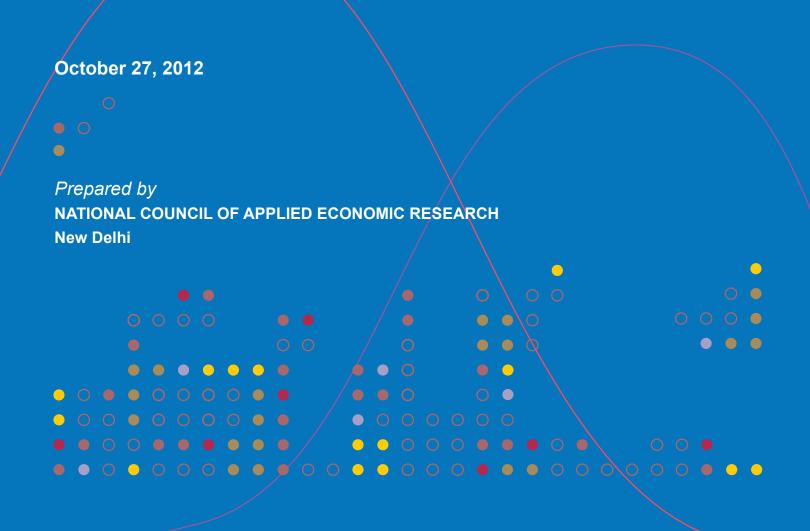




# A Course Change for the Economy? Mid-Year Review 2012–13

# NCAER-IIC Mid-Year Review of the Economy



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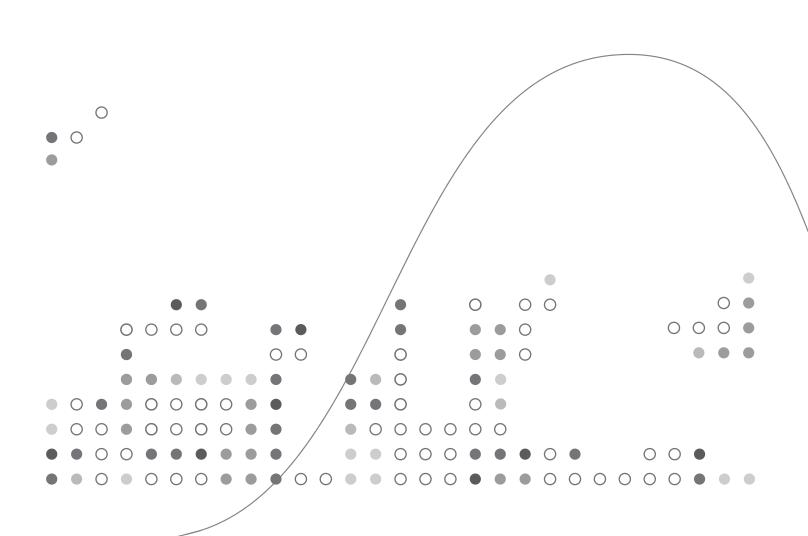
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## **Preface**

Higher inflation and slower industrial growth became persistent features of the Indian economy in 2012-13 following their prominent appearance in 2011-12. Both the fiscal deficit and the current account deficit worsened considerably. The global economy continued to register a weak recovery from the global financial crisis of 2008. Fiscal correction in the US became a political battle between its two political parties with their differing emphasis on expenditure cuts and tax increases. In the Eurozone, a resolution of the banking crisis remained distant. The investment climate at home worsened substantially as policy initiatives to resolve supply-side constraints were delayed and the policy initiatives that were pursued (such as GAAR, the Government's General Anti-avoidance Rules) were widely taken to be market-unfriendly. As an added challenge, the 12th Five Year Plan launched in 2012-13, with its increased emphasis on infrastructure development and human capital development, made it clear that major additional financial resources from the domestic private and public sectors and from external sources would be needed.

Persistent weaknesses in external demand also require policymakers to consider increased attention to the development of domestic markets. While infrastructure investment is one component of this demand story, measures to improve efficiency through fiscal reforms in the form of the Direct Tax Code and Goods and Services Tax are another component. A fresh phase of economic reforms and their careful implementation is needed to expand the room for greater investment and growth.

Achieving sustained high rates of economic growth over the medium-term against this backdrop of the Indian economy suggests the need for renewed discussion of changes in India's strategy for growth and development and the implementation of this strategy.

It was at this juncture of a widening fiscal deficit, a higher current account deficit, RBI's reluctance to loosen monetary policy, and a not-very-bright external sector that the Malcolm S. Adisheshiah Mid-Year Review of the Indian Economy was presented by NCAER at the India International Centre in October 2012. In the months since the Mid-Year Review was presented, and as we approach the end of the 2012-13 fiscal year, the official Advance Estimates place GDP growth for 2012-13 at just 5 per cent, much lower than our own projections presented in October. This suggests the magnitude of the challenge that lies ahead for the Indian economy and the need for debate and discussion on the course of India's economic policy framework and its implementation.

It has been NCAER's privilege to present the Mid-Year Review for the second successive year in partnership with the India International Centre. We are grateful to Dr Kavita Sharma, Director, IIC, and her team for partnering with us on this activity.

We are also grateful to Dr Bimal Jalan, former President of NCAER's Governing Body and former Governor of RBI and Member of the Rajya Sabha, who kindly agreed to chair the seminar and led an intense discussion of the Review. Prof. Sudipto Mundle, NIPFP and Dr Rana Hasan, ADB were the invited discussants and focused their comments on macro and micro aspects of the current economic policy challenges. We were fortunate to have Prof. B.N. Goldar, well known for his research on India's



industrial growth, as a member of our Review Team. We also wish to acknowledge the financial support of the Think Tank Initiative managed by IDRC, the Canadian International Development Research Center, for putting together this Mid-Year Review.

New Delhi March 2013 Shekhar Shah Director-General NCAER



## **Foreword**

In 1983, renowned development economist and educator, Dr Malcolm Adiseshiah, initiated the 'Mid-Year Review of the Indian Economy' which examines economic trends for the first half of the year, as also provides an assessment of the prospects for the economy for the full year. In pursuance of these aims, the Malcolm Adiseshiah Trust has supported an annual seminar at the India International Centre since 2001.

For the past two years, this event has been hosted by the Centre in collaboration with NCAER. This year, the Mid-Year Review asked a significant question: 'A Course Change for the Economy?' As Chairperson of the seminar, Professor Bimal Jalan said, there have been some course corrections, but expectations on the way forward have not been met. It is necessary to look at political developments when examining the future of the Indian economy. This Review comes at a crucial moment as the 12th Five Year Plan is to be initiated soon, and the 2014 General Elections are in the near future.

Eight sectors have been discussed in this report, and the trends in economic indicators for all these sectors have been presented. The seminar highlighted the fact that the actual outcome for the economy has been one of weaker economic growth than predicted. Agricultural output suffered as a result of erratic rainfall in 2012. In the non-agricultural sector, external demand conditions remained weak and the policy dilemmas affecting the investment climate continued. However, some mitigating measures unveiled in September 2012 relating to FDI in a few sectors could change this course. The need of the hour is accelerating policy changes.

Two additional themes this year were a revival of industrial growth, and the quest for a second Green Revolution. The priority, in the medium-term, is to address these issues to ensure creation of jobs and food security.

Kavita A. Sharma
Director
India International Centre



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# Mid-Year Review 2012-13

# **PART A: Overview**





## I. Overview

By Shashanka Bhide

#### 1. The Context

The first six months of the current financial year have been eventful from many perspectives: economic, political, global and local. Stagnating industrial production and lower but high inflation have defined the overall state of the economy. The robust services sector has also begun to lose its momentum of growth in the wake of weak demand conditions. GDP growth for 2011-12 is now estimated at 6.5 per cent, well below the initial assessment of 6.9 per cent provided as Advance Estimates before the Union Budget was presented. Although there was an improvement in the growth rates of GDP from agriculture, construction and finance-related sub-sectors, the decline in growth of manufacturing and trade, transport, storage and communications brought down overall GDP growth by 0.4 percentage points. Conducive weather helped rabi crops immensely and the year ended with record food grain output of 252 million tonnes and rice output crossing the 100 million tonne mark in 2011-12.

The decline in overall GDP growth from 8.4 per cent in 2010-11 to 6.5 per cent in 2011-12 should also be seen in the context of disappointing weakness in the global recovery. The Eurozone crisis continues although there have been a number of initiatives to resolve it. The October 2012 World Economic Outlook estimates world GDP growth for 2011 at 3.8 per cent, down from 5.1 per cent in 2010. For 2012, the estimates are even lower at 3.3 per cent, with recovery foreseen in 2013 at 3.6 per cent. GDP growth in China is projected to drop to 7.8 per cent in 2012 from 9.2 per cent in 2011, while for India the drop is from 6.8 per cent in 2011 to 4.9 per cent in 2012. These estimates are for the calendar year. External market conditions have not been conducive to growth, with the advanced economies showing further decline in economic growth: 1.6 per cent in 2011 and 1.3 per cent in 2012. The net capital inflows to emerging market economies are estimated by the Institute of International Finance to come in lower at USD1.067 trillion in 2012 compared to USD1.124 trillion in 2011. A decline is estimated for emerging market economies in Asia as well.

The first quarter in the current financial year brought modest GDP growth of 5.5 per cent compared to growth of 8 per cent in the same period, a year ago. The monsoon turned out to be below normal, although the situation improved during the course of the season compared to the conditions experienced in June. Nevertheless, inadequate rainfall in the southern parts of the country has again led to inter-state disputes on the sharing of reduced supplies of river water. Global production of some food commodities in 2012–13 remains below the level achieved in the previous year, which has led to an increase in food prices in international markets.

The Budget Speech of the Finance Minister in February this year recognised the challenges ahead. There was an attempt to contain budgetary deficits, although the definite steps were not clearly spelt out. For instance, overall subsidy was to be contained below 2 per cent of GDP but the process in terms of raising petroleum product prices was not articulated. The major move towards DTC and GST were re-iterated but actual implementation remained for the future.

Monetary policy continued to focus on bringing down the inflation rate while fiscal policy was more supportive of demand. However, the combination was not successful in meeting expectations of higher growth and a more moderate level of inflation.



What marked the overall policy environment until the reform announcements in mid-September this year was relative inaction. The process of decision making in the government was also perceived to have been slowed down by scandals related to corruption. Although policy inaction has been said to mark many countries in the last two years, stalled reforms at home were also adversely impacting on both the fiscal position and the external imbalance. Capital flows could not be accelerated and the growth slowdown was affecting revenues. Although, the causes of the policy lull are many, coalition politics has been often cited as the main reason for opposing views on policy decisions. The policy announcements that came later in the year were significant, first in raising the price of diesel which oil marketing companies could charge customers and then in limiting the allocation of subsidised LPG to consumers. These steps helped reduce the outgo on the petroleum subsidy. The other reforms permitted FDI in multi-brand retail and aviation and the disinvestment process also got support in this process. These moves were expected to reverse the decline in business sentiments and help in restoring the confidence of investors.

The reforms were necessary to provide a new forward momentum for the economy. The launching of the Twelfth Plan required appropriate strategies to achieve the economic growth needed for meeting the social agenda over the next five years; the fiscal imbalance needed immediate correction; the decline in forex reserves needed be arrested; and the inflation rate had to be contained. So far, the government has taken decisive steps in a number of areas. Although many of the decisions will require legislative clearance, the comprehensive nature of the reforms is likely to get the political support which may have been difficult for partial solutions.

In this Mid-Year Review (MYR), we provide a discussion of the trends and patterns in output, prices and other indicators of the economy for the current year. The MYR is presented in three parts. Part I provides an overview of the MYR. Part II analyses trends and patterns of economic indicators for the first six months of 2012-13 on the basis of available data. It covers the three broad sectors (agriculture, industry and services), external trade, money, credit and finance, public finances (mainly central government finances) and an assessment of prospects for the economy in 2012-13. Part III of the MYR has two papers, one dealing with industrial growth and the second with agriculture.

The next section provides the key points emerging from the review in Part II.

## 2. Agriculture, Industry, and Services

The year witnessed extremely erratic temporal as well as spatial distribution of rainfall. Actual rainfall received during the June-September period was 92 per cent of the long-term average, so monsoon rainfall for the country as a whole moved close to normal after experiencing huge deficit in the early part of the season. However, considering the huge variations across the country this year's monsoon rainfall turned out to be rather poor from an overall perspective.

The impact of the poor distribution of seasonal rainfall is evident in the preliminary estimates of kharif output released by the Ministry of Agriculture. According to the estimates kharif food grain output is likely to be around 117.2 million tonnes, about 10 per cent less than the previous year's estimated output of 129.9 million tonnes. The assessment provided in the section on agriculture indicates that the reduction in output is likely to be lower than the official estimates.

An important cause of the overall decline in industrial growth in the first five months of the current financial year is the huge drop in the production of capital goods reflecting the drop in investment activities. The lack of addition to real capital stock or productive capacity is a concern in the current phase of the



economy. Gross Fixed Capital Formation (GFCF), which reflects the overall investment scenario, grew by only 5.7 per cent during 2011-12, the lowest in the last three years, and lower than the growth of GDP. The quarterly growth of real GFCF has actually registered a declining trend through 2011-12, which has continued in 2012-13.

Production of consumer durables has shown a notable increase in April-August 2012-13. The IIP for this sector increased by 5.7 per cent, and this is the only sector where growth has improved over the previous year. The strength of the consumer durables segment appears to be fuelled by the increasing production of TV and professional instruments. The production of passenger cars and two-wheelers has grown at a slower pace in April-July 2012 compared to the same period the previous year.

Among the core industries, growth of cement production is impressive but steel production has slowed down in 2012-13. Infrastructure projects appear to be holding up demand for cement much more than steel.

The performance of services shows that the autonomous drive of the sector to grow may have diminished. One of the major drivers of this sector, telecommunications, has been affected by the policy dilemma. The global drivers of IT services are yet to recover. Industrial growth is absent. The overall result is that services growth has also decelerated. Services growth (excluding construction) in Q1:2012-13 over the same period in 2011-12 is estimated at 6.9 per cent compared to 8.8 per cent growth in Q1:2011-12. GDP from the trade, hotels and communications segment of services has decelerated sharply in the current financial year.

Revival of industrial growth, therefore, will be a key to improving the growth of services and also of exports. This will require a number of measures, most importantly revival of the investment climate. If domestic demand is to sustain growth in production then addressing concerns relating to policy stability and consensus on reform strategy will be critical.

#### 3. External Trade

Slow recovery in the global economy has led to a drop in the volume of international trade. The IMF has projected a decline in the growth of the volume of trade in goods and services from 5.8 per cent in 2011 to 3.2 per cent in 2012. Export growth of emerging and developing economies is projected to decline from 6.5 per cent in 2011 to 4 per cent in 2012. India's export performance has turned out to be much worse than for the emerging and developing economies as a group. Merchandise exports have shown negative growth, -6.79 per cent in dollar value, for the period April-September 2012 compared to the same period in 2011-12. Exports of all categories of merchandise registered negative growth rates in April-September 2012-13 over the same period in the last year, except for agricultural commodities. Competitive prices, favourable domestic supply and global demand conditions helped raise India's exports of farm commodities. The analysis in this section also makes the point that the significant appreciation of the rupee had not adversely affected exports and its recent steep depreciation has not helped restore export momentum. India's exports to its top 20 destination countries posted negative growth in April-June 2012. The discussion points to the influence of domestic factors on export performance. The slowdown in industrial growth prompted by domestic policy constraints may also have had a negative impact on exports.

With slower industrial growth, imports have also slackened. For April-September 2012, merchandise imports declined by 7 per cent over the same period last year.

The faster decline in imports relative to exports reduced the level of the trade deficit in April-September 2012 compared to the same period in 2011. However, there are risks that the deficit may widen over the



year. The current account deficit as a percentage of GDP may be lower than the 4.2 per cent estimated for 2011-12.

The high Current Account Deficit (CAD), especially against the backdrop of volatile global macroeconomic conditions and volatile capital flows, raises concerns about its sustainability. The future trend in balance of payment will largely depend on the global macroeconomic and trade environment as well as the domestic investment and policy environment. The government needs to act swiftly and effectively to restore business confidence, improve the investment climate within the country and bring the economy back to its growth trajectory.

#### 4. Money, Credit, and Finance

The major concern from the perspective of the RBI during 2011-12 has been the high rate of inflation. In fact, the experience of high inflation during the year has been somewhat specific to India among the major economies with which India's performance has been generally compared. In the Asian region, China had higher GDP growth and a far lower inflation rate than India. For 2012, the IMF projects a GDP growth of 7.8 per cent and consumer price inflation of 3 per cent for China and real GDP growth of 4.9 per cent and inflation rate of 10.2 per cent for India. Vietnam has a slightly higher rate of growth (5.1 per cent) and lower rate of inflation (8.1 per cent) than India, although it fared far worse on inflation in 2011 (when consumer prices rose by 18.7 per cent). In Brazil, real GDP growth is projected to be much lower (1.5 per cent), as is the inflation rate (5.1 per cent), while Russia is also expected to achieve a lower rate of inflation (5.1 per cent) with lower economic growth (3.7 per cent). The high rate of inflation in India has been therefore somewhat unique and structural. The fact that it is the prices of primary articles and fuels that have kept the Indian inflation rate high in 2012 has to be considered against the low rate of increase in crude oil prices and decline in non-fuel commodity prices in 2011. India was unable to benefit from the low commodity price rise situation that prevailed in the international markets.

In this sense, if fiscal measures are to strengthen investment to create production capacity where there are supply inadequacies, and monetary policy in turn supports those measures, the short-term pain of high inflation and low growth is the price that needs to be paid for future stability. The present monetary-fiscal policy stance in India has been quite different from measures taken elsewhere to resolve the problem of inflation while attempting to maintain growth.

A correction in the monetary policy stance is awaited as part of a definitive overall policy thrust to investments. In the September review of the policy, the RBI reduced the CRR rather than decreasing the policy rates. The indirect impact of this approach has strengthened the declining trend in interest rates on government securities. However, this trend may also be due to the slower growth of commercial credit in general.

The capital markets have reacted cautiously to the new wave of reforms and appear to be synchronous with the international stock markets.

As the *kharif* output begins to arrive in markets, commodity prices are expected to keep the price line from rising further. Attempts to improve investments in areas where supply constraints are likely to intensify would be critical at this juncture. Monetary policy measures to improve the investment climate are now necessary.

#### 5. Prices

The decline in the rate of inflation measured by the WPI since the beginning of this calendar year has been a relief, but the fact that the rate remains above 7 per cent is a concern. To exacerbate matters, consumer prices showed inflation rates of close to 10 per cent in the first six months of the current financial year.



The recent increase in the diesel price has spurred the inflation rate again. However, this may be a one-time increase necessary to regain some of the fiscal balance. The year-on-year rise in the primary articles price index (WPI) dropped below the 9 per cent mark in September 2012. However, concerns about the likely decline in agricultural output in the current year will keep the pressure on commodity prices in the domestic markets. If we are to benefit from lower prices in the international market for commodities, the exchange rate would have to remain stable or not depreciate.

Overall, the review points to the need for greater flexibility in prices in order to signal appropriate supply responses and to break the emergence of imbalances leading to subsidies and inadequate supply responses.

#### 6. Public Finance

An exit from the expansionary fiscal stance adopted in the face of the global crisis of 2008 or a move towards fiscal consolidation was initiated in the 2011-12 budget, and was aimed at raising total expenditure in the year by just 5 per cent over the previous year. However, actual expenditure overshot the goal, and revenues disappointed. The disinvestment targets failed. In this sense, fiscal consolidation measures are necessary, whether they come from revenues or from expenditures. The recommendations of the Kelkar-Rajaraman-Misra Committee provide an integrated approach to fiscal consolidation over a three-year period. Some of the key recommendations on curbing expenditure were: pricing of petroleum products on a more sustainable basis, capping that subsidy bill at 2 per cent of GDP and targeting expenditures at sustainable levels. Strategies for raising the tax-GDP ratio and disinvestment revenues were also indicated.

The trends in revenues and expenditures up to August this year reveal the impact of stagnant industrial growth. Growth in indirect tax revenues is weak and the initial rise in direct tax revenues also slowed in the second quarter. Service tax revenue has increased by more than 30 per cent during April-August 2012, year-on-year basis, and the increase in the tax rate in the current budget may have helped attain this growth. The recent increase in the price of diesel and policy of limiting distribution of subsidised LPG will reduce the outgo on meeting under-recoveries of the oil companies this year, but we need a longer term approach to sustainable pricing of petroleum products.

Fiscal support has become necessary over and above market prices, whether it is for infrastructure development, food security or expansion of the railways. The return to a Fiscal Management rule, while reforms reduce transaction costs, is needed.

Current trends point to a likely slippage in fiscal deficit goals. A revival of economic growth is essential if these goals are to be met.

#### 7. Forecast

The section presents a review of the macroeconomic indicators and points to a lowered expectation of growth for 2012-13. The assessment of parameters of global growth and prices from the *World Economic Outlook* form the basis for one set of assumptions influencing international trade and prices. The other set of assumptions comes from quarterly macro and monetary reviews from the RBI, the Union Budget and a number of other sources.

While expected growth of agriculture in the current year has been lowered as a result of deficient rainfall, pointing to a continued low growth in the industrial sector, the section notes that service sector performance would also be adversely affected by this trend.



We have presented an assessment of the prospects for 2012-13 on the basis of a quarterly model and also an annual model. Both models project GDP growth of 5.9 per cent. The quarterly model projects growth of above 6 per cent in the second half of the year. The projected growth rate of GDP is lower than the projections made by NCAER earlier this year in July.

The key assumptions underlying the projections based on the annual model are:

**Rainfall:** Rainfall during the monsoon season June–September 2012 will be 7-8 per cent below normal compared to our previous (July 2012) assumption of a 5 per cent deficit.

**World GDP growth:** The revised real world GDP growth rate is taken at 1 percentage point below our earlier assumption of 3.5 per cent.

**International crude oil price:** A year-on-year increase of 10 per cent in international crude oil prices is assumed in 2012–13.

**Non-fuel commodity prices in the international markets:** A year-on-year decrease of 5 per cent in non-fuel prices in the current fiscal is assumed against the 10 per cent decline assumed in July 2012.

**FDI** net inflows and net invisibles receipts: FDI inflows are assumed to decline by 10 per cent; for net invisible receipts, we retain our earlier assumption of a 10 per cent increase over the previous year.

**Foreign institutional investment:** We assume no growth in net FII inflows in 2012–13.

**Domestic energy price index (WPI for fuel, power, light and lubricants):** A year-on-year increase of 8.9 per cent in the WPI of fuel prices is assumed for the current fiscal.

**Interest rate and exchange rate:** We assume no further moderation of interest rate in the remaining months of the current fiscal. We also retain our earlier assumption of a LIBOR at 0.2 per cent. For the exchange rate, we assume a 10.7 per cent depreciation of the nominal exchange rate of the rupee vis-a-vis the USD.

Central government finances: According to fiscal data till August 2012, the central government has managed to collect only 5 per cent of the total disinvestment revenue budgeted for the year. We assume Rs 15,000 crore of disinvestment revenue for the current estimates compared to our earlier estimate of Rs 20,000 crore. On subsidies, we assume these will remain at the level of the budget estimates due to the increase of diesel, petro and LPG prices.

The assessment places overall GDP growth in constant 2004–05 prices at 5.9 per cent for 2012–13. The growth rate is lower by 0.5 percentage points compared to our July 2012 forecast. This decline in the growth assessment has come across all sectors, especially industry and services. The increased deficiency of rainfall will hamper agricultural production in the current fiscal. Therefore, the overall output of the agricultural sector is expected to expand by 2.1 per cent, down by 0.3 percentage points from our earlier estimates of 2.4 per cent in July 2012.

We also predict a slow growth rate both for industry and services. Our current estimates show industrial GDP growth at 3.5 per cent, which is lower by 0.7 percentage points from our July estimates. Services growth is expected to slow down with the contraction in domestic manufacturing activities and the slow recovery of growth in the developed countries. The continued poor performance of services like air transport



and telecom are dragging down the overall growth performance of services. Further, the lagged impact of investment in interest-rate-sensitive sectors and the steep fall in the growth of public administration and defence services will also affect the growth rate of services. Our current estimates put services growth at 8 per cent, which is 0.5 percentage points lower than our July estimates.

The y-o-y increase of WPI prices (inflation) has been revised upward due to the increase in domestic oil prices. We estimate 7.4 per cent WPI inflation for the current fiscal. The quarterly model forecast gives a slightly higher WPI inflation of 7.5 per cent.

On the external front, the growth prospects of exports do not look encouraging in the current fiscal as India's major export destination countries continue to be affected by slow growth. Our current estimates show that merchandise exports (USD) is expected to grow by 7.9 per cent in the current fiscal. The growth rate of merchandise imports (USD) is also expected to remain low due to a slowdown of domestic growth. Since exports decline more than imports, the current account deficit as a percentage of GDP is expected to remain around 3 per cent of the GDP in the current fiscal. The fiscal deficit of the central government is estimated at 5.7 per cent of the GDP at current market prices.

#### 8. The Special Themes: Industrial Growth Revival

Setting out to examine the causes of the industrial growth slowdown in the current year, the first paper in Part III of the MYR draws on the previous episodes of relatively long periods of industrial stagnation or low growth. The four episodes of low growth in the last 30 years mentioned here are June to November 1982, April to December 1991, January to April 1993, and December 2008 to June 2009. The causes of the slowdown diagnosed in the various economic surveys following each of these episodes ranged from sector-specific issues to weak external demand, disruptions caused by social/political turmoil, labour problems, technology disruptions and bank finance constraints.

The paper identifies the three major causes of weak industrial growth in the past episodes as: (1) sluggishness or a fall in export demand; (2) reduced flow of finance for industrial investment; and (3) a decline in business confidence resulting in reduced investment. These factors are expected to play a similar role in the current phase of industrial stagnation.

The paper examines the impact of each factor on the current industrial growth situation. While it finds these factors indeed are closely associated with the deceleration in industrial growth at the present juncture, it finds that the credit constraint may be reflection of weak demand as much as a constraint on supply. The channel of impact of monetary policy from interest rate to investment is seen as a complementary - and perhaps necessary - factor rather than the driver.

An interesting point made by the analysis is that the present slowdown may also be a reflection of a business cycle phenomenon, that the economy was on a cyclical downswing and recent data may suggest that the trough may have been found.

Among the measures recommended to revive growth is the pursuit of the Free Trade Agreement with the EU that can expand India's market access at this time. The analysis also emphasises the need for a wide range of reforms that can help businesses achieve efficiency in business operations.



#### 9. Agriculture: In Search of the Second Green Revolution

As a consequence of the recent food crisis experienced by many parts of the world these past few years, there is renewed interest in the agricultural sector. The sudden increases in world food prices that occurred in 2007, 2008, and again in 2010 and 2011, have exposed the fragilities of the sector and led to an increased sense of food insecurity and poverty.

A number of expert agencies and international forums have expressed concerns about the implications of food price increases and the consequent impact on the poor and vulnerable. Food and Agriculture Organisation data on hunger indicates that the total number of hungry people in the world, which had fallen to 898 million during 2004-06, has dipped marginally since then to 868 million people in 2010-12, but the state of affairs continues to be worrisome. The critical need for maintaining an adequate supply chain for food supplies in India is obvious.

The deceleration in the agricultural sector's growth in India during the past few decades, clearly evident from the fall in the rates of agricultural growth in the 1990s and thereafter compared to the scenario after the mid-1960s, has been a matter of concern.

The author of the section argues that productivity growth, witnessed after the initial round of the green revolution in the 1970s and 1980s, diminished thereafter and that in the 1990s average growth slowed down considerably. The low rates of yield seem to have become a norm in recent years. The only bright spot during this period has been cotton, which has witnessed an exceptionally high rate of productivity growth after the introduction of BT technology.

Given the importance of reviving agricultural growth, especially in the context of increasing claims on natural resources for other uses and the continuing high incidence of poverty, we need to understand the determinants of productivity in agriculture and to design measures to achieve sustained improvements.

#### 10. Postscript and Concluding Remarks

This Mid-Year Review of the economy has examined the trends and developments in a number of indicators on the economy to understand the current status of the economy and its short term prospects. The slowdown in growth and persistence of high inflation have been recurring themes in the discussion. Global comparisons suggest that while the slowdown in economic growth is a widely shared experience, high inflation is not. The need for fiscal consolidation and more flexible supply systems that can respond to emerging changes in demand conditions are areas where policy measures are imperative. The fresh impetus to reforms seen in the middle of fiscal year 2012-13 to narrow the widening fiscal imbalance, strengthen capital inflows, streamline governance processes and improve market processes came after a long pause on policy initiatives which led to a hold up on investments. Although the major policy changes require legislative clearances, the new initiatives signal an integrated agenda of policy action. These initiatives are necessary to achieve recovery in investment spending given the continued weakness in global demand conditions. Complementary monetary policy measures would increase the effectiveness of sectoral reforms.

Towards the end of the current fiscal year slow down of the economy became more pronounced. The official Advance estimate of GDP growth for 2012-13 is just five per cent over the previous year. Year on year basis, industrial output till December 2012 was stagnant in the current fiscal. The services growth decelerated and agricultural growth was also estimated to be lower. The silver lining was the drop in overall inflation rate at the wholesale level. The WPI inflation rate remained consistently below eight per cent



since September 2012. The consumer price indices remained at close to double digit level fuelled by the rise in the price of food articles and energy price. The exchange rate of the rupee remained stable in the second half of the year till the end of January 2013.

The Union Budget presented by the Finance Minister on February 28, 2013 has estimated fiscal deficit of the central government at 5.2 per cent of GDP for 2012-13 even with lower rate of growth of GDP during the year. The lower fiscal deficit has been achieved by a significant compression of plan expenditure. In anticipation of the likelihood of large deficit at year-end, the government appears to have compressed expenditure.

Dr. Kavita Sharma, Director, India International Centre and Dr. Shekhar Shah, Director General, NCAER, initiated the seminar providing a broader canvas for discussion on the economy. The need for assessing the implications for progress on human capital in the country was highlighted by Dr. Sharma. Dr. Shah also highlighted the need for understanding and assessing the factors influencing the course of the economy in the longer term. The agenda for reforms of the factors markets requires greater attention now given the structural constraints to growth.

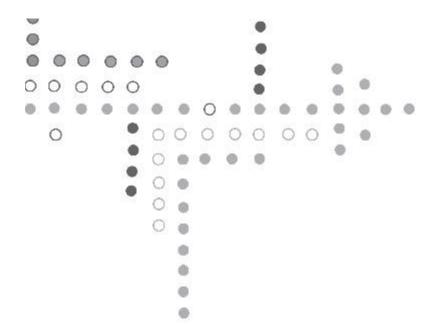
Dr. Bimal Jalan, chair for the seminar, noted that the important political reforms were needed for longer term economic development. Corruption and poor governance are an obstacle to development.

The discussants at the Review seminar, Prof. Sudipto Mundle and Dr. Rana Hasan, focused on macro and micro aspects of the challenges facing the economy. At the macro level, fiscal consolidation and monetary policy easing were both seen as necessary to revive the economic growth. Although there are structural features of current high inflation, coordination of the two policy strategies is essential. The management of the fiscal cliff in the US was also seen as a critical point for the course of the global economy with risks to Indian growth recovery also.

At the micro level, the distorted labour market was identified as one of the structural impediments to achieving sustained high economic growth over the medium term. The experience of countries such as South Korea and Taiwan has shown that when firms are allowed more flexible labour markets and no policy restrictions on investment and growth, there is more sustained industrial growth and importantly, there is growth in employment and productivity of labour. India's manufacturing sector requires reforms that help improve productivity of labour so that production becomes competitive in global markets.

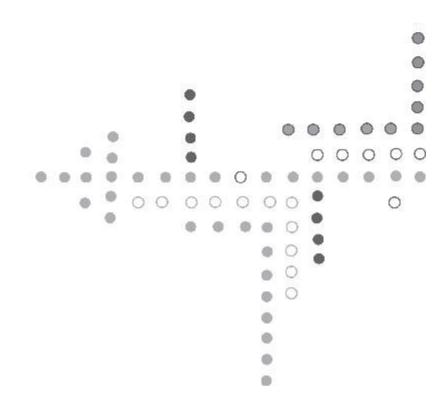
While case for easing the monetary policy by reducing interest rate has become stronger by the relative drop in WPI inflation and near stagnant industrial growth, evidence of strong fiscal measures towards fiscal consolidation appears to be critical to significant easing of policy rates. The repo rate was lowered in January 2013 by 50 basis points.

The international scenario remains a cause for worry. While the policy makers in the US appeared to have managed to avoid the 'fiscal cliff' at the end of 2012, the success was only in postponing the difficult decision on how to achieve fiscal consolidation. At this pace economic recovery may well have to precede progress on fiscal consolidation.



Mid-Year Review 2012-13

# **PART B: Recent Trends and Patterns in the Economy**





## I. Agriculture

By Anil Sharma

#### I.1 The South-West Monsoon

Actual rainfall received during June-September 2012 is 92 per cent of its long-term average, therefore, monsoon rainfall for the country as a whole turned out normal after a huge deficit in the early part of the season. Of the 36 agro-meteorological sub-divisions in the country, 23 sub-divisions covering about 67 per cent of the total area in the country received normal-to-excess rainfall. However, it is not accurate to judge the performance of monsoon rainfall from aggregate data for the entire season as this does not reveal variations across the all four months of the season and its spread across all the regions and states. A month-by-month analysis of monsoon rainfall during the season clearly reveals that this year rainfall was marked by huge fluctuations.

The south-west monsoon arrived in Kerala and its adjoining areas about four days later than its normal date of arrival, and after covering the entire state of Kerala and some parts of coastal Karnataka and Tamil Nadu it advanced rapidly along the west coast and north-eastern states. After a week's break, the monsoon progressed over the southern and central regions in mid-June, and into the peninsular, eastern, and central areas. Thereafter, it did not advance further; and due to its late arrival and passive activity, overall rainfall during the month of June remained deficient in all four regions of the country (Table I.1).

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

S. No.	Region	June	June-July	June-August	June-September
1.	Eastern Region	-12.0	-7.8	-10.4	-8.0
2.	Western Region	-50.7	-15.2	-11.0	-3.4
3.	Northern Region	-77.5	-32.8	-13.9	-7.2
4.	Southern Region	-34.4	-26.8	-14.5	-15.3
	All India	-34.8	-16.2	-10.7	-6.8

Source: Computed.

Notes: These are deviations in regional-level rainfall indices computed with unirrigated area under food grains as weights. The eastern region includes Assam, Bihar, Jharkhand, Orissa and West Bengal; the western region includes Chhattisgarh, Gujarat, Madhya Pradesh, Maharashtra and Rajasthan; the northern region includes Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Uttar Pradesh and Uttarakhand; and the southern region includes Andhra Pradesh, Karnataka, Kerala and Tamil Nadu.

