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India Economic Update



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The World Bank

Back to High Growth

India's economic performance in FY2009/10 shows that the recovery from the slowdown during the global financial crisis is well underway. India's GDP growth in FY2009/10 has beaten expectations by reaching 7.4 percent compared with 6.7 percent in the previous year. In particular, agricultural sector growth was better than feared with a slightly positive growth rate despite the worst monsoon shortfall in three decades. The manufacturing and mining sectors were the main engines of growth, while services sector growth was lower than in FY2008/09, when it was buoyed by fiscal stimulus spending. In particular in the fourth quarter of FY2009/10, GDP growth reached 8.6 percent on the basis of a resurgent industrial sector. On the demand side, much higher investments replaced government stimulus. Wholesale price inflation has been around 10 percent between February and May 2010 after remaining in negative territory during much of 2009. Food inflation, however, declined from 18 percent to 12 percent over the same period.

At this point, growth is expected to return to 8-9 percent in the next two years, with a shift from fiscal stimulus to manufacturing and, possibly, agriculture (because of the poor showing of FY2009/10). Wholesale price inflation is forecast to decline to around 6 percent by end-March 2011 as base effects recede and the impact of the FY2009/10 drought diminishes. Monetary aggregates, credit growth, and expectation surveys do not indicate emerging demand pressures and capacity constraints. The outlook faces substantial risks from the possibilities of higher international commodity prices, external shocks from the lingering effects of the global financial crisis, another deficient monsoon, and domestic supply and demand shocks which could lead to higher interest rates.

India: Selected Economic Indicators

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
			Est	Proj	Proj	Proj
Real GDP (at factor cost, % change)	9.2	6.7	7.4	8.5	9.0	8.5
Wholesale Price Index (average % change)	4.5	8.3	3.4	8.0	6.0	5.0
Exports (% change in current US)	26.4	7.9	-12.5	20.4	17.4	17.0
Imports (% change in current US)	32.1	11.5	-7.8	18.3	15.3	14.4
Current Account Balance (% of GDP)	-1.4	-2.5	-2.4	-2.4	-2.3	-2.1
General Government Deficit (% of GDP)	5.0	8.8	9.5	8.5	7.4	6.6
General Government Debt (% of GDP)	74.5	75.1	77.1	74.1	71.3	69.2

Sources: Central Statistical Organization, Reserve Bank of India, and World Bank Staff Estimates.

Economic policies have been recalibrated for a post-crisis world. The FY2010/11 Union Budget envisages a fiscal consolidation that is well balanced between revenue improvements and expenditure restraints. The Reserve Bank of India (RBI) was among the first central banks in the world to embark on a staggered exit strategy to reverse a string of monetary easing measures introduced in 2008.

As economic policy makers shift their attention from crisis management to providing the basis for a return to fast growth over the medium term, this Update discusses some important policy issues, namely inflation, aggregate demand growth, capital flows, fiscal policy, and performance of the states.

¹ Prepared by Ulrich Bartsch, Abhijit Sen Gupta, and Monika Sharma. Constructive criticism from N. Roberto Zaghera, Deepak Bhattasali, Giovanna Prennushi, Miria Pigato, and other colleagues in Washington and New Delhi hopefully contributed to improving this Update.

- We point out that inflation is predominantly driven by energy and food price increases which mainly happened in 2009. Food prices are affected heavily by policies on minimum support prices, public procurement, and exports and imports as they impinge on the supply and demand balance. The margins between minimum support prices, wholesale market prices, and retail prices are substantial. Continuing public stockpiling despite production shortfalls in FY2009/10 contributed to inflation. It should be noted that monetary policy tightening in the face of inflation driven by energy and food prices would be misguided.
- What is the importance of exports for India's economic growth, and their prospects in an environment of weak GDP growth in the high-income countries, which are recovering slowly from the global crisis? Technology transfers from abroad and innovation induced by competition in world markets may be central for factor productivity growth, which requires openness to trade. Tentative indicators for India, however, do not support the view that exports consist of more sophisticated products than domestic sales, and exports may therefore be less important for India's economic growth than for growth in smaller emerging market countries. The domestic market is growing fast and increasingly provides companies with the depth they need to benefit from economies of scale and scope. In addition, the structure of global trade growth suggests that there is no reason to be pessimistic about India's export growth.
- India's 'calibrated approach' to capital account openness has served it well. Extraordinary volatility in international capital flows over the last two years has reinforced skepticism with regard to capital account liberalization. There is now widespread support for the view that short-term portfolio flows can have a destabilizing effect. We show that the Reserve Bank of India's foreign exchange interventions amounted to US\$180 billion during the 2000s, and that around 40 percent of this amount was sterilized through open market sales of government and RBI bonds. Reserve money creation therefore was maintained in line with money demand growth, except during the last year and half before the global crisis. Indian policy makers used a variety of instruments to manage capital inflows. They prefer flexibility over nominal anchors and monetary policy rules, and have allowed greater exchange rate flexibility over the last two years.
- Fiscal policy could do more to support growth. Governments of fast-growing emerging market countries spend a much higher share of total resources in productive sectors, including health and education, than the Indian government. There are likely significant growth effects from a reallocation of spending, for example, from badly targeted subsidies to infrastructure investment. India's states achieved an impressive fiscal consolidation prior to the global financial crisis, which provided room for increased social sector spending, which was protected during the slowdown.
- Several states with lower than average per capita incomes have also been growing slower than the all-India average—there is as yet little sign that incomes are converging, despite the fact that all states have experienced real increases in per capita income since 2000.

Recent Developments

Strong growth in the fourth quarter pushed annual GDP growth to 7.4 percent in 2009-10. Fourth quarter growth reached 8.6 percent (y-o-y), the highest quarterly growth rate since the end of FY2007/08. The agricultural sector recorded growth of 0.7 percent in the last quarter of FY2009/10, which brought its annual growth rate into positive territory despite the worst Monsoon in decades. Advance estimates had expected a 0.2 percent decline in agricultural output for the year.

The industrial sector's robust recovery beat expectations. Growth in the last quarter of fiscal year FY2009/10 was an unexpectedly high 13.3 percent resulting in over 12 percent growth in the second half of year, nearly double the 6 percent growth witnessed in the first half. Growth in the index of industrial production reached 17.6 percent in April (y-o-y). The recovery is driven mainly by capital goods, consumer durables, and intermediate goods, although the latest seasonally adjusted annualized monthly rates (SAAR) indicate that restocking of depleted inventories and catch-up on postponed purchases could be coming to an end. Growth was driven by private demand with public demand falling because of the exit from fiscal stimulus.

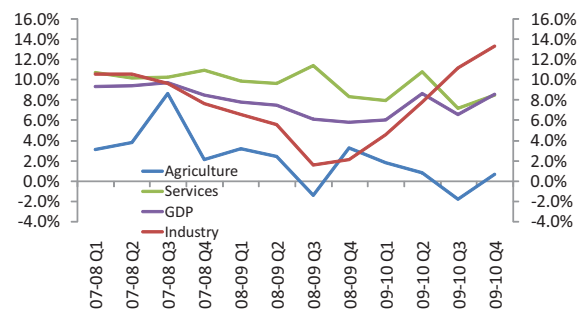
Higher inflation mars the bright picture, but there are clear indications of moderation. Inflation as measured by the wholesale price index (WPI) averaged 10 percent during February-May 2010. This is in sharp contrast to the negative inflation rates registered through much of 2009 due to the sharp drop in international commodity prices. While international oil prices have rallied strongly since the spring of 2009, the largest contribution to inflation in India comes from food price increases, which reached 17-20 percent during November-February but have since declined to 12 percent in May. Some moderation is also visible in seasonally adjusted, annualized monthly rates (SAAR) of inflation, which are around 2 percent over the February-April 2010 period.

In the external accounts, the current account (CA) deficit widened on the back of lackluster performance on the export side. The CA deficit reached US\$30.3 billion in the first three quarters of FY2009/10, compared to US\$27.5 billion over the same period in FY2008/09. Initially, following the global financial crisis, imports fell faster than exports because of the drop in oil prices and the current account balance improved. Lately, however, import demand has pulled ahead of export growth, partly because of the recovery in oil prices. While export growth dipped marginally in November 2009, it has registered a strong recovery since then.

Amid strong signs of a recovery and a firm rupee, portfolio investments have rebounded. In FY2009/10, net portfolio investment inflows amounted to US\$32.3 billion, compared to a net outflow of US\$13.8 billion in the previous year. By contrast, direct investment inflows have been flat, even registering a marginal decline over the same period, to US\$34.2 billion in FY2009/10 from US\$35.2 billion in FY2008/09.

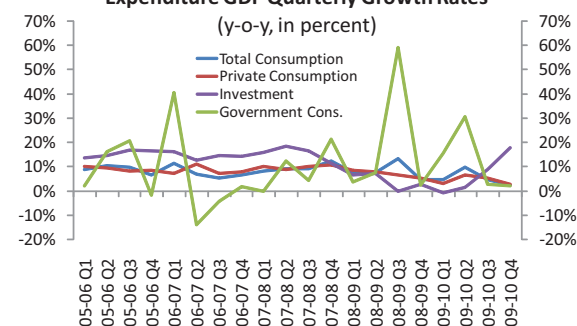
The rupee has gained ground and the RBI's reserves improved. The rupee strengthened by 15.1 percent against the U.S. dollar between March 2009 and April 2010. The real effective exchange rate appreciated by 11.2 percent

A Strong Rebound in the Industrial Sector Boosted Growth...
(y-o-y, in percent)



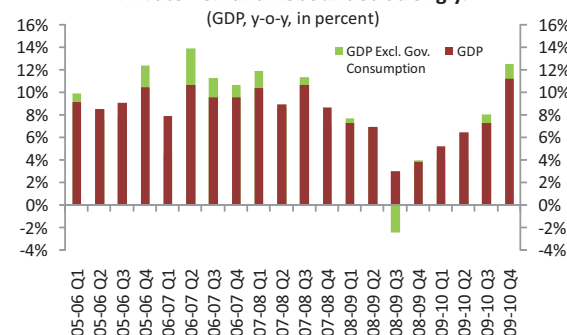
Source: CSO.

Expenditure GDP Quarterly Growth Rates



Source: CSO.

Private Demand Rebounded Strongly.



Source: CSO. Note: Expenditure GDP growth not always same as production.

over this period. The Greek debt crisis and associated fall in the euro has led to a sharp appreciation of the rupee against the currency of India's most important trading partner.

The fiscal accounts received a major boost from the sale of licenses for 3G and wireless broadband telephone services. The series of auctions during May and June 2010 resulted in revenue of Rs. 677 billion for 3G licenses, and another Rs. 385 billion for broadband wireless access spectrum, or about US\$20 billion together. This is about twice the amount targeted in the budget.

