ECONOMIC AND MARKET ANALYSIS: INDIA

Economics

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India Macroscope

The Ghost of the '90s Returns...How Much Further will India Be Spooked?

- **Inflation is in double-digits, growth is decelerating and the RBI is tightening – a mirror image of what happened in the 1990s...**
- **Yes, higher rates will impact growth...but corporate India is in better shape today. Productivity has improved and savings have risen**
- **Various dynamics – global growth, oil, new government – would impact the outlook in FY10, but these are somewhat un-predictable**
- **But one thing is clear, the days of 9%+ growth are over. India has lost the opportunity to sustain those levels for now. We expect growth to come in around 7%+ levels in FY09-10**

Asia Pacific

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In this month's macroscope, we discuss that while higher rates will impact growth, corporate India is in better shape than before. However, the days of 9%+ growth are over and we believe that India has lost the opportunity to sustain those levels for now, and we expect growth to come in around 7%+ levels in FY09-10

The ghost of the 1990s returns…

With inflation rearing its ugly head, and supply side measures not yet being effective the RBI has started its tightening cycle to ease demand. This is occurring at a time when industrial growth has decelerated, which makes one wonder if the coming year is likely to be a mirror image of what happened to India in the mid 1990s. Adding to the woes, a key difference and a variable that was unanticipated was the c.45% rise in oil prices since the beginning of the year. This coupled with the rise in other commodity prices – iron ore and metals – has further exacerbated inflationary pressures emanating from excessive money growth.

…So how much further will India get spooked?

Admittedly, much further rate hikes do pose downside risks to our FY09 and FY10 GDP estimates of 7.7% and 7.9%, respectively. But a couple of things worth pondering are: (1) While nominal interest rates have gone up, real interest rates are low; (2) Productivity has increased and ICORs in India are relatively lower; (3) Indian corporates are significantly underleveraged as compared to the past; (4) In most sectors other than perhaps retail/real estate, investments are being carried out to meet existing demand rather than that of the previous cycle – i.e in anticipation of demand; (5)Work in progress on big-ticket projects in areas such as oil and gas, minerals and metals and infrastructure are unlikely to get completely derailed as most of the projects have escalation clauses and back-to-back supply arrangements.

Inflation to edge higher…and so will rates

We expect headline inflation to remain in the double-digit range and possibly cross 13% levels. This assumes a moderate easing in primary product prices, a further rise in the fuel index – incorporating an increase in electricity tariffs, and manufactured product index sustaining at c.9% levels given the pass through of regulated and unregulated fuels. With supply side measures not really being effective in bringing inflation down, we expect the RBI to continue to raise rates to temper demand-side pressures. Much further monetary tightening poses downside risks to both our FY09 and FY10 GDP estimates of 7.7% and 7.9%, respectively.

Financial markets – Expect further weakness in INR and bonds

The deceleration in capital flows coupled with oil at US$135/bbl indicates possible further rupee weakness. However, direct + indirect intervention could keep the rupee in the Rs43-43.5 range. As regards bonds, factoring in the fuel price hike, repo rate and CRR hikes as well as the probability of further monetary tightening, bond yields edged almost 100bps higher with the 10-year trading at 9.15% from 8.2% levels last month. Assuming another round of monetary tightening this month, yields could edge towards c.9.25% levels.

Statistical Snapshot

Figure 1. India — Macroeconomic Summary, FY98-09E (Percent)

Year-end 31 March	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09E	FY10E
National income indicators													
Nominal GDP (Rs bn)	15,272	17,512	19,520	21,023	22,790	24,546	27,546	31,494	35,803	41,458	47,131	54,578	62,394
Nominal GDP (US$ bn)	411	415	450	460	475	508	600	700	808	923	1,172	1,284	1,560
Per Capita GDP (US$)	418	409	437	440	447	471	548	639	783	881	1,103	1,190	1,424
Real GDP growth (%YoY)	4.8	6.5	6.0	4.4	5.8	3.8	8.5	7.5	9.4	9.6	9.0	7.7	7.9
Agriculture growth	-2.4	6.2	0.5	-0.2	6.3	-7.2	10.0	0.0	5.9	3.8	4.5	3.0	3.0
Industry growth	4.3	3.7	4.1	6.3	2.7	7.1	7.4	10.3	10.1	11.0	8.5	7.5	7.1
Services growth	9.8	8.4	10.8	5.7	7.2	7.5	8.5	9.1	10.3	11.1	10.8	9.2	9.7
By Demand – Real (%YoY)													
Consumption	3.5	7.0	6.5	2.8	5.5	2.2	5.3	4.8	8.2	7.0	8.1	7.5	6.9
Pvt Consumption	2.3	6.1	5.3	3.2	6.1	2.7	5.8	5.2	8.7	7.1	8.3	7.4	7.0
Public Consumption	11.2	12.2	13.1	0.9	2.3	-0.4	2.6	2.6	5.4	6.2	7.0	8.0	6.5
Gross Capital Formation	12.1	0.1	20.6	-3.5	-2.9	17.0	19.9	19.5	19.4	10.9	13.7	10.4	7.9
Cons; Invst, Savings (%GDP)													
Total Consumption	77.2	77.8	77.2	76.3	76.5	75.3	73.2	70.8	70.2	68.4	67.8	67.7	67.1
Total Investments	24.5	23.1	25.9	24.1	22.2	25.0	27.7	30.6	33.4	33.8	35.2	36.1	36.1
Gross Domestic Savings	23.6	21.9	24.8	23.7	23.5	26.4	29.8	31.8	34.3	34.8	35.0	36.0	37.0
Real indicators (%YoY)													
Cement dispatches	10.6	6.4	14.1	0.1	8.6	11.1	6.5	9.3	10.3	10.0	9.0	10.0	12.0
MHCVs	-38.2	-10.7	32.5	-21.1	1.3	36.3	40.3	25.1	4.0	33.3	-0.3	4.0	8.0
LCVs	-24.2	-11.9	6.3	4.9	-12.5	46.9	33.6	26.2	25.2	30.8	13.3	12.0	12.0
Car sales	1.1	-4.0	45.3	-5.3	3.2	5.3	34.3	19.4	7.3	20.6	11.2	10.0	12.0
Two-wheelers	2.7	11.7	9.4	0.7	15.3	15.8	12.6	16.8	15.0	12.1	-5.0	3.0	7.0
Diesel consumption	3.5	3.7	5.5	2.0	-3.5	3.0	4.5	5.5	3.0	16.2	17.2	18.2	18.0
Tele-density	1.9	2.3	2.8	3.5	4.2	5.2	7.4	9.6	13.3	19.2	26.9	35.2	43.2
Monetary indicators(%YoY)													
Money supply	18.0	19.4	15.0	16.4	14.1	14.7	16.7	12.3	21.2	21.5	20.6	20.0	18.0
10 Yr Bond Yield	NA	NA	NA	10.9	8.7	6.9	5.4	6.3	7.2	7.8	7.9	9.25	8.75
Inflation – WPI	4.4	5.9	3.3	7.1	3.6	3.4	5.5	6.5	4.4	5.4	4.7	10.5	6.0
CPI	6.9	13.1	3.4	3.7	4.3	4.1	3.8	3.9	4.2	6.8	6.2	7.0	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	21.0	18.0	18.0
Deposit growth	18.4	19.3	13.9	18.4	14.6	16.1	17.5	13.0	24.0	23.0	24.0	18.0	18.0
Fiscal Indicators(% GDP)													
Centre's fiscal deficit	4.8	5.1	5.4	5.6	6.2	5.9	4.5	4.0	4.1	3.4	2.8	2.5	2.5
State fiscal deficit	2.9	4.3	4.7	4.3	4.2	4.2	4.5	3.5	2.5	2.2	3.8	3.3	3.3
Combined deficit (Centre+State)	7.1	8.9	9.4	9.5	9.9	9.6	8.5	7.5	6.7	6.4	6.0	5.8	5.8
Combined domestic liabilities	61.8	62.6	66.6	71.0	76.4	80.7	81.5	82.4	80.6	77.3	74.1	71.9	70.3
Combined o/s guarantees	9.7	9.8	11.1	12.2	11.5	11.2	11.1	10.0	8.1	7.7	7.5	7.3	7.0
External Sector													
Exports (US$bn)	35.7	34.3	37.5	45.5	44.7	53.8	66.3	85.2	105.2	128.1	158.5	188.6	237.6
% YoY	4.5	-3.9	9.5	21.1	-1.6	20.3	23.3	28.5	23.4	21.8	23.7	19.0	26.0
Imports (US$bn)	51.2	47.5	55.4	57.9	56.3	64.5	80.0	118.9	157.1	191.3	248.5	315.6	358.2
%YoY	4.6	-7.1	16.5	4.6	-2.8	14.5	24.1	48.6	32.1	21.8	29.9	27.0	13.5
Trade deficit (US$bn)	-15.5	-13.2	-17.8	-12.5	-11.6	-10.7	-13.7	-33.7	-51.9	-63.2	-90.1	-127.0	-120.6
Invisibles (US$bn)	10.0	9.2	13.7	9.8	15.0	17.0	27.8	31.2	42.0	53.4	72.6	76.9	88.7
Current Account Deficit (US$bn)	-5.5	-4.0	-4.1	-2.7	3.4	6.3	14.1	-2.5	-9.9	-9.8	-17.4	-50.1	-31.9
% to GDP	-1.3	-1.0	-0.9	-0.6	0.7	1.2	2.3	-0.4	-1.2	-1.1	-1.5	-3.9	-2.0
Forex reserves (excl gold) (US$bn)	26.0	29.5	35.1	39.6	51.0	71.9	106.1	135.1	145.1	191.9	300.0	305.1	327.7
Months of imports	6.1	7.5	7.6	8.2	10.9	13.4	15.9	13.6	11.1	12.0	13.5	10.9	11.1
Exchange rate													
Rs/US$ - annual avg	37.2	42.2	43.4	45.7	48.0	48.3	45.9	45.0	44.3	44.9	40.2	42.5	40.0
% depreciation	4.8	13.4	2.8	5.3	5.0	0.6	-5.0	-2.0	-1.6	1.4	-10.5	5.7	-5.9
Rs/US$ - year end	39.52	42.4	43.6	46.5	48.9	47.5	43.6	43.8	44.6	43.5	40.1	42.5	40.0
% depreciation	10.4	7.3	2.8	6.7	5.2	-2.9	-8.2	0.3	2.0	-2.5	-7.8	6.0	-5.9

