kotak® Institutional Equities

INDIA DAILY

June 11, 2007

EQUITY MARKETS

India	Change, % 8-Jun	1-day	1-mo	3-mo
Sensex	14,064	(0.9)	1.9	9.1
Nifty	4,145	(0.8)	1.7	11.5
Global/Regional indices				
Dow Jones	13,424	1.2	0.7	9.4
Nasdaq Composite	2,574	1.3	0.4	7.8
FTSE	6,505	-	(0.9)	4.2
Nikkie	17,863	0.5	1.8	4.1
Hang Seng	20,639	0.6	0.8	7.9
KOSPI	1,719	(0.5)	7.2	20.7

Value traded - India

	Moving avg, Rs bn 8-Jun	1-mo	3-mo
Cash (NSE+BSE)	150.4	######	######
Derivatives (NSE)	418.4	271.3	322.2
Deri. open interest	623.1	492.2	533.7

Forex/money market

	Change, basis points 8-Jun	1-day	1-mo	3-mo
Rs/US$	41.2	-	8	(307)
6mo fwd prem, %	0.7	(25)	71	24
10yr govt bond, %	8.2	2	8	13

Net investment (US$mn)

	7-Jun	MTD	CYTD
FIIs	(53)	1,257	40
MFs	(21)	238	(303)

Top movers -3mo basis

Best performers	Change, % 8-Jun	1-day	1-mo	3-mo
Balaji Telefilms	224	6.1	24.6	101.9
Reliance Cap	964	(1.6)	22.1	56.0
Moser Baer	454	5.4	19.5	48.2
GESCO	287	(2.5)	10.2	47.0
Tata Tea	830	(1.3)	6.5	41.1
Worst performers				
Bajaj Auto	2,120	(1.6)	(22.0)	(14.8)
Tata Motors	654	(3.5)	(8.6)	(13.5)
United Phos	273	(0.5)	(8.5)	(13.2)
Ashok Leyland	36	(2.9)	(4.2)	(10.8)
Infosys	1,951	(0.2)	(2.5)	(8.1)

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News Roundup

Corporate

- BSNL has cut call rates to US-Canada and the Gulf to Rs1.75 per minute and Rs6.75 per minute. Private players at present offer ISD at the rate of Rs1.99 per minute to the US and Rs6.99 per minute to the Gulf. (BS)
- Reliance natural resources (RNRL) has sent a legal notice to the petroleum ministry against the bids invited by Reliance Industries (RIL) for sale of gas and its proposal to enter into gas sales agreements. RNRL has alleged that the move violates the interim order by the Bombay High Court on May 3,2007. (ET)
- Glenmark Pharma may be close to licencing out its research molecule targeted at pain, in a deal potentially worth more than euro190 mn in upfront and milestonbe payments. (ET)

Economic and political

- The ministry of company affairs will get rid of atleast 50,000 companies that do not file statutory documents on time, within the next two months. These companies would cease to exist legally once the ministry strikes off their names from official records. (ET)
- Disagreeing with the views of the Left parties and certain members of the standing committee of parliament, the finance ministry has opposed any cap on interest rates for small loans under the Microfinance Bill. (BS)

Source: ET = Economic Times, BS = Business Standard, FE = Financial Express, BL = Business Line.

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Chemicals

RELI.BO, Rs1660	
Rating	U
Sector coverage view	Neutral
Target Price (Rs)	1,400
52W High -Low (Rs)	1785 - 843
Market Cap (Rs bn)	2,313

Financials

March y/e	2007	2008E	2009E
Sales (Rs bn)	1,052	957	1,146
Net Profit (Rs bn)	107.2	96.4	140.5
EPS (Rs)	76.9	71.5	98.5
EPS gth	*21.8*	*(7.0)*	*37.6*
P/E (x)	21.6	23.2	16.9
EV/EBITDA (x)	12.6	13.5	8.7
Div yield (%)	0.7	0.7	0.9

Shareholding, March 2007

	Pattern	% of Portfolio	Over/(under) weight
Promoters	43.5	-	-
FIIs	23.1	7.4	0.7
MFs	2.5	4.9	(1.9)
UTI	-	-	(6.7)
LIC	4.5	7.9	1.2

Reliance Industries: Details emerge on pricing of KG-D6 gas; in line with expectations

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- **Competitive bids from power plants at US$4.3-4.37/mn BTU; lower bids from fertilizer units**
- **We model US$4/mn BTU blended price throughout life of KG D-6 fields**
- **Pricing for new power plants (the key demand driver) may be significantly lower**

We view press reports of bid prices for gas from Reliance's KG-D6 block at US$4.3/mn BTU (wellhead) by certain power plants as being in line with our estimate of US$4/mn BTU. As per the press reports, five power plants have bid US$4.3-4.37/mn BTU for KG-D6 gas but fertilizer companies (five) have bid a much lower price (price not disclosed). More important, we believe the price for gas for new power plants (once the current 'low-hanging' demand from extant power and fertilizer units is exhausted) is likely to be significantly lower; the blended price for Reliance's 80 mcm/d may be below US$4/mn BTU, factoring in lower gas price for new power units and US$2.47/mn BTU for gas to be supplied to NTPC (11 mcm/d). We retain our 12-month fair valuation of Rs1,400 based on 9X FY2010E EPS plus value of investments (discounted to June 2008). Key upside risk is continued high global liquidity and new E&P discoveries.

