of financial services , S K Chattopadhyay [4]developed a composite Index of Financial Inclusion (IFI) using three indicators: banking penetration (percent of adult population having a bank account), availability of the banking services (number of branches per 1000 population) and usage of the banking system (outstanding deposit and credit as a percent of the Net District Domestic Product). The index ranges from 0 to 1, with a higher score indicating greater financial inclusion. The All India average of financial inclusion was 0.33, and only three states, viz., Kerala, Maharashtra and Karnataka had relatively high IFI values of 0.5 or more. The rest of the southern states had medium levels of financial inclusion ranging from 0.3 – 0.5 and, except for Sikkim, all the eastern, north-eastern and central states had low levels of financial inclusion with IFI scores less than 0.3. Hence, across India, there exists a wide disparity in both access and use if financial services, and it is important for policy-makers to understand why such a pattern exists and develop appropriate strategies to ensure greater financial inclusion nation-wide.

Religion

Both income levels and religion play a part in whether a household has a bank account (Figure FI.9). As against the national average of 61 per cent, only 36 per cent of households in the bottommost quintile have a bank account irrespective of their faith. The greatest variance in religion and bank access is in the second quintile with 37 per cent of those practicing Christianity having a bank account while 52 per cent of those practicing Sikhism have a bank account. Hence, strategies for greater inclusion will necessarily have to look at patterns of differential access across income levels as well as religious practices at the regional and state level.

Figure FI.9: Percent of household having a bank account by religion and income levels



[4] Chattopadhyay, S K. 2011. Financial Inclusion in India: A case-study of West Bengal. RBI Working Paper Series 8/2011

FI.5 What can we learn and what are the challenges

The government has made significant strides in improving access to financial services. In 2011 almost 60 per cent of households in India had access to credit. However, it is seen that a large percentage of bank accounts lie dormant defeating the very purpose of the availability of formal sources of finance to smooth consumption and decrease risk for the poor and the vulnerable. It is time now to move beyond institutional based targets to address the demand side of the financial inclusion.

Both the lack of access and the lack of demand are more acute in rural areas. With the growing commercialisation and modernisation of Indian agriculture, the credit needs in the rural areas is now far greater than before. Without formal access to credit, the rural moneylenders, now posing as suppliers of inputs and consumer goods, for-profit non-banking finance companies (NBFCs), middlemen and buyers of produce, and owners of the land, still continue to have a firm hold on rural credit. However, the identification of farmers indebted to private moneylenders is difficult as such loans in most cases have no formal records. But it cannot be underscored that in the present growth oriented economic climate, efforts to make financial services more affordable and more flexible to rural areas become far more important.

With this in mind, there is a need to improve the supply side of credit with more specific and innovative instruments. For instance, banks could create venture capital funds on a small scale to finance first time entrepreneurs. This would reduce risk for the entrepreneurs and the need for them to look for informal sources of finance at high interest rates. The government could also consider providing greater infrastructure and extension support for enhanced credit flow to agriculture so as to decrease reliance on informal channels. Other innovative products to promote savings and use of financial services could include an "index based insurance" where payouts are based on a measurable index like rainfall, commodity price etc. Ultimately, to know what type of financial services that are most needed, there is no shortcut to disaggregating the specific need for specific classes of households in specific areas.

The BC model has often been called the "rock star" of financial sector reforms for its innovative approach to improve access particularly in far flung rural areas. As far as targets go, there is no doubt that this model has performed very well. However, has the BC model really delivered on its goal to make financial services more inclusive? With a dismal record of active accounts and a high turnover of agents, this model which is the backbone of the present financial inclusion strategies too, will need a hard rethink. The BCs work on very low profit margins and low commissions, so ways to incentivize BCs and improve their profitability will have to form part of a holistic financial inclusion strategy. Also of importance is the lack of trust of the depositor in the BC. These issues will need to be addressed to see how far the BC model will encourage greater financial participation, both in terms of opening an account as well as the use of financial services over a longer time period. In the context of greater access, Micro Finance Institutions (MFIs) could also come to play a significant role in facilitating inclusion, as they are uniquely positioned in reaching out to the rural poor and are more trusted.

If we look at the demand for financial services, the behavior becomes more complex. Small and marginal farmers and casual wage labor form bulk of the workforce. However, as per the NSSO and the NCAER- NSHIE surveys, the majority of these households do not save and invest and lean toward informal sources of credit in times of financial hardship. For this class of the poor, a more comprehensive risk management and poverty alleviation program together with a push towards greater financial literacy and access to financial services is essential.

Other factors too play an important role in the demand for financial services. These include the adequacy, timeliness, affordability and convenience of financial services, the literacy levels of household, their income levels, the risk preferences, religion, distance to a bank and geography. A careful analysis of these factors would have to be done to ensure that the mere chasing of numerical targets of financial access and capturing headlines in the process is translated to something more practical and more meaningful for poor and the disadvantaged in the long run.