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

Theme: Tackling Macro Headwinds

- **Inflation is in double-digits, growth is decelerating and the RBI is tightening – a mirror image of what happened in the 1990s…**
- **Yes, higher rates will impact growth…but corporate India is in better shape today. Productivity has improved and savings have risen**
- **Given the various dynamics – global growth, oil, new government, it is difficult to make a call on how FY10 is likely to pan out. But one thing is clear, the days of 9%+ growth are over. India has lost the opportunity to sustain those levels for now, and we expect growth to come in around 7%+ levels in FY09-10**

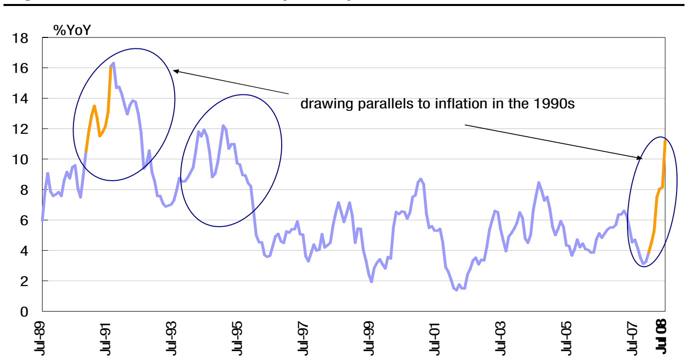
Ghost of the 1990s returns…

With inflation rearing its ugly head, and supply side measures not yet being effective the RBI has started its tightening cycle to ease demand. This is occurring at a time when industrial growth has decelerated, which makes one think whether the coming year or so is likely to be a mirror image of what happened to India in the mid 1990s.

Rewind to the 90s: Following a three year period of 7%+ growth during FY95-FY97, growth in the following six years averaged c.5% levels with industrial growth halving from 9.6% in the high growth period to 4.7%. Besides a weak global environment, the slowdown was largely attributed to monetary tightening – both CRR and policy rates as inflation had crossed double-digit levels. While monetary tightening did eventually bring down inflation – it did so at a cost. Credit growth slumped as did industrial production resulting in growth losing its momentum.

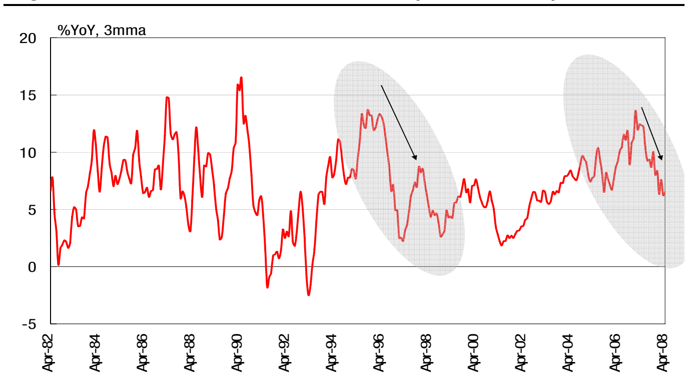
So what led to inflation in the 90s: Besides primary articles, one of the key reasons for the rise in inflation to 16% levels in the 90s was demand-side pressures emanating from excessive money-supply growth. With the opening up of the economy and consequent increase in dollar inflows, the RBI bought dollars to stem the rise in the rupee. But incomplete sterilization resulted in M3 growth touching 20% levels. This is similar to what we've seen during the last few years, where forex reserves have increased by US$174bn from Jan 2006 to date, but incomplete sterilization resulted in money supply growth remaining well over targeted growth.

Figure 2. Trends in Inflation (% YoY)



Source: Office of the Economic Advisor

Figure 3. Trends in Industrial Production (% YoY, 3mma)



Source: CSO

…so how will the economy adjust?

As mentioned in our February Macroscope – *FY09 Growth: A Slowdown not a Slump'*, major differences we see in this cycle vs. that of the 1990s include: (1) the structural changes in the economy; (2) the uptrend in savings and investments; (3) corporate leverage, which is lower than during the previous cycle. But what has probably made things difficult is the oil shock and its pass through impact.

The Oil Shock has made things worse

A key difference and a variable that was unanticipated is the c.45% rise in oil prices since the beginning of the year. Though prices of regulated transport fuels have been raised by c.10%, industrial fuels – prices of which are unregulated – are up 40-50%. This coupled with the rise in other commodity prices – iron ore, metals – has added to the inflationary pressures emanating from excessive money growth. As a result, interest rates which were earlier expected to be on hold or even cut have already been raised by 125bps (CRR from 7.50% to 8.75%) and 75bps (Repo rate from 7.75% to 8.5%).

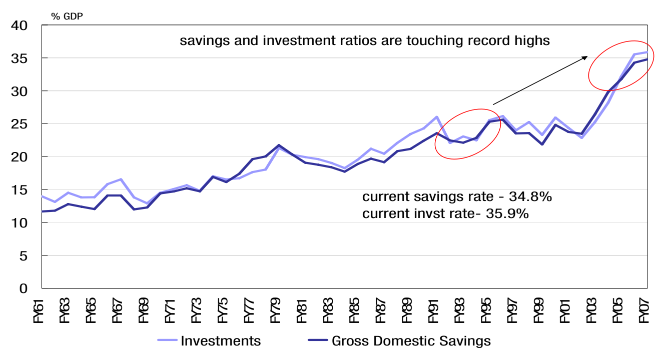
Yes, growth will slow…but industry is more competitive

Admittedly, much further rate hikes do pose downside risks to our FY09 and FY10 GDP estimates of 7.7% and 7.9%, respectively. But a couple of things worth pondering are: (1) While nominal interest rates have gone up, real interest rates are low; (2) Productivity has increased and ICORs in India are relatively lower; (3) Indian corporates are significantly underleveraged as compared to the past; (4) In most sectors other than perhaps retail/real estate, investments are being carried out to meet existing demand rather than that of the previous cycle – i.e in anticipation of demand; (5) Work in progress on big-ticket projects in areas such as oil and gas, minerals and metals and infrastructure are unlikely to get completely derailed as most of the projects have escalation clauses and back-to-back supply arrangements

…and the service sector is buoyant while monsoons are holding out

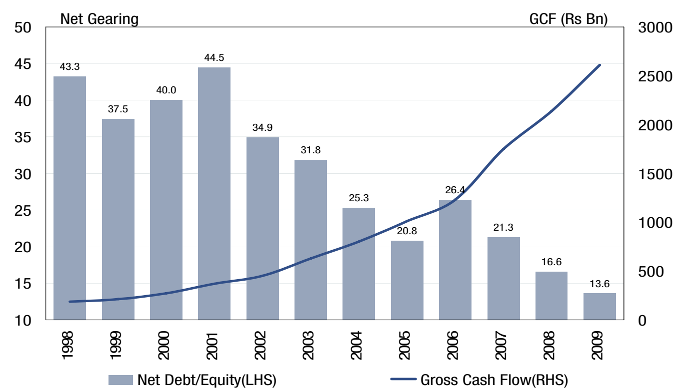
Another important feature of the Indian economy is the growing reach of the service economy. Last but not the least, is a good monsoon season so far in 2008. While in the past few years, the monsoon impact was muted as all the growth drivers were firing on all cylinders, the 2008 monsoons are crucial from the point of view of avoiding a food shock.

Figure 4. Trends in Savings and Investment (%)



Source CSO

Figure 5. Trends in Corporate Leverage (%, Rs Bn)



Source: CSO

FY10: Many variables at play, but clearly an opportunity missed

Given the various dynamics of global growth, quantum of capital flows, oil prices, structure of a new government, at this stage it is difficult to make a call on how exactly FY10 will pan out. But one thing is clear; the days of 9%+ growth are over. India has lost the opportunity to sustain those levels for now, and we expect growth to come in around 7%+ levels in FY09-10.

Which of the following variables is growth more sensitive to – interest rates, inflation, currency or sentiment? While a changing investment and consumption profile will likely see the impact on growth vary from the 90's cycle, we believe that the interest rate – inflation impact will likely remain the dominant variable. This is partly because: (1) capital investment is contingent on the cost and availability of funding; and (2) the consumption cycle is more leveraged to interest rates *(there was minimal consumer financing in the 90s – but has been the primary driver of consumer discretionary spending in the 2000s)*. Currency pressure could impact the availability and cost of capital. The sentiment aspect is the least quantifiable and predictable – information flows have changed dramatically over the last decade, and would well exaggerate sentiment on the positive (as witnessed until recently), but also on the way down. Bottom line, interest rates – inflation will probably provide the direction, while FX and sentiment will likely exaggerate the impact on either side.

Figure 6. Scenario Analysis of Higher Oil Prices on GDP- FY10E

	US$100/bbl	Base Case US$135/bbl	US$150/bbl	US$175/bbl	US$200/bbl
GDP (%YoY)	9.8	7.9	7.0	6.3	5.5

Source: Oxford Economic Forecasting Model, Cit I Estimates

What should one be aware of:

1. While the rise in off-balance sheet items is now well documented, what is a worry is that the fiscal imbalances are slowly seeping into the external account. For instance, while easing forex volatility is positive, the Special market operations enables oil companies to use 'oil bonds' as collateral in exchange for dollars subject to a daily limit of Rs15bn.
2. On a positive note; one over-done worry at this stage is the dollar exposure on account of the Foreign currency convertible bonds (FCCBs).

Figure 7. FCCB Issuance by Indian Corporates and Maturity Profile (US$mn)

	Year of Issuance					
Year of Maturity	**2004**	**2005**	**2006**	**2007**	**2008**	**Total**
2008	6	51				57
2009	398		54			452
2010	40	3,156	5	21		3,222
2011		216	5,574			5,790
2012			109	6,954	50	7,113
2013			238	415	912	1,566
2015					250	250
2016			1	10		11
2017	207			125		332
Total	**651**	**3,423**	**5,981**	**7,525**	**1,212**	**18,791**

Source: RBI; Citi Investment Research

Real Indicators

> ➤ **Rising interest rates and input costs are likely to result in a deceleration in investments…but what could possibly offset this are the low real interest rates and improvements in productivity**

How resilient is the investment cycle?

One of the key drivers in the acceleration of GDP growth from the 7% range to 9% was the uptrend in investments. Growth in gross capital formation rose to high double-digit levels resulting in the investment-GDP ratio rising from 24% in FY90 to 37% in FY08. The upturn in investments was supported by the financial strength of front-line Indian companies where as a result of capex discipline, cost cutting, efficiency improvements and better working capital management, companies generated free cash flows that lowered their leverage. These factors were further supported by a benign interest rate environment.