Macroeconomic Policies

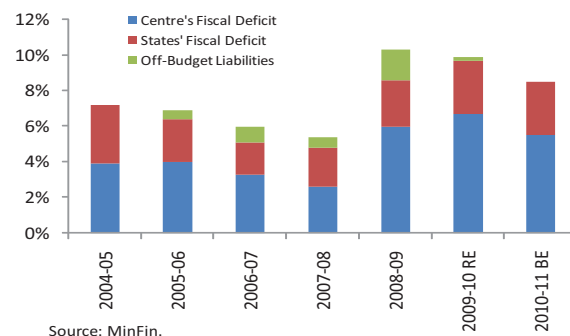
The budget for FY2010/11 cautiously rolled back some of the stimulus measures adopted in the second half of FY2008/09. It targets a fiscal deficit of 5.5 percent of GDP in FY2010/11, down from an estimated 6.7 percent deficit in the outgoing year (6.9 percent when off-budget financing of subsidies is included).² Following recommendations made by the 13th Finance Commission, the states' fiscal deficit is also expected to narrow slightly to 2.8 percent of GDP from a revised estimate of 2.9 percent of GDP in FY2009/10. With the budget, the Government delivered on its promise made last year to return to fiscal discipline once the recovery got underway.

Fiscal consolidation is well balanced between revenue improvements and expenditure restraints. Main measures on the revenue side include a partial reversal of the end-2008 reduction in excise taxes, and re-imposition of import duty and excise taxes on crude and petroleum products. Revenue in the government accounting system received a nearly \$20 billion boost from the sales of licenses for 3G and broadband cell phones. Spending pressure has lightened because arrears that resulted from the recommendations of the 6th pay commission were fully paid off during the outgoing fiscal year. The budget also takes positive steps toward implementing structural reforms. A new fertilizer pricing regime was presented just before the budget, and petroleum product retail prices were raised by about 7 percent (see Box 1 on subsidies). However, the adoption of the Goods and Services Tax (GST) was pushed back to FY2011/12, at the earliest, in order to complete the discussions of harmonization of taxes.

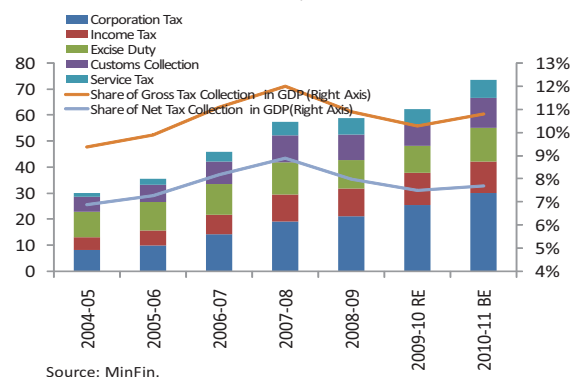
Expansion in monetary aggregates slowed, but credit growth revived. M3 growth languished at 14.7 percent (y-o-y) in April 2010, the same as the growth of deposits. Non-food credit growth revived to 17 percent in March 2010, which represents a significant improvement from a nine-year low of 10.3 percent in October 2009 (y-o-y).

The RBI tightened prudential norms and raised policy interest rates. It cited the rise in inflation along with signs of a revival in the rate of credit growth and an expansion in industrial production as

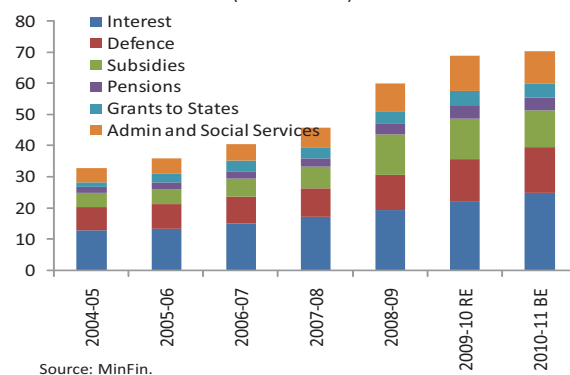
The Fiscal Deficit is Targeted to Come Down Significantly... (in percent of GDP)



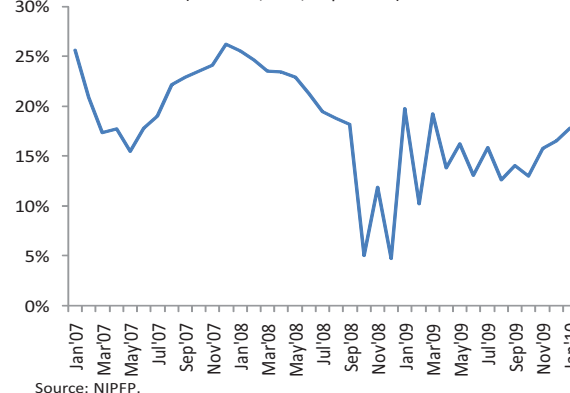
...With A Higher Tax Collection Effort... (in Rs. billions and percent of GDP)



...And Slower Growth in Spending. (in Rs. billions)



Non-Food Credit is Increasing. (3 month, saar, in percent)



² The government financed some under-recoveries for oil companies incurred in FY2008/09 with off-budget bonds issued in the beginning of FY2009/10.

reasons for increasing the repo- and the reverse-repo rates by a cumulative 50 basis points in March and April 2010. The RBI also raised the CRR by a cumulative 100 basis points in January and April 2010. Furthermore, it rolled back some of its earlier measures facilitating external borrowing. On the structural side, the RBI ruled that banks would be required to price loans against a base rate calculated on a cost-plus formula linked to deposit rates, and that no lending would take place below the base rate. This measure is aimed at improving transparency and increasing the responsiveness of bank interest rates to changes in policy rates. The RBI also took several initiatives to deepen financial inclusion (see Box 2). In another development, the government announced the creation of a Financial Stability and Development Forum, to be tasked with macro-financial surveillance.

Box 1: Cautious Changes in Subsidies Provide Hope for Deeper Reforms

The Indian government spends a sizeable share of its resources providing goods and services below cost. The central government alone spent about 2.1 percent of GDP in FY20 09/10 (budgetary subsidies mainly on oil and fertilizer). The outlays are aimed at benefiting the poor, but to varying degrees often benefit the non-poor. Explicit and implicit subsidies constrain fiscal space, which could be used more productively. The issues have been analyzed in numerous official reports, and reform proposals are by now well understood and ready. The Economic Surveys of FY2009/10 and FY2010/11 published by the Ministry of Finance provide lucid expositions of the case for reforms with a view to transforming subsidies into direct income support to poor households. Hopeful signs of progress have begun to emerge, which demonstrate the government's commitment to move more forcefully in the next few years.

The government has kick-started a project to provide unique identification (UIDs) cards to all citizens, which could form the basis for radically transforming the way resources are used in support of the poor and disadvantaged groups. It is hoped that UIDs will help when direct cash transfer systems are set up in the future to replace the blanket provision of subsidies. Meanwhile, experiments are being implemented using smart cards that have been given to eligible households. In New Delhi, for example, the municipal government recently announced that it would no longer provide subsidized kerosene, but would give poor households bottled gas and direct income support.

Retail prices for gasoline and diesel have been increased in the FY2010/11 Budget through the re-imposition of import duties and excises. Comparing import parity costs (including taxes) and retail prices, gasoline and diesel prices would have to be raised by about 10 percent, while kerosene and LPG continue to be sold at less than half their costs. However, the net position (looking at both taxes and subsidies) is positive, as the Government actually receives revenue from sales of all petroleum products at current costs and prices amounting to Rs. 445 billion despite the heavy subsidization of LPG and kerosene (projection for FY2010/11). Discussions are ongoing about the decontrol of motoring fuels and raising prices for LPG and kerosene on the basis of recommendations made in a 2006 report on India's energy strategy.

The Union Budget for FY2010/11 also announced a change in the policy on fertilizer subsidies: from April 2010, prices of non-urea fertilizers have been freed, and subsidies fixed on the basis of the nutrients (nitrogen, potassium, calcium, sulfur) contained in different fertilizers. This marks a turnaround from the existing regime of reimbursing the different production costs of fertilizers, which has led to production inefficiencies and distortions in fertilizer use. The cost-plus compensation will continue for urea, but its retail price was increased by 10 percent. Initially, at least, the new policy is not expected to reduce overall outlays on fertilizer subsidies but improve the balance of fertilizer use and, therefore, soil productivity.

Following structural changes in the electricity sector, subsidies on generation and distribution of electricity have been brought down significantly from the high levels of the early 2000s. Electricity subsidies paid to state electricity boards have been maintained around 0.3 percent of GDP over the past three years.

Gross and Net Subsidies on Petroleum Products, 2010-11

	Gasoline	Diesel	Kerosene	LPG	
	Rs/litre			(Rs/cylinder)	
Costs	28.3	28.3	25.2	528.1	
Taxes	23.4	11.6	1.01	66.0	
Current price	47.4	35.5	11.2	283.2	
Gross subsidy	4.2	4.4	15.0	310.9	
Net subsidy	-19.2	-7.2	14.0	244.9	Total
Gross subsidy (Rs. Billions)	75.3	304.3	172.7	288.1	840.4
Net subsidy (Rs. Billions)	-340.1	-492.6	161.0	227.0	-444.6

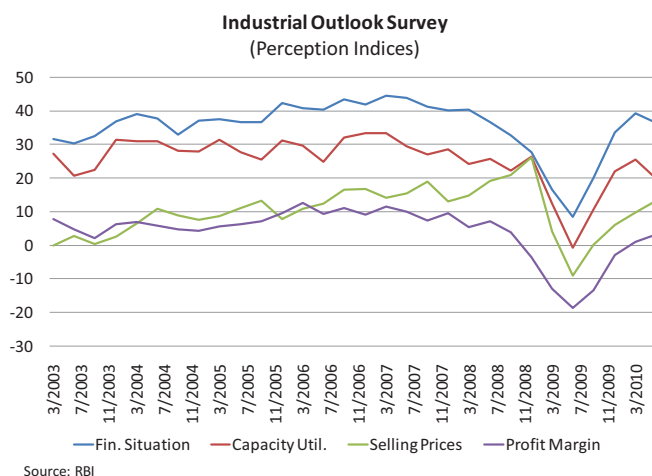
Notes: 1. Assumptions: crude oil price USD 80/bbl, international kerosene and LPG prices at current level, exchange rate at 46 INR/USD, retail prices at current levels.

2. Costs include international price, import duty, freight charges, and fixed margins.

3. Gross subsidy is retail prices minus costs and taxes; net subsidy is retail prices minus costs.

Source: MinFin.

