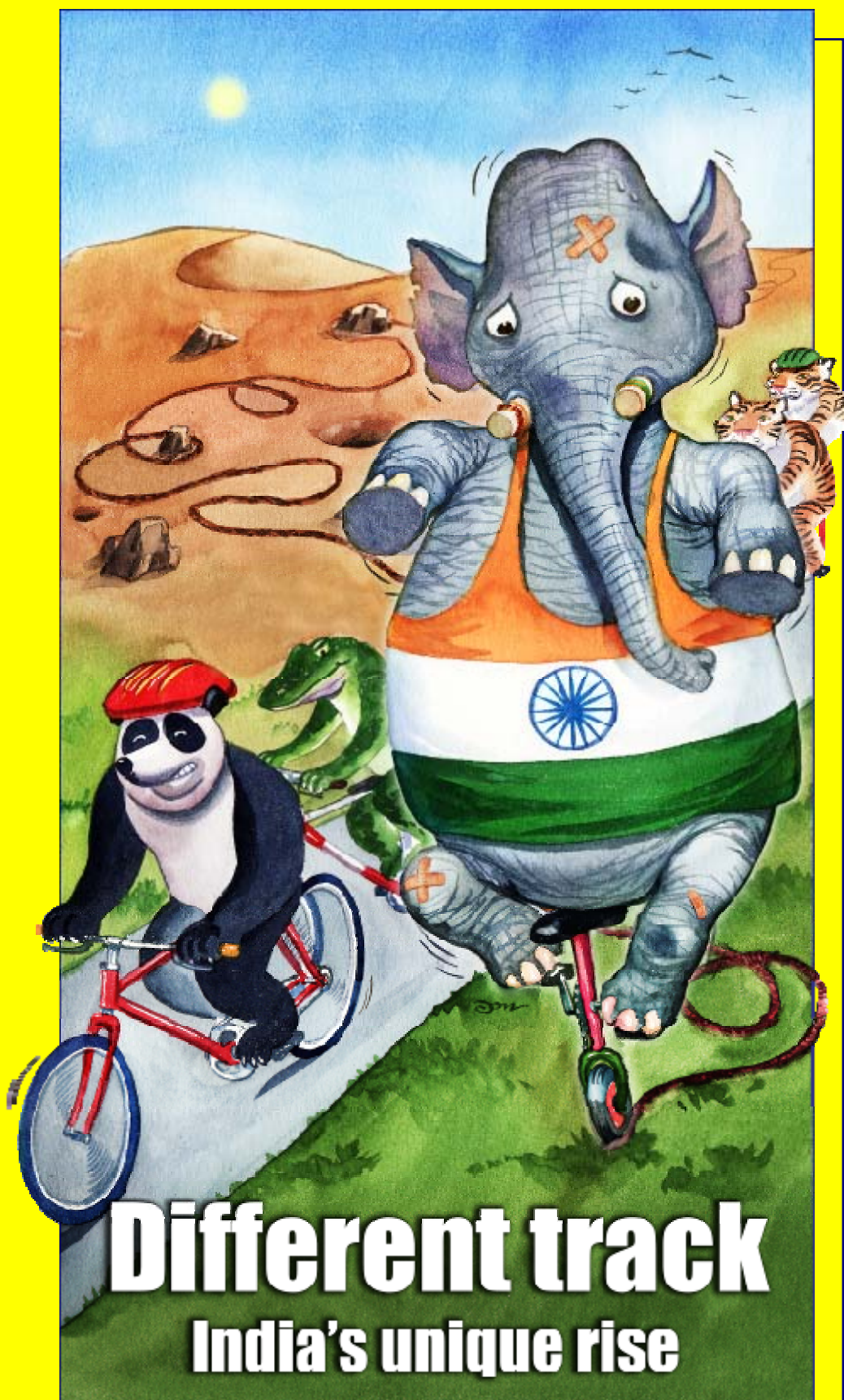


INDIA

ASIAN ECONOMICS RESEARCH

CLSA
ASIA-PACIFIC MARKETS

November 2011



Rajeev Malik

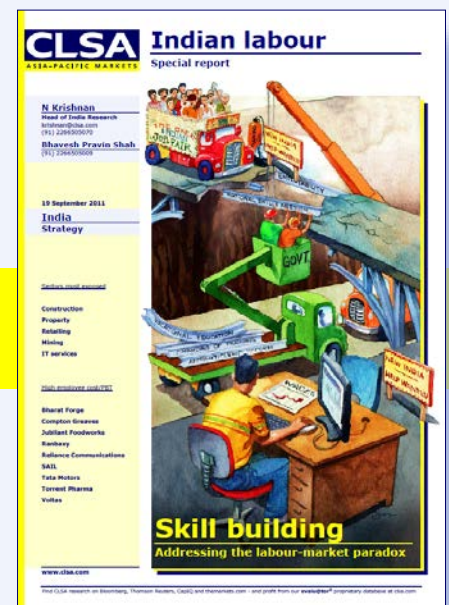
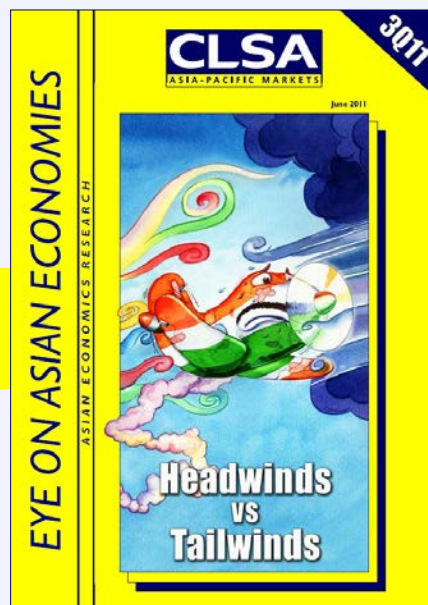
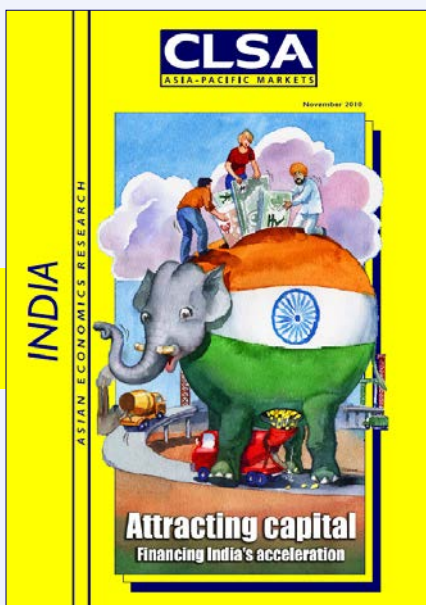
rajeev.malik@clsa.com
(65) 64167890



Contents

Executive summary	3
The curse of government.....	4
Lumbering elephant vs flying goose	9
Demographic shift: Blessing or curse?	19
Inflation: Multi-headed dragon	22
Progressive exchange rate policy	27
Living with twins	32
Appendices.....	40

Changing India





Different track

India never fails to confound, amaze or disappoint

India is a country with multiple personalities within each of its social, political and economic layers. The palpable extreme contrasts, and the day-to-day decision making and outcomes often appear to challenge logic, but never fail to confound, amaze or disappoint - sometimes all in a single snapshot. Even on a good day, there seems to be crisis somewhere in the folds of this chaotic democracy. On a bad day, one often wonders how it functions at all, let alone how it evolved to be Asia's second-fastest growing economy.

Economic rise has been uneven

But despite its multinational character and the baggage of vast size of uneducated and poor population, India has defied doomsday predictions. However, its economic rise has been far from smooth or even, and continues to have its share of uncertainties. This has more to do with the evolving local endogenous political cross-currents than with the country's democratic foundation. The irony that the world's largest democracy has a selected - not popularly elected - prime minister should not be overlooked.

India is following a different economic path

A late bloomer, India's economic evolution is following a different path compared to other Asian economies. The differences are underappreciated and often misinterpreted. Unlike the Asian authoritarian political regimes that favoured political openness *after* becoming economically open, India is moving ahead with the reverse combination, and with the additional liability of weak coalition governments. To be sure, unlike Deng Xiaoping in China, Lee Kuan Yew in Singapore or Mahathir Mohamad in Malaysia, India has no effective visionary reformist-politicians who can ably negotiate political consensus on reforms. Prime Minister Manmohan Singh, who is in office but does not seem to be in power, is an accidental reformer at best.

Product markets reformed before factor markets

Still, trend economic growth has accelerated despite a lethargic reform agenda since 2004, when the Congress-led UPA-1 came to power. UPA-II has been embroiled in corruption scandals and is balancing the trade-off between environment issues, corruption, growth and vote-bank politics. Admittedly, the government's policy paralysis in the last year has added to the cyclical slowdown, but the attractiveness of a strong structural story does not eliminate cyclical headwinds. The current challenges with land and labour are another rude reminder that India's topsy-turvy approach to reforms has reformed product markets before fixing its factor markets. It appears ironic that land and labour, which are both in surplus in India, have become liabilities for growth but capital, which is scarce, has had a smoother ride.

Global export share has risen despite low reliance on FDI

Unlike other Asian economies, India's global merchandise export share has been rising without a comparable jump in FDI, without the aid of a super-undervalued currency, and despite the embarrassing infrastructure deficit. Living with chronic twin deficits will remain challenging but globalisation is also forcing Indian governments to do some right things, eventually.

There is nothing pre-ordained about India's economic rise

There is nothing pre-ordained about India's economic rise, despite the scope for unlocking of the structural tailwinds, which will be affected by the pace and nature of reforms. The evolving demographic dividend, which has already been contributing to economic growth, is also fuelling rising aspirations across rural and urban areas and calls for greater accountability. Governments will have little choice but to attempt better delivery, or Indians will vote with their feet. In the final tally, India remains a glass half-full story that cannot be fully appreciated by assessing it through the lens used for other Asian economies.



**Government is the
weakest link in India's
economic rise**

Weak support for reforms

**India has had to navigate
severe ups and downs of
global financial shocks**

The curse of government

Government, its delivery mechanisms and their outcomes are the weakest link in India's economic rise. Why is government delivery so shoddy in India? Why is it that Indian governments rarely deliver, fashionably and unapologetically miss targets, and cannot resolve issues before they become problems? Why is that India scores high in terms of human talent for a meaningful portion of its population and its corporate sector stands out in many ways but the functioning of its governments - irrespective of the political leaning - is disappointing at best and embarrassing at worst? And why is it that growth has accelerated over the years despite a disappointing reform agenda?

The above questions are relevant as all politicians should have vested interest in ensuring improved delivery as that in turn will increase the probability of being re-elected. More importantly - and more likely - lack of adequate delivery will increase the chances of governments being thrown out of office. Indeed, increasingly at the state level, governments that have delivered have been rewarded by being voted back.

To better appreciate answers to the questions raised above, it is important to focus on three factors: (1) sequencing of political and economic openness; (2) nature of the political framework and its inadequate reformist bias; and (3) weak acceptability of reforms by voters in general.

Investors' attraction to India's economic rise kicked off only in 2003 but in the last four years, India also had to navigate the severe ups and downs triggered by the severe global financial shocks (Figure 1). This is in contrast to the experience of several Asian economies that had multiyear growth without external stress. Indeed, ASEAN economies had a great uninterrupted run between the late 1980s (triggered by the Japanese FDI boom into the region following the Plaza Accord in 1985) and the Asian financial crisis of 1997, despite some drivers of growth, such as overinvestment, becoming unsustainable.

Figure 1

BSE Sensex



Source: Bloomberg, CLSA Asia-Pacific Markets

Political openness is a key difference

A critical difference between India and other Asian economies when they were at a similar stage of development is the approach towards political openness. Unlike several newly independent Asian economies that quickly came under the fold of strong one-man shows that eventually delivered well in economic terms, India's ruling elite preferred adopting democracy after gaining independence in 1947, despite the widespread poverty and illiteracy.

India attained political openness before economic openness

Consequently, India achieved greater political openness before attempting to become more open economically, in contrast to the pattern in most of the other Asian economies. The sequencing in the case of other economies allowed governments to undertake unpopular but necessary economic reforms. The authoritarian regimes in many cases also facilitated greater acceptability of reforms by limiting the resistance to reforms. Indeed, one wonders how China's economic rise would have evolved if Deng Xiaoping (or for that matter Malaysia's Mahathir Mohamad or Singapore's Lee Kuan Yew) had to operate within fractious coalitions in a democratic framework with active opposition parties, as governments in India have had to do.

Some wrong bets by Indian planners

The above in no way lessens the adverse impact of some of the wrong bets by Indian planners, such as continuing with the flavour for Fabian socialism and the delayed disenchantment with import substitution. It is debatable if there is merit in having benign dictatorships in the early stages of economic development to push ahead with economic reforms but India's path of political openness is unlikely to be compromised or reversed.

Political openness is also India's key strength

However, political openness is also in some ways India's key strength in dealing with the vast socio-economic and political diversity and the resulting tensions. But it nevertheless affects the pace and nature of economic liberalization. This trend will continue to be affected by the evolving endogenous local political flux, which will also affect the popularity and acceptability of reforms. Indeed, people-state dynamics continue to be reoriented. For example, there are now different civic interest groups that are demanding more from the government on issues that affect people.

Globalisation is forcing Indian governments to do some right things

Globalisation too is forcing Indian governments to often do some right things, eventually. As Indian markets are opened up, global growth dynamics and price movements will have more and more impact than before on local prices and demand, and on the corporate profit cycles. The government will have little choice but to correct the mispricing across several sectors, including banking, agriculture, and education. India cannot participate and benefit from globalisation without being affected by the positives and the negatives of globalisation.

India has a selected - not popularly elected - prime minister
Can Indian politicians be outsourced?

An important and surprising feature of the world's largest democracy is that it has a selected - not popularly elected - prime minister. The real political power rests not with Prime Minister Manmohan Singh but with the Congress President, Sonia Gandhi. She reportedly relies on Singh on economic matters, but appears reluctant to be supportive of reforms that could further unleash a new wave of growth opportunities even though these would in turn facilitate her inclusive and redistributive agenda. This dual model has taken a toll on the economic and political management as Singh does not appear to have power despite being in office.

Pace of economic reforms will remain glacial in the absence of a crisis

In the absence of a crisis, the political backdrop will continue to support economic reforms at best in a gradual, uneven and uncertain manner. Gradualism in reforms has continued despite varying political resistance to specific reforms, and at times frequent changes in government (as in the 1990s), and the handicap of fractious coalition politics.

Trend growth has been accelerating despite weak reform agenda

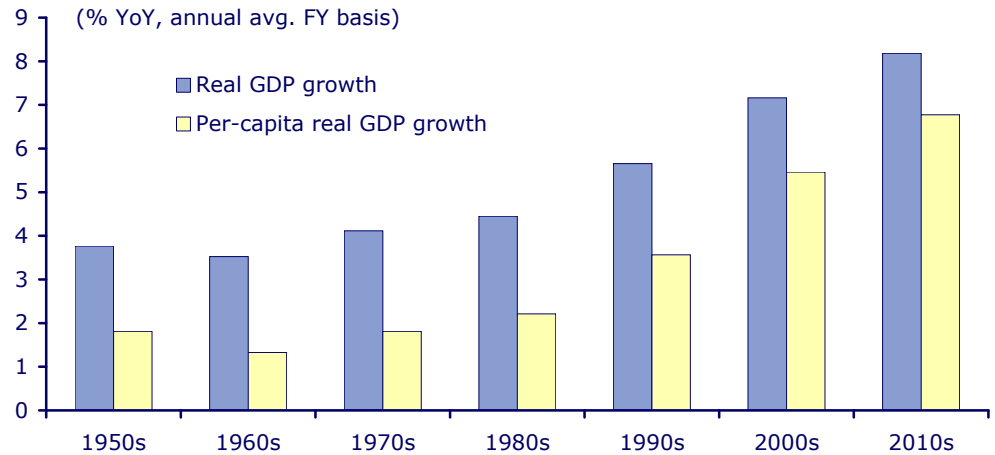
Trend growth has been accelerating for decades (Figure 2) despite the incremental reform agenda (1991 reforms were an exception as they were forced as part of an IMF rescue package). In early 2000s, no one expected the Indian economy to ever grow at twice the pace of 4.4% recorded in FY01, let alone close to 10% (FY07: 9.6%). But it did. More recently, the economy was relatively resilient in the fallout of the global financial crisis (GFC), partly because of the effective policy response. The "collapse" in growth to 6.8% in FY09 was not as severe as most expected. And hardly anyone expected growth to rebound to average 8.3% in FY10-FY11. To be sure, real sector reform initiatives during the past decade were hardly awe-inspiring to have been a meaningful contributor to the acceleration in growth.

Origin of Indian democracy

In *Political Economy and Governance Issues in the Indian Economic Reform Process* (K R Narayanan Oration, 2003), Professor Pranab Bardhan of University of California, Berkeley, offers some important insights on why the origins of the Indian democracy are dramatically different from those in the West. These differences make it difficult to match the Indian case to the canonical cases in the usual theories of democracy. Specifically, he lists five key differences:

1. In Europe, democratic rights were won over continuous battles against aristocratic privileges and arbitrary powers of absolute monarchs. However, in India, these battles were fought by a coalition of groups in an otherwise fractured society against the colonial masters. The various methods of group bargaining, subsidies and "reservations" for different social and economic categories that are common practice in India today can be traced to this earlier history.
2. Unlike in Western Europe, democracy came to India before any substantial industrial transformation of a predominantly rural economy, and before literacy was widespread. This seriously influenced the modes of political organization and mobilization, the nature of political discourse, and the excessive economic demands on the state.
3. In Western history, the power of the state was gradually hemmed in by civil society dense with interest-based associations. In India, groups are based more on ethnic and other identities (caste, religion, language, etc.), although the exigencies of electoral politics have somewhat reshaped the boundaries of (and ways of aggregating) these identity groups. This has meant a much larger emphasis on group rights than on individual rights.
4. In Western history, expansion of democracy gradually limited the power of the state. In India, on the other hand, democratic expansion has often meant an increase in the power of the state.
5. For a large federal democracy India, by constitutional design, differs from the classical case of US federalism in some essential features. Not merely is the federal government in India more powerful vis-a-vis the states in many respects (including the power to dismiss state governments in extreme cases and to reconstitute new states out of an existing state in response to movements for regional autonomy), but it has also more obligation, through mandated fiscal transfers (via the Finance Commission and the Planning Commission), to help out poor regions. In classical federalism, the emphasis is on restraining the federal government through checks and balances, but in India it is more on regional redistribution and political integration.

Figure 2

Real GDP and per-capita real GDP

Note: 2010s is CLSA forecast; Source: CEIC, CSO, CLSA Asia-Pacific Markets

Reforms have eliminated corruption related to scarcity

Economic reforms since 1991 have substantially eliminated waiting lists and corruption related to scarcity. But newer areas of corruption emerged due to shifts in the evolving nexus between politicians and businesses in light of new potential opportunities in different sectors. Admittedly, the combination of corruption scandals, policy paralysis and setbacks in project approval because of delay in environmental clearances has taken a toll on the investment cycle. But these are partly an outcome of India having reformed end product markets before reforming the factors of production, such as land, labour and capital, and the changing endogenous political reality.

Governments won't have a choice but to try to deliver

There is nothing pre-ordained about India's economic rise, despite the scope for unlocking of the structural tailwinds, which will also be affected by the pace of reforms. But still, the fear of nothing at all being done by the government appears exaggerated, in our view. Why? Governments will not have a choice but to try to deliver to meet the rising aspirations of the burgeoning working-age population. Indians will be happy to throw out governments that don't deliver. India continues to be a glass half-full story, in our view. Indeed, we will look back in a few years and probably cite the current push-and-pull for playing a constructive role in the subsequent unlocking of the India story.

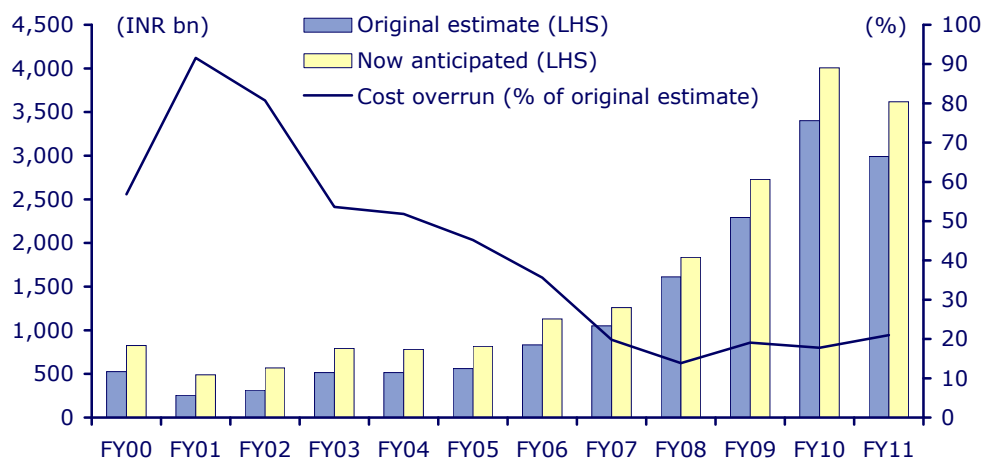
Being a democracy is a strong point in India's favour

The thriving chaotic democracy is correctly viewed as a strong point in favour of India, but at times that also allows political parties to hold up reform initiatives. The current political crossfire between the ruling UPA and the Bharatiya Janata Party (BJP), the main opposition party, over the goods and services tax (GST) is a good example, considering that the original push towards the GST was led by the BJP.

Reforms are resisted by groups within the Congress party

More importantly, several reforms are also resisted by the socialist interest groups within the ruling Congress-led UPA coalition government led by Prime Minister Manmohan Singh, with the differences of opinion within the Congress party a key stumbling block. An important fight is within - not outside - the Congress party. Equally, and irrespective of the political party, governments' execution record remains embarrassing (Figure 3).

Figure 3

Cost overrun of delayed central sector projects

Source: Ministry of statistics & programme implementation - GoI, CLSA Asia-Pacific Markets

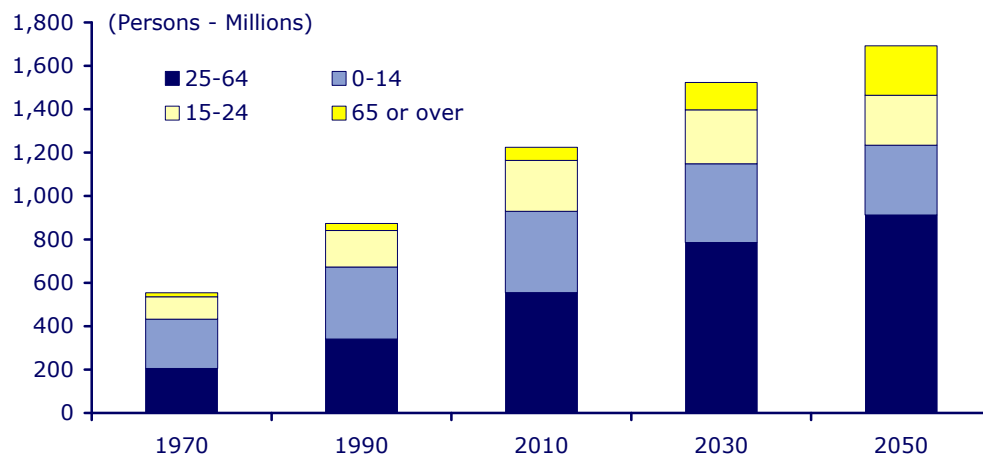
Indians are demanding more change

Demographic change favourably affecting growth and calls for greater accountability

The only thing worse than a government that tries to stay in power but does not do much is having more political instability via frequent changes in government. The most important aspect that is ignored is that Indians are demanding more change. This is a new development. There has never been a time before in India's history that this has happened while economic growth was running near 7-8%.