We've cut our investment numbers…but is it enough?

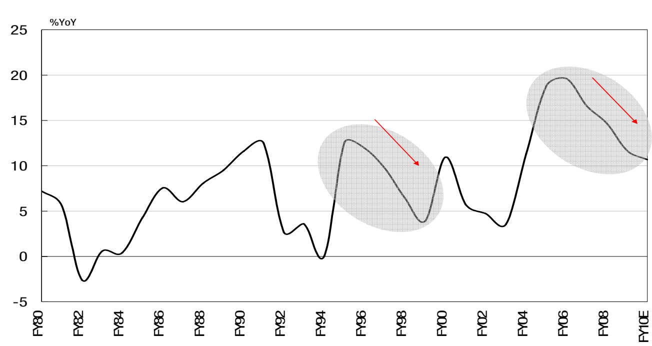
In the coming years, however, we do not expect trends to remain as favorable as the impact of monetary tightening kicks in. Our FY09 and FY10 GDP estimates of 7.7% and 7.9% incorporate a deceleration in investments to 10.4% and 7.9%, respectively. However, if the up-turn in oil prices continues, the on-going adjustment in market determined fuels coupled with the pass through impact on manufactured products will result in inflation edging higher. This would warrant further tightening, which, coupled with increasing input costs, would slow down investments further.

Figure 8. GDP by EXPENDITURE (%)

	FY05	FY06	FY07	FY08	FY09E	FY10E
Total Consumption (% GDP)	**64.9**	**70.2**	**68.4**	**67.8**	**67.7**	**67.1**
%YoY	4.8	7.9	7.0	8.1	7.5	6.9
Pvt Consumption (% GDP)	60.3	60.0	58.6	58.2	58.0	57.6
%YoY	5.2	8.7	7.1	8.3	7.4	7.0
Public Consumption (% GDP)	10.5	10.2	9.8	9.6	9.7	9.5
%YoY	2.6	5.4	6.2	7.0	8.0	6.5
Gross Capital Form (%GDP)	**30.6**	**33.4**	**33.9**	**35.2**	**36.1**	**36.1**
% YoY	19.5	19.4	10.9	13.7	10.4	7.9
Net Exports (% to GDP)	**1.7**	**-2.8**	**-4.2**	**-4.1**	**-4.6**	**-4.3**
Real GDP	**8.3**	**9.2**	**9.7**	**9.0**	**7.7**	**7.9**

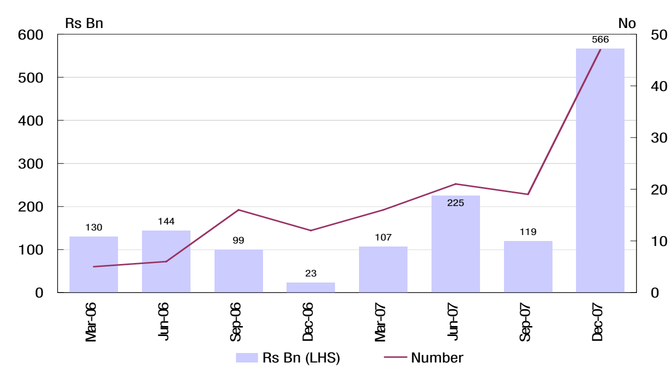
Source: CSO, Citi Estimates

Figure 9. Trends in Gross Capital Formation (% YoY)



Source: RBI

Figure 10. Trends in Projects Stalled/Abandoned



Source: CMIE

What could stem the deceleration in investment growth?

While the picture appears bleak, there are a number of key factors that must also be taken into account.

Labor productivity, capital efficiency and technology improvements play a major role

The first is that **productivity improvements** have in the past, and can help, partially offset declining investments[1]. There are 2 key indications of this:

1. India's *Total Factor Productivity (TFP)* - defined as a combination of changes in efficiency and production technology has historically played an important role in its output growth. A study by Bosworth-Collins (2006)[2] finds that the contribution of TFP increased by c.2% from less than 1% in the past
2. An improving *Incremental Capital Output Ratio* (ICOR), as reflected in a decline in the ICOR from 4.5% during the 9th Plan to 4% in the 10th Plan.

Another point to note is that savings growth has been on an uptick, which suggests that savings are not constraining higher growth. Finally, as one study[3] points out, a major trigger for India's growth in the 1990s was '*an attitudinal shift on the part of the national government*'. Thus, supportive policies that are 'pro-business' would also help bolster investments in spite of an unfavorable interest rate environment.

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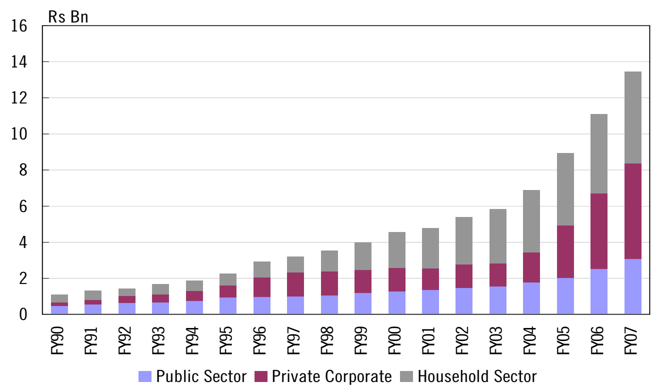
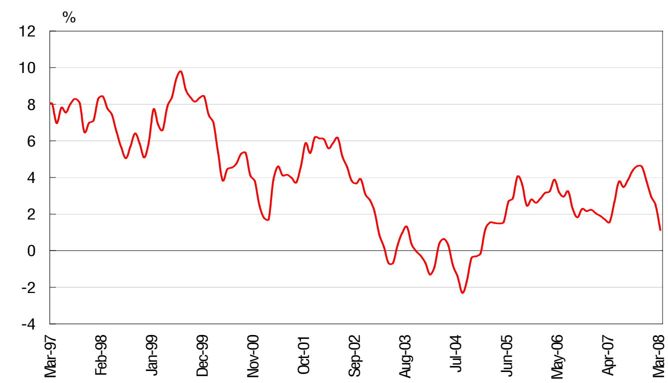
Figure 11. Gross Capital Formation – Share of Private/Public Sector



Source: CSO

Figure 12. Trends in Real Interest Rates (%)



Source: RBI

[1] Gross **Capital Formation, or investments**, refers to gross additions to fixed assets (fixed capital formation), increase in inventory stocks, and net acquisition of valuables. Fixed assets include (1) construction (2) machinery and equipment and (3) software.

[2] *Sources of Growth in the Indian Economy*; Bosworth, Collins and Virmani; July 2006

[3] '*From "Hindu Growth" to Productivity Surge: The Mystery of the Indian Growth Transition'* ; Dani Rodrik and Arvind Subramanian, May 2004

Monetary Indicators

- **With supply-side measures not really being effective in bringing inflation down, we expect the RBI to continue to raise rates to temper demand-side pressures**
- **Much further monetary tightening poses downside risks to both our FY09 and FY10 GDP estimates of 7.7% and 7.9%, respectively**
- **Credit demand remains strong, but it could be attributed to oil**

Inflation – Double-digit trends to continue for awhile

Inflation as measured by the WPI which first crossed double-digit levels for the week ending 7 June, rose further to 11.63% for the week ending 21 Jun. Of the headline **11.63%** WPI number, **5.7%** is attributed to manufacturing, **3.5%** to the Fuel index and **2.42%** to primary articles. Looking at the components, primary articles were up 10.5%; manufactured products were up 10.3%, while the fuel price index was up 16.2%. Besides a continued up-trend in iron-ore (+46%), basic metals (+22%), industrial fuels (+30-50%) and manufactured food products which includes edible oils (+17%), what has been inching up are chemicals and textile products.

Going forward, we expect headline inflation to remain in the double-digit range and possibly cross 13% levels. The underlying assumptions are: (1) the index for **primary product** prices ease from 11% to 7% by September – a result of good harvest, the increase in procurement for wheat and also based on the continuation of a good monsoon; (2) the **fuel index** inches up further – this assumes oil remains high at US$135/bbl b) electricity tariffs are raised by 10%; (3) On the **manufactured product index**, we expect the pass through of oil - regulated and unregulated fuels to keep manufactured product inflation at 9% levels.

Figure 13. Trends in Inflation (%YoY) and % Contribution to the Index

	Wts	29-Dec07	9-Feb-08	31May08	7-Jun08	14-Jun08	21-Jun08	Contribution to WPI
I. Primary Articles	**22.0**	**3.74**	**6.79**	**9.74**	**10.78**	**10.96**	**10.54**	**2.42**
(A) Food Articles	15.4	1.77	3.11	5.92	6.78	6.76	6.28	1.00
(B) Non-Food Articles	6.1	9.21	10.81	14.63	16.29	16.10	15.86	0.94
(C)Minerals (iron ore)	**0.5**	**4.10**	**5.10**	**40.60**	**41.60**	**42.60**	**45.57**	**0.47**
II. Fuel, Index	**14.2**	**3.36**	**4.02**	**7.86**	**16.25**	**16.37**	**16.24**	**3.50**
III. Manufactured Products	**63.7**	**4.02**	**4.56**	**8.77**	**9.09**	**9.74**	**10.28**	**5.70**
(A) Food Products	11.5	3.92	6.70	12.88	13.15	14.10	14.64	1.46
(B) Beverage Tobacco & Prod	1.3	9.35	9.38	7.90	7.90	7.90	7.90	0.13
(C) Textiles/ Textile Products	9.8	-3.71	-4.06	1.66	1.51	2.50	3.26	0.20
(D)Wood & Wood Products	0.2	0.37	-0.64	9.77	9.77	9.77	9.77	0.02
(E) Paper & Paper Products	2.0	1.25	1.19	3.42	3.42	3.42	3.42	0.06
(F) Leather & leather Products	1.0	1.09	-0.66	1.09	1.09	2.19	2.12	0.02
(G)Rubber & Plastic Products	2.4	7.92	8.06	6.02	6.02	6.02	6.02	0.10
(H)Chem & Chem Products	11.9	7.33	7.74	5.85	6.05	7.53	8.12	0.92
(I) Non-Met. Mineral Prods	2.5	8.63	8.56	4.45	4.45	4.10	3.84	0.09
(J) Basic Metals/Metal Prod	**8.3**	**2.40**	**3.36**	**19.44**	**20.73**	**21.34**	**22.28**	**2.14**
(K)Machinery & Machine Tools	8.4	5.34	3.90	4.79	4.98	5.28	5.33	0.35
(L)Transport Equipmt & Parts	4.3	4.73	4.91	6.11	6.29	5.84	5.78	0.19
All Commodities	**100**	**3.83**	**4.98**	**8.77**	**11.03**	**11.42**	**11.63**	**11.63**

Source: Office of the Economic Advisor

Credit Trends reflect increased off-take by the oil companies

As mentioned in last month's Macroscope, the 1Q banking indicators often reflect the impact of window-dressing in the last quarter (banks shore up deposits and loans which are then reversed). But trends this fiscal year indicate that **incremental credit** during 1 April - 20 June was up 26.3% at Rs305bn, as compared with a contraction of Rs363bn in the same period last year. Sector-wise allocation of credit is unavailable, but this can be partially attributed to higher offtake by the various oil companies.

