



**ECONOMIC AND  
MARKET ANALYSIS:  
INDIA**

**Economics**

13 July 2007

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## **India Macroscope**

### **The Changing Face of Rural India**

- **Despite the diminishing share of agriculture in India's GDP, the rural market remains an integral part of the economy, comprising 70% of the population and over 50% of consumption.**
- **The retail boom that has swept India in recent years is now making its way to the 'bottom of the pyramid', facilitating a trickle-down impact and empowering the rural economy.**
- **A growing number of corporates have begun to see the rural potential and are exploring both demand and supply-side dynamics.**
- **We maintain our FY08 macro estimates of GDP growth at 9.3%, sub 5% inflation and an appreciating rupee.**
- **Moderation in credit coupled with benign inflation will result in an extended pause in policy rates.**

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***The July Macroscope discusses the changing face of rural India and how the retail boom is now making its way to the 'bottom of the pyramid', empowering the rural economy. While we are maintaining our 9.3% GDP estimate, moderation in credit coupled with benign inflation will result in an extended pause in policy rates***

#### **Rural Retail: Capitalizing on 'The Bottom of the Pyramid'**

As mentioned in last month's macroscope, India's retail boom appears to be spanning across both ends of the spectrum – with the trickle-down impact to the rural segment being as strong as the growing demand for luxury and well-being assets. While last month's macroscope discussed the latter, this month we take a look at the *bottom of the pyramid* and discuss how, besides addressing corporate social responsibility, Indian corporates are also looking at the rural segment as a growing and profitable business opportunity.

#### **The Changing Face of Rural India**

Despite the declining significance of the monsoons on the economy and the diminishing share of agriculture in India's GDP, the rural market remains an integral part of India's economy, accounting for over 70% of India's population and over 50% of total consumption. Interestingly, the retail boom that has swept India in recent years is now making its way to the *'bottom of the pyramid'*, facilitating a trickle-down impact and empowering the rural economy.

#### **Benefits of corporate forays into the rural sector**

Apart from employment generation and productivity improvements within agriculture, corporate entry into rural areas will help diversify employment outside the segment. More important, the upward shift in income levels – a result of farmers getting a better deal as the produce gets diverted from traditional markets to the retail majors where payment is immediate - will eventually help lift people out of poverty and create a stronger middle-class.

#### **Macro Picture Remains Bright: Maintain our 9%+ GDP estimate**

While two-wheeler sales remain weak, other sectoral and macro trends coupled with favorable monsoons so far support our 9%+ GDP estimate for FY08. On the fiscal front, tax collections are up 35% during Apr-May07 v/s targeted growth of 17.2% for FY08 thus providing a cushion for unforeseen expenditure. Banking sector liquidity has turned comfortable due to the rise in deposits and the moderation in credit from 30%+ to 24.6%. This, coupled with benign inflation, will likely result in an extended pause in policy rates. But, we expect the CRR to be used as a liquidity management tool.

#### **Financial Markets – INR appreciation to continue; bonds to rally**

On the rupee, although near-term trends could be choppy, we are maintaining our March08 estimate of Rs40/US\$, based on an overall balance of payments surplus of US\$22.8bn and our house views on the USD and CNY. On bonds, easy liquidity conditions coupled with falling inflation resulted in the 10-year bond falling below 8% levels earlier this month. We expect the 10-year to trade in a narrow range in the coming months with falling inflation likely to be offset by higher oil prices.

# Statistical Snapshot

**Figure 1. India — Macroeconomic Summary, FY98-08 (Percent)**

Year - end 31 March	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08E
<b>National income indicators</b>											
Nominal GDP (Rs bn)	15,288	17,481	19,520	21,024	22,811	24,581	27,655	31,266	35,672	41,257	46,621
Nominal GDP (US\$ bn)	411	414	450	460	475	509	603	695	805	919	1,117
Per Capita GDP (US\$)	423	420	451	457	467	495	584	673	769	864	1,035
Real GDP growth (%YoY)	4.8	6.5	6.0	4.4	5.8	3.8	8.5	7.5	9.0	9.4	9.3
Agriculture growth	-2.4	6.2	0.5	-0.2	6.3	-7.2	10.0	0.0	6.0	2.7	3.0
Industry growth	4.3	3.7	4.1	6.3	2.7	7.1	7.4	9.8	9.6	10.9	10.0
Services growth	9.8	8.4	10.8	5.7	7.2	7.4	8.5	9.6	9.8	11.0	11.0
<b>By Demand – Real (%YoY)</b>											
Consumption	4.1	7.5	7.7	2.2	5.4	1.8	6.2	5.4	7.2	6.6	7.9
Pvt Consumption	3.0	6.5	6.5	2.6	6.0	2.2	6.9	5.4	6.7	6.2	8.2
Public Consumption	11.1	12.9	14.2	0.5	2.0	-0.4	2.5	5.4	9.8	9.0	6.0
Gross Fixed Capital Formn	2.1	8.7	11.4	0.3	4.5	8.7	13.1	11.8	15.3	14.6	15.0
<b>Cons; Invst, Savings (%GDP)</b>											
Total Consumption	74.0	75.9	77.2	76.4	76.5	74.7	73.0	70.6	69.2	66.6	65.4
Total Investments	25.2	23.1	25.9	24.0	22.9	25.2	28.0	31.5	33.8	34.5	35.5
Gross Domestic Savings	23.5	21.9	24.8	23.4	23.5	26.4	29.7	31.1	32.4	33.5	34.6
<b>Real indicators (%YoY)</b>											
Cement dispatches	10.6	6.4	14.1	0.1	8.6	11.1	6.5	9.3	10.3	10.0	10.0
Commercial vehicle sales	-33.2	-11.2	22.0	-11.9	-4.5	27.9	38.1	24.0	13.0	24.0	7.0
Car sales	1.1	-0.9	54.9	-6.9	4.5	7.6	32.8	18.7	7.0	15.0	12.0
Two-wheelers	-3.7	5.0	-5.4	-28.1	-3.1	-13.1	10.6	16.8	15.0	14.0	10.0
Diesel consumption	3.5	3.7	5.5	2.0	-3.5	3.0	4.5	5.5	3.0	5.0	5.0
Tele-density	1.9	2.2	2.8	3.5	4.3	5.2	7.4	9.4	12.7	16.2	17.2
<b>Monetary indicators(%YoY)</b>											
Money supply	18.0	19.4	15.0	16.4	14.1	14.7	16.7	12.3	21.2	18.0	18.0
Int rate PLR - year end	13.0	12.0	11.3	11.5	11.3	10.8	10.3	10.0	10.3	11.5	11.5
Inflation – WPI	4.4	5.9	3.3	7.2	3.5	3.4	5.4	6.5	4.5	5.3	4.5
CPI	6.8	13.1	3.4	3.8	4.3	4.0	4.0	4.5	4.0	6.0	6.0
Bank credit growth	16.4	13.8	18.2	17.3	15.3	23.7	15.3	30.9	37.0	27.6	20.0
Deposit growth	18.4	19.3	13.9	18.4	14.6	16.1	17.5	13.0	24.0	23.0	15.0
<b>Fiscal Indicators(% GDP)</b>											
Centre's fiscal deficit	4.8	5.1	5.4	5.6	6.2	5.9	4.5	4.0	4.1	3.7	3.5
State fiscal deficit	2.9	4.3	4.7	4.3	4.2	4.2	4.5	3.5	3.2	2.7	2.5
Combined deficit (Centre+State)	7.1	8.9	9.4	9.5	9.9	9.6	8.5	7.5	7.4	6.2	6.0
Combined domestic liabilities	61.8	62.7	66.6	71.0	76.4	80.7	81.5	82.4	78.7	75.3	72.9
Combined o/s guarantees	9.7	9.8	11.1	12.2	11.5	11.2	11.0	9.9			
<b>External Sector</b>											
Exports (US\$bn)	35.7	34.3	37.5	45.5	44.7	53.8	66.3	85.2	105.2	127.1	146.2
% YoY	4.5	-3.9	9.5	21.1	-1.6	20.3	23.3	28.5	23.4	20.9	15.0
Imports (US\$bn)	51.2	47.5	55.4	57.9	56.3	64.5	80.0	118.9	157.0	192.0	223.8
%YoY	4.6	-7.1	16.5	4.6	-2.8	14.5	24.1	48.6	32.0	22.3	16.5
Trade deficit (US\$bn)	-15.5	-13.2	-17.8	-12.5	-11.6	-10.7	-13.7	-33.7	-51.8	-64.9	-77.6
Invisibles (US\$bn)	10.0	9.2	13.7	9.8	15.0	17.0	27.8	31.2	42.7	55.3	61.9
Current Account Deficit (US\$bn)	-5.5	-4.0	-4.1	-2.7	3.4	6.3	14.1	-2.5	-9.2	-9.6	-14.7
% to GDP	-1.3	-1.0	-0.9	-0.6	0.7	1.2	2.3	-0.4	-1.1	-1.0	-1.3
Forex reserves (excl gold) (US\$bn)	26.0	29.5	35.1	39.6	51.0	71.9	106.1	135.1	145.1	191.9	213.0
Months of imports	6.1	7.5	7.6	8.2	10.9	13.4	15.9	13.6	11.1	12.0	11.4
<b>Exchange rate</b>											
Rs/US\$ - annual avg	37.2	42.2	43.4	45.7	48.0	48.3	45.9	45.0	44.3	44.9	41.8
% depreciation	4.8	13.4	2.8	5.3	5.0	0.6	-5.0	-2.0	-1.6	1.4	-7.0
Rs/US\$ - year end	39.52	42.4	43.6	46.5	48.9	47.5	43.6	43.8	44.6	43.5	40.0
% depreciation	10.4	7.3	2.8	6.7	5.2	-2.9	-8.2	0.3	2.0	-2.5	-8.0

Source: CSO, RBI, Ministry of Finance, Citi estimates

## Theme: The Changing Face of Rural India

- As mentioned in last month's MacroScope, a unique combination of favourable demographics and rising household incomes has resulted in India becoming one of the largest consumer markets in the world
- India's retail boom appears to be spanning across both ends of the spectrum – with the trickle-down impact to the rural segment being as strong as the growing demand for luxury and well-being assets.
- While last month's macroscope discussed the latter<sup>1</sup>, this month we take a look at the bottom of the pyramid and discuss how Indian corporates besides combining corporate social responsibility and development are also looking at the rural segment as a growing and profitable business opportunity

*Rural retail – providing favorable demand and supply-side dynamics*

### Rural Retail: Capitalizing on 'The Bottom of the Pyramid'

Despite the declining significance of the monsoons on the economy and the diminishing share of agriculture in India's GDP, the rural market remains an integral part of India's economy, accounting for over 70% of India's population and typically comprising over 50% of total consumption. Interestingly, the retail boom that has swept India in recent years is now making its way to the 'bottom of the pyramid', facilitating a trickle-down impact and empowering the rural economy. Further, a growing number of corporates have begun to see the potential in rural areas largely due to the rural sector's role in both demand and supply-side dynamics.