India's Bilateral Trade in Services: Patterns, Determinants and the Role of Trade in Goods

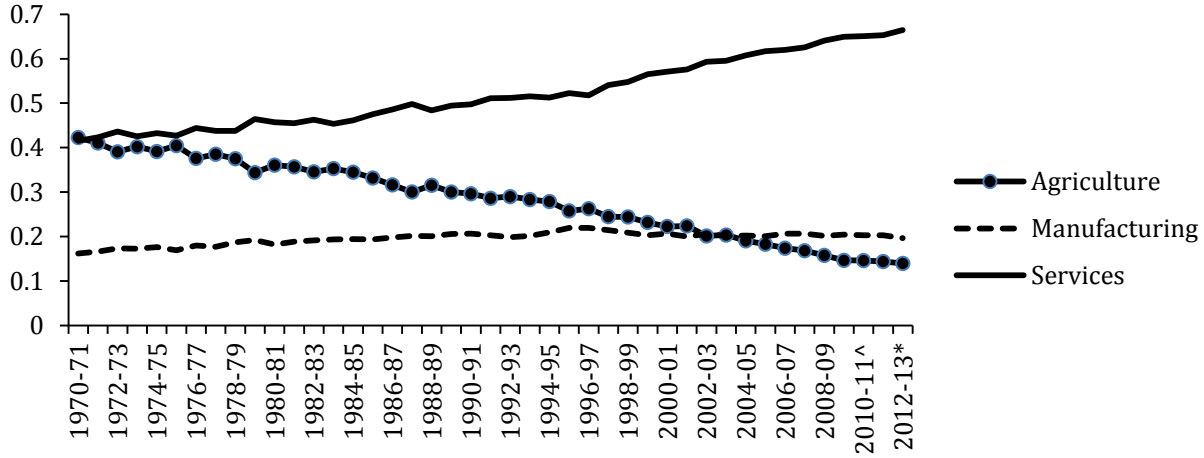
*Seema Sangita**

This paper analyses the patterns and determinants of bilateral trade in services in the case of India using a nascent bilateral trade in services dataset in a Gravity Model Framework over the time frame between 1994 and 2009. The Gravity model is enhanced to analyse the inter-linkages between trade in services and trade in goods and the paper demonstrates evidence of complementary relationship between these variables. The study suggests the need for an integrated policy making process for manufacturing and service sectors, particularly in trade sector, instead of treating them as two disparate sectors.

TS.1 Introduction

The service sector has evolved to become the largest sector in the Indian economy. The share of services in the real output of the economy has increased over the last three decades (Figure TS.1) and now it consists of about 2/3rd of the Gross Domestic Product (GDP). Over this time frame, the manufacturing sector has remained relatively stagnant. This is in contrast to traditional expectations of growth of manufacturing sector preceding the expansion of services sector. Several studies have established that the growth of Indian economy is driven by this unusual form of structural change with a dominant service sector, for example Nayyar (2012).

Figure TS.1: Share of Sectors in the Indian Economy, 1970–71 to 2012–13



Source: NAS and Author's Calculations

*I would like to thank Dr Rajesh Chadha, Dr Bornali Bhandari and participants of Seminar on International Trade in Services organized by Center for WTO Studies, IIFT, New Delhi in August, 2014 for their comments on this paper. Any errors or omissions remain the sole responsibility of the author. This is a draft working paper. Please do not quote or cite this without the permission of the author.

Further, in more recent years, India has gained reputation as an exporter of services. There has been a phenomenal increase in the total exports of services by more than 11 times between 1980 and 2013, from 8,311.8 to 92,670.02 in millions of US dollars[1]. The services sector has become increasingly a major component of India's exports. In fact, in 2013–14, services exports comprised of almost 30 per cent of the current account (credits)[2].

However, there is minimal understanding of the patterns and determinants of India's international trade in services. There are substantial disaggregated data on trade in commodities – bilateral trade, commodity and sector level etc. However, scarce data on patterns of trade on services not only limits our understanding of this very important area but also limits sound policymaking. With the availability of a nascent data set on bilateral trade in services, we attempt to increase our understanding of the Indian trade in services sector. Using this data set we analyse the following issues focusing specifically on India's exports in services:

1. The patterns of India's bilateral trade in services
2. The determinants of trade in services
3. The determinants of extensive margins (expansion of exports in new subsectors) and intensive margins (larger volume of exports in existing subsectors) in services
4. Effect of commodity trade on trade in services

TS.2 Unique Dataset

One of the reasons for limited research on bilateral trade in services with respect to India was the lack of appropriate data. This constraint has been eliminated to some extent by Francois and Pindyuk (2013). This is a global bilateral trade in services dataset that has been compiled systematically from Organisation for Economic Co-operation and Development (OECD), United Nations (UN), International Monetary Fund (IMF) etc. The dataset consists of trade in services of Mode 1 (Cross-border trade) and Mode 2 (Consumption abroad) of trade in services as per the General Agreement on Trade in Services (GATS) classification of trade in services. However, one constraint of this data is that the south-south flows tend to be underreported. We select our sample of India as the reporting country, more than 200 trading partners and a time frame of 1994 to 2009. The list of partner countries is provided in the appendix.