Figure 14. Trends in Bank Credit and Deposits (Rupees in Billions, % YoY)

	Outstanding	Incremental to date		YoY%	Total			
	March 08	FY09	FY08		FY08	FY07	FY06	FY05
Bank Credit	**23,485**	**305**	**-363**	**26.3**	**4,196**	**4,161**	**3,961**	**3,114**
Food	444	57	-26	14.1	-17	58	7	41
Non-Food	23,041	248	-338	26.6	4,217	4,103	3,954	3,074
Deposits	**31,969**	**528**	**548**	**21.9**	**5,838**	**4,852**	**3,875**	**2,807**
GOI Investments	9,717	362	497	12.0	1,826	747	-116	617

Source: RBI.

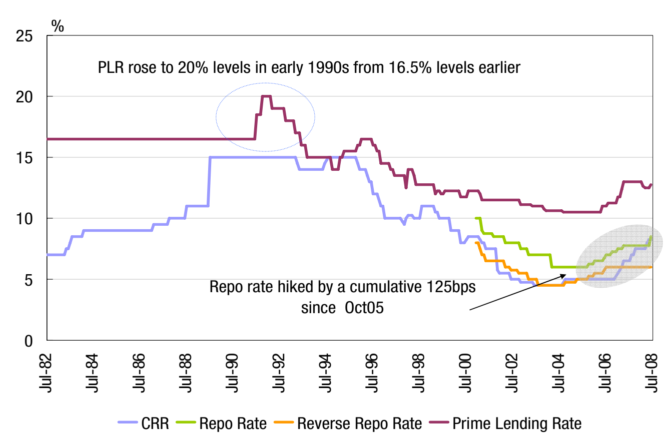
Rates raised again…more to come

Following the **11 June** 25bp hike in the repo rate to 8%, the RBI on **24 June** raised both the repo rate – the rate at which it lends/injects money – and the cash reserve requirement (CRR) by 50bps to 8.5% and 8.75%, respectively. With inflation likely to remain in the double-digit range for the next few months, and supply-side measures not really being effective in bringing inflation down, we expect the RBI to continue to raise rates to temper demand-side pressures.

Much further tightening poses risks to growth

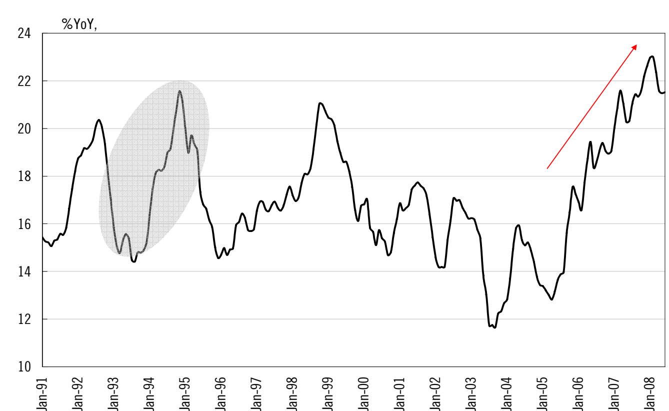
In the current fiscal, the CRR has been raised by 125bps from 7.50% to 8.75% while the repo rate has been raised by 75bps from 7.75% to 8.5%. Though the RBI in its statement has said that investment demand is strong and consumption is reviving, there appear to be clear signs that the consumption slowdown seen since last year has spilt over to the investment side. Thus much further monetary tightening poses downside risks to both our FY09 and FY10 GDP estimates of 7.7% and 7.9%, respectively.

Figure 15. Trends in Policy Rates (%)



Source: RBI

Figure 16. Trends in M3 Growth (% YoY, 3mma)



Source: RBI

Fiscal Indicators

> ➤ **While the government has targeted the fiscal deficit at Rs1,333bn or 2.5% of GDP…**
>
> ➤ **…the off-balance-sheet items (oil bonds, farm waiver, pay commission, fertilizer subsidies) account for c.4% of GDP**
>
> ➤ **Including all the off-balance sheet items as well as the state deficits, India's combined deficit would come in close to 9% of GDP**

Higher Fertilizer Subsidies[4]: Yet another Off-Balance-Sheet Item

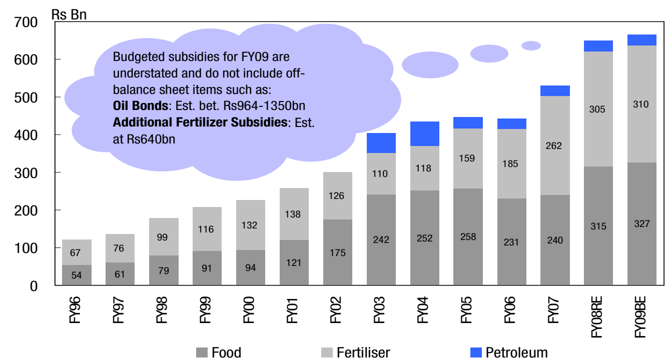
While rising oil bonds are an obvious implication of higher crude prices; the rise in prices of oil derivatives such as naphtha is taking its toll on fertilizers. Higher input costs compounded by the fact that retail prices have been unchanged since 2002, is resulting in a burgeoning fertilizer subsidy bill, estimated to touch Rs950bn in FY08 vs. the budgeted amount of Rs310bn. But, similar to the oil bonds, the additional amount will likely be kept off balance sheet and paid in bonds.

New Fertilizer Policy could allay impact, but not eliminate it

Besides unchanged retail prices, higher subsidies are partly a consequence of the government's fertilizer policy, which allows for only a small price margin thereby making production unviable. This in turn increases dependence on imported fertiliser – adding to the already bloated import bill (Fertilizer imports have risen by 27% to 14mn tonnes in FY08).

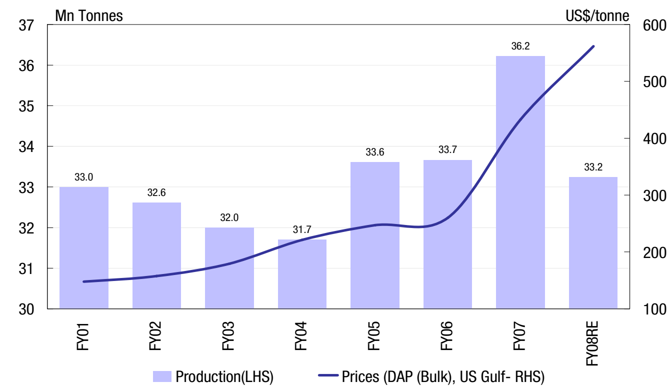
In a new policy announced earlier this month, the government has fixed concessions on phosphorous and potassium fertilizers to import-parity prices and rationalized freight tariffs. This would reduce overall subsidies to the tune of Rs12bn. Another positive is the creation of a buffer stock of fertilizers. But**,** what is important to note is that the most commonly used fertilizer – urea – remains outside the package.

Figure 17. Trends in Key Subsidies: Budgeted Amounts (Rs Bn)



Source: Ministry of Finance, Budget Documents

Figure 18. Fertilizer Production and Prices (Mn Tonnes; US$/tonne)



Source: Ministry of Fertilizers, CMIE

4 In a bid to encourage usage and increase crop productivity, **the government regulates prices** of nitrogen (N), phosphorous (P) and potassium (K) fertilizers. Producers are compensated for the difference between the selling price and their cost of production plus a profit margin. However, retail prices being unchanged since 2002. **This coupled with the rise in input costs** – which include naphtha, natural gas and furnace oil, prices of which that have increased by 50-60% during the last few months is likely to result in the fertiliser subsidy bill touching Rs950bn in FY08 v/s the budgeted amount of Rs310bn.

Oil shock accounts for 80% of off-balance-sheet items

As mentioned in our previous notes – in the current year, off-balance-sheet items (farm waiver/oil, food, and fertiliser bonds/pay commission) are estimated to bring the centre's fiscal deficit to c.6.4% of GDP – higher than the budgeted deficit of 2.5%. This would result in a combined deficit of close to 9% of GDP.

Similar to the current account deficit, the headline fiscal deficit number draws parallels with the 1991 situation; a point worth considering is that a substantial proportion of the off-balance-sheet items are related to oil shock.

Excluding the oil and fertiliser bonds, the off-balance-sheet items are Rs469bn or 0.9% of GDP. Moreover, while public-sector wage revisions are long overdue and will eventually be included in the expenditure items in the budget, the problem item really is the farm debt waiver, which is likely to create problems of moral hazard.

Figure 19. Key Off-Balance-Sheet Items: Fiscal Burden

Item	FY09 estimated amount (Rs Bn)
1. 6th Pay Commission Recommendations	219
2. Farm Debt Waiver	250
3. Likely Oil Bond Issuances	~964- 1,350
4. Additional Fertiliser Subsidy	640

Source: Citi Estimates

Latest Fiscal Data: Apr-May08 deficit: 55% of Budget estimates

Latest public finance data indicates that although total receipts were up 13%yoy in May, rising expenditure (+15.8%yoy) resulted in the fiscal deficit rising to Rs403bn (+17.3%yoy). On a cumulative basis, total receipts were up 27%, while expenditure was up 21%, bringing the fiscal deficit to Rs732bn or 55% of budget estimates during April-May08.

Given that expenditure is on-going while revenues pick up during the year, the government in "paper" will likely meet its fiscal deficit target of Rs1332bn or 2.5% of GDP. But as mentioned above, including the various off-balance sheet items, the centre's deficit would rise to c.6.5% of GDP.