#### Growing Demand, supported by rising incomes

Supported by rising income growth, the rural sector has seen a significant shift in consumption trends. For instance, food items, which comprised 73% of expenditure in the 1970s is down to 55% currently. A key factor aiding consumption is the wealth effect impact of land sales.

Figure 2. Rural Share of Consumer Demand (%)

	FY96	FY02	FY10E
Scooters	33.1	39.4	39.9
Motorcycles	47.3	39.8	48.3
Mopeds	52.7	58.2	57.7
Cars/jeeps	2.1	8.0	10.9
Automotive	37.9	36.0	37.9
TVs	54.0	54.5	44.2
Other white goods	23.8	23.9	23.7
All fans	50.0	56.9	56.7
Other low-cost items	58.1	60.1	61.3
Shampoos	27.2	31.9	33.0
Edible oils	64.3	67.1	62.9
Washing cakes	68.7	71.4	75.6

Source: NCAER

Figure 3. Distribution of Households by Income (Figs in Mns; Income in Rs)

	2005-06			2009-10E		
	Urban	Rural	Total	Urban	Rural	Total
Upto 45,000	6	47	53	3	31	35
45,000-90,000	17	62	80	15	65	80
90,000-1,35,000	14	20	34	15	34	49
1,35,000-1,80,000	9	7	16	11	10	21
Above 1,80,000	14	7	22	25	12	37
<b>Total</b>	<b>61</b>	<b>143</b>	<b>204</b>	<b>69</b>	<b>153</b>	<b>222</b>

Note: Income is in FY02 prices

<sup>1</sup> For details see India MacroScope "Focus on Luxury and Wellness as Plutonomy Arrives" dated 15<sup>th</sup> June, 2007 ( see <https://www.citigroupgeo.com/pdf/SAP06325.pdf>)

## Rural Corporate forays- Spanning across Sectors

Besides the corporate social responsibility angle, corporates are increasingly using various experiments to tap the latent potential in the rural sector. As an NCAER study points out, 17% of India's 627,000 villages account for 50% of the rural population and 60% of rural consumption. As a result, tapping 100,000+ villages would enable retailers to address 50% of the rural opportunity. Apart from the traditional initiatives of marketing agri produce inputs (tractors, fertilizers, seeds), companies have forayed into consumer durables, financial services, and other areas. Key among these include:

*A Two-Way Flow:  
Supply-Side dynamics  
are also favorable*

- **Consumer and Food Retail:** Rising rural incomes have resulted in a visible rise in rural spending – not only on agricultural inputs like seeds, fertilizers, and soil testing, but also on groceries, household items, and consumer durables. While growing demand is a major factor driving growth in the rural segment, a number of corporates have forayed into the sector to improve supply-chain dynamics directly with the farmer. By eliminating the role of the middleman<sup>2</sup>, the farm-to-fork models (egs. ITC's E-Choupal, HLL Project Shakti, DCM Shriram, Godrej Agrovet) have introduced price-transparency and reduced wastages. Contract farming is also an area that is seeing growing corporate interest.<sup>3</sup>
- **Banking and Financial Services:** With 58% of farming households still lacking access to basic banking services and *financial inclusion* gaining importance with policy officials, micro finance has emerged as an attractive financial proposition for large banks. Moreover, with several corporates also tying up with banks, retail is fast aiding penetration into financial services in the rural segment. For instance, ITC and DCM are collaborating with the State Bank of India (SBI) and ICICI Bank<sup>4</sup> respectively to either open branches in their stores or aid farmers with loans; thus eliminating the money-lender. Insurance companies are also making inroads into the rural segment. Currently, insurance covers only 2% of the poor in India. Regulations stipulate that 7% of a company's policies must come from rural areas in the first year of operation to 16% by the fifth year.
- **Telecom:** Although the telecom sector has witnessed unprecedented growth over the past decade, with 7mn new connections each month, the distribution is highly distorted, with urban tele-density at 31%, and rural at 2-3%.<sup>5</sup> Companies have begun tapping the mobile telecom market through innovative initiatives. For instance, while several **Reliance** phones are targeted at rural markets through an emphasis on price, other handset providers, such as **Nokia, Motorola and Vodafone**- have also launched low-cost mobile phones in the US\$20-30 range. Another initiative is the **Mahamaza** model where-in dealers consolidate orders from surrounding villages and pass on discounts received from bulk buying.

<sup>2</sup> Under **ITC's E-Choupal**, a computer with an Internet connection placed in a farmer's house, serving farmers in surrounding villages. Farmers use the computer to access daily closing prices in local markets and sell their produce directly to ITC at the previous day's close. In this way, ITC procures output directly from farmers, rather than from the local market. The system also ensures price transparency. Other initiatives include **HLL's Project Shakti** which involves working with self-help groups, to educate rural women and also employ them as direct selling agents; thus leveraging them to improve market penetration as well

<sup>3</sup> Eg - **FieldFresh**- a tie-up between the Bharti Group and Rothschild, which leases farmland producing vegetables for export

<sup>4</sup> **ICICI Bank's** rural lending doubled to Rs165bn (US\$4bn) in the year ended March 07. While it tripled the number of rural clients to 3.2mn last year, it aims to use branches, franchisees and ATMs to expand its rural base to 25mn clients over the next 5 years.

<sup>5</sup> Currently, the **United Service Obligation scheme** (USO) aims at providing access to basic telephone services to people in rural and remote areas at reasonable prices, even when some of these connections may not be justified on commercial considerations.

- **Information Technology:** The IT segment's foray into rural is still in a fairly nascent stage but an interesting initiative is the Byrraju Foundation's GramIT project set up by Satyam Computers. The objective is to set up basic data processing outsourcing centers in all the 160 villages adopted by Byrraju so as to enhance employment, technology, and education in villages, and at the same time benefit from low-cost labor.

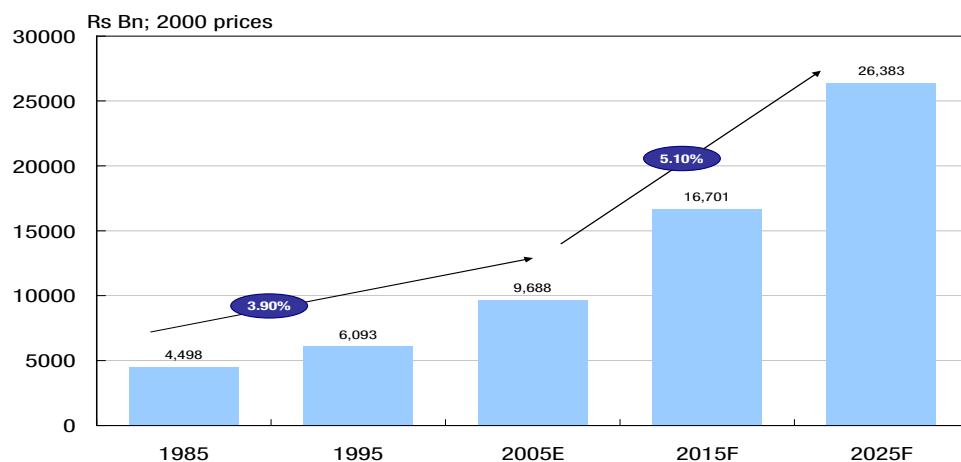
## Government initiatives will lead to further improvements

Government initiatives have also been positive and have encouraged growing commercial viability. These include the Rural Employment Guarantee Scheme<sup>6</sup>, and the Bharat Nirman Program<sup>7</sup> – both aimed at building infrastructure. Improvements in infrastructure are also key to connecting rural areas with the hinterland, which in turn would encourage corporate entry. In addition as the recent McKinsey study points out, investment in infrastructure has a two-fold impact on rural incomes – in the short term, it will create jobs that will boost income growth; while over the longer term, it will stimulate local economies, which in turn will provide alternate sources of income for residents.

### Benefits

The benefits of corporate forays into the rural sector are likely to be wide-ranging. For instance, apart from encouraging employment generation within agriculture, corporate entry into rural retail would also help diversify employment outside the segment. More importantly, the upward shift in income levels – a result of farmers getting a better deal as the produce gets diverted from traditional markets to the retail majors where payment is immediate - will eventually help lift people out of poverty and create a stronger middle-class. As farm-sector activities climb up the value chain, productivity *within* agriculture is also likely to see an improvement.

**Figure 4. Projected Trends in Rural Consumption**



Source: McKinsey & Co, Bird of Gold May 2007

<sup>6</sup> The scheme enables one member of every rural household to 100 days a year of work at a minimum daily wage of Rs60

<sup>7</sup> **The Bharat Nirman Program** is a four-year time-bound plan that aims to achieve goals in six areas of rural infrastructure - irrigation, water supply, housing, roads, telephony, and electrification. Key goals include (1) bringing an additional 10mn hectares under assured irrigation; (2) to connect all villages that have a population of 1,000 (or 500 in hilly/tribal areas) with a road; (3) to construct 6mn additional houses for the poor; (4) to provide drinking water to 74,000 uncovered habitations; (5) to expand the reach of electricity in rural areas; and (6) to extend rural telephone connectivity

## Real Indicators

- ▶ We are maintaining our 9.3% GDP estimate which has incorporated a deceleration in industrial growth from 11% in FY07 to 10% in FY08 due to higher rates. While we expect services to sustain 11% growth, we've assumed the 3% long-term trend for agriculture.
- ▶ However, better than expected monsoons could result in growth trending nearer to 10%. Supporting a growth upside is a relatively benign interest rate outlook
- ▶ Bio-fuels will help curb green house gas emissions, but have one serious disadvantage: they are driving up the prices of agricultural commodities and thus taking a toll on food price inflation

### Higher rates take their toll on May industrial production numbers

May industrial production rose 11.1%, marginally below expectations and the 12.4% growth in the previous month as well as the 11.7% growth seen last May. The lower growth was largely due to a slowdown in the interest sensitive sectors – transport equipment and durables. However, we are maintaining our 9.3% GDP estimates as our numbers have incorporated a deceleration in industrial growth.