As the season progressed, the monsoon covered more areas in the centre and in the remaining parts of western and northern India. However, rainfall during July was also below normal in many parts including the west, north-west and the south-west peninsula. While the rest of the country received normal rainfall, the deficiency in some areas like Punjab, Saurashtra and Kutch exceeded 50 per cent. As a result, despite some improvements, the June-July period ended with a deficiency of 16 per cent at



the national level and 27 per cent and 33 per cent in the southern and northern regions, respectively. Overall deficiency in the national level of rainfall decreased from 35 per cent at the end of June to 16 per cent by the end of July.

In August, rainfall improved significantly, leading to huge changes in the overall situation in many parts of the country. The overall rainfall deficiency of 16 per cent at the end of July fell to 11 per cent by the end of August. Similar improvements were observed in many parts of the country and these are reflected in the regional rainfall indices. There was a substantial improvement in the performance of monsoon rainfall in the northern and southern regions, which had witnessed exceptionally below-normal rainfall during the first two months of the season.

The momentum of improvement in rainfall conditions observed during August continued in September. In some parts of the country, however, the deficiency of rainfall was so severe in the first two months of the season, that the late recovery in August and September made little difference to the overall scenario. This is particularly true for Jharkhand, western Uttar Pradesh, Haryana, Punjab, Gujarat, Saurashtra and Kutch, Madhya Maharashtra, Marathwada, Tamilnadu, Karnataka, and Kerala. At the regional level, however, all four regions witnessed a significant improvement over the situation that existed in June and July.

Thus, the spatial distribution of overall seasonal rainfall so far in 2012 is comparatively poor compared to last year's rainfall (2011-12) and the preceding year (2010-11). This is reflected in the low proportion of sub-divisions that received normal-to-excess rainfall (Figure I.1). Evidently, in comparison to 2009-10, which was a drought year, the spread of overall monsoon rainfall this year has been better.

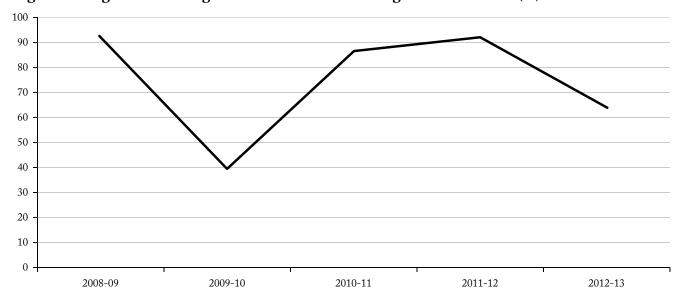


Figure I.1: Agro-Meteorological Sub-divisions Receiving Normal Rainfall (%)

Thus, considering the huge variations in 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. Further, at one extreme, rainfall remained largely deficient in some states such as Punjab, Haryana, Gujarat, Tamil Nadu, Kerala, and parts of Maharashtra, Madhya Pradesh, Karnataka, Uttar Pradesh and west Bengal. And at the other extreme, very heavy rains in parts of the



north-eastern region, West Bengal, Jammu and Kashmir, Uttar Pradesh, Gujarat, Madhya Pradesh, Rajasthan, coastal Karnataka, and Kerala led to severe flood situations at different times during the season.

#### **1.2** Prospects for 2012-13

The impact of the 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 around 117.2 million tonnes, a decrease of about 10 per cent over the previous year's estimated output of 129.9 million tonnes. The shortfall in output is on account of the lower output of rice (6 per cent), coarse cereals (19 per cent), and pulses (15 per cent).

Our own estimates, however, show that the deficit in overall food grain output may be slightly lower, approximately 4-5 per cent, which implies that food grain output during the current kharif season may be around 124-125 million tonnes (Table I.2). According to our estimates, the output of all three components of kharif food grains - rice, coarse cereals, and pulses - is expected to be higher than the first advance estimates of the Ministry mainly due to improvements in rainfall conditions in the latter half of the season.

Table I.2: Estimated Rates of Growth in Kharif Crop Output, 2012-13

Crops	Estimated Output (Ministry of Agriculture) (million tonnes/bales*)		Estimated Output and Rates of Growth	
	2011-12	2012-13 (first advance estimates)	Estimated Output (million tonnes/bales*)	Estimated Rates of Growth (per cent)
Rice				
Kharif	91.5	85.6	88.0 to 89.8	-1.9 to-3.8
Coarse cereals				
Kharif	32.3	26.3	29.8 to 29.9	-7.5 to-7.6
Pulses				
Kharif	6.2	5.3	5.7 to 5.8	-5.9 to-6.8
Food grains				
Kharif	129.9	117.2	123.6 to 125.4	-3.5 to-4.9
Oilseeds				
Kharif	20.8	18.8	18.6 to 18.7	-10.3 to-10.6
Cotton*	35.2	33.4	33.7 to 34.1	-3.2 to-4.3
Sugarcane	357.7	335.3	344.0 to 348.8	-2.5 to-3.8

Source: Computed.

**Note:** The projected output and output growth estimates are based on two approaches. One approach is based on output equations and the second approach is based on area and yield equations for each crop group.



However, our estimates for this year's output of oilseeds are more or less in line with the initial estimates of the Ministry, which suggest a 10 per cent reduction in the expected output of kharif oilseeds. For cotton, the Ministry estimates an output of about 33 million bales, which is about 5 per cent lower than last year's output, but our estimates suggest only a marginal reduction. In the case of sugarcane, preliminary estimates by the Ministry have placed output at about 335.3 million tonnes, about 6 per cent below last year's output, while our estimates suggest only a modest fall over last year's output.

On the differences in projections by the Ministry and us, it is important to note that variations in estimated output are due to differences in methods used to arrive at these estimates. While the Ministry's estimates are based on preliminary information supplied by state governments, our estimates are based on regression models, which incorporate the impact of monsoon rainfall as well as a 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 be as poor as expected in June and July for various reasons: the improvement in rainfall in August and September has raised the level of water stored in the major reservoirs, so that on October 18, it was at about 89 per cent of the previous year's level and at 106 per cent of the last ten-year average level during the same period. This augurs well for the ensuing rabi season. Further, for most crops, the incidence of pests and diseases continues to remain below 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 continues to be high at 9.9 per cent compared to just about 9 per cent last year (Table I.3). Some commodity groups like vegetables, pulses, eggs, meat and fish, have exhibited much higher rates of inflation during the current year, which is in contrast to the trends observed in their prices in 2011-12. The exceptions have been fruits, condiments and spices, and other food articles which have experienced lower rates of inflation this year.

Table I.3: Changes in Wholesale Price Indices of Food Articles, 2011-12 and 2012-13 (April-September)

S. No.	Product	Increase in 2011-12 over 2010-11	Increase in 2012-13 over 2011-12
1	Food articles	9.0	9.9
2	Cereals	5.0	8.7
3	Pulses	-5.7	23.6
4	Vegetables	5.4	28.0
5	Fruits	24.2	-3.7
6	Milk	8.5	9.2
7	Eggs, meat and fish	9.9	15.6
8	Condiments and spices	7.1	-15.4
9	Other food articles	21.7	11.6

Source: Computed.



## II. Industry

By Saurabh Bandyopadhyay

#### II.1 The Backdrop

The economy delivered a disappointing growth performance in 2011-12. The revised estimate of the Gross Domestic Product GDP (at factor cost) places annual growth at 6.5 per cent for the financial year ending March 2012 and at just 5.5 per cent for the first quarter of FY 2012-13 over the same quarter the previous year. Many believed that India's economic downturn in 2008-09 in the wake of global recession would bottom out quickly due to strong fundamentals, and that the country would soon be back on the high growth track. However, the perception remained unrealised, even though there was indeed a quick recovery in 2009-10 and 2010-11.

The reasons are many for the current state of deceleration in economic growth. The most prominent among them is the decelerating growth of the industrial sector. The long-term growth trend in industrial activity is closely associated with overall GDP growth. The long-term average annual growth of industry, comprising mining, manufacturing, electricity and construction, during the post-reform period from 1991-92 to 2011-12, averaged 7 per cent, which nearly equals the GDP growth of 6.9 per cent during the same period. There is a high correlation between industrial growth and overall GDP growth, which is not to deny the pivotal role the service sector has played in accelerating GDP growth during this period. An upswing in the growth of the secondary sector in different quarters of 2009-10 pulled up GDP growth. Industrial growth (GDP) in Q1:2012-13 indicated a slight uptrend (due to strong growth of the construction sector) and GDP growth has also followed this pattern (Figure II.1).

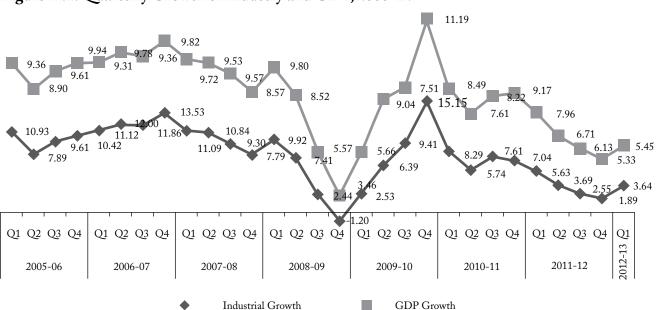


Figure II.1: Quarterly Growth of Industry and GDP, 2006-12

Source: Based on estimates of GDP in constant prices available from Central Statistical Organisation.



#### II.2 Investment and Industrial Growth

The lack of addition to real capital stock or productive capacity is a concern in the current phase. Gross Fixed Capital Formation (GFCF), which reflects the overall investment scenario, has registered a growth of just 5.7 per cent growth during 2011-12, the lowest in the last three years. The quarterly growth of real GFCF has actually registered a declining trend through 2011-12, which has continued in 2012-13 (Figures II.1 and II.2). The growth in GFCF which was 14.7 per cent in Q1:2011-12 y-o-y, dropped to -0.3 per cent in Q3:2011-12, rose slightly in Q4:2011-12 only to drop again sharply to 0.7 per cent in Q1:2012-13. The decline in investment affects not only production capacity, but in the short term, also weakens aggregate demand in the economy. In the present conditions, this aspect of investment appears to have a more immediate impact on economic growth.

Figure II.2: GDP, Industrial and Investment Growth during the Eleventh Plan, 2007–12

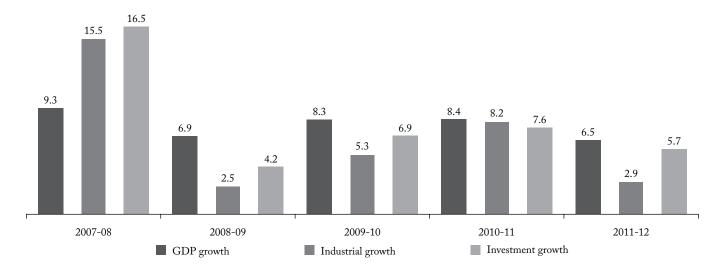
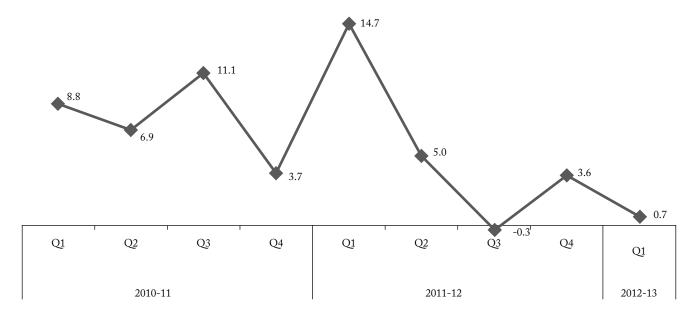


Figure II.3: Quarterly Growth of GFCF: A declining trend

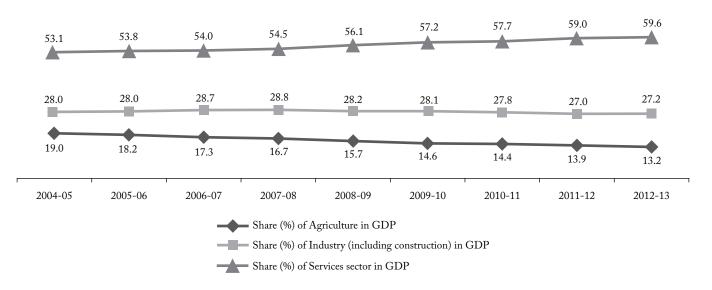




#### II.3 Sectoral Share of Industry in GDP

The share of industry (including construction) in GDP remained stable in the range of 27-28 per cent in the Eleventh Plan period of 2007-08 to 2011-12 (Figure II.3). The share is modest in the Indian economy when compared with the share of industry in China (over 40 per cent); and the goal of the New Manufacturing Policy to raise the share of manufacturing alone in GDP to 25 per cent by 2022, while necessary to provide adequate employment opportunities to the rising labour force, appears ambitious at this time.

Figure II.4: Share of Industry (including Construction) in GDP (at factor cost) (%) Sectoral Share of Industry in GDP



### II.4 The Index of Industrial Production (IIP)

The new IIP series with base 2004-05 replaced the earlier IIP series with base 1993-94 in June 2011. Besides having a more recent base year, the new series has a more representative basket of commodities to capture the reorientation in the economy's industrial structure. The weighting diagram for the new series has also changed (Table II.1).

Table II.1: Trends in Index of Industrial Production (IIP)

	Number of Products		Number of Product Groups		Weights	
	1993-94	2004-05	1993-94	2004-05	1993-94	2004-05
Mining	64	61	1	1	104.73	141.57
Manufacturing	473	620	281	397	793.58	755.27
Electricity	1	1	1	1	101.69	103.16
Total	538	682	283	399	1000	1000



The latest IIP data from the Central Statistical Organisation (CSO) for August 2012 shows the first turnaround in manufacturing in the current fiscal 2012-13, as the sector registered a growth of 2.9 per cent, a positive number after a decline in June and July 2012 (Figure II.4). Will this mark a sustained turnaround or just a transitory uptrend after a low base? There is some optimism on the industrial sector's performance based on the financial performance of some of the corporates in the last two quarters.

2.9

Apr/12 May/12 Jun/12 Jul/12 Aug/12

-3.1

Figure II.5: Growth of Manufacturing in 2012-13: Is there a Turnaround

#### II.5 Major Components of the IIP

Growth of overall industry (IIP-General), which was 15.5 per cent in 2007-08, has been slowing down. The initial decline in industrial growth was largely a result of the global economic meltdown. There was, however, a surge in industrial output with growth increasing from 2.5 per cent in 2008-09 to 5.3 per cent in 2009-10 and to 8.2 per cent in 2010-11. Slow economic recovery in the US and European countries and restrained business optimism at home have affected the growth of the industrial sector in the current year.

Table II.2: Sectoral Performance of IIP

Weights	Mining	Manufacturing	Electricity	General
	(141.57)	(755.27)	103.16)	(1000)
2007-08	4.6	18.4	6.3	15.5
2008-09	2.6	2.5	2.7	2.5
2009-10	7.9	4.8	6.1	5.3
2010-11	5.2	9.0	5.5	8.2
2011-12	-2.0	3.0	8.2	2.9
April-Aug. 2011-12	-0.5	6.0	9.5	5.6
April-Aug. 2012-13	-0.6	0.0	4.8	0.4

The cumulative growth of the overall IIP for April-August 2011 was 5.6 per cent, which fell steeply to 0.4 per cent in the same period of this fiscal. Among the components, the mining sector continues to be a laggard [-0.5 per cent in 2011-12 (April-August) and -0.6 per cent in



2012-13], reflecting the deep policy uncertainty with an outright ban on mining activity in some cases. However, the mining sector posted a rebound, registering a growth of 2 per cent in August 2012 compared to August 2011. Similarly, manufacturing grew by 2.9 per cent and electricity by 1.9 per cent. However, manufacturing registered a steep decline from 6.5 per cent in 2011 12 (April-August) to -0.6 per cent in 2012-13 (April-August). Electricity IIP registered 9.5 per cent growth during April-August 2011-12 but came down steeply to 4.8 per cent in the same period of 2012-13.

9.5

6.0

4.8

5.6

Mining Manufacturing Electricity General

April-Aug 2011-12

April-Aug 2012-13

Figure II.6: Cumulative Sectoral Growth of IIP (%, y-o-y)

The manufacturing sector's growth was affected by several factors: first, high and steep inflation eroded the demand potential for manufactured goods. Retail inflation, measured by the CPI touched the two-digit level again in August, after May 2012.

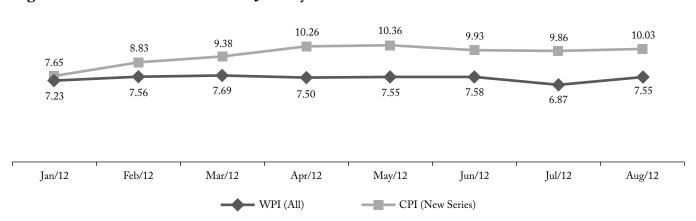


Figure II.7: Inflation Scenario since January 2012

Second, the price movement of raw materials is generally in the upward direction. The growth in the WPI of some crucial raw materials is summarised in Table II.3.



Table II.3: Price Movement of Selected Raw Materials: WPI (%, y-o-y)

Item	April-Aug 2012	April-Aug 2011	
Ferro alloys	3.0	-1.2	
Polymers	4.0	1.7	
Petrochemical Intermediates	4.5	17.0	
High-speed diesel	5.7	7.1	
Piston and compressors	5.7	11.4	
Electricity (Industry)	6.1	-3.2	
Raw silk	6.8	10.7	
Iron ore	7.9	16.0	
Cement and lime	8.7	1.3	
Ferrous metals	9.9	9.0	
Lubricants	10.1	15.7	
Fuel and power	10.4	12.6	
Lignite	10.7	18.9	
Petrol	10.7	24.9	
Light diesel oil	11.5	34.4	
Coal	13.9	13.3	
Naphtha	14.5	25.2	
Crude petroleum	17.1	35.3	
Furnace oil	24.5	28.7	
Copper ore	26.2	19.6	

**Source:** eaindustry.nic.in

Third, the offtake of non-food credit growth by scheduled commercial banks was slow, influenced by the RBI's cautionary monetary policy stance to contain inflationary tendencies in the economy.

Fourth, the growth in exports (including re-exports) in September 2012 was -10.78 per cent, lower in USD terms (but 2.28 per cent higher in rupee terms). The cumulative value of exports for the period April-September 2012-13 registered a negative growth of -6.79 per cent in USD terms and a growth of 12.52 per cent in rupee terms over the same period last year. The international demand scenario is at best moderate and shows signs of a pick-up only in rupee term due to exchange rate volatility. Imports, on the other hand, registered a growth of 5.09 per cent in USD terms and 20.47 per cent in rupee terms in September 2012. The cumulative growth in imports in the period April-September 2012-13 was negative, - 4.36 per cent in dollar terms and 15.52 per cent in rupee terms over the same period the previous year.

Fifth, there is also a steep decline in Foreign Direct Investment (FDI), which is considered crucial to reduce the investment-savings gap in the economy. A rise in FDI is expected to bring multi-dimensional benefits to the host country not only in terms of debt-free capital resources, but also in terms of technical



collaboration and organisational innovations. Data from the Department of Industrial Policy & Promotion (DIPP) shows that in USD terms, FDI in India fell by 59 per cent in April-July 2012-13 over the same period in 2011-12. The decline in FDI has also dampened the spirits of the domestic corporate sector. It may be noted that among the significant recipients of FDI in India are: construction (12 per cent), telecommunications (7 per cent), computer hardware & software (6 per cent) drugs & pharmaceuticals (5 per cent), chemicals (5 per cent) automotive and metallurgical industry (4 per cent each).

## II.6 IIP Growth across Use-based Groupings of Industry

In terms of the use-based classification of industry, in April-August 2012, the basic goods IIP registered a growth of 2.8 per cent and consumer durables notched a growth of 5.7 per cent over the same period the previous year. There was moderate growth in the other segments of the IIP and significant negative growth in capital goods.

Table II.4: Use-based Classification of IIP

Period/Year	Basic Goods	Capital Goods	Intermediate Goods	Consumer Durables	Consumer Non- durables	Overall
(weights)	(456.82)	(88.25)	(156.86)	(84.60)	(213.47)	(1000.0)
2007-08	8.9	48.5	7.3	33.1	10.2	15.5
2008-09	1.7	11.3	0.0	11.1	-5.0	2.5
2009-10	4.7	1.0	6.0	17.0	1.4	5.3
2010-11	6.0	14.8	7.4	14.2	4.3	8.2
2011-12	5.5	-4.0	-0.6	2.6	5.9	2.9
April-Aug 2011-12	7.6	7.4	0.9	4.5	4.3	5.6
April-Aug 2012-13	2.8	-13.8	0.6	5.7	1.7	0.4

The production of capital goods, reflecting investment in physical assets such as machinery, fell by 1.7 per cent in August this year; it had declined more steeply in April-August 2012-13 by -13.8 per cent. The cumulative growth performance a year ago was impressive (7.4 per cent). Further, growth in the consumer non-durable segment was a low 1.7 per cent for April-August 2012-13 compared with 4.3 per cent recorded in the same period of the previous fiscal.

Without a revival in consumer demand, a turnaround in capital goods production will be elusive.

# II.7 IIP Growth across Major Industry Sub-sectors (2-digit classification)

Within the manufacturing sector, the IIP data is available for 22 sub-groups, disaggregated at the two-digit level of the National Industrial Classification, 2004. Growth has varied across the sub-groups in 2012-13. In all, 13 of the 22 industry groups in the manufacturing sector showed positive growth in August. Notable among these are food products (8.4 per cent), textiles (10.3 per cent),

publishing (15.4 per cent), chemicals (6.5 per cent) and radio, TV and communication equipment (14.5 per cent). All these segments have potential for employment, and growth would bring a positive impact from the demand side as well.

In April-August 2012-13, only three manufacturing sub-groups, with a weight of 26.4 per cent in the IIP, registered growth in excess of 10 per cent; 2 sub-groups with a weight of 99.2 with growth of 5-10 per cent; 7 sub-groups with a weight of 381.1 with a positive growth rate of less than 5 per cent. At the same time, it is also the case that in April-August 2012-13, 10 sub-groups with a weight of 248.5 had negative growth, of which the electrical machinery witnessed record negative growth of -32.7 per cent, far below the 2 per cent growth recorded in the same period a year ago. As this group primarily caters to the needs of the power sector, the series of reform measures and subsequent policy thrust in the power sector would help to bring about a turnaround in this industry.

Table II.5: Growth Rate of IIP: 2-Digit Classification

Period	Weights	2010-11	2011-12	April-Aug 2011-12	April-Aug 2012-13
Food products and beverages	72.8	7.0	15.4	16.6	0.0
Tobacco products	15.7	2.0	5.4	-3.6	-6.0
Textiles	61.6	6.7	-1.3	-1.6	7.6
Wearing apparel; dressing and dyeing of fur	27.8	3.7	-8.5	-8.9	-3.6
Luggage, handbags, saddlery, harness & footwear; tanning and dressing of leather products	5.8	8.1	3.7	6.3	4.1
Wood and products of wood & cork except furniture; articles of straw & plating materials	10.5	-2.2	1.8	-4.4	-3.0
Paper and paper products	10.0	8.6	5.0	5.4	-0.1
Publishing, printing & reproduction of recorded media	10.8	11.2	29.6	9.1	14.7
Coke, refined petroleum products & nuclear fuel	67.2	-0.2	3.5	5.9	3.5
Chemicals and chemical products	100.6	2.0	-0.4	0.8	1.6
Rubber and plastics products	20.2	10.6	-0.3	-1.2	3.5
Other non-metallic mineral products	43.1	4.1	4.8	2.9	3.2
Basic metals	113.4	8.8	8.7	15.5	1.4
Fabricated metal products, except machinery & equipment	30.8	15.3	11.2	14.5	2.2
Machinery and equipment n.e.c.	37.6	29.4	-5.8	-1.7	5.1

(Contd...)



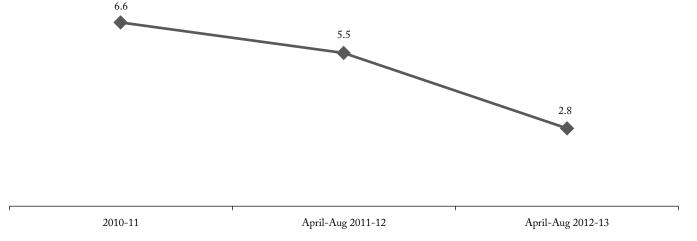
Table II.5: Growth Rate of IIP: 2-Digit Classification (Contd...)

Period	Weights	2010-11	2011-12	April-Aug 2011-12	April-Aug 2012-13
Office, accounting & computing machinery	3.1	-5.3	1.6	11.9	-5.7
Electrical machinery & apparatus n.e.c.	19.8	2.8	-22.2	2.0	-32.7
Radio, TV and communication equipment & apparatus	9.9	12.7	4.3	1.1	14.3
Medical, precision & optical instruments, watches and clocks	5.7	6.8	10.9	-5.3	12.5
Motor vehicles, trailers & semi-trailers	40.6	30.2	10.8	15.5	-3.0
Other transport equipment	18.2	23.2	11.9	17.3	-1.7
Furniture; manufacturing n.e.c.	30.0	-7.5	-1.8	1.8	-7.7

## II.8 Infrastructure: Performance of the Eight Core Industries

The data for the eight core industries, with a combined weight of 37.9 per cent in the IIP, highlights the status of services from these crucial sectors. The composite index stood at 143.1 in August 2012 with a growth rate of 2.1 per cent, lower than the 3.8 per cent growth recorded in August 2011. Receding growth was mainly on account of negative growth in the production of natural gas, cement, fertilisers and crude oil, besides a decline in the growth of steel and electricity production. During April-August 2012-13, the cumulative growth rate of the core industries was 2.8 per cent against 5.5 per cent during the corresponding period in 2011-12.

Figure II.8: Overall Index of the Eight Core Industries (%, y-o-y)



Among the components of the core sector, coal, refinery products, steel, cement and electricity registered positive growth. However, steel and electricity experienced a significant decline in growth rates in April-August 2012-13 compared with the previous fiscal.



Table II.6: Growth of Core Infrastructure Industries (with 37.9% weight in IIP), 2004-05 base

	Weight	2007-08	2008-09	2009-10	2010-11	2011-12	April- Aug 2011-12	April- Aug 2012-13
Coal	4.4	6.3	8.0	8.1	-0.2	1.2	-2.3	6.3
Crude oil	5.2	0.4	-1.8	0.5	11.9	1.0	6.1	-0.6
Natural gas	1.7	2.1	1.3	44.6	10.0	-8.9	-8.9	-12.1
Refinery products	5.9	6.5	3.0	-0.4	3.0	3.2	4.7	4.3
Fertilisers	1.3	-7.9	-3.9	12.7	0.0	0.4	1.2	-7.9
Steel	6.7	6.8	1.9	6.0	13.2	7.0	9.9	2.7
Cement	2.4	8.1	7.2	10.5	4.5	6.7	4.1	5.4
Electricity	10.3	6.3	2.7	6.2	5.6	8.1	9.4	4.9
Overall index	37.9	5.2	2.8	6.6	6.6	4.4	5.5	2.8

Coal, with a weight of 4.38 per cent, is considered to be the bright spot, registering a growth of 6.3 per cent during April-August 2012-13, compared with a negative growth of -2.3 per cent in the same period the previous fiscal. Increased production in the coal sector would help improve the production of thermal power. However, one should keep in mind that the production of coal this year (cumulative) is based on a lower base the previous year.

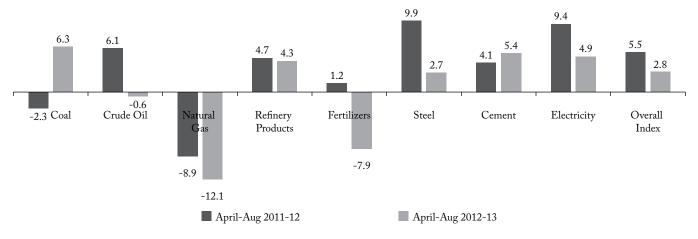
The growth in crude oil production dipped significantly to -0.6 per cent in April-August 2012-13 compared with 6.1 per cent during the same period of 2011-12. The growth rate of natural gas production, too, recorded a negative growth of -12.1 per cent in April-August of the ongoing fiscal compared with the -8.9 per cent growth notched in 2011-12. In contrast, petroleum refined production (weight 5.94 per cent) remained more or less stable, recording a growth of 4.3 per cent during April-August 2012-13, and 4.7 per cent in the same period of 2011-12. It may be noted, however, that Reliance Petroleum Limited with a refining capacity of 29 MMT was commissioned on December 25, 2008, but crude throughput has not been reported by the refinery, hence, it has not been included in production for the entire period.

Fertiliser production registered a steep negative growth of -7.9 per cent during April-August 2012-13, against a growth of 1.2 per cent during the same period of the previous fiscal.

Steel production remained a concern; it registered only 2.7 per cent growth during April-August 2012-13, against the 9.9 per cent growth recorded a year ago. The production of cement, on the other hand, recorded a growth of 5.4 per cent during April-August 2012-13 compared to 4.1 per cent growth in the same period the previous fiscal. Cement production is expected to improve further in the next quarter because of seasonal factors in demand. Generally, cement production dips in the monsoon season due to slow demand, and picks up from October.

Of the eight core sector industries, electricity has the highest weight of 10.32 per cent. Cumulatively, for the period April-August 2012-13, growth recorded is 4.9 per cent, which is far lower than the 9.4 per cent growth noted in the same period in 2011-12.

Figure II.9: Performance of the Core Industries



#### II.9 The MSME Sector

Micro, Small and Medium Enterprises (MSME) are considered to be pillars of India's industry, producing a wide range of goods from simple handmade articles to classy end-products. The sector produces and supplies various parts and components required by larger enterprises. Table II.7 below indicates estimates from the MSME census in 2006-07.

Table II.7: Quick Estimates from the Fourth MSME Census (2006-07)

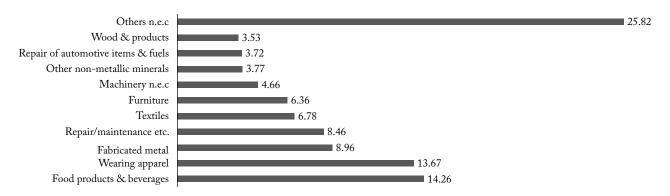
MSMEs (no.)	26.1 million
Manufacturing enterprises (no.)	7.3 million
Service enterprises (no.)	18.8 million
Women's enterprises (no.)	2.1 million (8%)
Rural enterprises (no.)	14.2 million (54.4%)
Employment (no.)	59.7 million
Employment (per unit)	6.24
Fixed investment (per unit)	Rs 33.78 lakh
Original value of plant & machinery (per unit)	Rs 9.66 lakh
Gross output (per unit)	Rs 46.13 lakh
Employment (per Rs one lakh fixed investment)	0.19

Source: dcmsme.gov.in

The sector contributes significantly to manufacturing output, employment and exports and accounts for about 45 per cent of the manufacturing output and 40 per cent of the total exports of the country. It is also estimated to employ about 59.5 million persons in over 26.1 million enterprises in the country, and to manufacture over 6,000 products, ranging from traditional to high-tech items. The sector has recorded a growth rate higher than the rest of the industrial sector. The broad product-share of MSMEs in different sectors is indicated in Figure II.10. It may be observed that food products and beverages have the highest share (14.26 per cent), followed by wearing apparel (13.67 per cent) and fabricated metals (8.96 per cent).



Figure II.10: Share of Products in the MSME Sector (Over 6,000 Products) (%)



Source: Final Report of the Fourth All India Census of Micro, Small & Medium Enterprises 2006-07: Registered Sector.

To broaden the scope of the smaller manufacturing units, the definitions and coverage of the original MSE sector were widened significantly under the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, which expanded the concept of "enterprise" to include both manufacturing and services, along with medium enterprises.

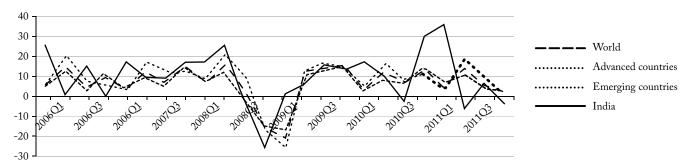
#### II.10 Performance and Policies in the MSME Sector

The Office of the Development Commissioner (MSME) provides estimates of various performance parameters relating to the sector.

First, it is clear that the MSME scenario has changed substantially after the Fourth All-India Census of MSMEs. The number of MSME units grew at an estimated 5.3 per cent per annum to reach 32.5 million by 2011-12. With the expansion in the number of MSME units, the policy toward inducement to invest assumes critical significance.

Second, though MSMEs have acted as a niche to provide employment opportunities in the country, available evidence suggests that the sector is moving to increased capital intensity, absorbing less labour force per unit of fixed investment over time. In the first half of the on-going fiscal, capital goods production has shown a steep declining trend, which would also affect production and productivity in the MSME sector. The higher capital intensity also requires a skilled and competent labour force, now in short supply.

Figure II.11: Employment (per billion Rs) of Fixed Investment (no.)



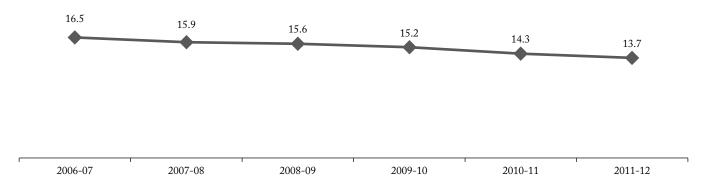
Source: Annual Report of the Ministry of MSMEs.

**Note:** The figure for 2011-12 is estimated



Third, the share of MSME output in GDP is declining. The declining share points to the fact that the sector, which was conceived to support a larger level of economic activities, is growing less rapidly than the other industrial segments.

Figure II.12: Share of MSME Output to GDP (%)



A few crucial steps were taken to revitalise the sector in 2011-12, some of which were:

- Procurement of goods and services produced by MSMEs by government departments, and PSUs: the government earmarked a targeted procurement of at least 20 per cent of total annual purchases of government departments from MSMEs.
- In order to help MSMEs raise funds from the capital market, the Securities and Exchange Board of India (SEBI) operationalised a nationwide trading platform for the sector in October 2011.
- Under the Prime Minister's National Council of Skill Development, the Ministry of MSMEs has
  undertaken a massive skill development programme to promote both self-employment and wage
  employment opportunities.
- The government has also taken a cluster development approach as a key strategy to enhance productivity and competitiveness of the sector. This has been supplemented with 134 infrastructure development projects as part of capacity enhancement for the MSME sector as a whole.



# III. The Services

By Devender Pratap

#### III.1 Services GDP: Global Trends

The services sector has been steadily driving growth in the Indian economy for more than a decade. The share of services in total world GDP of USD63 trillion in 2001 stood close to 68 per cent, and subsequently remained in the range of 68-69 per cent in 2009 and 2010. Services GDP attained a Compound Annual Growth Rate (CAGR) of 2.6 per cent during 2001-10. World services GDP y-o-y growth declined to less than 1 per cent during 2009, but picked up to 2.5 per cent in 2010.