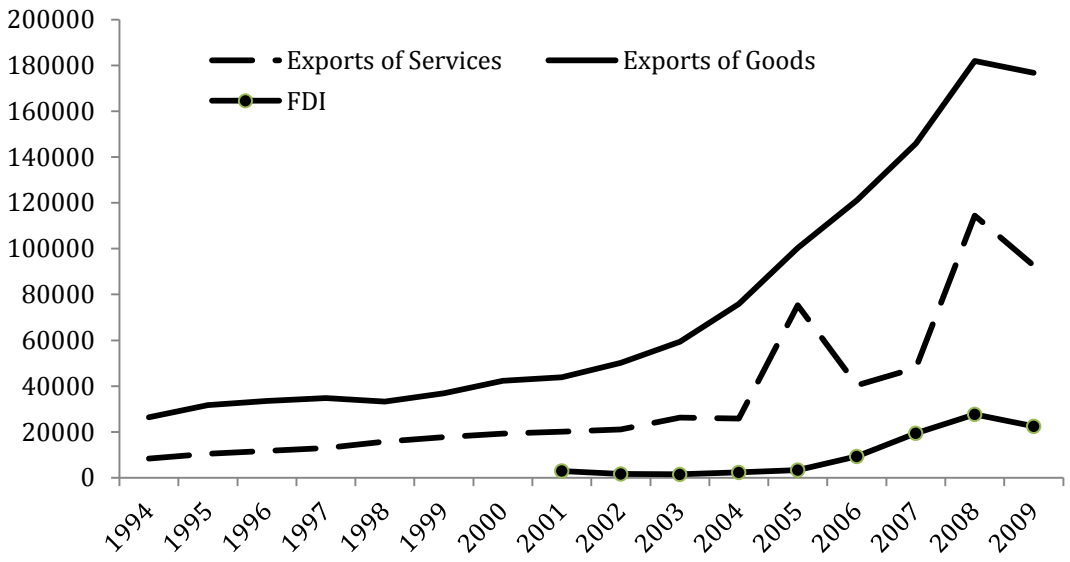
For purposes of comparison and analysis, further down the paper, we have also collected bilateral trade in goods and FDI inflows from the OECD and the UNCTAD[3]. The analysis also requires GDP data, which has been taken from the World Bank dataset while the distance variable has been taken from CEPII (Mayer and Zignago, 2011).

[1] UNCTAD.
[2] Reserve Bank of India, Handbook of Statistics.
[3] Another data constraint in this analysis is the limited availability of the FDI inflows data. The time frame of the FDI data is 2001 to 2009 and also the number of partner countries is much lower at 75. Also, the data used in this analysis does not include stock data of foreign investment, which could also potentially have an impact on trade in services.

TS.3 Patterns of India's Trade in Services

Figure TS.2 demonstrates an increase in exports of services from India to the world over the time frame of 1994 to 2009. The figure also shows concomitant increase in exports of goods from India to world and inflows of FDI from the world to India. In terms of export revenues, merchandise exports continue to be higher than that of services. However, the value of transactions in exports of services is higher than the value of inward flow of FDI in India. In 2008, export of goods is a little more than 50 per cent higher than export of services. Each of these variables increases over the time frame 1994 to 2008. After 2005, one observes an increase in the growth rate of all the three variables. Finally, the collapse of the global markets towards the end of 2008 reflects heavily on the data of the year 2009 - when there is a decline in exports of India, both goods and services, as well as FDI inflows into India.

Figure TS.2: India's exports of services, goods and FDI inflows (million USD), 1994–2009.



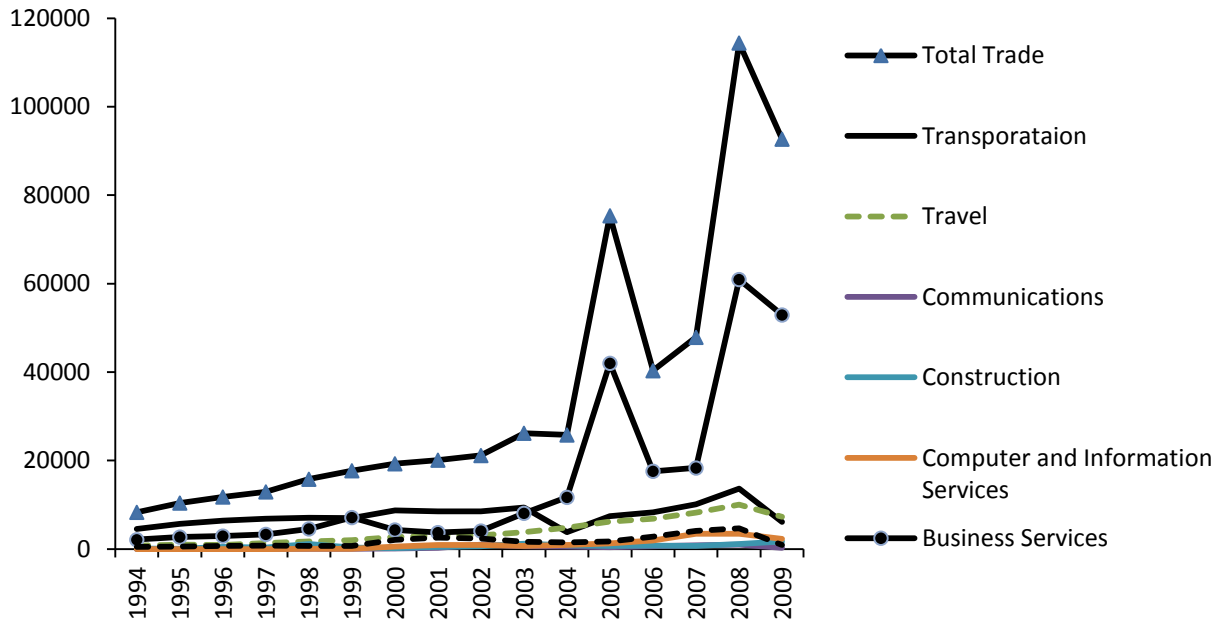
Sources: Francois and Pindyuk (2013), UNCTAD and OECD

An analysis of the top subsectors of the services sector (Figure TS.3) demonstrates that exports of services are dominated by the Business Services sector. Following this, Transportation and Travel generated highest export earnings in 2008. Table TS.1 reports the top trading partners of India. USA is both the top importer of services as well as top importer of goods from India. In addition to USA, Singapore, China, Germany, Great Britain and Hong Kong are some of the countries that are in both the top ten lists.