**Key Highlights in May:** (1) on a sectoral basis, growth was led by manufacturing (+11.9%), electricity (+9.4%) and mining (3.7%). (2) The use based classification indicates continuation of strong growth in capital goods up 22.9% despite a high base as well as buoyancy in basic goods, intermediate and consumer non-durables. (3) Similar to the last four months, growth in wood and wood products remains extraordinarily high, +133% in May

**We expect an extended pause in policy rates:** Moderation in credit growth coupled with benign inflation will result in an extended pause in policy rates. In addition, strong dollar inflows and limited sterilisation have resulted in call money rates at historic lows, which in turn is resulting in a softer rate environment. This bodes well for interest sensitive sectors in coming months.

### KEY DATA REVISIONS FOR APRIL

<b>Apr Industrial Prodn revised from 13.6 to 12.4</b>
<b>Manf Prodn revised from 15.1% to 13.7%</b>
<b>Mining from 3.4% to 2.3%</b>
<b>Capital Goods Prodn revised from 17.7% to 14%</b>
<b>Consumer Goods revised from 17.7% to 15.8%</b>

Figure 5 Trends in Industrial Production (% YoY)

	WTS								Apr-May FY08	Apr-May FY07
		Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	May-06		
<b>Sectoral Classification</b>										
Mining	10.5	6.1	7.7	7.5	7.3	2.3	3.7	2.9	3.0	3.1
Manufacturing	79.3	14.5	12.3	12.0	15.9	13.7	11.9	13.3	12.7	12.2
Electricity	10.2	9.1	8.3	3.3	7.9	8.7	9.4	5.0	9.0	5.5
<b>General</b>	<b>100</b>	<b>13.4</b>	<b>11.6</b>	<b>11.0</b>	<b>14.5</b>	<b>12.4</b>	<b>11.1</b>	<b>11.7</b>	<b>11.7</b>	<b>10.8</b>
<b>Use-based Classification</b>										
Basic goods	35.5	12.4	12.0	10.7	11.7	8.6	10.2	9.1	9.4	9.2
Capital goods	9.7	26.2	16.3	18.0	18.2	14.0	22.9	21.4	18.6	20.6
Intermediate gds	26.4	12.7	13.7	13.3	14.3	12.1	9.1	12.5	10.5	10.5
Consumer gds	28.4	10.7	8.2	7.4	16.0	15.8	9.8	10.5	12.7	9.7
Durables	5.1	1.8	5.3	1.8	3.3	5.2	2.6	17.5	3.8	12.5
Non-durables	23.3	13.5	9.1	9.3	20.7	19.3	12.5	8.2	15.9	8.8

Source: CSO



## **Trade-off: Food or Alternate Fuel?**

Faced with the challenge of growing energy dependence and curbing green house gas emissions (GHG), a number of countries have begun to implement the use of alternative fuel sources, specifically bio-fuels- to substitute petroleum for transport<sup>8</sup>. While benefits are plentiful, the growing use of bio-fuels has one serious disadvantage: it is driving up the prices of agricultural commodities and thus taking its toll on food price inflation.

### **Government initiatives have aimed at encouraging bio-fuels...**

In order to encourage the use of bio-fuels, a number of countries have imposed regulations requiring a shift towards greener fuel.<sup>9</sup> In India, the government has proposed a rise in ethanol blend with petrol to 20% by 2012 though there is little progress on this front as the oil and sugar companies have failed to arrive at a consensus on pricing. To augment supply, many countries, including Brazil and the EU, are providing subsidies to farmers to encourage them to grow crops that will aid the development of alternate fuels. A point worth noting is that India proposes to use bio-diesel produced from jatropha, which is grown on waste-lands.

### **...However, there are trade-offs in terms of higher food prices**

While benefits abound, the growing use of bio-fuels is driving up the prices of agricultural commodities with prices of corn and wheat – the key feedstock for ethanol - having reached their highest levels in over a decade this year. This is despite expectations of strong global grain production in FY08, which in turn has impacted prices of processed goods. Satisfying the EU's new regulations would require the entire region's rapeseed oil production as feedstock as well as put immense pressure on production of wheat and sugar beets, which in turn will keep up the pressure on prices of wheat, edible oils and oilseeds.

### **Impact on India**

To compensate the shortfall in domestic wheat production, India resorted to wheat imports (5.5mt) after a gap of nearly six years in FY07. However, the timing was not so fortunate as prices had risen given the fact that world wheat stocks had fallen to their lowest level in 30 years – a result of inclement weather and the renewed global thrust on bio-fuels. This resulted in primary product inflation in the 8%-10% range in FY07, with wheat prices (weightage of 1.4%) rising 13% and oil-seeds (weightage of 2.7%) rising 29%YoY.

In FY08, India once again needs to import 5mt of wheat as domestic procurement has been 11mt – as compared to the target of 15mt. With global prices reining at US\$317-US\$370 a tonne, this again could potentially result in a rise in primary product prices. Thus a long-term solution to minimize the domestic impact of rising global prices would be the need to enhance agricultural production and productivity to minimize imports of primary articles.

<sup>8</sup> Bio-fuels are renewable liquid fuels - bio-ethanol and bio-diesel. **Ethanol-based bio-fuels** - used for transportation of two main forms . While **Bio ethanol** can be derived from sugarcane, wheat or corn, **bio-diesel** is commonly derived from bio-mass from rapeseed and from non-edible oil extracted from plants, such as *jatropha*. For more details please see *India in 2006 – Maintaining the momentum-* dated January 9, 2007.

<sup>9</sup> The EU recently approved a directive requiring member countries to use 10% bio-fuels for transport by 2020, while the US is required to use 132bn liters of bio-fuel by 2017

# Monetary Indicators

- **Banking sector liquidity turned comfortable due to the continued rise in deposits and the moderation in credit from 30%+ levels to 24.6%**
- **This coupled with benign inflation trends is likely to result in an extended pause in policy rates in 2007. However, we continue to expect the CRR to be used as a liquidity management tool.**

**Loan growth slows to 24.6% levels while deposits pick up to 24.5% Credit growth**, which averaged 30%+ during the last few years, began moderating to sub 30% levels earlier this year. Latest data indicates a continued moderation in credit growth with growth coming in at 24.6% for the fortnight ended 22 June - the lowest levels seen since Oct 04. This is in-line with expectations – a result of the stepping up of interest rate hikes and liquidity tightening measures undertaken by the RBI during the last year. Going forward, our banks analyst, Aditya Narain, expects credit to moderate further to the 20%-22% levels – which have been incorporated in our GDP estimates.

**Deposit growth** continued to edge higher coming in at 24.5%. These trends bode well for the interest rate outlook in the coming months.

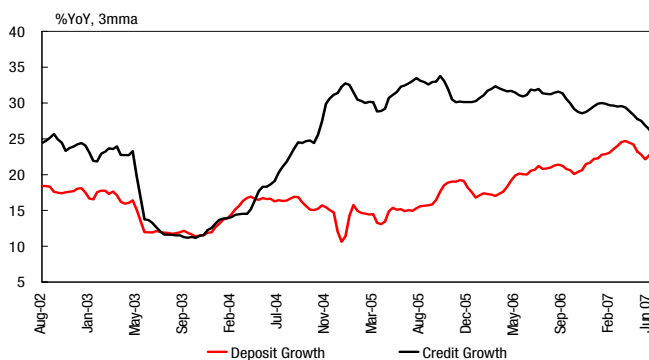
**Money supply** growth once again crossed 20% levels with the latest data as on June 22 pegging growth at 21.1%. This was largely due to the RBI’s dollar purchases.

**Figure 6. Trends in Bank Credit and Deposits (Rupees in Billions, % YoY)**

	Outstanding March 07	Incremental to date		YoY%	Total			
		FY08	FY07		FY07	FY06	FY05	FY04
<b>Bank Credit</b>	<b>19,289</b>	<b>-322</b>	<b>141</b>	<b>24.6</b>	<b>4,161</b>	<b>3,961</b>	<b>3,114</b>	<b>1,116</b>
Food	465	-17	6	6.4	58	7	41	-134
Non-Food	18,824	-305	134	25.1	4,103	3,954	3,074	1,251
Bonds & Debentures	620	-49	-32	-10.2	-47	-135	15	-4
<b>Deposits</b>	<b>25,943</b>	<b>739</b>	<b>346</b>	<b>24.5</b>	<b>4,852</b>	<b>3,875</b>	<b>2,807</b>	<b>2,236</b>
GOI Investments	7,922	490	238	13.5	747	-116	617	1,300

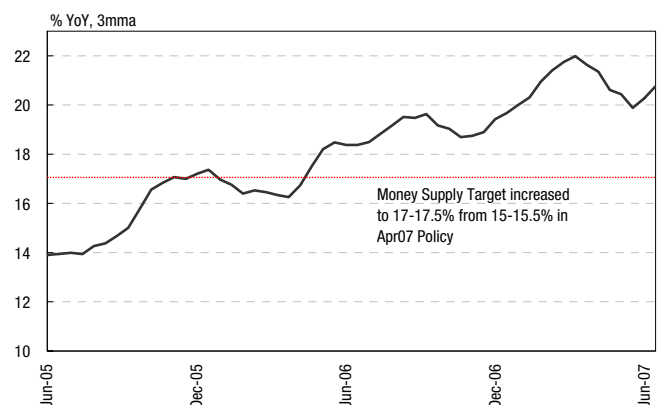
Source: RBI.