India's performance in terms of these indicators, namely, the share of services GDP in total GDP, remained not only above the share of developing countries but stood very close to that of the developed countries. In terms of services GDP growth, too, India attained a CAGR of 9.4 per cent during 2001-10, which was a little lower than the growth rate of 11.3 per cent attained by China. India's services GDP grew by 10.1 per cent in 2009 and by 7.7 per cent 2010 (Table III.1).

Table III.1: Growth of Services GDP: Global Trends

	Rank		Over	all GDP,	Share of Services as		Services GDP Growth				
			USD bn		% of GDP						
			Current	Constant			% у-о-у			CAGR	
			Prices	2005 Prices							
				in USD							
Country	Overall	Services	2010	2010	2001	2009	2010	2001	2009	2010	2001-10
	GDP	GDP									
US	1	1	14,447.1	13,017.0	77.0	79.0	78.2	2.9	-1.4	1.2	1.8
Japan	2	2	5,458.9	4,578.5	69.8	71.7	70.0	2.0	-4.8	2.9	0.6
China	3	3	5,739.4	3,883.5	39.8	42.1	41.8	10.3	9.6	9.6	11.3
Germany	4	4	3,280.3	2,945.8	69.7	73.7	72.5	2.1	-1.6	2.3	1.4
France	6	5	2,559.8	2,208.6	76.5	78.9	78.1	1.7	-1.1	0.2	1.4
UK	5	6	2,253.6	2,330.0	73.9	78.8	78.4	3.5	-3.2	1.1	2.0
Italy	7	7	2,051.3	1,744.0	70.1	73.6	73.3	2.3	-2.9	1.2	0.6
Brazil	11	8	2,089.0	1,092.6	65.3	67.6	66.8	1.8	3.0	4.8	4.0
Spain	10	10	1,407.3	1,180.7	65.7	70.5	71.0	3.4	-1.0	0.7	2.7
Canada	9	9	1,577.0	1,203.9	64.9	70.7	70.2	3.6	0.1	2.5	2.8
India	8	11	1,722.3	1,251.6	50.0	56.5	57.0	7.5	10.1	7.7	9.4
Russia	12	12	1,479.8	905.2	63.3	62.0	61.5	3.2	-5.6	2.9	5.5
World			63,064.0	51,040.5	68.1	68.7	67.8	2.9	-0.9	2.5	2.6

**Source:** UN National Accounts Statistics as cited in the *Economic Survey* 2011-12.

**Note:** i) Rank is based on current prices.

- ii) Share and growth rates are based on constant 2005 prices (USD).
- iii) CAGR is estimated for 2001-10.
- iv) The construction sector is excluded from services GDP.



India's service exports grew at a CAGR of 26.4 per cent from 2000-01 to 2008-09. The y-o-y growth of service exports declined to 9.4 per cent thereafter in 2009-10, and bounced back to 38.4 per cent in 2010-11. The higher growth in 2010-11, *albeit* on a lower base, decelerated to 7.1 per cent in 2011-12. Among the major components of services exports, only software, insurance and transportation showed higher growth in 2011-12 (Table III.2).

Table III.2: India's Services Exports (USD million)

	Value (USD billion)	% Share	in Total	CAGR (%), 2000-01	y-o-y, Growth Rate, %		ate, %
S. No.	2011-12	2000-01	2011-12	to 2008-09	2009-10	2010-11	2011-12
1. Travel	18,462	21.5	13.0	15.3	8.9	28.8	20.9
2. Transportation	18,241	12.6	12.8	23.8	-1.2	27.7	27.8
3. Insurance	2,632	1.7	1.8	23.1	11.9	22.4	35.1
4. G. n. i. e	478	4.0	0.3	-6.2	13.4	21.3	-10.7
5. Miscellaneous, of which	102,513	60.3	72.0	30.4	-13.4	42.1	1.6
a) Software services	62,212	39.0	43.7	28.2	7.4	11.6	12.2
b) Non-software miscellaneous services, of which	40,301	21.3	28.3	33.8	-40.3	113.4	-11.2
i) Business services	25,910	2.1	18.2	64.8	-39.1	112.4	7.7
ii) Financial services	5,967	2.1	4.2	37.7	-16.6	76.2	-8.3
iii) Communication services	1,600	7.0	1.1	9.2	-46.6	27.2	2.4
Total services	142,325	100.0	100.0	26.4	-9.4	38.4	7.1

Source: Authors' computation from RBI data.

#### III.2 Trends in Service Sector GDP

The service sector showed a deceleration in GDP growth from 2009-10 through 2011-12. Its growth of 8.5 per cent during 2011-12 was lower than the 9.2 per cent growth experienced in 2010-11 (Figure III.1). The growth rates of the three major components of the sector, i.e., construction; trade, hotels, transport & communication; and financing, insurance, real estate and business services, have fluctuated over the last three years, and their growth fell in 2011-12. The y-o-y increase in 'community, social and personal services' was higher at 5.9 per cent in 2011-12 compared to the 4.5 per cent rise a year ago.

The first quarter y-o-y growth of service sector GDP revealed a mixed pattern. 'Construction' which accounts for a little over 8 per cent share in total GDP, registered a sharp increase in growth to 10.9 per cent



during Q1:2012-13, compared to 4.8 per cent increase during Q4:2011-12. The quarterly y-o-y growth trends under this subsector have fluctuated since H2:2011-12.

Another sector - 'financing, insurance, real estate and business services,' which accounts for a 19.1 per cent share in total GDP, displayed a higher growth of 10.8 per cent in Q1:2012-13 compared to the 10 per cent increase during Q4:2011-12; this was the case too with 'community, social and personal services' which improved its growth to nearly 8 per cent in Q1:2012-13 compared to a 7.1 per cent increase in the fourth quarter of the last fiscal.

An important component of services GDP, i.e., 'trade, hotels, restaurants, and transport storage' which accounts for a 28.2 per cent share in total GDP, deteriorated in growth to 4 per cent in the first quarter of the current fiscal compared to a growth of 7 per cent in the fourth quarter of the last fiscal. This is also a subsector where y-o-y growth fluctuated across all four quarters of the last fiscal.

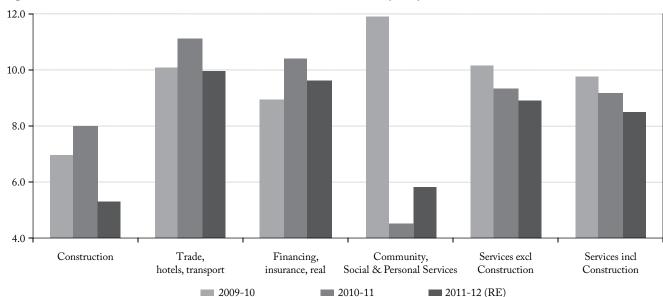


Fig. III.1: Real Growth Rate of Services Sector GDP (%, y-o-y)

The y-o-y growth performance of the various components of services in recent quarters is summarised in Table III.3. The shares of different components of services in total GDP are illustrated in Table III.4.

Table: III.3: Trends in Growth of Services, GDP (%, y-o-y)

Quarter/	Construction	Trade, Hotels,	Financing,	Community, Services		Services	GDP at
Fiscal Year		Transport,	Insurance,	Social & Personal	excluding	including	Factor
		Communication	Real Estate	Services	Construction	Construction	Cost
Q1: 2008-09	9.4	9.8	11.8	8.9	10.2	10.1	7.9
Q2	6.7	9.4	11.4	10.0	10.1	9.7	7.7
Q3	0.7	5.4	12.3	23.6	11.4	10.0	5.8
Q4	5.3	5.8	14.3	8.9	9.0	8.5	5.9
Q1:2009-10	4.4	8.4	11.2	13.0	10.2	9.5	7.5
Q2	5.8	10.3	10.6	19.3	12.5	11.7	9.8

(Contd...)

Table: III.3: Trends in Growth of Services, GDP (%, y-o-y) (Contd...)

Quarter/	Construction	Trade, Hotels,	Financing,	Community,	Services	Services	GDP at
Fiscal Year		Transport,	Insurance,	Social & Personal	excluding	including	Factor
		Communication	Real Estate	Services	Construction	Construction	Cost
Q3	9.2	10.6	8.3	8.0	9.3	9.3	7.4
Q4	8.4	10.9	6.0	8.4	8.8	8.8	8.6
Q1:2010-11	8.4	12.6	10.0	4.4	10.0	9.8	8.5
Q2	6.0	10.6	10.4	4.5	9.1	8.7	7.6
Q3	8.7	9.7	11.2	-0.8	7.7	7.8	8.2
Q4	8.9	11.6	10.0	9.5	10.6	10.4	9.2
Q1:2011-12	3.5	13.8	9.4	3.2	10.2	9.3	8.0
Q2	6.3	9.5	9.9	6.1	8.8	8.5	6.7
Q3	6.6	10.0	9.1	6.4	8.9	8.7	6.1
Q4	4.8	7.0	10.0	7.1	7.9	7.5	5.3
Q1:2012-13	10.9	4.0	10.8	7.9	6.9	7.4	5.5

**Source:** CSO, Press Note on Estimates of Gross Domestic Product for the First Quarter (April-June) 2012-13 http://mospi.nic.in/mospi\_new/upload/NAD\_Press\_Note\_31aug12.pdf

Table III.4: Share of Services in GDP (2004-05 prices) (%)

Quarter/ Fiscal Year	Construction	Trade, Hotels, Transport, Communication	Financing, Insurance, Real Estate	Community, Social & Personal	Services excluding Construct-ion	Services including Construction
Icar		Communication	Real Estate	Services	Construct-ion	Construction
2008-09	Q1	8.4	26.2	17.1	12.1	55.4
	Q2	8.4	26.9	17.5	13.5	57.9
	Q3	7.4	25.0	16.4	13.1	54.5
	Q4	7.8	26.5	17.0	13.6	57.1
2009-10	Q1	8.1	26.4	17.7	12.7	56.8
	Q2	8.1	27.0	17.7	14.7	59.3
	Q3	7.6	25.8	16.5	13.2	55.5
	Q4	7.8	27.0	16.6	13.6	57.2
2010-11	Q1	8.1	27.4	17.9	12.2	57.6
	Q2	7.9	27.8	18.1	14.2	60.1
	Q3	7.6	26.2	17.0	12.1	55.2
	Q4	7.8	27.6	16.7	13.6	58.0
2011-12	Q1	7.8	28.9	18.2	11.7	58.8
	Q2	7.9	28.5	18.7	14.1	61.3
	Q3	7.6	27.1	17.4	12.1	56.7
	Q4	7.8	28.1	17.4	13.9	59.4
2012-13	Q1	8.2	28.5	19.1	12.0	59.6

**Source:** Same as Table III.1.



## III.3 Indicators of Services Output

The performance of key indicators of service sector output during the first half of the current fiscal provide some insights into the outlook for the sector. The growth performance of these indicators reveals a mixed pattern (Table III.5).

**Transport and communications:** The y-o-y growth in revenue-earning goods traffic by the railways during the second quarter of the current fiscal improved to 9.2 per cent compared to a 2.7 per cent increase in the same period last year. After a deceleration in the growth of railway freight traffic to 3.8 per cent during 2011-12, compared to a 6.6 per cent increase in the previous fiscal, the pick-up in growth in the first two-quarters of the current fiscal is indeed a positive note.

**Tourism:** During the first two quarters of the current fiscal, the number of foreign tourist arrivals declined compared to the same period the previous year. Foreign tourist arrivals decelerated on a y-o-y basis to 2.2 per cent during the second quarter of the current fiscal compared to an 8.1 per cent rise a year ago.

**Production of commercial vehicles:** The growth rate of 'production of commercial vehicles' — a proxy for incremental demand for road freight transport – fell on a y-o-y basis to 5.2 per cent in July-August 2012, compared to a 24 per cent rise in the same quarter a year ago. In comparison to the double-digit growth attained during all four quarters of the last fiscal, the current performance cannot be viewed as a signal of rising transport activity.

Ports: The performance of the ports sector, in terms of cargo handled, critically depends on economic activity levels both in the domestic and global markets. Cargo handled at the 12 major ports declined marginally to less than 1 percentage point during the July-September period of the current fiscal compared to a rise of nearly 1 per cent in the same period a year ago. On top of the 1.7 per cent y-o-y decline in cargo tonnage during 2011-12, the further decline in growth during the first five months of the current fiscal is indicative of weakened exports and imports, and raises concerns about recovery in this ailing sector. The Indian ports sector has showed a continuous decline in growth since Q3:2011-12.

The decelerating growth of cargo handled at major ports for the last two years is also explained by capacity constraints and efficiency issues. During 2009-10, eight of the major ports were already operating at over 75 per cent of their capacity utilisation levels. However, the ports sector is expected to improve in the short to medium term, as many of the minor ports which are being developed under public private partnerships are located in less densely populated regions, offering ample scope for capacity expansion. Better mechanisation and state-of-the-art facilities at these ports are expected to reduce turnaround time compared to the major ports. A notable point is that, during the period 2007-08 to 2010-11, cargo handled at major ports grew by only 3.2 per cent per annum compared to a 15.7 per cent growth at the minor ports. The ten-year plan for ports, known as the Maritime Agenda 2020, envisages developing the shipbuilding industry and expanding India's port capacity to 3,200 million tonnes by 2020. The private sector is expected to handle nearly 50 per cent of the nation's cargo by 2015.



Table III.5: Indicators of Service Sector Output (% change, y-o-y)

Quarter/ Fiscal Year	Tourists Arrival (Number)	Revenue- Earning Goods Traffic by Railways (mn tonnes)	Cargo Handled at Major Ports ('000 tonnes)	Production of Commercial Vehicles ('000)	New Telephone Connections (fixed+ wireless) (mn)	Growth in Aggregate Deposits (Rs cr)	Bank Credit to Commercial Sector (Rs cr)
2008-09 Q1	7.4	9.6	9.0	8.5	44.8	22.0	24.5
Q2	9.1	7.7	5.4	0.2	42.2	19.7	23.5
Q3	-3.7	1.5	-3.4	-50.3	41.0	20.8	22.6
Q4	-11.8	2.2	-2.9	-43.0	43.0	19.9	16.9
2009-10 Q1	-0.2	5.0	1.9	-18.7	42.7	21.9	15.2
Q2	-2.0	8.0	2.6	4.4	43.9	19.8	12.3
Q3	6.6	9.6	10.8	95.6	46.1	17.9	11.2
Q4	10.7	4.0	9.0	112.4	44.6	17.2	15.8
2010-11 Q1	7.9	2.5	2.0	55.8	44.5	14.0	18.8
Q2	6.1	2.4	0.8	38.6	16.8	14.4	18.7
Q3	8.2	4.7	0.8	31.9	20.3	19.2	27.2
Q4	11.1	5.5	3.2	15.5	36.2	15.9	21.3
2011-12 Q1	10.5	7.0	5.2	-15.8	31.9	18.3	20.6
Q2	8.1	2.7	0.9	23.8	24.4	17.5	19.5
Q3	9.6	4.4	-4.7	23.8	17.7	17.0	16.2
Q4	14.0	6.6	-7.4	13.2	12.4	13.5	17.1
2012-13 Q1	4.8	4.7	-5.4	43.1	9.0	16.5	18.6
Q2	2.2	9.2	-0.8	-5.2	4.4#	17.5	16.1

Note: # ending August 2012.

**Source:** i) Foreign tourist arrivals - Press Information Bureau, Ministry of Tourism; railway traffic - Press Information Bureau, Ministry of Railways; Port cargo – Indian Port Association; http://ipa.nic.in/pcs/default.asp; and aggregate deposits and bank credit - RBI.

**Communications:** There is a significant slowdown in the growth of telephone connections: monthly additions to telephone connections (fixed and wireless) registered a sharp decline to 4.4 per cent during the period ending August 2012 compared to a 24.4 per cent rise in the same period a year ago. This raises the need for an increase in the utilisation of connections to increase growth in this sector.

**Banking services:** Banking indicators, namely, aggregate deposits, improved in terms of growth to 17.5 per cent during the second quarter of the current fiscal compared to the same increase in the same period a year ago. The y-o-y growth of bank credit to the commercial sector grew at a slower rate of 16.1 per cent during this period compared to a growth of 19.5 per cent the previous year (Table III.5).



Table III.6: Domestic and International Air Passenger and Cargo Traffic

Month/ Domestic Traffic			Traffic		Inter	nationa	International Traffic				ıffic	
Year	Passengers (lakh)	% chg	Cargo ('000' tonnes)	% chg	Passengers (lakh)	% chg	Cargo ('000' tonnes)	% chg	Passengers (lakh)	% chg	Cargo ('000' tonnes)	% chg
M04-11	93.5	14.0	64.7	0.4	32.2	14.2	127.5	10.3	125.7	14.1	192.1	6.7
M05-11	108.5	15.9	66.0	-3.8	33.7	7.7	132.8	2.4	142.2	13.9	198.7	0.2
M06-11	104.2	18.9	63.1	-8.9	32.3	7.0	125.7	2.4	136.5	15.9	188.8	-1.6
M07-11	98.8	23.1	66.2	-9.0	33.7	7.3	129.3	0.9	132.5	18.7	195.3	-2.8
M08-11	94.4	21.2	70.0	-4.4	31.9	3.6	124.3	-4.6	126.3	16.2	194.3	-4.5
M09-11	89.9	20.2	72.1	-2.9	31.3	7.9	120.7	-2.7	121.2	16.7	192.8	-2.8
M10-11	104.1	19.9	66.7	-13.8	33.9	7.6	118.9	-7.5	138.0	16.8	185.6	-9.7
M11-11	106.8	16.2	67.7	0.5	34.9	5.8	117.3	-0.1	141.7	15.5	185.0	0.2
M12-11	111.2	11.3	70.4	-6.0	37.2	4.8	120.9	0.3	148.4	9.7	191.2	-2.1
M01-12	106.3	12.5	67.4	-4.0	37.2	6.6	108.6	-10.3	143.5	10.9	176.0	-7.9
M02-12	100.9	12.9	65.9	-2.0	34.1	11.1	112.8	-3.7	135.0	12.5	178.7	-3.1
M03-12	96.3	-0.2	71.3	-3.0	35.6	9.2	129.2	-8.0	131.9	2.2	200.5	-6.2
M04-12	101.3	8.3	66.0	2.0	33.9	5.3	119.8	-6.0	135.2	7.6	185.8	-3.3
M05-12	108.6	0.1	71.4	8.1	35.1	4.2	123.7	-6.8	143.7	1.1	195.1	-1.8
M06-12	101.9	-2.2	66.4	5.3	33.9	5.0	124.3	-1.1	135.8	-0.5	190.7	1.0
M07-12	91.0	-7.9	66.0	-0.3	33.2	-1.5	125.2	-3.2	124.2	-6.3	191.1	-2.1
2010-11	1055.1	18.0	852.8	23.8	379.1	10.3	1495.7	17.7	1431.8	15.7	2347.8	19.8
2011-12	1214.9	15.1	811.5	-4.8	408.0	7.6	1467.9	-1.9	1622.9	13.4	2279.0	-2.9
					April	-July						
2011-12	405.0	17.9	260.1	-5.3	131.9	8.9	515.2	3.8	536.9	15.6	774.9	0.5
2012-13	402.8	-0.5	269.8	3.7	136.1	3.2	493.0	-4.3	538.9	0.4	762.8	-1.6

Source: Airport Authority of India, various issues, http://www.aai.aero/traffic\_news/traffic\_news.jsp

Air traffic: Air traffic, both in terms of passenger and cargo traffic, registered a mixed pattern of growth during first four months of the current fiscal (Table III.6). The stagnant growth performance of total passenger traffic vis-a-vis the decline in total cargo traffic during 2011-12, further deteriorated during the first two months of the current fiscal. The growth in total air passenger traffic (both domestic and international) during April-July 2012 decelerated to less than half a per cent compared to a rise of 15.6 per cent a year ago. The low growth in total passenger traffic is attributed to the decline in domestic passenger traffic which accounts for 74.7 per cent of total passenger traffic. Domestic passenger traffic growth declined to half a per cent in April-July 2012-13, compared to a nearly 18 per cent increase in the previous fiscal. Similarly, growth in international air passenger traffic, which contributes 25 per cent to total passenger traffic, decelerated to 3.2 per cent during this period compared to a nearly 9 per cent rise a year ago.



In sharp contrast, cargo traffic, sum of international and domestic, declined by 1.6 per cent during this period compared to a marginal increase of 0.4 per cent in the previous fiscal. International cargo traffic, which contributes nearly 66.5 per cent of total air cargo traffic, declined by 4.3 per cent during this period compared to an increase of nearly 3.8 per cent the previous year. Domestic cargo traffic, which constitutes nearly 35 per cent of total air cargo traffic, grew at an improved 3.7 per cent during this period, compared to a -5.3 per cent growth in the same period the previous year. The overall weak performance of cargo traffic is likely to have serious implications for the growth of the aviation industry during the first half of the current fiscal.

The overall mixed pattern of growth in service sector indicators may impact on service sector GDP. The lower-than-expected performance of transport and communications and dwindling tourist arrival numbers may also impact upon 'trade, hotels, transport & communication' GDP. The trends point to a weak outlook for the service sector in the first half of the current fiscal, unless there is a pick-up in the activity level in the economy.

**Exports:** Exports have been a major contributor to the growth of the service sector. Invisible receipts have been in the range of 12-13.5 per cent of GDP in the last two years. Similarly, the share of services in total invisible receipts has maintained its level during fiscal 2011-12 compared to the previous year, and this has remained nearly the same during the first quarter of the current fiscal (Table III.7).

Table III.7: Major Components of Invisible Receipts in the Current Accounts Balance (% of GDP)

Year	Services *	Transfers	Income **	Total	Share of Services in Total
				Invisibles	Invisible Receipts
2008-09 Q1	7.9	4.3	1.2	13.4	59.1
Q2	10.1	4.8	1.4	16.3	61.8
Q3	9.9	3.9	1.1	14.9	66.5
Q4	9.0	3.6	1.2	13.8	65.2
2009-10 Q1	8.0	4.8	1.1	13.8	57.9
Q2	7.3	4.9	1.6	13.8	52.8
Q3	7.0	4.0	0.8	11.7	59.8
Q4	7.6	3.6	0.7	11.9	63.6
2010-11 Q1	7.5	3.9	0.8	12.1	61.6
Q2	8.8	3.8	0.6	13.2	66.8
Q3	9.3	3.4	0.5	13.3	70.3
Q4	8.1	3.3	0.5	11.9	68.2
2011-12 Q1	7.9	3.6	0.6	12.1	65.4
Q2	7.8	3.9	0.7	12.4	62.6
Q3	8.9	4.0	0.5	13.4	66.1
Q4	8.6	4.0	0.5	13.1	65.4
2012-13 Q1	8.5	4.3	0.5	13.4	63.7

Source: RBI.

**Notes:** \*Includes travel, transportation, insurance, government not included elsewhere and miscellaneous, which includes software in the invisibles accounts.

<sup>\*\*</sup> Includes investment income and compensation to employees in invisible accounts.



Software exports and non-software miscellaneous services exports contributed immensely to total service exports. The share of software exports in total services hovered around 43-45 per cent during the four quarters of the last fiscal, and remained at 46.1 per cent in the first quarter of the current fiscal. The share of non-software miscellaneous services remained in the range of nearly 26-34 per cent during the four quarters of the last fiscal, and stayed at 26 per cent during Q1:2012-13 compared to 26.4 in the fourth quarter of the last fiscal (Table III.8).

The Q1:2012-13 growth of service exports needs to be critically examined for a broader perspective on the fiscal year as a whole. During Q1:2011-12, total service exports showed a lower y-o-y increase of 1 per cent. The three major components of services, i.e., travel, transportation and insurance, which account for one-fourth of total service exports declined by 5.2 per cent, 2.4 per cent and 6.5 per cent, respectively on a y-o-y basis. The Q1:2012-13 numbers also point to a decline in the growth of non-software miscellaneous services (Table III.9).

Table III.8: Quarterly Composition of India's Services Exports (%)

Year	Travel	Transportation	Insurance	G. n. i.e.	Software Services	Non-Software Miscellaneous Services*	Total Services
2008-09 Q1	10.6	11.1	1.5	0.6	51.2	25.1	100.0
Q2	9.6	10.5	1.3	0.3	41.8	36.5	100.0
Q3	10.4	9.7	1.2	0.3	39.9	38.4	100.0
Q4	10.7	11.6	1.4	0.3	43.1	32.9	100.0
2009-10 Q1	10.2	11.2	1.7	0.4	49.1	27.3	100.0
Q2	12.7	12.0	1.8	0.5	52.5	20.5	100.0
Q3	14.1	12.2	1.6	0.5	54.0	17.6	100.0
Q4	12.2	11.2	1.5	0.4	51.4	23.3	100.0
2010-11 Q1	11.1	11.8	1.5	0.4	46.3	29.0	100.0
Q2	10.8	10.4	1.4	0.4	39.6	37.4	100.0
Q3	11.3	9.5	1.3	0.4	37.6	39.9	100.0
Q4	12.7	11.6	1.7	0.5	44.7	28.9	100.0
2011-12 Q1	10.9	12.8	1.7	0.4	43.9	30.4	100.0
Q2	13.0	13.8	2.8	0.5	42.7	34.3	107.0
Q3	13.5	12.5	2.1	0.4	42.9	28.5	100.0
Q4	14.3	12.3	1.7	0.1	45.2	26.4	100.0
2012-13 Q1	10.2	12.4	1.5	0.5	46.1	29.4	100.0

Note: G. n. i. e. - government not included elsewhere; \* includes business and professional services; R- revised.

Source: RBI.

Table III.9: Growth of Service Sector Exports (%, y-o-y)

Year	Travel	Transportation	Insurance	G. n.	Software	Non-Software	Total
		_		i. e	Services	Miscellaneous	Services
						Services*	
2008-09 Q1	19.9	33.9	-6.2	38.3	36.7	6.2	24.7
Q2	23.9	45.4	10.6	19.1	33.9	46.8	38.0
Q3	-13.9	-2.2	-20.8	7.8	17.3	39.4	17.1
Q4	-25.9	-8.0	-28.5	3.8	-15.5	35.0	-4.4
2009-10 Q1	-8.3	-4.4	10.9	-23.1	-8.9	3.2	-5.1
Q2	-2.4	-15.5	1.9	23.5	-7.5	-58.7	-26.4
Q3	17.6	9.2	13.8	27.8	17.1	-60.4	-13.4
Q4	27.0	6.8	21.6	43.2	32.1	-21.6	10.8
2010-11 Q1	28.4	25.7	5.7	-6.0	12.0	26.2	18.9
Q2	24.3	27.2	14.8	25.0	11.1	168.9	47.2
Q3	28.8	24.1	28.4	21.0	11.7	263.5	60.2
Q4	32.8	33.0	39.5	42.2	11.5	58.8	28.1
2011-12 Q1	25.4	38.6	38.8	47.9	21.3	33.9	27.8
Q2	25.3	37.6	110.7	17.6	11.9	-4.8	3.9
Q3	14.4	26.7	57.6	-3.3	9.4	-31.4	-4.1
Q4	20.9	13.0	7.6	-71.5	7.9	-2.3	6.8
2012-13 Q1	-5.2	-2.4	-6.5	14.4	6.0	-2.5	1.0

Source: RBI.

Table III.10: Break- up of Non-Software Miscellaneous Services Receipts (USD billion)

Year	Business	Financial	Communication	Total Non-Software Miscellaneous Services
2008-09 Q1	4.087	0.615	0.510	5.936
Q2	5.410	1.673	0.740	10.596
Q3	4.851	1.112	0.547	10.847
Q4	4.255	1.028	0.501	8.269
2009-10 Q1	2.586	1.116	0.418	6.123
Q2	2.504	0.732	0.307	4.371
Q3	2.413	0.741	0.259	4.296
Q4	3.818	1.103	0.245	6.481
2010-11 Q1	4.819	1.228	0.325	7.727
Q2	5.942	1.819	0.417	11.755

(Contd...)



Table III.10: Break- up of Non-Software Miscellaneous Services Receipts (USD billion) (Contd...)

Year	Business	Financial	Communication	Total Non-Software Miscellaneous Services
	7.085	1.684	0.424	15.617
Q3				
Q4	6.203	1.777	0.396	10.291
2011-12 Q1	5.780	1.282	0.360	10.345
Q2	6.120	1.577	0.390	11.194
Q3	6.806	1.613	0.456	10.712
Q4	7.204	1.495	0.395	10.051
2012-13 Q1	7.611	1.306	0.419	10.091

Source: RBI.

During the last fiscal, non-software miscellaneous services performed better than expected, due to a recovery in the export of 'business services' which touched USD26 billion. The USD7.6 billion export of business services in the first quarter of the current fiscal is, indeed, quite satisfactory (Table III.10).

India's IT-BPO industry seems to have survived the uncertainties in the global market. The year is going to be a landmark in the sense that the IT-BPO industry is set to cross the USD100 billion mark. Of this, the IT software and services sector (excluding hardware) accounted for USD88 billion of revenue. The share of IT and ITes in total merchandise and service exports rose to 25 per cent in 2011-12. The contribution of IT and ITes to India's GDP is estimated to touch 7.5 per cent in 2011-12 compared to 7.1 per cent in the previous year (NASSCOM, 2012).

## III.4 The Supply Side of Services

FDI inflows, which provide external stimulus to the supply side of the service sector, showed mixed trends. Table III.11 presents FDI for 2011-12 and also for April-July 2012. The April-July 2012 performance of FDI inflows into major segments, except for financial and non-financial services, was lower than they had been in the past. The share of services (financial and non-financial) increased in April-July 2012 compared to its share during the April 2000-July 2012 period. This segment attracted nearly 28 per cent of total FDI into the country during April-July 2012. The share of FDI inflows into 'construction' (township, housing, and built-up infrastructure) which reached an unprecedented high level of 12 per cent of total FDI inflows during April 2000-August 2011, dropped to 7.1 per cent share during April-July 2012. This appeared to be lower than its share of nearly 9 per cent in total FDI attained during 2011-12.

The telecommunication sub-sector had only a marginal share in total FDI inflows during April-July 2012, which marked deterioration in its performance compared to its shares of 8.4 per cent and 8.9 per cent observed during 2010-11 and 2011-12. FDI inflows into the computer software and hardware sub-sector touched 2.3 per cent during April-July 2012, far lower than its historical share of 7.3 per cent and its 4 per cent level for 2011-12.



#### **III.5** Outlook for 2012-13

The key indicators of the services sector in the first half of the current fiscal indicate a low-growth trajectory for the sector for the year as a whole. Ports, in terms of total traffic (both passenger and cargo), and the aviation industry are nearly stagnant. Tourist arrivals during the second quarter of the current fiscal have fallen. Growth of the three major segments of service exports - travel, transportation and insurance, which account for nearly 25 per cent of total services exports - declined during the first quarter of the current fiscal. In the face of lower growth in the trade, hotel restaurants, and transport sub-sector which accounts for 28.2 per cent of total GDP, the decline in service exports has had adverse implications for the growth of service sector GDP during H1:2011-12. A pick-up in global demand would play a positive role in the growth of India's IT and trade-related services.

Table III.11: Sectors Attracting Highest FDI Equity Inflows (Rs crore)

Sector	2010-11 (Apr Mar.)	2011-12 (Apr March)	2012- 13 (Apr July)	% to total FDI inflows 2011-12 (USD terms)	% to total FDI inflows April-July 2012-13 (USD terms)	Total FDI inflows April 2000–July 2012, (USD terms)	% to total FDI inflows (USD terms)
Services (financial and non-financial)	15,053 (3,296)	24,656 (5,216)	8,972 (1,649)	14.9	27.9	154,744 (34,001)	19.2
Construction development (incl. housing, etc.)	7,552 (1,655)	15,236 (3,141)	2,262 (421)	8.9	7.1	96,025 (21,160)	12.0
Telecommunications	7,552 (1,665)	9,012 (1,997)	83 (15)	5.7	0.3	57,161 (12,567)	7.1
Computer software and hardware	3,551 (780)	3,804 (796)	611 (112)	2.3	1.9	50,729 (11,317)	6.4
Total FDI inflow	97,320 (21,383)	165,146 (35,121)	32,202 (5,902)	100	100	32,002 (176,882)	100



# IV. External Sector

By Aradhna Aggarwal and Shweta Jain

#### IV.1 World Economy and Trade

# IV.1.1 Four years have passed since the great recession of 2008-09, but the world economy and trade remain fragile

The severe contraction of world output and trade volume during the mid-2008 global crisis – the steepest since the Great Depression of the 1930s – was a major blow to the global economy. Economic recovery began in mid-2009 and had continued its momentum through 2010. The world economy posted an impressive growth in output of 5.1 per cent in 2010 against a -0.7 per cent contraction in 2009 on the strength of the massive Chinese stimulus programme, which not only restored China to double-digit growth but swung several neighbouring economies from recession to recovery. Clearly, the growth revival was uneven. While China and the Newly Industrialised Economies (NIEs) in the Asian region recovered fast, posting an impressive growth rate of 8.4 per cent in 2010, the developed economies which had suffered severe financial shocks due to the collapse of the housing boom and resulting banking crisis, were laggards during the recovery process. World growth, however, once again slowed in 2011.

In the second half of 2011, the euro area went through another acute crisis. Market worries about fiscal sustainability in Italy and Spain led to a sharp increase in sovereign yields. Concerned about funding, banks froze credit. Confidence declined, and economic activity slumped. Growth also disappointed in part due to other factors — including higher commodity prices, supply chain disruptions first from the Japanese earthquake and then from the Thai flood, and the impact of earlier policy tightening and investor jitters. Political unrest in some of the Middle East and North African (MENA) countries during the last quarter of 2010 and early months of 2011 causing rising oil prices threw another challenge before the world economy. Overall, the growth in world output in 2011 stood at 3.9 per cent. It was just 1.6 per cent in the advanced economies (against 2.2 per cent forecast in October 2011) and 6.2 per cent in the emerging and developing countries (against 6.4 per cent forecast in October 2011).

## IV.1.2 Weaker global growth is expected in 2012 and 2013

There have been continuous downward revisions of the IMF's forecasts made over the past one year for 2012 and 2013 in the World Economic Outlook (WEO):

- The January 2012 WEO Update marked down the projected growth for 2012 and 2013 announced in the September 2011. Growth projections were revised from 4 per cent and 4.1 per cent to 3.3 per cent and 4 per cent in 2012 and 2013 respectively, mainly on account of the damage done by deteriorating sovereign and banking sector finances in the euro area during 2011.
- The April WEO made upward revisions. Global prospects gradually strengthened in the first three
  months of 2012. Better policies in the Euro area in response to its deepening economic crisis reduced
  the threat of a sharp global slowdown. While acknowledging that the improvements were very fragile,
  the April 2012 update of the IMF forecast projected recovery *albeit* weak in the major advanced



economies. It also expected the activity to remain relatively solid in most emerging and developing economies. The 2012 projection was revised upward to 3.5 per cent from 3.3 per cent. The reacceleration of activity during the course of 2012 was expected to return global growth to about 4.1 per cent in 2013. The Euro area was still projected to go into a mild recession in 2012 as a result of the sovereign debt crisis, a general loss of confidence, the effects of bank deleveraging on the real economy, and the impact of fiscal consolidation in response to market pressures. Because of the problems in Europe, activity was expected to continue to disappoint for the advanced economies as a group, expanding by only about 1.5 per cent in 2012 and by 2 per cent in 2013. Real GDP growth in the emerging and developing economies was projected to slow down from 6.25 per cent in 2011 to 5.75 per cent in 2012, but then to reaccelerate to 6 per cent in 2013, helped by easier macroeconomic policies and strengthening foreign demand.