Figure 20. Trends in Fiscal Deficit (Rs Bn. % YoY, % of Budget)

	Apr-May08	%YoY	FY08RE	% of Budget
a. Revenue receipts	360	39.1	6,030	6.0
Net tax revenues	320	47.1	5,072	6.3
Non-tax	41	-2.4	958	4.3
b. Non-debt receipts	3	-90.6	147	1.7
c. Total receipts (a+b)	**363**	**26.8**	**6,177**	**5.9**
d. Revenue expenditure	1,038	21.7	6,581	15.8
e. Capital expenditure	57	3.8	928	6.2
f. Total expend (d+e)	**1,095**	**20.6**	**7,509**	**14.6**
Plan Expenditure	380	64.2	2,434	15.6
Non- Plan Expenditure	715	5.7	5,075	14.1
g. Fiscal deficit (f-c)	**732**	**17.8**	**1,332**	**55.0**
h. Revenue deficit (d-a)	677	14.2	551	122.9

Source: Ministry of Finance, Budget Documents

Figure 21. The Government's Subsidy Sharing Mechanism (Rs Bn)

(Rs Bn)	FY06	FY07	FY08	FY09E
Gross Under-recoveries	**400**	**593**	**770**	**2,453**
***Less*: Oil Bonds**	**115**	**241**	**350**	**1,350**
% to GDP	**0.3**	**0.6**	**0.7**	**2.5**
Less: Upstream Contribution	140	205	257	450
Less: Refineries Sharing	30	-	-	-
Less: Price Hike and Duty Cuts	-	90	0	438
Net Under-Recoveries	**115**	**57**	**163**	**215**

Source: Ministry of Petroleum; Citi

External Sector

- **Assuming WTI at US$135/bbl, India's current account deficit is likely to touch c.4% of GDP, higher than 3% seen during the 1991 crisis**
- **But the US$302bn of forex assets coupled with the introduction of Special Market Operations, potential ECB liberalisation and higher investment in debt makes the BoP resilient rather than vulnerable**

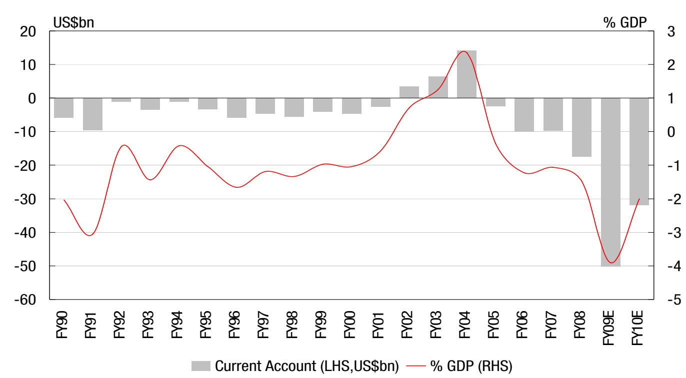
FY09 FX Reserve Accretion c.US$6bn vs. US$110bn in FY08

The RBI recently released the FY08 Balance of Payments statistics. A quick re-cap of the key numbers are a widening of the current account deficit (CAD) to US$17.4bn vs. US$ 9.7bn in FY07, while record capital flows to the tune of US$108bn resulted in an overall accretion to reserves (including re-val) to the tune of US$110.5bn vs. US$47.6bn in FY07

Outlook for FY09: Incorporating the latest BoP data, we expect India's CAD to widen to US$50.2bn or 3.9% of GDP. *(This assumes exports rising 19%, imports by 27% and WTI at US$135/bbl)*. On the capital account, we expect flows to decelerate to US$56bn. This will result in a net accretion of US$6bn and the currency trading in the Rs42.5-43.5 range.

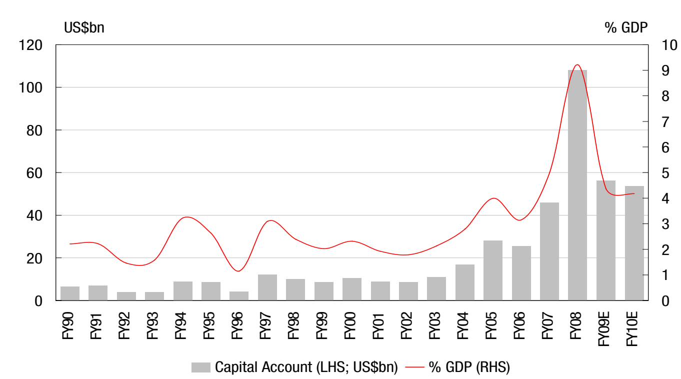
While at first glance the numbers look worse than those in 1991, the situation is not exactly comparable. Besides forex assets (excluding gold) being a comfortable US$ 302bn or 11months of import cover vs. US$2bn, or two weeks of import cover in 1991, the RBI has several levers available to prevent a crisis. Recent measures include the introduction of Special Market Operations, which enables oil companies to borrow money from the RBI using 'oil bonds' as collateral. This is subject to a daily limit of Rs15bn and oil companies would then be provided with equivalent forex. Other levers available include the further liberalisation of external commercial borrowings, higher FII investment in debt as well as making NRI deposits more attractive.

Figure 22. Trends in the Current Account (US$bn, % to GDP)



Source: RBI; Citi

Figure 23. Trends in the Capital Account (US$bn, % to GDP)



Source: RBI, Citi

Impact of Higher Oil on the BOP:

A quick re-cap on the basic facts: India imports close to 80% of its crude oil requirements. Our FY09 BoP estimates have factored in WTI averaging US$135/bbl in FY09. Taking into account higher crude consumption on account of Reliance's new refinery, we expect the oil import bill to rise to US$117bn vs. US$77bn in FY08. Incorporating higher petro-product exports, we expect the trade deficit to widen to US$127bn vs. US$90bn in FY08 and the current account deficit to come in at US$50.1bn (3.9% of GDP).

The arithmetic indicates that a US$1/bbl increase in oil prices results in the trade deficit widening by US$700mn. Working from this, if WTI touches US$150/bbl, the current account deficit (CAD) would widen to US$60.6bn or 4.7% of GDP vs. our base case of the CAD at US$50.1bn or 3.9% of GDP. A further rise in oil prices could result in a drawdown in reserves, which would have negative implications for the currency.

Figure 24. Scenario Analysis: Impact of an Increase in Oil Prices on the BOP

(US$bn, %)	Base Case WTI @135	WTI=150	WTI=175	WTI=200
Trade Deficit	-127.1	-137.5	-155.2	-172.1
Current Account Deficit	-50.1	-60.6	-78.2	-95.3
% to GDP	-3.9	-4.7	-6.1	-7.4
Capital Account	56.1	56.1	56.1	56.1
Accretion/Drawdown	**5.9**	**-4.5**	**-22.7**	**-39.2**
Rupee Range (INR/USD)	**42.5-43.5**	**44-45**	**45+**	**?**

Source : Citi Estimates

While FY09 is likely to be a crunch time for India given the situation of a rising current account deficit and lower capital flows, the pressure could ease a bit from FY10 as the new hydrocarbon discoveries by Reliance, ONGC, GSPCL and Cairn come onstream. While the discovery by Cairn is purely oil, those by Reliance and ONGC/GSPCL are natural gas. Thus, savings would result to the extent that: (i) indigenous crude can substitute imported oil; and (ii) natural gas can replace naphtha (which can then be exported). Taking this into account, we expect India's CAD to decline to 2% in FY10 from c.4% in FY09.

Figure 22. Likely Savings from Oil and Natural Gas

Savings from Oil	Prodn (mmbbl/day)	Annual Prodn (mmbbl)	Oil Price (US$/bbl)	Annual Savings (US$bn)	
Reliance +Cairn	0.22	77.4	115.0	8.9	
Savings from Natural Gas		**Assuming Substitution of Gas is:**		**Savings (US$bn)**	
	Naphta Cons. (MMT)	**50%**	**75%**	**50%**	**75%**
Reliance/ONGC/GSPCL	13.0	6.5	10.0	5.9	9.0

Source: Citi Estimates

Latest Trade Update: April-May Deficit up US$20.6bn vs. US$13.9bn

Following the 31.8% rise in April, export growth in May decelerated to 12.9% with exports coming in at US$13.8bn. Imports remained strong at US$24.5bn (up 27.1%) led by oil at US$8.5bn up 50.8% and non-oil at US$16.1bn up 17.4%. This resulted in a trade deficit of US$10.8bn in May. Going forward, we expect the monthly trade deficit to average c.US$10bn levels taking the full-year customs deficit (this excludes defence) to US$117bn.

Financial Markets

- **The deceleration in capital flows coupled with oil at US$135/bbl indicates further rupee weakness. However, direct + indirect intervention, could keep the rupee in the Rs42.5-43.5 range**
- **With inflation likely to remain in the double-digit range in the coming months, we expect the RBI to continue to tighten monetary policy through a combination of CRR and/or policy rate hikes**

Forex Markets

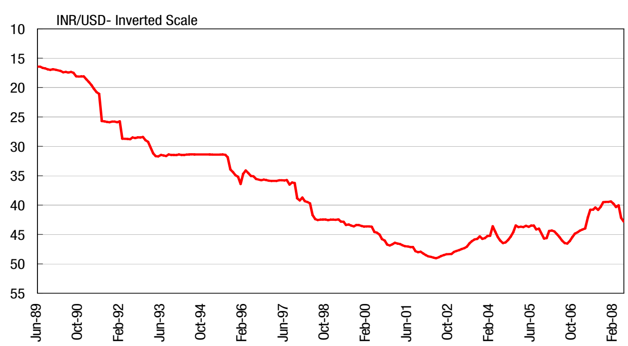
- **Forex Market:** The rupee fell to 43.16/US$1 from 42.47/US$1, trading around the 42.90/US$1 mark for a major part of June. Inflation, investment outflows and widening trade account deficit all exerted pressure on the unit. While the hikes in the Repo rate and CRR provided some respite, the currency fell to a 15-month low of Rs43.50/$ in the absence of RBI intervention.
- **Forex Reserves:** The weak global environment coupled with portfolio outflows has resulted in a deceleration in forex reserves. Fiscal YTD, foreign currency assets have risen by US$2.8bn vs. US$14bn in the same period last year and currently stand at US$302bn. Forex reserves including gold are at US$312bn.
- **Outlook:** A widening current account deficit and a deceleration of flows will likely result in a net reserve accretion of US$6bn in FY09 vs. US$92bn in FY08. As a result, we expect the rupee to trade in the Rs42.5-43.5 range. The rupee would have been weaker were it not for RBI intervention and recent measures (Special Mkt Operations, ECB liberalisation, higher FII investment in debt) taken to hold up the unit.