Table TS.2 shows the list of top ten importers of service subsectors of India. This list is, as expected, dominated by the western nations. United States is also the top importer of services from India in the subsectors of Transportation, Travel, Financial Services, Royalties and License Fees and Other Services. European countries like Italy,

Netherlands and Belgium are the top trading partners in the case of communication sector, while most of trade in Computer and Information Services takes place with Finland, Sweden and Germany. USA, Singapore and Hong Kong are the largest importers of Financial Services from India. Also, Poland, Japan and Germany are largest importers of construction services from India. Several of these countries also have trade relationship with India even in the case of commodities.

Figure TS.3: Exports of Services of various sectors (million USD), 1994–2009.



Source: Francois and Pindyuk (2013) and Author's Calculations

One noteworthy fact is that most of the trading partners fall in the category of high income countries and emerging market or developing countries are virtually non-existent in this list. Given the data constraints, it has not been possible to gauge if this pattern of bilateral trade remained unchanged since the collapse of the global economy in 2009. However, India could benefit by creating a more diverse set of trading relationships to minimize the risk of collapse of the export market due to economic crisis in any one part of the world.

TS.4 Determinants of Trade in Services

Gravity Model Framework

One goal of this paper is to identify the determinants of international trade in services for the case of India. The gravity model has been successfully used to study bilateral trade patterns and determinants. Bergstrand and Egger (2011) present a detailed survey of the use of gravity model in bilateral trade studies. In its simple form, the gravity model suggests that bilateral trade between two countries is directly proportional to the GDP of both the nations and inversely proportional to the distance between them. If the two countries are i and j, then gravity model can be represented as

$$Trade_{ij} = \alpha GDP_i^{\beta_1} GDP_j^{\beta_2} / Distance_{ij}^{\beta_3}$$

As elaborated by Bergstrand and Egger (2011), this equation explains bilateral trade flows reasonably well. This model has received theoretical backing by different research papers, including Anderson and Van Wincoop (2003).

The GDPs of the two countries represent the size of the countries that indulge in bilateral trade. In the country of export, the GDP reflects the output of the economy and acts as a proxy for the production capabilities. In contrast, GDP represents the income in the importing country. It denotes the size of the market for commodities - countries with a higher GDP may have a greater demand for goods in the international market.

Empirical Strategy

A gravity model analysis is undertaken for India's bilateral trade in services with the rest of the world over a timeframe of 1994 to 2009 in order to derive our benchmark estimates. The log linear version of the gravity model is used to derive our estimation equation, as shown below:

$$lnExports_{ijt} = \alpha + \beta_1 lnGDP_{it} + \beta_2 lnGDP_{jt} + \beta_3 lnDistance_{ij} + \varepsilon_{ijt}$$

In this case the country i is India and country j consists of more than 200 countries. The hypothesis is that β_1 and β_2 would be positive and the coefficient of distance, β_3, would be negative.

Our dataset is an unbalanced panel data since the reporting of the data by different countries has not been consistent. The gravity model is estimated using a panel regression analysis of the gravity model with partner country and time fixed effects. It is essential to include these fixed effects to account for various trade frictions that may take place over time and space.

Results

Table TS.3 demonstrates the gravity model outcomes for India's bilateral trade in services. In the first column we find that the coefficient of GDP partner and GDP of India are as predicted by the model. An increase in the GDP of the partner country by one per cent could lead to an increase in bilateral trade in services with India by about 2.3 per cent, keeping everything else constant. The impact of distance is positive but insignificant. Distance is a proxy for barriers to trade. In some cases (like travel, transportation etc.), distance is a direct cost of the service, and in some cases (like information technology services), distance may not reflect direct cost of trade. However, distance still reflects an increased search and transaction cost of trade partnership. In this case, it appears that given the prominence of trade in services using information technology channels, the effect of distance is insignificant.

TS.5 Determinants of extensive and intensive margins of trade in services

For the next set of analyses extensive and intensive margin of trade is calculated using the methodology that was first suggested by Hummels and Klenow (2005). In this paper they propose a method of calculating the extent to which economies trade in a larger quantity of existing goods (or intensive margin of trade) or a wider variety of goods (or extensive margin of trade). The same methodology is used, but the analysis is restricted by the available data. In the Francois and Pindyuk (2013) dataset, there is a large amount of missing information at the disaggregated level of BOP categories. Hence, this analysis is restricted to thirteen broader subsectors of the service sector. The list of subsectors included in the analysis is presented in the appendix. Therefore, in this case, extensive margin of trade refers to a wider range of subsectors and intensive margin refers to larger volume of trade in the existing subsectors.

The gravity model is estimated for the extensive and intensive margins of trade and the results are presented in Table TS.4. In the first column we find that extensive margin of trade is significantly influenced by the GDP of India and also, the distance variable is negative and significant. However, the results pertaining to intensive margins of trade do not conform to the hypothesis set by the gravity model. While, the coefficient of GDP of the partner country is significant, the coefficient of distance is positive. Distance is a proxy for trading cost, which includes a search and transaction costs apart from the physical transportation cost. Hence, this result could potentially imply that when it comes to increasing trade volumes with existing partners, there is a lower search or transaction cost of trading.