While government delivery will matter, the most compelling argument for the continued economic rise of India is the population's shifting age profile (Figure 4) and the ongoing increase in rural and urban aspirations. Already, the increase in the number of young voters is prompting political parties to reassess their past strategies. Thus, the pro-Hindu BJP has been toning down its right wing agenda, as it does not resonate well anymore. While the government's reform agenda matters for the pace and the magnitude of the unlocking of potential, it essentially makes a key difference for turning what is already a good story into what could be a great story.

Figure 4

Population profile

Source: UN - World Population Prospects, CLSA Asia-Pacific Markets



Flying Geese pattern explains the evolution of Asian economies

Lumbering elephant vs flying goose

The Flying Geese pattern of development is a framework that explains the evolution of Asian economies. An economy, like the first goose in a V-shaped formation, can lead other economies towards industrialization. Countries specialize in industries where they have a comparative advantage (or where one is engineered via policy). Over time, older product and technologies are handed down to the followers as the leader's income rises and it adopts newer technologies and products. For most part, Japan was the leading mother goose followed by other Asian economies.

Industries relocated from Japan to NICS and ASEAN, and economies moved to higher value-added production. Higher FDI boosted the availability of capital and technology, and diversity in the resource endowment facilitated the Flying Geese pattern of development.

China has disrupted the conventional catch-up process in Asia

Admittedly, the emergence of China has disrupted the conventional catch-up process of the Flying Geese pattern. Low-income China is increasingly replacing Japan as the mother goose, with both competitive and complementary traits. China poses a formidable competitive challenge to the rest of Asia but it is also an important destination for exports from other Asian countries.

India has a topsy-turvy "model" of reforms

India's topsy-turvy "model" of reforms

Unlike the export-led model of development adopted by most other Asian economies, India has no formal model or a single strategy or even proper sequencing for real sector reforms. At best, India has what can be described as a topsy-turvy "model" of reforms: policymakers have a good idea about what to do and how to do it, but implementation and timing can be all over the place depending on political constraints.

No long-term reform agenda or political consensus on reforms

Reforms in India are an outcome of a myriad of competing economic and political pressure points that at times work at cross purposes. Overall, there is no long-term reform agenda or a political consensus on reforms. Also, governments have not effectively sold the economic benefits of reforms to voters. Reforms are often announced opportunistically, either owing to a minister's strong personality and/or reformist credentials, or owing to a web of constraints that leave little option but to act - finally - in order to avoid a crisis. More often than not, the Indian government is eventually forced to do the right thing and is quick to move when its back is up against a wall and it is left with very few degrees of freedom.

India is a supply-constrained economy

Given the topsy-turvy model of reforms, how should one think about India and its global economic rise? India is essentially a supply-constrained economy, unlike, say, China that is demand constrained. However, India's demographic transition, which will swell the number of voters and working-age Indians, means that governments have little choice but to continue doing whatever it takes to improve the economic well being of the people - especially the younger generation - who have already tasted the fruits of 8% GDP growth. There cannot be any turning back now.

Think of India as being composed of two different countries

To better appreciate the evolving Indian story, it is perhaps best to think in terms of India actually being composed of two different countries: (1) a section that comprises a thriving 300 million people, many of whom are open

Inclusive growth is still misunderstood but is the right approach

How can India be the second-fastest growing economy?

and global in their outlook; and (2) around 900 million less privileged people, and within this a sizable chunk that is economic deadweight but cannot be ignored due to vote bank politics.

In recent years, the government has undertaken a large increase in budgetary allocations for anti-poverty and redistributive programmes. Inclusive growth is still misunderstood but is the right approach if India is to avoid social and political unrest owing to widening economic disparities. However, to give economic benefits to or to empower the bigger part of the population, the smaller, more competitive part also has to do better. This is why it is pertinent to use a dual-economy filter to think about the gradualism in the reform process.

Is India's growth an illusion?

How can India be the second-fastest growing economy in Asia with all its domestic challenges? Real sector economic reforms have not been forthcoming in recent years, and the recent policy paralysis has worsened the demand-supply imbalance in several sectors. Economic growth has been elevated (Figure 5) despite India having the highest nominal lending rates in Asia and the third-lowest ratio for both credit/GDP and consumer loans/GDP. Further, the well documented deficit in its social and physical infrastructure does not really facilitate such elevated growth, which has emerged with a stagnant share of manufacturing in GDP.

Singapore and India: Lessons for each other

Few countries have as many contrasting features as Singapore and India, and the contrasts go beyond just size and politics. At USD44,000, Singapore per-capita GDP is nearly 30 times that of India's. In terms of exports/GDP, Singapore is the most open Asian economy while India is the least open. Policymaking in Singapore is often pro-active and driven by "benign paranoia" as the country is viewed as being small and insignificant.

In contrast, policymaking in India is almost always reactive and suboptimal, and pegged on a view that little can go wrong (but a lot often goes wrong) as the economy is large and mainly domestically-driven. Singapore policymakers' delivery is almost always better than their guidance while Indian government's delivery is habitually short of its targets.

Singapore's economic structure has undergone dramatic transformation, both within the manufacturing sector and with respect to the rise of different service sectors to drive growth. Despite being one of the most expensive places, Singapore still retains its importance as an important manufacturing base for electronics. Admittedly, this has been affected by China's rise as the factory to the rest of the world, but Singapore has constantly strived to shift production to higher value-added items. In recent years, it has successfully

focussed on biomedical (pharmaceutical) production. It has also boosted the tourism industry by the opening of the integrated resorts.

Singapore is the exception not the rule in the global market place. But an inadvertent outcome of Singapore's sound, smooth and reliable policymaking in a somewhat managed social framework has been that Singaporeans and Singapore companies rely heavily on the government to do the right thing (which it often does). But this in turn often limits creativity and lateral thinking, and makes local businesses less street smart when they venture overseas. On the other hand, Indians and Indian companies know that they cannot rely on the government to do the right thing as it is often the obstacle (or the source of the obstacles). Consequently, they are constantly trying to engineer a way past the government.

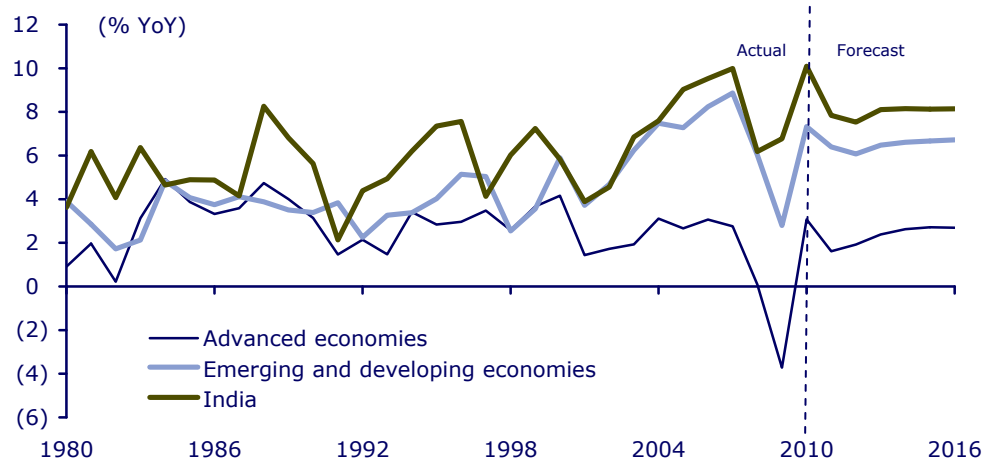
Singapore is a highly cyclical economy due to its heavy reliance on exports (export/GDP at 211%) and it could learn a few things from the entrepreneurial skills and the go-getting attitude of a sizeable portion of Indian population and the vibrant corporate sector. Equally, India's government can learn a lot from Singapore's forward-looking style of policymaking that does not wait for problems to emerge and then scramble for solutions.

India's economic transition following a different script

Reverse sequencing of reforms

Figure 5

Real GDP growth



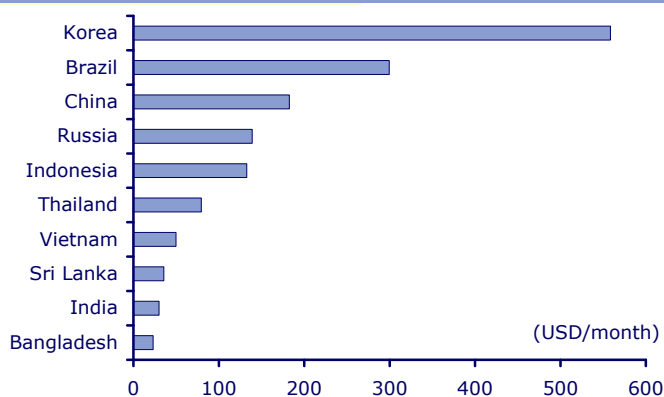
Note: IMF data uses GDP-expenditure Source: IMF, CLSA Asia-Pacific Markets

Apart from the vital differences in the political framework, and the nature and effectiveness of governments, India's economic transition throws up several different patterns that were not found in the development experience of other Asian economies. In this section we analyze three key differences:

Reforming product markets before factor markets: One of the most striking - and underappreciated - aspects of India's economic reforms and the subsequent economic rise has been the reverse order in which factor and product markets have been reformed. Typically, markets for factors of production such as land, labour and capital are reformed in the early stages of development. This in turn facilitates a more efficient allocation of resources, and creates a more enabling environment for higher sustainable growth. When implemented before or in sync with demand-enhancing reforms, factor market reforms boost supply and also facilitate the transformation of product markets.

Figure 6

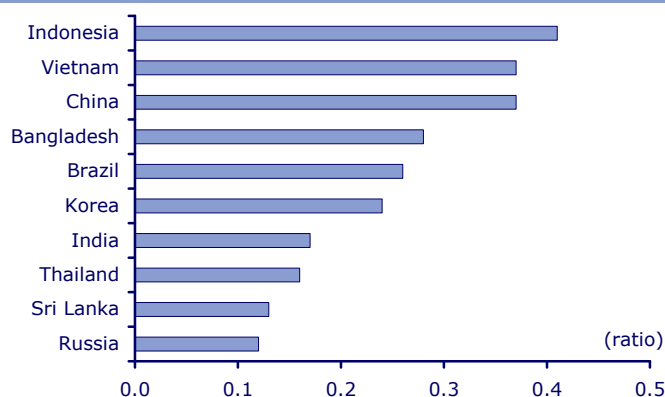
Minimum wage for 19-year old or apprentice



Source: World Bank, CLSA Asia-Pacific Markets

Figure 7

Minimum wage to value added per worker



However, in India, successive governments have managed to reform the end-product markets without meaningfully reforming the factor markets (capital is the sole exception, but more on this later). In fact, India has been unable to

Few governments are genuinely interested in pro-market reforms

Reforming product markets is easier than reforming land or labour

Focus on the key factors of production

Both land and labour are surplus in India while capital is scarce

Corruption in land is partly an outcome of lack of reforms

Greater demand from voters for land reform and anti-corruption bill

capitalise on its low-cost advantage (Figures 6 & 7) partly because of this shortcoming. The upside-down approach is understandable in the context of the political reality and is an outcome of two key forces at play:

1. Few governments are genuinely interested in pro-market reforms, especially if reform initiatives will affect the ability to attract votes. This is one area where India is behind other Asian economies even if the latter had authoritarian political regimes. The current UPA government will probably fall back on the often abused argument of "coalition politics" for the lethargic pace of reforms, but that is not entirely correct, in our opinion. To be sure, there are strong elements within the Congress party, including the Chairperson Sonia Gandhi and her son and heir-in-waiting, Rahul Gandhi, who appear suspicious of pro-market reforms.
2. Reforming end-product markets is much easier and more acceptable than risking political capital on issues such as unpopular labour reform. Indeed, once demand rises, there is a greater consensus to address the deficiency. For example, airline deregulation and the resulting boom in air travel preceded the moves to enhance existing capacity of airports.

For more details on our analysis of the the three key factors of production, please refer to the following CLSA reports:

- ❑ *Hungry elephant: The need for more land*, 10 November 2010
- ❑ *Attracting capital: Financing India's acceleration*, 11 November 2010
- ❑ *Skill building: Addressing the labour-market paradox*, 19 September 2011

Both land and labour are surplus in India while capital is scarce. However, policymakers have had better success in addressing capital rather than land or labour. This might appear counter-intuitive at first blush but isn't. Reforms in land and labour are shackled by vote-bank politics, including vested business interest. In contrast, barring certain aspects pertaining to the foreign presence in the local banking sector, most of the financial reforms are with the RBI, a non-political entity that often expresses its own opposing views to the government. Overall, the RBI has stayed with gradual liberalisation of the financial sector, the most recent example being the long overdue full deregulation of the savings bank deposit rate.

Much of the current rhetoric on the issue of land surrounds challenges in acquisition, appropriate pricing and corruption. But these are partly the outcomes of lack of reforms for this factor of production. Admittedly, the focus on natural resources is rather recent and reflects the newer realities of balancing sustainable growth with environment responsibility, and the political need to be seen as improving the well being of the people dependent on that land.

But encouragingly, the recent mess in the sector and its adverse economic impact only boosted demand from voters for land reform. This culminated in the government finally introducing the Land Acquisition Relief and Rehabilitation Bill in Parliament this year. Similar demand by civil society and public at large has forced the government to focus on an anti-corruption bill, which is likely to be introduced in Parliament in the upcoming session. These are just two examples of the government being forced to respond in a stronger manner by the people.

China: Economic superpower

China's economic performance and its global integration are awe-inspiring by any yardstick. In less than three decades, it has managed to transform its closed economy into an integral part of the global economy. It is an important base of production for the global marketplace and a huge source of demand for imports from the rest of the world. The Chinese economy has posted an impressive annual average growth of 10.5% in the last two decades, although with a per-capita GDP of USD4,382, it ranks below Thailand's USD5,000. In 2010, China surpassed Japan to emerge as the world's second-largest economy. It offers several constructive lessons for India, despite the important political differences between the two countries.

The transformation of the state-led Chinese economy kicked off with Deng Xiaoping in 1978. Initially, the focus was on the farm sector, which was followed by rural industrialization and a more constructive role for Special Economic Zones (SEZs) to boost exports and to benefit from investment and technology. There was also a strong focus on the reform of the state-owned enterprises (SOEs). Market mechanisms continued to be adopted within Chinese socialism, and got a formal sign-off in 1992 after the Communist Party endorsed Deng's view that the market system is compatible with socialism. Importantly, the reforms also coincided with the demographic dividend, i.e. increase in the proportion of working-age population in total population.

In January 1994, the government unified the official and swap market rates. That year, the Clinton administration de-linked the most favoured nation (MFN) status for Chinese exports and human rights conditions in China. China avoided any exchange rate adjustment during the Asian financial crisis that erupted in 1997, but de-pegged CNY from USD in July 2005.

However, it unofficially re-pegged it in July 2008 around the time of the global financial crisis (GFC) but moved to a more flexible approach in late 2009.

In December 2001 (after 15 years of negotiations), China became a member of the World Trade Organisation (WTO) and consequently revised several existing laws and also enacted new legislation in compliance with the WTO. The WTO membership was a path-breaking event that catapulted China into the centre of global trade.

China's share in global trade shot up to 9.8% in 2010 from 3.7% in 2000, with its share in global exports surging to 10.6% in 2010 from 3.9% in 2000 (1990: 1.9%). But China also became an important source of demand for global imports, with its share in global imports jumping to 9.1% in 2010 from 3.4% in 2000 (1990: 1.5%). Interestingly, despite the tectonic impact of the WTO entry and other factors on Chinese exports, its annual average GDP growth in 2002-2010 was only marginally higher than what it was in the decade before it became a WTO member.

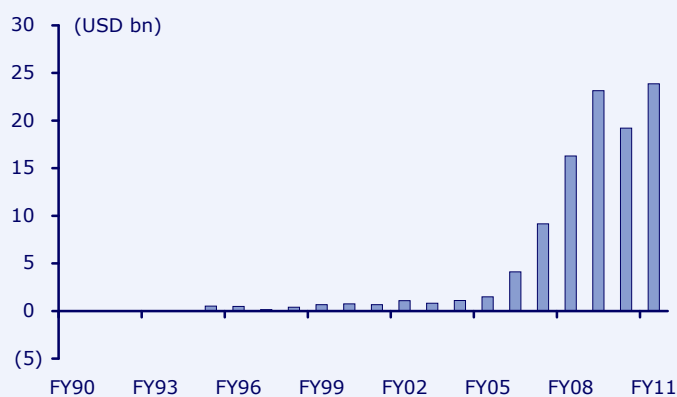
China is trying to re-orientate its economy towards consumption, but India has yet to experience a sustained investment upturn. India's last investment upturn was interrupted by the GFC, and the post-crisis recovery was adversely affected by a combination of delay in environmental clearances, corruption scandals, policy paralysis and rising interest rates. India scores higher than China on democratic foundation and transparency, free press and regulation of the banking sector. However, the Chinese government's strength in project execution and delivery, infrastructure and strategic planning are the weaknesses of the Indian state.

India and China

	2010	
GDP production (% of GDP)	India	China
Agriculture	19.0	10.2
Industry	26.3	46.9
Services	54.7	43.0
GDP expenditure (% of GDP)		
Exports	21.5	29.4
Imports	24.8	25.4
Net exports	(3.2)	4.0
Total trade	46.3	54.9
Merchandise trade		
Export (% of world exports)	1.5	10.6
Import (% of world imports)	2.1	9.1
Total trade (% of world trade)	1.8	9.8

Note: India is FY11 except merchandise data which is CY10;
Source: IMF - DOTS, DataStream, CEIC, CLSA Asia-Pacific Markets

India's merchandise trade deficit with China



Source: CEIC, CLSA Asia-Pacific Markets

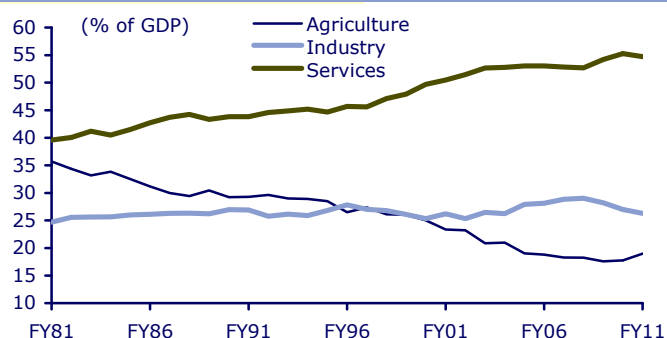
Service- rather than manufacturing-led growth appears counter-intuitive

Service sector beats manufacturing

The most counter-intuitive feature of India's economic development has been that it has so far almost bypassed greater role for manufacturing to jump to the service sector as a key driver of economic growth (Figure 8). This is in contrast to the typical economic development model in which the economy transitions from being largely agrarian to one where manufacturing plays a more important role. This eventually transforms into a mature economy where the service sector dominates, as manufacturing production costs become less competitive relative to those in more cost-competitive emerging economies.

Figure 8

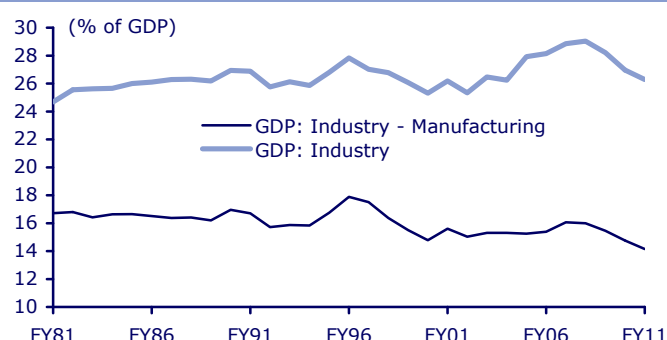
Composition of GDP - production



Source: CEIC, CLSA Asia-Pacific Markets

Figure 9

Industry vs manufacturing



Source: CEIC, CLSA Asia-Pacific Markets

Service-led growth is not a result of conscious policy

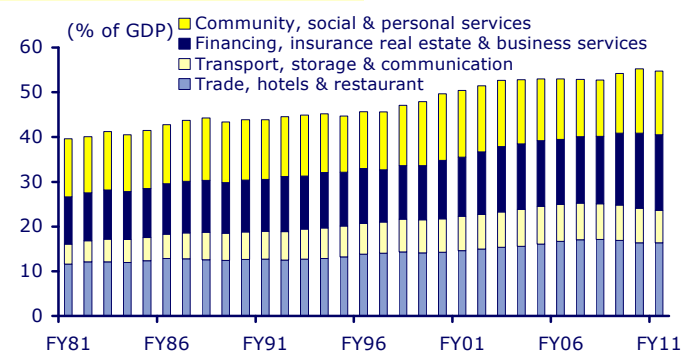
However, the outcome of India being driven more by services is not a result of conscious policy. A major boost for the information technology revolution in India owed to declining communication costs and the opportunity due to the Y2K bug, and the fact that outsourcing hubs did not have to rely on physical infrastructure as much as manufacturing. Further, manufacturing sector in India suffers from high taxation, regulatory issues, and poor supporting infrastructure, all of which have resulted in the sector's stunted growth (Figure 9).

Manufacturing upturn needed to absorb rise in working-age population

Despite the fact that growth in services sector has been less volatile than the growth in industry and agriculture, it is highly unlikely that India's service sector will be able to absorb the large additions to the labour force in the coming years due to rising share of working-age population. To be sure, manufacturing will have to get a shot (ok, several shots) in the arm, via a combination of improving physical and social infrastructure, and lower taxation. It is only then that the manufacturing sector will be able to absorb the addition to the labour pool (see *National manufacturing policy*, page 17).