Figure 26. Currency Forecasts and Forwards

		Spot	3 Months		6 Months		12 Months	
	Range in Jun	3-July	Forecast	Forward	Forecast	Forward	Forecast	Forward
Versus USD								
India INR	40.46 - 42.87	42.93	43.48	43.59	42.98	44.00	42.00	44.77

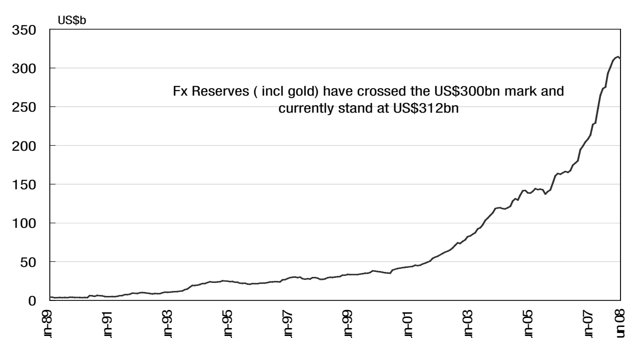
Source: Reuters, Citi estimates.

Figure 27. Trends in the Rupee (INR/USD)



Source: RBI.

Figure 28. Outstanding Foreign Exchange Reserves (US$bn)



Source: RBI.

Bond Markets

- **Repo/CRR Rate Hikes:** On the back of rising inflation, policy officials had said "monetary action would be the first line of defence". Thus in the month of the June, the RBI raised the repo rate twice by a cumulative 75bps taking it from 7.75% to 8.5%, while the CRR was raised by 50bps from 8.25% to 8.75%. Going forward, we expect inflation to remain in the double-digit range in the coming months and thus another 50bps hike appears to be on the cards.

- **Government Securities:** The 10-year yield rose to a high of 9.15% from 8.10% levels last month, factoring in the fuel price hike, repo rate and CRR hikes as well as the probability of further monetary tightening as inflationary expectations did not recede. Assuming another round of monetary tightening this month, yields could edge towards c.9.25% levels

- **Corporate Bonds:** The corporate bond yield curve rose by over a percent in four weeks and trading activity fell to meagre amounts. Primary market activity was thin owing weak sentiment. The AAA 5-year yield ended at 10.77% from 9.61% offering a spread of 143 bps from 169 bps earlier.

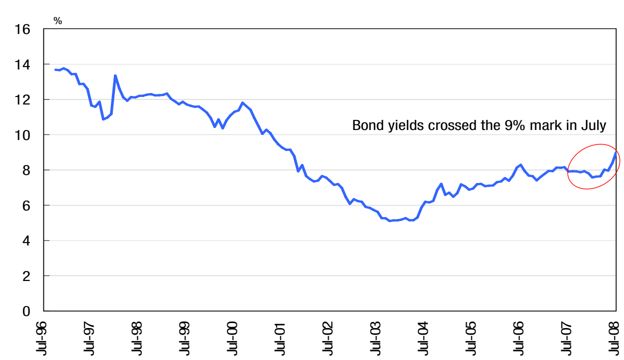
- **Liquidity:** Rupee liquidity conditions tightened following the advance tax payments with the RBI injecting liquidity as compared to the liquidity absorbtion of Rs225bn on a daily average basis in June.

Figure 29. India Market Monitor

	Units	Latest	Previous	1M ago	3M ago	12M ago
Interest Rates						
Overnight	%	6.25	8.75	6.10	4.50	0.75
1 year Treasury Bill	%	9.17	8.25	7.61	7.37	7.17
1 year OIS	%	9.83	9.86	7.72	7.17	7.08
1 year MIFOR	%	7.27	7.64	5.00	4.44	7.78
5 year Corp AAA spread over GOI	%	1.31	1.52	1.38	1.41	1.91
10 year GOI	%	9.15	8.61	8.12	7.98	8.03

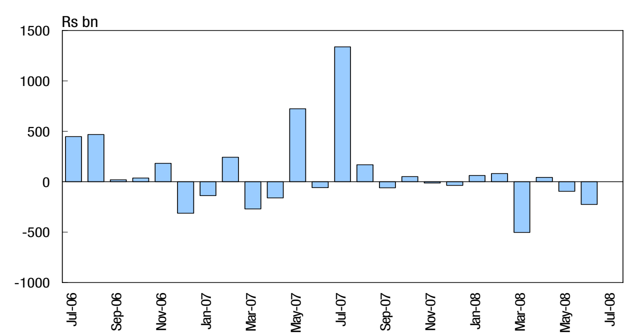
Source: RBI.

Figure 30. India — Trends in the 10-Year GOI Bond (Percent)



Source: RBI, Citi.

Figure 31. India — Trends in Reverse Repos/Repos (Rs bn)



Source: RBI, Citi.

Spotlight

External Debt – Rising…but appears sustainable

Recently released data indicates that India's external debt has risen by US$51bn over the year from US$169bn in FY07 to US$221bn. This is the highest annual increase seen since 1991. While valuation changes accounted for US$9.9bn of the increase, the key reasons for this uptrend are (1) A rise in commercial borrowing and (2) Short term trade credit which includes supplier's credit.

Figure 32. Trends in External Debt (US$bn)

	FY91	FY01	FY03	FY04	FY05	FY06	FY07	FY08
Multilateral	20.9	31.1	30.0	29.3	31.7	32.6	35.3	39.3
Bilateral	14.2	16.0	16.8	17.3	17.0	15.8	16.1	19.6
Trade Credit	4.3	5.9	5.0	4.7	5.0	5.5	7.1	10.3
Commercial Borrowing	10.2	24.4	22.5	22.0	26.4	26.4	41.7	62.0
NRI Deposits (>1 year)	10.2	16.6	23.2	31.2	32.7	36.3	41.2	43.7
Rupee Debt*	12.8	3.7	2.8	2.7	2.3	2.0	1.9	2.0
Total Long term debt	**72.6**	**97.7**	**100.2**	**107.2**	**115.2**	**118.6**	**143.4**	**176.9**
NRI Deposits (< 1 year)	3.7	1.0	2.0	0.3	0.0	0.0	0.0	0.0
Others (trade related)	14.2	2.7	2.7	4.1	16.3	19.4	26.0	43.7
Total Short term debt	**17.9**	**3.6**	**4.7**	**4.4**	**16.3**	**19.4**	**26.0**	**43.7**
GROSS TOTAL	**90.5**	**101.3**	**104.9**	**111.6**	**131.5**	**138.0**	**169.4**	**220.6**

Source: RBI

Debt indictors still reflect sustainability…

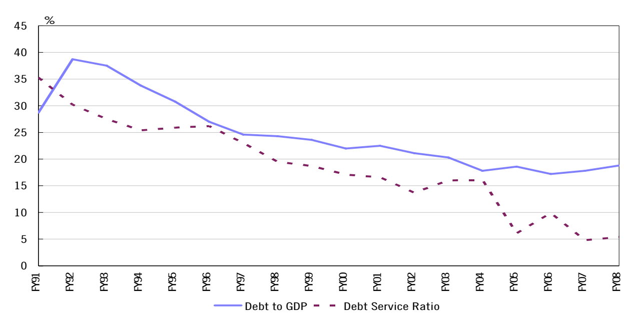
While at first glance the rise in debt is worrisome, the underlying debt indicators still reflect a much stronger position than the past. The only thing that one would need to monitor is whether similar to historic trends short term debt can be easily rolled over. For instance, the RBI has said that short term debt as classified according to the residual maturity of external debt is estimated at US$82bn.

Figure 33. Residual Maturity of External Debt Outstanding – as on March 2008

	Upto 1 yr	1-2 yrs	2-3 yrs	>3 yrs	Total
Sovereign Debt	2.7	3.1	3.4	47.1	**56.3**
Commercial Borrowing	6.9	7.3	10.6	52.7	**77.5**
NRI Deposits	28.8	7.1	3.5	1.5	**43.7**
Short term debt	43.7				**43.7**
Total	**82.1**	**17.5**	**17.5**	**101.3**	**221.2**

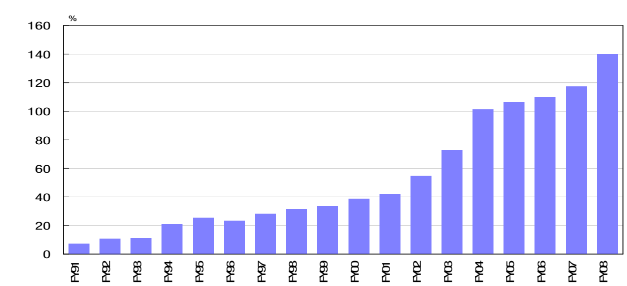
Source: RBI

Figure 34. Key Debt Indicators (%)



Source: RBI

Figure 35. Forex Reserves to Total Debt (%)



Source: RBI.

Monthly Monitor

Figure 36. India — Key Monthly Economics Indicators (Percent Change from a year ago unless otherwise stated)