Reactions to the latest policy moves were positive. Rating agencies, confidence indices, and expectations surveys indicate optimism and a swift recovery, but not yet a full return to pre-crisis levels. After the budget was announced, S&P revised its outlook for India from ‘negative’ to ‘stable’ and Fitch followed in June. The RBI’s industrial outlook survey series show significant declines up to June 2009, but have since recovered much of the losses. The indicators, however, are still well below their levels in FY2006/07, when the economy was growing at 10 percent, and show a small decline in the first quarter of FY2010/11. The seasonally adjusted HSBC Markit Purchasing Managers’ Index also showed a small retreat in May, after it had reached a 21-month high in April. The level of 58.2 in May 2010 is still at a level consistent with a fast rise in output. The NCAER Business Confidence Index for February 2010, at 153.8 points, was at its highest level since January 2008. The rise in confidence was also evident in the equity market, with both the BSE Sensex and the NSE posting increases.

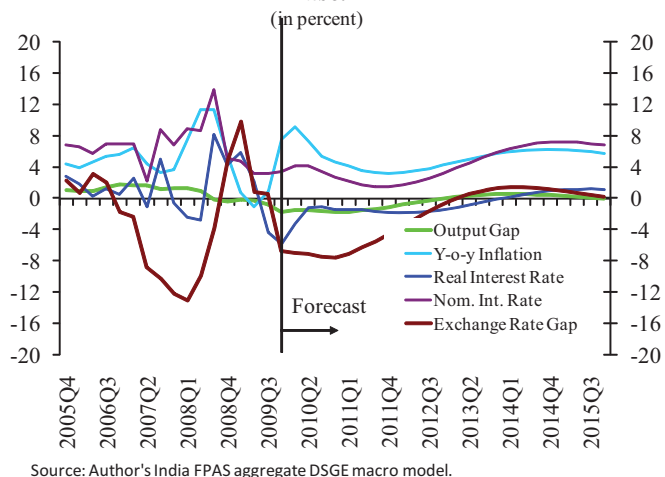


A Positive Outlook

India’s recovery after the slowdown seems well underway. Growth is projected to climb to 8-9 percent in the next two years. These growth rates are achievable without a renewed build-up of inflationary pressure as long as agricultural growth returns to trend, infrastructure constraints are alleviated, and international prices remain stable. It is therefore not surprising that surveys show Indian firms as having some of the most optimistic expectations and hiring plans in the world.³ It also gives credibility to the government’s aim to achieve double digit growth within four years.⁴ On the negative side, an appreciating exchange rate (with a depreciating euro making matters worse) and rising real interest rates weigh on the recovery.

Over the next year, sources of growth will shift from fiscal stimulus to manufacturing and, possibly a recovering agriculture. Agricultural growth is likely to be high if the monsoon returns to normal in 2010 given the low production base of the 2009 *kharif* (summer) season. Signs of a recovery in investment demand bode well for broad based manufacturing growth. Services sector growth, on the other hand, was maintained at a high level during the downturn by fiscal stimulus spending. Growth rates going forward may be somewhat lower, given the plans for fiscal consolidation.

India Outlook: Output Recovers Slowly, Inflation Subsides Allowing Policy Rates to Ease.



The baseline projection faces substantial risks from a smaller-than-estimated output gap, renewed international price pressures, and a surge in capital inflows. Based on statistical analysis, we estimate an output gap of about 2 percentage points of GDP.⁵ If the output gap is smaller than estimated, a recovery in industrial

³ Manpower Inc. (2010).

⁴ Ministry of Finance (2010).

⁵ The concept of an output gap is based on the assumption of full employment of factors of production in steady state. Many studies of this kind employ statistical techniques to determine an output gap. These build on trends in output, but this may be less reliable in an emerging market setting where trend growth is less stable than in high-income countries. The concept of an output gap needs some reinterpretation in

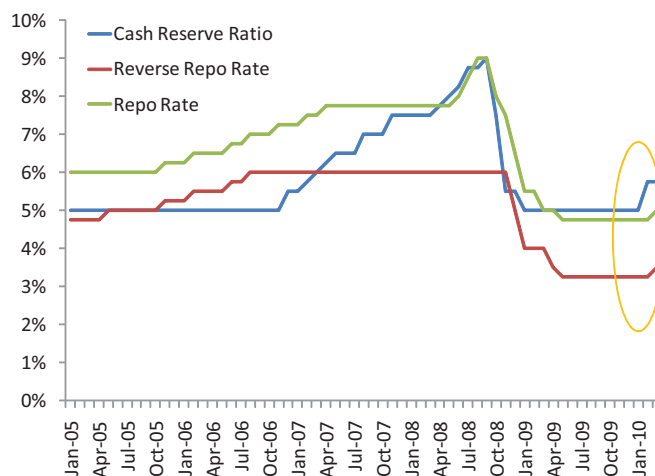
growth could lead to a rapid build-up of price pressures. In fact, some of the build-up in price pressures in the first half of 2008 is attributed to infrastructure bottlenecks in addition to international commodity price rises. If investments in infrastructure, including ports, roads, railways, and electricity do not keep pace with rising demand, prices are likely to rise. Regarding imported inflation, while there is significantly more excess capacity in the international oil market now than in 2007, the trajectory of oil prices continues to be highly uncertain. A further increase in prices, whether from rising oil prices or bottlenecks in the supply chain, could elicit more aggressive tightening by the RBI (although such a reaction to a supply shock would be misguided), potentially moderating investment demand. Also, with interest rates low and liquidity high in many high-income countries, carry trade (borrowing in currencies for which interest rates are low and investing in currencies where returns are expected to be higher) could lead to significant inflows into India and appreciation of the rupee. While this in itself would dampen price pressures, it would have adverse consequences on the competitiveness of tradables, and the effects could be exacerbated by policy tightening.

Monetary Policy Goes Back to ‘Neutral’

There are currently no clear signs of overheating. Recent price increases stem largely from agriculture, and food price pressures are declining (see below). The growth of monetary aggregates has slowed from the previous 12-month period, as has credit growth, although there is some recovery in the latter. The stock market is back where it was two years ago and wage increases seem to be in line with GDP growth.⁶ Finally, with fiscal consolidation planned in FY2010/11, there is a negative impulse of about 1-1.5 percent of GDP pulling on aggregate demand. On balance, therefore, a deceleration in price increases seems likely.

Monetary policy tightening serves to put monetary conditions in ‘neutral’. Policy rates (5 percent repo, and 3.5 percent reverse repo) are currently negative in real terms, and the market expects that the small rate increase in March will be followed by another when the RBI reviews monetary policy at end April. If inflation subsides, real rates will move into ‘neutral’ territory. This will then allow the RBI to wait and see. If excess demand (for example, because of the delays in bringing new capacity on stream and bottlenecks in the economy) emerges as a problem, pressure would rise for RBI to raise rates further to avoid a surge in core inflation, although it would of course be better to alleviate supply constraints in other ways than to choke off demand. If price pressures emanate from another agricultural supply shock or a surge in international commodity prices, the RBI will have to navigate a narrow path between accommodating them and avoiding entrenchment of inflationary expectations and second round effects.

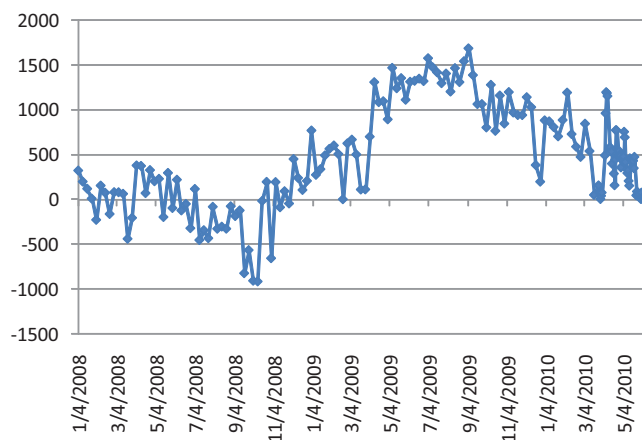
Monetary Policy Tightening, More to Come?



Source: RBI.

Excess Liquidity has Drained from the Banking System.

(RBI Liquidity Adjustment Facility net Outstanding, in Rs. billions)



Source: RBI.

the context of a labor-surplus economy. The non-accelerating inflation rate of unemployment (NAIRU) in an emerging market setting has to be re-interpreted as the rate of factor redeployment (from labor-surplus to higher-productivity sectors) that can be maintained without inflationary pressures.

⁶ Ernst and Young estimates wage increases to be 9-10 percent in FY2010/11, but they were much smaller in FY2009/10.

Box 2. Progress in Financial Inclusion

Background

India has long sought to improve access to finance, but it is estimated that two-thirds of household savings are still outside of the financial system. Bringing them into the financial system could greatly expand the availability of financing for investments. Rural cooperative banks have been in existence for over a century. The Government of India nationalized banks in the late 1960s with the partial objective of expanding the branch network in rural and semi-urban areas across the country. Other measures to promote financial inclusion have involved directed lending and interest rate ceilings, although the latter have mostly been liberalized. National development finance institutions (DFIs) such as the National Bank of Agriculture and Rural Development, the Small Industries Development Bank of India, and specialized regional rural banks sponsored jointly by public sector banks and the government have also been supported to increase financial access, especially in underserved rural areas. While many of these measures have had some success, there still remains a significant gap in the provision of financial services. A World Bank-NCAER rural-finance access survey conducted in 2004 in the states of Andhra Pradesh and Uttar Pradesh showed that 70 percent of small and marginal farmers surveyed did not have a deposit account, while 87 percent of such farmers did not have a credit account.

A New Approach to Financial Inclusion

Microfinance started in the mid-1990s but picked up steam only in the last five years or so. This initiative has delivered successes both through linking self-help groups with banks – where groups of women come together to co-guarantee each other's borrowing from banks – as well as through Microfinance Institutions (MFIs), which borrow from financial institutions and on-lend to under-served clients. Microfinance has demonstrated success on the asset side, providing credit to hitherto excluded segments. There have been several other policy initiatives that focus more on the liabilities side. These include measures that supported the creation of 'no frills' accounts, which resulted in the opening of over 30 million accounts by end-March 2009. They also include introduction of business correspondent and agent models as a branchless banking initiative, simplifying Know Your Customer (KYC) norms for small accounts, allowing larger transaction limits for mobile banking and the use of technology to promote financial inclusion. Other recent measures include promoting bank branch openings in under-served areas. The RBI recently announced that a point of access to a bank's services should be provided to every village or locality with a population exceeding 2,000, which would require an additional 60,000 points of sale or access across the country.

These initiatives bode well for promoting financial inclusion, though challenges remain. Amongst other measures, there is still a need to widen the provision of credit services and to ensure that this is done with due consideration to 'responsible finance' principles. Similarly on the liabilities/insurance side, scaling up the initiatives and ensuring that these are done sustainably and without risk to small depositors remain important. Improving efficiency of the formal banking system, addressing 'incentives' and HR issues that encourage branch managers to promote financial inclusion also need to be tackled in the medium term.

Contributor: Niraj Verma, SASFP.