Figure 10

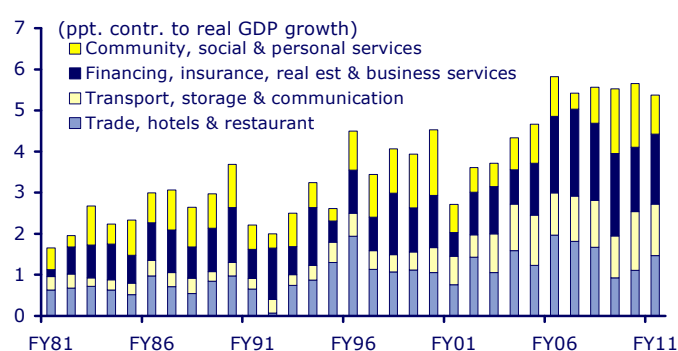
Services as % of GDP



Source: CEIC, CLSA Asia-Pacific Markets

Figure 11

Contribution of services to real GDP growth



India's global share of commercial services is greater than its share in merchandise exports

Share of the service sector in GDP has been trending up since 1980s

IT-BPO industry has a significant multiplier effect on the economy

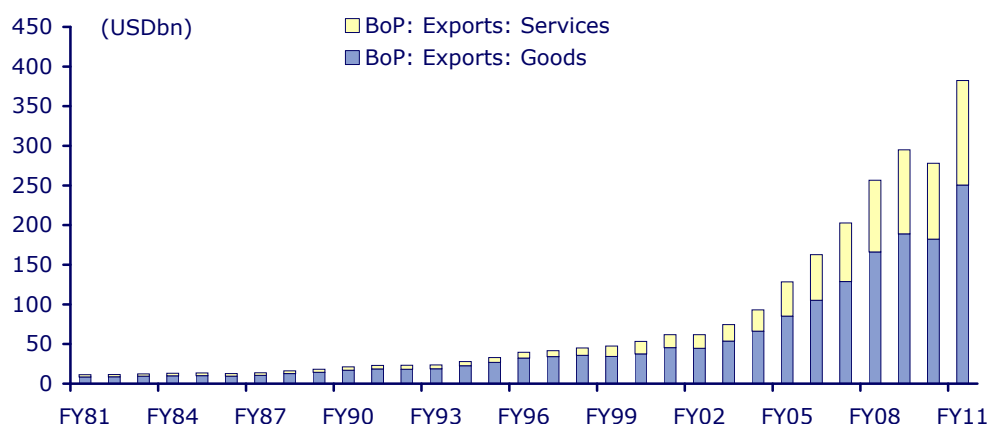
India's global share of commercial services is greater than its share in merchandise exports, in contrast to most other Asian economies. While the IT-driven surge in service exports is well documented, less well known is that the increase in the importance of service sector to GDP growth emerged in the 1980s and has also been favourably affected by the rise in domestically consumed services (Figure 10).

The share of the service sector in GDP has been trending up since the 1980s, well before the IT revolution boosted the sector's output. Apart from the external demand for IT services, the service sector's growth has also been driven by higher use of services in the economy, partly due to increased specialization, or splintering (i.e. unbundling of services) to allow the outsourcing (domestic or offshore) of some of the service activities. Higher demand for services has also been driven by the rising domestic activity and foreign trade (Figure 11).

India's IT-BPO industry, which has contributed substantially to export earnings (Figure 12), also has a significant multiplier effect on the economy. Thus, setting up of a new facility positively affects local property prices, demand for transportation, accommodation, and consumer durables. Nasscom estimates that the IT-BPO sector in India aggregated revenues of USD88.1bn in FY11. Direct employment reached nearly 2.5m in that year, an addition of 240,000 employees, while indirect job creation is estimated at 8.3m. As a proportion of national GDP, the sector's revenues have grown from 1.2% in FY98 to an estimated 6.4% in FY11. The share of IT-BPO industry in the total Indian exports (merchandise plus services) increased to 26% in FY11 from less than 4% in FY98.

Figure 12

Exports of goods and services



Source: CEIC, CLSA Asia-Pacific Markets

Global integration and foreign direct investment

India is not the first country that comes to mind when thinking about foreign direct investment (FDI) or its multiple positive effects on economic growth, as has been well documented by the experience of India's export-driven Asian neighbours. But interestingly, India has managed to enhance its global export share (Figures 13), despite low reliance on FDI. Further, outbound FDI has taken off in India's case at a much earlier stage of

India is not the first country that comes to mind for FDI

development than was the case with other Asian economies. The decline in inbound FDI (Figure 14) has reversed so far in FY12, with FDI in April-August up 95% to USD17.4bn.

Figure 13

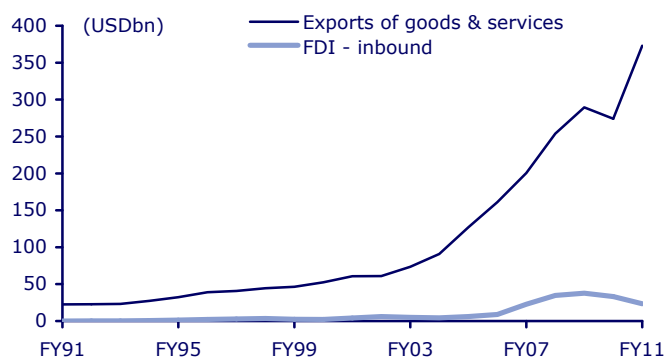
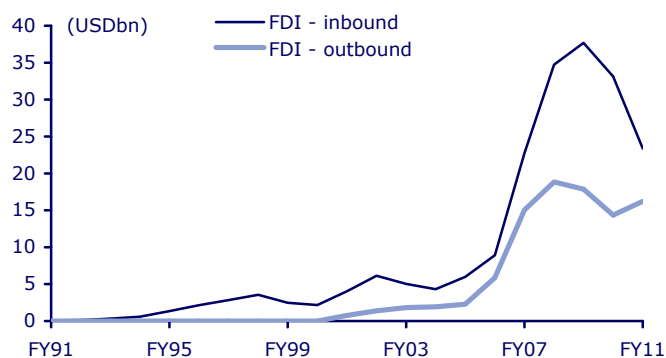
FDI and exports

Figure 14

FDI – inbound and outbound

Source: CEIC, CLSA Asia-Pacific Markets

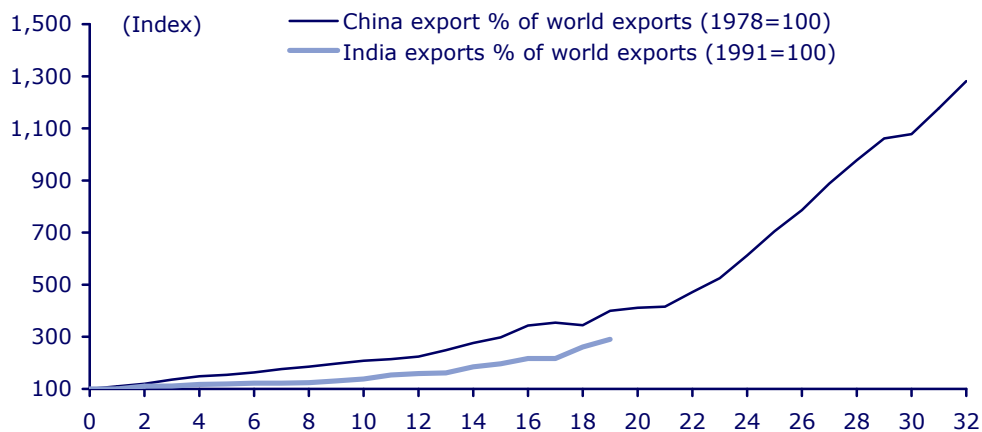
FDI into India is primarily horizontal, i.e. for market access

Rise in India's global export share similar to China's in its early years

Unlike other Asian economies, inward FDI into India is primarily horizontal (i.e. for market access) than vertical (i.e. export enhancing). Indeed, FDI has been much less important in driving India's merchandise export growth. The reasons for this are similar to those responsible for the stagnation in the manufacturing sector: poor physical infrastructure, challenges with land acquisition, overbearing regulations and archaic labour laws that hurt manufacturing activity.

Still, it is striking that the pattern of increase in India's global export share since the 1991 reforms is not substantially different from the pattern observed in China's export share since 1978, the beginning of its economic reforms (Figure 15). This is despite the fact that India has had much smaller inbound FDI.

Figure 15

India and China global exports share

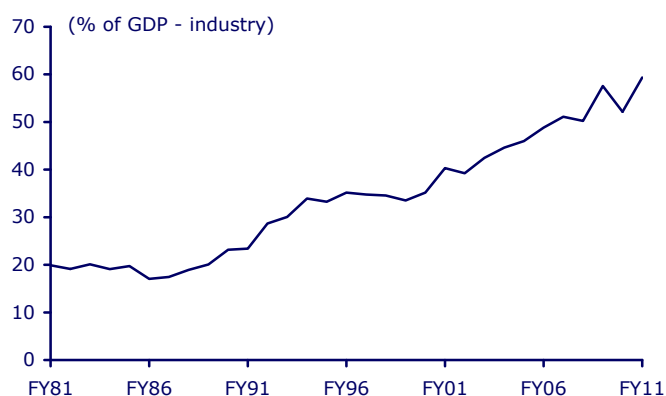
Source: IMF - DOTS, DataStream, CLSA Asia-Pacific Markets

Industry's outward orientation has also been steadily increasing

Indian industry's outward orientation has also been steadily increasing (Figure 16), despite the challenges it faces. While India's export/GDP ratio at 21.5% remains the lowest in Asia, it has been rising as India enhances its integration with the rest of the world (Figure 17). It should go without saying that it is highly unlikely that India will follow a pattern over the next decade or two that will be similar to China's meteoric rise. This is because, as argued earlier in the report, there are significant differences in the path adopted by the two economies.

Figure 16

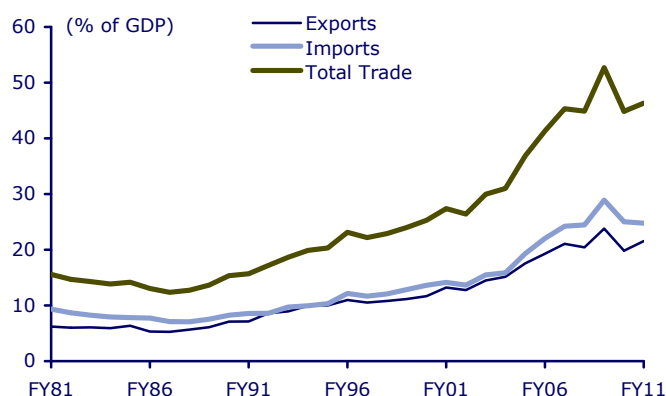
BoP merchandise exports as % of GDP - industry



Source: CEIC, CLSA Asia-Pacific Markets

Figure 17

Export, import and total trade % of GDP



Note: Export and import from GDP. Source: CEIC, CLSA Asia-Pacific Markets

Outbound FDI has risen significantly despite being a low-income economy

India is unique in that outbound FDI has increased significantly despite it being classified as a low-income economy. A combination of easing overseas restrictions, expectations of INR appreciation over the medium term, record-low global interest rates and exceptionally easy global liquidity conditions have all facilitated outbound FDI.

Scepticism alive regarding the rise in outbound FDI

Some pessimists argue that the outward investment is a sign that Indian companies themselves have lost faith in the Indian story. This appears to be an exaggeration at best and incorrect at worst. More importantly, if indeed those allegations were true, it is not clear why many foreign businesses are trying to make inroads into India to tap its growth. Finally, the government is actually facilitating this overseas drive of corporate India rather than nipping it in the bud, which is what it would have done if outbound FDI was hollowing out India.

Outbound FDI is not a substitute for local investments

Outbound FDI by companies should not be seen as a substitute for local investments by the same companies, despite the fact that India has never been an easy place for doing business. The competitive pressure to have a global footprint, to be globally competitive (rather than just regionally), to capitalise on economies of scale, and the need to secure natural resources, such as crude oil and coal, all have contributed towards the overseas expansion of Indian companies.

National manufacturing policy

India's cabinet has approved the widely awaited national manufacturing policy (NMP), the first of its kind in the country. The government seems to have finally woken up to the multi-pronged importance of the manufacturing sector, and the renewed emphasis is an important initiative.

The aim of NMP is to increase the share of manufacturing in GDP, create more employment and ensure a more sustainable economic growth model that is not just reliant on services. The NMP envisages developing National Investment and Manufacturing Zones (NIMZ), or mega-industrial parks, which will have good physical infrastructure and reduce the compliance burden on industry. The government has identified seven locations to set up these industrial parks, which will be large areas of developed land, with the requisite eco-system for promoting world class manufacturing activity.

It also aims to create 100 million additional jobs over the next decade in order to absorb the rising working-age population. It is expected to increase the share of manufacturing to 25% of GDP by 2020 from 16%, a level that has been stagnant for a long time. The policy has also proposed easing of labour and environment laws and suggested tax benefits for the industrial parks. The planned big enclaves could even subsume special economic zones (SEZs), and will be aimed at

deepening manufacturing capabilities and enhancing the value-added in the sector. NIMZs will be different from SEZs in terms of size, level of infrastructure planning, and governance structures related to regulatory procedures and exit policies.

On an average, a manufacturing unit needs to comply with nearly 70 laws and regulations. Apart from facing multiple inspections, these units have to file sometime as many as 100 returns in a year. The NMP aims to lessen the burden and also favour expeditious exit mechanism. Major environmental aspects will be taken care of in the NIMZ in the beginning itself by having an impact study while doing selection of the site.

The key issue that will dictate the success of NMP will be execution and inter-ministerial coordination, two areas where policy initiatives often fall through the cracks. The policy's success will also warrant a more pro-active and coordinated approach by the government. This initiative is best thought of as creating a more enabling environment for manufacturing in various pockets, something that the chronic resistance to reforms in labour laws, liability of infrastructure deficit and current issues with land acquisition and environmental clearances have not facilitated on a larger scale. Hopefully, the government has learnt some meaningful lessons.

Indonesia: New kid on the block

This year, Indonesia is the third-fastest growing economy in Asia after China and India. It has averaged GDP growth of 5.7% annually in the last six years, driven by a combination of domestic-led growth, favourable demographics, rising FDI, and the commodity boom. But the impressive performance in recent years significantly owes to the dramatic and painful changes that followed the domestic economic and political crisis inflicted by the Asian financial crisis that erupted in July 1997. For example, external debt has declined to around 29% of GDP in 2010 from 143% in 1998.

The economic crisis quickly evolved into a political crisis, which further damaged economic growth. Output declined by a whopping 13.1% in 1998, while IDR had lost more than 80% of its value by June 1998. Inflation, unemployment and poverty soared, and the combination of economic and political crises led to the downfall of the President Suharto's authoritarian regime

in 1998. GDP growth averaged a mere 3.8% annually in 1999-2003.

However, Suharto's violent downfall paved the way for systemic change after nearly three decades of authoritarian rule. Indonesians adopted political and institutional reforms, and for the first time in 45 years, selected national and local representatives in June 1999. Elections were again held in 2004 when Susilo Bambang Yudhoyono (popularly known as "SBY"), a former army general, won the presidential election. He was re-elected in 2009.

The transition to democracy from an authoritarian regime was far from smooth and still has its challenges in the archipelago nation of 17,000 islands with around 240m people. Still, the economic improvement under SBY has been significant, even if implementation, especially in infrastructure, leaves a lot to be desired.



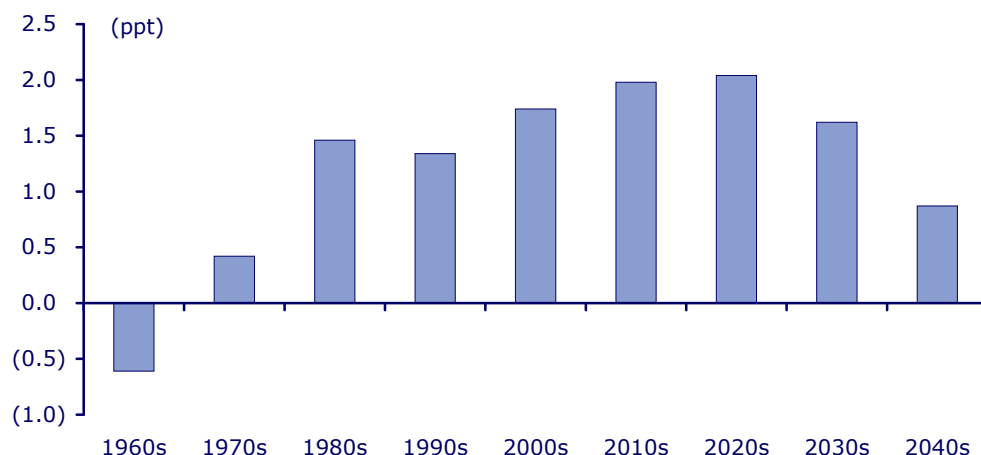
India is undergoing a demographic transition that has played out in most Asian countries

Demographic shift: Blessing or curse?

India is undergoing a demographic transition that has already played out in most of Asia. Everyone talks about India's expected demographic dividend, but few realise that it has already been unfolding for decades and has already been contributing to the acceleration in India's trend growth. An IMF paper (*The demographic dividend: Evidence from Indian states*, February 2011) correctly points this out and computes the demographic dividend - the addition to annual per-capita growth as a result of the higher proportion of working age population - at 0.4% in the 1970s, 1.5% in the 1980s, and 1.3% in the 1990s, and 1.7% in the 2000s (Figure 18). The demographic dividend is expected to increase further in the next two decades.

Figure 18

Demographic dividend



Note: Demographic dividend is the addition to annual per capita growth as a result of the higher proportion of working age population; Source: IMF, CLSA Asia-Pacific Markets

Poorest states to gain the most from demographic transition

There is also an interesting angle in the paper about the state-level impact of the demographic transition. The largest expansions in the working age ratio have occurred so far in the southern and western states. However, looking ahead, the poorest Indian states stand to gain the most from the forthcoming demographic transition, thus raising the prospect of substantial income convergence.

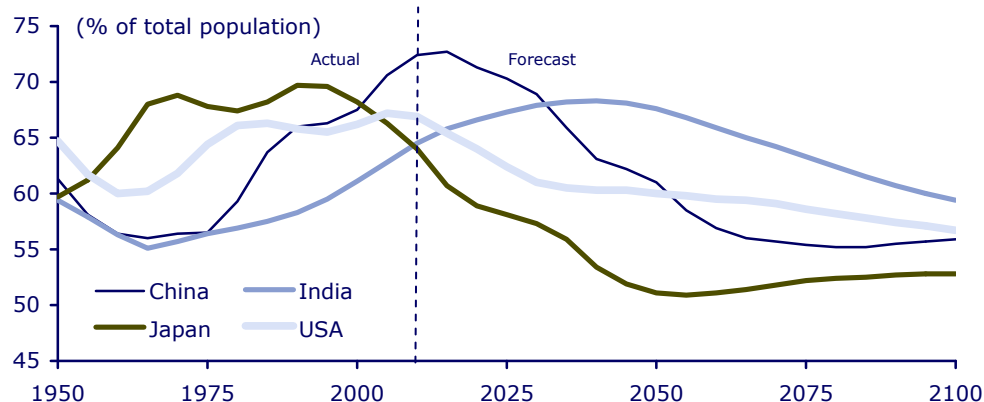
Median age of the population in India is only 25.1 years

It is hard to ignore India's compelling demographic transition. The median age of the population in India is only 25.1 years, compared to nearly 34.5 years for China, around 36.9 years for the US, and 44.7 years for Japan. In the next decade, 133.3 million Indians will come into the working-age population. While it will be a challenge to ensure meaningful jobs for all, the demographic transition does offer a favourable dividend to India.

Hard to ignore India's compelling demographic transition

The share of working-age population in total population in India has been increasing, and hit 64.5% in 2010 from 61.1% in 2000 and 58.3% in 1990 (Figure 19). The share of working-age population in total population is expected to rise to nearly 67% by 2020 and to around 68% in 2030, suggesting that the demographic dividend will continue for a long time. An estimated 322 million people will enter the working age group between 2010 and 2040. There is an important emerging contrast between India and China. China's share of working-age population in total population is at its peak, while India's will continue to increase for the next three decades.

Figure 19

Working age population

Source: UN- world population prospects, CLSA Asia-Pacific Markets

Infrastructure improvement will boost productivity

Demographic boon could turn into a burden if there are no reforms

Huge increase in aspirations and spending power of the households

The long-term growth of an economy is a function of two main factors: (1) growth in labour force; and (2) growth in productivity. Thus, India, like China and several Southeast Asian economies before it, has a built-in demographic dividend that has been, and will continue to be, a potent driver of economic growth. Even gradual improvement in infrastructure will contribute to a positive productivity shock.

Admittedly, the demographic boon could turn into a burden if the people entering the labour force are ill equipped and badly trained for better and higher-paying jobs. This remains a legitimate risk, as, contrary to fashionable comments about the huge labour pool in India, the effective supply of appropriately trained labour is far smaller. Indeed, India's challenge is not with the size of the available pool of workers but its employability because of inadequate training.

The potent combination of favourable demographics and higher economic growth is unleashing a significant increase in the aspirations and the spending power of the households (Figure 20). This in turn contributes to the sustainability of growing consumerism, especially since India has low levels of ownership of most consumer goods. There is a dramatic shift in aspirations and, consequently, governments that do not measure up in their delivery could find themselves out of a job.

Figure 20

Improving spending power of households

	Household inc. p.a. (Rs'000)	No. of households ('000s)				Annual growth rate (%)		
		FY96	FY02	FY06	FY10	FY96 - FY02	FY02 - FY06	FY06 - FY10
Deprived	<90	131,176	135,370	132,249	114,390	0.5	(0.6)	(3.6)
Aspirers	200	28,901	41,260	53,276	75,304	6.1	6.6	9.0
Seekers	500	3,881	9,030	13,813	22,268	15.1	11.2	12.7
Strivers	1,000	651	1,710	3,212	6,170	17.5	17.1	17.7
Near rich	2,000	189	546	1,122	2,370	19.3	19.7	20.6
Clear rich	5,000	63	200	454	1,037	21.2	22.7	22.9
Sheer rich	10,000	11	40	103	255	24.0	26.7	25.4
Super rich	>10,000	5	20	53	141	26.0	27.6	27.7

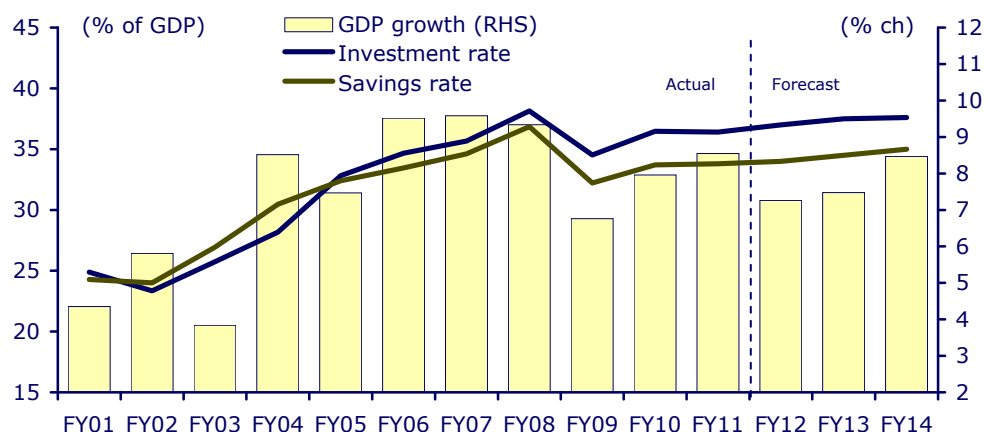
Source: NCAER, CLSA Asia-Pacific Markets

Demographic dividend will boost savings rate

There is a lot of understandable focus on the favourable effect of the demographic dividend on consumer spending, but not enough appreciation of what it means for the domestic savings rate for the whole economy. The rising share of working-age population in total population will boost the

domestic savings rate, which in turn will contribute more to growth, and also check the widening of the CA deficit, or the saving-investment gap (see *Attracting capital: Financing India's acceleration*, November 2010). In India, the share of working-age population in total is expected to continue to rise and hit a peak only in 2040. This, in turn, will push up the national savings rate (Figure 21), to 40% from around 34% at present.