TS.6 Effect of commodity trade on trade in services

Motivation

A section of the literature has explored the inter-linkages between the manufacturing and services sectors and has assessed its impact on the growth of the Indian economy. In contrast, the analysis of inter-linkages between the industrial and services sector within the external sector has largely been unexplored. Intuitively, transport or financial services may accompany merchandise trade. Looking at one without the other presents an incomplete picture and therefore may lead to misdirected policy implications.

Why would one expect that India has more bilateral trade in services with countries where there is concomitant trade in commodities? This is possible due to two reasons. One reason is the possibility of exploiting existing trade relationships. Creation of a trade relationship involves search costs. If certain relationships and networks have already been established due to trade in commodities between India and a partner nation, then it may be an optimal approach to minimize new search costs by indulging in trade in services with these trading partners. However another, more sustained reason for connection between international trade in commodities and services is that there are inter-linkages between manufacturing sector and services sector - for example trade in goods leads to an automatic increase in exports of transportation and freight services or increase in business travel to India.

There are likely to be deep inter-linkages between industry and services and several studies on the Indian economy have presented evidence for this idea. Banga and Goldar (2004) shows that services sector played a crucial role in the story of productivity growth in the manufacturing sector in the post reforms period. The services acted as inputs in the production process of the manufacturing sector – accordingly trade reforms lead to a growth in, not just the manufacturing sector, but the contribution of services in the manufacturing sector. Singh (2006) suggests that services reduce transaction costs and thereby improves productivity of the manufacturing sector. This paper also points out that one of the reasons for expansion of services sector as an input into manufacturing sector (as well as final product) is the decline of its relative prices due to technological advances, liberalization policies and foreign direct investment. Dehejia and Panagariya (2014) also support the idea that there are spillovers from manufacturing sector to the service sector as the former demands various services such as transportation, telecommunication and business activities as inputs. However, they do not find significant impact of the services sector due to shifts in income and relative prices.

In the field of International Trade, recent works, for example Dencin and Tekin-Koru (2014), have demonstrated that there are inter-linkages between exports of services and goods and that, almost 46% of firms in their sample from Turkey export both goods and services. The firms that are traditionally commodity exporters are now diversifying to export services as well. While there is a long history of trade in goods, the boom trade is services has been much more recent, spurred by advances in information communication technologies.

In the recent past, a huge literature has explored the concept of trade in value added. The UNCTAD (2013) report on Global Value Chains and Development explores some of the inter-linkages between investment and trade in the world. The report says:

> *Global investment and trade are inextricably intertwined through the international production networks of firms investing in productive assets worldwide and trading inputs and outputs in cross-border value chains of various degrees of complexity. Such value chains (intra-firm or inter-firm, regional or global in nature, and commonly referred to as Global Value Chains or GVCs) shaped by Transnational Corporations account for some 80 per cent of global trade.*

Services sector plays a very important role in such value chains. The UNCTAD report estimates that about half (47%) of the value added of exports comes from services sector as the manufacturing sector depends heavily on services sector in each phase of production. Several of these services are international in nature and emerge as foreign trade in services. Transportation of commodities and travel of labor, use of information and communication technologies for production via outsourcing, setting up business processing offices for customer services are all ways by which international trade in services and goods may be connected. As communication technologies improve, it is also possible to access insurance and financial services and some other business services from a foreign country.

This paper explores the extent to which India's international trade relationships have influenced the patterns of bilateral trade in services. We take this analysis further to assess the impact of international trade in goods on the intensive and extensive margins of trade along different sectors of service trade.

Augmented Gravity Model

We extend the gravity model to include trade in goods in the independent variables as demonstrated below.

$$lnExports_{ijt} = \alpha + \beta_1 lnGDP_{it} + \beta_2 lnGDP_{jt} + \beta_3 lnDistance_{ij} + \beta_4 lnExpGoods_{ijt} + \varepsilon_{ijt}$$

Again, the country i is India and country j consists of more than 200 countries. The hypothesis is that β_1 and β_2 would be positive and the coefficient of distance, β_3, would be negative. In order to validate our hypothesis that exports in goods have positive linkages with exports in services, we expect β_4 to be positive.

Results

In column 2 of Table TS.3, trade in export of goods is inserted into the analysis. We find that the coefficients of the GDP of the partner country and the distance variable are similar to the column 1. The coefficient of export of goods is positive and significant at a 10 per cent level of confidence. So an increase in trade in exports of goods by one per cent is likely to feed into trade in services to an extent of almost 0.31 per cent, keeping everything else constant.

The results suggest that there could be deep inter-linkages between trade of goods and trade of services. In most cases, the coefficient of the trade of goods variable is positive and significant denoting that there is a complementary relationship between trade in goods and services (as opposed to a substitutable one). It appears that trade in services could be an important component of the value added of commodities and this idea could be explored further if appropriate data is available.

In the second and fifth columns of Table TS.4, the effect of export of commodities on the extensive and intensive margin of trade in services is assessed. We find that India's export of commodities has a positive and significant impact on the extensive margin of trade. One interpretation of this result is that export of goods to specific countries creates business networks with them and the same networks prove to be beneficial while developing bilateral trade in services. Export of goods also has a positive and significant effect on the intensive margin of service trade, albeit, the coefficients of GDP of the partner country and the distance variable are not as hypothesized.