**Figure 7. Trends in Deposit and Credit Growth (% YoY)**



Source: Office of the Economic Advisor; Citi

**Figure 8. Trends in Money Supply (%YoY,3mma)**



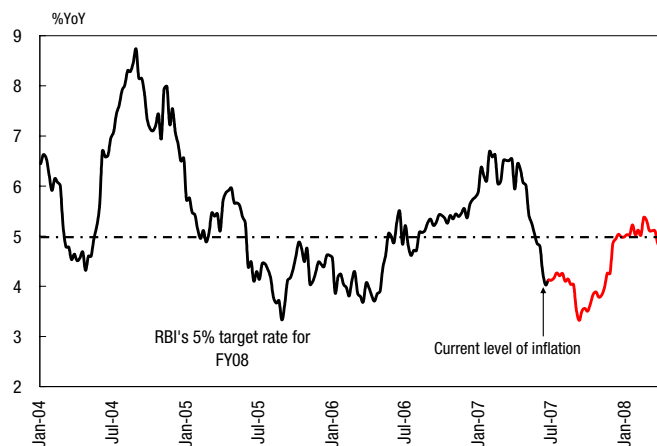
### Inflation – Likely to remain at sub 5% levels

The moderation in inflation from 6%+ levels seen in January this year to sub 5% levels is likely to continue in the coming months with the latest data pegging the WPI at 4.13% for the week ended June 23. This is on the back of the base effect; the RBI's tightening measures as well as the fiscal measures taken in FY07. Going forward, we expect inflation to remain at sub-5% levels during the remaining months of 2007, which would be in line with the RBI's 5% target for inflation in FY08.

### Implications: Extended Pause in Policy Rates

The decline in inflation which is largely in line with expectations<sup>10</sup>, coupled with the moderation in credit bodes well for the interest rate outlook. We now expect an extended pause in policy rates in 2007. However, having lowered its medium-term target for inflation from 5.0-5.5% to 4.0-4.5%, we think the RBI has kept a window open for one more rate hike which could take place in 2008. Given dollar inflows, we believe that the RBI will continue to use the Cash Reserve Ratio to absorb liquidity arising due to capital flows. But, not wanting to upset the growth momentum, we could see a reduction in the Statutory Liquidity Ratio in 2H FY08.

Figure 9. Likely Trends in Inflation (%YoY)



Source: Office of the Economic Advisor; Citi

Figure 10. Components of the Wholesale Price Index

	FY94=100	%YoY
<b>I. Primary Articles</b>	<b>22.0</b>	<b>7.10</b>
(A) Food Articles	15.4	4.90
(B) Non-Food Articles	6.1	12.70
(C) Minerals	0.5	11.40
<b>II. Fuel, Power Light &amp; Lubricants</b>	<b>14.2</b>	<b>-1.30</b>
<b>III. Manufactured Products</b>	<b>63.7</b>	<b>5.19</b>
(A) Food Products	11.5	2.10
(B) Beverage Tobacco & Tobacco Products	1.3	10.90
(C) Textiles	9.8	2.10
(D) Wood & Wood Products	0.2	7.10
(E) Paper & Paper Products	2.0	2.40
(G) Rubber & Plastic Products	2.4	7.10
(H) Chemicals & Chemicals Products	11.9	3.62
(I) Non-Metallic Mineral Products (incl cement)	2.5	8.20
(J) Basic Metals, Alloys & Metal Products	8.3	10.10
(K) Machinery & Machinery Tools	8.4	8.40
(L) Transport Equipment & Parts	4.3	1.74
<b>All Commodities</b>	<b>100.0</b>	<b>4.13</b>

<sup>10</sup> For more details please see our note dated 2<sup>nd</sup> March 07 at <https://www.citigroupgeo.com/pdf/SAP03261.pdf>

## Fiscal Indicators

- India's current fiscal picture looks good – a result of buoyant tax collections – up 35% v/s targeted growth of 17.2% for FY08
- As mentioned last month, strong capital flows could prompt a CRR hike or another increase in the ceiling for market stabilisation bonds

### Positive Fiscal Trends Continue:

India's fiscal deficit during April-May was Rs621bn, down 14% YoY and 41% of budget estimates as compared to 49% in the same period last year. The improvement in finances was primarily due to buoyant tax collections, up 35% v/s the government's targeted growth of 17.2% for FY08. This bodes well for government finances and the interest rate outlook.

**Govt to meet its FY08 targets:** The FY08 deficit is targeted at Rs1,509bn or 3.3% of GDP – in line with the FRBM targets. We maintain our view that budget arithmetic, which assumes gross tax collections rising by 17% and nominal GDP growth of 13%<sup>11</sup>, is conservative as compared to the 28% rise in tax collections in FY07. We believe this provides a cushion for unforeseen expenditures.

**Figure 11. April- May 2007: Fiscal Data (Rs Bn, %)**

Rs bn	May-07	%YoY	Apr-May07	%YoY	FY08BE	%Ytd of BE
a. Revenue receipts	178	79.8	259	34.0	4,864	5.3
Net tax revenues	163	96.8	217	44.0	4,039	5.4
Non-tax revenues	15	-6.7	42	-1.6	826	5.1
b. Non-debt cap receipts	24	2943.0	27	443.2	432	6.3
<b>c. Total receipts (a+b)</b>	<b>202</b>	<b>102.5</b>	<b>286</b>	<b>44.3</b>	<b>5,296</b>	<b>5.4</b>
d. Revenue expenditure	512	53.3	852	-3.1	5,579	15.3
e. Capital expenditure	34	158.6	55	39.0	1,226	4.5
<b>f. Total expenditure (d+e)</b>	<b>545</b>	<b>8.8</b>	<b>908</b>	<b>-1.3</b>	<b>6,805</b>	<b>13.3</b>
Plan Expenditure	(47)	-38.4	231	-20.3	2,051	11.3
Non- Plan Expenditure	416	48.7	676	7.5	4,754	14.2
g. Fiscal deficit (f-c)	343	-14.5	621	-13.8	1,509	41.2
h. Revenue deficit (d-a)	334	-11.6	593	-13.5	715	83.0

Source: Controller General of Accounts, Budget Documents

*All the tax categories are running ahead of budgeted growth rates*

**Figure 12. April- May 2007: Tax Collections Data (Rs Bn, %)**

	May-07	May-06	%YoY	Apr-May08	Apr-May07	%YoY	FY08BE	%ofB	Budgeted Growth Rate
Corporate	37	(18)	-304.8	61	18	231.8	1,684	3.6	15.0
Income	45	29	55.0	80	65	22.1	988	8.1	19.8
Customs	82	70	17.7	153	124	23.1	988	15.5	20.7
Excise	66	59	11.9	73	65	13.5	1,302	5.6	11.0
Others	36	26	41.8	57	41	37.1	520	10.9	30.6
<b>Gross Taxes</b>	<b>266</b>	<b>165</b>	<b>61.7</b>	<b>424</b>	<b>314</b>	<b>35.0</b>	<b>5,482</b>	<b>7.7</b>	<b>17.2</b>
Devolvement to States	102	81	25.6	204	162	26.3	1,443	14.2	18.4
<b>Net Taxes</b>	<b>163</b>	<b>83</b>	<b>96.8</b>	<b>217</b>	<b>151</b>	<b>44.0</b>	<b>4,039</b>	<b>5.4</b>	<b>16.7</b>

Source: : Controller General of Accounts, Budget Documents

<sup>11</sup> Under the **FRBM Act**, beginning FY05, the central government has to reduce its fiscal and revenue deficit by 0.3% and 0.5% of GDP a year so as to eliminate the revenue deficit by 2009. Nominal GDP growth assumptions are based on real GDP of 8.5-9% and inflation of 5-5.5%

### Liquidity Management and Sterilisation Issues

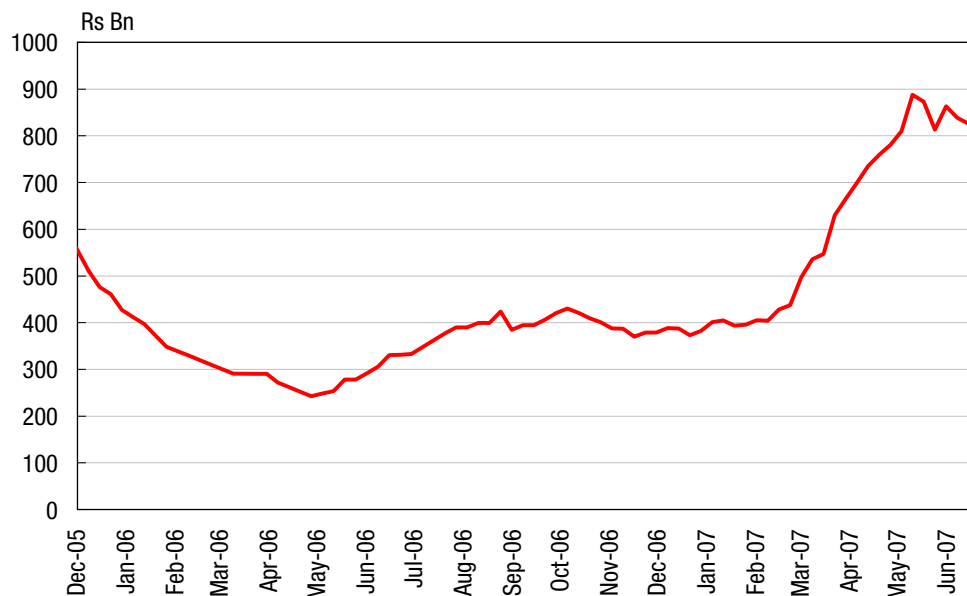
With forex reserves rising US\$14.3bn so far this fiscal, liquidity management remains a key concern for policy makers. Earlier this year, the RBI has raised the threshold limit for the market stabilization scheme (MSS)<sup>12</sup> to Rs1.1trillion and has modified it to include a mix of both treasury bills as well as government dated securities. Then on March 2, 2007 the RBI imposed a cap of not accepting more than Rs30bn from the reverse-repo window. The imposition of the cap resulted in short term rates coming down sharply which in turn helps discouraging hot money flows.

However, with foreign flows continuing to be strong and over Rs800bn of market stabilisation bonds already being issued, the RBI appears to be in a dilemma as to how best to manage liquidity given that it appears there is pressure on not letting the rupee appreciate much further.

Looking ahead, if capital flows remain strong, the options available to the RBI are a hike in the cash reserve ratio, and a further revision in the ceiling for MSS issuances. The only thing that currently works against further MSS issuances is the cost and the impact on the fiscal deficit as the interest expenditure is borne by the government.

Thus for now, it appears that with the RBI intervening to hold the rupee over Rs40/US\$, the reverse repo window capped at Rs30bn and no further MSS issuances, the burden of sterilisation has shifted from the RBI and MoF to the banking system. Call money rates for the last six weeks have been in the 0-4% range which in turn is resulting in a softening of interest rates across the board.