Figure 21

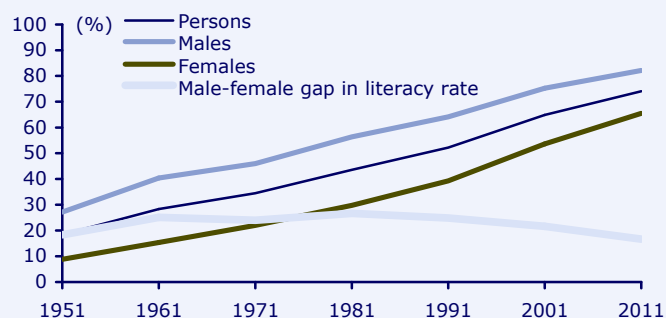
GDP growth, savings and investment rate

Source: CEIC, RBI, CLSA Asia-Pacific Markets

Where are the baby girls?

Masked by the emerging impressive demographic dividend due to the decline in the dependency ratio (i.e. dependents to the working-age population) is the distressing trend in India's female population, despite some improvement in the headline sex ratio (defined as the number of females per 1,000 males in the population). Preliminary data from the ongoing Census 2011 shows that India's sex ratio has improved in recent years, partly reflecting improved female literacy and narrowing gender gap in the literacy rate. However, more distressing is that the child sex ratio in the age-group 0-6 years continues to decline, indicating a continued preference of boys over girls.

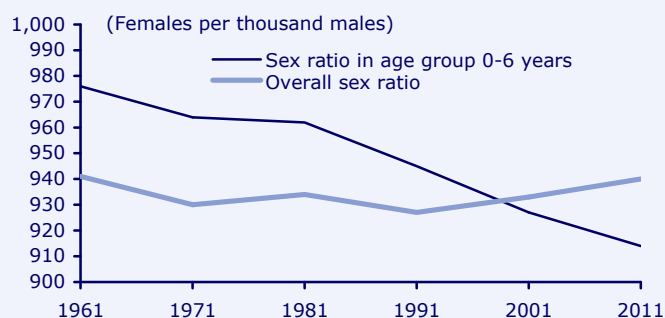
India's overall sex ratio has been rising since the Census 1991 and has gained seven points since Census 2001 to hit 940 now, the highest reading since the 1971 Census.

Literacy rate

Source: Census 2011- India, CLSA Asia-Pacific Markets

However, the child sex ratio has dropped to 914 - the lowest since independence. While a few states posted an improvement in the child sex ratio, the majority reported further decline. Interestingly, the rural sex ratio (947) is higher than the urban sex ratio (926), possibly because of easier access to pre-natal technology.

Indeed, the changing gender dynamics are also affecting the ease of finding a partner. A recent media article (<http://www.hindustantimes.com/The-new-business-of-marriage/Article1-762156.aspx>) offered some interesting statistics from modern-day brokers for arranged marriages from around the country. In the 30-36 age group, there are 15 women to one man. In the 26-30 age group, there are 7 women to one man. In the 20-25 age group, the ratio changes and there are 2 men to one woman. Happy dating.

Sex ratio



High inflation is partly an outcome of government policy...

...and a complex mix of demand- and supply-side factors

Inflation has not been due to excessive pace of monetary expansion

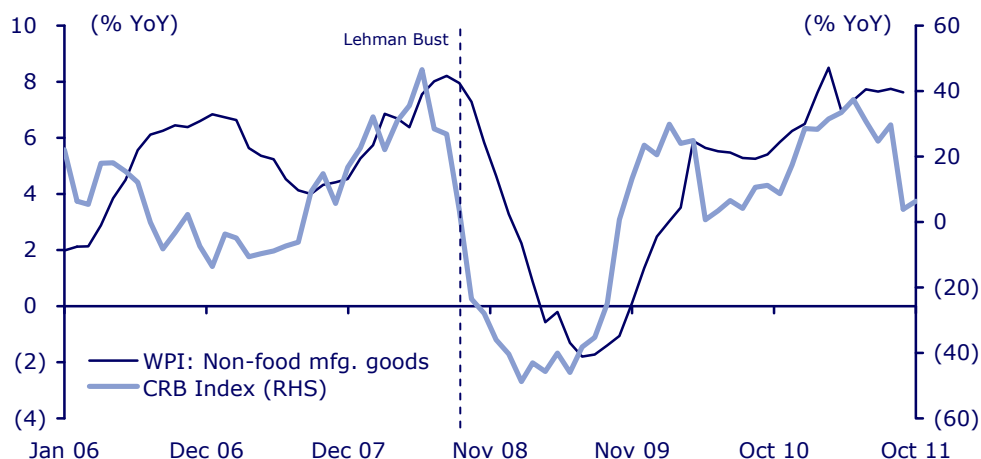
Inflation: Multi-headed dragon

Inflation itself is not something that differentiates India from other countries in Asia. However, in India's case, the difference has been with the drivers of inflation, especially since some of these are an offshoot of government policy. To be sure, discussion and analysis of India's inflation challenge has been like the proverbial five blind men describing an elephant. Each is right in his limited opinion based on his experience but all miss the complete picture.

In *Triple-A India Tracking the macro risks* (30 March), we reiterated that India's inflationary pressures are a complex mix of demand- and supply-side factors, cover food and non-food categories, and are structural and cyclical in nature. Like the previous cycle, global commodity prices have been a key driver of inflationary pressures in the current cycle (Figure 22).

Figure 22

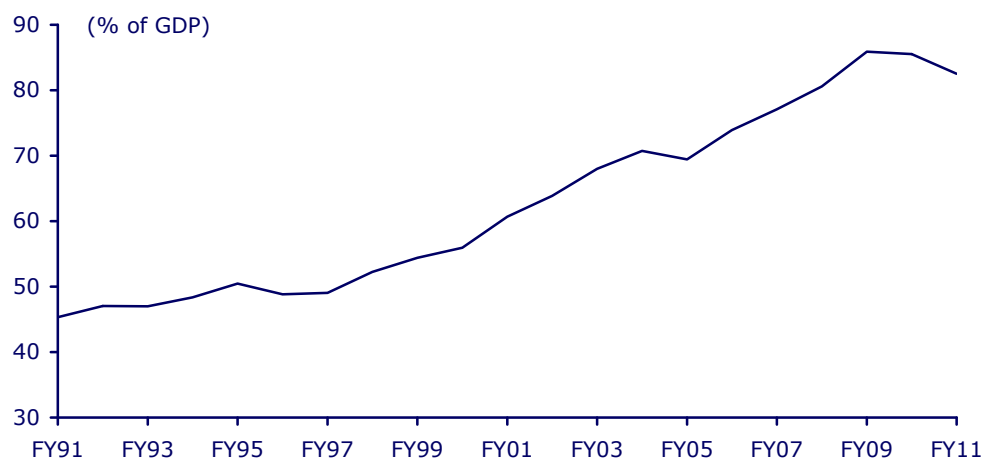
Core WPI inflation and CRB



Source: Bloomberg, CEIC, CLSA Asia-Pacific Markets

However, unlike the previous cycle, current inflation has not been due to excessive pace of monetary expansion. Indeed, the pace of increase in M3 has lagged the growth in nominal GDP (Figure 23), something unusual in India's experience. But the delay in reversing the successful counter-cyclical fiscal measures introduced to deal with the GFC has undermined the effectiveness of the RBI's monetary tightening. Indeed, a lax fiscal approach, especially the absence of an adequate reduction in subsidies, has been a key impediment to checking inflation, which has also been aggravated by supply bottlenecks. Higher subsidies limit the adjustment to consumer spending from higher oil prices. This in turn keeps consumer spending stronger than it otherwise would be and contributes to demand-driven inflation pressures.

Figure 23

M3 as % of GDP

Source: CEIC, CLSA Asia-Pacific Markets

There is a structural element to the high protein-rich food inflation

Apart from the impact of government policy and domestic supply shocks, there is a structural element to India's inflation as higher incomes have increased the demand for food, especially protein-rich items such as eggs, meat, milk and fish. Importantly, food grains such as wheat, rice and pulses are not showing any significant price increase. However, the pressures from protein-rich food items are accentuated by the government's inadequate supply response. After all, India is not the first country to experience increased demand for food as the broader population, especially at lower income levels, enhances its purchasing power. But there is no country where protein-based food inflation became permanently entrenched.

Interest rates alone cannot fix India's inflation

It is often mistakenly assumed that India's inflation is driven only by cyclical demand pressures that higher interest rates will be able to check. While the strength of aggregate demand, especially in the absence of the much-needed fiscal consolidation, is a relevant contributor, there are two other factors that are directly a function of the government's policy: (1) higher minimum support prices (MSPs) of several crops; and (2) higher spending on social programmes, including the rural employment guarantee initiative (*India unplugged: What lies beneath*, 24 June 2011). Both these policy measures have enhanced the spending power of rural India, which, along with structural factors resulting in greater consumerism, have contributed to the strength of consumer demand.

Higher MSPs have contributed to inflationary pressures

Including FY05, the first year of the current term of the Congress-led UPA coalition government, the MSPs for wheat and rice have jumped by a whopping 75-80% (Figure 24). In the six years to FY11, wheat and rice prices surged around 72% and 75%, respectively, compared to the increases of around 10% and 14%, respectively, in the six years to FY05. Thus, a meaningful part of food inflation has been caused by the government's own policy of higher MSPs. But higher MSPs have also contributed to the strength of rural consumer demand, which in turn has partly sustained the growth momentum.

Forecasting India's inflation: All fall down

One of the troubling features of tracking the Indian macro over the last year has been the lack of a reliable forecast of the inflation trajectory. This applies equally to the track record of inflation forecasting by the RBI and the private sector. In fact, one of the factors contributing to elevated inflation expectations has been the misses in actual inflation playing out as expected in the inflation trajectory. In particular, the RBI's own track record over the last few years has been poor, with actual inflation exceeding its original forecast.

There were several causes for the mishap with forecasting India's inflation over and above RBI's focus on WPI instead of CPI, as the former is more sensitive to changes in global commodity prices. One, the uncertain pass-through of higher global commodity prices made the inflation trajectory prone to more-than-usual revisions, which were also affected by the uncertainty around the timing and magnitude of the government's revisions of administrative prices for fuel and fuel-related categories.

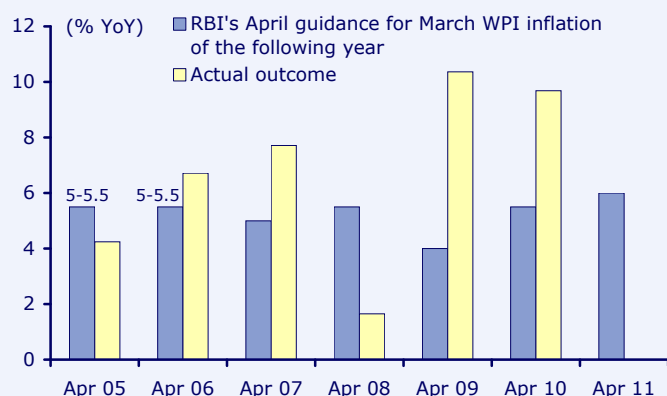
Two, the severe drought in 2009 caused a surge in food inflation. Typically, such weather-related shocks are temporary but that was not how it played out this time. While headline food inflation did come off, it remained elevated owing to a combination of structural factors

and government's policy of increasing minimum support prices for agricultural produce.

Three, in early 2011 the underlying drivers of inflation changed from being mainly driven by food to non-food items, especially the items captured in core (i.e. non-food manufactured goods) inflation, and inflationary pressures became more generalised and sticky. Four, the anticipated fiscal consolidation was much slower and weaker than what was appropriate from the perspective of managing the economic cycle, which in turn kept inflation and inflation expectations elevated. In fact, RBI's aggressive monetary tightening this year was partly to make up for the lack of meaningful fiscal adjustment.

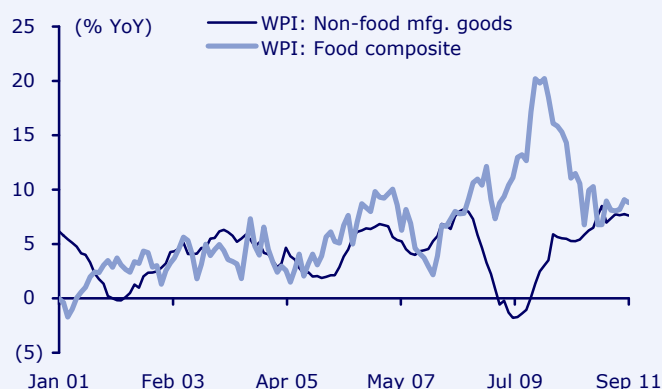
Five, higher inflation is partly an outcome of the broader government policy of improving the terms of trade for the agriculture sector/rural economy. In recent years, the rise in food prices has significantly exceeded the increase in the prices of non-food manufactured goods. Six, data quality remains an issue and revisions to the initially reported WPI inflation have been 1ppt or even higher at times. Finally, in a supply-constraint economy, the lack of supply-enhancing measures by the government ensured that the aggregate demand-supply imbalance contributed to keeping inflation high.

RBI's inflation forecast and outcome



Note: April 11 guidance has been revised to 7% in October 2011;
Source: CEIC, RBI, CLSA Asia-Pacific Markets

Core WPI and food composite inflation

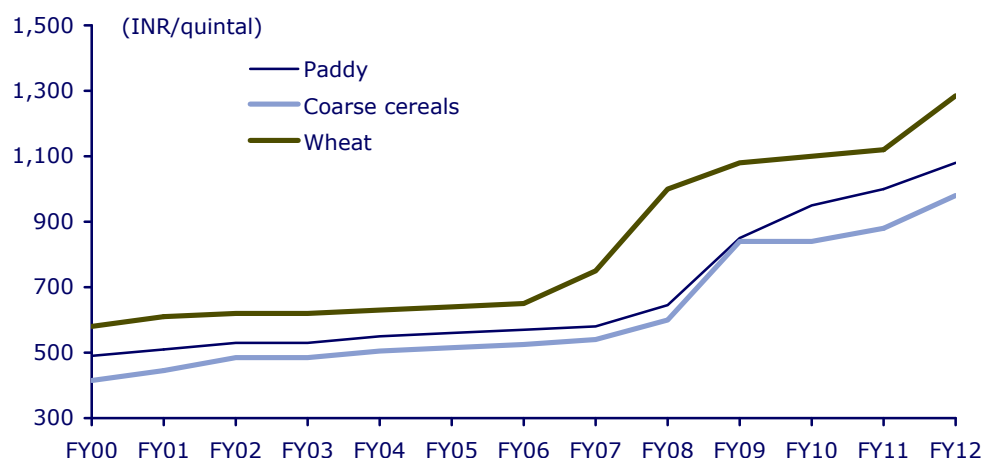


Source: CEIC, CSO, CLSA Asia-Pacific Markets

Pace of increase in food prices has outstripped that in non-food manufactured goods

India also suffers from "suppressed" inflation

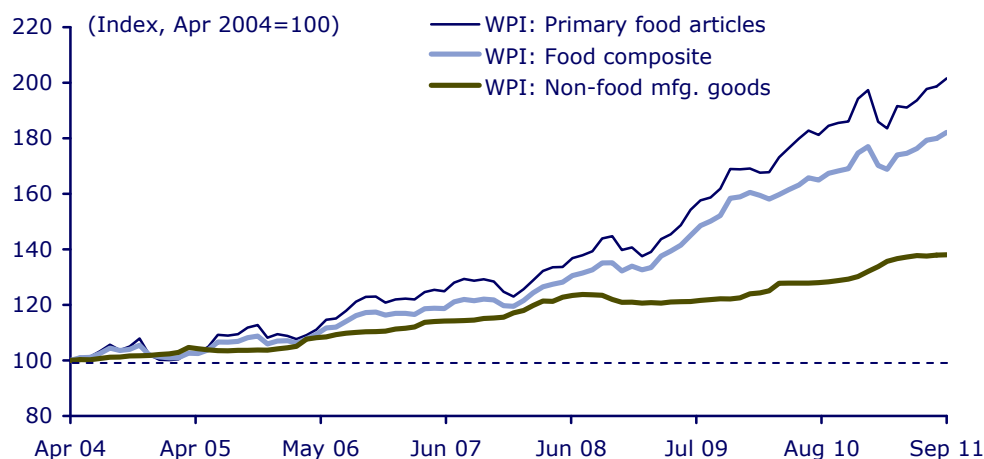
Figure 24

Minimum support prices

Source: CEIC, Hindu Business line, CLSA Asia-Pacific Markets

This important point is often overlooked: a part of the high inflation is an outcome of policy initiatives designed to improve the terms of trade for the agriculture sector/rural economy via higher minimum crop prices at the expense of the rest of India, broadly the urban middle-class. Thus, it is striking that in the last five years, the pace of increase in food prices has outstripped the increase in non-food manufactured goods by a wide margin (Figure 25).

Figure 25

Drivers of inflation

Source: CEIC, CLSA Asia-Pacific Markets

Moreover, India continues to suffer from "suppressed" inflation as several local prices do not fully reflect the changes in international prices. Also, India (like most other countries in the region) is moving on to a new higher inflation trajectory. Indeed, inflation will remain higher for longer for two key reasons: (1) policymakers do not want to dramatically slow growth; and (2) there is a new higher global normal for commodity prices. These factors suggest that inflation in India (and in other economies) will be higher than what we have been used to. Thus, a much higher loss in near-term growth will be needed if the old inflation trend has to be achieved. This is an option that most countries will shun. Consequently, policymakers will have to live with higher inflation for longer.

Fiscal consolidation and real sector reforms also needed

The bottom line is that India's inflation problems cannot be solved only by interest rate hikes. Fiscal consolidation and real sector reforms, including higher investment in agriculture and revamping the mechanism of setting agricultural prices have to be key parts of the solution. Sole emphasis on raising rates will be counter-productive beyond a point as it will hurt growth without much improvement in inflation. In fact, a huge dividend can be extracted by implementing reforms that could ultimately result in both higher growth and lower inflation.

RBI's idiosyncratic choice of WPI

One of the unique aspects of the RBI's monetary framework is its choice of wholesale price index (WPI) for setting the interest rate policy. Almost all other central banks use consumer price index (CPI) for deciding and communicating their monetary policy stance. Lower frequency measures, such as the deflators for GDP and private consumption, also provide insights into the broader inflation dynamics. India now has several different CPIs but with limited use. It does not have a producer price index (PPI).

Importantly, WPI is not a substitute for PPI. The PPI covers price changes faced by the producers on inputs, finished goods and services that are ready for market. The purpose of PPI is to provide a measure of prices received by the producers. The primary difference between the WPI and the PPI is that the WPI reflects changes in the average cost of production including mark-ups and taxes, while the PPI measures price changes at the gate excluding taxes.

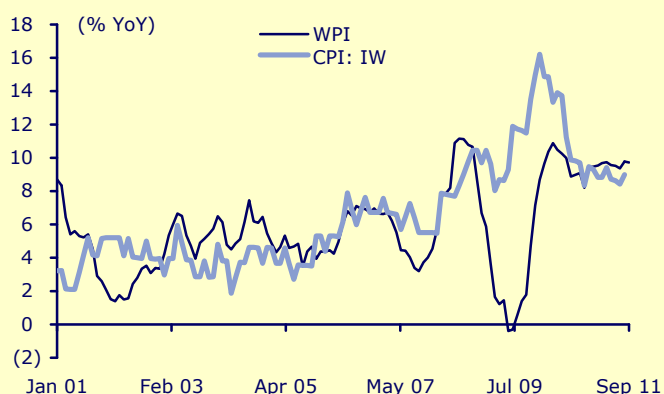
RBI often states that it looks at all inflation measures. However, WPI beats them all as it is the only inflation measure for which RBI announces a formal forecast. India's CPIs reflect the different segments of the population rather than the entire population. Thus, there is a CPI for industrial workers (CPI-IW), and one each for agricultural labourers (CPI-AL) and rural labourers (CPI-RL). CPI-IW is typically used as a cost of living index for urban areas. In early 2011, the government announced another CPI, which at the all-

India level combines new rural and urban CPIs. This was a welcome step but there is limited history of this new CPI and hence its usefulness for policy purposes is limited at this time.

Over time, majority investors and economists have reconciled and now just go with WPI, never mind that no one actually consumes the basket of goods represented by WPI. To be fair to the RBI, it has to use an inflation measure, so it relies on the second-best option of using WPI in the absence of a reliable CPI. But why choose WPI? Until recently, the key issue in India was that WPI was available on a weekly frequency while CPIs were available monthly, with considerable lags and often had outdated base years. WPI also offered significant details for analysis, although timely updates of price quotes can still be an issue.

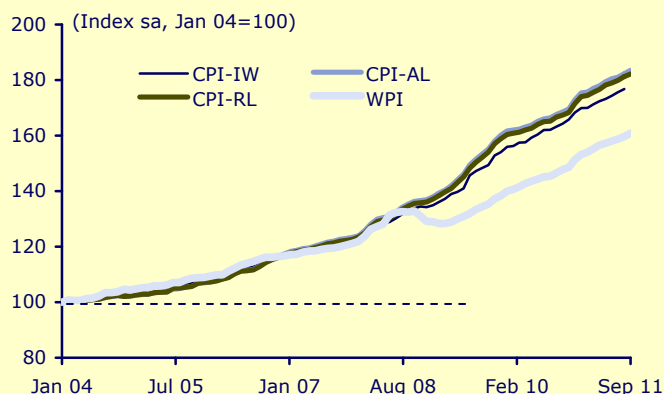
The divergence between WPI and CPI-IW had widened during the global financial crisis (GFC). This was mainly because of the price movements of minerals and metals, which are not directly captured in CPI. Also, the differences in the weights assigned to the fuel basket in CPI-IW and WPI, and prices of services (these are not included in WPI) caused a variation in the measurement of inflation. Finally, CPIs are more affected by food as the weight assigned to it is much higher than in WPI. To be sure, CPI-IW has a weight of 46.2% for food compared to the weight of 24.3% for the food composite basket in WPI.