TS.8 Addressing Issues of Endogeneity and Robustness Checks

One of the concerns regarding this analysis is the possibility of endogeneity. This problem is addressed using the strategy of instrumental variables analysis. Fugazza and Nicita (2011) present an index called Tariff Trade Restrictive Index. This index has been created exclusively for trade in commodities and hence, it does not include trade in services. Hence this is a suitable instrumental variable for our analysis. Table TS.5 presents the results of the panel instrumental variable regression in the second column. The coefficient of exports of goods continues to be positive and significant even upon the inclusion of instrumental variable in the analysis. This indicates that there is some causal effect of export of goods on exports of services in India.

Another concern in the case of the current dataset on the bilateral trade in services is that a large part of the observations are zeros. This is because several of the smaller countries do not import services from India. This concern is greater in the case of bilateral trade in subsectors of services. This could lead to inconsistent estimation as demonstrated in Santos Silva and Tenreyro (2006). This paper also suggests that the Poisson Pseudo Maximum Likelihood model is a better alternative to the standard log linear model. As a robustness check, I test my hypothesis using the PPML model and the results are presented in the Table TS.6 for the case of impact of export of goods and the export of services for India. The column 2 shows that the coefficient of export of goods is positive and significant. I also perform this analysis on the intensive and extensive margins of trade and find that the coefficient of exports of goods is positive and significant in the case of extensive margins of trade (Table TS.7).

TS.9 Implications and Conclusions

The Indian economy is increasingly developing a skew towards the services sector and it is essential to deepen our understanding of the activities in this sector and develop a better understanding of the trade potential of this sector. This calls for an in depth study of bilateral trade patterns of the services sector. This paper is a first step towards understanding the determinants of the bilateral trade in services and in the future, this would be a step towards developing policies of bilateral trade in service sector.

USA is one of the major importers of services from India. Several European nations are also largest importer of services in some of the service subsectors. One caveat of this study is that reliable data is available only till 2009. It is possible that this pattern has changed following the downturn in the American and European economies. More recent data is required to analyse this and develop strategies of diversification of trading partners.

The size of the Indian Economy and the trading partners GDP are the key determinants of trade in services. Unlike the case of trade in goods, distance is not a major determinant of trade in services. This paper presents evidence to demonstrate that trade in goods has a positive influence on trade in services. This suggests the existence of complementarities between bilateral trade in services and goods. Bilateral trade in goods leads to an increase in trade both in the extensive and intensive margin of trade in services.

Policy making in India tends to treat services and manufacturing as to disparate sectors. However, there is an increasing body of literature that points towards several inter-linkages between these sectors. Hence it is imperative to rethink the strategies of policy making to integrate both services and manufacturing sectors in one framework. Even in the case of policies pertaining to international trade, such as tariff decisions or bilateral trade agreements have so far analysed trade in goods and trade in services separately. This paper presents the case to think of India's export strategy in one unified framework that includes the exports of goods, services as well as any spillover effects.

Finally, this paper also presents several limitations of availability of detailed and recent bilateral trade in services data, particularly in the case of India. Future course of action for this body of literature should include strategies to compile reliable bilateral trade in services data. The services sector consists of several heterogeneous subsectors and future research on developing an understanding of the patterns and determinants of the subsectors separately would benefit the literature. Developing a nuanced analysis of the extent of inter-linkages between specific subsectors of industry and services would benefit from

REFRENCES

Anderson, J. E. and Van Wincoop, E. (2003), "Gravity with Gravitas: A Solution to the Border Puzzle," *American Economic Review,* American Economic Association, vol. 93(1), pp 170-192

Banga, R. and Goldar, B. (2004), "Contribution of Services to Output Growth and Productivity in Indian Manufacturing: Pre and Post Reforms", ICRIER Working Paper No. 139.

Bergstrand J. H. and Egger, P. (2011) "Gravity Equations and Economic Frictions in the World Economy", in Daniel Bernhofen, Rod Falvey, David Greenaway, and Udo Kreickemeier, Eds.,*Palgrave Handbook of International Trade* (Palgrave Macmillan Publishing, 2011)

Dencin, N.N. and Tekin-Koru, A (2014), "A League of Their Own: Service Exporters within Goods Exporters", Available at: http://www.etsg.org/ETSG2013/Papers/095.pdf

Dehejia, R. and Panagariya, A. (2014), "Trade Liberalization in Manufacturing and Accelerated Growth in Services in India", NBER Working Paper 19923. Available at http://www.nber.org/papers/w19923.pdf

Francois, J & Olga Pindyuk, O. (2013), "Consolidated Data on International Trade in Services," *IIDE Discussion Papers 20130101*, Institute for International and Development Economics.

Fugazza, M. and Nicita, A. (2011), "On the Importance of Market Access for Trade", UNCTAD Policy Issues in International Trade and Commodities – Study Series No. 50. Available at: http://www.unctad.info/upload/TAB/docs/Research/stud50_tab51_dec2011.pdf

Hummels, D and Klenow, P. J. (2005), "The Variety and Quality of a Nation's Exports" American Economic Review, vol. 95(3), pages 704-723

Mayer, T. and Zignago, S. (2011) "Notes on CEPII's Distances Measures: The GeoDist Database" *CEPII Working Paper 2011-25*

Nayyar, G (2012) *The service sector in India's Development*, Cambridge University Press, New Delhi.