**Figure 13. Trends in Market Stabilisation Bonds**



Source: RBI

<sup>12</sup> In a bid to keep inflationary pressures in check and minimize the cost of sterilization the RBI launched a Market Stabilization Scheme to absorb additional liquidity from the markets arising due to capital flows. With this tool the RBI issues treasury bills and dated securities with a maturity of less than one year to absorb liquidity in the system.

## External Sector

- ▶ Despite a widening trade deficit, in line with seasonal trends, India recorded a current account surplus in 4QFY07. For FY07 as a whole, India's current account deficit (CAD) came in at US\$9.6bn or 1% of GDP, similar to that seen in FY06.
- ▶ For FY08, we expect the CAD to widen to 1.3% of GDP on the back of lower exports as well a higher import bill. But we maintain our positive stance on the external sector and our 12M rupee estimate of Rs40 as capital flows are more than sufficient to finance the CAD

### 4QFY07 BoP – Current account records a surplus

On the external front, despite a widening trade deficit, in line with seasonal trends, India recorded a current acc surplus in 4QFY07 of US\$2.6bn in 4QFY07 vs. a surplus of US\$1.8bn in 4QFY06. This is in line with seasonal trends where remittances and non-factor services generally lead to higher invisibles flows in the 4th quarter of the fiscal. For FY07 as a whole, India's current account deficit (CAD) came in at US\$9.6bn or 1% of GDP similar to what one had in FY06.

**Outlook for FY08:** Going forward for FY08, we expect India's trade deficit to widen to US\$77.6bn in FY08 vs. US\$64.9bn in FY07. This is due to (1) A deceleration in export growth to 15% from 20%+ seen in the last five years and (2) A marginal increase in the oil import bill (assumes 10% volume growth and Dubai crude at US\$70/bbl).

As a result, despite buoyant invisibles, India's CAD is estimated to widen to US\$14.7bn (1.3% of GDP vs. 1% of GDP in FY07). However, even assuming lower ECB flows and excluding so-called hot money (FII flows+ NRI deposits) capital flows are likely to be more than sufficient to finance the CAD.

**Figure 14. India's Balance of Payments: Quarterly and Annual Trends and Estimates (US\$bn).**

	FY06		FY07				FY06	FY07	FY08E
	Q4	Q1	Q2	Q3	Q4				
<b>1. Current Account (a+b)</b>	<b>1.8</b>	<b>-4.6</b>	<b>-4.8</b>	<b>-2.8</b>	<b>2.6</b>	<b>-9.2</b>	<b>-9.6</b>	<b>-14.7</b>	
Exports	30.2	29.7	32.7	30.7	34.1	105.2	127.1	146.2	
Imports	41.7	46.6	48.6	47.5	49.3	157.0	192.0	223.8	
<b>a. Trade Balance</b>	<b>-11.5</b>	<b>-16.9</b>	<b>-15.9</b>	<b>-16.9</b>	<b>-15.2</b>	<b>-51.8</b>	<b>-64.9</b>	<b>-77.6</b>	
b. Invisibles	13.3	12.4	11.0	14.1	17.8	42.7	55.3	61.9	
<b>2. Capital Account (c:g)</b>	<b>10.9</b>	<b>10.6</b>	<b>6.8</b>	<b>10.5</b>	<b>17.1</b>	<b>23.4</b>	<b>44.9</b>	<b>34.0</b>	
c. Loans (Including ECBs)	3.6	4.4	3.3	4.3	9.0	6.1	21.1	11.5	
d. Foreign Investment	6.4	0.9	4.6	6.1	3.9	17.2	15.5	19.4	
of which FII	4.3	-0.5	2.2	3.6	1.8	12.5	7.1	10.0	
e. Banking Capital Net	-0.4	5.0	-1.8	-3.3	2.3	1.4	2.1	6.0	
of which NRI deposits	1.7	1.2	0.8	1.2	0.6	2.8	3.9	3.0	
f. Other capital	1.5	0.3	0.7	3.4	2.0	-0.7	6.4	1.0	
g. Rupee debt service	-0.1	-0.1	0.0	0.0	-0.1	-0.6	-0.2	-0.4	
Errors & Omissions	0.6	0.4	0.3	-0.2	0.8	0.8	1.3	0.0	
<b>Overall Balance (1+2)</b>	<b>13.2</b>	<b>6.4</b>	<b>2.3</b>	<b>7.5</b>	<b>20.5</b>	<b>15.1</b>	<b>36.6</b>	<b>22.8</b>	

Source: RBI, Citi Forecasts.

### May Trade Deficit – Remains in the US\$6bn range

Exports in May touched US\$11.9bn up 18.1%, higher than expectations while imports at US\$18.1bn rose 26.4%— led by a 41.6% increase in non-oil imports and a 3% decline in the oil import bill. During Apr-May, exports were US\$22.4bn (up 20.4%yoy) while imports were US\$35.7bn (up 33.1%yoy), resulting in the trade deficit widening to US\$13.3bn v/s US\$8.2bn in the same period last year.

**Figure 15. India Trade – Customs Classification: April- May 2007 (US\$bn, %YoY) (Excludes Defense Payments)**

	May-07	%YoY	Apr-May07	Apr-May06	%YoY	FY08E	%YoY
Exports	11.9	18.1	22.4	18.6	20.4	143.6	15.2
Imports	18.1	26.4	35.7	26.8	33.1	214.6	18.3
Oil	4.7	-3.0	9.2	9.1	1.0	62.0	8.3
Non-oil	13.3	41.6	26.5	17.8	49.4	152.6	23.0
<b>Trade Balance</b>	<b>-6.2</b>		<b>13.3</b>	<b>8.2</b>		<b>71.0</b>	

Source: DGC&S, Citi estimates

### Commodity Composition of Trade: Supports the growth story

Data on commodity composition of trade previously came out with a two month lag. However, the latest available data on this (for January 07) indicates that close to 70% of the rise in non-oil imports is due to capital goods (up 39%), and industrial raw materials (up 22%)— which support the investment story. Among the consumption related items are gold imports (up 34%) and electronic goods (up 22%) which is partially explained by mobile handset imports given that India has been adding close to 6.5mn-7mn subscribers per month. The key sectors driving exports are engineering goods and petroleum products.

**Figure 16 : Commodity composition of Exports**

	Apr-Jan FY07	Apr-Jan FY06	%YoY
Agricultural & allied products	9.6	8.0	19.5
Ores & minerals	5.4	4.7	13.2
Manufactured Goods	67.3	58.0	16.0
Leather & leather manufactures	2.4	2.2	8.9
Chemicals & related products	9.2	8.0	14.4
Engineering goods	23.4	17.1	37.0
Textiles	6.8	6.3	7.8
Readymade Garments	7.1	6.8	4.7
Gems & Jewellery	12.8	12.6	2.0
Other manufactured goods	5.5	5.0	11.2
Petroleum & crude products	15.3	9.5	62.1
Other commodities	4.2	2.1	95.3
<b>TOTAL EXPORTS</b>	<b>101.8</b>	<b>82.4</b>	<b>23.5</b>

Source: DGC&S, CEIC Data Company

**Figure 17: Commodity Composition of Imports**

	Apr-Jan FY07	Apr-Jan FY06	%YoY
Petroleum crude & products (P&O)	47.6	35.6	33.5
<b>Non-Oil Imports</b>	<b>100.6</b>	<b>82.2</b>	<b>22.4</b>
Food & related items	3.3	2.7	21.8
Textiles (incl.RMG)	1.8	1.7	3.8
Chemicals & related products	11.6	9.5	22.0
Capital goods	21.0	15.1	39.4
Gold & Silver	12.3	9.2	34.3
Pearls precious & semiprec. Stones	6.0	8.0	-25.7
Electronic Goods	13.1	10.7	22.1
Coal, coke briquettes	3.7	3.2	14.3
Other(iron & steel, cement, fertilizer etc)	24.0	17.2	39.3
Other commodities	3.9	4.8	-19.9
<b>TOTAL IMPORTS</b>	<b>148.2</b>	<b>117.9</b>	<b>25.7</b>

# Financial Markets

- While near-term trends could be choppy, we maintain our long-term rupee appreciation view given the favourable balance of payments surplus and our house views on the USD and CNY
- Easy liquidity conditions coupled with falling inflation resulted in the 10-year bond falling below 8% levels earlier this month. We expect the 10-year to trade in a narrow range in the coming months with falling inflation likely to be offset by higher oil prices.

## Forex Markets

- **INR Review:** The rupee gained further rising to Rs40.42/US\$ from Rs40.63/US\$ last month. While strong investment inflows coupled with IPO related inflows were key factors behind the rise, higher crude oil prices and intervention by state run banks capped the upside.
- **Premium and Reserves:** The six-month premium fell to 1.77% from 2.62%. However, due to money market and currency movements, forward premiums moved in a wide range rising as high as 3.34%. The surge in forex reserves continued with reserves up US\$14.3bn this fiscal to US\$213bn.
- **Outlook:** While near-term trends could be choppy, we are maintaining our March08 estimate of Rs40/US\$, based on an overall balance of payments surplus of US\$22.8bn and our house views on the USD and CNY

**Figure 18. Currency Forecasts and Forwards**

	Range in Jun	Spot	3 Months		6 Months		12 Months	
		12-July	Forecast	Forward	Forecast	Forward	Forecast	Forward
Versus USD								
<b>India INR</b>	40.21 - 40.9	40.48	40.70	40.67	40.20	40.91	39.50	41.37

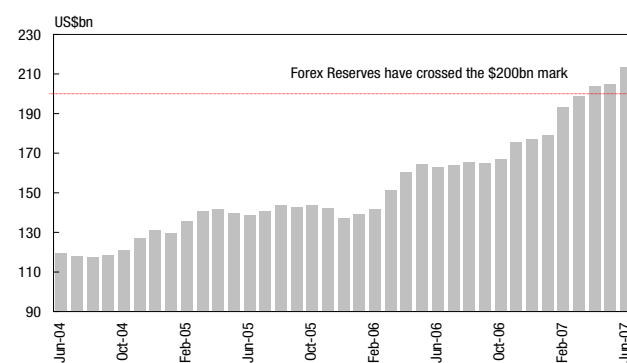
Source: Reuters, Citi estimates.

**Figure 19. Trends in the Rupee (INR/USD)**



Source: RBI.