- The IMF lowered its outlook on the global economy in its July update. Global financial market turbulence, which eased in the early part of 2012, intensified in April 2012, in particular in the Euro area when the global recovery, which was not strong to start with, showed signs of further weakness. Financial market and sovereign stress in the Euro area periphery ratcheted up, close to end-2011 levels. Reflecting this, the IMF's July update on growth projections lowered global growth projections slightly over the forecast period. The IMF expected the global economy to grow by 3.5 per cent in 2012, broadly unchanged from its April WEO. However it downgraded its global growth forecast for 2013 slightly from 4.1 per cent to 3.9 per cent.
- In October 2012 the IMF once again lowered its forecast for world growth in both 2012 and 2013. The IMF's growth projections have been further revised down to 3.3 per cent in 2012, and a still sluggish 3.6 per cent in 2013 (Table IV. 1). This includes significant downward revisions to growth in many emerging economies, including India and Brazil. Growth in these economies has been revised down to 5.3 per cent, compared with growth of 6.2 per cent in 2011. Growth in leading emerging markets such as China, India, Russia, and Brazil has been revised lower. Advanced economies are projected to grow by only 1.3 per cent this year, compared with 1.6 per cent last year and 3 per cent in 2010. According to the analysts, low growth and uncertainty in advanced economies are affecting emerging market and developing economies through both trade and financial channels, adding to domestic weaknesses. These revisions have been made based on prospects for a global recovery in the light of such risks as the ongoing Euro area crisis and the "fiscal cliff" facing US policymakers<sup>1</sup>.

## IV.1.3 Downside risks to world growth have increased in recent months.

Indicators of activity and unemployment show increasing and broad-based economic sluggishness in the first half of 2012 and no significant improvement in the third quarter. Global manufacturing has slowed sharply. Many economies are struggling to cope with increased government debt and a significant fall in global trade. The Euro area periphery has seen a marked decline in activity driven by financial difficulties evident in a sharp increase in sovereign rate spreads. Activity has disappointed in other advanced economies,

If everything goes according to plan, policy changes on January 1, 2013 will cause US federal spending to fall and federal
taxes to rise by a combined USD607 billion in 2013 alone. This is expected to cause one of the biggest shocks to the
economy since the financial crisis four years ago. The magnitude and abruptness of the changes have given rise to the name
"fiscal cliff".



too, notably the US. Revised national accounts data in the US suggest that the economy began 2012 with more momentum than initially estimated, but real GDP growth then slowed to 1.7 per cent in the second quarter, below the April WEO and July WEO projections. The labour market and consumption have failed to garner much strength from the Federal Reserve's policy stimulus. Because of the ongoing political gridlock, the fiscal cliff will not be addressed before the November elections.

Other causes of disappointing growth include weak financial institutions and inadequate policies in key advanced economies. The persistent weakness prompted by spillovers from the advanced economies has held back activity in emerging market and developing economies. These spillovers have lowered commodity prices and weighed on activity in many commodity exporters. However, a significant part of the lower growth in the emerging market and developing economies is related to domestic factors, notably constraints on the sustainability of the high pace of growth in these economies and increasing financial imbalances. In addition, IMF research suggests that fiscal cutbacks have had larger-than-expected negative short-term multiplier effects on output, which may explain part of the slowdown in growth.

## IV.1.4 Most regions will show moderate growth in 2012 and 2013

- United States: The IMF forecast estimates 2.2 per cent growth in 2012, slowing slightly to 2.1 per cent in 2013. Weak household balance sheets and confidence, relatively tight financial conditions, and continued fiscal consolidation stand in the way of stronger growth.
- Euro-area: Real GDP is projected to decline by 0.4 per cent in 2012 and then stay flat in the first half of 2013, before expanding by about 1 per cent in the second half of 2013. The "core" economies of Europe are expected to see low but positive growth throughout 2012 and 2013. Most Euro area "periphery" economies are expected to suffer a sharp contraction in 2012, constrained by tight fiscal policies and financial conditions, and to begin to recover only in 2013.
- **Japan:** Growth is projected at 2.2 per cent in 2012. The pace of the recovery is expected to slow noticeably as post-earthquake reconstruction winds down. Real GDP is forecast to stagnate in the second half of 2012 and grow by about 1 per cent in the first half of 2013. Thereafter, growth is expected to improve.
- **Developing Asia:** Real GDP growth is forecast to average 6.7 per cent in 2012, accelerating to 7.2 per cent in 2013. The improvement in 2013 is mainly due to China, which is expected to receive a boost from the accelerated approval of public infrastructure projects.
- Middle East and North Africa: Activity in the region will likely be held back by continued uncertainty
  associated with political and economic transition in the aftermath of the Arab Spring and weak terms
  of trade.
- Latin America: Real GDP growth is projected at about 3.2 per cent in 2012, accelerating to 3.9 per cent in 2013. The projected acceleration is mainly due to an improvement in Brazil because of targeted fiscal measures aimed at boosting demand. Policy rates have also been cut significantly. The pace of economic activity elsewhere in the region is not forecast to pick up appreciably.
- **Sub-Saharan Africa:** These economies are expected to grow strongly in both 2012 and 2013, averaging growth above 5 per cent. Most countries in the region are experiencing "strong" growth, with the exception of South Africa, which, according to the IMF "has been hampered by its strong links with Europe".



The forecasts are based on two crucial policy assumptions: first, that European policymakers get the Euroarea crisis under control and, secondly, that policymakers in the US take action to tackle the "fiscal cliff" and do not allow automatic tax increases and spending cuts to take effect. Failure to act on either issue would make growth prospects far worse.

#### IV.1.5 Projections for merchandise and commercial services trade are also bleak

The outlook for world trade also weakens as the global growth scenario deteriorates. World trade (of goods and services) expanded in 2011 by 5.8 per cent, a sharp deceleration from the 2010 rebound of 12.6 per cent. A significant slowdown of trade expansion had been forecast for 2011, but multiple economic setbacks during the year dampened growth beyond expectations. Trade growth is projected to slow further still to 3.7 per cent in 2012, and then re-accelerate somewhat to 4.5 per cent growth in 2013.

#### IV.1.6 World merchandise exports slumped in 2011 and are projected to grow at moderate rates

World merchandise trade volume grew 5 per cent in 2011 led by Asia's 6.6 per cent growth. The total dollar value of world merchandise exports jumped 19 per cent to USD18.2 trillion in 2011. This increase was nearly as large as the 22 per cent rise in 2010 and was driven in large part by higher primary commodity prices. All types of manufactured goods saw y-o-y growth fall toward zero over the course of 2011. Prices for traded manufactured goods have tended to be more stable than those of primary products, both before and after the economic crisis. As a result, movements in nominal trade flows reflect changes in quantities reasonably well. WTO economists are forecasting a slowdown in merchandise trade volume growth to 3.7 per cent in 2012, with 2 per cent export growth anticipated for developed economies and 5.6 per cent for developing economies (including the Commonwealth of Independent States). On the import side, the WTO is projecting 1.9 per cent growth for developed countries and 6.2 per cent for developing economies and the CIS. World trade volume for 2013 is expected to recover to 5.6 per cent. Exports of developed and developing economies should increase by 4.1 per cent and 7.2 per cent, respectively. On the import side, developed economies should record growth of 3.9 per cent while developing economies should advance by 7.8 per cent.

## IV.1.7 Commercial services exports have grown even more slowly than merchandise exports

Despite the fact that commercial services exports grew by 11 per cent in 2011 to USD4.1 trillion, their share in total goods plus commercial services trade (technically, on a balance of payments basis) was 18.6 per cent, the lowest such share since 1990. Transport services recorded the slowest growth of any sub-category of services (8 per cent), followed by other commercial services (11 per cent) and travel (12 per cent). The slow growth of transport services is perhaps not surprising considering the close relationship between this category of services and trade in goods, which had stagnated in the second half of 2011. An oversupply of new container ships may have also depressed revenues in the shipping sector.

## IV.1.8 Overall, risks to the current forecast are firmly on the downside

A deeper recession in the Euro area would increase social transfer payments, deprive cash-strapped governments of much-needed revenue, and cast doubts on the ability and willingness of countries to service their debts. This would drive up borrowing costs for countries with challenging finances and reinforce any downturn.



It suggests that uncertainty about the outlook has increased markedly The Global Projection Model (GPM) of the IMF confirms that risks of a recession in advanced economies (entailing a serious slowdown in emerging market and developing economies) are alarmingly high. For 2013, the GPM estimates suggest that recession probabilities are about 15 per cent in the US, above 25 per cent in Japan, and above 80 per cent in the Euro area.

Structural reforms will be needed to boosting growth and foster global demand rebalancing, while reducing associated vulnerabilities. In surplus countries such as China and Germany, reforms are needed to boost domestic demand; in deficit countries such as Brazil and India, they are needed to improve supply.

Table IV.1: Growth of World Output and Trade (% change, y-o-y)

Region	2007	2008	2009	2010	2011	2012P	2013P
A. World Output	5.4	2.8	-0.7	5.1	3.8	3.3	3.6
I. Advanced economies	2.8	0.1	-3.7	3	1.6	1.3	1.5
Japan	2.4	-1.2	-6.3	4.5	-0.8	2.2	1.2
United States	1.9	-0.3	-3.5	2.4	1.8	2.2	2.1
Euro area, of which	3	0.4	-4.3	2	1.4	-0.4	0.2
Germany	3.4	0.8	-5.1	4	3.1	0.9	0.9
France	2.2	-0.2	-2.6	1.7	1.7	0.1	0.4
Italy	1.5	-1.3	-5.2	1.8	0.4	-2.3	-0.7
Spain	3.6	0.9	-3.7	-0.3	0.4	-1.5	-1.3
United Kingdom	2.7	-0.1	-4.9	1.8	0.8	-0.4	1.1
NIEs	5.9	1.8	-0.7	8.5	4	2.1	3.6
Emerging & developing economies	8.9	6	2.8	7.4	6.2	5.3	5.6
Developing Asia, of which	11.5	7.7	7.2	9.5	7.8	6.7	7.2
China	14.2	9.6	9.2	10.4	9.2	7.8	8.2
India	10	6.2	6.8	10.1	6.8	4.9	6
Commonwealth of Independent	8.9	5.3	-6.4	4.8	4.9	4	4.1
States, of which							
Russia	8.5	5.2	-7.8	4.3	4.3	3.7	3.8
Excluding Russia	9.9	5.5	-3	6	6.2	4.7	4.8
Latin America and the Caribbean	5.8	4.3	-1.7	6.2	4.5	3.2	3.9
Brazil	6.1	5.2	-0.6	7.5	2.7	1.5	4
Mexico	3.2	1.2 1.5	-6.2 -2.3	5.6	3.9	3.8	3.5 2.9
III. World growth based on market	4	1.5	-2.3	4.1	2.8	2.6	2.9
exchange rates							
World trade volume (goods and							
services)							
1.Volume	7.7	3	-10.7	12.6	5.8	3.2	4.5
2. Imports							
Advanced economies	5.2	0.6	-12.4	11.4	4.4	1.7	3.3
Emerging & developing economies	13.8	9.1	-8	14.9	8.8	7	6.6
3. Exports							
Advanced economies	6.8	2.1	-11.9	12	5.3	2.2	3.6
Emerging & developing	10.2	4.7	-7.7	13.7	6.5	4	5.7
economies							

Note: 'P': Projected.

Source: IMF, World Economic Outlook Update, October 2012.



#### IV.2 India's Trade

## IV.2.1 The Backdrop

Economic growth is projected to remain sluggish in 2012-13

Revised estimates of India's national income now place its GDP growth in 2011-12 at 6.5 per cent. Growth is likely to remain sluggish in 2012-13 as well. The official projections have already scaled down India's growth to 6.7 per cent during 2012-13 from the 7.6 per cent (+/- 0.25 per cent) projected earlier. Major domestic and global financial service firms such as Moody's, Citi and CLSA are even less optimistic. They have cut their estimates for India to 5.4 per cent for the fiscal year 2012-13. In its October update the IMF has cut its growth projections for 2012 to 4.9 per cent (even below 5 per cent). But improvements in external conditions and confidence - helped by a variety of reforms announced very recently - are projected to raise real GDP growth to about 6 per cent in 2013.

## IV.2.2 Exports

## India's exports suffer a steep drop in 2012-13

India's merchandise exports, measured in US dollar terms, had accelerated in 2007-08 with its growth rate touching 28.9 per cent followed by deceleration to a growth rate of 12.2 per cent in 2008-09, the year of the global recession. Exports continued to decline in 2009-10 but posted a robust growth of 42.3 per cent in 2010-11. This was despite a significant y-o-y appreciation of the 36-country trade-based REER by 7.9 per cent and the 6-country trade-based REER by 13 per cent. The surge was attributed (by the *RBI Monthly Bulletin*, September 2011) to three factors: the diversification of exports in terms of composition and destinations; government policy incentives; and the base effect. However, the tempo could not be maintained and export growth decelerated to 21 per cent in 2011-12, particularly due to a sharp deceleration in export growth in the second half of the year. This is despite the fact that the rupee posted a sharp depreciation between 31 March and 14 October 2011, with the 36-country trade-based REER depreciating by 4.1 per cent and the 6-country trade-based REER deprecating by 6.3 per cent.

A significant deceleration in export performance observed in the second half of 2011-12 continued during Q1:2012-13, as the global economic and trade environment remained unsupportive. During Q1:2012-13, exports stood at USD75.2 billion and showed a decline of 1.7 per cent, against an increase of 36.4 per cent during Q1:2011-12. The cumulative value of exports for April-September 2012-13 was USD 143,676 million (Rs 7,85,076 crore) as against USD154,149 million (Rs 6,97,699 crore) registering a negative growth of 6.79 per cent in dollar terms and a growth of 12.52 per cent in rupee terms over the same period last year. Evidently, the significant depreciation in the rupee since the second half of 2011-12 could not sufficiently offset the impact of the slowdown in global demand and domestic policy paralysis.

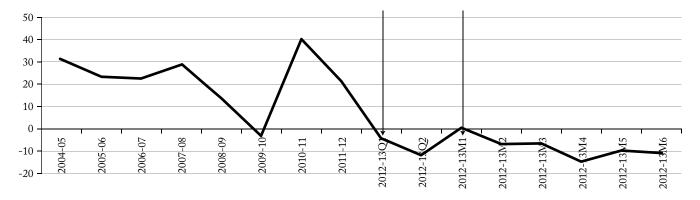
## Export diversification could not pay off

In recent years, due to export diversification efforts, the share of developing economies in India's total exports witnessed a gradual increase. However, as the sluggish economic conditions in Advanced Economies (AEs) slowly spilled over to other Emerging and Developing Economies (EDEs), diversification did not yield results similar to those seen in previous years (according to the *RBI Monthly Bulletin*, October 2012). Going forward, demand conditions especially in the EU are likely to remain muted for some time.



As a result, growth in global trade volume, including exports from the EDEs, is likely to be lower in 2012. Indian exports are likely to reflect this general trend.

Figure IV.1: Export Growth Rate: 2004-05 to 2012-13 (%, y-o-y)



Source: RBI: RBI Monthly.

#### Exports of all broad categories registered negative growth except for agricultural and allied products

India's exports declined by 4.5 per cent in April-June 2012 compared with a growth of 41.4 per cent in the corresponding period of 2011-12 (Figure IV.1). While the exports of all the broad categories registered impressive growth during April-June 2011-12; there has been a steep decline in all categories during the corresponding period in 2012-13. The only exception is the export of agricultural products which grew by 68.1 per cent. The exports of manufactured goods which account for more than three-fifths of total exports, contracted by 4.5 per cent during April-June 2012 against a robust growth of over 40 per cent in the corresponding period of 2011-12 (Table IV.2). Indeed, this is worrisome and cannot be explained by the global turndown alone.

Table IV.2: Shares and Growth of Exports by Broad Product Category: April-June, 2011-12 and 2012-13

Item	Share	es (%)	Growth (%)			
	April- June					
	2011-12	2012-13	2011-12	2012-13		
Agricultural & allied products	8.76	15.95	57.8	73.7		
Ores & minerals	2.44	2.55	-36.4	-0.1		
Manufactured goods	62.21	62.19	40.7	-4.5		
Leather & leather manufactures	1.5	1.56	35.1	-0.9		
Chemicals & related products	8.03	9.51	27.4	13.1		
Engineering goods	23.43	22.85	33.7	-6.9		
Textiles (excluding readymade garments)	4.7	4.72	29.2	-4.1		
Gems & jewellery	15.35	14.48	64.8	-7.7		

(Contd...)

Table IV.2: Shares and Growth of Exports by Broad Product Category: April-June, 2011-12 and 2012-13 (Contd...)

Item	Shares (%)		Growth (%)		
	April- June				
	2011-12	2012-13	2011-12	2012-13	
Petroleum & crude products	19.96	16.89	76	-19.2	
Other commodities	6.61	2.39	15.1	-65.4	
All commodities (USD value)	76,508 73,047 41.4 -				

**Source:** Based on Centre for Monitoring the Indian Economy (CMIE) reports.

#### Exports have been passing through hard times in almost all export destinations

Among the top 20 destinations, a positive growth rate of exports has been observed for exports directed to the UAE, US, China, Saudi Arabia and Bangladesh. In all other countries, it is negative. Overall, India's exports to its top 20 destination countries posted negative growth in April-June 2012. Yet, their share increased in total exports from 67 per cent to over 70 per cent. This essentially was due to the increased share of the top five destinations. These countries registered either positive growth (UAE, USA and China) or a relatively small drop (Hong Kong) in exports directed to them with Singapore being the exception where the decline was rather large (Table IV.3).

Table IV.3: Share and Growth of India's Major Export Destinations (April-June, % USD value)

Country/ Region	Share	es (%)	Growth (%)		
	2011-12	2012-13	2011-12	2012-13	
UAE	11.72	13.59	19.8	10.7	
USA	10.74	14.28	34.6	26.9	
China	3.66	5.14	-13.4	33.8	
Singapore	7.54	4.55	104.7	-42.4	
Hong Kong	4.35	4.16	43.7	-8.7	
Share & Average Growth Rate (top 5)	38.01	41.72	37.88	4.06	
Netherlands	2.92	2.78	50.4	-9.3	
UK	2.95	2.76	49.9	-10.7	
Germany	2.74	2.42	56.5	-15.6	
Indonesia	2.15	1.83	87.1	-19	
Belgium	2.7	1.77	94.3	-37.2	
Share & Average Growth Rate (top 10)			52.76	-7.15	
Saudi Arabia	1.91	3.39	19.8	69.3	
Japan	1.79	1.6	-7	-14.8	
France	1.36	1.54	7.7	8.1	
Italy	1.89	1.36	63.2	-31.3	
Brazil	2.09	2.1	92.1	-4.1	
South Africa	1.56	1.36	-19.6	-16.5	

(Contd...)



Table IV.3: Share and Growth of India's Major Export Destinations (April-June, % USD value) (Contd...)

Country/ Region	Shares (%)		Growth (%)			
	2011-12	2012-13	2011-12	2012-13		
Korea Republic (South)	1.66	1.28	82.9	-26		
Sri Lanka	1.43	1.35	63.8	-10.2		
Malaysia	1.49	1.31	-11.7	-16		
Bangladesh	0.95	1.72	9.4	71.5		
Share & Average Growth Rate (top 20)			41.41	-2.07		
Country Groupings						
World	100	100	41.4	-4.5		
Africa	7.82	9.12	25.1	11.3		
America	16.28	19.98	43.5	17.2		
Asia (excl. Middle East)	30.44	28.45	35.6	-10.8		
Middle East	17.7	22.14	23.1	19.4		
Europe	20.39	18.46	48.3	-13.6		
Oceania	0.73	0.92	46.9	21.3		

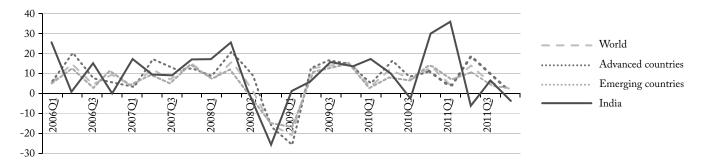
Source: Based on Centre for Monitoring the Indian Economy (CMIE) reports.

Apparently, the export decline has been widespread across sectors, countries and regions.

In general, India's exports have shown relatively more moderate growth and have been subject to higher volatility than world exports in the post-crisis period

Figure IV.2 shows quarterly growth rates in exports for the period 2006 to 2011. As seen in the figure, the volatility of Indian exports has increased markedly after the global recession of mid-2008.

Figure IV.2: Quarterly Export Growth Rates, 2006-11: India vis-a-vis the World



**Source:** Based on IMF's international trade database.

Table IV.4 shows the mean of the quarterly export growth rates for India, the world and the developed and developing regions separately. It also presents the standard deviation and coefficient of variation in the quarterly growth rates since Q1:2005. Surprisingly, for the world, and both the developed and developing regions, the variability in export growth rates has declined or remained stagnant, and mean growth rates have increased after the recession. For India, on the other hand, the mean export growth rate has declined and it is associated with increased variability.



Table IV.4: Summary Statistics of Quarterly Export Growth Rates, 2005-11: India vis-a-vis the World

	2005Q1-2008Q2			2009Q2-2011Q4		
	Mean	Standard Deviation	CV	Mean	Standard Deviation	CV
World	4.11	3.96	96.17	4.66	4.24	90.95
Advanced countries	3.34	4.04	120.98	4.01	4.16	103.77
Emerging countries	5.77	5.22	90.55	5.86	5.33	91.01
India	7.75	9.93	128.16	6.34	11.92	188.04

**Source:** Based on IMF's *International Trade Statistics*.

A significant part of the lower growth in exports may be related to domestic factors, notably constraints on the sustainability of the high pace of economic growth.

#### Poor export performance coincides with weak industrial performance

Figure IV.3 shows the y-o-y percentage change in the monthly Index of Industrial Production (IIP) during 2006-11. Industrial output has remained subdued after the post-crisis recovery, led by a slack in investment activity owing to elevated input costs and interest rates, delayed clearances, high inflation, and the lack of policy support. The IIP for August is up 2.7 per cent, over the same period during 2011-12, after several months of stagnant and even declining growth. Since, three-fourths of exports are constituted by manufacturing exports, this could be an important factor pulling down production or the causality may be reverse. This relationship requires further exploration.

It would be important for India to maintain its export competitiveness through efficient domestic and foreign trade initiatives. On the domestic front, India needs to move briskly on its reforms related to manufacturing. The policy uncertainties have already dealt a heavy blow to the government's much-hyped SEZ policy, which was aimed at giving a major thrust to manufacturing and exports in the country. The government has now moved to promoting National Investment and Manufacturing Zones (NIMZs) under the recently notified National Manufacturing Policy, however this is being held up by inter-ministerial tussles. While the government has already notified seven zones, the Labour Ministry has yet to notify the policy. There is a need for firm measures to enable lagging manufacturing sectors to improve, in order to sharpen India's export competitiveness.



25 20 15 10 5

Figure IV.3: Changes in IIP (%, y-o-y): January 2006 - August 2012

**Source:** Based on CSO statistics.

#### Slowdown in service exports

Despite the challenges in global market conditions, services exports in general, and software exports in particular, sustained a growth momentum in 2011-12. However, net service exports earnings at USD14 billion in Q1:2012-13 have declined around 12 per cent y-o-y, suggesting a loss in momentum. Service exports in gross terms expanded by a moderate 3 per cent. The NASSCOM projection of 11-14 per cent growth in software exports in 2012-13 suggests a deceleration. Current indications, borne out by the dollar revenue guidance of IT majors, suggest that software export earnings may be lower than projected by NASSCOM. The risk of lower software exports may arise from reduced spending on technology by US corporations, continued uncertainty in Euro area countries and a likely Euro depreciation. As software exports account for nearly 63 per cent of net receipts of invisibles, any deceleration in these exports may aggravate the already high current account deficit recorded in recent quarters.

## IV.2.3 Imports

## Imports decelerated faster than exports in H1:2012-13

During Q1:2012-13, imports declined by 6.1 per cent over the corresponding quarter of 2011-12 and stood at USD 114.3 billion. Lower imports during Q1:2011-12 mainly reflected the contraction in the imports of Petroleum, Oil and Lubricants (POL) and gold and silver. The contraction in the growth in POL imports during Q1: 2012-13 compared with a growth of 52.5 per cent during Q1:2011-12 could be reflecting the moderation in international crude oil prices. It could also be partly due to a lower growth in industrial activity. The import of gold and silver at USD 9.4 billion during Q1:2012-13 was 48.4 per cent lower than in Q1: 2011-12. Non-oil non-gold imports during Q1:2012-13 at USD 65.3 billion recorded a decline of 2.9 per cent compared to an increase of 18.9 per cent in the first quarter the preceding year. Interestingly, the import growth rates of all the major categories of imports moderated (Table IV.5).

50.00

40.00

20.00

10.00

10.00

-10.00

-10.13 Anguitt

2012-13 Anguitt

Figure IV.4: Import Growth Rates in India: 2004-05 to 2012-13

**Source:** Based on Ministry of Commerce data.

## Imports continued to decelerate in the second quarter of 2012-13

Imports contracted by 2.57 per cent in Q2:2012-13 over Q2:2011-12. The cumulative value of imports for the period April-September 2012-13 was USD232,927 million as against USD243,546 million, registering a negative growth of 4.36 per cent in USD terms. The negative growth rate could be essentially attributed to a contraction in non-oil imports. Non-oil imports during April-September 2012-13 were valued at USD152,143 million which was 9.38 per cent lower than the its value of USD 167,893 million in April-September, 2011-12 (not shown in Table IV.5). Oil imports started rising, though, and in April-September 2012-13, were valued at USD 80,784 million, 6.78 per cent higher than its value of USD75,653 million in the corresponding period last year.

Table IV.5: Share and Growth of India's Commodity Imports (April-June, % USD value)

Item	Shares (%)		Growth (%)	
	2011-12	2012-13	2011-12	2012-13
Petroleum crude & products	32.1	34.41	52.8	-0.5
Food & related items	2.3	3.26	22.8	31.6
Textiles (incl. RMG)	0.76	0.81	24	-1.3
Chemicals and related products	6.24	6.88	4.8	2.4
Natural rubber, incl. synthetic & reclaimed rubber	0.15	3.44	44.1	23.2
Pulp & waste paper	0.31	0.29	24.9	-15
Other Commodities	2.05	3.94	9.1	78.2
All commodities (USD value)	122,726	113,950	44	-7

Source: Based on Centre for CMIE.



## Imports from most regions contracted during 2012-13:Q1

India's major import sources for 2011-12 and 2012-13 are shown in Table IV.6. It shows that imports from the top 20 trade-sourcing countries contracted by 8.44 per cent in April-June 2012-2013 compared with over 60 per cent per cent growth over the same period in 2011-12. There has been a growth deceleration of imports from almost all the top 20 countries. In most cases imports contracted during the first quarter.

Table IV.6: Share and Growth of India's Imports from Major Sources (April-June, % USD value)

Item	Shares	(%)	Growth (%)		
	2011-12	2012-13	2011-12	2012-13	
China	10.96	11.95	33.8	1.3	
UAE	8.13	7.86	39.2	-10.1	
Switzerland	7.72	4.65	206.5	-44.1	
Saudi Arabia	5.97	7.56	50.2	17.6	
USA	4.82	5.06	19	-2.5	
Share & Average Growth Rate	37.6	37.08	69.74	-7.56	
(top 5)					
Iraq	4.52	4.04	247.6	-17	
Nigeria	3.75	2.96	58.2	-26.7	
Germany	3.03	3.05	38.9	-6.6	
Iran	2.94	2.38	31.7	-24.9	
Indonesia	2.89	3.05	54.3	-1.9	
Share & Average Growth Rate	54.73	52.56	77.94	-11.49	
(top 10)					
Australia	2.86	2.53	3.8	-17.7	
Hong Kong	2.66	1.56	89.2	-45.5	
Kuwait	2.58	2.9	31.3	4.4	
Belgium	2.48	2.28	32.6	-14.6	
Korea Republic (South)	2.39	2.74	18.8	6.6	
Japan	2.27	2.7	44.7	10.3	
Singapore	2.16	1.63	35.6	-29.7	
Qatar	2.35	3.87	77	52.5	
South Africa	1.88	1.29	49.2	-36.3	
Malaysia	1.73	2.16	51.9	16.1	
Share & Average Growth (top 20)	78.09	64.27	60.675	-8.44	
Country groupings					
World	100	100	44.4	-7.2	
Africa	8.89	8.22	42.6	-14.1	
America	8.47	10.48	6.6	14.8	
Asia (excl. Middle East)	29.15	29.71	42.3	-5.4	
Middle East	28.61	30.16	52.9	-2.1	
Europe	21.37	18.05	67.2	-21.6	
Oceania	3.01	2.74	2.3	-15.5	

Source: Computations based on Centre for Monitoring the Indian Economy (CMIE) reports.



#### IV.2.4 Current Account

## The merchandise trade deficit lowered but an upward risk remains

The trade deficit during Q1:2012-13 was lower at USD 42.5 billion compared with USD 45 billion during Q1:2011-12 (Table IV.7-8). The merchandise trade deficit had gone up in Q1:2011-12 from USD 31.9 billion in Q1:2010-11 to \$35.5 billion. Obviously, imports decelerated faster than exports in the first quarter of 2012-13. However, the improvement in the trade deficit was not sustainable, and the July-September 2012 deficit turned out to be above USD46 billion which was higher than the July-September 2011 deficit. Overall, however, the trade deficit for April-September 2012-13 was estimated at USD89,251 million, marginally lower than the deficit of USD89,397 million in April-September 2011. As suggested above, this was essentially due to a contraction in the deficit in Q1:2012-13.

## The balance of invisibles contracted in the first quarter of 2012-13

The surplus on invisibles contracted in Q1:2012-13 by 5.6 per cent compared with a 43 per cent increase over the same period in 2011-12. This was essentially due to a decline in the surplus on trade in services, in particular in software services.

Given the contraction in the trade deficit, the current account deficit contracted by 5.6 per cent in the first quarter of 2012-13. This was despite the moderation in the surplus on invisibles. Over the same period in 2011-12, the deficit had gone up by 38 per cent. It must, however, be noted that the trade deficit once again rose in Q2:2012-13.

The recent trend of a faster deceleration in imports than exports has given rise to the possibility that the Current Account Deficit (CAD) could improve in 2012-13. According to preliminary estimates, the current account deficit in fiscal 2012-13 is projected to be 3.6-3.7 per cent of the gross domestic product<sup>2</sup>. It had ballooned to 4.2 per cent of the GDP during 2011-12. However, current assessment suggests that such an improvement could be insufficient to ensure CAD sustainability. The upside risk to the CAD remains significant. The response of exports to the depreciation of the rupee has so far remained muted due to subdued global demand. The downside risks to export growth are large in view of worsening global and domestic investment conditions. The exchange rate sensitivity of India's imports is also limited.

# IV.2.5 Capital Account

## FDI inflows have dived by around 50 per cent in Q1:2012-13

FDI, both inflows as well as outflows, declined sharply during the first quarter of the current financial year, reflecting the growing pessimism among companies that are shying away from investment. The fall in inflows into the country was, however, more significant as companies invested USD6.2 billion, net of disinvestment and repatriation, during April-June 2012, compared to USD12.3 billion a year ago. Since Q1:2012-13, concerns about the growth and financial health of the Euro area countries have intensified. In addition, signs of weakness in the US and China have made investors more cautious, and driven up global financial market volatility. Concerns about the domestic business environment appear to be weighing on FDI inflows as well. Outward investment by Indian companies has also decreased as companies are shying away from setting up new plants amid a weak economic environment. Demand, too, has dwindled

<sup>2.</sup> http://myiris.com/newsCentre/storyShow.php?fileR=20120925174605718&dir=2012/09/25&secID=economy accessed on 18 October, 2012.



as individuals are holding back purchases and companies have cut back on discretionary expenses. These factors have also led to a net FII outflow of USD1.7 billion in Q1:2012-13. NRI deposits, however, have picked up in recent months due to the rupee depreciation. Overall, capital flows may remain volatile due to global uncertainties and the subdued investment environment within India.

Table IV.7: Overall Balance of Payment in India (million USD), Net

Item	Apr-June 2010 (PR)	Apr-June 2011	Apr-June 2012 (P)	Growth R	ates, y-o-y
	1	2	3	Q1:2010 - Q1:2011	Q1:2011- Q1:2012
I. MERCHANDISE	-31,907	-45,009	-42,473	41.1	-5.6
II. INVISIBLES (a+b+c)	19,209	27,468	25,922	43.0	-5.6
a) Services	9,636	16,418	14,175	70.4	-13.7
i) Travel	642	237	398	-63.1	67.9
ii) Transportation	9	353	594	3,822.2	68.3
iii) Insurance	100	271	283	171.0	4.4
iv) G.n.i.e.	-49	-63	-5	28.6	-92.1
v) Miscellaneous	8,934	15,620	12,905	74.8	-17.4
of which				0.0	0.0
Software Services	11,752	14,647	15,211	24.6	3.9
Business Services	-1,073	-133	-137	-87.6	3.0
Financial Services	-176	-482	-130	173.9	-73.0
Communication Services	83	-55	315	-166.3	-672.7
b) Transfers	13,027	14,680	16,653	12.7	13.4
i) Official	-83	-100	-155	20.5	55.0
ii) Private	13,110	14,779	16,808	12.7	13.7
c) Income	-3,455	-3,629	-4,905	5.0	35.2
i) Investment Income	-3,199	-3,818	-5,118	19.3	34.0
ii) Compensation of Employees	-255	189	212	-174.1	12.2
Total Current Account (I+II)	-12,698	-17,541	-16,551	38.1	-5.6
CAPITAL ACCOUNT				0.0	0.0
1. Foreign Investment (a+b)	8,079	11,798	2,314	46.0	-80.4
a) Foreign Direct Investment (i+ii)	3,474	9,256	4,236	166.4	-54.2
i) In India	6,748	12,388	6,204	83.6	-49.9
Equity	3,713	9,219	3,863	148.3	-58.1

Table IV.7: Overall Balance of Payment in India (million USD), Net (Contd...)