Economic Policy in the Medium Term

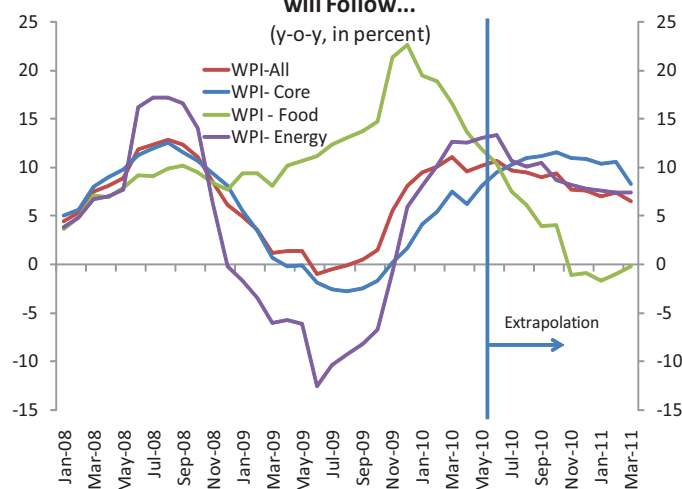
As India returns to high growth, this section discusses some medium-term policy issues: inflation, external and domestic demand growth, capital flows, and fiscal consolidation. Our conclusions are that high food price increases are unlikely to persist, and that exports can be expected to contribute to employment creation and growth despite the weaker global economy, but the expansion of the domestic market too will provide a strong fillip to growth. India may face high volatility in capital inflows in the near future, but it has fared well under its ‘calibrated approach’ to capital account liberalization. We point out that a reallocation of fiscal spending to high-productivity areas could boost growth, and assess the fiscal and growth performance of Indian states.

Inflation Feeds on Food Price Pressures in India

Global commodity prices have rebounded after the financial crisis but price pressures are likely to remain subdued. Prices crashed at the height of the global financial crisis and rebounded starting around March 2009 and stabilized around September of the same year. This see-saw price history means that year-on-year price indices show high rates of increase during the last few months, when prices were lower last year than this year. However, substantial spare capacity exists in many commodity sectors. World oil demand grew on average by 1.7 percent a year over the years 2000–2007, but declined by nearly 3 percent during the last quarter of 2008 and the first quarter of 2009. OPEC production cuts have led to spare capacity of around 6.5 million barrels per day and inventories remain very high. This implies a much more bearish outlook on prices than in the first half of 2008, when prices rose to \$150 per barrel. Nevertheless, spare capacity was adequate even in that period. The price boom had therefore more to do with expectations of future supply-demand imbalances than the fundamentals existing at the time and a similar situation could arise again driving prices up. Agricultural prices have rebounded less strongly than energy and metals. Agricultural markets, especially grain markets, are likely to remain well supplied. Over the medium term, food commodity prices are projected to be marginally higher in 2010 compared with 2009, but to decline by 3 and 1 percent in 2011 and 2012 respectively.⁷

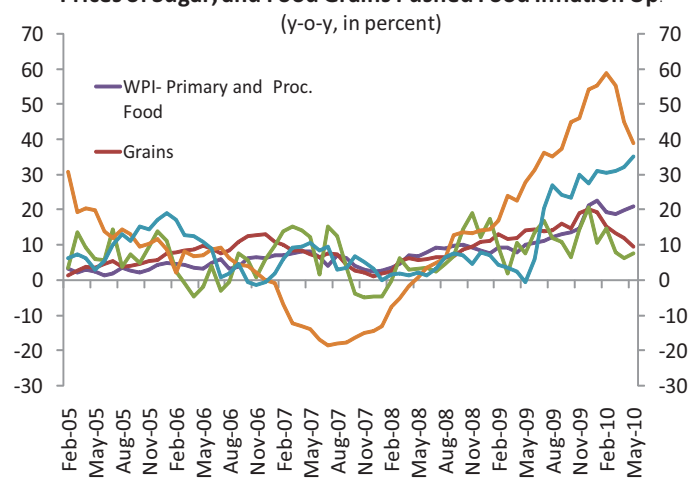
Inflation in India is likely to decline in the next few months. A simple extrapolation of inflation based on averages of the last five monthly increases shows that much of the current increase in prices is caused by base effects. Core (non-energy, non-food) inflation tracks overall inflation with a lag, and will therefore also stabilize. Food inflation has declined substantially since the beginning of the year because of a better-than-expected *rabi* (winter) harvest. Further easing of price pressures is predicated on a return to normal of the FY2010/11 monsoon and

Food Inflation has Begun to Moderate, Overall Inflation will Follow...
(y-o-y, in percent)



Note: Simple extrapolation of average of past 5 monthly increases.
Sources: RBI and authors' calculations.

Prices of Sugar, and Food Grains Pushed Food Inflation Up.
(y-o-y, in percent)



Source: CSO.

⁷ See World Bank (2010).

agricultural production, a stabilization of international oil prices around the current level (and no significant further increases in retail fuel prices), and conducive policies regarding minimum support prices (MSP) for agricultural goods and procurement.

Pressure from energy prices is high because of the sharp recovery of global oil prices a year ago.

Crude oil prices have risen from US\$35 per barrel in December 2008 to around US\$75-80 per barrel, with most of the increase happening February-May 2009. Year-on-year price indices show an accelerating trend, though they were negative during much of 2009. From October 2009, oil prices have stabilized somewhat around US\$80 per barrel, which means that energy inflation should decelerate in the next few months, notwithstanding the increase in the administered retail prices of some petroleum products.

Food prices, on the other hand, have been increasing at a double digit rate since July 2009.

The wholesale food price increase was close to 20 percent in January 2010. The WPI-Food is driven primarily by the prices of sugar, pulses, and cereals. Sugar prices increased 42 percent over fiscal year FY2008/09. With a share of 15 percent in the WPI-Food, sugar on its own constituted 41 percent of the food price increase of FY2009/10. Cereals prices increased 14 percent. Pulses registered an average rate of price rise of 28 percent, while eggs, meat and fish also registered high price increases, but their share in the index is small. Sugar prices have come down significantly since their peak in February 2010, and grain price inflation is declining since January 2010, but inflation in eggs, meat and fish accelerated to 35 percent in May 2010. Pulses, eggs, meat and fish can be regarded as premium food with an income elasticity higher than cereals and other staples. Demand would therefore go up faster than for cereals such as rice and wheat as households substitute these premium products in their diets.

The sharp rise in sugar and food grain prices can be attributed to production shortfalls and a series of policy decisions.

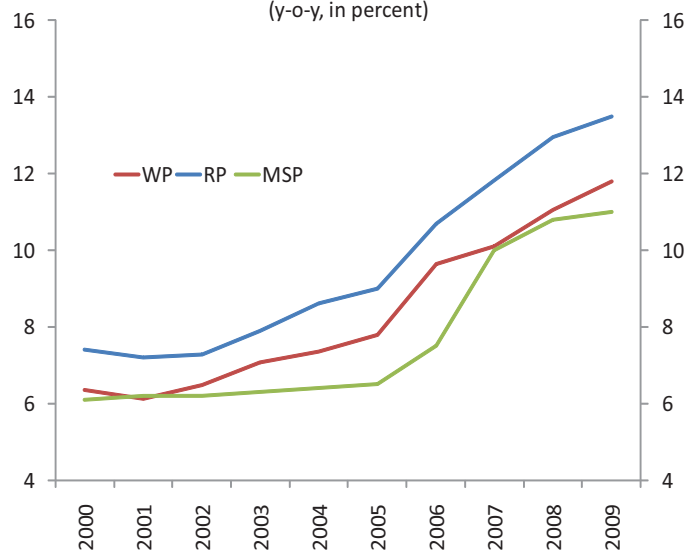
A poor monsoon in FY2008/09 and the worst drought in decades in FY2009/10 led to lower output. Sugar production declined by 2.1 percent, 18.1 percent, and 11.8 percent, respectively, in the three years since FY2007/08. Food grain output increased by only 1.6 percent in FY2008/09, and is expected to have declined by 7.5 percent in FY2009/10 (CSO advance estimate). A comparison of wholesale and retail prices indicates rising retail margins, which add to the divergence between WPI and CPI measures of inflation.

Trends in Food Production
(per cent annual growth)

	1993-94 to 2004-05 to								
	2003-04	2009-10	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10 1/	
Total Foodgrains	0.7	0.4	-7.0	5.2	4.2	6.2	1.6	-7.5	
Rice	1.6	0.1	-6.1	10.4	1.7	3.6	2.6	-11.7	
Wheat	2.4	1.9	-4.9	1.0	9.3	3.6	2.7	-0.5	
Pulses	2.5	0.0	-11.9	2.0	6.1	3.9	-1.3	1.2	
Total nine oil seeds	-0.4	1.5	-3.3	14.9	-13.2	22.5	-6.8	-5.0	
Sugarcane	-0.2	2.4	1.4	18.6	26.4	-2.1	-18.1	-11.8	
Fruits	2.5	5.6	7.9	4.3	6.4	6.7	na	2.5	
Vegetables	3.0	8.8	8.0	21.6	4.2	5.4	na	4.8	
Total food output	2.4	2.9	0.6	5.9	4.1	5.4	1.6	-0.2	

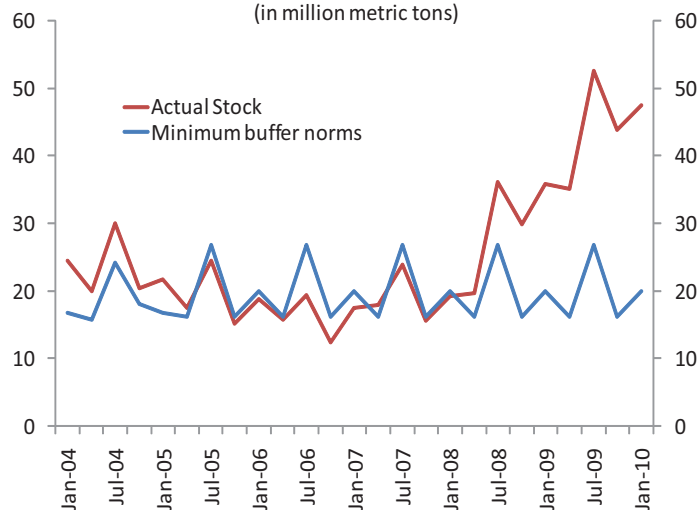
Source: MinAgri
1/ 2009-10 second advance estimates

Wholesale and Retail Prices do not Track MSP Well.
(y-o-y, in percent)



Source: MinAgri. and CSO.