**Figure 20. Outstanding Foreign Exchange Reserves(US\$bn)**



Source: RBI.



## Financial Markets

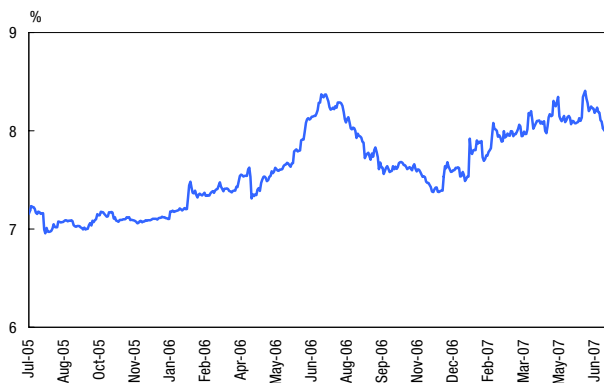
- **Liquidity:** Liquidity conditions remained comfortable despite the market borrowing program with the RBI receiving bids over Rs1 trillion at the reverse repo auction. The key reasons attributed to the increase in liquidity are (1) central bank’s dollar purchases to stem the rupee appreciation and (2) increase in banking sector liquidity – a result of slowdown in credit off-take and continued pickup in deposits.
- **Call money rates:** Easy liquidity conditions coupled with the Rs30bn cap on reverse repo absorption still in place have resulted in call money rates significantly lower the LAF corridor of 6% - 7.75%. This situation has persisted for awhile and has not only resulted in a steepening of the yield curve but also a lowering of market interest rates with loans including mortgages and auto finance rates as well as deposits – all 25-50bps cheaper today than a month ago.
- **Bonds:** Easy liquidity conditions coupled with falling inflation resulted in the 10-year bond falling below 8% levels earlier this month. However, bonds traded in a wide range with yields shooting up to 8.4% levels on the back of concerns that excess liquidity would result in tightening by the RBI. We expect the 10-year to break 8% levels but trade in a narrow range in the coming months with falling inflation likely to be offset by higher oil prices.

Figure 21. India Market Monitor

	Units	Latest	Previous	1M ago	3M ago	12M ago
<b>Interest Rates</b>						
Overnight	%	0.40	4.00	0.30	7.25	5.85
1 year Treasury Bill	%	7.17	7.65	7.69	7.70	7.05
1 year OIS	%	7.08	7.64	8.03	7.84	6.75
1 year MIFOR	%	7.83	8.29	9.28	8.65	7.08
5 year Corp AAA spread over GOI	%	1.97	1.90	1.73	1.36	0.72
10 year GOI	%	8.01	8.18	8.11	7.94	7.99

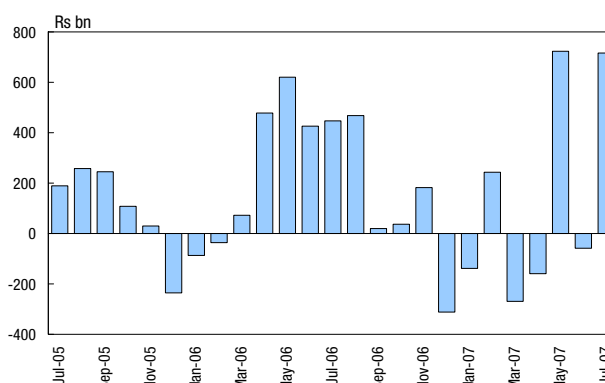
Source: RBI.

Figure 22. India — Trends in the 10-Year GOI Bond (Percent)



Source: RBI, Citigroup.

Figure 23. India — Trends in Reverse Repos/Repos (Rs bn)



Source: RBI, Citigroup.

## What's New

### **Greater Private Sector Participation in Defense**

India's defence expenditure has risen by 10% on a CAGR basis in the past ten years with military expenditure currently amounting to 2.3% of GDP. The uptrend in expenditure continues with the FY08 budget estimating expenditure at Rs960bn (US\$24bn); up 12% from FY07. While there has been a considerable amount of liberalization since 2001, with the government permitting (1) 100% investment to private firms and (2) FDI to the tune of 26%; only 30% of production is indigenized making India one of the largest arms importers in the world.

In a step that will ensure greater self-reliance in defense production, it is reported<sup>13</sup> that India may open the segment to greater private sector participation with the government likely to permit private firms to compete for R&D and production projects at par with the public sector. To this end, a selection committee recently submitted a report identifying '*tier-I industries of proven excellence...depending on their technical, managerial and financial strength.*' Such firms will be accredited with the status of '*Raksha Udyog Ratna's*' – defence industry jewels.

### **Private Sector participation to benefit both domestic and international players**

While private sector participation has been permitted since 2001, the key players in the Indian defense space continue to be the 8 Defence Public Sector Undertakings and the 39 ordnance factories. However, this could change given the fact that current indigenization levels are at just 30%, compared with the targeted 70% level and thus leaves immense scope for further private sector participation.

**Current domestic participants** in the defense space players include majors such as Ashok Leyland, Astra Microwave, Bharat Electronics, Bharat Earth Movers, BF Utilities, Garden Reach Shipbuilders, Godrej and Boyce, Jindal, Kirloskar Oil Engines, L&T, Mahindra & Mahindra, Max Aerospace & Aviation, Tata Group and Wartsila.

**In the international space**, we have seen interest from players such as Lockheed Martin, Raytheon, General Electric, and BAE Systems. Moreover, according to the '*offset clause*', foreign vendors with a defense contract over US\$70mn would have to compulsorily source 30% of the total cost of defense material from domestic suppliers. This would further encourage domestic players.

<sup>13</sup> See page 57 of the FY07 Annual Report of the Ministry of Defense <http://mod.nic.in/reports/welcome.html>

# Monthly Macro Monitor

**Figure 24. India —Key Monthly Economics Indicators (Percent Change from a year ago unless otherwise stated)**

Monthly Macro Snapshot														
	May 06	Jun 06	Jul 06	Aug06	Sept06	Oct06	Nov06	Dec06	Jan07	Feb07	Mar07	Apr07	May07	Jun07
<b>Consumption Trends</b>														
Two-Wheelers	20.4	23.6	19.7	3.5	19.1	10.3	14.5	6.9	10.9	4.9	-0.2	-4.0	-7.4	-8.1
Passenger Car Sales	25.8	25.4	20.5	13.9	19.8	15.9	25.8	25.7	24.2	37.2	6.0	8.4	4.8	11.1
Commercial Vehicle Sales	41.2	30.9	38.6	28.9	33.1	22.6	44.3	42.9	33.6	22.3	10.9	9.1	0.3	4.5
<b>Investment Trends</b>														
Infrastructure Index	7.2	7.7	10.8	5.7	9.7	9.8	9.5	8.5	8.2	7.5	10.0	7.4	8.7	
Cement Dispatches	6.9	12.9	13.9	4.0	18.2	8.6	13.7	8.4	8.3	6.3	6.2	6.0		
Diesel Consumption	15.1	-2.9	3.9	-1.2	15.0	3.5	10.8	7.0	8.2	1.3	11.6	8.5		
Steel Production	7.9	6.0	15.6	6.8	8.4	7.7	9.1	10.0	8.3	13.4	14.6			
Aluminum Production	21.9	15.6	27.9	19.8	22.4	26.1	26.2	28.2	28.0	13.1	10.7			
<b>Ind. Production Index</b>														
General	11.7	9.7	13.2	10.3	12.0	4.5	15.8	13.4	11.6	11.0	14.5	12.4	11.1	
Manufacturing	13.3	10.7	14.3	11.9	12.7	3.8	17.2	14.5	12.3	12.0	15.9	13.7	11.9	
Basic Goods	9.1	8.5	10.0	4.8	11.5	10.5	12.1	12.4	12.0	10.7	11.7	8.6	10.2	
Capital Goods	21.4	21.6	18.3	16.6	9.5	6.5	29.4	26.2	16.3	18.0	18.2	14.0	22.9	
Intermediate Goods	12.5	11.2	10.7	8.7	13.8	5.9	17.9	12.7	13.7	13.3	14.3	12.1	9.1	
Consumer Goods	10.5	6.1	16.8	15.0	12.1	-2.8	13.5	10.7	8.2	7.4	16.0	15.8	9.8	
<b>Services</b>														
Port Traffic	5.1	14.2	6.5	5.4	6.6	9.7	17.0	10.6	13.2	14.1	11.6	23.6		
Railway Freight	7.6	11.0	11.7	7.3	10.8	10.0	11.0	7.5	6.5	6.8	8.9	4.5		
Tourist Arrivals ('000)	259	273	349	303	281	394	472	547	515	463	444	335	272	
Cellular Subscribers (Mils.)	75.3	78.5	82.4	86.6	91.0	95.5	100.8	105.4	110.4	115.3	121.4	125.5	130.6	
<b>Banking Trends</b>														
Money Supply	18.3	18.3	19.2	19.5	19.2	18.8	19.0	19.8	20.8	21.6	21.6	20.6	19.9	21.3
Loan Growth	30.7	31.8	31.4	31.5	30.6	28.9	28.6	29.6	29.9	29.5	28.8	27.7	26.7	25.1
Deposit Growth	20.0	20.5	20.8	21.3	20.8	20.3	21.0	22.2	22.9	24.0	24.2	23.0	22.3	23.9
Non-Food Credit	32.5	32.9	33.0	32.9	33.0	30.1	30.0	30.7	30.3	30.4	29.9	26.8	26.9	25.4
<b>Inflation</b>														
CPI (IW)	6.3	7.7	6.7	6.3	6.8	7.3	6.3	6.9	7.1	7.6	6.7	6.7	6.6	
WPI	4.5	5.2	5.0	5.7	5.9	5.4	5.2	5.4	5.7	6.1	6.2	6.6	5.5	4.4
Mfg Products Inflation	2.4	2.9	3.5	4.0	4.3	4.6	4.5	4.9	5.8	5.9	6.3	6.1	5.3	5.1
<b>Interest Rates (Avg, %)</b>														
Call Money Rate	3.8	4.6	4.8	5.2	5.3	4.9	5.6	5.4	5.5	4.7	4.3	4.0	2.0	0.2
91-Day T-Bills	5.7	6.1	6.4	6.4	6.5	6.6	6.7	7.0	7.3	7.7	7.7	7.5	7.6	7.3
10-Year Government Bond	7.6	7.9	8.3	8.1	7.7	7.6	7.5	7.6	7.7	7.9	8.0	8.1	8.2	8.2
<b>Trade - Customs Data</b>														
Exports	26.1	31.9	40.8	24.6	27.0	14.8	35.7	7.7	5.5	7.9	8.8	23.1	18.1	
Imports	17.2	24.9	27.7	18.8	34.2	44.4	37.5	31.1	23.2	25.1	14.5	40.7	26.4	
Oil	28.4	54.5	54.7	27.2	25.8	28.1	48.3	29.6	15.1	-1.2	9.8	11.4	-3.0	
Non-Oil	13.1	13.7	15.8	14.8	38.3	53.6	32.8	31.8	27.3	39.8	16.4	54.3	41.6	
Brent Prices (\$/bbl)	69.7	68.6	73.7	72.9	61.4	57.2	58.3	63.0	53.8	57.6	62.2	63.2	64.2	
<b>Foreign Investment (US\$ Mils.)</b>														
FII	-1,630	106	252	1,000	1,166	1,736	2,037	-797	113	1,620	-244	1,516	942	401
FDI	538	523	1,127	619	916	1,698	1,151	5,130	1,921	698	603			
<b>Exchange Rate and Reserves</b>														
US\$ Exchange Rate Average	45.4	46.0	46.5	46.5	46.1	45.4	44.8	44.6	44.3	44.2	44.0	42.1	40.8	40.8
US\$ Exchange Rate Mnth End	46.4	46.1	46.6	46.5	45.9	45.0	44.7	44.3	44.2	44.3	43.5	41.2	40.6	40.7
Forex Res Inc.Gold (US\$ Bils.)	164.5	162.9	164.0	165.3	165.3	167.1	175.5	177.3	179.1	193.1	199.2	204.1	204.9	213.5