OECD (2014), OECD STAN Bilateral Trade Database. Available at: http://www.oecd.org/trade/bilateraltradeingoodsbyindustryandend-usecategory.htm

Santos Silva, J. M. C. & Tenreyro, Silvana (2006) "The Log of Gravity," *The Review of Economics and Statistics*, Vol. 88(4), pp 641-658.

Singh, N. (2006) "Services-led Industrialization in India: Assessment and Lessons" MPRA Paper 1276. Available at: http://mpra.ub.uni-muenchen.de/1276/

UNCTAD (2013), *Global Value Chains and Development*, Available at: http://unctad.org/en/publicationslibrary/diae2013d1_en.pdf

UNCTAD (2014), UNCTAD Bilateral FDI Statistics. Available at: http://unctad.org/en/Pages/DIAE/FDI%20Statistics/FDI-Statistics-Bilateral.aspx

World Bank (2012), *World Development Indicators 2012*, Washington, DC:World Bank. Available at: http://data.worldbank.org/data-catalog/world-development-indicators

Table TS.1: Top Ten Importers from India (2008)

Importer of Services from India	Importer of Commodities from India
United States	United States
Switzerland	United Arab Emirates
Singapore	China
Great Britain	Singapore
China	Hong Kong
Germany	Great Britain
Ireland	Netherlands
Australia	Germany
Hong Kong	Saudi Arabia
Japan	Belgium

Source: Francois and Pindyuk (2013)

Table TS.2: Top Importers of Indian Services (2008)

Transportation	Travel	Communication	Construction	Insurance Services	Financial Services
United States	United States	Italy	Poland	Singapore	United States
Singapore	Australia	Netherlands	Japan	Germany	Singapore
Germany	Great Britain	Belgium	Germany	United States	Hong Kong
Denmark	Italy	France	China	Japan	Luxembourg
Korea	Canada	Australia	France	France	Germany
Great Britain	Hong Kong	Austria	Netherlands	Sweden	Belgium
France	France	Germany	Great Britain	Italy	France
Hong Kong	South Korea	South Korea	Singapore	Belgium	Japan
Japan	Japan	Sweden	Turkey	South Korea	Austria
Netherlands	Israel	Finland	Russia	Russia	Russia
Computer and Information Services	**Royalties and License Fees**	**Other Business Services**	**Personal, Cultural, Recreational Services**	**Government Services**	**Other Services**
Finland	United States	United States	Canada	Great Britain	United States
Sweden	Japan	China	Great Britain	Netherlands	Switzerland
Germany	Singapore	Hong Kong	United States	Germany	China
United States	France	Switzerland	Brazil	France	Singapore
Singapore	Germany	Mexico	Indonesia	Denmark	Great Britain
Netherlands	Netherlands	Japan	China	Italy	Ireland
Hong Kong	Hong Kong	Korea	Turkey	Japan	Germany
Hungary	Finland	Netherlands	Australia	Australia	Hong Kong
Israel	Sweden	Taiwan	Germany	Austria	Luxembourg
Italy	Italy	Malaysia	Finland	Pakistan	Japan

Source: Francois and Pindyuk (2013)

Table TS.3: Impact of Export of Goods on Export of Services for India

Dep Variable: Export Services	**1**	**2**
GDP Partner	2.361	2.089
	(0.787)***	(0.877)**
GDP India	2.419	2.018
	(0.453)***	(0.477)***
Distance	5.656	6.944
	(3.444)	(3.590)*
Colony	0.267	0.337
	(1.418)	(1.498)
Common Lang/Ethnicity	-5.054	-6.147
	(3.268)	(3.342)*
Contiguity	5.916	8.441
	(6.865)	(7.144)
Export of Goods		0.318
		(0.142)**
Constant	-173.758	-169.780
	(26.927)***	(26.852)***
N	465	461

* $p<0.1$; ** $p<0.05$; *** $p<0.01$
All variables are in Logs
Includes year and country fixed effects
Fixed effect coefficients are suppressed

Table TS.4: Impact of Export of Goods on Extensive and Intensive Margin of Trade at Sectoral Level

Dep Variable:	**EMT**	**EMT**	**IMT**	**IMT**
GDP Partner	0.667	0.536	1.033	0.928
	(0.800)	(0.885)	(0.559)*	(0.621)
GDP India	0.732	0.272	0.648	0.407
	(0.439)*	(0.481)	(0.307)**	(0.337)
Distance	-6.382	-5.351	6.992	7.641
	(3.197)**	(3.351)	(2.236)***	(2.349)***
Colony	-3.194	-3.329	0.639	0.619
	(1.402)**	(1.491)**	(0.981)	(1.045)
Common Lang/Ethnicity	5.339	4.394	-6.702	-7.276
	(2.990)*	(3.074)	(2.091)***	(2.155)***
Contiguity	-15.983	-13.963	14.273	15.548
	(6.366)**	(6.660)**	(4.452)***	(4.669)***
Export of Goods		0.323		0.178
		(0.151)**		(0.106)*
Constant	11.224	15.191	-104.893	-102.833
	(24.644)	(24.655)	(17.234)***	(17.284)***
N	439	435	439	435

* $p<0.1$; ** $p<0.05$; *** $p<0.01$
All variables are in Logs
Includes year and country fixed effects
Fixed effect coefficients are suppressed