Government Rice and Wheat Stocks Greatly Exceed Buffer Stock Requirements.
(in million metric tons)



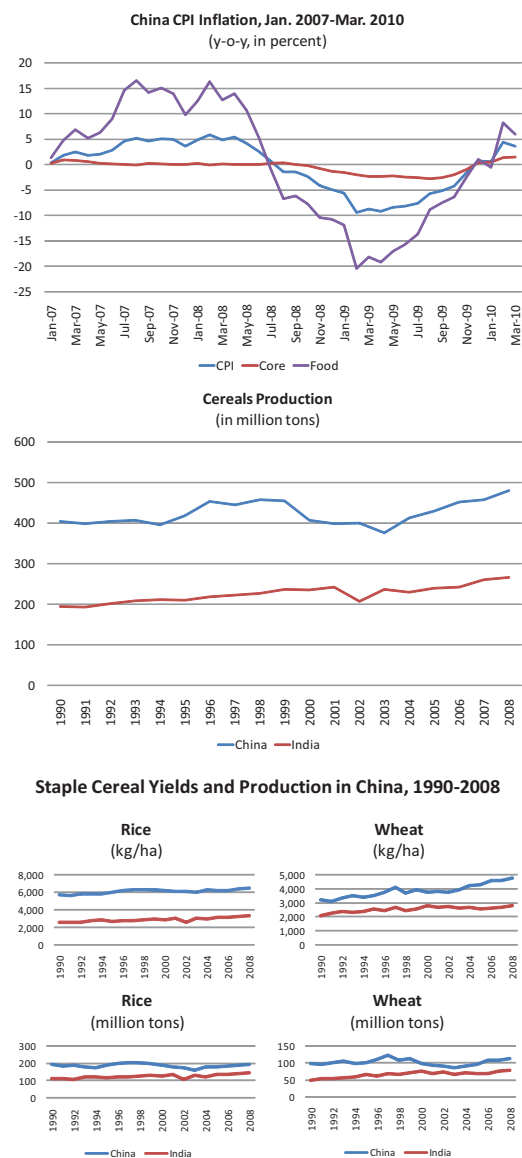
Source: MinAgri.

Food prices do not track minimum support prices well. Wheat prices were increased by 15 percent and 33 percent in 2006/07 and FY2007/08, and in smaller increments in subsequent years, for a total of 47 percent in the period FY2007-2010. Rice prices were raised by 64 percent over the same period. Support prices for pulses were also raised significantly. Following bumper harvests, sugar prices were low in 2006/07 and farmers switched away from sugar in subsequent years, leading lately to price pressures as supplies tightened. However, wholesale and retail prices do not track support price developments well. Wholesale and retail prices increased in FY2006/07 in line with increases in support prices, but did not increase as much as rice and wheat MSP in FY2007/08, despite increased official procurement. This indicates that retail and wholesale prices may be market determined, while farm gate prices are determined by the MSP for those producers who receive the MSP.

Box 3: Inflation in China

Inflation in China has been considerably lower than in India in recent years, although food inflation has shown higher variability in China relative to India. Consumer price inflation in China showed two cycles in the 2000s, in which it increased from negative to 5 percent in the first four years of the decade, fell back to -4 percent in July 2005, and increased again to 5 percent in May 2007. It hovered around five percent between May 2007 and May 2008, which was mainly driven by food inflation with core inflation close to zero throughout. In the wake of the global financial crisis, food inflation and core inflation dropped into negative territory, with food inflation reaching -20 percent in February 2009. Overall inflation reached -10 percent in the same month. It has recently recovered to 5 percent in line with the recovery of global commodity prices.

China managed very high GDP growth rates at low inflation rates. This is often credited to China's particular development model: massive investment in capacity precedes and creates growth in demand. Inflation remains low because demand is not facing supply bottlenecks. Interestingly, overall cereals production in China has not increased faster than in India over the last 20 years. In fact, cereals production in China more or less stagnated through the 1990s up to about 2002, then fell during 2003, and improved sharply since then. Production in India improved steadily throughout with a set-back from the drought in 2002. Despite the sharp increase in China since 2003, the China-India gap in cereals production narrowed between 1990 and 2008. Chinese yields in rice have also not improved faster than those in India, and the China-India production gap narrowed. In wheat, China improved yields more robustly than India, but the production gap narrowed even in wheat. China managed to maintain lower food inflation than India despite lower production growth and while per capita incomes were growing much faster.

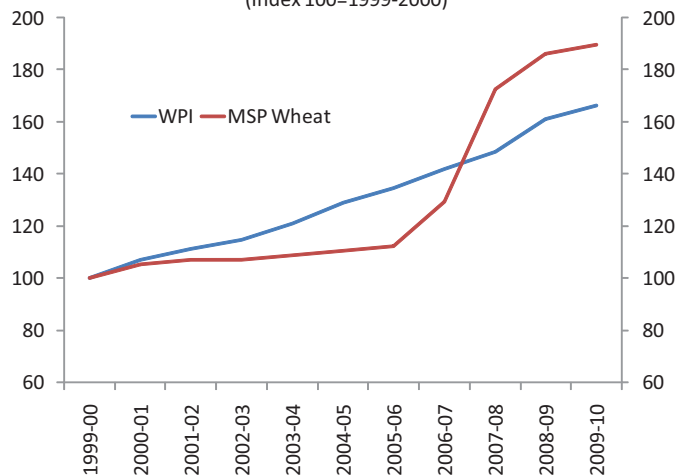


Government procurement increased massively over the last two years while production declined. From 2005-2008, the stocks of wheat and rice held by the Food Corporation of India (FCI) in the central pool were below the buffer stock norms. Following the support price increases, FCI procured record quantities of wheat and rice in the last two years, with the result that stocks reached 47.5 million tons (mt) in January 2010, compared to a norm of

around 20 mt. In the case of sugar cane, with high stocks going into FY2007/08, sugar exports continued through FY2007/08 and well into FY2008/09 at relatively low prices, despite the production decline. Between April and September 2008, India exported sugar worth US\$960 million. Once stocks were exhausted, the decline in production led to sharply higher prices both in the Indian and international markets, which was also hit by low production in Brazil. India has since imported sugar worth US\$434 million.⁸

Energy and food prices have both contributed to inflation, but cannot be fought with monetary policy instruments. Indian policymakers and monetary policy cannot do much about imported energy prices, apart from ensuring a swift pass-through to avoid distortions and reduce the budgetary burden of subsidies. However, monetary policy is also ill suited to address food price inflation, because of the low income elasticity of food demand. Food prices depend heavily on agricultural pricing and government procurement decisions. In fact, even international prices of some agricultural products, in particular sugar, wheat, and rice, reflect partly the Indian government’s decisions on exports and imports (although India has not traded rice or wheat lately). Policy has an important role to play.

Wheat Procurement Prices Increased Sharply from 2006-07, Well Ahead of Inflation.
(Index 100=1999-2000)



Source: MinAgri. and CSO.

⁸ Chand (2010).

Can India's GDP Growth Reach 9 percent After the Global Crisis?

There is now a concern that increasing openness—the share of trade and capital flows in the economy—cannot play the role of growth driver that it played before the global crisis.⁹ Emerging markets would be unable to rely to the same extent as before on an export-led industrialization strategy because of the lingering recession in the OECD countries and higher risk aversion by foreign investors. Exports are viewed to contribute more to growth than production for the domestic market because they are more sophisticated products that embody higher human capital and technology than products sold at home. This section points out that the evidence does not suggest that Indian exports employ more technology and human capital than production for the domestic market. Exports, therefore, may not be as important for growth in India as they are in some other, smaller emerging markets. We also point out that the export pessimism for emerging market economies that some commentators have espoused may be misplaced, because export growth in the years immediately before the global crisis was much faster than trend and to some extent independent of GDP growth in high-income countries. The forces that drove export growth in these years are likely to drive export growth again after the crisis. Lastly, the section discusses the scope for economies of scale in production for the Indian market, which is developing fast.

Trade often drives factor productivity growth. Trade in manufactured products or competition with imported products generally requires higher technology and skills than production for the domestic market. In fact, human capital- and technology-intensive manufactured exports have grown fast in India since 1990. Up to then, more than 80 percent of exports were based on natural resources and unskilled labor, arguably in line with India's endowments. However, by 2008 this share had declined to 63 percent.

Nevertheless, available data does not support the idea that Indian exports employ more technology and skills than home production. Industry survey data shows that the share of such skill and technology intensive processes was actually higher in the production of manufactured goods for the home market than in exports: 56 percent of manufacturing output came from natural resource- and unskilled labor-intensive industries, compared to 63 percent of exports. The data are inadequate, however, to draw firm conclusions from this comparison. The surveys of domestic industries used for this comparison likely miss much of the production of the informal sector, which is unskilled-labor intensive. Adding an estimate of the informal sector production to the survey data increases the share of natural resource and unskilled-labor intensive production to 63 percent, similar to the current share in exports.¹⁰

Four-Factor Representation of Structure of Production, Exports and Domestic
(Share in total, in percent)

	Exports					Domestic	
	1962	1970	1990	2000	2008	2004	2008
Natural Resource Intensive	62.9	59.9	52.1	39.7	46.5	47.1	49.6
Unskilled labour intensive	33.3	27.0	31.5	24.7	16.8	9.8	9.0
Human capital intensive	2.2	8.6	8.9	14.2	16.4	17.2	16.0
Technology Intensive	1.6	4.5	7.4	15.4	20.3	25.9	25.3

Sources: Pitigala (2010) using UN Comtrade, and author's calculations using CSO.

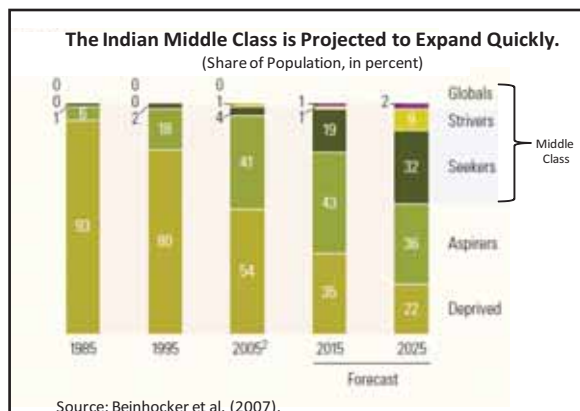
Looking at the sources of global trade growth, there are no strong reasons for export pessimism. High-income country imports have grown faster than GDP, driven by differentiation of goods, and developing country exports have risen faster than global GDP, because of continuing economic integration, fragmentation of production, and specialization in globalized production networks. During the boom years between the 2001-02 global downturn and the global financial crisis, high-income countries had slightly lower GDP growth than in the 1990s, 2.3 percent against 2.5 percent annually, respectively. At the same time, developing countries grew significantly faster: close to 7 percent against 3.2 percent in the 1990s. On the trade side, high-income country import growth declined somewhat in line with GDP developments, from 5.4 to 5.2 percent annually. Developing country exports, however, surged ahead with average annual growth of 12 percent during the five years preceding the crisis, compared with 5.4 percent in the 1990s. The forces that drove these developments before the global crisis continue to operate. India stands to benefit from these developments, as its integration into East Asian production

⁹ See for example the World Bank (2010).