Source: CSO; CMIE, RBI, DGCI&amp;S; CMA; SIAM.

# Summary of Balance of Payments

Figure 25. Trends and Forecasts in the Balance of Payments (US\$Mn, %)

FY08E KEY POINTS		FY01	FY02	FY03	FY04	FY05	FY06	FY07P	FY08E
<b>CURRENT ACCOUNT</b>									
<b>Exports(RBI)</b>		<b>45,452</b>	<b>44,703</b>	<b>53,774</b>	<b>66,285</b>	<b>85,206</b>	<b>105,152</b>	<b>127,090</b>	<b>146,154</b>
Y/Y%		21.1	(1.6)	20.3	23.3	28.5	23.4	20.9	15.0
% of GDP		9.9	9.4	10.6	11.0	12.3	13.1	13.8	13.1
<b>Imports (RBI)</b>		<b>57,912</b>	<b>56,277</b>	<b>64,464</b>	<b>80,003</b>	<b>118,908</b>	<b>156,993</b>	<b>191,995</b>	<b>223,751</b>
Y/Y %		4.6	-2.8	14.5	24.1	48.6	32.0	22.3	16.5
% to GDP		12.6	11.8	12.7	13.3	17.1	19.5	20.9	20.0
<b>Imports-Customs</b>		<b>50,576</b>	<b>51,448</b>	<b>61,385</b>	<b>78,200</b>	<b>106,700</b>	<b>140,200</b>	<b>181,368</b>	<b>214,639</b>
Y/Y %		1.9	1.7	19.3	27.4	36.4	31.4	29.4	18.3
of which:									
<b>Oil</b>		<b>15,676</b>	<b>14,048</b>	<b>17,685</b>	<b>20,600</b>	<b>29,900</b>	<b>43,800</b>	<b>57,271</b>	<b>62,000</b>
Y/Y %		24.1	-10.4	25.9	16.5	45.1	46.5	30.8	8.3
<b>Non-Oil</b>		<b>34,900</b>	<b>37,400</b>	<b>43,700</b>	<b>57,600</b>	<b>76,800</b>	<b>96,400</b>	<b>124,097</b>	<b>152,639</b>
Y/Y %		-5.7	7.2	16.8	31.8	33.3	25.5	28.7	23.0
<b>a. Trade balance (RBI)</b>		<b>-12,460</b>	<b>-11,574</b>	<b>-10,690</b>	<b>-13,718</b>	<b>-33,702</b>	<b>-51,841</b>	<b>-64,905</b>	<b>-77,597</b>
% of GDP		-2.7	-2.4	-2.1	-2.3	-4.9	-6.4	-7.1	-6.9
Trade Balance (Customs)		-6,016	-7,621	-8,666	-14,357	-26,000	-39,600	-56,739	-71,067
Difference		-6,444	-3,953	-2,024	639	-7,702	-12,241	-8,166	-6,531
<b>b. Invisibles</b>		<b>9,794</b>	<b>14,974</b>	<b>17,035</b>	<b>27,801</b>	<b>31,232</b>	<b>42,655</b>	<b>55,296</b>	<b>61,900</b>
Non-factor services		1,692	3,324	3,643	10,144	15,426	23,881	32,727	38,000
Of which: Software Services		5,750	6,884	8,863	11,750	16,400	22,262	28,798	35,998
Investment income		-5,004	-4,206	-3,446	-4,505	-4,979	-5,510	-4,846	-4,400
Remittances		12,854	15,398	16,387	21,608	20,525	24,102	27,195	29,000
Official transfers		252	458	451	554	260	182	220	300
<b>1. Current a/c balance (a+b)</b>		<b>-2,666</b>	<b>3,400</b>	<b>6,345</b>	<b>14,083</b>	<b>-2,470</b>	<b>-9,186</b>	<b>-9,609</b>	<b>-14,697</b>
% of GDP		-0.6	0.7	1.2	2.3	-0.4	-1.1	-1.0	-1.3
<b>CAPITAL ACCOUNT</b>									
<b>c. Loans</b>		<b>5,264</b>	<b>-1,261</b>	<b>-3,850</b>	<b>-4,364</b>	<b>10,909</b>	<b>6,113</b>	<b>21,129</b>	<b>11,500</b>
External assistance		410	1,117	-3,128	-2,858	1,923	1,682	1,770	1,000
Commercial borrowings*		4,303	-1,585	-1,692	-2,925	5,194	2,723	16,084	8,500
Short-term credit		551	-793	970	1,419	3,792	1,708	3,275	2,000
<b>d. FDI (Net = a-b)</b>		<b>3,274</b>	<b>4,734</b>	<b>3,217</b>	<b>2,388</b>	<b>3,713</b>	<b>4,730</b>	<b>8,437</b>	<b>9,442</b>
(a) FDI - To India		4,031	6,125	5,036	4,322	5,987	7,661	19,442	21,442
(b) FDI - Abroad		-757	-1,391	-1,819	-1,934	-2,274	-2,931	-11,005	-12,000
<b>e. Portfolio investment</b>		<b>2,590</b>	<b>1,952</b>	<b>944</b>	<b>11,356</b>	<b>9,287</b>	<b>12,494</b>	<b>7,062</b>	<b>10,000</b>
<b>f. Banking Capital</b>		<b>-1,961</b>	<b>2,864</b>	<b>10,425</b>	<b>6,033</b>	<b>3,874</b>	<b>1,373</b>	<b>2,087</b>	<b>6,000</b>
Commercial Banks (Net)		-4,277	110	7,447	2,391	4,838	-1,416	-1,808	3,500
NRI deposits		2,316	2,754	2,978	3,642	-964	2,789	3,895	2,500
<b>g. Rupee debt service</b>		<b>-617</b>	<b>-519</b>	<b>-474</b>	<b>-376</b>	<b>-417</b>	<b>-572</b>	<b>-162</b>	<b>-400</b>
<b>h. Other capital**</b>		<b>292</b>	<b>781</b>	<b>578</b>	<b>1,699</b>	<b>656</b>	<b>-738</b>	<b>6,391</b>	<b>1,000</b>
<b>2.Capital a/c (c+d+e+f+g+h)</b>		<b>8,842</b>	<b>8,551</b>	<b>10,840</b>	<b>16,736</b>	<b>28,022</b>	<b>23,400</b>	<b>44,944</b>	<b>37,542</b>
Errors & Omissions		-305	-194	-200	602	607	838	1,271	0
<b>Overall balance (1+2)</b>		<b>5,871</b>	<b>11,757</b>	<b>16,985</b>	<b>31,421</b>	<b>26,159</b>	<b>15,052</b>	<b>36,606</b>	<b>22,845</b>
<b>Forex</b>									
Forex assets		39.6	51.0	71.9	106.1	135.1	145.1	191.9	213.0
FCA to months of imports (Rhs)		8.2	10.9	13.4	15.9	13.6	11.1	12.0	11.4
<b>Exchange rate</b>									
Rs/US\$ - annual avg		45.7	48.0	48.3	45.9	45.0	44.3	44.9	41.8
% depreciation		5.3	5.0	0.6	-5.0	-2.0	-1.6	1.4	-7.0
Rs/US\$ - year end		46.5	48.9	47.5	43.6	43.8	44.6	43.5	40.0
% depreciation/(-) app		6.7	5.2	-2.9	-8.2	0.3	2.0	-2.5	-8.0

\*Includes US\$4.1bn of the Resurgent Bond Issue repaid in September 2003 and repayment of India Millennium Bonds in FY06.

\*\* Includes delayed export receipts, advance payments against imports.

Source: RBI, Citigroup estimates.