Monthly Macro Snapshot

	Apr07	May07	Jun07	Jul07	Aug07	Sept07	Oct07	Nov07	Dec07	Jan08	Feb08	Mar08	Apr08	May08	Jun08
Consumption Trends															
Two-Wheelers	-4.0	-7.5	-8.0	-6.6	-1.3	-11.3	-0.8	0.9	-3.9	-6.8	-7.1	2.2	12.7	8.9	
Passenger Car Sales	7.7	6.6	12.7	13.9	15.7	8.7	14.0	16.0	6.6	10.8	6.4	14.6	24.2	18.0	
Commercial Vehicle Sales	11.1	2.6	7.0	2.0	4.1	1.4	14.0	0.9	2.8	1.7	3.6	15.2	3.1	7.1	
Investment Trends															
Infrastructure Index	5.9	7.9	5.3	7.2	9.6	5.8	4.6	5.1	3.1	3.3	7.1	3.4	3.6		
Cement Dispatches	6.0	10.7	4.6	11.3	13.8	3.7	8.4	3.1	4.2	4.6	12.9	8.6	6.5	4.4	
Diesel Consumption	8.5	1.0	19.9	14.0	5.7	3.0	17.4	10.6	11.0	16.7	19.0	9.5	13.2		
Steel Production	8.5	11.8	5.1	6.6	8.5	8.6	4.9	3.7	0.6	1.1	4.3	1.2			
Aluminum Production	7.3	9.8	16.3	12.0	9.9	7.9	5.5	3.6	2.3	4.8	6.2	4.4			
Ind. Production Index															
General	11.3	10.6	8.9	8.3	10.9	7.0	12.2	4.9	8.0	6.2	8.6	3.9	7.0		
Manufacturing	12.4	11.3	9.7	8.8	10.7	7.4	13.8	4.7	8.6	6.7	8.6	3.9	7.5		
Basic Goods	8.6	10.3	9.2	8.7	12.7	6.5	6.5	5.2	3.4	3.6	7.3	3.4	4.6		
Capital Goods	10.9	22.4	23.1	12.3	30.8	20.9	20.9	24.2	17.6	2.6	10.4	11.0	14.2		
Intermediate Goods	10.6	8.8	8.6	7.7	13.8	10.1	13.9	5.5	7.6	8.0	7.9	4.3	4.2		
Consumer Goods	14.7	8.7	3.6	7.1	0.0	-0.2	13.7	-2.9	8.7	8.4	9.6	0.9	8.9		
Services															
Port Traffic	23.6	12.4	7.6	16.4	11.5	11.3	14.7	8.9	7.6	7.1	15.0	9.9	14.7		
Railway Freight	4.5	7.2	3.9	7.7	11.7	9.0	12.4	7.5	10.1	10.1	14.4	8.4	10.9		
Tourist Arrivals ('000)	334	268	310	377	361	326	441	511	575	585	561	510	370	291	
Cellular Sub Adds (Mils.)	4.1	5.1	5.4	5.7	6.0	5.6	6.7	6.1	5.8	6.5	6.6	7.7	6.1	6.7	
Banking Trends															
Money Supply	20.6	19.9	21.3	21.6	20.6	20.7	22.1	23.3	22.1	23.1	22.2	20.9	21.2	22.2	21.0
Loan Growth	27.7	26.7	24.6	23.7	23.1	22.6	22.9	23.0	22.3	21.8	22.2	21.7	23.3	25.1	26.1
Deposit Growth	23.0	22.3	23.7	24.8	23.3	23.7	25.4	25.7	24.3	27.3	25.6	22.6	23.1	23.7	22.5
Non-Food Credit	26.8	26.9	25.1	24.1	25.0	22.1	23.0	24.0	23.0	23.1	24.7	22.6	24.0	25.0	25.5
Inflation															
CPI (IW)	6.7	6.6	5.7	6.5	7.3	6.4	5.5	5.5	5.5	5.5	5.5	7.9	7.8	7.8	
WPI	6.6	5.5	4.4	4.4	4.0	3.5	3.3	3.3	4.1	4.6	5.1	6.5	7.7	8.5	
Mfg Products Inflation	6.1	5.8	5.4	5.2	4.8	5.2	4.6	4.3	4.3	4.9	4.5	7.0	8.0	8.0	
Interest Rates (Avg, %)															
Call Money Rate	4.0	6.6	2.3	0.6	6.4	6.1	6.0	7.1	7.4	6.6	6.9	7.1	6.0	4.8	
91-Day T-Bills	7.5	7.6	7.3	5.1	6.7	7.1	7.3	7.5	7.4	7.3	7.4	7.2	7.4	7.5	8.7
10-Year Government Bond	8.1	8.1	8.2	7.9	7.9	7.9	7.9	7.9	7.9	7.6	7.5	7.7	8.0	8.0	8.4
Trade - Customs Data															
Exports	27.5	21.6	14.4	16.0	16.5	13.4	35.6	26.8	18.3	20.5	35.2	26.6	31.5	12.9	
Imports	41.8	35.0	38.9	25.2	33.6	0.5	24.3	29.3	18.1	63.6	30.5	35.2	36.6	27.1	
Oil	38.3	-7.1	9.8	8.7	19.5	8.0	14.6	16.7	23.8	60.8	39.5	76.6	46.2	50.8	
Non-Oil	43.4	58.3	55.8	33.0	40.9	-2.7	28.8	35.3	15.3	65.1	26.3	18.7	32.3	17.4	
Brent Prices ($/bbl)	67.8	67.4	71.8	77.9	71.5	78.1	82.8	93.0	91.3	92.5	95.8	104.3	108.8	122.6	131.7
Foreign Invstmnt (US$ Mils.)															
FII	1,516	942	401	5,855	-1,922	3,957	5,067	-1,450	1,383	-3,232	430	-32	267	-1,242	-2,318
FDI Inflows	1,551	2,120	1,238	705	831	713	2,027	1,864	1,558	1,767	5,670	4,438	3,749		
Exch. Rate and Reserves															
US$ Exchange Rate Average	42.1	40.8	40.8	40.4	40.8	40.3	39.5	39.5	39.5	39.4	39.8	40.3	40.1	42.2	42.8
US$ Exch Rate Mnth End	41.2	40.6	40.7	40.4	40.9	39.8	39.3	39.6	39.4	39.4	40.0	40.1	40.5	42.5	42.9
Forex Res Inc.Gold (US$ Bn.)	204.1	204.9	213.5	225.4	228.8	247.8	262.5	272.3	275.6	288.3	301.2	309.2	312.9	314.6	

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

Summary of Balance of Payments

Figure 37. Trends and Forecasts in the Balance of Payments (US$Mn, %)

	FY04	FY05	FY06	FY07	FY08	FY09E	FY10E	COMMENTS
Exports (RBI)	**66,285**	**85,206**	**105,152**	**128,083**	**158,461**	**188,569**	**237,596**	UPSIDE if currency weakens
Y/Y %	23.3	28.5	23.4	21.8	23.7	19.0	26.0	Includes Petro-Product exports
% of GDP	11.0	12.2	13.0	13.9	13.5	14.7	15.0	
Imports (RBI)	**80,003**	**118,908**	**157,056**	**191,254**	**248,521**	**315,622**	**358,231**	
Y/Y %	24.1	48.6	32.1	21.8	29.9	27.0	13.5	
% to GDP	13.3	17.0	19.4	20.7	21.2	24.6	23.0	
Imports-Customs	78,200	106,700	140,200	185,700	235,770	304,149	350,836	
Y/Y %	27.4	36.4	31.4	32.5	27.0	29.0	15.3	
Of which: Oil	20,600	29,900	43,800	56,900	76,900	117,000	125,000	DOWNSIDE if WTI crosses US$135/bbl
Y/Y %	16.5	45.1	46.5	29.9	35.1	52.1	11.1	
Non-Oil	57,600	76,800	96,400	128,800	158,870	187,149	220,836	
Y/Y %	31.8	33.3	25.5	33.6	23.3	17.8	18.0	
a. Trade balance (RBI)	**-13,718**	**-33,702**	**-51,904**	**-63,171**	**-90,060**	**-127,053**	**-120,634**	
% of GDP	-2.3	-4.8	-6.4	-6.8	-7.7	-9.9	-7.7	
Trade Balance (Customs)	-14,357	-26,000	-39,600	-59,300	-80,258	-117,534	-110,700	
Difference	639	-7,702	-12,304	-3,871	-9,802	-9,519	-9,900	Diff bet RBI & customs= proxy for defense imports
b. Invisibles	**27,801**	**31,232**	**42,002**	**53,405**	**72,657**	**76,900**	**88,698**	
Non-factor services	10,144	15,426	23,170	31,810	37,550	45,000	53,798	Assumes 21% growth v/s 27%-30% seen earlier
Of which: Software Services	11,750	16,400	22,742	29,033	37,051	44,832	53,798	UPSIDE IF currency weakens, US strong
Investment income	-4,505	-4,979	-5,855	-6,573	-5,910	-5,500	-5,500	
Remittances*	21,608	20,525	24,493	27,941	40,778	37,000	40,000	COULD VARY Depending on Invst Opportunities
Official transfers	554	260	194	227	239	400	400	
1. Current a/c balance (a+b)	**14,083**	**-2,470**	**-9,902**	**-9,766**	**-17,403**	**-50,153**	**-31,936**	Due to a widening trade deficit and moderation in invisibles, CAD could widen to 3.9% of GDP
% of GDP	2.3	-0.4	-1.2	-1.1	-1.5	-3.9	-2.0	
c. Loans	**-4,364**	**10,909**	**7,909**	**24,534**	**41,962**	**27,000**	**21,000**	
External assistance	-2,858	1,923	1,702	1,767	2,114	1,000	1,000	
Commercial borrowings	-2,925	5,194	2,508	16,155	22,165	14,000	14,000	UPSIDE if RBI liberalizes norms further
Short-term credit	1,419	3,792	3,699	6,612	17,683	12,000	6,000	
d. FDI (Net = a-b)	**2,388**	**3,713**	**3,034**	**8,479**	**15,545**	**15,000**	**16,000**	
(a) FDI - To India	4,322	5,987	8,901	21,991	32,327	32,000	34,000	
(b) FDI - Abroad	-1,934	-2,274	-5,867	-13,512	-16,782	-17,000	-18,000	
e. Portfolio Inst (FII//GDRs)	**11,356**	**9,287**	**12,494**	**7,062**	**29,261**	**5,000**	**10,000**	DOWNSIDE Risk if global environment worsens
f. Banking Capital	**6,033**	**3,874**	**1,373**	**1,913**	**11,757**	**6,500**	**6,000**	
Commercial Banks (Net)	2,391	4,838	-1,416	-2,408	11,578	4,000	3,500	UPSIDE if RBI raises limit to 50% of Tier 1 capital
NRI deposits	3,642	-964	2,789	4,321	179	2,500	2,500	UPSIDE if RBI makes NRI deposits attractive
g. Rupee debt service	**-376**	**-417**	**-572**	**-162**	**-121**	**-400**	**-400**	
h. Other capital**	**1,699**	**656**	**1,232**	**3,953**	**9,627**	**3,000**	**1,000**	
2.Capital a/c (c+d+e+f+g+h)	**16,736**	**28,022**	**25,470**	**45,779**	**108,031**	**56,100**	**53,600**	
Errors & Omissions	602	607	-516	593	1,536	0	0	
Overall balance (1+2)	**31,421**	**26,159**	**15,052**	**36,606**	**92,164**	**5,947**	**22,627**	
Forex								
Forex assets	106.1	135.1	145.1	191.9	299.1	305.1	327.7	FX Assets@ US$302bn are a strong cushion
FCA to months of imports	15.9	13.6	11.1	12.0	13.5	10.9	11.1	
Exchange rate								
Rs/US$ - annual avg	45.9	45.0	44.3	44.9	40.2	42.5	40.0	Rising oil prices would put pressure on the INR
% depreciation	-5.0	-2.0	-1.6	1.4	-10.5	5.7	-5.9	
Rs/US$ - year end	43.6	43.8	44.6	43.5	39.0	42.5	40.0	
% depreciation/(-) app	-8.2	0.3	2.0	-2.5	-10.3	6.0	-5.9	

* **Remittances** - 50% are for family maintenance; balance is local withdrawal from NRI rupee deposits ** **other capital** refers to leads and lags in exports, advances received pending issue of shares, funds held abroad Source: RBI; Citi Estimate*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, Citi estimates.