CPI-industrial workers and WPI inflation



Source: CEIC, CLSA Asia-Pacific Markets

Different CPIs and WPI





**India was never married
to export-driven growth**

**Gradual pace of fuller
capital account
convertibility**

**INR's fortune changed
in 2002**

**There has been a change
in RBI's INR strategy**

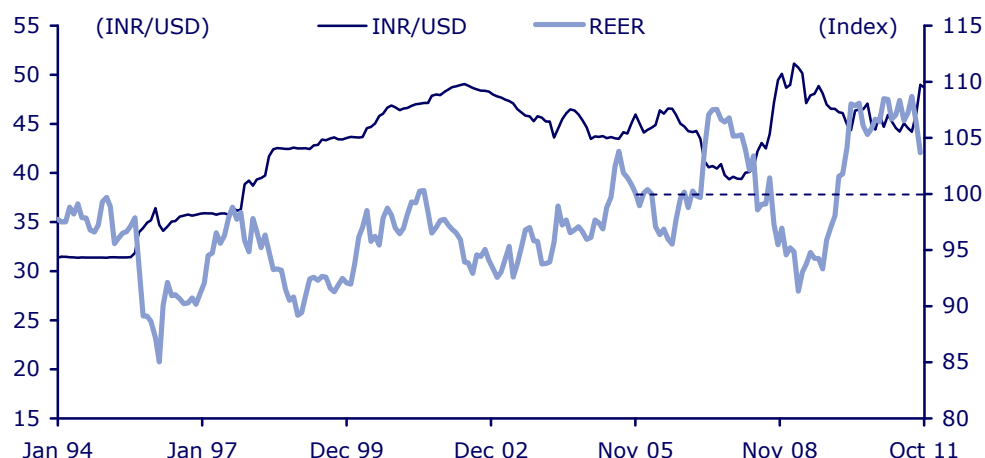
Progressive exchange rate policy

A key policy feature of Asian economies has been undervalued exchange rates in order to enhance the competitiveness of the export sector, which in turn facilitated their export-led growth. In contrast, India was never married to export-driven growth and, in recent years, has also moved away from intervention in the foreign exchange market. The hands-off approach towards managing INR is unique in Asia, where excessive currency intervention has typically been the norm. Encouragingly, India's share in global merchandise exports has been steadily rising, despite the absence of direct pursuit of an undervalued exchange rate.

India's pegged exchange rate regime shifted to a partial float in 1992, as part of the reform following the 1991 balance of payments crisis. INR was made fully convertible on the current account of the balance of payments in 1994. Over time, the RBI has adopted a gradual pace of fuller convertibility on the capital account, and has continued with the liberalisation despite the after-effects of the global financial turmoil and the related economic distress in recent years.

Figure 26

INR/USD and real effective exchange rate (REER)



Source: BIS, Bloomberg, CLSA Asia-Pacific Markets

The change of fortune for INR began from 2002, but owing to temporary current account (CA) surpluses that lasted until early 2004 (Figure 26). Often viewed as a sign of strength, the CA surpluses actually reflected weak domestic demand conditions that contributed to the narrowing of the merchandise trade deficit. The CA balance reverted to a deficit from FY05, as the economic recovery gathered strength and a new multi-year acceleration in growth began that lasted until FY08 when the GFC occurred. The real effective exchange rate (REER) has been more volatile in recent years. This is mainly because of a more flexible and progressive exchange rate policy.

There was a change in strategy of the RBI following the GFC as a result of which it has avoided intervening in the currency market. Consequently, INR has been more volatile (Figure 27). It has also understandably underperformed other Asian currencies as India runs a chronic CA deficit (Figure 28).

Figure 27

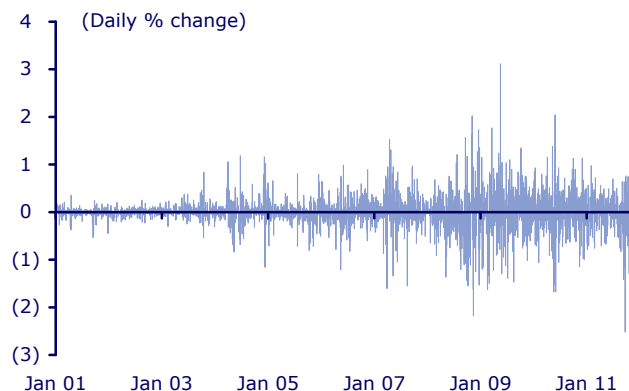
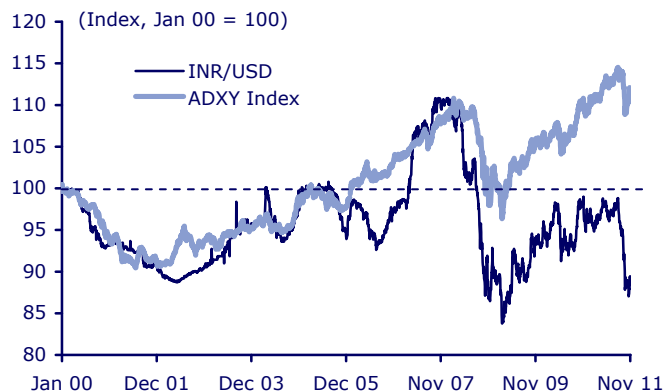
INR volatility

Figure 28

INR/USD and ADXY

Source: Bloomberg, CLSA Asia-Pacific Markets

Capital flows have been important in deciding INR flexibility

India's experience with capital flows has been important in deciding the pace of greater INR flexibility by the RBI. What India (and several other economies) experienced following the GFC was a boom-bust cycle associated with a sudden and significant reversal of a surge in capital inflows. Thus, in FY08, India's overall balance of payments (BoP) surplus, which is the sum of the surplus of the capital account and the CA deficit, surged to an unprecedented and unpalatable USD92.2bn (or 7.4% of GDP), before turning into a deficit in FY09 due to capital outflows.

Recent capital inflows have not been overwhelming

The magnitude of capital inflows into India following the post-GFC recovery has not been overwhelming. Also, the size of the CA deficit is higher, so capital inflows have been just sufficient to finance the CA deficit. Consequently, the RBI has not been intervening in the currency market. The bottom line is that the monetisation of BoP surpluses is significantly less than what it was in the run up to the GFC, and the related excesses in the domestic credit cycle are substantially less pronounced (see *Triple-A India-Recalibration*, 11 May).

INR impacted by risk appetite and commodity price movements

It is common to find reams written on why lower prices of commodities, especially crude oil, are positive for India's macro. We concur. However, what is debatable is how big an impact these lower commodity prices and the broader global environment that results in lower commodity prices have on the local equity market. While input price pressures will undoubtedly ease for businesses and the macro setting will be less worrying, investors often overlook what will happen to capital inflows. Thus, it is striking that Sensex and Brent are generally positively correlated (Figure 29) up to a point, and there has not been a period in the last several years that shows a combination of falling crude oil prices and rising Sensex on a sustained basis. INR and Brent have also been correlated in recent years (Figure 30), as both reflect shifting risk appetite.

Figure 29

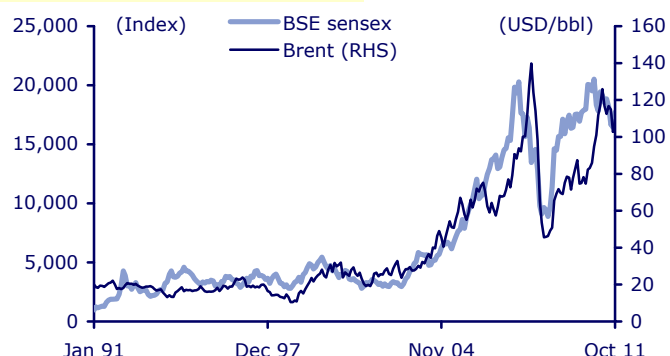
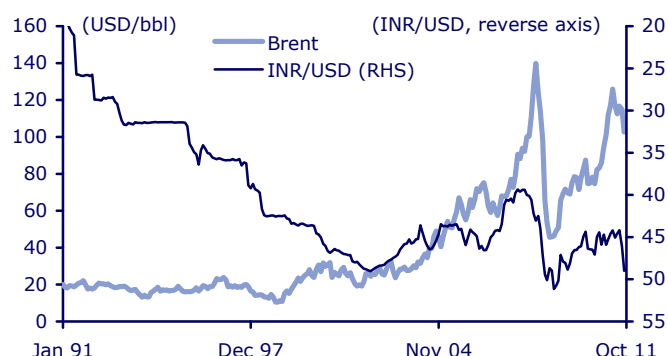
Sensex and Brent

Figure 30

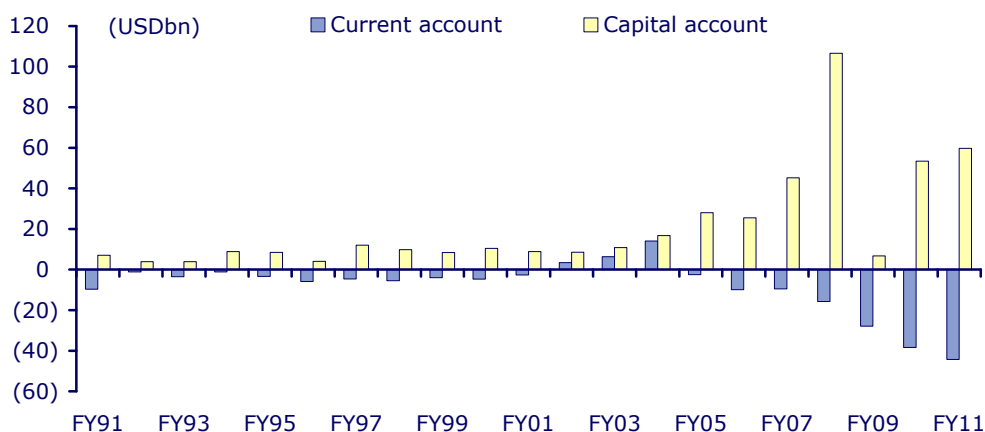
INR/USD and Brent

Source: Bloomberg, CLSA Asia-Pacific Markets

Lower crude oil prices are good for inflation and its twin deficits

Lower crude oil prices are unambiguously good for India's inflation and its twin deficits, and could also potentially offer breathing room to RBI. However, the factors that trigger lower crude oil prices (say, global risk aversion vs a normal global cyclical slowdown) should not be overlooked as they will also impact capital inflows, and hence the prices of local financial assets. If the decline in crude oil price is because of higher risk aversion, then it is unlikely that the Sensex will be singing high notes no matter what lower crude oil price means for the macro. In the final tally, what is unquestionably good for the macro may not necessarily be good for the equity market. This distinction shouldn't be ignored.

Figure 31

Current account and capital account balance

Source: CEIC, CLSA Asia-Pacific Markets

Policymakers do not have peace with the balance of payments

Indian policymakers do not have much peace with the country's balance of payments position. They have to be mindful of either the widening CA deficit, or the surge in capital inflows, and sometimes both within a few months (Figure 31). That also highlights the key challenge in designing sustainable policy as the flip-flop in capital inflows can happen suddenly - as has been the case - and dealing with each requires a different policy prescription.

India is vulnerable to sudden reversal in portfolio capital

A legitimate worry with India's financing of the CA deficit is that it is vulnerable to a sudden reversal in portfolio capital, despite the attractiveness of India's global economic rise. The world might be experiencing a structural shift in the allocation of portfolio capital towards emerging economies, but there is no guarantee that short-term swings in capital inflows won't occur.

Export competitiveness and FDI need to be boosted

Debatable if India should focus on undervalued exchange rate

China will be an important focus for India...

...especially for currencies

There are three key policy initiatives that the government can undertake to lessen the vulnerability to fickle capital flows: (1) Boost the competitiveness of exports and move towards higher value-added goods; (2) Make inbound FDI more attractive as it tends to be less volatile than portfolio flows; and (3) continue to gradually open up the local currency debt markets to FIIs, who then assume the currency risk. There is increased appetite for local currency government debt and corporate bonds. The opening up of these asset classes to foreigners will also diversify the sources from which firms can borrow, ease the financing constraint, and lengthen the maturity profile of borrowing for several companies, especially for projects with longer gestation.

Undervalued exchange rate and adequacy of foreign reserves

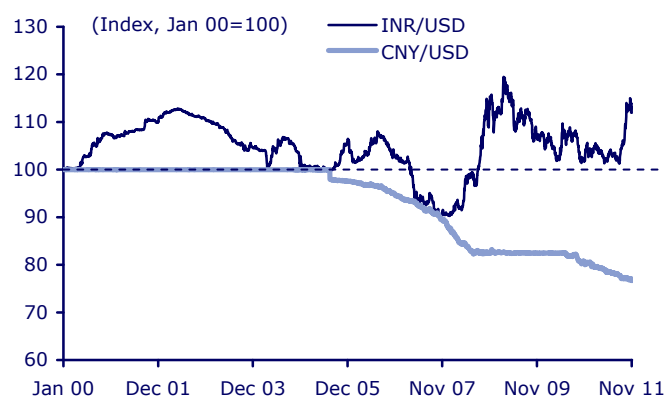
There are two additional facets of India's exchange rate policy that should not be ignored. One, over the medium term, should it have preference for an undervalued exchange rate - as has been the case with other Asian economies - in order to boost employment in the export sector? This is particularly relevant as the government has not been able to quickly or fully fix the impediments, such as poor infrastructure, which make Indian exports relatively less competitive. Indeed, these impediments have limited the success India could have enjoyed because of its low-cost advantage.

For obvious reasons, China will be an important focus for India. Economic ties between Asia's two fastest-growing economies are gradually improving, despite some unresolved political issues. Two-way trade between the two countries has risen to USD63.1bn in FY11 from USD2.3bn in FY01, and indications are that both countries want it to rise to USD100bn by 2015. China now accounts for 7.7% of India's exports (FY01: 1.9%) and 12.3% of imports (FY01: 3.0%). India's bilateral merchandise trade deficit with China has swelled to USD23.9bn in FY11 from a mere USD0.7bn in FY01.

In particular, exchange rate policy will become more important in dealing with China. INR depreciated against CNY substantially in nominal bilateral terms (Figure 32) but the movement in the respective REERs is less striking (Figure 33), mainly because of India's higher inflation. There isn't much overlap in the export structures of India and China, but INR depreciation against CNY increases the cost of imports from China.

Figure 32

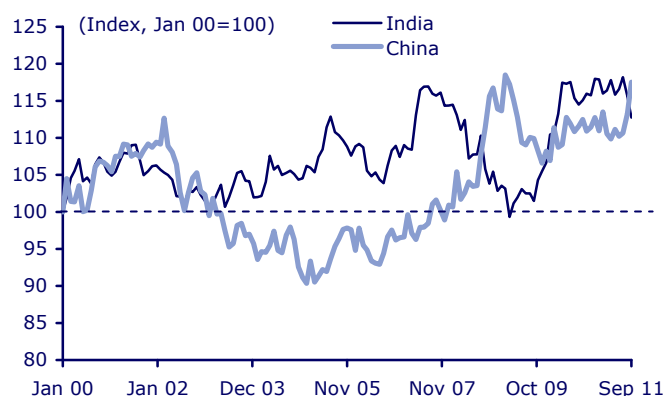
INR and CNY per USD



Source: Bloomberg, CLSA Asia-Pacific Markets

Figure 33

Real effective exchange rate



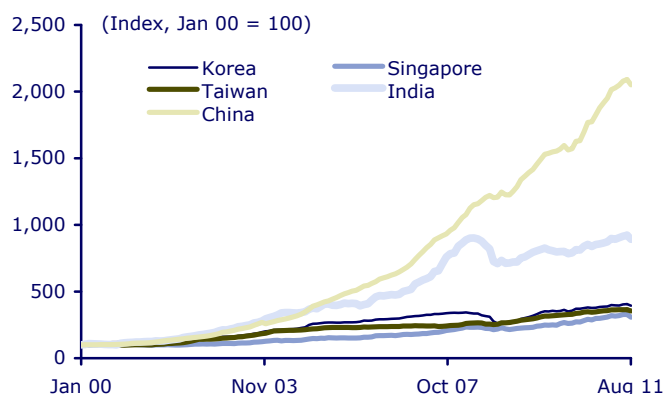
Source: BIS, CLSA Asia-Pacific Markets

Adequacy of foreign reserves will become more important

Second, in the absence of intervention in the currency market, will the stock of foreign exchange reserves with the RBI be sufficient in the years to come? As the Indian economy continues to grow, the combination of higher merchandise import bill and rising external obligations will increase the requirement for holding higher foreign reserves, which also constitute an important metric used to assess foreign liquidity ratios in times of external financial and economic stress. Indeed, one factor that facilitated greater policy flexibility in dealing with GFC was that India could run down a part of its foreign reserves (Figure 34).

Figure 34

Foreign exchange reserves



Source: CEIC, CLSA Asia-Pacific Markets

Figure 35

Change in foreign reserves

	Dec 09 (USD bn)	Sep 11 (USD bn)	Change in fx reserves (USD bn)	% change in fx reserves
Australia	42	44	2	5.2
China	2,399	3,202	803	33.5
Hong Kong	256	278	22	8.5
India	283	311	28	9.9
Indonesia	66	115	48	73.2
Korea	270	303	33	12.4
Malaysia	97	131	34	35.5
Philippines	44	75	31	69.9
Singapore	188	234	46	24.4
Taiwan	348	389	41	11.8
Thailand	138	180	42	30.1

Risk from a hands-off INR approach and chronic twin deficits

However, a striking combination in India's macro management is the preference for a hands-off approach towards INR with continuing twin deficits and increased reliance on foreign capital, including volatile portfolio flows. As shown in Figure 35, the increase (percentage change) in India's foreign reserves has been the lowest in Emerging Asia (ex Hong Kong). The absence of meaningful increase in foreign reserves could make the Indian economy even more vulnerable to the global swings in capital flows. While the non-interventionist approach towards INR has been the right approach for making domestic monetary tightening more effective, it does not appear to be a sustainable approach unless the CA deficit is narrowed and sustainable FDI inflows increase significantly.



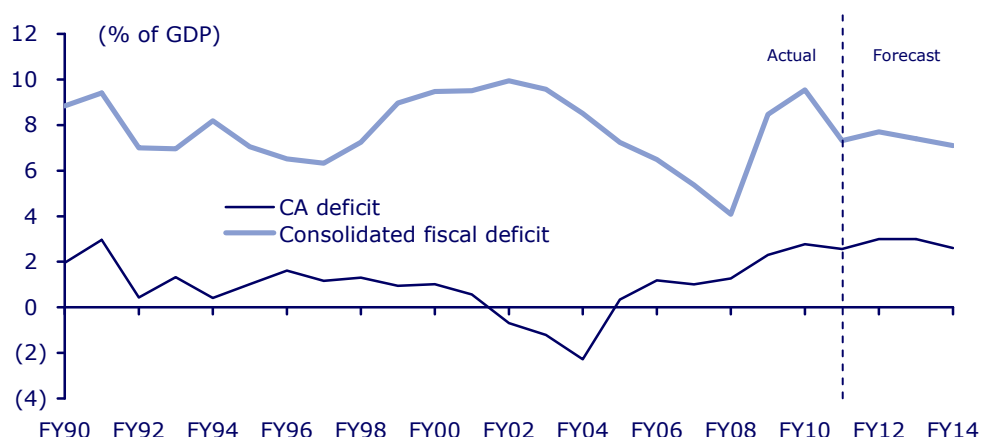
**India has posted chronic
CA and fiscal deficits**

Living with twins

Many Asian economies have posted a deficit on the current account (CA) or on the fiscal balance (or both in some years), but India has the unique distinction of posting *chronic* shortfall in its fiscal and the CA balances. Indeed, the sum of the consolidated (centre + states) fiscal deficit (FD) and the current account deficit (CA deficit) was almost 10% of GDP in FY11 (Figure 36). The CA deficit is significantly affected by India's dependence on crude oil, which accounts for almost 30% of total imports.

Figure 36

Current account deficit and consolidated fiscal deficit



Source: CEIC, RBI, CLSA Asia-Pacific Markets

**Fiscal deficit must be
equal to surplus of
savings over investment
plus trade deficit**

Fiscal deficit (FD) must be equal to the surplus of savings over investment plus the trade (or current account) deficit. Under floating exchange rates, any deficit or surplus in the current account must be balanced by an equal and opposite surplus or deficit in the capital account. Consequently, a budget deficit must be financed either by an excess of saving over investment, or by borrowing from abroad. A large FD that is sustained also adversely affects India's ambition of higher sustainable economic growth.

**Chronic twin deficits
increase the dependence
on foreign capital**

Chronic twin deficits increase the dependence on foreign capital, which in turn can make the economy vulnerable to swings in global capital flows. Importantly, the Indian government does not borrow internationally by issuing foreign currency sovereign bonds, but it has been liberalising the capital account of the balance of payments so as to attract more foreign savings for the non-government sector.

**Both deficits are partly
affected by changes in
global price of crude oil**

It is common for growing emerging economies to have saving-investment gaps, but what constitutes sustainable thresholds for FD and CA deficit vary across countries. Still, the Indian economy is exposed to swings in foreign capital and hence the need to ensure that the CA deficit does not exceed 2.5-3% of GDP and that there is a sustained reduction in the FD.

Both deficits are partly affected by changes in global price of crude oil. The impact on the fiscal is a policy choice to live with higher subsidy bill by avoiding a higher pass-through to local fuel prices. On our sensitivity analysis, a USD10/bbl increase (decrease) in crude oil prices widens (narrows) the FD

**Weak fiscal dynamics
have always been India's
Achilles' heel**

**Focus on size of fiscal
deficit and sustainability
of government debt**

**Fiscal deficit-GDP was
improving until GFC...**

**...fiscal response to GFC
pushed up the fiscal
deficit**

and the CA deficit by around 0.2ppt of GDP and 0.5ppt of GDP, respectively. The impact of the recent decline in crude oil price will be favourable provided the decline is more than the depreciation of INR against USD.

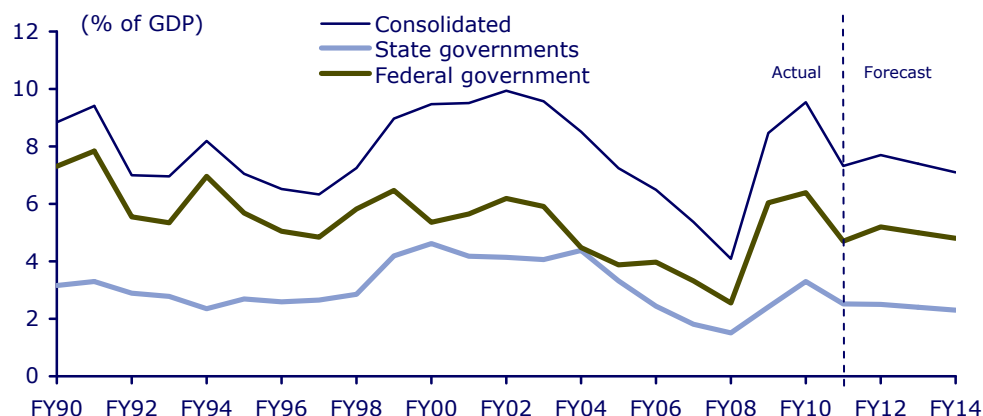
Fiscal consolidation is a must

Weak fiscal dynamics have always been India's Achilles' heel. The weakness has been aggravated by the emergence of coalition politics at the national level that have prompted various governments to adopt a more myopic view of public finances. Unlike other Asian economies, the states in India enjoy a lot of fiscal autonomy and the federal government normally cannot enforce any discipline directly. Further, the ruling UPA government appears to favour using the fiscal pump for political advantage, often under the banner of "inclusive" or "redistributive" initiatives, some of which have been announced despite the concerns about their impact on macro management.