¹⁰ However, the Comtrade SITC and domestic ISIC data classifications are not easily mapped making it difficult to form an estimate of the parallel change in composition of export production.

networks is still in its infancy, and new opportunities arise as China moves up in the value chain. The most hopeful recent development is the emergence of India as a hub for the production of cars for export and for the auto components industry. Hyundai and Suzuki export half of their India-produced vehicles today, and Ford and Nissan will enter the market shortly.

Domestic market opportunities are growing fast. The Indian middle class is projected to expand from 50 million people in 2005 to 500 million by 2025. With 50 million consumers, the market size for many products is currently not big enough to allow for economies of scale and scope.¹¹ The outlook for the next 20 years, however, makes India an attractive market to invest in, and many international consumer goods companies do so. For now many of them contend themselves with sales outlets rather than production bases, because economies of scale allow them to produce cheaper elsewhere. This is changing, however, in particular when production costs in East Asia are rising with rising wages.



It would be risky to adopt policies that aim at replacing export growth with faster domestic market growth. A strategy aimed at increasing domestic demand growth at the cost of savings—by encouraging higher consumer spending—runs some risks as it would require India to rely to a greater degree on an uncertain external environment to finance the massive investment needs of the country. Consequently, a balanced approach building on both domestic and external demand is needed to provide a solid foundation for medium term growth.

India’s ‘Calibrated Approach’ to Capital Account Openness has Served it Well

The increased volatility of international capital flows has rekindled the debate about capital account liberalization. Sharp changes in the direction of capital flows during the last two years have raised difficulties for macroeconomic management. In particular, there is concern today that the low interest rates found in the high-income countries could lead to a surge in capital flows to emerging markets through the carry trade, which could choke off the recovery in the receiving countries by affecting the competitiveness of domestic tradables production. Consequently, a number of countries have taken measures to deter inflows of short-term capital.

Convertibility skepticism seems to be gaining ground. Proponents of capital account liberalization have argued that it creates opportunities for portfolio diversification, consumption smoothing, risk-sharing, and addressing contracts and payments in trade. Furthermore, the threat of capital outflows in the face of opportunistic policies could have a disciplining effect on policymakers.¹² Conversely, critics point toward the East Asian crises at the end of the 1990s and maintain that speculative capital flows are extremely volatile for reasons outside of the control of individual countries, and opening an economy to such capital flows results in financial crises. They argue, therefore, for the imposition of frictions to limit the short-term cross-border trade in financial assets.¹³ In a recent paper, the IMF, long-time champion of capital account opening, seems to concur with this view.¹⁴ Furthermore, current thinking emphasizes the need for appropriate sequencing of capital account liberalization in the overall reform process and prioritizing liberalization of certain selected capital flows and taxing others.¹⁵

¹¹ For example, about 1.3 million cars were sold in India in FY2009/10, a market hotly contested by three major players (Tata, Maruti-Suzuki, and Hyundai) and many others. By contrast, the top 15 global car companies sold more than that number of cars each during the year, and the top four sold more than 6 million each.

¹² See for example Fischer (1998) and Summers (2000).

¹³ See for example Rodrik (1998), Bhagwati (1998) and Stiglitz (2002).

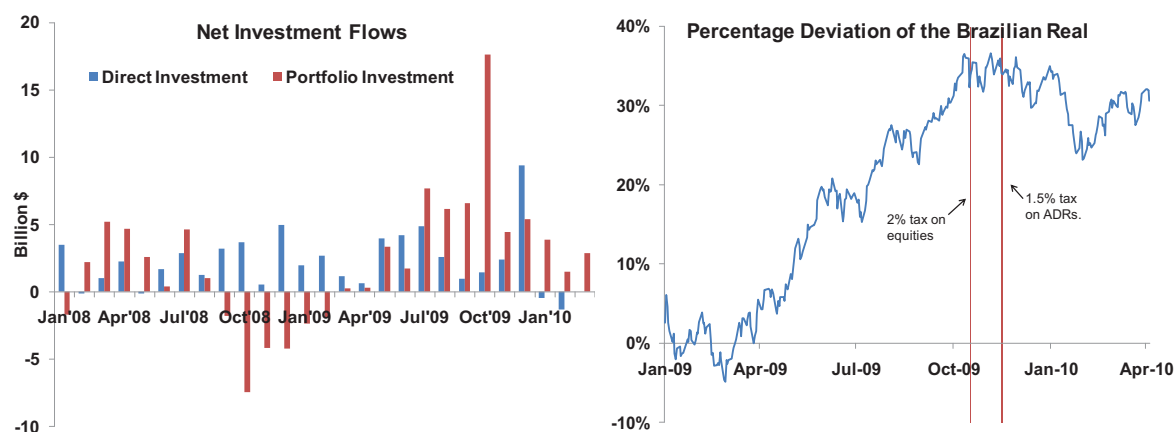
¹⁴ Ostry et al. (2010).

¹⁵ Rogoff (2002) and Feldstein (2003)

Economists today give a mixed verdict on the efficacy of capital controls. One recent exhaustive survey looks at capital controls in Brazil, Chile, Columbia, Czech Republic, Malaysia and Thailand during the 1990s.¹⁶ It concludes that capital controls may provide some space for an independent monetary policy, alter the composition of flows, and in some cases alleviate exchange rate pressures. However, they are ineffective in changing the volume of net flows.¹⁷ Economic analysis of the experience of India has shown much the same pattern. For example, two studies suggest that firms use various forms of financial engineering to circumvent capital controls (including wrongly invoicing trade, transfer pricing, and borrowing abroad through a foreign affiliate or subsidiary).¹⁸

Box 4: Brazil's Recent Experience with Capital Controls

Brazil initiated a number of measures to curb capital inflows, after its currency, the Brazilian real (BRL), appreciated by 35 percent between January and October 2009 on the back of capital inflows. Initially, it intervened in the foreign exchange market, increasing the holdings of international reserves from US\$188 billion to US\$239 billion. However, as these interventions became increasingly costly and gradually less effective due to a positive signaling effect to foreign investors, Brazil introduced taxes to control capital inflows. In October 2009, Brazil levied a 2 percent tax on foreign investments in equities and fixed income securities. On fears that the tax could easily be circumvented, a 1.5 percent tax on Brazilian stocks traded as ADRs was levied in November 2009.



Source: Banco Central Do Brasil Economic Database

These measures did have a short term impact as the appreciation of the BRL was arrested, although it is too early to gauge the long term effectiveness of these controls. By February 2010, the BRL weakened by 10 percent against the U.S. dollar, appreciating by 7 percent afterwards, albeit this is also due to the dollar weakening against most currencies. Moreover, while portfolio flows slowed somewhat, Brazil received an additional US\$15 billion since October 2009.

India has been ranked relatively low on the scale of capital account openness, although rapid changes occurred in the 2000s.¹⁹ The ratio of foreign assets and liabilities to GDP has risen from 40 percent in 1998 to over 85 percent in 2007. India follows a 'calibrated approach' towards capital account liberalization, seeing it as 'a process, not an event'.²⁰ The result is a continuing very low score on *de jure* measures of openness, but increasing *de facto* openness. India has opened the door to FDI flows, barring only some sensitive sectors and imposing sectoral caps. Portfolio (stock market) investment has also been liberalized. Capital controls remain primarily on

¹⁶ Reinhart and Magud (2007).

¹⁷ Aizenman and Noy (2009).

¹⁸ Patnaik and Shah (2009) and Patnaik and Vasudevan (2000).

¹⁹ The Lane-Milesi Ferreti *de facto* openness index reflects the ratio of a country's sum of foreign assets and liabilities to its GDP, while the Chinn-Ito *de jure* measure is based on the regulations governing capital flows into a country, with a higher number indicating greater openness.

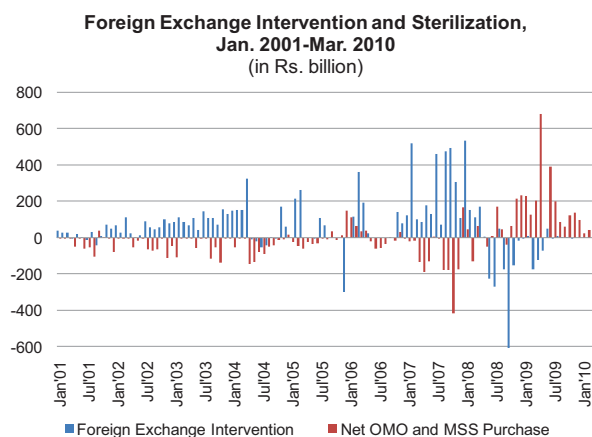
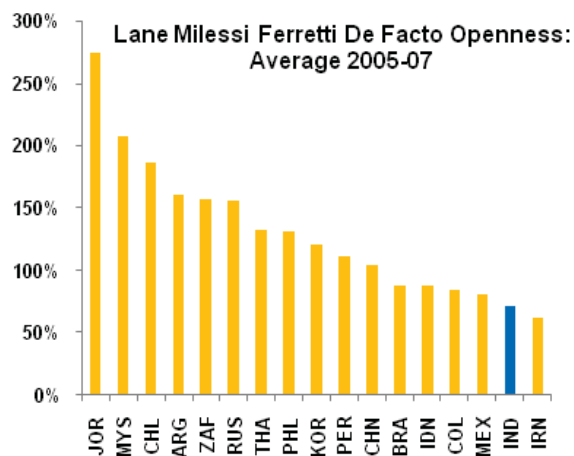
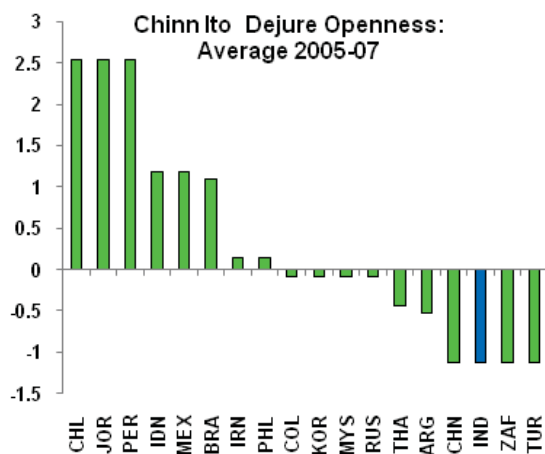
²⁰ Prasad (2009) and Subbarao (2010).

debt creating flows as well as certain types of outflows for residents. External commercial borrowing (ECB) and trade credits are regulated with regard to volume of borrowing, maturity structure, and end use of the funds.²¹

India values low inflation, a stable and competitive exchange rate, and a high level of activity. This goes back to analyses of the experience of other emerging market countries. The growth spurts of, for example, South Korea in the 1960s and China since the 1980s indicate that a competitive exchange rate provides an important enabling condition for sustaining fast growth, although it must be accompanied by other factors, such as a high level of human capital, large inflow of FDI, and policies aimed at stimulating industrial growth. The rapid development of the Asian Tigers was possible by moving factors of production into high-productivity manufacturing of tradables from low-productivity non-tradables. The production of tradables for export opens up vast opportunities for growth through sales in large international markets.