Table TS.5: Instrumental Variable Regression

Dep Var: Trade in Services	Panel	Panel - IV
GDP Partner	0.139	-0.085
	(0.160)	(0.639)
GDP India	2.614	2.493
	(0.281)***	(1.217)**
Distance	0.765	0.621
	(0.476)	(0.673)
Colony	1.091	0.419
	(1.346)	(0.717)
Common Lang/Ethnicity	-0.101	-0.133
	(0.443)	(0.764)
Contiguity	-0.143	-2.190
	(0.957)	(1.108)**
Export of Goods	0.826	1.187
	(0.118)***	(0.603)**
Constant	-91.873	-85.834
	(9.434)***	(39.304)**
N	461	326

* $p<0.1$; ** $p<0.05$; *** $p<0.01$
All variables are in Logs

Table TS.6: PPML - Impact of Export of Goods on Export of Services for India

	1	2
GDP Partner	0.204	0.035
	(0.014)***	(0.020)*
GDP India	0.641	0.436
	(0.062)***	(0.065)***
Distance	-0.163	0.031
	(0.049)***	(0.049)
Colony	0.087	0.102
	(0.044)**	(0.041)**
Common Lang/Ethnicity	0.228	0.031
	(0.036)***	(0.039)
Contiguity	-0.474	-0.302
	(0.195)**	(0.137)**
Export of Goods		0.170
		(0.021)***
Constant	-21.073	-14.517
	(1.920)***	(1.911)***
R^2	0.54	0.61
N	442	441

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

Table TS.7: PPML - Impact of Export of Goods on Extensive and Intensive Margin of Trade at Sectoral Level

	IMT	EMT	IMT	EMT
GDP Partner	0.218	0.541	0.121	0.468
	(0.066)***	(0.022)***	(0.112)	(0.046)***
GDP India	3.724	1.710	3.606	1.555
	(0.500)***	(0.160)***	(0.536)***	(0.193)***
Distance	-0.176	0.031	-0.043	-0.191
	(0.562)	(0.072)	(0.553)	(0.084)**
Colony	-1.204	0.521	-1.202	0.440
	(0.293)***	(0.222)**	(0.294)***	(0.219)**
Common Lang/Ethnicity	0.217	-0.683	0.107	-0.734
	(0.249)	(0.125)***	(0.242)	(0.123)***
Contiguity	-0.860	-1.567	-0.689	-1.808
	(0.823)	(0.412)***	(0.787)	(0.390)***
Export of Goods			0.101	0.086
			(0.083)	(0.049)*
Constant	-115.458	-65.889	-111.911	-58.555
	(17.109)***	(4.430)***	(18.274)***	(5.506)***
R^2	0.11	0.26	0.11	0.28
N	439	2,415	435	2,045

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

Appendix TS.1: ISO codes of India's trading partners

ABW	BMU	DEU	GIN	JOR	MDV	NRU	SLV	TZA
AFG	BOL	DJI	GMB	JPN	MEX	NZL	SMR	UGA
AGO	BRA	DMA	GNB	KAZ	MHL	OMN	SOM	UKR
AIA	BRB	DNK	GNQ	KEN	MKD	PAK	SRB	URY
ALB	BRN	DOM	GRC	KGZ	MLI	PAN	STP	USA
AND	BTN	DZA	GRD	KHM	MLT	PER	SUR	UZB
ANT	BWA	ECU	GRL	KIR	MMR	PHL	SVK	VCT
ARE	CAF	EGY	GTM	KNA	MNG	PNG	SVN	VEN
ARG	CAN	ERI	GUF	KOR	MNP	POL	SWE	VGB
ARM	CCK	ESH	GUY	KWT	MOZ	PRI	SWZ	VIR
ATG	CHE	ESP	HKG	LAO	MRT	PRK	SYC	VNM
AUS	CHL	EST	HND	LBN	MSR	PRT	SYR	VUT
AUT	CHN	ETH	HRV	LBR	MUS	PRY	TCA	WLF
AZE	CIV	FIN	HTI	LBY	MWI	PYF	TCD	WSM
BDI	CMR	FJI	HUN	LCA	MYS	QAT	TGO	YEM
BEL	COG	FLK	IDN	LIE	NAM	ROU	THA	ZAF
BEN	COK	FRA	IMN	LKA	NCL	RUS	TJK	ZMB
BFA	COL	FRO	IND	LSO	NER	RWA	TKL	ZWE
BGD	COM	FSM	IRL	LTU	NFK	SAU	TKM	
BGR	CPV	GAB	IRN	LUX	NGA	SDN	TON	
BHR	CRI	GBR	IRQ	LVA	NIC	SEN	TTO	
BHS	CUB	GEO	ISL	MAC	NIU	SGP	TUN	
BIH	CYM	GGY	ISR	MAR	NLD	SHN	TUR	
BLR	CYP	GHA	ITA	MDA	NOR	SLB	TUV	
BLZ	CZE	GIB	JAM	MDG	NPL	SLE	TWN	

Appendix TS.2: The subsectors included in the calculation of extensive and intensive margin of trade in services:

BOP CODE	SECTOR
205	Transportation
236	Travel
245	Communication Services
249	Construction Services
253	Insurance Services
260	Financial Services
262	Computer and Information Services
266	Royalties and License Fees
268	Other Business Services
287	Personal, Cultural and Recreational Services
291	Government Services
981	Other Services
983	Services Not Allocated