Item	Apr-June 2010 (PR)	Apr-June 2011	Apr-June 2012 (P)	Growth Rates, y-o-y	
	1	2	3	Q1:2010 - Q1:2011	Q1:2011- Q1:2012
Reinvested Earnings	2,985	2,051	2,284	-31.3	11.4
Other Capital	50	1,118	57	2,136.0	-94.9
ii) Abroad	-3,274	-3,132	-1,968	-4.3	-37.2
Equity	-1,844	-1,145	-446	-37.9	-61.0
Reinvested Earnings	-271	-302	-297	11.4	-1.7
Other Capital	-1,159	-1,685	-1,225	45.4	-27.3
b) Portfolio Investment	4,605	2,541	-1,922	-44.8	-175.6
i) In India	4,652	2,750	-1,612	-40.9	-158.6
of which					
FIIs	3,538	2,472	-1,706	-30.1	-169.0
ADR/GDRs	1,114	278	94	-75.0	-66.2
ii) Abroad	-47	-208	-310	342.6	49.0
2. Loans (a+b+c)	9,000	6,470	6,168	-28.1	-4.7
a) External Assistance	2,452	349	-184	-85.8	-152.7
i) By India	-6	-39	-64	550.0	64.1
ii) To India	2,458	388	-120	-84.2	-130.9
b) Commercial Borrowings	2,229	3,052	975	36.9	-68.1
i) By India	-58	21	132	-136.2	528.6
ii) To India	2,287	3,031	843	32.5	-72.2
c) Short-term to India	4,319	3,069	5,378	-28.9	75.2
i) Suppliers' Credit > 180 days & Buyers' Credit	3,175	1,586	6,038	-50.0	280.7
ii) Suppliers' Credit up to 180 days	1,144	1,483	-660	29.6	-144.5
3. Banking Capital (a+b)	4,002	12,664	9,434	216.4	-25.5
a) Commercial Banks	4,024	12,659	9,517	214.6	-24.8
i) Assets	705	6,263	5,324	788.4	-15.0
ii) Liabilities	3,320	6,396	4,193	92.7	-34.4
of which: Non-Resident Deposits	1,119	1,151	6,551	2.9	469.2
b) Others	-22	5	-83	-122.7	-1,760.0



Table IV.7: Overall Balance of Payment in India (million USD), Net (Contd...)

Item	Apr-June 2010 (PR)	Apr-June 2011	Apr-June 2012 (P)	Growth Rates, y-o-y	
	1	2	3	Q1:2010 - Q1:2011	Q1:2011- Q1:2012
4. Rupee Debt Service	-16	-31	-26	93.8	-16.1
5. Other Capital	-3,719	-6,977	-921	87.6	-86.8
Total Capital Account (1 to 5)	17,347	23,923	16,969	37.9	-29.1
Errors & Omissions	-908	-939	103	3.4	-111.0
Overall Balance (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	3,741	5,442	521	45.5	-90.4
Monetary Movements (i+ii)	-3,741	-5,442	521	45.5	-109.6
i) I.M.F.	_	_	_		
ii) Foreign Exchange Reserves (Increase - / Decrease +)	-3,741	-5,442	-521	45.5	-90.4
of which: SDR allocation	_	_	_		

Source: RBI Monthly Bulletin, January 2012, October 2012.

Table IV.8: Overall Balance of Payment in India (USD million), Credit and Debit

Item	Apr-June 2010 (PR)	Apr-June 2011	Apr-Jun 2012 (P)	Apr-June 2010 (PR)	Apr-June 2011	Apr-Jun 2012 (P)
I. MERCHANDISE	55,301	78,642	76,708	87,209	123,651	119,181
II. INVISIBLES	43,260	52,085	54,008	24,051	24,617	28,086
(a+b+c)						
a) Services	26,650	34,055	34,381	17,014	17,637	20,206
i) Travel	2949	3,697	3,506	2,307	3,461	3,108
ii) Transportation	3143	4,355	4,250	3,134	4,002	3,656
iii) Insurance	410	569	532	310	298	249
iv) G.n.i.e.	94	139	159	143	201	163
v) Miscellaneous	20,054	25,295	25,934	11,120	9,675	13,029
of which						
Software Services	12,327	14,950	15,843	575	302	632
Business Services	4,819	5,780	7,611	5,892	5,914	7,748
Financial Services	1,228	1,282	1,306	1,404	1,764	1,436
Communication Services	325	360	419	241	415	104

Table IV.8: Overall Balance of Payment in India (USD million), Credit and Debit (Contd...)

Item	Apr-June 2010 (PR)	Apr-June 2011	Apr-Jun 2012 (P)	Apr-June 2010 (PR)	Apr-June 2011	Apr-Jun 2012 (P)
b) Transfers	13,754	15,538	17,492	727	858	839
i) Official	59	46	37	141	146	192
ii) Private	13,695	15,491	17,455	585	712	647
c) Income	2,855	2,493	2,135	6,310	6,122	7,040
i) Investment Income	2,628	1,904	1,436	5,828	5,722	6,554
ii) Compensation of Employees	227	589	698	482	400	486
Total Current Account (I+II)	98,561	1,30,727	130,716	1,11,260	1,48,268	147,267
CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	53,410	66,052	43,871	45,331	54,255	41,557
a) Foreign Direct Investment (i+ii)	9,344	17,351	8,458	5,870	8,095	4,221
i) In India	9,050	16,947	7,595	2,302	4,559	1,390
Equity	5,991	13,445	4,896	2,278	4,226	1,033
Reinvested Earnings	2,985	2,051	2,284	_	_	0
Other Capital	75	1,451	415	24	333	358
ii) Abroad	294	404	863	3,568	3,536	2,831
Equity	294	404	863	2,138	1,549	1,309
Reinvested Earnings	_	_	0	271	302	297
Other Capital	_	_	0	1,159	1,685	1,225
b) Portfolio Investment	44,066	48,701	35,413	39,461	46,159	37,335
i) In India	43,972	48,607	35,175	39,320	45,857	36,787
of which						
FIIs	42,858	48,329	35,081	39,320	45,857	36,787
ADR/GDRs	1,114	278	94	_	_	0
ii) Abroad	94	94	238	141	303	548
2. Loans (a+b+c)	23,465	32,191	37,041	14,464	25,721	30,873
a) External Assistance	3,210	1,236	551	758	887	735
i) By India	19	17	14	25	57	78
ii) To India	3,191	1,219	537	733	831	657
b) Commercial Borrowings	4,429	6,790	6,282	2,200	3,738	5,307



Table IV.8: Overall Balance of Payment in India (USD million), Credit and Debit (Contd...)

Item	Apr-June 2010 (PR)	Apr-June 2011	Apr-Jun 2012 (P)	Apr-June 2010 (PR)	Apr-June 2011	Apr-Jun 2012 (P)
i) By India	185	339	1,068	243	319	936
ii) To India	4,244	6,451	5,214	1,957	3,419	4,371
c) Short-term to India	15,825	24,165	30,208	11,506	21,096	24,831
i) Suppliers' Credit > 180 days & Buyers' Credit	14,681	22,682	30,208	11,506	21,096	24,171
ii) Suppliers' Credit up to 180 days	1,144	1,483	_	_	_	660
3. Banking Capital (a+b)	16,745	28,767	27,371	12,743	16,103	17,937
a) Commercial Banks	16,743	28,736	27,345	12,719	16,077	17,828
i) Assets	3,263	10,858	7,992	2,558	4,595	2,668
ii) Liabilities	13,480	17,878	19,352	10,160	11,482	15,160
of which: Non- Resident Deposits	11,252	12,488	19,338	10,133	11,337	12,787
b) Others	2	31	26	24	27	109
4. Rupee Debt Service	_	_	ı	16	31	26
5. Other Capital	1,478	1,672	3,183	5,197	8,649	4,104
Total Capital Account (1 to 5)	95,098	1,28,683	111,466	77,751	1,04,760	94,497
Errors & Omissions	_	_	103	908	939	_
Overall Balance (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	1,93,659	2,59,410	242,285	1,89,918	2,53,968	241,763
Monetary Movements (i+ii)	_	_	_	3,741	5,442	521
i) I.M.F.	_	_	_	_	_	_
ii) Foreign Exchange Reserves (Increase - / Decrease +)	_	_	_	3,741	5442	521
of which: SDR allocation	_	_	_	_	_	_

Source: RBI Monthly Bulletins, January 2012, October 2012.



# IV.2.6 Major Concerns

### Rupee gains in Q4:2011-12 dissipated in 2012-13

The rupee gained by 4.1 per cent in Q4:2011-12, partly reflecting the favourable impact of policy measures by the Reserve Bank to improve capital flows and curb speculative pressure in the foreign exchange market. The intervention in the foreign exchange market also helped in containing the depreciation. However, the rupee started weakening from the first week of April 2012 as portfolio capital inflows dried up. The large trade deficit, domestic policy uncertainty and growing apprehensions about the Euro area affected overall investment sentiment. As a result, the rupee reached a low of 57.2 against the USD on June 27, 2012, and the real effective exchange rate (i.e., the REER based on 6, 30 and 36 currency baskets) recorded a depreciation (Table IV.9).

Devaluation of the rupee continued in the second quarter. This is likely to affect the economy rather adversely through the costs of imported goods, capital-intensive projects and dollar loans taken by companies, which would increase the foreign debt. As interest rates rise and foreign institutional flows ebb, growth is affected adversely.

Table IV.9: Nominal and Real Effective Exchange Rates – Trade Based (Base: 2004-05=100) (Per cent, appreciation+/depreciation-)

	Index	Year-on-Year Variation (Average)			2011-12	2012-13
	July 20, 2012 P	2009-10 P	2010-11P	2011-12	(March 2012 over January 2012)	(July 20, 2012 over March 2012)
1	2	3	4	5	6	7
36-REER	91.4	-3.2	8.0	-3.2	2.3	-7.2
36-NEER	78.6	-2.6	3.1	-6.4	1.2	-9.7
30-REER	83.5	-4.6	4.8	-2.9	2.3	-7.2
30-NEER	80.3	-2.2	1.1	-5.4	1.0	-9.6
6-REER	104.6	-0.3	13.0	-6.8	2.5	-7.1
6-NEER	76.4	-3.7	5.7	-7.9	1.4	-9.9
Rs/USD (Average)	54.5#	-3.2	4.0	-4.9	2.0	-7.7#
Rs/USD (end-March)	55.9*	12.9	1.1	-12.7	-2.9	-8.6*

P: provisional; NEER: nominal effective exchange rate; REER: real effective exchange rate.

**Note:** Rise in indices indicates appreciation of the rupee and *vice versa*.

Source: RBI Monthly Bulletin, October 2012.

### Increasing External Debt

With equity flows dwindling, various measures were taken in 2011-12 to encourage other capital flows into the country. These include an increase in FII investment in debt securities (both government and corporate debt), enhancing the all-in-cost ceiling for ECBs and trade credit, and deregulation of interest rates on

<sup>\*:</sup> As on July 26, 2012; #: April-July 26, 2012 over March 2012.



rupee-denominated NRI deposits, i.e., NRE and NRO accounts. On account of the greater recourse to such debt-creating flows in financing the CAD, India's external debt increased significantly during Q4:2011-12, putting pressure on external sector management. Further, the repayment of commercial borrowings of about USD15 billion (including FCCBs of about USD4.7 billion) is due during 2012-13. Thus, there is thus a pressing need to improve equity flows to finance.

### Sustainability of the CAD and its financing remain concerns

External sector vulnerability indicators showed a mixed trend in Q4:2011-12. There has been a marginal improvement in the ratio of short-term debt to total debt. While the debt-GDP ratio and debt-service ratio remained the same, other indicators such as the ratio of foreign exchange reserves-to-total debt and short-term debt-to-foreign exchange reserves, deteriorated at end-March 2012, compared with end-December 2011. India's Net International Investment Position (NIIP) also weakened. While Q1:2012-13 witnessed softening of the CAD, it also was associated with a sharp decline in equity inflows and a decline in aid. Commercial borrowings increased sharply causing concerns on the BOP front.

### Rising vulnerability to external shocks

The CAD-GDP ratio was high at 4.5 per cent in Q4:2011-12, taking the full-year ratio to an all-time high of 4.2 per cent. Even in 2012-13, it is projected to be as high as 3.3-3.5 per cent. Such a high CAD level, especially against the backdrop of volatile global macroeconomic conditions and capital flows, raises grave concerns about its sustainability. A recent analysis shows that with a GDP growth of 7 per cent, a CAD-GDP ratio of around 2.5 per cent is sustainable. With an increase in the deficit beyond this level, financing could be a constraint and external sector vulnerability may rise further. Unsustainable improvement in the CAD, high external debt, along with a deterioration in the NIIP may weaken the resilience of India's external sector in 2012-13.

# IV.2.7 Concluding Remarks

Future trends in the balance of payments will largely depend on the global macroeconomic and trade environment as well as on domestic investment and the policy environment. The world economy faces downside risks and so does the Indian economy. The global crisis, in particular in the Euro area, has turned out to be too difficult to control quickly. At home, the government needs to act swiftly and effectively to restore business confidence and improve the investment climate within the country and bring the economy back to the growth trajectory.



# V. Money, Credit and Finance

By Shashanka Bhide and Siddhartha Chattopadhyay<sup>3</sup>

# V.1 The Backdrop

The persistence of a high rate of inflation has been a challenge to monetary policy for well over a year now. The WPI-based measure of inflation dropped from 9.5 per cent in November 2011 and it has stayed between 7.5 and 7.7 per cent since then, on a monthly basis, except for a drop below 7 per cent in July. The annual rate of inflation continues to be well above the desirable level of monetary policy, and the underlying high rate of food inflation, more visible in the CPI-based measure of inflation, is above the desirable level for consumers. The persistence of inflation is also symptomatic of incomplete adjustment in prices in the presence of shocks, such as high petroleum crude prices and structural issues such as the rising demand for non-staple food commodities. The coincidence of supply-side bottlenecks, changing structure of demand for food items and a decline in investor confidence have led to the unusual combination of low economic growth and high inflation.

India's inflation experience has been quite contrary to global trends where inflation rates are as subdued as economic growth. The October 2012 World Economic Outlook of the IMF indicates that what is helping growth in the advanced economies is accommodative monetary policy as fiscal consolidation is taking place. What has restrained a strong growth recovery is the uncertainty. In India, monetary policy changed to address high inflation, while fiscal policy has attempted to sustain growth with modest attempts at consolidation. Investors seemed to remain unimpressed the world over.

The recent surge of reforms in India, which followed a lengthy period of policy inaction, may have revived plans for new investments. However, if the change in monetary policy is tightly linked to the inflation rate, sectoral policy reforms will have to drive investor sentiments by themselves. Recent data on growth continues to show weak level of industrial activity. The IIP growth for April-July 2012 over the same period in 2011 shows stagnation in output, with the positive contribution coming only from the consumer durables segment in the use-based grouping of industries and electricity in the more aggregate grouping of manufacturing, mining and electricity under the IIP general index. The collapse of industrial growth has also meant the inability of businesses to meet their debt-servicing requirements. Corporate debt restructuring has become necessary on a large scale. Importantly the growth collapse also implies a slowdown in new employment and consumer spending.

The declining industrial growth and high inflation have also coincided with a deteriorating external balance. Although foreign exchange reserves remain relatively high, there was a drawdown of USD13 billion from these reserves in 2011-12. The rupee fell from Rs 44.45/USD on April 5, 2011 to Rs 57.2/USD on June 22, 2012 to recover to Rs 53/USD on October 11, 2012. The rate was volatile and while RBI intervention was geared to reducing volatility, the fall in the rupee value was necessary to reflect a worsening trade imbalance. RBI intervention also improved capital flows. Apart from the price signals to consumers to conserve fuel, the policy announcements in September were also aimed at attracting foreign capital afresh with the latest reforms opening up new sectors for FDI and liberalising investment procedures for foreign investment in capital markets.

<sup>3.</sup> Research assistance by Charu Jain and Himani Gupta is gratefully acknowledged.



The Union Budget for 2012-13 provided Rs 18,800 crore for recapitalising PSU banks. Financial sector reforms were slower to come. The Pension Fund Bill and the Insurance Bill have been cleared by the Cabinet after amendments in view of the Parliamentary Committee review, and are to be placed in Parliament. The licensing of new banks is yet to get legislative approval.

Under the circumstances, the fresh impetus to financial sector growth has to come from overall economic growth. A facilitating environment is to be created by various regulatory mechanisms.

# V.2 The Policy Rates

The repo rate was increased to 8.5 per cent on October 24, 2011 from prevailing 8.25 per cent and kept at that level until April 17, 2012, when it was reduced to 8 per cent. The rate has since then remained there, although there was widespread expectation that it would be lowered at the time of the mid-quarter review in September. The decline in the inflation rate to about 7 per cent was not adequate to bring down the repo rates (Figure V.1). Instead, the CRR was reduced to 4.5 per cent on September 22, 2012, from 4.5 per cent to ensure liquidity in the banking sector to supply credit in the ensuing 'busy' season.

Monetary policy, therefore, remains restrictive as far as the cost of credit is concerned. The challenge of reviving the economy has been left to reforms and fiscal policy. However, if the reforms do not succeed in reviving investment, then the impact of high interest rates in an environment of a stagnant economy could be more adverse for the financial sector's health as well. The use of the CRR as an instrument to increase liquidity will have a moderating impact on interest rates as well. However, this is an indirect channel.

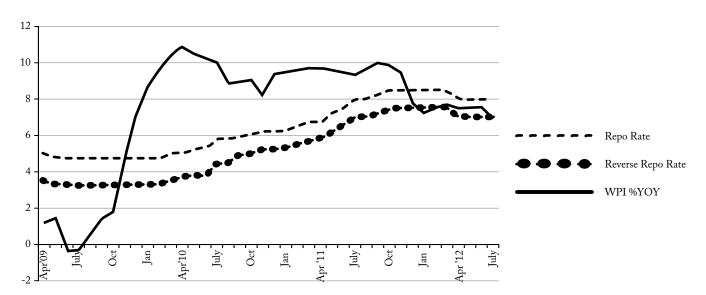


Figure V.1: Policy Rates and Inflation %

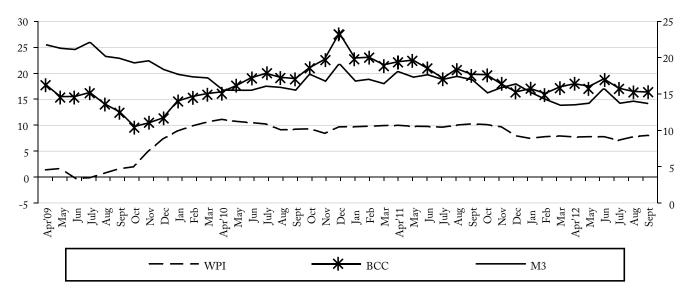
# V.3 Monetary Aggregates

The impact of the slowdown of the economy on the demand for credit and money is now more clearly seen with the growth rate of M3 dropping below 14 per cent in July and August 2012. The y-o-y growth rate was below 14 per cent during February-May 2012 and rose to 15 per cent in June.



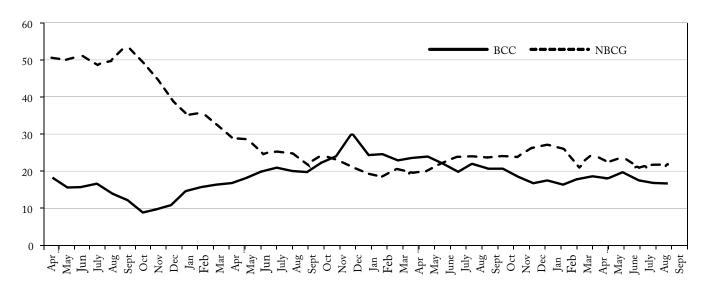
Bank Credit to the Commercial sector (BCC) has also registered lower growth for July and August, compared to the previous four months. Bank credit to the government is propping up overall growth in bank credit (Figure V.2).

Figure V.2: Money Supply and Inflation Trends (%, y-o-y)



While the deceleration in BCC is more prominent than Net Bank Credit to the Government (NBCG), growth in the latter has not accelerated but remained close to 20 per cent, much higher than the growth rate of BCC (Figure V.3). The difference in the growth of credit to the commercial sector and the government indicate the impact of high interest rates and slow growth in demand on the commercial sector and on compulsions to maintain expenditure for the government.

Figure V.3: Bank Credit to Commercial Sector (BCC) and Net Bank Credit to Central Government (%, y-o-y)





The slower growth of M3 in July and August is also reflected in the slow growth of Reserve Money (RM). RM increased by 8 per cent by end-September this year compared to its growth of 15.4 per cent in the same period in 2011.

The increase in M1 during the year ending September 2012 was more rapid than the growth in RM and also in M1 in the corresponding period the previous year. The growth in M1 was achieved by the faster growth of demand deposits in the current year compared to a negative growth in the corresponding period of the previous year. The slower growth in M3 was also reflected in the slower growth of time deposits (Table V.1). Time deposits increased by 14.3 per cent during the year ending in September 2012 compared to a growth of 20.9 per cent in the same period the previous year.

The money multipliers have increased in the current year (ratios of M3/M0 and M1/M0) compared to the period October 2011 to September 2012, indicating a more efficient use of money, but the credit multipliers (credit/deposit ratios) have declined. However, this improvement appears to be carried over from the recovery of these ratios in the 2011-12 financial year, as indicated by the greater improvement in the ratios of the money multiplier and credit-deposit during April 2011 to March 2012 (Table V.1).

Table V.1: Monetary Aggregates: Pattern of Changes in Current Year

Item	Stock end-Sept 2012	% Change over Previous Year		
	Rs '000 crore	Sept '11 over Sept '10	Sept '12 over Sept '11	March '12 over March '11
Reserve money (M0)	1,463.3	15.4	8.0	3.7
Narrow money (M1)	1,745.5	4.2	10.2	5.9
Broad money (M3)	7,799.4	16.6	13.4	13.1
Demand deposits	681.7	-7.5	6.2	-2.6
Time deposits	6,053.9	20.9	14.3	15.6
NRBICG	549.7	72.5	54.1	35.1
NBCG	2,584.4	22.0	20.1	19.4
BCC	5,127.1	19.5	16.1	17.1
NFEA Banking Sector	1,608.5	14.0	3.5	10.8
Ratios		Chan	ge in percentage po	oints
M3/M0	5.33	0.05	0.25	0.43
M1/M0	1.19	-0.13	0.02	0.03
Credit/deposit	0.75	0.01	0.01	0.01
Non-food credit/ deposit	0.74	0.01	0.01	0.02

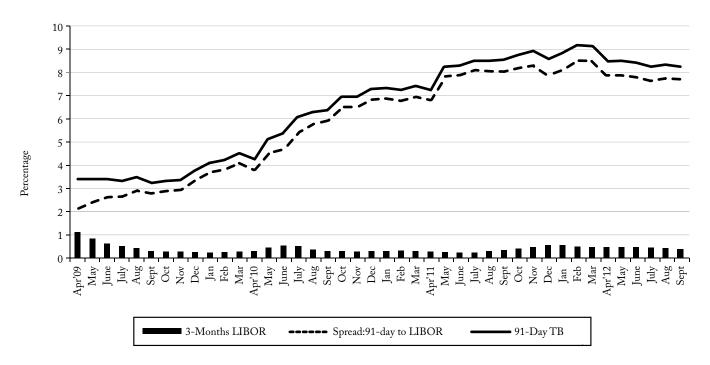
The key point emerging from the review of monetary aggregates is that commercial credit demand has slowed while the growth in demand for credit by the government has remained high.



#### V.4 The Financial Markets

Even as policy rates have remained stuck because of slower economic growth, the demand for credit has increased more slowly, as pointed out earlier. The increase in government demand for credit has offset some of this increase. However, because of the slower growth in commercial credit, the government has benefitted in the form of a lower rate of interest on treasury bills (Figure V.4). The use of CRR to improve the availability of funds and the cost of funds to commercial banks may also have helped bring down the interest rate on 91-day T-bills.

Figure V.4: Interest Rate Structure: 91-day Treasury Bill Rates and 3-month Libor Rate and Spread



A heightened challenge for monetary management during the course of the year was the forex market. As we noted earlier, the rupee depreciated sharply between April 2011 and June 2012. Since then, there has been some stability at the new exchange rate of about Rs 50/USD (Figure V.5). The drawdown of forex reserves to finance the large Current Account Deficit (CAD) led to pressures on the rupee. The reliance on capital inflows alone to sustain forex reserves was also proving to be inadequate, given the uncertainty on capital inflows in the current global economic environment. In this sense, the depreciation of the rupee was a strong signal to narrow the CAD and at the same time improve conditions for capital inflows.

The overall economic conditions, where investment conditions were unattractive, also impacted on the stock markets. One barometer of sentiments is the stock price index, the BSE Sensex. The index remained on a declining trajectory from April 2011 to December 2011 with some upturn in the new year, 2012. However, this upturn was short lived and sustained improvement has only begun since July 2012. The current improvement also tracks the improvement in the US stock market (Figure V.6).



Figure V.5: Trends in the Rupee Exchange Rate

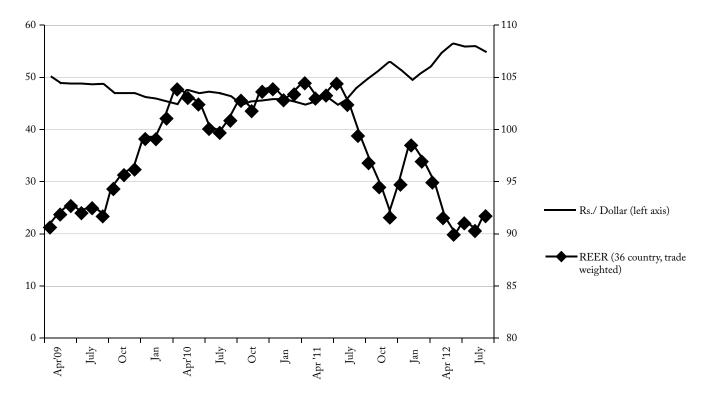
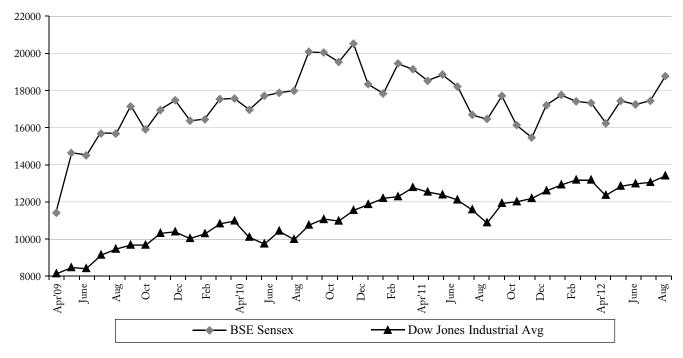


Figure V.6: The BSE Sensex (month-end) and Dow-Jones Industrial Average



Indian stock markets respond to global capital market conditions, but sustained improvements will require an upturn in global markets. However, a more attractive investment climate is likely to attract more capital to finance new investments and lay the ground for the recovery of India's economic growth.



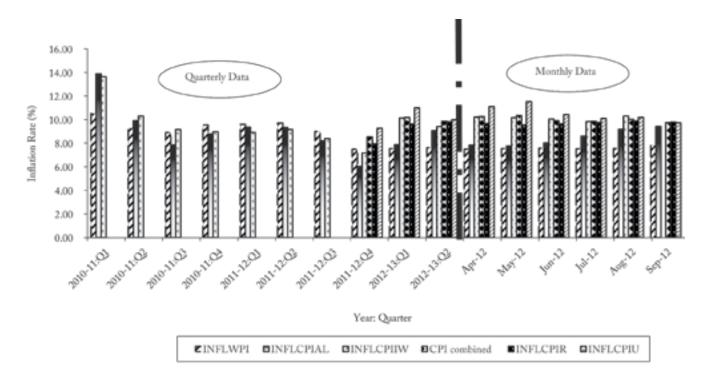
# VI. Prices

By Bornali Bhandari

### VI.1. Inflation Rates

Quarterly trends over the past two years show that the inflation rate (from various indicators) came down significantly after Q1:2010-11. However, the first six months of the current fiscal year (2012-13) shows a reversal of the trends, i.e., inflation is increasing again with the latest monthly data giving mixed signals for the future (Figure VI.1). Six indicators are used to assess inflation. They are calculated on a year-on-year (y-o-y) basis from their respective price indices which are: the Wholesale Primary Index (base year 2004-05), the Consumer Price Index of Industrial Workers (base year 2001), the Consumer Price Index of Agricultural Labour (base year 1986-87), Consumer Price Index Rural, Consumer Price Index Urban, and the Consumer Price Index Combined (base year 2010).

Figure VI.1: Year-on-Year Inflation Rate, Q1: 2010-11 to Q2: 2012-13 and April 2012-September 2012



**Sources:** Office of the Economic Advisor, Government of India, Labour Bureau, Government of India and Ministry of Statistics & Programme Implementation, Government of India.

Note: Q2:2012-13 excludes September data for the Consumer Price Index of Industrial Workers.



The primary indicator for inflation in India is calculated from the Wholesale Primary Index (INFLWPI). From its monthly trends (y-o-y inflation rate calculated using monthly data), one may infer that inflation is being brought under control and is stabilising, although it is still significantly above 5 per cent. The INFLWPI has averaged around 7.55 per cent between April and September 2012, and showed a marginal increase to 7.81 per cent in September 2012. Y-o-y inflation rates calculated from quarterly data also show similar trends. Similarly, the inflation rate calculated from the Consumer Prices Index of Industrial Workers (INFLCPIIW) has averaged 10.12 per cent in the first six months of the current fiscal year (2012-13). Without including the September index, the y-o-y INFLCPIIW, calculated using quarterly data, dropped to single digits in Q2:2012-13. Similarly, inflation from the Consumer Price Index Rural (INFLCPIR) has averaged around 9.72 per cent between April and September 2012, although it shows signs of marginal weakening between August (9.9 per cent) and September 2012 (9.79 per cent).

In contrast, the y-o-y inflation rate calculated from the Consumer Price Index of Agricultural Labour (INFLCPIAL) shows a steady increase, from 7.84 per cent in April 2012 to 9.43 per cent in September 2012. The quarterly data also reflects similar trends.

The inflation rate calculated from the Consumer Price Index of Urban (INFLCPIU) has averaged around 10.51 per cent between April and September 2012, although there was a decline between August (10.19 per cent) and September (9.72 per cent) of 2012. The Consumer Price combining Rural and Urban (INFLCPI) also declined from 10.03 per cent in August 2012 to 9.73 per cent in September 2012. In the last six months, the INFLCPI has averaged 10.03 per cent. Whether the September data are a blip or a firm trend, is a matter of speculation which only time can tell.

However, one may firmly conclude that the inflation rate remains uncomfortably high. Any shock can only worsen the scenario, i.e., have an upward pressure on the inflation rate. This statement is further supported by calculating inflation in an alternative manner. After de-seasonalising the data and calculating month-on-month inflation rates (Table VI.1), the INFLWPI jumps up from 8.65 per cent in August 2012 to 12.28 per cent in September 2012. This is perhaps not surprising given that diesel prices were raised in September. Further, the late and uneven monsoon affected food prices fruits and vegetables were affected in the first quarter and cereals and grains in the second quarter of the current fiscal. Essentially, the upward pressure on food inflation remained in one form or the other.

The rest of the chapter examines the Wholesale Price Index in detail, and attempts to understand the factors driving it and to identify the risk factors.

Table VI.1: Wholesale Price Index, April 2011 to September 2012

I	II	II
Year: Month	Y-o-y Inflation Rate	M-o-m Inflation Rate
2011M04	9.74	8.96
2011M05	9.56	4.51
2011M06	9.51	5.95
2011M07	9.36	5.91
2011M08	9.78	8.02



Table VI.1: Wholesale Price Index, April 2011 to September 2012 (Contd...)

I	II	II
Year: Month	Y-o-y Inflation Rate	M-o-m Inflation Rate
2011M09	10.00	10.18
2011M10	9.87	8.93
2011M11	9.46	4.08
2011M12	7.74	6.52
2012M01	7.23	5.32
2012M02	7.56	10.11
2012M03	7.69	10.11
2012M04	7.50	6.72
2012M05	7.55	5.82
2012M06	7.58	6.54
2012M07	7.52	5.84
2012M08	7.55	8.65
2012M09	7.81	12.28

**Source:** Office of the Economic Advisor.

### VI.2 Wholesale Price Index

The WPI has three major components – primary articles (WPIP), fuel and power (WPIF) and manufactured products (WPIM). The very small increase in the y-o-y WPI inflation rate (from monthly and quarterly data) is due to the fact that two of three components' prices increased and one declined marginally (Table VI.2). While the y-o-y inflation rate calculated from monthly data on primary articles declined from 10.08 per cent in August 2012 to 8.77 per cent in September 2012, the inflation rates increased for fuel and power (8.32 per cent in August 2012 to 11.88 per cent in September 2012) and manufacturing (6.14 per cent in August 2012 to 6.26 per cent in September 2012). The increase in WPIM inflation is especially striking if one looks at y-o-y inflation from quarterly data – 5.29 per cent in Q1:2012-13 versus 6.09 in Q2:2012-13.

Table VI.2: Year-on-Year Inflation Rate of the Components of WPI, Q1:2010-11 to Q2:2012-13 and April 2012-September 2012

Period	WPI	Primary Articles	Fuel and Power	Manufacturing	Core
Q1:2010-11	10.54	20.67	13.98	5.97	8.16
Q2:2010-11	9.28	17.73	12.28	5.30	7.24
Q3:2010-11	8.91	17.03	10.87	5.18	7.27



Table VI.2: Year-on-Year Inflation Rate of the Components of WPI, Q1:2010-11 to Q2:2012-13 and April 2012-September 2012 (Contd...)

Period	WPI	Primary Articles	Fuel and Power	Manufacturing	Core
Q4:2010-11	9.56	15.92	12.10	6.35	7.97
Q1:2011-12	9.60	13.09	12.74	7.38	9.27
Q2:2011-12	9.71	12.05	12.99	7.87	9.71
Q3:2011-12	9.01	7.76	15.08	7.95	9.53
Q4:2011-12	7.50	6.70	14.94	5.89	7.64
Q1:2012-13	7.54	9.87	11.90	5.29	6.29
Q2:2012-13	7.63	9.79	12.80	6.09	5.99
April 2012	7.50	9.55	12.10	5.27	6.48
May 2012	7.55	10.31	11.53	5.24	6.39
June 2012	7.58	9.75	12.07	5.37	6.05
July 2012	7.52	10.54	8.39	5.87	5.21
August 2012	7.55	10.08	8.32	6.14	5.83
September 2012	7.81	8.77	11.88	6.26	6.95

Source: Office of the Economic Advisor, Government of India.

**Note:** Base year: 2004-05.

The increase in fuel and power inflation can be explained by the increase in the price of diesel. The increase in manufacturing inflation, especially when production growth is so low, is worrisome unless it signals higher demand in the economy (which could spur production).