India experienced a sharp increase in capital flows in the mid-2000s, in line with other emerging markets. Between January 2001 and August 2008, the RBI purchased US\$183 billion of foreign exchange. To limit the rupee injections, the RBI reduced its holdings of government bonds. It created Market Stabilization Scheme (MSS) bonds when its stock of government bonds was depleted in the beginning of 2004. When capital inflows accelerated in FY2006/07 and FY2007/08, the RBI took a number of measures to limit them: increased liberalization of outflows, altering the caps and the interest rate ceilings on debt instruments, prepayment of external debt, and modification of corporate access to certain types of inflows.²² Between January 2001 and August 2008, the RBI's stock of net domestic assets declined by Rs. 4.4 trillion, while foreign assets increased by Rs. 11 trillion. Reserve money thus increased by Rs. 6.6 trillion, or about 15 percent per year on average, compared with nominal GDP growth of 12.5 percent per year on average. Capital flows accelerated in early 2007 through to mid-2008, and reserve money growth in this period averaged 26 percent. Some of the excess liquidity was absorbed with an increase in the CRR by 200 basis points in 2007. Despite these interventions, the rupee appreciated against the U.S. dollar by 20 percent from early 2001 to mid-2008, while the trade weighted REER appreciated by 5 percent.

The global financial crisis resulted in some outflow of capital from India in late 2008. RBI injected rupee liquidity worth about 9 percent of GDP in response to the crisis. The rupee lost much of its earlier appreciation within six months after the collapse of Lehman and RBI rescinded some of the restrictions on inflows it had imposed earlier. Capital inflows resumed in early 2009, and India received net capital inflows of \$43 billion during April to December 2009. This prompted RBI to re-impose all-in-cost ceilings for ECBs and to discontinue buybacks of foreign currency convertible bonds. Interestingly, the RBI lately refrained from intervening in the



²¹ See Mohan (2008) for a comprehensive outline of regulations.

²² Subbarao (2009).

foreign exchange market. Initially, between March 2009 and November 2009, the RBI actually sold more than US\$6 billion of reserves. Thereafter, between December 2009 and April 2010 the RBI has not intervened in the forex market.²³ The rupee appreciated about 17.5 percent against the U.S. dollar between March 2009 and April 2010, while the 36 currency NEER appreciated by more than 9 percent.

Policymakers have shown considerable flexibility in using a variety of instruments to implement their eclectic capital account regime. When capital flows surged, first into India and then out, a multitude of tools was used to manage growth, price stability and competitiveness. The policy seems to have worked well in recent years, as witnessed by high growth, relative price stability, a steady inflow of capital (even during the global financial crisis FDI flows to India, though flat, held up relatively well when compared to, for example, China and other East Asian countries) and a small and relatively stable current account deficit.

Fiscal Policy Could Contribute More to Growth²⁴

Fiscal policy is set to undergo important changes over the next few years. This section discusses, first, the major recommendations of the 13th Finance Commission in its December 2009 report, the most important of which is the identification of a clear path to bring down the consolidated fiscal deficit by 4.1 percentage points of GDP, to reach 5.4 percent of GDP by FY2014/15. Virtually all of the adjustment is to be undertaken by the central government. It then looks at two important elements of the consolidation strategy: first, the feedback between composition of fiscal spending and growth, and second, elements of a rules-based fiscal policy.

The 13th Finance Commission presented a bold strategy of ‘expansionary fiscal consolidation’. Its aim is to promote growth, while giving assurances that the state “will continue to mobilize and deploy a significant proportion of resources to promote public welfare.” The report proposes to adopt fiscal rules for an overall adjustment in the general government deficit, as highlighted above. Capital spending and net lending would rise sharply to 6.4 percent of GDP by FY2014/15, higher than at any time since the late 1980s. For the first time, the government will adopt an explicit debt ceiling, with the consolidated government debt-to-GDP ratio to fall to 68 percent by FY2014/15, from the current 77 percent. The transfer of revenue from the central pool of taxes has been increased to 32 percent from 30.5 percent, and as in previous years, the commission proposes the use of a multitude of additional grants to promote changes in financial management in the states. It also proposes the creation of a compensation fund for revenue losses that states could incur when the Goods and Sales Tax (GST) is implemented. The fund is meant to shrink if there are delays in reaching an agreement over the shape and scope of the GST beyond FY2011/12. Other grants cover environmental action, maintenance of roads, and social services, such as a reduction in maternal mortality.

India’s debt-to-GDP ratio has gone through several sharp cycles over the last 30 years, but India has not experienced a debt crisis. Because the primary balance in India has nearly always been in deficit over the last three decades, it has always added to the level of debt. However, growth has generally exceeded the real interest rate on debt by a substantial margin, so that increments to debt have been less than increments to GDP, thus making a reduction in the debt-to-GDP ratio possible. Earlier, strong financial repression resulted in a negative real interest rate on government debt, but policy reforms beginning in the early 1990s led to a gradual reduction in financial repression. With buoyant growth projections, debt sustainability does not seem to be jeopardized in the foreseeable future.

However, the baseline debt trajectory faces risks from lower growth and higher interest rates. It is possible that a significantly larger primary deficit adjustment might become necessary under a less favorable growth scenario. At around 80 percent of GDP, India’s public debt may be close to the kind of historical threshold found in

²³ Despite the low level of intervention India’s reserve holdings witnessed fluctuations during these periods due to valuation changes. Between March and November 2009, reserves increased by US\$ 36 billion as the US Dollar weakened against the Euro, Pound and Yen by 12.5 percent, 14.6 percent and 8.9 percent. However, in recent months the trend has reversed with the US Dollar significantly strengthening against the Euro and Pound, largely due to the Euro crisis. As a result, India’s reserve holdings went down by about US\$ 5 billion between December 2009 and April 2010.

²⁴ This section is largely based on a background paper Brahmhatt (2010).

an examination of past debt crises, beyond which more severe growth and inflation impacts come into play.²⁵ A key issue in this sort of scenario would be to make the adjustment of the primary balance possible while protecting public expenditures that are most important for growth and equity.

Fiscal rules tend to be more effective when there is a strong political consensus supporting them, but then they are not strictly necessary. Fiscal rules have been identified empirically as a success factor in fiscal consolidation more generally, but the econometric evidence on this is not particularly robust.²⁶ While the finance commission has raised the important issue of making fiscal rules sensitive to shocks and countercyclical changes, success or failure in this regard will depend on the specifics of the rules that are adopted and, above all, on the level of political consensus for following the rules in good or bad times. More to the point, there would need to be political support not only for relaxing fiscal rules in bad times but *also for exceeding them in good times* – for example by running large surpluses in boom times in order to run deficits in bad times. Otherwise a cyclically sensitive fiscal rule might simply turn into an excuse for running imprudent fiscal policies in both bad times and good.

How significant are the potential growth effects from shifting expenditure composition in a more productive direction? The level of fiscal spending (as a share of GDP) and its composition in India is similar to that found in income comparators and the major emerging markets, but there are important differences when we compare India with a group of fast growing countries. Most notably, India’s level of general government spending (30 percent of GDP) is comparable, but the composition of spending is quite different.

The proportion of productive expenditure in India is strikingly lower than what it is in other fast growing developing countries.²⁷ For general government spending, the proportion of productive spending (around 44 percent) is far below that found in the group of fast growing countries, where it averaged close to 70 percent. The biggest shortfall in India’s productive spending is in education, which stood at about 11 percent of the total, little over half of what it is in the fast growing comparators.

A quantitative analysis of various components of fiscal spending on growth underscores the potential benefits of a reallocation of spending. We compared several relationships between growth and fiscal policies dividing expenditure between current and capital expenditures, or sub-dividing current and capital expenditure into economic services, social services, and general services. To reflect the government budget constraint, each estimated equation also included total government revenues and the budget deficit, both as a share of GDP. A number of control variables were included, for example trade openness, inflation and private fixed capital formation. The study covered the period FY1984/85 to FY2008/09.

Composition of Government Spending 2000-05						
	GDP per capita growth	Government Expenditure	Productive Spending	Educ.	Health	Transp. & Com.
	(%)	(% of GDP)	(% of Total Expenditure)			
India	2.7	17.0	32.0	2.4	1.7	1.3
India (general govt.)		27.1	44.1	10.8	3.0	5.3
Fast Growing	3.8	21.0	68.1	21.3	5.8	7.4
Korea	4.6	20.7	59.9	15.4	0.5	6.7
Malaysia	3.2	27.0	61.1	24.6	7.1	8.0
Thailand	4.1	19.6	60.0	21.3	9.0	7.1
Singapore	3.4	16.6	91.5	23.7	6.7	7.8
Other Comparators	2.3	23.1	40.8	18.2	5.7	4.2
Mexico	1.5	15.9	48.5	24.7	5.0	2.3
Philippines	2.6	19.4	38.9	18.0	2.1	8.5
Turkey	3.6	33.1	26.4	8.8	8.8	3.2
Venezuela	1.4	24.1	49.3	21.2	6.7	2.7

Source: Bayraktar and Moreno-Dodson (2010); World Bank data and staff estimates. Central government spending unless otherwise stated.

²⁵ Reinhart and Rogoff (2010).

²⁶ Horton (2009).

²⁷ The *a priori* definition of productive spending used here follows Bleaney, Gemmell, and Kneller (2001), comprising general services, defense, education, health, housing and transportation and communication expenditure.

A preliminary set of estimates indicates a negative correlation between total current spending and growth. It shows that a 1 percentage point of GDP increase in current spending is on average associated with a decrease in the GDP per capita growth rate of approximately 0.083 percentage points. On the other hand, although it is not statistically significant, a 1 percentage point increase in capital spending as a share of GDP is associated with an increase in GDP per capita growth of 0.17 percentage points. Digging into the sub-categories of current spending, the negative coefficient is primarily related to general services, while current spending on social services has a positive (though statistically insignificant) effect. These results, imprecise though they may be, indicate that reallocating current expenditures from the general to the social categories would be beneficial to growth. Reallocating funds within the current spending envelope from general (interest payments, for instance) and economic sectors (subsidies, say) to social sectors (maintenance of water and sanitation projects, for example) would also reinforce the positive effect of capital spending, because it would ensure that investments are adequately maintained and productive. Rebalancing the composition of current/capital spending in both economic and social sectors could also stimulate growth. In order to ensure that investments in economic services (for example transport and energy) continue to help growth, it would be important to restructure current spending, away from subsidies, and towards better operational and maintenance spending.

Has Rapid Growth Across India Led to a Convergence of Incomes Across the States?