There are two key issues with India's FD: (1) slippage following the global finance crisis (GFC) and the disappointingly slow post-recovery pace of fiscal consolidation (Figure 37); and (2) sustainability of government debt.

Figure 37

Centre, states and consolidated deficit



Source: CEIC, RBI, MoF, CLSA Asia-Pacific Markets

Since early 2000s, the trend in India's FD has had three phases:

Phase 1 - Pre-GFC: Fiscal indicators were improving until the GFC erupted (the full impact of the hit from the GFC was captured in FY09). High economic growth, some spending restraint and the federal government adopting fiscal responsibility legislation allowed the federal government's fiscal deficit to shrink to 2.6% of GDP in FY08 from 5.7% in FY01. The consolidated FD improved to 4.1% of GDP from 9.5% over the same time period, partly helped by states adopting a state value-added tax, which boosted their revenues.

Phase 2 - Response to GFC: This covered the period FY09 to FY10. Two factors played an important role in the reversal of the improving trend in the FD during this phase: (1) the payout of the Sixth Pay Commission (SPC) beginning late 2008; and (2) counter-cyclical fiscal measures to cushion the hit to the economy from the GFC. The combined impact raised the federal government and the consolidated FD to 6.4% of GDP and 9.5% of GDP, respectively, in FY10.

...but post-recovery fiscal adjustment has been disappointingly slow

Official forecast of fiscal deficit of 4.6% of GDP is optimistic

Spending will be lower in some areas but fiscal slippage is still likely

Government's market borrowing remains high

Crowding out of credit to the private sector has not been a key problem

Phase 3 - Post GFC: This phase, which began in FY11, marked the post-GFC effort to consolidate the fiscal position as the Indian economy recovered from the fallout of the GFC. However, the government's efforts towards fiscal consolidation have been weak and the fiscal laxity has contributed to the subsequent inflation challenge. In FY11, the government enjoyed a one-off windfall of around INR650bn (0.8% of GDP) from the 3G/WMA auction, which allowed the final FD to come in at 4.7% of GDP, lower than government's revised forecast of 5.1%. In the coming years, India will have to show more spending discipline and also undertake reforms to boost revenue.

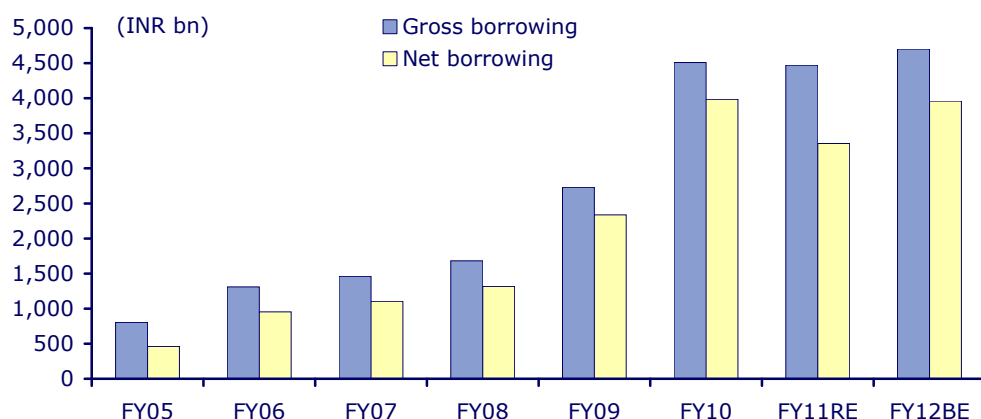
The FY12 FD of 4.6% of GDP that was announced in February (CLSA: -5.2% of GDP) was ambitious to start with as it was under-budgeted for subsidies, as is typically the case with India's budgets when they are announced. Of importance is that the reported federal government's FD in April-September of 68% of the full-year target announced in the FY12 Budget is partly biased because of exceptionally high tax refunds that were packed in the early months of FY12. This lowered the net tax intake of the government, but should iron out over the course of the year, although the government will miss its FD target.

Lower divestment and higher subsidy bill will be negative for the FY12 FD, but there will also be areas, such as rural employment guarantee scheme, where spending will be much lower than budgeted. Also, the hit to revenue collection will be less pronounced than is typically expected as the FY12 Budget was based on a conservative 14% growth in nominal GDP, while the actual outcome will be around 17%.

The government's local market borrowing surged following the GFC due to the counter-cyclical measures adopted to cushion the hit to growth (Figure 38). However, rather than declining after that, borrowing remains elevated. In fact, even in FY11, the decline in market borrowing was far less than what could have been the case if the government had fully used the better-than-expected revenues from the 3G/WMA auction to speed up consolidation.

Figure 38

Federal government's market borrowing



Note: FY12BE is revised borrowing; Source: CEIC, MoF, CLSA Asia-Pacific Markets

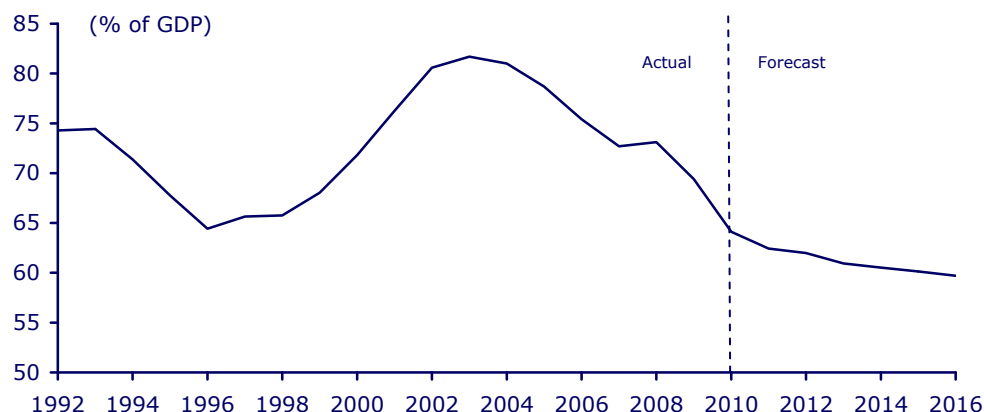
More importantly, the sizeable market borrowing has contributed to inflationary pressures as government spending on redistributive/populist schemes increased, thereby boosting aggregate demand. To be fair, crowding out of credit to the private sector has not been issue but mainly because of the weak investment cycle.

India has avoided a crisis despite concerns over its fiscal dynamics

Two main factors have helped India avoid a fiscal crisis despite legitimate and chronic concerns over its FD: (1) its debt/GDP has been declining (Figure 39); and (2) government's external debt is a mere 4.4% of GDP. These factors don't mean that the government should avoid further efforts to cut the FD but that they offer some flexibility that should be used opportunistically.

Figure 39

General government's debt



Note: CY basis; Source: IMF (data may not fully tally with national sources), CLSA Asia-Pacific Markets

Strong GDP growth has exceeded the increase in debt

The decline in the debt/GDP has been possible because of the strong GDP growth that has exceeded the interest cost on the debt. However, India still needs to lower the primary deficit (FD minus interest payment) of 1.5-2% of GDP for faster and more secure reduction in the debt/GDP. An important factor to keep in mind is that Indian government's external debt ratio is pretty low at 4.4% of GDP as it does not borrow internationally by issuing sovereign bonds in foreign currency to finance its fiscal deficit.

Government's external debt is only 4.4% of GDP

Given below are some details of India's debt profile (all as % of GDP):

- A. Government (centre + states) debt (external + domestic): 64.3%
- B. Government external debt: 4.4%
- C. Non-government external debt: 13.2%
- D. Total (government + non-government) external debt (B+C): 17.6%
- E. Total (external + government's domestic) debt (A+C): 77.5%

The profile of India's total (government + non-government) external debt of USD306bn is as follows:

- ❑ Maturity: 78.8% of total external debt is long-term, while 21.2% is short-term.
- ❑ Concessional: 15.6% of total external debt is concessional.
- ❑ Creditor: 28.9% of total debt is commercial borrowings, 15.8% is multilateral, 8.5% is bilateral, and 6.1% is for export credits.
- ❑ Currency: 53.5% of total external debt is in USD, 11.4% in JPY, 9.7% in SDRs and 3.7% in EUR.
- ❑ Interest cost: The implicit interest rate on India's total external debt was 2.2% in FY11, down from 4% in FY07.

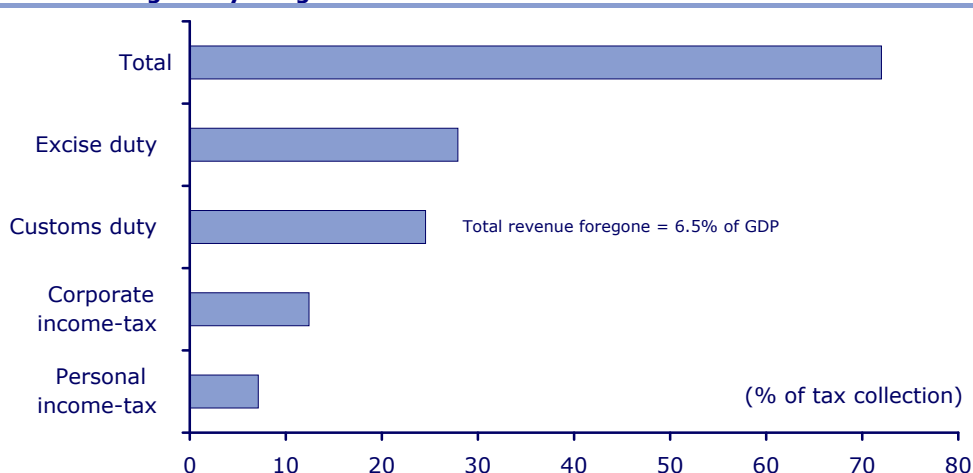
78.8% of total external debt is long-term

Improving public finances a must for sustained elevated GDP growth

Improving public finances will have to be an integral part of ensuring the sustainability of the growth upturn, as sustained higher government borrowing risks crowding out credit to the private sector, and also has second-round effects of keeping long-term rates high. Improving fiscal dynamics are also important for boosting the economy's domestic savings rate, which in turn will facilitate higher investment and GDP growth. However, the progress on fiscal reforms, covering both direct and indirect taxation, including the game-changing Goods and Services Tax (GST), remains uneven, uncertain and disappointing. As Figure 40 shows, reforms will go a long way in improving the government's coffers.

Figure 40

Revenue foregone by the government in FY11



Source: India budget, CLSA Asia-Pacific Markets

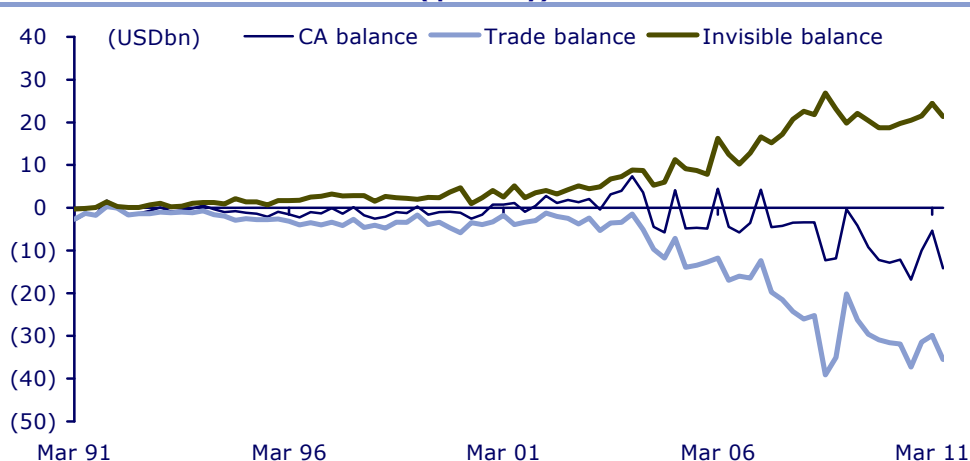
Sizeable invisible surplus limits the impact of wide merchandise trade deficit

Current account deficit: Shifting threshold

As a share of GDP, India's CA deficit is less than half the size of the merchandise trade deficit (Figure 41). The difference owes to a sizable "invisible" surplus that includes remittances from Indians working abroad and earnings from software exports. On our expectations, the trade deficit will likely be 7.7% of GDP in FY12, while the CA deficit will be 3% of GDP.

Figure 41

Drivers of current account balance (quarterly)

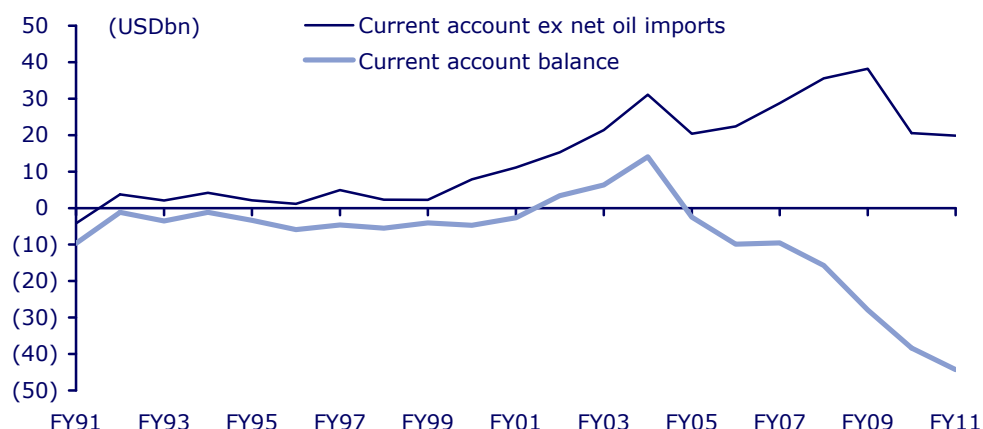


Source: CEIC, RBI, CLSA Asia-Pacific Markets

India has a CA surplus if oil-related trade is excluded

Crude oil plays an important role in shaping the merchandise trade deficit, as India imports nearly 70% of the refining needs, and crude oil imports are about a third of total imports. Rising export of petroleum products (FY11: USD42bn or 16.7% of total exports) provides some comfort. Excluding the oil-related trade, India runs a current account surplus (Figure 42). Thus, in FY11, India posted a CA deficit of USD44.3bn but a current account surplus of USD19.9bn if net oil trade is excluded.

Figure 42

Current account balance

Source: CEIC, CLSA Asia-Pacific Markets

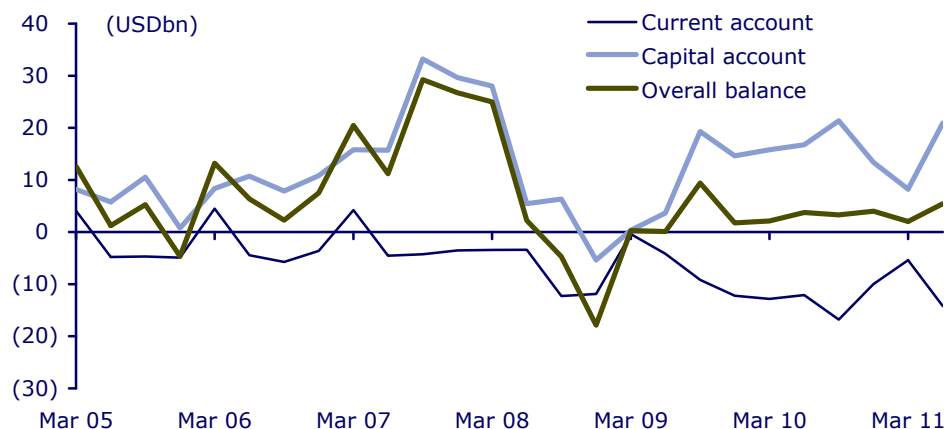
GFC triggered a boom-bust cycle

A striking feature of India's balance of payments in recent years has been that policymakers have had to deal with extreme outcomes of capital flows - large outflows and destabilising inflows. The magnitude of capital inflows was accelerating until FY08 (along with the global credit cycle), and culminated in the capital account of the balance of payments posting an unprecedented surplus of USD107bn, or a nerve-racking 8.6% of GDP in FY08. At the other extreme was the sharp reversal of foreign capital following the Lehman bust, which froze global financial markets and triggered a boom-bust cycle, which in turn crippled India's economic cycle (see *India unplugged 2011 vs 2008: Policy insights*, 15 August).

Stop-go pattern of capital inflows creates complications for policy

The stop-go pattern of capital inflows (Figure 43) creates complications for monetary policy and currency management. India's CA deficit is partly indicative of the strength of domestic demand, and also reflects its chronic dependence on imported crude oil. Policymakers in India have a choice. They can either aim for a combination of a much lower growth path that shrinks or eliminates the CA deficit, or continue with the current strategy of elevated sustained growth path while living with a manageable CA deficit (depending on the stage of economic cycle) that can be financed. The latter is a more appealing option but the government will have to speed up reforms that benefit the export sector so as to check the CA deficit.

Figure 43

Balance of payments (quarterly)


Source: CEIC, CLSA Asia-Pacific Markets

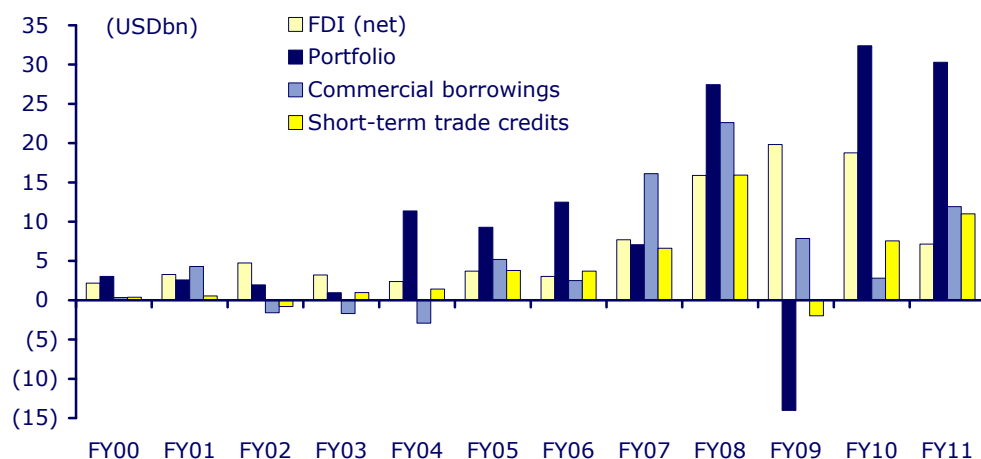
Acceptable threshold for CA deficit appears to be 2.5-3% of GDP

The acceptable threshold for CA deficit appears to be 2.5-3% of GDP. Admittedly, financing a CA deficit becomes trickier during periods of global risk aversion. But the RBI cannot do anything about global risk appetite. All it can do is to ensure that there is policy flexibility so that it can respond swiftly and appropriately under either scenario of capital inflows or outflows. At the same time, too many flip-flops on the regulatory environment by the RBI and the government will be viewed as negative by investors.

Absorbing foreign savings via different channels

Absorbing foreign savings via different channels (e.g. portfolio, FDI, ECB, private equity, non-resident Indians' savings) will continue to be an important input in India's global rise (see *Attracting capital - Financing India's acceleration*, November 2010). In fact, India has continued to liberalise the BoP capital account transactions. The growing financial openness of India has been accompanied by a significant shift in the composition of capital inflows, and the share of market-driven private inflows has been steadily rising (Figure 44). Corporate sector's overseas borrowing has been rising in recent quarters but is not close to its destabilising level in FY08.

Figure 44

Composition of capital inflows


Source: CEIC, CLSA Asia-Pacific Markets

Foreign investment in local currency debt increasing

An important shift in the composition of capital inflows has been within portfolio investment, usually considered volatile. Historically, portfolio investment meant only FII inflows into the equity market. However, as part of India's ongoing integration with the rest of the world and calibrated reforms to further opening of domestic asset classes to foreigners, FII participation in local currency government and corporate debt has picked up. Indeed, as a share of total net FII portfolio inflows reported by SEBI, debt inflows hit 24.6% in FY11, after being negligible couple of years earlier. In CY11 (up to 9 November), debt accounts for USD4.6bn of the total FII (net) inflow of USD5.3bn. Thus, the diversification in portfolio inflows has been beneficial.

FDI still needs to be made more attractive

However, FDI still needs to be made more attractive. While net FDI plunged in FY11, it has encouragingly surged 145.1% YoY to USD7.2bn in 2Q11, as inbound FDI more than doubled to USD12.9bn. Net FDI will show a significant increase in FY12 but the broader policy framework still needs to be overhauled to make it more attractive. **In 2Q11, net portfolio inflows (USD2.5bn) were lower while external commercial borrowings (net) were slightly higher (USD2.9bn).**

BoP and INR will continue to be affected by shifting global risk appetite

India's CA deficit will not disappear but the government is likely to stay the course with gradual liberalisation of the capital flows despite the more uncertain global backdrop. The RBI is an exception in Asia for adopting a more progressive policy towards INR and has thus not been intervening in the currency markets. Overall India's BoP and INR will continue to be affected by a combination of shifting global risk appetite, crude oil price and capital inflows. Ironically, lower crude oil prices, which will improve the terms of trade and lower the CA deficit, could also be accompanied by lower capital inflows if global risk aversion increases.