From the quarterly data, one may infer that core inflation has decreased (to 9.71 per cent in Q2:2011-12 versus 5.99 per cent in Q2:2012-13). However, the y-o-y inflation rate calculated using monthly data shows that the inflation rate has increased for two months continuously, from 5.21 per cent in July 2012 to 6.95 per cent in September 2012. This is worrisome, considering that it leaves out the more volatile items like food and energy. It indicates strengthening of inflation rates.

# VI.3 Primary Articles

The three components of inflation are further examined in detail to understand what sub-components are driving these categories. Both the quarterly and monthly y-o-y inflation rates indicate weakening of the primary articles inflation rate. Primary articles inflation is decomposed into three major categories – food articles, non-food articles and minerals (Table VI.3). Y-o-y inflation rates using quarterly data shows that the inflation rates of food articles and minerals have slightly weakened but the rate for non-food articles has increased between the first and second quarter of the current fiscal.

The monthwise data shows that y-o-y inflation rates for food have started to decline (from 10.91 per cent in June 2012 to 7.86 per cent in September 2012). This is directly proportional to the pattern of rainfall.



With deficient rainfall in June 2012, food inflation shot up, but declined with the spread of the southwest monsoon from July 2012.

Non-food articles inflation increased from 1.4 per cent in April 2012 to 13.75 per cent in August 2012, before showing a decline (to 10 per cent) in September 2012. The minerals inflation rate declined from 15.91 per cent in April 2012 to 7.58 per cent in June 2012 before increasing again to touch 12.38 per cent in September 2012.

With both non-food articles and minerals inflation in double digits, primary articles inflation remains high.

Table VI.3: Year-on-Year Inflation Rate of Major Categories in WPI for Primary Articles, Q1:2010-11 to Q2:2012-13 and April 2012-September 2012

Period	Primary Articles	Food Articles	Non-Food Articles	Minerals
Q1:2010-11	20.67	20.94	16.21	27.13
Q2: 2010-11	17.73	16.56	17.30	27.29
Q3:2010-11	17.03	13.26	25.56	29.81
Q4:2010-11	15.92	12.36	29.39	16.33
Q1:2011-12	13.09	8.83	22.23	25.48
Q2:2011-12	12.05	9.14	16.16	24.48
Q3:2011-12	7.76	6.34	4.15	23.67
Q4:2011-12	6.70	5.05	-0.89	32.52
Q1:2012-13	9.87	10.82	5.64	11.66
Q2:2012-13	9.79	9.05	12.34	10.26
April 2012	9.55	10.92	1.40	15.91
May 2012	10.31	10.63	8.57	11.49
June 2012	9.75	10.91	7.18	7.58
July 2012	10.54	10.17	13.34	8.65
August 2012	10.08	9.14	13.75	9.74
September 2012	8.77	7.86	10	12.38

Source: Office of the Economic Advisor, Government of India.

**Note:** Base year: 2004-05.

#### VI.4 Food Articles

The food articles inflation rate has dropped in the second quarter of the current fiscal after shooting up to double digits (10.82 per cent) in the first quarter. The y-o-y food inflation rate using monthly data shows similar trends (Table VI.4). This downward movement in the second quarter of the current fiscal is driven



by a fall in the inflation rate of fruits and vegetables (14.4 per cent in Q1:2012-13 to 5.28 per cent in Q2:2012-13), milk (11.56 per cent in Q1:2012-13 to 6.98 per cent in Q2:2012-13) and eggs, meat and fish (EMF, 17.12 per cent in Q1:2012-13 to 14.23 per cent in Q2:2012-13). The EMF inflation rate has been declining steadily since April 2012 but it remains in the double digits. Deceleration of the condiments and spices inflation rate seems to have slowed down but continues to be negative. The two items which show an increase in food inflation are cereals and grains and other food articles (tea and coffee). Both show increasing trends (using both monthly and quarterly data) and are in the double digits.

Table VI.4: Year-on-Year Inflation Rate of Major Categories in Food Articles in WPI, Q1:2010-11 to Q2:2012-13 and April 2012-September 2012

Period	Food Articles	Food Grains (Cereals and Pulses)	Fruits and Vegetables	Milk	Eggs, Meat and Fish	Condiments and Spices	Other Food Articles
Q1:2010-11	20.94	12.52	16.37	27.49	41.01	37.10	-17.61
Q2: 2010-11	16.56	6.88	9.50	25.67	29.28	38.39	-9.87
Q3:2010-11	13.26	0.93	15.26	19.13	21.76	30.60	-3.28
Q4:2010-11	12.36	-0.66	25.23	10.14	13.98	29.68	3.65
Q1:2011-12	8.83	0.51	16.11	6.84	9.17	14.47	22.62
Q2:2011-12	9.14	4.29	14.93	10.15	10.64	0.49	20.90
Q3:2011-12	6.34	4.75	1.71	11.02	12.32	-3.83	18.43
Q4:2011-12	5.05	5.62	-5.26	13.08	18.55	-18.07	14.21
Q1:2012-13	10.82	8.20	14.40	11.56	17.12	-18.18	10.01
Q2:2012-13	9.05	14.73	5.28	6.98	14.23	-12.51	13.24
April 2012	10.92	7.64	11.04	15.68	17.54	-14.79	11.69
May 2012	10.63	7.75	14.81	11.90	17.13	-20.44	8.28
June 2012	10.91	9.21	17.58	7.46	16.69	-19.25	10.21
July 2012	10.17	11.87	10.51	8.01	16.59	-13.71	8.11
August 2012	9.14	15.09	5.38	6.68	13.77	-10.86	14.26
Sep. 2012	7.86	17.20	0.05	6.25	12.44	-12.96	17.45

Source: Office of the Economic Advisor, Government of India.

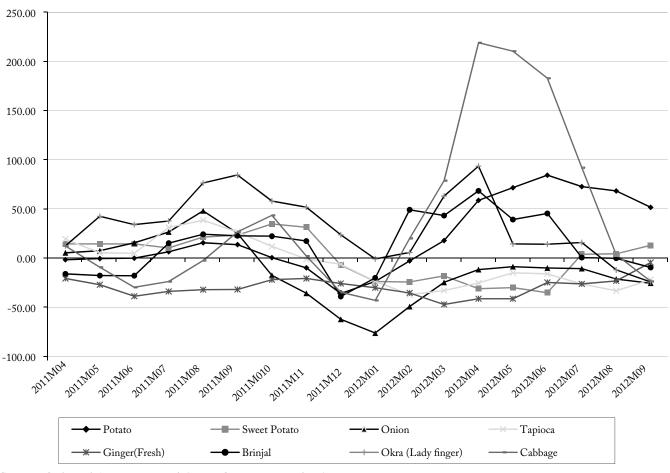
**Note:** Base year: 2004-05.

Fruits and vegetables inflation has been through a roller coaster ride in the last three quarters mainly due to the rise in the prices of vegetables, so that inflation has increased from being in the negative (-11.52 per cent in Q4:2011-12) to 53.79 per cent in Q1:2012-13, and declining in the next quarter to 11.88 per cent. Figure P.2 traces the trends in the prices of selected vegetables produced throughout the year using y-o-y inflation rates from monthly data. It shows that four vegetables, potatoes, brinjals, okra and cabbage, drove



vegetable price in April-June 2012. In contrast, the fruit inflation rate was in negative territory in the first quarter of the current fiscal (-9.11 per cent in Q1:2012-13), and rose in Q2:2012-13 to 1.84 per cent. The fruit inflation rate showed signs of spiking in September 2012, with a 7 per cent inflation rate.

Figure VI.2: Four Vegetables Responsible for Vegetables Price Hike in April-June 2012, April 2011-September 2012



Source: Office of the Economic Advisor, Government of India.

**Note:** Base year: 2004-05.

In the case of cereals and pulses, the latter has had a double-digit inflation rate since October 2011 (with the exception of February 2012). It increased further in June 2012 (to 20.6 per cent) and to 34.4 per cent in August 2012 (Figure VI.3). The pulses inflation rate weakened slightly in September 2012 to 29.3 per cent. Cereals, in contrast, experienced relatively low inflation, which shows signs of increasing from May 2012. It reached double- digit inflation in August 2012 and was at 14.3 per cent in September 2012. The uneven monsoon may explain this phenomenon, but given that the government is holding record levels of grains, better food management could have mitigated this hike.

In conclusion, food inflation continues to be worrisome. The good news is that milk inflation seems to have come down to single digits. While fruits and vegetables inflation after spiking for one quarter has come down, cereals and pulses inflation has raised its dormant head.



40.0 35.0 30.0 25.0 20.0 15.0 10.0 0.0 2012M08 2011M07 2011M05 2011IM06 2011IM09 2011M10 2011M12 2012M02 2012M04 2012M06 2012M07 2012M09 2011M11 2012M03 2012M05 2012M01 -5.0-10.0-15.0Cereals - Pulses

Figure VI.3: Cereals and Pulses Inflation Rate, April 2011-September 2012

Source: Office of the Economic Advisor, Government of India.

**Note:** Base year: 2004-05.

### VI.5 Non-Food Articles

The non-food articles inflation rate increased from -0.89 per cent in Q4:2011-12 to 12.34 per cent in Q2:2012-13 (Table VI.5). De-composing this, one finds that oilseeds inflation is the major component placing upward pressure on inflation rate. The fibres inflation rate significantly declined in the last quarter of the last fiscal and the first quarter of the current fiscal, and in the second quarter of the current fiscal it was 1.04 per cent. The y-o-y inflation rate calculated using monthly data shows that the fibres price jumped up between June (-12.7 per cent) and July (5.9 per cent) and has declined to -5.7 per cent in September 2012.

Oilseeds inflation has been in double digits since Q1:2011-12 and has increased from 10.79 per cent in Q3:2011-12 to 27.33 per cent in Q2:2012-13. Figure VI.4 shows the y-o-y inflation rate using month-on-month data for the various commodities that make up oil seeds. Of 11 oilseeds, only three



(copra, safflower and castor) show a deceleration in inflation. Sunflower inflation is the only one in single digits. The upward pressure on most oilseeds seems to have begun from June 2012 (i.e., as a result of the uneven monsoon). Since these are used to make oil for cooking, they indirectly contribute to food inflation.

Table VI.5: Year-on-Year Inflation Rate of Major Categories of Non-Food Articles in WPI, Q1:2010-11 to Q2:2012-13 and April 2012-September, 2012

Period	Non-Food Articles	Fibres	Oil Seeds	Other Non- food Articles	Flowers
Q1:2010-11	16.21	17.00	3.60	40.99	-13.74
Q2: 2010-11	17.30	22.73	3.16	40.80	-14.24
Q3:2010-11	25.56	44.80	4.60	39.82	28.18
Q4:2010-11	29.39	77.69	7.39	29.15	6.12
Q1:2011-12	22.23	62.69	11.64	14.72	-12.81
Q2:2011-12	16.16	29.78	15.08	12.20	-6.88
Q3:2011-12	4.15	1.39	10.79	7.93	-38.00
Q4:2011-12	-0.89	-26.05	11.86	7.77	4.09
Q1:2012-13	5.64	-20.84	18.11	16.07	-5.38
Q2:2012-13	12.34	1.04	27.33	6.63	-7.23
April 2012	1.40	-31.0	16.7	15.2	10.4
May 2012	8.57	-16.5	19.1	20.2	-10.4
June 2012	7.18	-12.7	18.5	12.9	-13.1
July 2012	13.34	5.9	25.5	7.5	-3.8
August 2012	13.75	3.5	28.3	7.9	-8.7
Sep. 2012	10	-5.7	28.1	4.6	-8.9

**Note:** Base year: 2004-05.

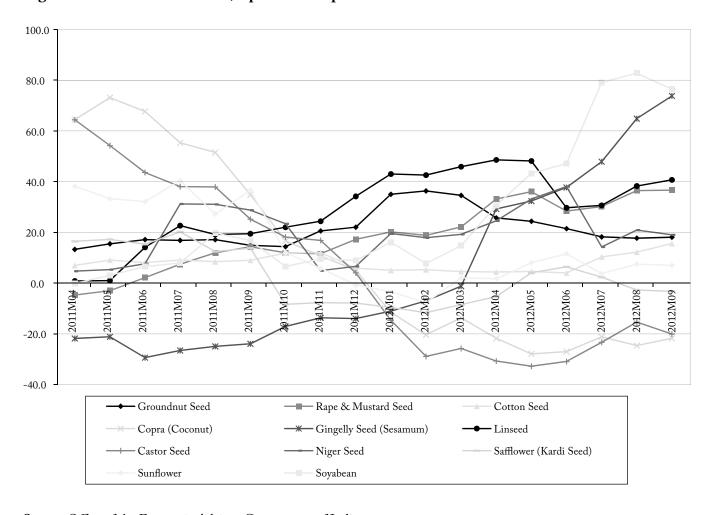
Source: Office of the Economic Advisor, Government of India.

The other non-food articles inflation rate was in the double digits in the first three months of the current fiscal before steadily declining (see Box VI.1). The inflation rate for flowers has been constantly decelerating in the first half of the current fiscal.

In conclusion, oilseeds inflation is an added cause of worry for the policymaker.



Figure VI.4: Oilseeds Inflation, April 2011-September 2012



Source: Office of the Economic Advisor, Government of India.

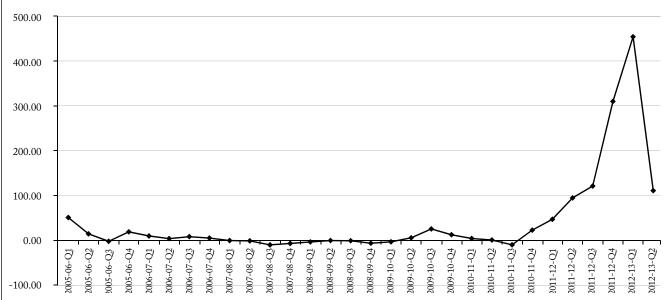
**Note:** Base year: 2004-05.



### Box VI.1: The Case of the Guar Seed

Guar seed is a major item in the other non-food articles category of non-food articles. WPI of non-food articles showed double-digit inflation in the first quarter of the current fiscal. Digging further, one found that guar seed had very high inflation in triple digits. Figure VI.5 shows that inflation in this commodity is a recent feature, i.e., after Q4:2010-11.

Figure: VI.5: Guar Seed Inflation, Q1:2004-05 to Q2:2011-12



Source: Office of the Economic Advisor, Government of India.

**Note:** Base year: 2004-05.

What is this commodity and why did it experience such rapid inflation?

"Guar, also known as the cluster bean, is an annual legume crop that provides a natural source of hydrocolloid (substance that forms a thick solution at low concentrations with water). Guar plant is a rough-to-touch, bushy plant, with an ability to thrive even in drought-like conditions, so it is cultivated mostly in arid and semi-arid areas. Guar beans have a large endosperm that contains galactomannon gum, a substance which forms a gel in water. This is commonly known as guar gum, and is used as a thickening agent and additive in food products such as instant soups, ice creams and processed meat products. Guar gum is also used for applications in paper, textiles, ore floatation, explosives and fracturing of oil and natural gas formations. The US and Canada are major buyers of guar seed in the international market.

India is the foremost producer of guar seed in the world, contributing nearly 80 per cent of the world's total guar seed production. Guar has been cultivated in India and Pakistan for ages, as its tender pods are used as fresh vegetables and other parts of the plant can be used as cattle feed. The world total production is around of 7 lakh tons. Guar is also known to be cultivated in Texas, US (introduced by India in 1903), some parts of South Africa, Malawi etc., but not in very large commercial quantities. In India, the major producing states of guar seed are Rajasthan, Haryana, Gujarat and Punjab. Uttar Pradesh and Madhya Pradesh also produce guar seed, but their output is low. Rajasthan contributes over 70 per cent of India's total production. Haryana and Gujarat place themselves at the second and third position sharing approximately 12 per cent and 11 per cent respectively. (www.ucxindia.com)



The reason for the rapid increase in guar prices lies a couple of thousand miles apart. The US has been able to reduce its total carbon-dioxide emissions because it has recently shifted from oil to natural gas (*Economist*, May 2012). This has happened because natural gas has become cheaper because of the employment of fracking technology which is used to extract natural and shale gas from beneath the Earth's surface (CNN, September 2012).

Where does guar gum fit into this story? Guar gum is a key ingredient in the fracking process with little available substitutes. The increased use of fracking technology to extract natural gas in the US has resulted in increased demand for this product thereby pushing up the prices and benefitting the farmers in Rajasthan.

**Sources:** http://www.ucxindia.com/Guar%20Seeds/M\_\_29 http://www.economist.com/blogs/schumpeter/2012/05/americas-falling-carbon-dioxide-emissions http://edition.cnn.com/2012/09/09/world/asia/india-guar-bean-fracking/index.html

### VI.6 Minerals

The minerals inflation rate has significantly declined from the high of 32.52 per cent in Q4:2011-12 to 10.26 per cent in Q2:2012-13 (Table VI.6), mainly because of the fall in the inflation rate of crude petroleum (from 51.02 per cent to 7.85 per cent in the same two time periods). However, this was counterbalanced by the rise in inflation of both metallic and other minerals.

Table VI.6: Year-on-Year Inflation Rate of Major Categories of Minerals in WPI, Q1:2010-11 to Q2:2012-13 and April 2012-September 2012

Period	Minerals	Metallic Minerals	Other Minerals	Crude Petroleum
Q1:2010-11	27.13	36.57	0.53	22.37
Q2: 2010-11	27.29	59.39	1.44	8.17
Q3:2010-11	29.81	65.91	7.43	8.55
Q4:2010-11	16.33	24.68	10.72	9.67
Q1:2011-12	25.48	11.70	10.30	40.60
Q2:2011-12	24.48	7.00	11.71	43.76
Q3:2011-12	23.67	4.91	4.05	44.93
Q4:2011-12	32.52	16.74	7.09	51.02
Q1:2012-13	11.66	9.70	15.76	12.85
Q2:2012-13	10.26	12.39	19.24	7.85
April 2012	15.91	6.49	6.61	24.41
May 2012	11.49	8.90	15.68	13.13
June 2012	7.58	13.85	25.47	1.39
July 2012	8.65	9.48	20.24	7.00
August 2012	9.74	12.76	18.19	6.62
September 2012	12.38	15.05	19.31	9.84

Source: Office of the Economic Advisor, Government of India.

**Note:** Base year: 2004-05.



Although in single digits so far, the y-o-y inflation rates using monthly data show an upward trend for crude petroleum inflation (9.84 per cent in September 2012). Similar trends are seen for metals (15.05 per cent in September 2012) and other minerals (19.31 per cent in September 2012). These increases are probably due to some recovery of developed economies which fuel an increased demand for metals.

In essence, minerals inflation may rise again in the next quarter, thereby adding to Indian inflation.

#### VI.7 Fuel and Power

Fuel and power inflation (Table VI.7) increased from 11.9 per cent in Q1:2012-13 to 12.8 per cent in Q2:2012-13 driven by the increase in the price of electricity (from 8.56 per cent in Q1:2012-13 to 16.52 per cent in Q2:2012-13). Coal inflation stayed put at 13.92 per cent in the second quarter of the current fiscal. Mineral oil shows a significant decline from 12.23 per cent in the first quarter of the current to 6.91 per cent in the second quarter. The four major sensitive components show a decline.

Using monthly data, the y-o-y inflation rate of mineral oil actually doubled from 5 per cent in August 2012 to 10.8 per cent in September 2012. This is mainly due to the rise in high-speed diesel which went up from 0.36 per cent in August 2012 to 8.94 per cent in September 2012. Since the increase in diesel prices was announced only in mid-September, one sees only the partial price rise.

Fuel and power inflation is expected to strengthen next quarter as India feels the full impact of the rise in the price of diesel. There is no respite from inflation overall in this category in the coming few months.

Table VI.7: Year-on-Year Inflation Rate of Major Categories in Fuel and Power in WPI, Q1:2010-11 to Q2:2011-12 and April 2012-September 2012

Period	Fuel and	Coal	Mineral		Mi	neral Oil		Electricity
	Power		Oil	LPG	Petrol	Kerosene	High-	
							Speed	
							Diesel	
Q1:2010-11	13.98	7.95	17.84	4.75	18.53	2.97	16.31	6.86
Q2: 2010-11	12.28	7.95	15.17	15.30	15.36	35.44	14.64	6.15
Q3:2010-11	10.87	1.37	15.00	15.19	18.85	35.44	14.69	4.97
Q4:2010-11	12.10	5.73	16.15	14.99	26.36	35.44	11.01	3.59
Q1:2011-12	12.74	13.25	16.05	11.61	26.59	33.54	5.86	0.27
Q2:2011-12	12.99	13.25	16.49	14.53	24.25	18.33	9.32	-0.32
Q3:2011-12	15.08	13.25	18.84	14.27	25.25	18.33	9.27	2.63
Q4:2011-12	14.94	21.97	16.02	14.27	13.02	18.33	9.24	4.00
Q1:2012-13	11.90	13.92	12.23	14.03	11.48	16.55	8.42	8.56
Q2:2012-13	12.80	13.92	6.91	0.79	8.28	1.46	3.10	16.52
April 2012	12.10	13.9	13.7	15.5	12.0	18.3	9.24	4.0
May 2012	11.53	13.9	12.7	15.4	10.5	18.3	9.24	4.0
June 2012	12.07	13.9	10.3	11.3	11.9	13.1	6.81	17.7
July 2012	8.39	13.9	4.9	0.7	8.7	0.6	0.00	17.7
August 2012	8.32	13.9	5.0	0.6	9.5	1.6	0.36	17.7
Sep. 2012	11.88	13.9	10.8	1.1	6.7	2.2	8.94	14.2

Source: Office of the Economic Advisor, Government of India.

**Note:** Base year: 2004-05.



### VI.8 Manufacturing

Manufacturing inflation shows an upward trend in both quarterly and monthly data (Table VI.8). This is due to the rise in capital goods inflation and consumer goods inflation, especially nondurable goods. Basic goods inflation stays stagnant but is very high at 9.66 per cent between the first and second quarters of the current fiscal. Y-o-y capital goods inflation using monthly data shows slight weakening in September 2012. In the case of intermediate goods, the quarterly data shows weakening between the first and second quarters of 2012, while the monthly y-o-y inflation shows strengthening from August onwards, increasing from a low of 3.78 per cent in July 2012 to 7.64 per cent in September 2012. Similar weakening trends are observed in y-o-y consumer durables inflation using both quarterly and monthly data.

An increase in the inflation rate of basic and intermediate goods would lead to higher prices for the rest of the economy. The analysis of manufactured goods does not offer any respite from inflation. It is much lower than before but the strengthening trends indicate continued inflation problems.

Table VI.8: WPI-Based Year-on-Year Inflation Rate by Use-Based Classification, Q1:2010-11 to Q2:2012–13:Q2 and April 2012–September 2012

Period	Manufacturing	Basic Goods	Capital Goods	Intermediate Goods	Consumer Goods	Consumer Durables	Consumer Non-
							Durables
Q1:2010-11	5.97	9.15	3.23	10.94	5.76	4.02	6.32
Q2: 2010-11	5.30	8.11	3.41	9.80	5.09	6.10	4.77
Q3:2010-11	5.18	7.79	3.65	10.38	3.90	7.47	2.87
Q4:2010-11	6.35	8.07	3.84	12.52	4.03	7.70	2.98
Q1:2011-12	7.38	8.65	2.45	12.66	7.83	9.02	7.43
Q2:2011-12	7.87	10.00	3.03	11.46	8.89	10.86	8.32
Q3:2011-12	7.95	11.71	3.41	11.75	8.36	10.89	7.55
Q4:2011-12	5.89	10.74	2.38	7.94	6.75	9.41	5.89
Q1:2012-13	5.29	9.67	2.13	5.98	5.89	8.30	5.20
Q2:2012-13	6.09	9.66	2.89	5.37	6.31	6.47	6.25
April 2012	5.27	10.40	1.63	5.87	6.44	8.64	5.77
May 2012	5.24	9.49	2.32	6.17	5.87	8.61	5.05
June 2012	5.37	9.19	2.46	5.88	5.41	7.61	4.73
July 2012	5.87	8.66	2.98	3.78	5.68	7.67	5.07
August 2012	6.14	10.35	3.05	4.60	6.41	5.96	6.54
Sep. 2012	6.26	9.94	2.67	7.64	6.81	5.80	7.13

**Source:** Office of the Economic Advisor, Government of India and NCAER.

Note: Base Year: 2004-05

### VI.9 Worldwide Inflation Trends Commodity Price Inflation

The average spot price of crude oil remained the same between Q2:2012 and Q3:2012. This low level of crude oil inflation is also reflected in the Indian trends. However, due to past misalignment of prices, this relatively low level of crude oil inflation is not reflected in fuel and power inflation.



Indian trends do not match worldwide trends for most commodities. There is a global deceleration in the prices of almost all commodities which is not reflected in Indian prices. Notable exceptions (where Indian price trends match world trends) are fats and oil which have double-digit inflation, and food and grain inflation: adverse weather has affected grain production worldwide, driving up the prices of grains.

140.0 120.0 100.0 80.0 60.0 40.0 20.0 0.0 Average, Spot Brent Dubai Texas Intermediate Commodity ■2011:Q4 ■2012:O1 ■2011:O2 ■2011:O3

Figure VI.6: Crude Oil, Q1:2011-Q3:2012

**Source:** World Bank pink sheets.

**Note:** Crude oil, average spot price of Brent, Dubai and West Texas Intermediate, equally weighed crude oil, U.K. Brent 38` API, f.o.b. U.K ports, spot price crude oil, Dubai Fateh 32` API, f.o.b. Dubai, spot price crude oil, West Texas Intermediate (WTI) 40` API, f.o.b. Midland Texas, spot price.

### VI.10 Conclusion

Inflation has come down from the 9 per cent range since the beginning of the calendar year 2012, but after its declining trend, seems to be firming up again. Uncertain weather and poor management of food has kept food inflation high, with one or more categories of food being affected. Even non-food inflation has been affected. Although inflation in crude oil has come down, fuel and power inflation has risen because of an increase in diesel prices. Manufacturing prices are also showing increasing trends.

While the policy permitting FDI in retail has definitely been good news, far-reaching structural reforms are needed to get India out of this high inflation phase. A flexible economy with flexible prices could possibly break India's spiral of high inflation.



Table VI.9: Year-on-Year Inflation Rate of Major Commodities for Low- and Middle-Income Countries, Q4:2011- Q3:2012

Commodity	Y-o-Y Change	Y-o-Y Change	Y-o-Y Change	Y-o-Y Change
•	2011:Q4	2012:Q1	2012:Q2	2012:Q3
Energy	20.00	10.82	-7.03	-2.14
Non-energy	-4.60	-12.91	-12.85	-10.03
Agriculture	-2.65	-12.61	-10.88	-4.34
Beverages	-5.11	-21.88	-25.61	-19.41
Food	-0.45	-6.52	-2.59	5.97
Fats and oils	-7.79	-9.93	1.76	13.75
Grains	10.29	-2.87	-7.61	7.58
Other food	0.06	-4.62	-3.69	-9.14
Raw materials	-6.81	-22.25	-22.94	-22.68
Timber	9.18	0.35	-7.23	-13.36
Other raw materials	-16.71	-33.52	-32.05	-29.42
Fertilisers	30.91	12.99	2.82	-11.69
Metals and minerals c/	-12.96	-16.61	-18.95	-21.47
Base metals d/	-13.90	-15.38	-18.45	-16.62
Precious metals			34.57	-7.86

Source: World Bank Pink Sheets.

Note: 1. d/ base metals pluse iron ore; 2. e/ Includes aluminium, copper, lead, nickel, tin and zinc; 3. base year =2005.



# VII. Public Finance

By Shashanka Bhide4

# VII.1 The Backdrop of the Union Budget 2012-13

Presenting the Union Budget for 2012-13, the Finance Minister had noted that the year 2011-12 was a year in which 'recovery' was interrupted. Referring to causes for the interruption, he cited the intensification of the sovereign debt crisis in the Euro zone, the disastrous earthquake in Japan and political turmoil in the Middle East, apart from an overall global gloom. The decline in the GDP growth rate and high rate of inflation were double shocks for the economy in 2011-12. Even as the GDP growth for 2011-12 was estimated at 6.9 per cent at the time of the budget, the growth rate was revised downward by the CSO to 6.5 per cent in July.

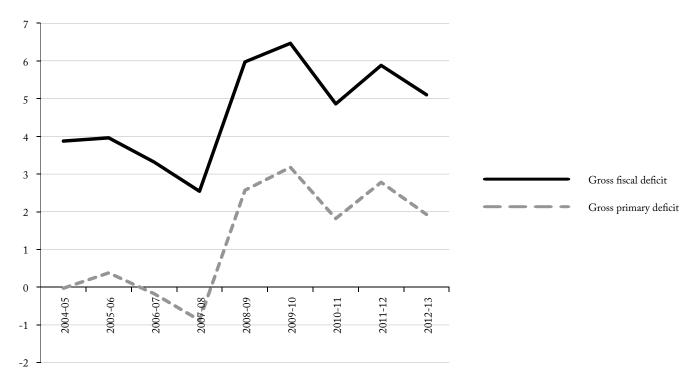
Among the few positives, a good agricultural harvest ensured more than adequate supply of rice and wheat for the PDS and a measure of stability on the food front. The glimmer of hope the budget speech identified was the recovery in some core sectors such as cement, electricity, fertilisers and coal. The speech also referred to the monetary and fiscal policy responses which were not necessarily synchronised to supplement each other: monetary policy aimed to slow down expansion while fiscal policy attempted to sustain demand through subsidies.

The budget proposed to reduce the Centre's deficits in 2012-13. The gross fiscal deficit was budgeted to decline to 5.1 per cent from the 2011-12 level of 5.9 per cent of GDP. The revenue deficit was projected to decline from 4.4 per cent to 3.4 per cent of GDP. Continuing with the practice introduced in the previous year, the budget provided estimates of expenditures in the revenue account which go towards capital formation, and calculated the "effective revenue deficit" in 2011-12 at 2.9 per cent of the GDP, compared to the conventional revenue deficit of 4.4 per cent. The projected decline in the Centre's deficits was an attempt to move towards a consolidation of fiscal accounts as the projected deficits were closer to levels in 2010-11, from the slippage seen in 2011-12 (Figure VII.1). The need to get back to the act of fiscal balance also received recognition. The Speech also projected GDP growth in 2012-13 at 7.6 per cent, with a margin of 0.25 percentage points on either side of this mark.

The move to fiscal consolidation was to be achieved by the faster growth of revenue receipts (22 per cent) and relatively more modest growth of expenditures (13 per cent) in 2012-13 (Table VII.1). The items that attracted much criticism at the time of the budget proposals were the likely under-estimation of subsidies and receipts under disinvestment ('other receipts') in the capital account. Nevertheless, the optimism of a reduced rate of inflation and higher growth drove the budget strategy.

<sup>4.</sup> Research assistance from Charu Jain and Himani Gupta are gratefully acknowledged.

Figure VII.1: Attempt at Fiscal Consolidation in 2012-13 (central government deficits as % of GDP)



**Note:** The deficits for 2011-12 are based on revised estimates and 2012-13 budget estimates, both as per the Union Budget 2012-13 (*Budget at a Glance*). For the earlier years, data are from RBI's *Handbook on the Indian Economy*.

At a broader level, a medium-term strategy on expenditure reforms was indicated with the proposed adoption of more efficient systems of delivery of subsidies in fertiliser and domestic fuels drawing on the UID platform. The budget speech also noted the objective of limiting overall Central subsidies - specified in the budget to less than 2 per cent of GDP, with a further reduction to 1.75 per cent over the next two years. At the budgeted level of Rs 190,015 crore, central subsidies were 1.9 per cent of GDP in 2012-13. Maintaining the fiscal imbalance at manageable levels would require much greater efficiency in services to achieve the same benefits as we now appear to have. The attempts to keep fuel subsidies in check by raising diesel and LPG prices have underscored the need for containing the subsidy bill to manageable levels.

Table VII. 1: Budget Proposals on Managing the Fiscal Consolidation: 2012-13

Revenue/ expenditure	Val	ue (Rs '000 cr	% change over previous year		
	2010-11	2011-12	2011-12	2012-13	
	Actual	Actual RE BE			BE/RE
Revenue receipts	788	767	936	-2.72	21.99
Tax revenue	570 642 771			12.70	20.06
Non-tax revenue	219	125	165	-42.94	31.97



Table VII. 1: Budget Proposals on Managing the Fiscal Consolidation: 2012-13 (Contd...)

Revenue/ expenditure	Val	ue (Rs '000 cr	% change over previous year		
	2010-11	2011-12	2012-13	2011-12	2012-13
Capital receipts	409	552	555	34.94	0.64
Recovery of loans	12	14	12	14.80	-18.29
Other receipts	23	15	30	-32.19	93.64
Borrowings and other liabilities *	374	522	514	39.72	-1.61
Total receipts	1,197	1,319	1,491	10.14	13.06
Non-plan expenditure	818	892	970	9.02	8.72
(Interest payments)	234	276	320	17.77	16.02
Plan expenditure	379	427	521	12.55	22.13
Total expenditure	1,197	1,319	1,491	10.14	13.06

Note: The data are from Budget at a Glance, Union Budget 2012-13.

The budget proposals also set a target of raising Rs 30,000 crore through the disinvestment route. The potential for raising large sums through the sale of 2G spectrum in telecommunications has remained alive, but actual the implementation of the sale is awaited. Although these revenues are not the best way to regain a fiscal imbalance as they are one-time sources of funds, if a clearer medium-term strategy on fiscal consolidation is in place, the one-time relief from disinvestment will ease the process of fiscal consolidation.

On the revenue front, the implementation of the Direct Tax Code and the GST is awaiting completion of the legislative process.

The 2002-03 budget actually laid out a wide range of steps to take towards reforms to improve economic growth and fiscal health.

The areas where significant financial out go in the form of incentives or subsidies have been identified, are in infrastructure. Viability Gap Funding (VGF) has been extended to a number of new sectors such as "irrigation (including dams, channels and embankments), terminal markets, common infrastructure in agriculture markets, soil-testing laboratories and capital investment in the fertiliser sector". Further, it was stated that oil and gas/LNG storage facilities and oil and gas pipelines, the fixed network for telecommunication and telecommunication towers will also be eligible sectors for VGF. Provision for tax-free bonds linked to infrastructure projects was doubled to Rs 60,000 crore in 2012-13.

The interest subsidy for lower-priced housing was extended and indirect finance through priority sector lending for housing was also enhanced. The interest subsidy for farm loans has continued, with the additional coverage of loans for the post-harvest period of six months against warehouse receipts.

The reining in of subsidies and incentives will remain a challenge unless there are actual limits at some aggregate level. The subsidies and grants to targeted groups of the population are also large. Containing the fiscal imbalance will require strategies to contain the rise in overall expenditures and improve the effectiveness of spending.



# VII.2 Moving Towards Fiscal Consolidation

The fiscal stimulus in 2008-09 continued in one form or the other in subsequent years. For instance, the revenue loss from maintaining duty cuts in the petroleum sector to keep the retail prices down was reportedly Rs 49,000 crore in 2011-12.