Snapshot of Government Finances

Figure 38. India's Central Government Finances (Rupees in Billions, Percent to GDP)

Rs Bn, % GDP	FY04	FY05	FY06	FY07	FY08RE	FY09BE	COMMENTS
a. Gross Tax Revenue	**2,543**	**3,050**	**3,662**	**4,735**	**5,911**	**6,877**	
% to GDP	9.2	9.7	10.2	11.4	12.5	13.0	The 17.5% Gross tax assumptions appear realistic
Corporation tax	636	827	1,013	1,443	1,895	2,264	
Income tax	414	493	560	751	1,057	1,383	Higher exemption limits and tax slabs will help
Excise duty	908	991	1,112	1,176	1,233	1,379	Export bans/ import duty reductions to curb inflation
Import duty	486	576	651	863	1,029	1,189	could hurt growth in excise/import duties
Service tax	100	163	326	502	697	662	
b. (-) Devolvement to States & UTs	674	802	972	1,223	1,518	1,806	
c. Net tax revenues (a-b)	1,870	2,248	2,689	3,512	4,375	5,072	
d. Non tax revenues	769	812	768	832	1,024	958	
e. Net revenue receipts (c+d)	**2,639**	**3,060**	**3,458**	**4,344**	**5,396**	**6,029**	
f. Non-debt capital receipts	841	665	122	64	439	147	
Recovery of loans	672	620	106	59	51	45	
Privatisation	170	44	16	5	388	102	
g. TOTAL REVENUES (e+f)	**3,480**	**3,725**	**3,580**	**4,408**	**5,838**	**6,176**	
% YoY	29.8	7.0	-3.9	23.1	32.4	5.8	
h. Revenue expenditure	**3,621**	**3,843**	**4,394**	**5,146**	**5,954**	**6,581**	Expenditure Targets do not take into account off-
Interest (1)	1,241	1,269	1,326	1,503	1,715	1,908	balance sheet items. These include:
Defence	432	439	482	517	548	576	1. Oil Bonds: Estimated at Rs964bn-1350bn in FY09
Subsidies	443	460	475	571	697	**714**	2. Additional Fertilizer Subsidies: c.Rs650bn
Pensions	159	183	203	221	242	251	3. Farm Loan Waiver
Grants to States	137	148	305	357	364	433	4. 6th Pay Commission Recommendations
Admin and social services	422	470	484	553	558	601	These items understate expenditure targets
Plan expenditure	786	875	1,119	1,424	1,756	2,098	
i. Capital expenditure	**1,092**	**1,139**	**664**	**688**	**1,182**	**928**	
Defence	169	320	323	338	377	480	
Loans	487	371	52	75	512	111	
Plan expenditure	436	448	288	274	319	336	
j. Plan exp on rev & cap a/c	1,223	1,323	1,406	1,699	2,056	2,434	
k Non Plan expen on rev & cap a/c	3,490	3,660	3,651	4,135	5,080	5,075	
l. TOTAL EXPENDITURE (h+i) = (j+k)	**4,713**	**4,983**	**5,057**	**5,834**	**7,136**	**7,509**	
% YoY	14.0	5.7	1.5	15.4	22.3	5.2	
Deficit trends							
m. Fiscal deficit (l-g)	**1,233**	**1,258**	**1,478**	**1,426**	**1,298**	**1,333**	On paper, FD is in line with FRBM Targets
% to GDP	4.5	4.0	4.1	3.4	2.8	2.5	Including off-balance sheet items to 6.5% of GDP
n. Revenue deficit (h-e)	**982**	**783**	**936**	**802**	**555**	**552**	
% to GDP	3.6	2.5	2.6	1.9	1.4	1.0	
o. Primary deficit (m-1)	**-8**	**-12**	**137**	**-77**	**-417**	**-575**	
% to GDP	0.0	0.0	0.4	-0.2	-0.9	-1.1	
Financing the deficit							
Market borrowings	889	460	953	1,104	1,107	1,006	
PPF & special deposits	50	-4	60	52	48	48	
Small savings	0	0	0	0	-18	99	
Net external assistance	-135	148	75	85	100	110	
Others	468	736	584	140	382	-2	
Cash Surplus	-39	-82	-195	45	-182	72	
Total financing	**1,233**	**1,258**	**1,478**	**1,426**	**1,437**	**1,333**	
Memo items (% to GDP)							
Centre	4.5	4.0	4.1	3.4	3.1	2.5	
State	4.5	3.5	3.2	2.6	2.5	2.4	
Combined	8.5	7.5	6.7	6.4	6.0	5.7	

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

Global Forecasts

	GDP Growth (%YoY)			CPI Inflation (%YoY)			Current Balance (% GDP)			Fiscal balance (% GDP)		
	2007	2008F	2009F	2007	2008F	2009F	2007	2008F	2009F	2007	2008F	2009F
Global	4.0	3.0	2.7	3.1	5.0	3.7	0.2	-0.5	-0.6	-0.4	-1.2	-1.3
Based on PPP weights	4.9	3.9	3.6	3.6	5.9	4.3	0.6	-0.4	-0.6	-0.5	-1.3	-1.4
Industrial Countries	2.5	1.6	1.2	2.1	3.4	2.3	-0.8	-1.4	-1.4	-0.8	-1.9	-2.1
United States	2.2	1.6	1.4	2.9	4.2	2.7	-5.3	-5.7	-5.7	-1.1	-3.5	-3.4%
Japan	2.1	1.5	1.0	0.0	1.4	0.9	4.8	4.1	4.4	-2.8	-3.1	-3.8
Euro Area	2.7	1.6	1.0	2.1	3.4	2.0	0.2	0.0	-0.1	-0.6	-1.0	-1.1
Canada	2.7	0.9	2.0	2.1	2.4	2.3	0.9	2.1	2.0	0.2	0.1	0.1
Australia	4.3	2.6	2.8	2.3	4.3	3.2	-6.1	-3.3	-3.5	1.6	1.5	1.8
Germany	2.6	1.8	0.9	2.3	2.7	2.0	7.6	6.3	4.0	0.0	-0.5	-1.0
France	2.1	1.6	0.9	1.5	2.9	1.8	-1.4	-2.0	-2.2	-2.7	-3.2	-3.4
Italy	1.4	0.4	0.9	2.2	3.3	1.9	-2.0	-2.5	-2.7	-2.3	-3.0	-3.1
Spain	3.8	1.4	1.2	2.8	4.5	3.0	-9.6	-8.9	-7.5	2.2	-0.3	-1.5
United Kingdom	3.0	1.7	0.5	2.3	3.5	3.2	-4.2	-3.0	-2.5	-2.8	-3.0	-3.5
Emerging Markets	7.4	6.3	6.1	5.3	8.5	6.9	4.4	4.4	3.8	0.7	0.5	0.5
China	11.9	9.8	9.7	4.8	7.4	5.7	10.8	8.3	6.4	0.3	-2.0	-1.5
India	9.0	7.7	7.9	4.5	8.0	6.0	-1.2	-3.2	-2.2	-6.0	-5.8	-5.2
Korea	5.0	4.0	3.7	2.5	5.0	3.8	0.6	-2.0	-1.5	3.8	1.5	0.7
Poland	6.5	5.1	4.3	2.5	4.3	3.1	-3.7	-4.8	-4.8	-1.4	-1.6	-1.3
Russia	8.1	7.0	6.6	9.0	14.7	13.3	6.2	7.1	6.2	5.5	8.1	7.8
South Africa	5.1	3.3	3.2	7.2	10.6	6.8	-7.3	-7.8	-7.1	0.8	0.3	0.2
Turkey	4.5	3.6	3.7	8.8	10.4	8.0	-5.7	-6.8	-6.7	-1.9	-2.4	-3.1
Brazil	5.4	4.6	3.5	3.6	5.6	5.1	0.1	-1.8	-2.0	-2.3	-1.6	-1.0

Source: 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 (%)				
	Current	3Q08 Forecast	4Q08 Forecast	1Q09 Forecast	2Q09 Forecast	Current	3Q08 Forecast	4Q08 Forecast	1Q09 Forecast	2Q09 Forecast	Current	3Q08 Forecast	4Q08 Forecast	1Q09 Forecast	2Q09 Forecast
United States	NA	NA	NA	NA	NA	2.00	2.00	2.00	2.50	2.75	3.96	4.10	4.10	4.20	4.30
Japan	105.97	106.00	102.00	102.00	105.00	0.50	0.50	0.50	0.50	0.50	1.68	1.65	1.55	1.50	1.60
Euro Area	1.59	1.58	1.58	1.55	1.50	4.00	4.25	4.25	4.25	4.00	4.65	4.70	4.60	4.60	4.55
China	6.85	6.75	6.70	6.63	6.55	7.47	7.74	7.74	8.01	8.01	4.07	4.00	3.90	3.70	3.50
India	**42.93**	**43.50**	**43.00**	**42.50**	**42.00**	**8.50**	**8.75**	**9.00**	**9.00**	**9.00**	**8.80**	**9.25**	**9.25**	**9.25**	**9.25**

Source: Citi estimates

Long-Term Forecasts

	GDP Growth(%)					Exchange Rates(Average)					Long-term Rates(%)				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
United States	1.6	1.4	2.7	2.7	2.7	NA	NA	NA	NA	NA	3.95	4.35	4.75	5.00	5.00
Japan	1.5	1.0	1.5	2.0	1.2	105	105	108	103	98	1.55	1.63	1.75	2.25	1.75
Euro Area	1.6	1.0	2.0	2.0	2.0	1.56	1.50	1.50	1.50	1.50	4.45	4.50	4.50	4.50	4.50
China	9.8	9.7	10.5	10.8	10.0	6.90	6.50	5.95	5.60	5.45	4.1	4.0	4.0	4.5	5.0
India	**7.7**	**7.9**	**8.3**	**8.7**	**8.8**	**42.5**	**40.0**	**38.0**	**36.0**	**34.0**	**9.00**	**8.5**	**8.5**	**8.5**	**8.5**

Source: Citi estimate

Disclosure Appendix A1

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