Appendix 1: Macroeconomic and financial indicators

Item	Average FY91 to FY00 (10 years)	Average FY01 to FY10 (10 years)	Average FY04 to FY08 (5 years)	FY09	FY10	FY11
Overall Real GDP (% change)	5.7	7.3	8.9	6.8	8.0 QE	8.5 RE
Agriculture (% change)	3.2	2.4	5.0	(0.1)	0.4	6.6
Industry (% change)	5.7	7.3	9.0	4.0	8.3	7.8
Manufacturing (% change)	5.6	8.0	10.0	4.2	8.8	8.3
Services (% change)	7.1	9.0	10.1	9.5	9.7	9.2
Demand Side Aggregates						
Final Consumption Expenditure (% change)	5.0	6.3	7.2	8.2	8.7	8.0
PFCE (% change)	4.8	6.4	7.4	7.7	7.3	8.6
GFCE (% change)	6.3	5.8	5.6	10.7	16.4	4.8
Gross Fixed Capital Formation (% change)	7.2	10.2	15.7	1.5	7.3	8.6
Share in GDP						
Agriculture (%)	28.4	19.4	18.9	15.7	14.6	14.4
Industry (%)	20.1	20.0	20.1	20.1	20.2	20.0
Services (%)	51.5	60.6	61.1	64.2	65.2	65.6
Foodgrains Production (Million tonnes)	188.6	210.5	213.6	234.5	218.1	241.6
Rice	80.1	89.2	90.7	99.2	89.1	95.3
Wheat	63.9	73.4	72.9	80.7	80.8	85.9
Pulses	13.5	13.5	14.1	14.6	14.7	18.1
Food Stocks (Million tonnes)						
Procurement	23.3	42.0	38.4	55.3	58.0	56.8
Off-take	20.6	39.5	41.5	39.5	48.9	52.9
Stocks at end-March	19.3	30.1	18.6	35.6	43.4	44.4
Index of Industrial Production (% change)	6.3	7.4	12.4	2.5	5.3	8.2
Sectoral						
Mining	3.4	4.3	4.0	2.6	7.9	5.2
Manufacturing	6.5	8.0	14.5	2.5	4.8	9.0
Electricity	7.0	4.8	6.3	2.7	6.1	5.5
Use-Based						
Basic Goods	6.3	5.6	8.0	1.7	4.7	6.0
Capital Goods	5.5	13.3	30.0	11.3	1.0	14.8
Intermediate Goods	7.5	6.2	8.5	0.0	6.0	7.4
Consumer Goods	5.9	8.2	14.8	0.9	7.7	8.6
Gross Domestic Saving Rate (% of GDP)	23.0	30.7	33.3	32.2	33.7 QE	-
Household	17.7	23.1	23.5	23.8	23.5	-
Private Corporate	3.8	6.3	7.4	7.9	8.1	-
Public	1.5	1.3	2.4	0.5	2.1	-
Gross Domestic Investment Rate (% of GDP)	24.4	31.2	34.3	34.5	36.5 QE	-
Wholesale Price Index Annual Average (% change)						
All Commodities	8.1	5.4	5.5	8.1	3.8	9.6
All Commodities-Point to Point	-	-	-	1.6	10.4	9.7
Primary Articles	9.4	6.4	6.0	11.0	12.7	17.7
Food Articles	10.2	5.8	5.2	9.1	15.3	15.6
Non-food Articles	8.3	6.1	5.5	12.9	5.5	22.3
Fuel and Power	10.6	8.9	7.3	11.6	(2.1)	12.3
Manufactured Products	7.1	4.1	5.0	6.2	2.2	5.7
Food Products	8.6	4.7	4.8	8.7	13.5	3.7
Non-Food Products	6.8	4.0	5.0	5.7	0.2	6.1
Consumer Price Index (CPI) (Average % Change)						
CPI- Industrial Workers	9.5	5.9	5.0	9.1	12.4	10.4
CPI- Industrial Workers Food	9.8	6.2	5.5	12.3	15.2	9.9
CPI- Agricultural Labourers	9.3	5.4	5.1	10.2	13.9	10.0
Monetary indicators						
Narrow Money (M1) (% change)	15.6	16.0	19.6	9.0	18.2	9.8
Broad Money (M3) (% change)	17.2	17.5	18.6	19.3	16.8	16.0
Aggregate Deposits (% change)	17.2	18.1	19.0	19.9	17.2	15.9
Bank Credit (% change)	15.9	21.8	25.5	17.5	16.9	21.5
Non-food Credit (% change)	15.4	22.4	26.7	17.8	17.1	21.3
Investment in Government Securities (% change)	20.9	17.7	13.3	20.6	19.3	8.6
Credit-Deposit Ratio (%)	55.1	64.8	68.0	72.4	72.2	75.7
Credit-GDP Ratio (%)	20.6	37.7	39.5	49.7	49.5	50.0
Call / Notice Money rate	11.7	6.1	5.6	7.1	3.2	5.8
10 year G-Sec yield	12.3	7.5	7.0	7.5	7.2	7.9

Continued on the next page

Macroeconomic and financial indicators (cont'd)

Item	Average FY91 to FY00 (10 years)	Average FY01 to FY10 (10 years)	Average FY04 to FY08 (5 years)	FY09	FY10	FY11
Central Government Finances (% of GDP)¹						
Total Revenue Receipts	9.2	9.5	9.9	9.7	8.7	10.0
Tax Revenue	6.8	7.2	7.6	7.9	7.0	7.2
Non Tax Revenue	2.5	2.3	2.3	1.7	1.8	2.8
Total Expenditure	16.0	15.4	14.8	15.8	15.6	15.4
Revenue Expenditure	12.3	12.9	12.2	14.2	13.9	13.4
Interest Payment	4.2	4.0	3.8	3.4	3.3	3.1
Capital Expenditure	3.7	2.5	2.6	1.6	1.7	2.1
Revenue Deficit	3.0	3.4	2.3	4.5	5.2	3.4
Fiscal Deficit	5.9	4.8	3.6	6.0	6.4	5.1
Primary Deficit	1.6	0.8	(0.2)	2.6	3.1	2.0
Domestic Debt	48.0	56.7	58.2	54.4	51.7	47.9
State Finances¹						
Revenue Deficit (% of GDP) ²	1.2	1.0	0.5	(0.2)	0.5	0.3
Gross Fiscal Deficit (% of GDP) ²	3.1	3.1	2.7	2.4	2.9	2.6
Primary Deficit (% of GDP) ²	1.2	0.8	0.3	0.6	1.2	1.0
Outstanding Liabilities (% of GDP) ²	22.3	29.3	30.1	26.3	25.0	23.0
Balance of Payments						
Merchandise Exports (% change) ³	8.6	17.7	25.3	13.7	(3.6)	37.4
Oil Exports (% change) ³	(13.5)	505.3 ⁴	62.6	(2.9)	2.3	48.7
Non Oil Exports (% change) ³	8.9	18.5 ⁴	31.0	17.2	(4.6)	35.4
Merchandise Imports (% change) ³	9.6	19.5	32.3	19.8	(2.6)	26.7
Oil Imports (% change) ³	17.7	22.9	35.7	17.6	(7.0)	21.7
Non Oil Imports (% change) ³	8.8	18.5	31.0	20.7	(0.6)	28.8
Trade Balance/GDP (%)	(2.8)	(5.3)	(5.4)	(9.8)	(8.6)	(7.5)
Invisible Balance/GDP (%)	1.6	4.8	5.1	7.5	5.8	5.0
Current Account Balance/GDP (%)	(1.3)	(0.5)	(0.3)	(2.3)	(2.8)	(2.6)
Net Capital Flows /GDP(%)	2.2	3.4	4.6	0.6	3.9	3.5
Current Account Balance (US\$ billion)	(4.4)	(8.3)	(4.7)	(27.9)	(38.4)	(44.3)
Net Invisibles	6.0	44.2	45.8	91.6	80.0	86.2
Services	1.3	21.5	23.4	53.9	35.7	47.7
Private Transfers	7.8	27.9	27.6	44.6	52.1	53.4
Investment Income	(3.5)	(5.0)	(4.9)	(6.6)	(7.2)	(13.9)
Net Capital Flows (US\$ billion)	7.7	31.0	44.4	6.8	53.4	59.7
FDI to India	1.6	16.3	15.3	37.7	33.1	23.4
FIIIs	1.3	7.1	10.6	(15.0)	29.0	29.4
NRI Deposits	1.3	2.5	2.0	4.3	2.9	3.2
Reserve Changes (BoP basis) (US \$ billion) [(Increase (-)/Decrease (+)]	(3.3)	(22.9)	(40.3)	20.1	(13.4)	(13.1)
External Debt Indicators						
External Debt Stock (US\$ billion) ⁵	93.0	157.0	156.0	224.5	261.0	305.9
Debt-GDP Ratio (%)	29.0	19.0	17.7	20.5	18.0	17.3
Import cover of Reserves (in Months) ⁵	6.5	12.5	14.0	9.8	11.1	9.6
Short-term Debt to Total Debt (%)	6.0	11.8	13.6	19.3	20.0	21.2
Debt Service Ratio (%)	24.9	8.8	8.3	4.4	5.5	4.2
Reserves to Debt (%) ⁵	23.0	96.0	114.2	112.2	106.9	99.6
Openness Indicators (%)						
Export plus Imports of Goods/GDP	18.8	29.5	30.4	41.0	35.0	36.5
Export plus Imports of Goods & Services/GDP	22.9	39.2	40.8	54.0	46.3	49.0
Current Receipts plus Current Payments/GDP	26.8	45.1	46.6	61.1	52.8	54.4
Gross Capital Inflows plus Outflows/GDP	15.1	33.6	36.8	51.1	46.2	53.9
Current Receipts & Payments plus Capital Receipts & Payments /GDP	41.9	78.7	83.5	112.2	99.1	108.3
Exchange Rate Indicators						
Exchange Rate (Rupee/US Dollar)						
End of Period	34.1	45.4	43.1	50.9	45.1	44.6
Average	32.7	45.6	44.1	45.9	47.4	45.6
36 - Currency REER (Percentage Change)	(0.04) ⁶	0.4	1.0	(9.9)	(3.1)	7.7
36 - Currency NEER (Percentage Change)	(1.3) ⁶	(0.3)	0.5	(10.9)	(2.6)	2.9
6 - Currency REER (Percentage Change)	(0.4) ⁶	1.5	2.5	(9.3)	(0.3)	13.1
6 - Currency NEER (Percentage Change)	(4.0) ⁶	(1.4)	0.4	(13.6)	(3.7)	5.7

¹ Data for 2010-11 relates to Revised estimates. ² Data for 2009-10 and 2010-11 pertains to 28 States of which five are Vote on Account. ³ Based on DGCIS data. ⁴ Figure pertains to average during 2000-01 to 2008-09. ⁵ At end-March. ⁶ Average of 1994-95 to 1999-2000. \$: Includes oilseeds, sugarcane, cotton (lint) and raw jute and mesta. - : Not Available/Not applicable. Notes: QE: Quick Estimates; RE: Revised Estimates; PFCE: Private Final Consumption Expenditure; GFCE: Government Final Consumption Expenditure; REER: Real Effective Exchange Rate; Agricultural production figures for 2010-11 are based on Fourth Advance Estimates as on 19-07-2011; Average growth rate in the 4th column for item 1.6 and 1.7 are calculated with the new base year (2004-05). Average growth rate of 3 years, i.e., 2005-06, 2006-07 and 2007-08 are given in column. Source: RBI

Appendix 2: Growth rates and sectoral composition of real gross domestic product (At 2004-05 prices)

Sector	Growth Rate (%)						Share in real GDP (%)				
	Average FY06 to FY11	FY07	FY08	FY09	FY10	FY11	FY07	FY08	FY09	FY10	FY11
Agriculture and Allied Activities	3.7	4.2	5.8	(0.1)	0.4	6.6	17.4	16.8	15.7	14.6	14.4
Agriculture	3.1	4.1	6.3	(0.6)	(0.1)	..	14.7	14.3	13.3	12.3	..
Industry	8.5	12.9	9.2	4.0	8.3	7.8	20.6	20.6	20.1	20.2	20.0
Mining and quarrying	4.4	7.5	3.7	1.3	6.9	5.8	2.6	2.5	2.3	2.3	2.3
Manufacturing	9.3	14.3	10.3	4.2	8.8	8.3	16.0	16.1	15.8	15.9	15.8
Electricity, gas and water supply	6.9	9.3	8.3	4.9	6.4	5.7	2.1	2.0	2.0	2.0	1.9
Services	10.0	10.1	10.4	9.5	9.7	9.2	62.0	62.6	64.2	65.2	65.6
Construction	9.1	10.3	10.7	5.4	7.0	8.1	8.0	8.1	8.0	7.9	7.9
Trade, hotels and restaurants	9.1	11.0	10.0	5.5	6.7	9.0	16.7	16.8	16.6	16.4	16.5
Transport, storage and communications	12.7	12.7	12.9	11.1	15.0	12.3	8.9	9.2	9.5	10.2	10.5
Financing, insurance, real estate and business services	11.7	14.0	11.9	12.5	9.2	9.9	15.7	16.1	17.0	17.2	17.4
Community, social and personal services	8.0	2.9	6.9	12.7	11.8	7.0	12.7	12.4	13.1	13.6	13.4
Gross Domestic Product at factor cost	8.6	9.6	9.3	6.8	8.0	8.5	100	100	100	100	100

Note: FY10 - quick estimates, FY11 - revised estimates. Source: RBI

Appendix 3: Gross domestic saving and investment

	Per cent of GDP at current market prices			
	Average FY05 to FY10	FY08	FY09	FY10
Household Saving	23.3	22.5	23.8	23.5
Financial Assets	11.2	11.7	10.8	11.8
Physical Assets	12.1	10.8	13.1	11.7
Private corporate sector	7.9	9.4	7.9	8.1
Public sector	2.7	5.0	0.5	2.1
Gross Domestic Saving	33.9	36.9	32.2	33.7
Net capital inflow	1.5	1.3	2.3	2.8
Gross Domestic Capital Formation	35.4	38.1	34.5	36.5
Errors and Omissions	0.1	0.1	(0.8)	0.7
Gross Capital Formation	35.3	38.0	35.4	35.8
Public sector	8.5	8.9	9.5	9.2
Private corporate sector	13.4	17.3	11.5	13.2
Household sector	12.1	10.8	13.1	11.7
Valuables ¹	1.3	1.1	1.3	1.7
Memo:				
Total Consumption Expenditure		67.3	69.4	69.7
Private Final Consumption Expenditure		57.0	58.4	57.7
Government Final Consumption Expenditure		10.3	11.0	12.0
Saving-Investment Balance		(1.2)	(2.3)	(2.8)
Public Sector Balance ¹		(3.9)	(9.0)	(7.0)
Private Sector Balance ¹		3.8	7.1	6.7
Private Corporate Sector		(7.9)	(3.6)	(5.1)
Household Sector		11.7	10.8	11.8
GDP at Market Prices (at current prices)		49,86,426	55,82,623	65,50,271

¹ Valuables cover the expenditures made on acquisition of valuables, excluding works of art and antiques. Note: FY09: Provisional Estimates. FY10 : Quick Estimates. Source : RBI

Appendix 4: Financial saving of the household sector (gross)

	Per cent to total financial saving		
	FY09	FY10	FY11
Financial Saving (Gross)	100.0	100.0	100.0
Currency	12.7	9.8	13.3
Deposits	60.7	47.2	47.3
With Commercial Banks	52.8	41.7	42.0
With Non-banking Companies	2.0	1.9	2.9
With Coperative Banks and Societies	4.7	3.6	2.5
Trade Debt (Net)	1.2	(0.1)	(0.1)
Share and Debentures	(0.7)	4.6	(0.4)
Private Corporate Business	1.0	1.3	1.2
Banking	0.0	0.1	0.1
Bonds of public Sector undertakings	0.1	0.1	0.1
Mutual Funds (including UTI)	(1.4)	3.3	(1.8)
Claims on Government	(3.8)	4.3	6.5
Investment in Government securities	0.0	0.0	0.0
Investment in Small Savings, etc.	(3.8)	4.3	6.5
Life Insurance Funds	21.0	22.6	24.2
Life Funds of LIC and private insurance companies	20.3	22.0	23.8
Provident and Pension Funds	10.1	11.5	9.1

Note : Components may not add up to the totals due to rounding off. FY10: Revised, FY11: Preliminary estimates. Source: RBI

Appendix 5: Direction of foreign trade

Group/Country (USD million)	FY97		FY00		FY05		FY11	
	Export	Import	Export	Import	Export	Import	Export	Import
OECD countries	18,601	19,457	21,107	21,364	36,495	39,990	84,601	105,302
EU	8,655	10,625	9,382	10,968	17,540	18,713	46,818	42,409
Belgium	1,093	2,252	1,368	3,681	2,510	4,589	6,413	8,314
France	716	768	897	718	1,681	1,894	5,048	3,531
Germany	1,893	2,831	1,738	1,842	2,826	4,015	6,730	11,437
Italy	934	987	1,120	735	2,286	1,373	4,539	4,077
Netherlands	852	494	886	471	1,605	792	7,729	1,782
U.K.	2,047	2,135	2,035	2,707	3,681	3,566	7,181	5,109
North America	6,908	3,999	8,974	3,944	14,633	7,777	26,949	20,463
Canada	353	313	578	381	867	776	1,353	1,932
U.S.A	6,555	3,686	8,396	3,564	13,766	7,001	25,596	18,531
Asia and Oceania	2,457	3,584	2,153	3,714	2,941	7,188	7,120	19,014
Australia	385	1,317	403	1,082	720	3,825	1,711	10,246
Japan	2,006	2,187	1,685	2,536	2,128	3,235	5,217	8,146
Other OECD countries	581	1,248	597	2,738	1,381	6,312	3,714	23,417
Switzerland	300	1,127	354	2,598	541	5,940	744	21,694
OPEC	3,229	10,143	3,896	12,851	13,207	10,023	54,733	119,117
Indonesia	592	599	326	959	1,333	2,618	6,304	9,485
Iran	195	874	152	1,251	1,231	410	2,730	10,713
Iraq	2	-	49	200	131	1	717	8,992
Kuwait	155	2,405	154	1,912	421	306	1,873	9,831
Saudi Arabia	577	2,770	743	3,017	1,412	1,301	5,198	20,112
U.A.E.	1,476	1,736	2,083	2,334	7,348	4,641	33,135	28,270
Eastern Europe	1,099	1,103	1,293	995	1,780	2,514	2,973	5,607
Romania	18	154	13	20	106	168		
Russia	811	628	948	623	631	1,323	1,577	3,455
Developing countries	10,037	8,427	10,460	14,524	31,597	28,604	105,693	115,239
Asia	8,134	6,573	8,206	9,942	24,968	22,581	78,545	94,187
SAARC	1,702	242	1,395	398	4,441	950	12,706	2,018
Afghanistan							412	122
Bangladesh	869	62	636	78	1,631	59	3,559	412
Bhutan	22	34	8	18	85	71	157	201
Maldives	10	0	7	0	48	1	106	32
Nepal	166	64	151	189	743	346	2,132	476
Pakistan	157	36	93	68	521	95	2,308	333
Sri Lanka	477	45	499	44	1,413	378	4,033	441
Other Asian	6,432	6,332	6,811	9,545	20,528	21,631	65,839	92,169
developing countries								
China	615	757	539	1,287	5,616	7,098	19,247	40,218
Hong Kong	1,863	319	2,511	818	3,692	1,730	11,420	8,505
South Korea	519	884	477	1,273	1,042	3,509	4,105	10,055
Malaysia	531	1,108	447	2,024	1,084	2,299	3,986	6,294
Singapore	978	1,063	673	1,534	4,001	2,651	10,601	6,694
Thailand	447	197	450	328	901	866	2,825	4,167
Africa	1,421	1,294	1,555	3,646	4,479	3,930	16,636	12,501
Benin	17	10	28	43	47	80	265	154
Egypt	158	65	237	444	445	153	2,236	1,345
Kenya	169	20	117	21	427	47	2,275	123
South Africa					984	2,198	4,160	6,481
Sudan	27	6	72	7	317	23	499	613
Tanzania	68	74	82	125	174	132	1,486	299
Zambia	32	104	23	26	50	23	109	31
Latin American countries	481	560	700	936	2,150	2,093	10,512	8,551
Others / unspecified	504	4	67	4	457	30,387	6,402	7,310
Total Trade	33,470	39,132	36,822	49,671	83,536	111,517	254,402	352,575

Note: Data for FY10 are revised and for FY11 are provisional; Country-wise data on imports for the year 1999-2000 do not add up to total imports on account of revision in the total imports. Source: RBI

Appendix 6: Exports of principal commodities

(USD million)	FY97	FY00	FY05	FY11
Primary Products	8,035	6,524	13,553	35,359
Agriculture and Allied Products	6,863	5,608	8,475	24,696
Tea	292	412	410	691
Coffee	402	331	238	639
Rice	894	721	1,507	2,371
Wheat	197	-	325	0
Cotton Raw including Waste	444	18	94	2,852
Tobacco	213	233	279	835
Cashew including Cashew Nut Shell Liquid	363	568	554	577
Spices	339	408	419	1,723
Oil Meals	985	378	707	2,381
Fruits and Vegetables	163	148	399	1,064
Processed Fruits, Juices, Misc. Processed Items	307	197	284	786
Marine Products	1,129	1,183	1,440	2,535
Sugar and Mollases	304	9	35	2,488
Meat and Meat Preparations	200	189	424	1,926
Other Agriculture and Allied Products	633	813	1,361	3,828
Ores and Minerals	1,172	916	5,079	10,663
Iron Ore	481	271	3,277	4,617
Mica	7	10	14	32
Other Ores and Minerals	685	635	1,787	6,014
Manufactured Goods	24,613	29,714	60,731	168,098
Leather and Manufactures	1,606	1,590	2,422	3,789
Chemicals and Related Products	3,913	4,707	12,444	28,980
Basic Chemicals, Pharmaceuticals & Cosmetics	2,497	3,088	7,139	19,241
Plastic and Linoleum Products	539	604	3,033	4,609
Rubber, Glass, Paints, Enamels and Products	683	694	1,760	3,622
Residual Chemicals and Allied Products	193	321	512	1,508
Engineering Goods	4,963	5,152	17,348	68,784
Iron & Steel	770	833	3,921	6,580
Manufacture of Metals	914	1,226	3,402	9,470
Machinery and Instruments	1,057	1,183	3,719	11,852
Transport Equipment	969	810	2,830	18,448
Electronic Goods	784	681	1,832	8,904
Other Engineering Goods	470	419	1,645	13,531
Textile and Textile Products	8,636	9,822	13,555	23,312
Cotton Yarn, Fabrics, Madeups, etc.	3,122	3,090	3,450	5,431
Natural Silk Yarn, Fabrics, Madeups, etc.incl. Silk Waste	129	245	405	350
Manmade Yarn, Fabrics, Madeups, etc.	703	811	1,963	4,197
Manmade Staple Fibre	19	44	88	438
Woolen Yarn, Fabrics, Madeups, etc.	104	50	70	105
Readymade Garments	3,753	4,765	6,561	11,204
Jute & Jute Manufactures	155	126	276	454
Coir & Coir Manufactures	61	46	106	151
Carpets	591	645	636	983
Carpet Handmade	436	499	608	979
Carpet Millmade	135	113	-	-
Silk Carpets	19	34	28	4
Gems and Jewellery	4,753	7,502	13,762	40,791
Handicrafts (excluding Handmade Carpets)	476	669	377	233
Other Manufactured Goods	268	273	823	2,209
Petroleum Products	482	39	6,989	41,918
Others (All Commodities)	339	545	2,263	9,027
Total Exports	33,470	36,822	83,536	254,402