The direct tax slabs were raised for personal income, providing relief to tax payers. Although corporate income tax rates were not changed, recognition of the need to provide incentives for infrastructure investments was reflected in direct tax measures for spending on such investments. The balancing act of tax relief and containing expenditures is increasingly prominent as the revenue dividend from high growth is no more there. Among the measures that were initiated partly to streamline the tax system and partly to raise revenues, which became highly controversial, was the GAAR. The 2012-13 budget proposals also included measures aimed at increasing the tax base by requiring the reporting of assets held abroad, TDS on transactions in land, taxation of unexplained credits and so on. It was, however, the retrospective application of GAAR that created much heat.

The idea of a negative list of services for tax purposes introduced last year has been pursued, although the exemptions beyond the list are significant.

The service tax rate was raised from 10 to 12 per cent.

While the basic customs duty was lowered on a range of products, domestic bicycles and bicycle parts received increased protection. With many changes in duty rates, inclusion and exclusion from taxes, the next effect of changes in indirect taxes was to raise expected tax collections for the year as a result of these changes. The tax system is yet to evolve into a simpler form.

The Committee on the Roadmap for Fiscal Consolidation chaired by Vijay Kelkar has reiterated the urgency of fiscal consolidation and recommended a number of measures. In its assessment of the scenario for 2012-13, if no corrective steps are taken, the committee projects that tax revenue would be lower than budgeted, subsidy outgo would be higher than budgeted, disinvestment revenue would be lower and, consequently, the fiscal deficit is likely to be higher at 6.1 per cent of GDP compared to the budget estimate of 5.1 per cent.

The committee indicated the need to regain the tax-GDP ratio of 11.9 per cent achieved in 2007-08 in the medium term. For 2012-13, a ratio of 10.3 per cent is advocated. Disinvestment revenues are projected at Rs 30,000 crore, based on a set of measures that include a special dividend claim on cashrich PSUs if such surpluses cannot be invested profitably. The committee indicated steps to reduce major subsidies, on petroleum, fertiliser and food, bringing down the projected subsidy bill in 2012-13 from 2.6 per cent of GDP to 2.2 per cent. The recent hike in diesel price by Rs 5 per litre has actually exceeded the expectation of the committee. The committee also indicated significant savings from efficient spending in plan schemes. The overall fiscal deficit may be contained at 5.2 per cent of GDP in 2012-13 if the measures recommended by the committee are adopted.

Taking a medium-term view, till 2014-15, the committee expects the fiscal deficit to decline to 3.9 per cent of GDP in 2014-15 if a series of its recommendations are adopted. The measures include raising the tax-GDP ratio, containing subsidies, right-sizing plan spending and a set of supply-side measures.



#### VII.3 Revenue Trends in 2012-13

While slower growth in industrial output is expected to lead to slower growth in tax collections, Q1:2012-13 showed significant improvement in tax buoyancy, not only compared to Q1:2011-12 but also compared to the other quarters of 2011-12 (Figure VII. 2). This is likely to be an over-estimate, as revenue collections in the subsequent two months have decelerated. One reason for the large figure for collections is reportedly incomplete refunds made on tax payments in Q1:2012-13.

When comparing the emerging pattern of revenue and expenditure during April-August as a ratio to the budgeted levels for 2012-13, this appears to follow a pattern similar to 2011-12 (ratio-to-revised estimates). Total receipts in April-August 2011 were 24.6 per cent of the Revised Estimates (RE) for 2011-12 and in April-August 2012, the corresponding number is 23.8 per cent (Table VII.2). Net tax revenue to the Centre and net revenue receipts have increased at nearly the same pace in April-August 2012-13 compared to the same period in 2011-12, relative to annual realisations or targets. However, it must be remembered that the revenue realisation in 2011-12 turned out to be well below the budget estimates. In this sense, the performance in 2012-13 has to be seen with respect to growth over 2011-12. What is worrisome is the significantly higher levels of revenue and fiscal deficits at the end of August 2012 compared to the situation in August 2011. The fiscal deficit at the end of August was 65.7 per cent of the annual budget estimate and the revenue deficit was 79.2 per cent. In August 2011, larger deficits were incurred in subsequent months. Given that expenditure under non-plan is now 43 per cent of the budget estimates, with considerable overshooting of interest payments, the need for steps to contain deficits are necessary.

Table VII.2: Accounts of the Central Government, April-August, 2012-13

Item	2011-12 RE	2012-13 BE	April-Aug (%	April-Aug (%
	(Rs crore)	(Rs crore)	2011-12 RE)	2012-13 BE)
1. Revenue receipts	766,989	935,685	24.6	23.8
2. Tax revenue (net to Centre)	642,252	771,071	22.6	22.7
3. Non-tax revenue	124,737	164,614	35.0	29.0
4. Non-debt capital receipts	29,751	41,650	34.1	12.2
5. Recoveries of loans	14,258	11,650	63.1	32.0
6. Other receipts	15,493	30,000	7.4	4.5
7. Total receipts (1+4)	796,740	977,335	24.9	23.3
8. Non-plan expenditure (9+10)	892,116	969,900	38.1	43.0
9. On revenue account of which,	815,740	865,596	37.5	43.9
(i). Interest payments	275,618	319,759	74.6	83.2
10. On capital account	76,376	104,304	45.0	36.0
11. Plan expenditure (12+13)	426,604	521,025	30.9	28.4
12. On revenue account	346,200	420,513	32.6	28.6
13. On Capital account	80,404	100,512	24.0	27.5
14. Total expenditure (8+11)	1318,720	1490,925	35.8	37.9
15. Revenue deficit (9+12-1)	394,951	350,424	58.2	79.2
16. Fiscal deficit (14-7)	521,980	513,590	52.4	65.7

Source: Budget Documents and Controller General of Accounts, Ministry of Finance, Government of India.



The net tax revenue to the Centre and also net revenue receipts have increased at a considerably faster pace in April-August 2012-13 compared to the same period in 2011-12 (Table VII.3). The main contributor to the improved performance is direct tax revenue. If we compare the growth in April-August 2012 over the same period in 2011, service tax collections are slower in 2012-13, although the increase is still substantial. The increase in the service tax rate may have helped sustain the growth rate of this source of revenue at a reasonable level. The other indirect taxes, customs and excise have increased at a much slower pace in April-August 2012 compared to the same period in 2011. It is interesting to note that the growth rate of direct and service taxes has held its level in 2012-13 so far despite stagnating industrial growth.

Table VII.3: Quarterly Trends in Revenue Receipts: % change y-o-y

Year/ period	Net Revenue Receipts	Net Tax Revenue	Gross Tax Revenue	Corporate Income Tax	Income Tax	Customs	Union Excise Duty	Services Tax
Q1:2010-11	177.5	32.6	28.6	23.7	13.8	62.2	52.0	9.1
Q2:2010-11	15.0	22.1	23.2	14.8	13.5	61.4	35.3	20.7
Q3:2010-11	28.5	29.4	29.4	24.5	12.3	73.0	30.1	25.9
Q4:2010-11	12.8	19.6	26.8	26.8	15.0	51.8	25.7	26.0
Q1:2011-12	-54.5	-6.3	5.0	-27.8	1.9	37.7	23.2	31.1
Q2:2011-12	8.2	17.8	19.7	21.3	29.0	9.3	8.4	41.6
Q3:2011-12	3.7	5.0	9.6	10.1	15.0	3.1	-0.8	36.8
Q4:2011-12	22.7	16.4	11.6	12.0	23.1	-3.7	-0.3	36.2
Q1:2012-13	30.6	32.8	25.0	53.0	40.2	-1.2	8.0	40.7
Q2:2012-13*	6.5	6.6	9.4	12.8	17.8	11.0	13.5	-27.3
2011-12 Apr-Aug	-35.16	4.6	12.2	-12.7	12.6	27.1	17.9	37.0
2012-13 Apr-Aug	18.13	20.8	18.2	25.8	30.3	3.4	10.8	33.5

Source: Based on data from Controller General of Accounts, Ministry of Finance.

**Note:** \*= July-August

The tax-to-GDP ratio is generally lower in Q1 and highest in Q4 or Q2 compared to Q1 and Q3. In this sense, the lower tax-to-GDP ratio seen in Q1:2012-13 may improve in Q2 and Q4 this year as well, unless the increase in Q1 was an aberration to be corrected in Q2. However, given the slower growth of industrial output so far, an improvement in the ratio well above the levels seen in 2011-12 will be required to maintain the growth of government revenues. In this sense, the tax revenue performance in Q1:2012-13 is quite different from the previous year. If some sectors do well in terms of output growth in the subsequent quarters, revenue realisations would also be sustained.



Table VII.4: Revenue of Major Items (% of GDP)

Year	Net Revenue Receipts	Net Tax Rev	Gross Tax Rev	Corporate Tax	Income Tax	Customs duties	Union Excise Duties	Tax	Other Taxes	Net Non- Tax Rev
Q1:2010-11	11.6	4.9	7.5	2.6	1.4	1.7	1.1	0.6	0.1	6.7
Q2:2010-11	11.3	8.5	11.1	4.5	1.8	1.8	1.9	0.9	0.2	2.8
Q3:2010-11	9.2	7.8	10.1	3.9	1.7	1.8	1.7	0.9	0.1	1.4
Q4:2010-11	9.6	8.3	12.3	4.4	2.3	1.8	2.4	1.2	0.1	1.3
Q1:2011-12	4.5	3.9	6.7	1.6	1.2	1.9	1.2	0.7	0.1	0.6
Q2:2011-12	10.3	8.4	11.2	4.6	2.0	1.7	1.7	1.1	0.2	1.8
Q3:2011-12	8.3	7.2	9.6	3.8	1.7	1.6	1.5	1.0	0.1	1.2
Q4:2011-12	10.5	8.6	12.2	4.4	2.5	1.5	2.1	1.5	0.1	1.9
Q1:2012-13	5.2	4.6	7.4	2.2	1.5	1.7	1.1	0.8	0.1	0.6

Source: Based on data from Controller General of Accounts, Ministry of Finance.

### VII.4 Expenditure Trends in 2012-13

The growth of overall expenditure in April-August 2012-13 is much higher than in the same period of 2011-12 (Table VII.5). On the revenue account, interest payment has increased faster in 2012-13 during the period April-August and therefore the other non-plan revenue account payments have increased more slowly. Both non-plan and plan, and revenue and capital spending in April-August 2012-13 are higher than in the same period in 2011-12.

Table VII.5: Quarterly Trends in Central Government Expenditure (% change, y-o-y)

Year/ period	Total Expenditure	`	`	Non- Plan (On	Revenue		(Plan	(Plan
		Revenue Account)		Capital Account)	Account)	Account)	and Non-	and Non-
			- Interest Payments)				plan)	plan)
Q1:2010-11	23.0	0.9	13.5	110.9	62.8	48.2	17.2	83.0
Q2:2010-11	17.4	15.3	22.1	76.2	11.7	23.2	14.3	50.0
Q3:2010-11	-3.8	-0.2	0.4	-40.9	-4.7	1.8	-1.6	-22.3
Q4:2010-11	32.5	23.7	8.3	77.2	33.9	57.1	26.6	69.0
Q1:2011-12	7.8	13.7	24.8	22.4	-4.2	-6.2	7.2	12.1
Q2:2011-12	14.2	15.2	15.6	2.4	13.8	19.7	14.8	9.4
Q3:2011-12	19.4	9.4	30.8	157.1	21.8	32.8	13.1	86.4
Q4:2011-12	-2.4	7.1	5.2	-79.5	0.7	30.4	5.2	-37.7
Q1:2012-13	19.3	31.4	20.8	2.2	-25.0	36.6	20.3	12.5

(Contd...)

Table VII.5: Quarterly Trends in Central Government Expenditure (% change, y-o-y) (Contd...)

Year/ period	Total Expenditure	Non- Plan (On Revenue Account)	Revenue	Non- Plan (On Capital Account)	,		(Plan	Capital (Plan and Non- plan)
Q2:2012-13*	20.3	12.1	6.0	27.9	24.0	51.6	18.5	39.2
2011-12 Apr-Aug	5.5	11.8	17.1	-8.6	-4.1	1.9	7.0	-5.1
2012-13 Apr-Aug	19.7	24.2	13.4	9.2	6.7	43.3	19.5	21.5

Source: Based on data from Controller General of Accounts, Ministry of Finance.

**Note:** \*= July-August.

The pattern in terms of the ratio of expenditure-to-GDP also exhibits a similar faster increase in spending in Q1:2012-13 over Q1:2011-12 than seen in the previous year. The pattern is similar for plan and non-plan spending and also for revenue and capital (Table VII.6).

Table VII.6: Quarterly Trends in Central Government Expenditure (% of GDP)

Year	Total Ex-	Non-Plan	Non-Plan	Non-Plan	Plan Ex-	Plan Ex-	Revenue	Capital
	penditure		Expenditure		pendi-	pendi-	Expen-	Expen-
		,	(On Revenue	,	1	ture (On		diture
		Revenue	Account -	Capital Ac-				(Plan and
		Account)	Interest Pay-	count)	Account)	Account)		Non-
			ments)				plan)	plan)
Q1:	14.1	7.8	2.3	1.2	4.5	0.7	12.3	1.9
2010-11								
Q2:	16.8	11.1	3.6	1.1	3.9	0.8	14.9	1.9
2010-11								
Q3:	12.4	7.9	2.2	0.5	3.4	0.6	11.3	1.1
2010-11								
Q4:	18.9	11.0	4.1	2.1	4.6	1.3	15.5	3.4
2010-11								
Q1:	12.8	7.5	2.5	1.2	3.6	0.5	11.0	1.7
2011-12								
Q2:	16.2	10.7	3.5	1.0	3.7	0.8	14.5	1.7
2011-12								
Q3:	12.8	7.5	2.5	1.0	3.6	0.7	11.1	1.7
2011-12								
Q4:	16.4	10.5	3.8	0.4	4.1	1.5	14.6	1.9
2011-12								
Q1:	13.6	8.7	2.6	1.1	3.1	0.6	11.8	1.8
2012-13								

Source: Based on data from Controller General of Accounts, Ministry of Finance, Government of India.



### VII.5 Trends in Deficits and Debt in 2012-13

Although budgetary deficits are likely to be higher in the first quarter of the year, an unexpected increase in expenditure may increase these deficits even more as the year progresses. The slower pace of industrial production would also slow down the pace of collection of indirect taxes. This appears to have happened in the current year as well. Although tax revenue increased at a faster pace than last year, this was only because of the increased collection of direct taxes: the pace of collection of indirect taxes has been slower. The fiscal and revenue deficits as a ratio to GDP of the corresponding quarter were 8.3 per cent and 6.7 per cent, respectively, in Q1:2012-13 (Figure VII.2). Stepping-up of disinvestment revenue realisation and containing subsidy growth would have to go along with measures to increase overall economic growth.

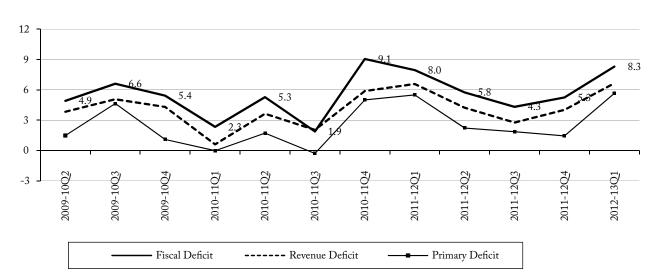


Figure VII.2: Trends in Central Government Deficits (% of GDP at current prices)

The impact of higher deficits is reflected in the growth of liabilities as well. The stock of debt increased by 5.2 per cent in Q1:2012-13 as the fiscal deficit rose by 8.3 per cent of GDP in the period (Figure VII.3). Although the increase in debt as a ratio to GDP would be relatively small, larger deficit let liabilities creep up.

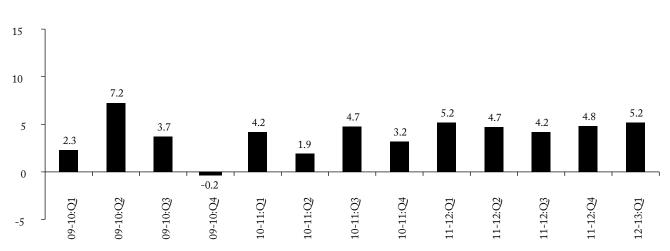


Figure VII.3: Growth in Total Outstanding Liabilities of the Central Government (%, q-o-q)



### VII.6 Concluding Remarks

The slower pace of economic growth is also affecting the fiscal balance. The crisis in the Eurozone is far more severe than what we are currently experiencing and the reasons for the fiscal crisis may also be quite different from what we are going through now. It is also important to keep in view the potential for the cyclical nature of budgetary deficits. As the IMF report (*Fiscal Monitor*, July 2012) cautioned, especially in the case of advanced economies, bringing down budgetary deficits should be calibrated with the needs of the entire economy for stable recovery of growth. However, measures to accelerate economic growth should also incorporate strategies to ensure a stable fiscal position. The Kelkar-Rajaraman-Misra Committee recommendations on a multi-pronged approach to fiscal consolidation need to be incorporated into budget strategies for this year and the next couple of years.



# VIII. Forecast

By P.C. Parida

### VIII.1 Backdrop

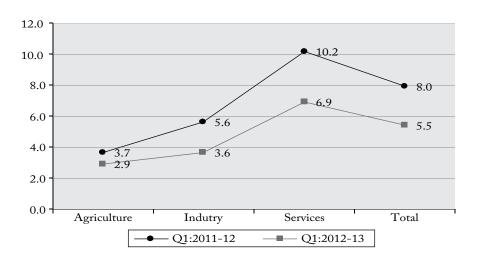
India's economic growth for the current fiscal is expected to remain low compared to the previous fiscal year's 6.5 per cent growth, despite the recently announced series of reform measures. The IMF's WEO October 2012 lowers India's GDP growth for the calendar year 2012 to 4.9 per cent from its earlier estimates of 6.2 per cent in July 2012. The World Bank in its *India Economic Update*, October 2012 has also revised downwards India's GDP growth to 6 per cent for the current fiscal year from its previous estimate of 6.5 per cent. The Reserve Bank of India had also projected a GDP growth rate of 6.5 per cent for 2012-13 in July 2012. Official estimates show that GDP growth for the first quarter declined significantly to 5.5 per cent. GDP growth for the second quarter of the current fiscal may be lower than the first quarter given the weak industrial production and slower growth in agriculture. In that case, to achieve 6 per cent growth for the entire fiscal, economic output should expand more than 6.5 per cent in the second half of the year.

At the sectoral level, all three sectors – agriculture, industry and services – are expected to grow slower than the previous year. Agriculture recorded 2.8 per cent growth in 2011-12 and is expected to grow at a lower rate than the previous year due to deficient rainfall during the monsoon season June-September 2012. The Ministry of Agriculture has stated that food grain production for the current year will be lower than the previous year's level of 257.44 million tonnes.

The performance of industry continued to remain lacklustre in 2011-12 and in the first four months of the

current fiscal. In 2011-12, it recorded 3.4 per cent growth and it may not be higher in the current fiscal. During April-July 2012, the IIP recorded a negative growth of 0.12 per cent. In order to achieve a nominal growth of 3 per cent in current fiscal, industry will need to grow at more than 6 per cent in the remaining eight months of the current fiscal, which is difficult in the current business environment. Construction, which is not covered by the IIP but comes under the industrial sector in GDP estimation, performed

Figure VIII.1: GDP at factor cost (2004-05 prices)



well in Q1:2012-13. But this was partly due to the strong low-base effect of the previous year. Steel, which is one of the key components of the construction sector, has recorded a mere 3.8 per cent growth

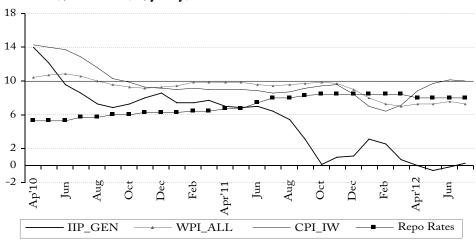


during the April-July 2012 against an outstanding growth of 10.4 per cent in corresponding period of the previous fiscal year. Surprisingly, the cement industry has seen an expansion of output during the first quarter of the current fiscal year.

The services sector which contributes more than 55 per cent of India's GDP has been slowing down. It recorded less than 7 per cent growth in Q1:2012-13 for the first time during the post-crisis period (Figure VIII.1). The growth rate of this sector is expected to fall below 8 per cent in the current fiscal compared to 8.9 per cent in the previous fiscal year. This is mainly due to the poor performance of the trade, hotel and transport sector. One of the drivers of growth in the past, telecommunications, is also in disarray.

WPI inflation India's continued to remain above the comfort level (5-6 per cent) of the Reserve Bank of India (RBI). During the first five months of the current fiscal, WPI inflation recorded 7.4 per cent despite RBI's tight credit policies. Although it has moderated during the first five months of the current fiscal compared to the same period of the previous fiscal year, we may see upward pressure on inflation in the coming months as we

Figure VIII.2: Trends in Repo Rate (%), Inflation (%WPI and % CPIIW), and IIP (%, y-o-y)



approach the festival seasons. The decline in the output of food grain production in the current fiscal would also put upward pressure on food inflation, unless there are policy measures to release more grain from government-held stocks. Food inflation may decline after January 2013 if the rabi harvest is bountiful. Nevertheless, WPI inflation for the current fiscal will remain high, which gives little room to the RBI for a cut in repo and reverse repo rates. Recently, the RBI slashed the CRR by 0.25 percentage points. The high interest rate structure has kept the cost of borrowings high and affected commercial activities. Figure VIII.2 illustrates the y-o-y growth rates of the three-month moving average of the IIP, WPI and CPI-IW series. While CPI-based inflation has increased significantly since February 2012, WPI-based inflation has increased moderately since April 2012.

The fiscal balance of the Central government has been widening. Many analysts predict that the actual fiscal deficit as a percentage of GDP would overshoot the budget estimate of 5.1 per cent for 2012-13. The Kelkar Committee (2012) has also voiced a similar concern that without reform measures the fiscal deficit of the Central government would be 6.1 per cent of GDP, a rise of almost 1 percentage point. And with reform measures, it would still overshoot the budget estimates by 0.1 percentage point. The committee has also raised concerns about rising subsidies. Without reform measures, total subsidies as percentage of GDP would be 2.6 per cent higher than the budget estimates of 1.9 per cent. The committee has also predicted that total expenditure will exceed the budget estimates



due to higher subsidies and other non-plan expenditure, whereas revenue collection will lag behind the budget estimates.

In order to revive investment and improve the economic outlook, the government announced a series of reform measures on September 14, 2012. This included allowing 51 per cent FDI in multi-brand retail, 49 per cent investment by foreign airlines in the aviation sector and the sale of equity in four PSUs. Before that, the government also hiked the diesel prices by Rs 5 per litre and restricted the supply of subsidised cooking gas to six cylinders per household in a year, to fetch an additional Rs 20,300 crore. The government has also proposed to allow more private players into the pension and insurance sectors. The immediate impact of reform measures was evident in the rise of stock prices. The capital market (BSE Sensex) has improved during the last couple of weeks due to net FII inflow. The Business Expectation Survey of FICCI shows an improvement in business sentiments in the July-September quarter over the previous quarter. However, these reform measures may not be adequate to pull the economy out of a slow growth phase. Further reforms such as the implementation of the DTC and GST and streamlining the process of land acquisition for a variety of industrial and infrastructure projects are required to improve the investment climate. The decline of private investment in the current fiscal would also bring down the potential for higher production in the next fiscal as well.

### VIII.2 Recent Trends in Selected Macroeconomic Indicators

The Indian economy has experienced a stagflationary phase of low growth and high inflation. Economic growth has declined across all sectors due to both domestic and external factors. As far as domestic factors are concerned, high inflation and interest rates are negatively affecting private investment and therefore economic growth. Business sentiment has been low due to constraints on fresh investments from policy uncertainty. The proposed General Anti-Avoidance Rules (GAAR) added to business uncertainty. Widening fiscal and current account deficits have again become major policy concerns. The decline in the growth of merchandise exports which exceeded the growth of merchandise imports has resulted in widening trade and current account deficits. Current trends in the major macro indicators are given in Table VIII.1. Some of the important emerging patterns are:

- The y-o-y growth of the general IIP has declined since Q1:2011-12. In the first quarter of the current fiscal, it recorded a negative growth of 0.2 per cent compared to a strong positive growth of 7.7 per cent in the same quarter of the previous year. The negative growth of IIP in Q1:2012-13 was mainly due to a contraction of output in two leading sectors, manufacturing and, mining and quarrying, by 0.8 per cent and 1.1 per cent, respectively. In contrast, the electricity sector recorded a positive growth of 6.4 per cent in Q1:2012-13, but this slowed down in July to 2.8 per cent.
- The y-o-y WPI inflation has increased from 7 per cent in Q4:2011-12 to 7.5 per cent in Q1:2012-13. This is mainly due to an increase in the prices of food grain. The prices of paddy and wheat recorded a 6.1 per cent and 6.5 per cent increase in Q1:2012-13, respectively, compared to a 2.5 per cent and -2.7 per cent increase in Q4:2011-12, respectively. There was a further increase in the prices of both these food articles during the months of July and August 2012. On the other hand, the prices of manufacturing and fuel have remained low during the first eight months of the current fiscal compared to the corresponding months of the previous year. UK Brent oil prices declined to below USD 100 per barrel in June 2012. But, thereafter, there has been an increase in oil prices during July and August 2012.

- - On the monetary policy front, the RBI has maintained a tight monetary policy position to combat inflation. M3 growth declined to 13.9 per cent on a y-o-y basis in Q4:2011-12 from 16.3 per cent in the corresponding quarter of the previous fiscal year. The growth rate of M3 also remained around 14 per cent in the first quarter of the current fiscal. The latest data available for the months of July and August show that M3 recorded a growth of around 14 per cent during these two months. In contrast, bank credit to the commercial sector improved during the first quarter of the current fiscal but declined thereafter. In August 2012, the growth of BCC was 17 per cent.
  - The rupee has been under pressure against the US dollar due to massive capital outflow during the first six months of the current fiscal. The rupee has depreciated considerably against the US dollar by 21.4 per cent during the first five months of the current fiscal year. However, the sharp depreciation of the rupee has not improved the growth of merchandise exports. On a y-o-y basis, merchandise exports (USD) recorded a negative growth of 4.8 per cent in Q1:2012-13 against a whopping positive growth of 50.8 per cent in the corresponding quarter of 2011-12. This is mainly due to a declining demand in India's major trading partner countries. The growth rate of merchandise imports (USD) has also declined substantially in the first quarter of the current fiscal, primarily due to low domestic demand. Forex reserves have declined due to capital outflows and also the large current account deficit since Q3:2011-12.

Table VIII.1: Recent Trends in Selected Economic Indicators

% Change, y-o-y	2011-12	2011-12	2011-12	2011-12	2012-13	2012-13	2012-13
	Q1	Q2	Q3	Q4	Q1	July	Aug
I. Growth Environment:		_	=	=	_	•	- (
IIP							
Manufacturing	7.7	3.4	1.1	0.4	-0.8	-0.2	-
Mining and quarrying	0.7	-4.1	-4.3	-0.3	-1.1	-0.7	ı
Electricity	8.2	10.5	9.6	4.5	6.4	2.8	ı
General	7.0	3.2	1.2	0.6	-0.2	0.1	-
II. Price environment							
WPI (new base)							
Primary articles	13.1	12.1	7.9	6.4	9.9	10.4	10.1
Fuel, power, etc.	12.7	13.0	15.1	12.8	11.9	6.0	8.3
Manufacturing	7.4	7.9	7.8	5.8	5.3	5.6	6.1
Rice or paddy	3.0	3.9	2.9	2.5	6.1	10.1	10.3
Wheat	-0.1	-1.0	-3.5	-2.7	6.5	6.7	12.8
Edible oils	14.9	14.4	12.2	9.0	10.3	10.3	10.5
All commodities	9.6	9.7	9.0	7.0	7.5	6.9	7.6
CPI							
Industrial workers	8.9	9.2	8.4	7.2	10.1	9.8	-
Agricultural labour	9.4	9.3	8.2	6.0	7.9	8.6	-
III. Monetary/ Capital							
market variables							
Sensex	8.2	-8.2	-17.9	-5.8	-9.8	-5.3	4.5
M3	17.2	16.5	15.1	13.9	14.0	13.8	14.0
RM	17.6	17.3	14.8	8.8	7.4	6.7	6.3

(Contd...)



Table VIII.1: Recent Trends in Selected Economic Indicators (Contd...)

% Change, y-o-y	2011-12	2011-12	2011-12	2011-12	2012-13	2012-13	2012-13
	Q1	Q2	Q3	Q4	Q1	July	Aug
Bank credit to commercial	21.2	18.8	17.0	16.3	18.1	17.6	17.0
sector							
LIBOR (3 months, end	0.26	0.30	0.48	0.52	0.47	0.45	0.43
period rate %)*							
IV. External account							
Exports (merchandise) USD	50.8	58.5	-5.0	6.5	-4.8	-28.0	-
Imports (merchandise) USD	33.2	47.8	49.5	39.0	4.2	-6.2	-
Exchange rate Rs/USD	-2.2	-1.4	13.5	10.9	19.9	24.9	22.5
(+depreciation/- appreciation							
Brent \$/barrel*	117.1	112.5	109.3	118.6	108.9	103.1	113.3
Forex currency assets (USD)	15.5	5.0	-1.4	-4.1	-7.6	-10.4	-9.9

**Source:** Data compiled from official statistics.

### VIII.3 Economic Prospects for 2012-13

India's growth prospects for the current fiscal do not look encouraging as growth has been slowing down across all the broad sectors. Industry and services, the two leading sectors of the economy may register lower growth than in the previous year. The official estimates of GDP for the first quarter of the current fiscal show that the services sector recorded a below-par growth of 6.9 per cent, for the first time during the post-crisis period. On the other hand, the industrial sector recorded merely 3.6 per cent growth. As a result of this, the overall GDP recorded an abysmal growth of 5.5 per cent in Q1:2012-13. As observed by various agencies, India's GDP growth for the current fiscal is expected to remain lower than the previous year owing to weakening private investment, tight monetary policies, widening fiscal and current account deficits and slow recovery of growth and employment in developed countries. Although the new economic reform measures announced by the government may improve the economic outlook in the second half of the year, the significant slowdown of investment in the first half would keep overall GDP growth low.

Investment data released by the Centre for Monitoring the Indian Economy (CMIE, October 2012) show that proposals for new investment declined during the three months ending in September 2012, the sixth consecutive quarter of decline. A total of 325 new investment proposals worth Rs 59,777 crore were made in Q2:2012-13 compared to 934 projects worth Rs 2,33,404 crore in the corresponding quarter of 2011-12. In Q1:2012-13,748 new projects worth Rs 2,41,826 crore were announced. Across the sectors, the decline in new proposals for investment was evident more in the case of mining and electricity. Weakening private investment is explained by the continuous decline in business confidence. Current reform measures initiated by the government could help in restoring business confidence. However, the lack of political consensus on big-ticket reforms like the DTC, GST, land acquisition and Lokapal bills, and frequent accusations of scams could hurt the positive impact of new reform measures. The other main factors which are a threat to growth are high inflation and widening of both the fiscal and current account deficits.

Services which contribute 55 per cent of GDP are slowing down because of the poor performance of the manufacturing sector at home and the rising financial risk in the Euro zone. Agriculture is expected to perform poorly in the current fiscal owing to deficient rainfall in the monsoon season this year.

<sup>\*</sup>These are actual values and not y-o-y change.



Against this backdrop, we have re-assessed the economic outlook for the current fiscal year using two approaches: (1) quarterly GDP growth assessment based on a quarterly model that incorporates some of the inter-sectoral relationships and evolution patterns of variables over time, and (2) annual GDP growth assessment based on a more detailed annual macro-econometric model. The results are presented below.

### VIII.4 Quarterly GDP Growth in 2012-13

The current quarterly projections for 2012-13 are based on a number of assumptions relating to exogenous variables and also updating high frequency exogenous variables till August-September 2012.

The latest data on rainfall shows that the rainfall deficit is greater than the earlier estimates made in July 2012. We now take rainfall during the monsoon season, June-September 2012, to be 7 per cent below normal, compared to our earlier assumption of 5 per cent deficiency. As in the previous year, we expect that the performance of the BSE Sensex in the current fiscal will remain weak. We assume no change in the BSE Sensex which is the same assumption underlying our earlier estimates in July 2012. In the case of bank credit to the commercial sector, we assume a 16.3 per cent growth compared to our earlier assumption of 17.3 per cent growth in the current fiscal. We assume a slightly higher growth in government expenditure for our current estimates at 13.7 per cent compared to 13.5 per cent assumed in July 2012. This is 0.6 percentage points higher than the budget estimates. The quarterly update of WPI inflation for 2012-13 has been carried out using the latest data till August 2012. The y-o-y increase of WPI inflation is projected at 7.5 per cent for the current fiscal.

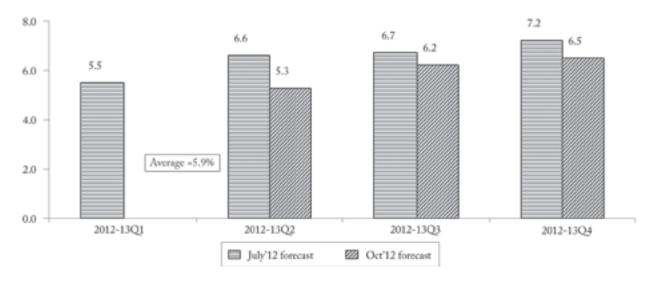


Figure VIII.3: Revised Quarterly GDP Forecast for 2012-13

Source: Data used from CSO.

Based on the above assumptions on exogenous variables, the quarterly projections of GDP growth for 2012-13 are given in Figure VIII.3. The estimates show a downward revision of the GDP growth rate in all three quarters, compared to our previous estimate in July. This is mainly due to the contraction of output in all three sectors – agriculture, industry and services. While lower agricultural output is explained by the high deficit in rainfall, lower industrial and services output growth are a result of the decline in BCC growth and under performance of the capital market. Based on the quarterly model estimates, GDP growth for 2012-13 is projected at 5.9 per cent.



### VIII.5 Annual Assessment for 2012-13

The current forecast for 2012-13 is the second revision of the real GDP growth rate after the initial two forecasts were presented in April and July 2012. We had projected real GDP growth at 6.4 per cent in July 2012. The current forecast incorporates changes in the key macroeconomic parameters during the past three months. The main assumptions on which the forecast is based are:

**Rainfall:** We assume rainfall during the monsoon season June-September 2012 to be 7 per cent below normal compared to our previous (July 2012) assumption of 5 per cent deficit.

World GDP growth: The revised real world GDP growth rate is taken at 3.4 per cent as compared to the earlier assumption of 3.5 per cent. This is based on the WEO, IMF October 2012.