India's rapid growth in the 2000s is reflected in substantially higher growth in per capita GDP in the states. On average, the GDP of Indian states grew by 6.6 percent per year over 2001-08, which translated into a per capita GDP growth of 5.2 percent.²⁸ The highest level of per capita GDP in 2008 was achieved in Haryana, which had the highest overall growth rate, but the third highest per capita growth rate over the period. Highlighting a success story, Bihar was ranked the lowest in terms of per capita GDP in 2008, but it achieved the third highest overall growth rate and the fifth highest per capita growth rate in the sample. However, a small group of states with below-average per capita income and below-average growth rates of those incomes are falling behind.²⁹ In 2000, the state with the highest per capita income averaged four-and-half-times the per capita income of the poorest state. In 2008, the difference between the richest and poorest state was almost unchanged.

India – Growth and General Government Expenditure					
Dependent variable: Per capita GDP growth	-1	-3	-4	-5	-6
Increase in growth for 1 percentage point of GDP increase in government expenditure					
Capital expenditure		0.17		0.17	
Current expenditure		-0.08**	0.04		
Capital expenditure – Economic Services			0.12		
– Social Services			1.33**		
– General Services			0.77**		
Current expenditure – Economic Services				-0.02	
– Social Services				0.28	
– General Services				-0.29**	
Current + Capital – Economic Services	0.08				
– Social Services	0.17				
– General Services	-0.25**				
Defense					-0.36
Non Defense					0.03
Number of observations	24	24	24	24	24
Adjusted R-squared	0.334	0.205	0.172	0.337	0.12

Note: * indicates significance at 10%, ** at 5%.

Source: Brahmabhatt et al. (2010).

Per Capita Growth Comparison of Selected States, 2001-09 Averages

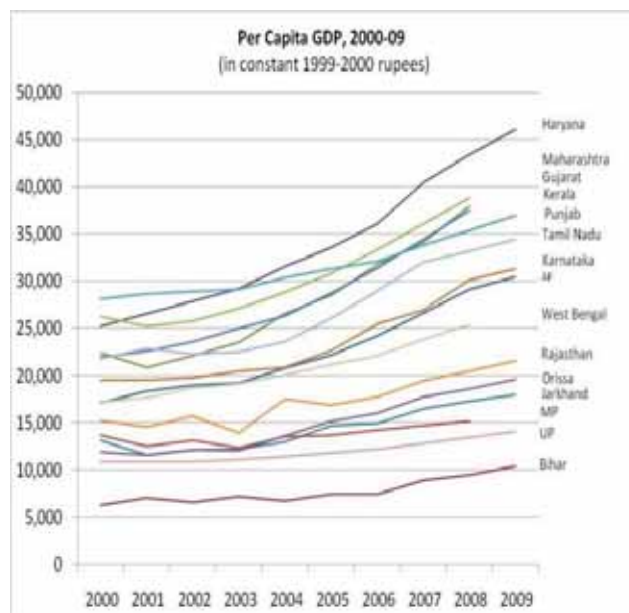
	Growth	Growth (p.c.)	Ranks		
			Level (p.c.)	Growth	Growth (p.c.)
AP	7.8	6.7	8	4	4
Bihar	8.1	6.1	15	3	5
Gujarat	8.8	7.0	3	2	1
Haryana	9.1	6.9	1	1	3
Jharkhand	5.5	3.8	12	12	12
Karnataka	6.8	5.4	7	7	7
Kerala	7.8	7.0	4	5	2
Madhya Pradesh	3.4	1.5	13	15	15
Maharashtra	6.8	5.1	2	8	9
Orissa	7.1	5.8	11	6	6
Punjab	4.9	3.1	5	14	13
Rajasthan	6.5	4.4	10	9	11
Tamil Nadu	6.2	5.3	6	11	8
UP	5.0	2.9	14	13	14
WB	6.3	5.0	9	10	10
Average (weighted)	6.6	5.2

Source: CSO.

²⁸ Data for FY2008/09 are available for only a few states, so FY2007/08 was used for the comparison.

²⁹ The states are: Mizoram, West Bengal, Rajasthan, Meghalaya, Jammu & Kashmir, Uttar Pradesh, Manipur, and Madhya Pradesh.

The states achieved impressive fiscal consolidation before the global financial crisis. Under the auspices of the 12th Finance Commission starting in FY2004/05, states had passed fiscal responsibility legislation and accepted borrowing limits. Thereafter, deficits and debt ratios showed considerable improvement, and states were able to spend more on social services. Pay awards resulting from the 6th pay commission and economic stimulus packages in the wake of the crisis have undone some of the gains, but social services have been protected. While spending on wages increased, lower interest payments allowed development spending to rise. In fact, administrative expenditures (wages, operations, and maintenance) were reduced to 28 percent of revenue expenditure, or 2.4 percent of GDP in FY2007/08, but have since climbed to 33 percent and 3.1 percent, respectively. Debt relief and restructuring initiated by the 12th Finance Commission allowed interest payments to take up less fiscal space, and the ratio of development expenditure to GDP increased from 9.4 percent in FY2007/08 to 11 and 10.7 percent in FY2008/09 and FY2009/10, respectively. Social sector expenditure in particular, received a boost in the two “slowdown years” FY2008/09 and FY2009/10, increasing by about 1 percentage point of GDP.



This success of the states generates optimism that fiscal consolidation can succeed.

It also suggests that the new rules based approach proposed by the 13th FC may be sufficiently disciplining to result in improved economic and social outcomes at the state level. At the same time, it should be recognized that resources from the center, which remain critical, are diminishing as a proportion of the total revenues some states are able to mobilize on their own. Commensurately, inter-state competition for domestic and foreign investment is rising, which, combined with other factors such as regional endowments and policies, is likely to create strong pressures for a divergence of incomes among the states. In such a situation, the effectiveness of state level spending assumes even greater significance, especially for the lagging states of India.

States' Expenditure Patters, 1990-2010
(in percent of GDP)

	1990-95	1995-00	2000-05	2005-06	2006-07	2007-08	2008-09	2009-10
Aggregate Expenditure	15.9	14.9	17.0	15.2	15.3	15.2	16.9	17.1
Revenue Expenditure	12.7	12.4	13.3	11.8	11.8	11.7	13.0	13.6
Interest Payments	1.7	2.0	2.7	2.3	2.2	2.0	1.9	1.9
Capital Expenditure	3.2	2.5	3.6	3.3	3.5	3.5	3.8	3.5
Development Expenditure	10.7	9.4	9.4	8.9	9.2	9.4	11.0	10.7
Non-Development Expenditure	4.3	4.8	5.9	5.1	4.9	4.7	4.8	5.3
Others	0.9	0.7	1.7	1.1	1.2	1.1	1.1	1.1

Note: Aggreg. Exp. = Rev. Exp. + Int. Paym. + Cap. Exp. = Dev. Exp. + Non-Dev. Exp.
Source: RBI.

Table 1. India: Selected Economic Indicators

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
					Est	Proj	Proj	Proj
Real Income and Prices (% change)								
Real GDP (at market price)	9.3	9.4	9.6	5.1	7.7	8.5	9.0	8.5
Real GDP (at factor cost)	9.5	9.7	9.2	6.7	7.4	8.5	9.0	8.5
Agriculture	5.2	3.7	4.7	1.6	0.2	5.0	3.0	3.0
Industry	9.3	12.7	9.5	3.9	9.3	9.0	9.5	9.0
<i>Of which</i> : Manufacturing	9.6	14.9	10.3	3.2	10.8	9.0	9.5	9.8
Services	11.1	10.2	10.5	9.8	8.5	9.1	10.2	9.5
Prices (average)								
Wholesale Price Index	4.5	5.5	4.5	8.3	3.4	8.0	6.0	5.0
Consumer Price Index	4.2	6.4	6.2	9.1	11.3
GDP Deflator	4.7	5.6	5.3	7.2	3.8	8.0	6.0	5.0
Consumption, Investment and Savings (% of GDP)								
Consumption	69.1	67.1	66.5	69.8	69.6	70.6	69.4	68.1
Public	10.9	10.4	10.4	11.7	12.1	11.6	11.3	11.0
Private	58.2	56.7	56.1	58.1	57.5	59.0	58.2	57.1
Investment	34.3	36.0	37.6	35.6	34.9	35.1	35.7	36.4
Public	7.9	8.4	8.9	9.4	9.1	9.8	10.1	9.0
Private	25.3	26.4	27.6	24.9	25.0	25.3	25.6	27.4
Gross National Savings	35.3	36.9	39.4	35.7	37.5	36.1	33.4	34.3
Public	2.4	3.6	5.0	1.4	1.7	3.9	5.5	6.8
Private	30.7	30.9	31.4	31.1	32.3	32.2	27.8	27.6
External Sector								
Total Exports (% change in current US)	26.7	24.5	26.4	7.9	-12.5	20.4	17.4	17.0
Goods	23.4	22.6	28.9	5.4	-7.6	18.5	16.3	15.9
Services	33.3	28.0	22.1	12.4	-20.9	24.1	19.5	18.9
Total Imports (% change in current US)	30.5	22.7	32.1	11.5	-7.8	18.3	15.3	14.4
Goods	32.1	21.4	35.2	14.3	-8.2	19.6	15.7	14.8
Services	24.0	28.5	18.5	-2.1	-5.3	11.0	12.9	12.2
Current Account Balance (% of GDP)	-1.2	-1.0	-1.4	-2.5	-2.4	-2.4	-2.3	-2.1
Foreign Investment (US billion)	16	14.8	45.0	3.5	51.0	57.0	48.0	46.0
Direct Investment, net	3.0	7.7	15.4	17.5	26.0	28.0	27.0	26.0
Portfolio Investment, net	12.5	7.1	29.6	-14.0	25.0	29.0	21.0	20.0
Foreign Exchange Reserves (excl. Gold) (US billion)	145	191.9	299.2	241.4	260.4	279.3	307.1	339.3
(in months of goods and services imports)	9.1	9.8	11.6	8.4	9.8	8.9	8.5	8.2
General Government Finances (% of GDP)								
Revenue	19.7	20.0	21.1	19.9	18.5	19.1	19.1	19.4
Expenditure	26.5	25.5	26.2	28.7	28.0	27.5	26.5	26.0
Deficit	6.8	5.4	5.0	8.8	9.5	8.5	7.4	6.6
Total Debt	80.6	77.3	74.5	75.1	77.1	74.1	71.3	69.2
Domestic	75.3	72.5	70.2	70.3	71.9	69.4	67.1	65.2
External	5.3	4.8	4.3	4.7	5.2	4.7	4.2	4.0
Monetary Sector (% change)								
Money Supply (M3)	21.2	21.5	21.2	19.0	13.3	19.1	16.6	15.0
Domestic Credit	20.7	20.5	17.4	23.0	18.8	17.9	15.7	14.2
Bank Credit to Government	1.3	8.8	8.6	40.1	35.0	17.9	15.3	13.5
Bank Credit to Commercial Sector	32.2	25.8	20.9	17.0	12.0	17.9	16.0	14.6

Sources: Central Statistical Organization, Reserve Bank of India, and World Bank Staff Estimates.

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