# Snapshot of Government Finances

Figure 26. India's Central Government Finances (Rupees in Billions, Percent to GDP)

	FY03	FY04	FY05	FY06	FY07RE	FY08BE
<b>BUDGET FY08: KEY HIGHLIGHTS</b>						
<i>No change in direct taxes, reduction in the peak customs tariffs from 12.5% to 10%. Additional surcharge of 1% for education + removal of exemptions will help shore up revenues</i>						
<i>Tax Revenue growth assumption @17%yoy is conservative</i>						
<i>*Privatization and Disinvestment estimates include Rs400bn on account of transfer of RBI's stake in SBI</i>						
<i>Higher Defense outlays, interest payments, subsidies and wages have driven up non-plan expenditure...</i>						
<i>...however, outlays on expenditure on National Urban Renewal Mission, Bharat Nirman Project raised by 31% - will encourage 'inclusive growth'</i>						
<i>FY08 Fiscal Deficit at 3.3% - in line with FRBM targets</i>						
<b>a. Gross Tax Revenue</b>	<b>2,163</b>	<b>2,543</b>	<b>3,050</b>	<b>3,662</b>	<b>4,678</b>	<b>5,481</b>
% to GDP	8.8	9.2	9.8	10.3	11.3	11.8
Corporation tax	462	636	827	1,013	1,465	1,684
Income tax	369	414	493	636	825	988
Excise duty	823	908	991	1,112	1,173	1,302
Import duty	449	486	576	651	818	988
Service tax*	61	100	163	250	398	520
b. (-) Devolvement to States & UTs	577	674	802	959	1,219	1,443
c. Net tax revenues (a-b)	1,585	1,870	2,248	2,703	3,460	4,039
d. Non tax revenues	723	769	812	772	774	826
<b>e. Net revenue receipts (c+d)</b>	<b>2,308</b>	<b>2,639</b>	<b>3,060</b>	<b>3,475</b>	<b>4,233</b>	<b>4,864</b>
f. Non-debt capital receipts	373	841	665	122	60	432
Recovery of loans	342	672	620	106	55	15
Privatisation*	32	170	44	16	5	417
<b>g. TOTAL REVENUES (e+f)</b>	<b>2,682</b>	<b>3,480</b>	<b>3,725</b>	<b>3,597</b>	<b>4,293</b>	<b>5,296</b>
% YoY	21.3	29.8	7.0	-3.4	19.4	23.4
<b>h. Revenue expenditure</b>	<b>3,387</b>	<b>3,621</b>	<b>3,843</b>	<b>4,398</b>	<b>5,068</b>	<b>5,579</b>
Interest (1)	1,178	1,241	1,269	1,326	1,462	1,590
Defence	407	432	439	482	515	541
Subsidies	435	443	460	475	535	543
Pensions	144	159	183	203	222	235
Grants to States	133	137	148	305	362	384
Admin and social services	374	422	470	488	526	543
Plan expenditure	716	786	875	1,119	1,446	1,744
<b>i. Capital expenditure</b>	<b>745</b>	<b>1,092</b>	<b>1,139</b>	<b>664</b>	<b>749</b>	<b>1,226</b>
Defence	150	169	320	323	345	419
Loans	197	487	371	52	123	500
Plan expenditure	399	436	448	288	281	307
j. Plan expenditure on rev & cap a/c	1,115	1,223	1,323	1,406	1,727	2,051
k Non Plan expen on rev & cap a/c	3,018	3,490	3,660	3,655	4,089	4,754
<b>l. TOTAL EXPENDITURE (h+i) = (j+k)</b>	<b>4,132</b>	<b>4,713</b>	<b>4,983</b>	<b>5,061</b>	<b>5,816</b>	<b>6,805</b>
% YoY	14.1	14.0	5.7	1.6	14.9	17.0
<b>Deficit trends</b>						
<b>m. Fiscal deficit (l-g)</b>	<b>1,451</b>	<b>1,233</b>	<b>1,258</b>	<b>1,464</b>	<b>1,523</b>	<b>1,509</b>
% to GDP	5.9	4.5	4.0	4.1	3.7	3.3
<b>n. Revenue deficit (h-e)</b>	<b>1,079</b>	<b>982</b>	<b>783</b>	<b>923</b>	<b>834</b>	<b>715</b>
% to GDP	4.4	3.6	2.5	2.6	2.0	1.5
<b>o. Primary deficit (m-1)</b>	<b>273</b>	<b>-8</b>	<b>-12</b>	<b>138</b>	<b>61</b>	<b>-80</b>
% to GDP	1.1	0.0	0.0	0.4	0.1	-0.2
<b>Financing the deficit</b>						
Market borrowings	976	889	460	953	1,075	1,096
PPF & special deposits	139	50	-4	60	50	50
Small savings	0	0	0	0	30	105
Net external assistance	-119	-135	148	75	79	91
Others	436	468	736	584	180	167
Cash Surplus	19	-39	-82	-209	109	0
<b>Total financing</b>	<b>1,451</b>	<b>1,233</b>	<b>1,258</b>	<b>1,464</b>	<b>1,523</b>	<b>1,509</b>
<b>Memo items (% to GDP)</b>						
Centre	5.9	4.5	4.0	4.1	3.7	3.2
State	4.2	4.5	3.5	3.2	2.7	2.7
Combined	9.6	8.5	7.5	7.4	6.3	6.0

BE- Budgeted Estimated; RE- Revised Estimates. Source: Budget Documents.

# Global Economic Forecasts

	GDP Growth			CPI Inflation			Current Balance (% of GDP)			Fiscal Balance (% of GDP)		
	2006E	2007E	2008E	2006E	2007E	2008E	2006E	2007E	2008E	2006E	2007E	2008E
United States	3.3	2.3	2.6	3.2	2.8	2.4	-6.1	-5.9	-6.0	-1.9	-1.1	-0.6
Japan	2.2	2.6	2.1	0.2	-0.3	0.3	3.9	4.2	4.1	-3.6	-3.0	-3.0
Euro Area	2.8	2.7	2.3	2.2	1.9	1.8	-0.1	0.1	0.2	-1.6	-1.2	-1.1
China	10.7	10.3	10.7	1.5	3.0	4.5	9.0	9.5	8.9	-0.7	-1.8	-2.0
<b>India(Inflation is WPI)</b>	<b>9.4</b>	<b>9.3</b>	<b>9.4</b>	<b>5.3</b>	<b>4.5</b>	<b>4.5</b>	<b>-1.0</b>	<b>-1.3</b>	<b>-1.4</b>	<b>-6.3</b>	<b>-6.0</b>	<b>-6.1</b>

Note: GDP and CPI are expressed as year-to-year percent change. Source: Citi estimates.

## Short-Term Forecasts

	Vs. US\$					Policy Rates (%)					Long-term Rates (%)								
	1 Month		3 Month		6 Month	12 Month	3Q07		4Q07		1Q08	2Q08		3Q07		4Q07		1Q08	2Q08
	Current	Forecast	Forecast	Forecast	Forecast	Forecast	Current	Forecast	Forecast	Forecast	Forecast	Current	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	
United States	NA	NA	NA	NA	NA	5.25	5.25	5.25	5.25	5.00	5.07	5.10	5.15	5.20	5.20				
Japan	122.8	--	125.0	124.0	122.0	0.50	0.50	0.75	0.75	1.00	1.93	1.90	1.85	1.85	1.90				
Euro Area	1.4	--	1.4	1.4	1.4	4.00	4.00	4.25	4.25	4.25	4.60	4.60	4.65	4.70	4.70				
China	7.6	7.6	7.4	7.3	7.1	6.57	6.84	6.84	6.98	7.11	3.83	3.65	3.70	3.85	4.00				
Hong Kong	7.8	7.8	7.8	7.8	7.8	4.52	4.60	4.66	4.63	4.45	4.59	4.67	4.69	4.80	4.73				
<b>India</b>	<b>40.5</b>	<b>40.6</b>	<b>40.7</b>	<b>40.2</b>	<b>39.5</b>	<b>7.75</b>	<b>7.75</b>	<b>7.75</b>	<b>8.00</b>	<b>8.00</b>	<b>8.02</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>				
Malaysia	3.5	3.4	3.4	3.4	3.3	3.50	3.50	3.50	3.50	3.50	3.45	3.70	3.75	3.83	3.90				
Philippines	46.1	45.0	46.0	44.5	43.5	7.50	7.50	7.50	7.50	7.50	6.95	6.50	6.00	5.75	5.50				
Singapore	1.5	1.5	1.5	1.5	1.5	2.50	2.60	2.65	2.70	2.75	2.92	2.85	2.90	2.95	3.00				
Korea	922.4	930.0	920.0	900.0	890.0	4.50	4.75	4.75	4.75	4.75	5.43	5.40	5.30	5.25	5.20				
Taiwan	32.8	33.0	32.8	32.5	32.2	2.01	2.05	2.10	2.15	2.20	2.55	2.50	2.50	2.75	3.00				
Thailand	34.0	34.6	33.0	32.5	31.0	3.50	3.50	3.50	3.50	3.50	4.63	4.50	4.75	4.63	4.50				

Source: Citigroup estimates.

## Long-Term Forecasts

	GDP Growth(%)					Exchange Rates(Average)					Long-term Rates(%)				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
United States	2.3%	2.6%	2.7%	2.7%	2.7%	NA	NA	NA	NA	NA	4.95	5.15	5.25	5.35	5.35
Japan	2.6	2.1	0.8	1.8	2.1	121	121	114	104	94	1.78	1.90	1.80	2.60	2.90
Euro Area	2.7	2.3	2.0	1.8	1.7	1.34	1.36	1.35	1.36	1.40	4.30	4.60	4.70	4.75	4.75
China	10.3	10.7	10.0	9.8	9.5	7.54	7.00	6.65	6.32	6.00	3.50	4.50	4.00	4.50	5.00
<b>India</b>	<b>9.3</b>	<b>9.4</b>	<b>9.8</b>	<b>9.7</b>	<b>9.7</b>	<b>41.80</b>	<b>40.00</b>	<b>39.00</b>	<b>37.50</b>	<b>36.00</b>	<b>8.00</b>	<b>7.50</b>	<b>7.50</b>	<b>7.50</b>	<b>7.50</b>

Source: Citi estimates.

## India's Place in the World: GDP Rankings, Nominal and PPP Basis (Top 15 countries, 2005, US\$bn)

Ranking	Country	GDP-PPP Basis	Ranking	Country	Nominal GDP
1	United States	12,409	1	US	12,455
2	China	8,573	2	Japan	4,506
3	Japan	3,944	3	Germany	2,782
<b>4</b>	<b>India</b>	<b>3,816</b>	4	China	2,229
5	Germany	2,418	5	UK	2,193
6	United Kingdom	1,927	6	France	2,110
7	France	1,830	7	Italy	1,723
8	Italy	1,668	8	Spain	1,124
9	Brazil	1,627	9	Canada	1,115
10	Russian Federation	1,560	10	Brazil	794
11	Spain	1,134	11	Korea	788
12	Canada	1,061	<b>12</b>	<b>India</b>	<b>785</b>
13	Korea	1,056	13	Mexico	768
14	Mexico	1,052	14	Russian Fed	764
15	Indonesia	847	15	Australia	701

Source: World Development Indicators, 2005.

## Disclosure Appendix

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