**International crude oil price:** The growth rate of international crude oil prices was negative during April-July 2012. In the subsequent two months its growth rate has become marginally positive. We retain our earlier assumption of a y-o-y 10 per cent increase in international crude oil prices in 2012-13.

**Non-fuel commodity prices in international markets:** The prices of international non-fuel commodities have increased slightly during the last three months. The WEO, IMF October 2012 has revised non-fuel prices upward by 2.6 percentage points from its July estimates. We assume a 5 per cent y-o-y decline in non-fuel prices in the current fiscal compared to a 10 per cent decline in July 2012.

**FDI** net inflows and net invisibles receipts: We assume a 10 per cent y-o-y decline of FDI inflows compared to our assumption of a 10 per cent increase in July 2012. In the case of net invisible receipts, we retain our earlier assumption of a 10 per cent y-o-y increase.

**Foreign institutional investment:** In July 2012, we had assumed y-o-y zero growth in net FII inflows in 2012-13. In our current estimates, we retain the earlier assumption.

**Domestic energy price index (WPI for fuel, power, light and lubricants):** The increase in diesel and LPG prices would have a positive impact on overall fuel prices. We assume a y-o-y 8.91 per cent increase in domestic fuel prices in the current fiscal compared to our assumption of an 8.24 per cent increase in July 2012.

**BSE Sensex:** We retain our earlier assumption of no growth in the average BSE Sensex in 2012-13.

**Interest rate and exchange rate:** We assume no further moderation of interest rates in the remaining months of the current fiscal. We also retain our earlier assumption of LIBOR at 0.2 per cent. For the exchange rate, we assume a 10.7 per cent depreciation of the nominal exchange rate of the rupee vis-a-vis the US dollar against the assumption of a 4 per cent depreciation in July 2012. We also assume a 10.7 per cent depreciation of the NEER in this round of estimation compared to our earlier assumption of 4 per cent.

Central government finances: As per the fiscal data till August 2012, the central government has managed to collect only 5 per cent of the total disinvestment revenue. We assume Rs 15,000 crore of disinvestment revenue for the current estimates compared to our earlier estimates of Rs 20,000 crore. On subsidies, we assume they will remain at the level of the budget estimates due to an increase in diesel, petro and LPG prices. The assumption on all other government finances remains the same as for the July 2012 estimates.

We maintain a no-growth scenario for corporate investment in the current fiscal over the previous fiscal.

The revised assessment of key macroeconomic parameters for 2012-13 is summarised in Table VIII.2.

The assessment places overall GDP growth, in constant 2004-05 prices at 5.9 per cent in 2012-13. The growth rate is lower by 0.5 percentage points than our July 2012 forecast. This decline in the growth assessment applies across all sectors, especially industry and services. The increased deficiency of rainfall



will hamper agricultural production in the current fiscal. Therefore, the overall output of the agricultural sector is expected to expand by 2.1 per cent, down by 0.3 percentage points from our earlier estimates of 2.4 per cent in July 2012. We also predict a slow growth rate for both industry and services.

Our current estimates show industrial GDP growth at 3.5 per cent, which is lower by 0.7 percentage points from our July estimates. Services sector growth is expected to slow down due to contraction of domestic manufacturing activities and slow recovery of growth in developed countries. Continued poor performance of services sub-sectors like air transport and telecom are dragging down the overall growth performance of the services sector. Further, the lagged impact of investment in interest-rate-sensitive sectors and steep fall in the growth of public administration and defence services will also affect the growth rate of the services sector. Our current estimates place services sector growth at 8 per cent, which is 0.5 percentage points lower than our July estimates.

The y-o-y increase of WPI prices (inflation) has been revised upward due to an increase in domestic oil prices. We estimate 7.4 per cent WPI inflation for the current fiscal. The quarterly model forecast gives a slightly higher WPI inflation of 7.5 per cent.

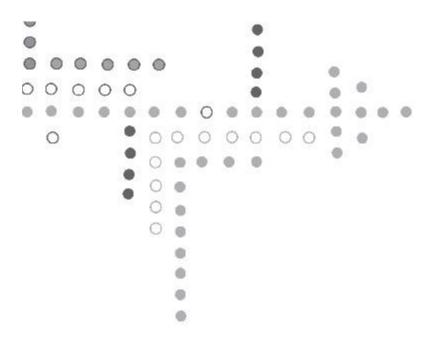
On the external front, the growth prospects of exports do not look encouraging in the current fiscal as India's major export destination countries continued to be affected by slow growth. Our current estimates show that merchandise exports (USD) are expected to grow by 7.9 per cent in the current fiscal. The growth rate of merchandise imports (USD) is also expected to remain low due to the slowdown of domestic growth. Since exports are expected to decline more than imports, the current account deficit as a percentage of GDP is expected to remain at around 3 per cent of GDP in the current fiscal. The fiscal deficit of the central government is estimated at 5.7 per cent of GDP at current market prices.

Table VIII.2: GDP Forecast for 2012-13

Item	2010-11(QE)	2011-12(RE)	NCAER Forecast for 2012-13 July 2012	NCAER Forecast for 2012-13 October 2012
% Change y-o-y				
Real GDP				
- Agriculture	7.0	2.8	2.4	2.1
- Industry	7.2	3.4	4.2	3.5
- Services	9.3	8.9	8.5	8.0
Total	8.4	6.5	6.4	5.9
Exports (USD value)	40.5	18.0	17.2	7.9
Imports (USD value)	28.2	35.6	14.9	9.9
Inflation (WPI)	9.4	8.8	6.9	7.4
% of GDP at market prices				
Current account balance*	-2.7	-3.6@	-2.9	-3.0
Fiscal deficit (Centre)	4.9	5.9(RE)	5.6	5.7

**Notes:** Forecast based on annual model.

QE: quick estimates. RE: revised estimates \* surplus (+)/deficit (-) # provisional @ PMEAC



# Mid-Year Review 2012-13

# **PART C: Selected Themes**





# I. Industrial Stagnation in India in Recent Times

By Bishwanath Goldar<sup>5</sup>

-15

# I.1 Negative Industrial Growth in Recent Months and Earlier Such Episodes

The average rate of y-o-y growth in the Index of Industrial Production (IIP) for Indian manufacturing (hereafter IIP-manufacturing or IIP-MFG) in the six-month period, March to August 2012, was negative at -0.6 per cent (in the March-July period, the average y-o-y growth rate was -1.3 per cent). In the last 30 years, a negative average rate of growth in IIP-manufacturing, over a period of four month or more had occurred on four occasions: June to November 1982, April to December 1991, January to April 1993, and December 2008 to June 2009 (see Fig. I.1).

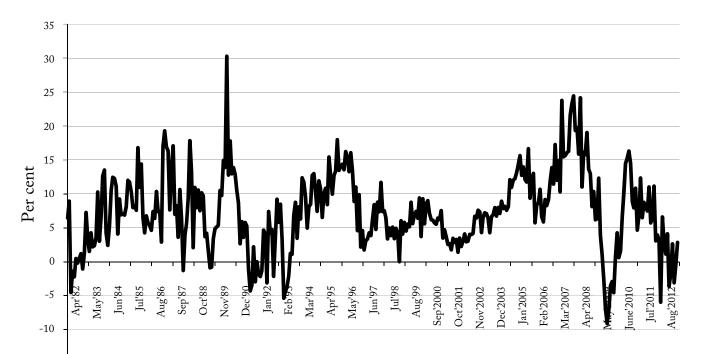


Figure I.1: Year-on-Year Growth Rate in IIP-MFG, April 1982 to August 2012

Source: Computed from IIP data available at the website of the Central Statistical Office (CSO).

There were different reasons for negative industrial growth in these four episodes, before the current one, but there were some common factors as well. In the case of the negative growth in IIP-manufacturing from June to November 1982, the *Economic Survey 1982-83* (p. 24) noted that the causes of sluggish or

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negative growth performance during the first half of 1982-83 differed from industry to industry. Among the causative factors mentioned are

- problems of demand-supply adjustments
- stringency of bank finance
- sluggishness in exports growth
- lack of modernisation and diversification
- labour problems and
- a shift in demand to man-made fibres and textiles, both at home and globally, adversely affecting the domestic textiles and jute industries.

Turning now to the next episode, the negative industrial growth experienced in India in the period April to December 1991 is reflective of serious economic problems the country faced at the time. The *Economic Survey 1992–93* (pp. 121–22) observed that:

"severe import compression combined with a tightening of credit availability was one of the principle supply-side factors responsible for the decline in manufacturing output during 1991-92. Economic uncertainty adversely affecting investments and the collapse of the exports market to the erstwhile Soviet Union also contributed to negative industrial growth."

The growth rate in IIP-manufacturing during 1992 was 4.2 per cent per year as against a fall in IIP-manufacturing of -1.7 per cent per year from April 1991 to December 1991. This recovery could not, however, be sustained. During January to April 1993, IIP-manufacturing fell by about 4 per cent over the same period the previous year. According to the *Economic Survey*, 1993-94 (p. 94), the fall in manufacturing output in the initial months of 1993 was caused by:

"social disturbance in the wake of Ayodhya-related incidents which affected investors' confidence. The uncertainties discouraged investment which affected growth."

The negative growth in IIP-manufacturing during December 2008 to June 2009 is undoubtedly traceable to the global financial crisis. The *Economic Survey*, 2008–09 (pp. 200-03) noted:

"the adverse effects of the global financial crisis on the growth of Indian manufacturing, drawing attention to the hike in input costs, the reduced flow of finance and its increased cost, the fall in demand and revenue growth, and the reduction in the rate of profit. To this, one may add the adverse effect that economic uncertainty must have had on investor confidence."

To this, one may add the adverse effect that economic uncertainty must have had on investor confidence.

Considering the four previous episodes of negative industrial growth, it seems that three common factors were largely responsible for poor industrial growth in those episodes: sluggishness or a fall in export demand; the reduced flow of finance for industrial investment; and a decline in business confidence resulting in reduced investment. It appears that the current episode of sluggish or negative industrial growth in India is also attributable largely, or at least partly, to these three factors. This is explained further below.



One important difference between the current episode and the three previous episodes is that there was an element of sudden shock in the previous episodes. By contrast, the adverse developments in economic scene have been gradual in the current episode, so that there was time to act, but it was not done. A difference between the 2008-09 episode of negative industrial growth and the current one is that interest rates were substantially lowered during 2008-09 to help the industry but this has not been done in the current episode. Also, the rate of inflation differs between the two episodes. It was much lower in the 2008-09 episode (see Fig. I.2).

8 6 Per cent per year IIP-MFG 2 WPI-all commodities WPI-manufacturing 0 Oct'08 to Dec'08 to March'12 Dec'11 to Oct'09 June'09 to July'12 Sept.'12 -2

Figure I.2: Growth Rate in IIP-MFG and Wholesale Price Index (WPI)

**Source:** Computed from IIP data available at the Website of Central Statistical Office (CSO) and monthly series on wholesale price index available at the Website of the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India.

# I.2 Exports and Industrial Growth

Figure I.3 shows annual growth rates in India's exports (in USD) from 1971-72 to 2012-13. The growth rate for 2012-13 relates to the first six months of the financial year.

It is evident from Figure I.4 that the phases of negative industrial growth were often associated with a dip in India's exports. The rate of growth of exports was negative in 1982-83 and 1991-92, in the first six months of 2012-13 (April to September), and in 1998-99 and 2001-02. In the last two years, there was a significant deceleration in the growth rate of IIP-manufacturing. In 1998-99, the annual growth of IIP-manufacturing came down to 4.4 per cent from 6.7 per cent the previous year.



Similarly, in 2001-02, the annual growth rate in IIP-manufacturing came down to 2.9 per cent from 5.3 per cent the previous year.

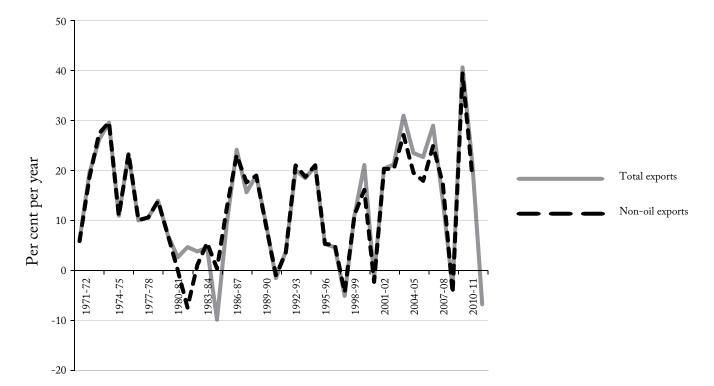


Figure I.3: Growth rate in India's Exports (USD)

**Source:** Computed from exports data available in the *Handbook of Statistics on the Indian Economy*, Reserve Bank of India (RBI). Trade data for recent month have been taken from press releases of the Ministry of Commerce and Industry, Government of India.

Figure I.4 shows that the growth rate in India's exports was negative in 2009-10. Interestingly, IIP-manufacturing grew by 4.8 per cent in 2009-10, accelerating from a growth rate of 2.5 per cent in 2008-09. Thus, there is some mismatch between exports growth and industrial growth in 2008-09 and 2009-10. This apparent mismatch gets clarified in an analysis of month-wise growth rates in exports and industrial production depicted in Figure I.4 which covers the period April 2004 to August 2012. A match is now found in the growth rates of exports and industrial production in 2008 and 2009. The growth rate in exports was negative from October 2008 to September 2009. The growth rate in IIP-manufacturing was negative during December 2008 to June 2009. Clearly, there is overlap and some matching. It may be added here that the correlation coefficient between monthly (y-o-y) growth rates in exports (in USD) and IIP-manufacturing for the period April 2004 to August 2012 is 0.6. It is thus reasonable to argue that the sluggish or negative industrial growth experienced in 2012 has a lot to do with the negative growth in exports since March 2012.

The correlation between growth rates in manufacturing production and exports is brought out also by Figure IA.5 which shows the average growth rates for these two variables for different sub-periods chosen on the basis of industrial growth. It is clear that periods of poor industrial growth were also those in which export growth performance was poor.



60.0

40.0

40.0

20.0

Growth rate exports

Growth rate IIP-MFG

-20.0

Growth rate exports

Growth rate IIP-MFG

Figure I.4: Year-on-Year Growth in Exports (USD) and IIP-MFG, April 2004 to August 2012

**Source:** Computed from month-wise exports data available in the *Handbook of Statistics on the Indian Economy*, RBI and IIP data available at the website of CSO. Trade data for recent month have been taken from press releases of the Ministry of Commerce and Industry, Government of India.

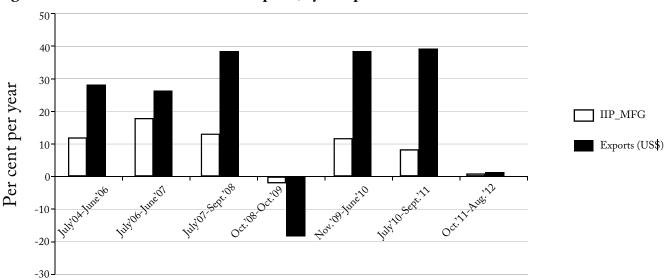


Figure I.5: Growth in IIP-MFG and Exports, by sub-periods

-40.0

**Source:** Computed from month-wise exports data available in *the Handbook of Statistics on the Indian Economy*, RBI and IIP data available at the website of the CSO. Trade data for recent month have been taken from press releases of the Ministry of Commerce and Industry, Government of India.



It should be pointed out here that India is not the only developing country experiencing a slowdown in industrial growth in 2012. Rather, there has been a general slowdown in industrial growth among several developing countries as depicted in Figure I.6. China is an exception, as it has been able to maintain a high rate of industrial growth (though it has also suffered some slowdown lately). But, the average industrial growth rate of other developing countries has come down. It is particularly interesting to note that the growth rate of manufacturing output has turned negative for Brazil as for India, more so in the case of Brazil than for India. The implication is that the cause of sluggish or negative industrial growth in India is in part attributable to global economic conditions.

20 15 China 10 Newly industrializ countries (except Per cent China) Other developing countries 0 201102 India -5 **Brazil** -10

Figure I.6: Growth in Manufacturing Output in Developing Countries, 2011-12, by Quarter

**Source:** Prepared from growth rates in manufacturing output reported in *World Manufacturing Production, Quarterly Reports*, UNIDO.

#### I.3 Business Confidence and Investment

A decline in business confidence is probably an important cause of sluggish or negative industrial growth in the last six months. The NCAER-Master Card index of business confidence fell to 126.6 in July 2012 from 134.9 in April 2012. The index had an all-time high of 162.1 in October 2010. Obviously, there has been a sharp fall in business confidence between October 2010 and July 2012. Similarly, the business confidence index based on surveys undertaken by *Business Today* and Cfore has registered a fall from 74.8 in January-March 2011 to 52.3 in October-December 2011 and further



to 49.3 in April-June 2012. It would be reasonable to say that the decline in business confidence has adversely affected investments made by manufacturing firms, which in turn has affected output growth. To corroborate this point, it may be added that there is some data to indicate that new projects announced in recent months have fallen hugely from the levels in 2010. This is again a reflection of the decline in business confidence.

Though data on investments by manufacturing firms in recent months is not readily available, there are indications that investment may have come down. Figure I.7 shows growth rates in Gross Fixed Capital Formation (GFCF) in the Indian economy at constant prices. The estimate for 2012-13 relates to the first half (i.e. April-September). It is evident from the figure that in 2012-13 the growth in GFCF has come down substantially from the levels reached in 2009-10 to 2011-12. It is even lower than that in 2008-09 when investments were hit by the global financial crisis.

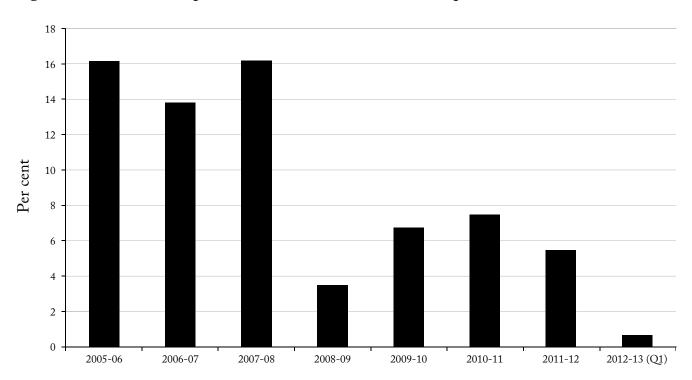


Figure I.7: Gross Fixed Capital Formation Growth % (at 2004-05 prices)

Source: Based on National Accounts Statistics (CSO). For recent data, the press releases of CSO have been used.

# I.4 Credit Availability and Interest Rate

There has been a deceleration in bank credit to industries in 2012. According to RBI data, bank credit to industries increased by 15.8 percent in August this year as against an increase of 23.6 per cent in the same month in the previous year (RBI press release, September 28, 2012). Figure I.8 shows the year-on-year growth in non-food credit (deflated by wholesale price index of all commodities) and IIP-manufacturing for the period April 1995 to September 2012. The two series show a good deal of similarity in movements over time. Indeed, the correlation coefficient between the two series is 0.43. It is also observed that the growth rate in non-food credit and IIP-manufacturing has both come down in 2012 compared to 2011.



The average year-on-year growth rate in non-food credit (deflated) was 8.8 percent during January-September 2012, whereas the growth rate was about 10.5 percent in the corresponding period in 2011. Does this mean that credit constraint has impeded industrial growth to some extent in the recent period? One cannot be sure, because credit flow may be determined by production rather than credit flow determining production.

Figure I.8: Year-on-Year Growth in Non-food Credit and IIP-MFG, April 1995 to August 2012

**Source:** Data on non-food credit has been taken from RBI publications and press releases. IIP data has been taken from the website of the CSO.

Thus, an interesting issue here is whether the slowing down of credit is a cause or an effect of the slowdown in industrial growth. A study done by Krittika Banerjee ("Credit and Growth Cycles in India: An Empirical Assessment of the Lead and Lag," Reserve Bank of India, Working Paper Series, No. 22, December 2011) has carefully examined the inter-relationship between production and credit in Indian manufacturing industries in the period 1989-90 to 2008-09. Of the 14 manufacturing industries studied, she finds two-way causality in four industries (electrical machinery and apparatus, rubber and plastic products, machinery other than transport and electrical, and motor vehicles and other transport equipment). Another seven manufacturing industries show one-way causality. In six cases, the tests of Granger causality indicate causality from production to credit and in only one case (in the tea industry) is there an indication of causality from credit to production. Thus, on the whole, causality seems to run from production to credit rather than vice-versa. Thus, for those industries where the causality between credit and production runs both ways, or where the causality is from credit to production, constraints of credit supply may be affecting production. The implications of the analysis undertaken by the RBI study are that the decline in credit flow may be responsible for the slowdown in growth in certain segments of Indian manufacturing.

There is a view that a cut in interest rates will help boost the rate of industrial growth in India from the low levels it had reached in recent months. Econometric research undertaken by the RBI, however, gives the impression that the effect of interest rate on growth is modest. For instance, a study by Muneesh Kapur



and Harendra Behera ("Monetary Transmission Mechanism in India: A Quarterly Model," RBI working paper, June 2012) using a macro model with quarterly data shows that a 100 bps increase in the policy rate has an adverse effect on non-agriculture growth; the peak effect is 40 bps with a lag of two quarters. Evidently, the results of this study suggest that an interest cut would have only a modest favourable impact on industrial growth. Yet, it appears that a cut in interest rate may be beneficial for growth at this juncture. The gloomy international economic conditions raise the risks of industrial investment in the country. Lowering of interest rate compensates for the increased risk. The dip in industrial growth is primarily in the capital goods sector. This is likely to gain from a lowering of interest rate. The cut in interest rate will have a signaling effect, and thus encourage investment.

### I.5 Reviving Industrial Growth

The average growth rate in IIP-manufacturing in the last five years including the current one is 4.4 per cent per annum. The target growth rate for manufacturing in the 12th Five Year Plan is 9.8 to 11.5 per cent per annum (corresponding to the overall growth target of 9 or 9.5 per cent per annum). The medium term growth target for manufacturing is 12 to 14 per cent per annum.

The two crisis experienced in the last five years have slowed down the growth rate of Indian manufacturing. But, one cannot be sure that such crisis will not reoccur. Rather, occasional reoccurrence of global crisis is possible. Thus, India will have to achieve an average growth rate of manufacturing of 10 to 14 percent per annum despite the crisis. This is obviously very difficult to achieve.

There is a widely held view that if the growth rate of Indian industry has to be revived and sustained, major economic reforms need to be undertaken. It is felt that imperfections in land and labour markets are constraining industrial growth, and urgent reforms are needed for the two markets. According to 'Doing Business 2012', a report of the World Bank, India ranked 132 out of 183 countries compared in term of the ease of doing business. This brings out the enormous amount of policy reforms that India needs to undertake to create a business friendly environment comparable to the best in the world.

The Approach Paper to the 12th Plan and the report of steering committee on manufacturing list a host of measures that need to be taken for accelerating the pace of manufacturing growth. The listed strategies/measures include:

- Integrating into global networks
- Developing technology and depth; enhancement of human capital, R&D, etc.
- Establishing business regulatory framework
- Development of a national land use policy
- Clustering and aggregation
- Boosting manufacturing exports

A related issue is infrastructure. It well known that inadequate infrastructure facilities has been a major constraint on Indian industry, and investment in infrastructure needs a boost to revive the rate of industrial growth. A recent article by Ashima Goel (Business Line, October 12, 2012) concludes that the real cause for the slowdown in infrastructure in India is the failure of the official apparatus to gear up to provide various clearances for infrastructure proposals that came up during the boom phase. As a solution to the problem she suggests that there is need to simplify administrative procedures to make them more responsive, yet robust. She feels that the proposed National Investment Board is an excellent suggestion.



The unfavorable global economic condition has been an important cause of the sluggish or negative industrial growth in India in the recent period. No marked improvement in the global economic environment is in sight, at least not in the immediate future. Thus, if a high rate of growth of manufacturing has to be maintained, increasing emphasis has to be placed on growth of domestic demand coupled with productivity advance. At the same time there is need to boost India's exports to pay for imports. Indeed, a well developed domestic market may provide the strength to Indian firms to compete in international markets. This process can be aided by improving their market access. It is here that India-EU free trade agreement and other such agreements can play a pivotal role.



# II. Agriculture: In Search of the Second Green Revolution By Anil Sharma

### II.1 The Context

As a consequence of the recent food crisis that many parts of the world have been experiencing for the past few years, there is renewed interest in the agricultural sector. The sudden increase in world food prices that occurred in 2007, 2008, and again in 2010 and 2011, has exposed the fragilities of the sector and also led to an increased sense of food insecurity and poverty. The price rise in agricultural commodities caused by shortfalls in agricultural production and the diversion of food crops for meeting bio-fuel requirements due to the hardening of oil prices, were major factors that contributed to the increase in the numbers of poor people in the world. The recent Global Monitoring Report for 2012 suggests that the food price spikes of 2007 and 2008 raised the poverty headcount by 105 million and that of 2010 and 2011 by 49 million, respectively. Food and Agriculture Organisation data on hunger indicates that the total number of hungry people in the world, which had fallen to 898 million during 2004-06, has dipped marginally since then to 868 million people in 2010-12, however, the state of affairs is worrisome.

These developments have prompted a series of actions at the international level, which is evident from the initiatives initiated by many international organisations and groups of countries – the United Nations (UN), the World Bank, Food and Agriculture Organisation (FAO), G-8, G-20, and many other development agencies. The result has been many assurances for increased funding for agricultural development and safety nets for the most vulnerable people in the world. In July 2009, world leaders at the G-8 Summit in L'Aquila pledged more than USD20 billion for these initiatives. Similarly, G 20 leaders have prepared a detailed action plan for enhancing food security and addressing commodity price volatility.<sup>8</sup>

A country like ours, where the majority of the population lives in the rural areas (72 per cent) and a significant part still depends on the agricultural sector (more than 50 per cent), is no exception and has also been experiencing significant distress in the agricultural sector. This is evident in the near-stagnation in agricultural growth and concerns related to food inflation.

Interestingly, in sharp contrast to world food inflation in 2007 and 2008 (25 per cent and 26 per cent, respectively), food inflation in India during this period was much lower (3 per cent and 9 per cent,

<sup>6.</sup> The World Bank (2012): *The Global Monitoring Report 2012: Food Prices, Nutrition, and the Millennium Development Goals (GMR),* The World Bank, Washington, DC.

<sup>7.</sup> FAO (2012): The State of Food Insecurity in the World, FAO, Rome, October 2012.

<sup>8.</sup> A specific group that includes G20 Agriculture Vice-Minister's has been created to work on the initiatives and report progress on a regular basis.



respectively) (Figure II.1). However, during 2009, which was a period of negative and low global food inflation (-21 per cent), food prices in India remained very high mainly due to a shortfall in production triggered by drought. The average rate of food inflation recorded during this period in India was 17 per cent. And, during 2010 and 2011, which was again a period of high global food inflation (18 per cent and 23 per cent, respectively) food prices in India remained high compared to their levels in 2006 and 2007, but have been below the global averages (13 per cent and 6 per cent, respectively). And, during the past nine months of this year, average food inflation in India has been 8 per cent compared to the global average of -7 per cent.

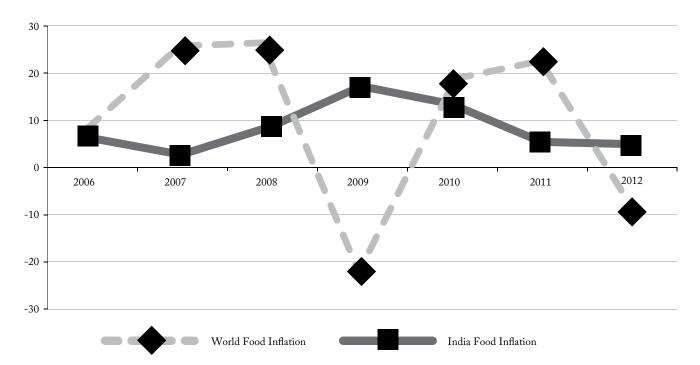


Figure II.1: Food Inflation - India and the World, 2006-12

### II.2 The Issues

While there are significant differences in the manner in which food inflation in India has behaved compared to the situation in the world, and factors that have contributed to the food inflation<sup>10</sup>, it can be hardly denied that the deceleration in agricultural growth has been one of the main reasons for constraints on the supplies of agricultural commodities. This weakness of the agricultural sector during the past few decades has been a matter of concern and is clearly evident from the fall in the

<sup>9.</sup> The rates of food inflation discussed in this section include five groups of commodities which form FAO food index – cereals, dairy products, meat products, edible oils, and sugar.

<sup>10.</sup> Many studies including Gokarn (2011) are of the view that structural factors such as shifts in the consumption pattern towards proteins (pulses, dairy products, eggs, fish and meat) due to rising incomes have been the key drivers of food inflation in India in recent years. Gokarn, Subir (2011): "The Price of Protein," *Macroeconomics and Finance in Emerging Market Economies, Vol. 4(2)*.



rates of agricultural growth witnessed in the 1990s and thereafter, compared to the scenario that existed after the mid-1960s (Figure II.2). Though growth has been less volatile in recent years, the trends are not very encouraging because growth has consistently remained short of the targeted rate (4 per cent), which is considered a norm in our five-year Plan documents for achieving the medium-and long-term goals of meeting food supplies and poverty reduction.

5
4.5
4.5
4.5
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Figure II.2: Agricultural Growth Rates (ten-year moving average): %, y-o-y

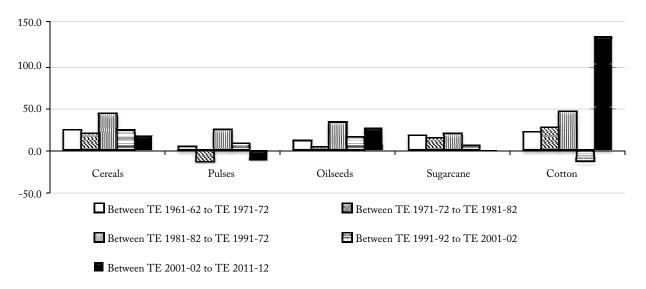
It is a known fact that the mid-1960s marked the beginning of the Green Revolution in India. The introduction of High-Yielding Varieties (HYVs) of cereals and the increased use of fertilisers coupled with the expansion of irrigation facilities led to dramatic jumps in productivity per unit of land during the late-1960s and 1970s (Figure II.3). And, further extension of new technology beyond traditional areas and crops during the 1980s provided new momentum to productivity growth. The result was a significant acceleration in yields of many crops – cereals, pulses, oilseeds, and sugarcane, and even of non-food crops such as cotton.

Productivity growth, however, witnessed a fatigue thereafter and average growth in the 1990s slowed down considerably and even fell in some cases, such as cotton. Low rates of yield growth seem to have become a norm in recent years. The only bright spot during this period has been cotton, which has witnessed an exceptionally high rate of productivity growth after the introduction of Bt technology. Apart from this, the climate does not look very promising for most crops.

One could argue that the measure of productivity that we have used is simple, provides only an overview of progress, and is partial in nature because it does not account for changes in other inputs that go into the production of agricultural commodities. Hence, to get a comprehensive view one should also look at changes in more inclusive measures of productivity such as Total Factor Productivity (TFP), which is the difference between the rate of growth of real product and the rate of growth of real factor inputs.



Figure II.3: Productivity Growth (selected crops): %, y-o-y



But, even studies based on TFP growth for a few crops or the sector as a whole demonstrate that there has been a deceleration in productivity growth. A survey of literature of studies on this subject for the 1990s and thereafter clearly reveals these disturbing developments. Almost all studies have attributed the deceleration in TFP growth to a variety of factors such as the declining trend in public sector investment and problems due to intensification in many parts of the country. A recent study using the Index of Agricultural Production as the measure of output has found low improvements in efficiency for most states. In a few states such as Haryana, Punjab, Kerala and Tamil Nadu, however, there are marked changes in productivity improvements and technical change.

#### II.3 The Outlook

Given these developments, the outlook appears to be more worrying due to continuous depletion of natural resources (land and water), rising costs of inputs, and concerns associated with climate change. The challenges posed by many of these developments not just put question marks on the availability of food in the medium to long term, but also threaten the livelihoods of millions of poor who are mostly engaged in the agricultural sector. The importance of reversing these trends on a priority basis becomes even more vital for the following reasons.

<sup>11.</sup> For a survey of literature on these studies in the 1990s see Sharma, Anil (2001): "Agricultural Sector, in Economic and Policy Reforms in India," National Council of Applied Economic Research, New Delhi. And for recent years see Chaudhary, Shilpa (2012): "Trends in Total Factor Productivity in Indian Agriculture: State-level Evidence using Non-parametric Sequential Malmquist Index," Centre for Development Economics, Delhi School of Economics, Working Paper No. 215.

<sup>12.</sup> Chaudhary, Shilpa (2012), op cit.

<sup>13.</sup> The more recent period covered in the study is from 1997-98 to 2005-06.

<sup>14.</sup> Of the total number poor in India 78 per cent live in rural areas.

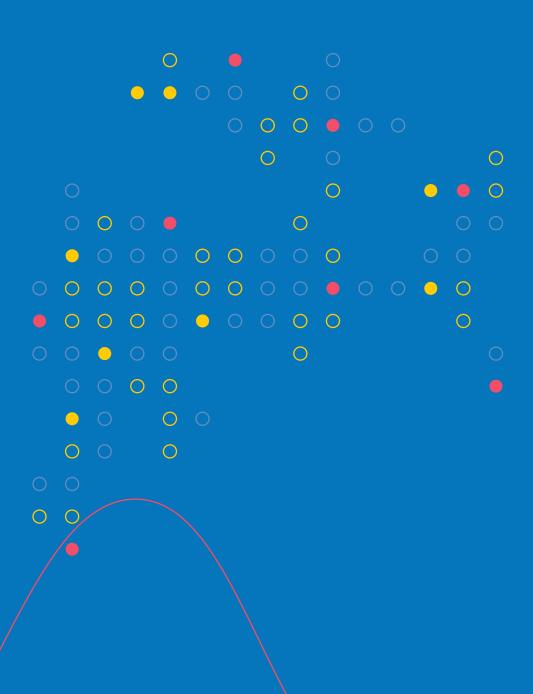


First, the estimates suggest that hunger and malnutrition affects nearly 217 million people in India.<sup>15</sup> This has serious consequences for health and productivity in general and for child mortality in particular.

Second, the estimates also suggest that world population will reach 9.3 billion by 2050 and India's share in it will go up to 18.2 per cent during the same period. Evidently, to meet the increasing demand India would have to grow more food to feed its population.

Third, improvements in agricultural production and productivity have direct and indirect effects, on the welfare of a large number of people – farmers, agricultural labour, and others associated with the agricultural sector. The literature is replete with studies, which demonstrate that agricultural growth is two to three times more effective in reducing poverty compared to the growth originating from the non-agricultural sector.

<sup>15.</sup> Food and Agriculture Organisation (2012), op cit.



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