Note: Data for FY11 are provisional and data for FY10 are revised. Source: RBI

Appendix 7: Imports of principal commodities

(USD million)	FY97	FY00	FY05	FY11
Bulk Imports	16,365	19,646	42,401	150,490
Petroleum, Crude and Products	10,036	12,611	29,844	106,068
Bulk Consumption Goods	1,214	2,417	3,105	8,720
Cereals and Cereal Preparations	137	222	26	115
Edible Oils	825	1,857	2,465	6,462
Pulses	251	82	396	1,532
Sugar	1	256	217	612
Other Bulk Items	5,115	4,618	9,452	35,701
Fertilisers	911	1,399	1,377	6,983
Crude	135	204	290	709
Sulphur and Unroasted Iron Pyrites	91	116	128	229
Manufactured	686	1,079	960	6,045
Non-Ferrous Metals	1,106	547	1,310	4,029
Paper, Paper Boards, Manufactures including News Prints	499	447	728	2,101
Crude Rubber, including Synthetic and Reclaimed	177	143	409	1,761
Pulp and Waste Paper	232	255	490	1,138
Metalliferrous Ores, Metal Scrap, etc.	820	875	2,469	9,410
Iron and Steel	1,371	952	2,670	10,279
Non-Bulk Imports	22,767	30,025	69,117	202,085
Capital Goods	9,922	8,966	25,135	71,627
Manufactures of Metals	316	405	919	3,229
Machine Tools	525	262	620	2,234
Machinery except Electrical and Electronic	3,644	2,745	6,818	23,296
Electrical Machinery except Electronic	325	438	1,195	3,543
Electronic Goods	1,424	2,797	9,993	21,490
Computer Goods	84	197	666	757
Transport Equipment	1,484	1,137	4,327	10,990
Project Goods	2,118	986	596	6,088
Mainly Export Related Items	6,138	9,117	17,096	49,639
Pearls, Precious and Semi-Precious Stones	2,925	5,436	9,423	31,262
Organic and Inorganic Chemicals	2,661	2,866	5,700	14,742
Textile Yarn, Fabrics, Made-Ups, etc.	359	538	1,571	3,092
Cashew Nuts	194	277	402	544
Others	6,707	11,942	26,886	80,819
Gold and Silver	992	4,706	11,150	35,611
Gold	-	4,152	10,538	33,876
Silver	-	554	612	1,735
Artificial Resins and Plastic Materials, etc.	796	720	1,457	6,865
Professional, Scientific Controlling Instruments, Photographic Optical Goods	553	845	1,530	3,746
Coal, Coke and Briquettes, etc.	995	1,008	3,198	9,658
Medicinal and Pharmaceutical Products	307	373	705	2,376
Chemical Materials and Products	264	361	819	2,771
Non-Metallic Mineral Manufactures	121	164	472	1,480
Others	2,681	3,766	7,554	18,311
Total Imports	39,132	49,671	111,517	352,575

Note: Data for FY11 are provisional and data for FY10 are revised. Source: RBI

Appendix 8: Foreign direct investment

Source/Industry (USD million)	FY07	FY08	FY09	FY10	FY11
Total FDI	9,307	19,425	22,697	22,461	14,939
Country-wise Inflows					
Mauritius	3,780	9,518	10,165	9,801	5,616
Singapore	582	2,827	3,360	2,218	1,540
U.S.A	706	950	1,236	2,212	1,071
Cyprus	58	570	1,211	1,623	571
Japan	80	457	266	971	1,256
Netherlands	559	601	682	804	1,417
United Kingdom	1,809	508	690	643	538
Germany	116	486	611	602	163
UAE	215	226	234	373	188
France	100	136	437	283	486
Switzerland	57	192	135	96	133
Hong Kong	60	106	155	137	209
Spain	62	48	363	125	183
South Korea	68	86	95	159	136
Luxembourg	-	15	23	40	248
Others	1,055	2,699	3,035	2,376	1,184
Sector-wise Inflows					
Manufacture	1,641	3,726	4,777	5,143	4,793
Construction	967	2,551	2,237	3,516	1,599
Financial Services	1,330	3,850	4,430	2,206	1,353
Real Estate Activities	431	1,336	1,886	2,191	444
Electricity and other Energy Generation, Distribution & Transmission	174	829	669	1,877	1,338
Communication Services	423	66	2,067	1,852	1,228
Business Services	2,425	1,158	643	1,554	569
Miscellaneous Services	298	1,901	1,458	888	509
Computer Services	824	1,035	1,647	866	843
Restaurants & Hotels	153	280	343	671	218
Retail & Wholesale Trade	47	200	294	536	391
Mining	42	461	105	268	592
Transport	165	816	401	220	344
Trading	82	176	400	198	156
Education, Research & Development	43	156	243	91	56
Others	262	884	1,097	384	506

Note : Includes FDI through SIA/FIPB and RBI routes only. Source: RBI

Appendix 9: India's external debt

(USD million)	FY09	FY10	FY11
Multilateral	39,538	42,859	48,464
Government borrowing	35,724	37,825	42,578
Concessional	25,080	25,711	26,991
Non-concessional	10,644	12,114	15,587
Non-Government borrowing	3,814	5,034	5,886
Concessional	0	0	0
Non-concessional	3,814	5,034	5,886
Bilateral	20,610	22,593	25,953
Government borrowing	14,655	15,860	18,075
Concessional	14,655	15,860	18,075
Non-concessional	0	0	0
Non-Government borrowing	5,955	6,733	7,878
Concessional	641	702	917
Non-concessional	5,314	6,031	6,961
International Monetary Fund	1,018	6,041	6,308
Trade Credit	14,481	16,867	18,627
Buyers' credit	12,572	14,837	16,425
Suppliers' credit	635	651	630
Export credit component of bilateral credit	1,274	1,379	1,572
Export credit for defence purposes	0		0
Commercial Borrowings	62,461	70,800	88,267
Commercial bank loans	43,169	44,891	58,034
Securitized borrowings (including FCCBs) ¹	17,918	25,090	29,501
Loans/securitised borrowings, etc.	1,374	818	731
Self Liquidating Loans	0	0	0
NRI & FC(B&O) Deposits (above one-year maturity)	41,554	47,890	51,682
FCNR(B)	13,211	14,258	15,597
NR(E)RA	23,570	26,251	26,378
NRO	4,773	7,381	9,707
Rupee Debt²	1,523	1,657	1,601
Defence	1,361	1,486	1,437
Civilian ³	162	171	164
Total Long-term Debt (I to VII)	181,185	208,707	240,902
Short-term Debt	43,313	52,329	64,990
Trade Related Credits	39,915	47,473	58,462
FII Investment in Govt. T-Bills & other instruments	2,065	3,357	5,424
Investment in Treasury Bills by foreign central banks and international institutions etc.	105	103	50
External Debt Liabilities of Central Bank and Commercial Banks	1,228	1,396	1,053
Gross total	224,498	261,036	305,892
Concessional Debt	41,981	43,930	47,585
As percentage of Total Debt	18.7	16.8	15.6
Short Term Debt			
As percentage of Total Debt	19.3	20.0	21.2
Memo Items:			
Debt Indicators :			
1. Debt Stock - GDP Ratio (in per cent)	20.5	18.0	17.3
2. Debt Service Ratio (per cent) (for fiscal year) (including debt-servicing on non-civilian credits)	4.4	5.5	4.2

¹ Includes net investment by 100 per cent FII debt funds.² Debt owed to Russia denominated in Rupees and converted at current exchange rates, payable in exports.³ Includes Rupee suppliers' credit from end-March 1990 onwards. Note: Multilateral loans do not include revaluation of IBRD pooled loans and exchange rate adjustment under IDA loans for Pre-1971 credits. Source: RBI

Appendix 10: Agricultural production

Crop (Million tonnes)	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
All Crops: Annual Growth Rate (per cent) ¹	6.0	(12.8)	7.4	(1.6)	12.2	14.3	3.2	(6.3)	(1.4)	11.8
Foodgrains	9.4	(18.5)	22.6	(7.1)	5.7	4.1	6.2	1.6	(7.0)	8.2
Non-foodgrains	2.0	(5.7)	(8.9)	1.6	16.1	19.5	1.8	(9.9)	1.5	13.5
Foodgrains	212.9	174.8	213.2	198.4	208.6	217.3	230.8	234.5	218.1	241.6
Rice	93.3	71.8	88.5	83.1	91.8	93.4	96.7	99.2	89.1	95.3
Wheat	72.8	65.8	72.2	68.6	69.4	75.8	78.6	80.7	80.8	85.9
Coarse Cereals	33.4	26.1	37.6	33.5	34.1	33.9	40.8	40.0	33.6	42.2
Jowar	7.6	7.0	6.7	7.2	7.6	7.2	7.9	7.2	6.7	6.7
Bajra	8.3	4.7	12.1	7.9	7.7	8.4	10.0	8.9	6.5	10.1
Maize	13.2	11.2	15.0	14.2	14.7	15.1	19.0	19.7	16.7	21.3
Pulses	13.4	11.1	14.9	13.1	13.4	14.2	14.8	14.6	14.7	18.1
Tur	2.3	2.2	2.4	2.4	2.7	2.3	3.1	2.3	2.5	2.9
Gram	5.5	4.2	5.7	5.5	5.6	6.3	5.8	7.1	7.5	8.3
Kharif	112.1	87.2	117.0	103.3	109.9	110.6	121.0	118.1	104.0	120.2
Rice	80.5	63.1	78.6	72.2	78.3	80.2	82.7	84.9	75.9	80.7
Coarse Cereals	26.7	20.0	32.2	26.4	26.7	25.6	31.9	28.5	23.8	32.4
Jowar	4.2	4.2	4.8	4.0	4.1	3.7	4.1	3.1	2.8	3.5
Bajra	8.3	4.7	12.1	7.9	7.7	8.4	10.0	8.9	6.5	10.1
Maize	11.3	9.3	12.7	11.5	12.2	11.6	15.1	14.1	12.3	16.3
Pulses	4.8	4.2	6.2	4.7	4.9	4.8	6.4	4.7	4.2	7.1
Tur	2.3	2.2	2.4	2.4	2.7	2.3	3.1	2.3	2.5	2.9
Rabi	100.8	87.6	96.2	95.1	98.7	106.7	109.8	116.3	114.2	121.4
Rice	12.8	8.7	9.9	10.9	13.5	13.2	14.0	14.3	13.2	14.7
Wheat	72.8	65.8	72.2	68.6	69.4	75.8	78.6	80.7	80.8	85.9
Coarse Cereals	6.7	6.1	5.4	7.1	7.3	8.3	8.9	11.5	9.7	9.8
Jowar	3.3	2.8	1.8	3.2	3.6	3.4	3.8	4.2	3.9	3.3
Maize	1.9	1.9	2.3	2.7	2.6	3.5	3.9	5.6	4.4	5.0
Pulses	8.5	7.0	8.7	8.4	8.5	9.4	8.4	9.9	10.5	11.0
Gram	5.5	4.2	5.7	5.5	5.6	6.3	5.8	7.1	7.5	8.3
Non-foodgrains										
Oilseeds ⁴	20.7	14.8	25.2	24.4	28.0	24.3	29.8	27.7	24.9	31.1
Groundnut	7.0	4.1	8.1	6.8	8.0	4.9	9.2	7.2	5.4	7.5
Rapeseed & Mustard	5.1	3.9	6.3	7.6	8.1	7.4	5.8	7.2	6.6	7.7
Sunflower	0.7	0.9	0.9	1.2	1.4	1.2	1.5	1.2	0.9	0.6
Soyabean	6.0	4.7	7.8	6.9	8.3	8.9	11.0	9.9	10.0	12.7
Sugarcane	297.2	287.4	233.9	237.1	281.2	355.5	348.2	285.0	292.3	339.2
Cotton ²	10.0	8.6	13.7	16.4	18.5	22.6	25.9	22.3	24.2	33.4
Jute and Mesta ³	11.7	11.3	11.2	10.3	10.8	11.3	11.2	10.4	11.8	10.6
Tea ⁵	851.4	846.0	878.7	906.8	948.9	973.1	987.0	972.8	991.2	966.7
Coffee ⁵	300.6	275.3	270.5	275.5	274.0	288.0	262.0	262.3	289.6	299.0

¹ Growth rates are based on Index of Agricultural Production with base triennium ending 1993-94=100. Data for 2010-11 are averages for period 1994-95 to 2007-08.² Million bales of 170 kg. each.³ Million bales of 180 kg. each.⁴ For nine oilseeds out of eleven in all.⁵ Million kilograms. Tea production for 2010-11 is average of 2001-02 to 2009-10. Source: RBI

© 2011 CLSA Asia-Pacific Markets ("CLSA").

This publication/communication is subject to and incorporates the terms and conditions of use set out on the www.clsa.com website. Neither the publication/ communication nor any portion hereof may be reprinted, sold or redistributed without the written consent of CLSA.

CLSA has produced this publication/communication for private circulation to professional, institutional and/or wholesale clients only. The information, opinions and estimates herein are not directed at, or intended for distribution to or use by, any person or entity in any jurisdiction where doing so would be contrary to law or regulation or which would subject CLSA to any additional registration or licensing requirement within such jurisdiction. The information and statistical data herein have been obtained from sources we believe to be reliable. Such information has not been independently verified and we make no representation or warranty as to its accuracy, completeness or correctness. Any opinions or estimates herein reflect the judgment of CLSA at the date of this publication/ communication and are subject to change at any time without notice. Where any part of the information, opinions or estimates contained herein reflects the views and opinions of a sales person or a non-analyst, such views and opinions may not correspond to the published view of the CLSA research group. This is not a solicitation or any offer to buy or sell. This publication/ communication is for information purposes only and does not constitute any recommendation, representation, warranty or guarantee of performance. Any price target given in the report may be projected from 1 or more valuation models and hence any price target may be subject to the inherent risk of the selected model as well as other external risk factors. This is not intended to provide professional, investment or any other type of advice or recommendation and does not take into account the particular investment objectives, financial situation or needs of individual recipients. Before acting on any information in this publication/ communication, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice, including tax advice. CLSA does not accept any responsibility and cannot be held liable for any person's use of or reliance on the information and opinions contained herein. To the extent permitted by applicable securities laws and regulations, CLSA accepts no liability whatsoever for any direct or consequential loss arising from the use of this publication/communication or its contents. Where the publication does not contain rating, the material should not be construed as research but is offered as factual commentary. It is not intended to, nor should it be used to form an investment opinion about the not rated companies.

The analyst/s who compiled this publication/communication hereby state/s and confirm/s that the contents hereof truly reflect his/her/their views and opinions on the subject matter and that the analyst/s has/have not been placed under any undue influence, intervention or pressure by any person/s in compiling such publication/ communication.

Subject to any applicable laws and regulations at any given time CLSA, its affiliates or companies or individuals connected with CLSA may have used the information contained herein before publication and may have positions in, may from time to time purchase or sell or have a material interest in any of the securities mentioned or related securities or may currently or in future have or have had a business or financial relationship with, or may provide or have provided investment banking, capital markets and/or other services to, the entities referred to herein, their advisors and/or any other connected parties. As a result, investors should be aware that CLSA and/or such individuals may have one or more conflicts of interests that could affect the objectivity of this report.

The Hong Kong Securities and Futures Commission requires disclosure of certain relationships and interests with respect to companies covered in CLSA's research reports and the securities of which are listed on The Stock Exchange of Hong Kong Limited and such details are available at http://www.clsa.com/member/research_disclosures/. Disclosures therein include the position of the CLSA Group only and do not reflect those of Credit Agricole Corporate & Investment Bank

and/or its affiliates. If investors have any difficulty accessing this website, please contact webadmin@clsa.com on (852) 2600 8111. If you require disclosure information on previous dates, please contact compliance_hk@clsa.com.

This publication/communication is distributed for and on behalf of CLSA Limited (for non-US markets research) and /or Credit Agricole Securities (USA) Inc. (for US research) in Australia by CLSA Australia Pty Ltd; in Hong Kong by CLSA Research Ltd.; in India by CLSA India Ltd. (Address: 8/F, Dalamal House, Nariman Point, Mumbai 400021. Tel No: +91-22-66505050. SEBI Registration No: BSE Capital Market Segment: INB010826432; BSE F&O Segment: INF010826432; NSE Capital Market Segment: INB230826436; NSE F&O Segment: INF230826436); in Indonesia by PT CLSA Indonesia; in Japan by Credit Agricole Securities Asia B.V., Tokyo Branch, a member of the JSDA licensed to use the "CLSA" logo in Japan; in Korea by CLSA Securities Korea Ltd.; in Malaysia by CLSA Securities Malaysia Sdn Bhd; in the Philippines by CLSA Philippines Inc. (a member of Philippine Stock Exchange and Securities Investors Protection Fund); in Thailand by CLSA Securities (Thailand) Limited; and in Taiwan by CLSA Limited, Taipei Branch.

United States of America: This research report is distributed into the United States by CLSA solely to persons who qualify as "Major U.S. Institutional Investors" as defined in Rule 15a-6 under the Securities and Exchange Act of 1934 and who deal with Credit Agricole Corporate & Investment Bank. However, the delivery of this research report to any person in the United States shall not be deemed a recommendation to effect any transactions in the securities discussed herein or an endorsement of any opinion expressed herein. Any recipient of this research in the United States wishing to effect a transaction in any security mentioned herein should do so by contacting Credit Agricole Securities (USA) Inc. (a broker-dealer registered with the Securities and Exchange Commission) and an affiliate of CLSA.

United Kingdom: Notwithstanding anything to the contrary herein, the following applies where the publication/communication is distributed in and/or into the United Kingdom. This publication/communication is only for distribution and/or is only directed at persons ("permitted recipients") who are (i) persons falling within Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 (the "FPO") having professional experience in matters relating to investments or high net worth companies, unincorporated associations etc. falling within Article 49 of the FPO, and (ii) where an unregulated collective investment scheme (an "unregulated CIS") is the subject of the publication/communication, also persons of a kind to whom the unregulated CIS may lawfully be promoted by a person authorised under the Financial Services and Markets Act 2000 ("FSMA") by virtue of Section 238(5) of the FSMA. The investments or services to which this publication/communication relates are available only to permitted recipients and persons of any other description should not rely upon it. This publication/ communication may have been produced in circumstances such that it is not appropriate to categorise it as impartial in accordance with the FSA Rules.

Singapore: This publication/communication is distributed for and on behalf of CLSA Limited (for non-US markets research) and /or Credit Agricole Securities (USA) Inc. (for US research) in Singapore through CLSA Singapore Pte Ltd solely to persons who qualify as Institutional, Accredited and Expert Investors only, as defined in s.4A(1) of the Securities and Futures Act. Pursuant to Paragraphs 33, 34, 35 and 36 of the Financial Advisers (Amendment) Regulations 2005 with regards to an Accredited Investor, Expert Investor or Overseas Investor, sections 25, 27 and 36 of the Financial Adviser Act shall not apply to CLSA Singapore Pte Ltd. Please contact CLSA Singapore Pte Ltd in connection with queries on the report. MICA (P) 168/12/2009

The analysts/contributors to this publication/communication may be employed by a Credit Agricole or a CLSA company which is different from the entity that distributes the publication/communication in the respective jurisdictions.

MSCI-sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, disseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of Morgan Stanley Capital International Inc. and Standard & Poor's. GICS is a service mark of MSCI and S&P and has been licensed for use by CLSA Asia-Pacific Markets.

Australia

CLSA Australia Pty Ltd
CLSA House
Level 15
20 Hunter Street
Sydney NSW 2000
Tel: (61) 2 8571 4200
Fax: (61) 2 9221 1188

India

CLSA India Ltd
8/F, Dalamal House
Nariman Point
Mumbai 400021
Tel: (91) 22 6650 5050
Fax: (91) 22 2284 0271

Philippines

CLSA Philippines, Inc
19/F, Tower Two
The Enterprise Center
6766 Ayala corner Paseo de Roxas
Makati City
Tel: (63) 2 860 4000
Fax: (63) 2 860 4051

USA - Boston

Credit Agricole Securities
(USA) Inc
99 Summer Street
Suite 220
Boston, MA 02110
Tel: (1) 617 295 0100
Fax: (1) 617 295 0140

China - Beijing

CLSA Limited - Beijing Rep Office
Unit 10-12, Level 25
China World Trade Centre Tower 2
1 Jian Guo Men Wai Ave
Beijing 100004
Tel: (86) 10 5965 2188
Fax: (86) 10 6505 2209

Indonesia

PT CLSA Indonesia
WISMA GKBI Suite 901
Jl Jendral Sudirman No.28
Jakarta 10210
Tel: (62) 21 2554 8888
Fax: (62) 21 574 6920

Singapore

CLSA Singapore Pte Ltd
80 Raffles Place, No.18-01
UOB Plaza 1
Singapore 048624
Tel: (65) 6416 7888
Fax: (65) 6533 8922

USA - Chicago

Credit Agricole Securities
(USA) Inc
227 W. Monroe Street
Suite 3800
Chicago, IL 60606
Tel: (1) 312 278 3604

China - Shanghai

CLSA Limited - Shanghai Rep Office
Room 910, 9/F
100 Century Avenue
Pudong New Area
Shanghai 200120
Tel: (86) 21 2020 5888
Fax: (86) 21 2020 5666

Japan

Credit Agricole Securities Asia BV
Tokyo Branch
15/F, Shiodome Sumitomo Building
1-9-2, Higashi-Shimbashi
Minato-ku, Tokyo 105-0021
Tel: (81) 3 4580 5533 (General)
(81) 3 4580 5171 (Trading)
Fax: (81) 3 4580 5896

Taiwan

CLSA Limited
Taiwan Branch
27/F, 95 Tun Hwa South Road
Section 2
Taipei
Tel: (886) 2 2326 8188
Fax: (886) 2 2326 8166

USA - New York

Credit Agricole Securities
(USA) Inc
15/F, Credit Agricole Building
1301 Avenue of The Americas
New York 10019
Tel: (1) 212 408 5888
Fax: (1) 212 261 2502

China - Shenzhen

CLSA Limited - Shenzhen Rep Office
Room 3111, Shun Hing Square
Di Wang Commercial Centre
5002 Shennan Road East
Shenzhen 518008
Tel: (86) 755 8246 1755
Fax: (86) 755 8246 1754

Korea

CLSA Securities Korea Ltd
15/F, Sean Building
116, 1-Ka, Shinmun-Ro
Chongro-Ku
Seoul, 110-700
Tel: (82) 2 397 8400
Fax: (82) 2 771 8583

Thailand

CLSA Securities (Thailand) Ltd
16/F, M Thai Tower
All Seasons Place
87 Wireless Road, Lumpini
Pathumwan, Bangkok 10330
Tel: (66) 2 257 4600
Fax: (66) 2 253 0532

USA - San Francisco

Credit Agricole Securities
(USA) Inc
Suite 850
50 California Street
San Francisco, CA 94111
Tel: (1) 415 544 6100
Fax: (1) 415 434 6140

Hong Kong

CLSA Limited
18/F, One Pacific Place
88 Queensway
Hong Kong
Tel: (852) 2600 8888
Fax: (852) 2868 0189

Malaysia

CLSA Securities Malaysia Sdn
Bhd
Suite 20-01, Level 20
Menara Dion
27 Jalan Sultan Ismail
50250 Kuala Lumpur
Tel: (60) 3 2056 7888
Fax: (60) 3 2056 7988

United Kingdom

CLSA (UK)
12/F, Moor House
120 London Wall
London EC2Y 5ET
Tel: (44) 207 614 7000
Fax: (44) 207 614 7070



At CLSA we support sustainable development. We print on paper sourced from environmentally conservative factories that only use fibres from plantation forests. Please recycle.

CLSA Sales Trading Team

Australia (61) 2 8571 4201
China (Shanghai) (86) 21 2020 5810
Hong Kong (852) 2600 7003
India (91) 22 6622 5000
Indonesia (62) 21 573 9460
Japan (81) 3 4580 5169
Korea (82) 2 397 8512

Malaysia (60) 3 2056 7852
Philippines (63) 2 860 4030
Singapore (65) 6416 7878
Taiwan (886) 2 2326 8124
Thailand (66) 2 257 4611
UK (44) 207 614 7260
US (1) 212 408 5800



CLSA is certified ISO14001:2004