US$4.3/mn BTU versus US$4/mn BTU results in moderate upside to earnings, valuation. At US$4.3/mn BTU gas price versus our assumed US$4/mn BTU, our FY2010E EPS would increase to Rs158.6 (from Rs153.5), the valuation of KG-D6 block would increase by Rs27 (to Rs211/share) and our 12-month fair valuation would increase by Rs47/share. We attribute the valuation difference between the change in our fair valuation for Reliance stock (Rs47) and KG-D6 valuation (Rs27) to the fact that a P/E valuation assumes earnings in perpetuity and naturally overestimates valuation of Reliance's E&P business versus a DCF-based valuation with finite (for a limited period of time) cash flows.

If 'low-hanging' demand is at US$4.3/mn BTU, pricing would become increasingly tougher. Our demand analysis of the Indian market suggests that about 40 mcm/d of incremental demand is available currently from extant power and fertilizer plants and Reliance's internal demand of 20 mcm/d (assuming 100% of internal heating requirement is met from gas). Reliance will have to use the same discovered price gas for internal use (US$4.3/mn BTU presumably). However, we believe new power plants will likely demand a far lower price given that they have the option of using coal; in fact, very few new power plants are being set up with gas as fuel. The extant power units, which are currently short of gas, do not have that luxury and would have naturally bid more aggressively to secure gas.

Details of proposed formula and bids. According to press articles, Reliance has proposed a fixed price for three years (up to March 31, 2012) with the price to be determined by a competitive bidding process. Reliance has also submitted a price formula linked to crude price (Dated Brent) after that with US$25/bbl as floor and US$65/bbl as ceiling to the government for its approval. We assume this would become applicable after FY2012.

We see little logic for domestic gas pricing to be linked to crude oil or for gas consumers to accept a crude-price linked formula for domestic gas. In our view, domestic gas pricing should be based on supply-demand of gas in the local market and the relative price of gas versus other competing fuels. The price of domestic gas is typically determined globally (1) by market mechanism (local supply and demand) in developed markets (North America, Western Europe) or (2) by regulation/governments in less developed markets (India, Russia, Middle-East).

We note that Reliance's proposed gas formula is akin to pricing of LNG; however, the case for LNG is different with its huge investments in upstream, liquefaction terminal, shipping and re-gasification terminal. LNG producers and consumers enter into a pricing formula with appropriate floor and ceiling to protect their respective investments.

Reliance Industries consolidated with Reliance Petroleum: Profit model, balance sheet, cash model, March fiscal year-ends, 2003-2010E (Rs mn)

	2003	2004	2005	2006	2007E	2008E	2009E	2010E
Profit model (Rs mn)								
Net sales	451,133	510,715	656,223	809,113	1,051,630	956,677	1,145,762	1,797,449
EBITDA	**75,808**	**91,148**	**123,820**	**139,991**	**180,102**	**166,722**	**235,326**	**387,540**
Other income	10,012	11,381	14,498	6,829	1,930	2,000	2,194	4,191
Interest	(15,552)	(14,347)	(14,687)	(8,770)	(11,140)	(3,999)	(6,023)	(11,722)
Depreciation & depletion	(28,371)	(32,470)	(37,235)	(34,009)	(40,090)	(41,316)	(55,633)	(77,706)
Pretax profits	41,897	55,711	86,397	104,041	130,802	123,406	175,865	302,303
Extraordinary items	7,845	7,300	4,290	3,000	2,000	—	—	—
Tax	(2,459)	(3,510)	(7,050)	(9,307)	(15,210)	(29,074)	(35,951)	(55,575)
Deferred taxation	(6,240)	(7,900)	(7,920)	(7,040)	(8,510)	5,344	7,513	8,385
Minority interest	—	—	—	—	—	—	(4,344)	(22,798)
Net profits	41,043	51,601	75,717	90,693	109,082	99,676	143,082	232,316
Adjusted net profits	**34,570**	**45,623**	**72,135**	**88,152**	**107,439**	**99,676**	**143,082**	**232,316**
Earnings per share (Rs)	**24.8**	**32.7**	**51.7**	**63.3**	**77.1**	**71.5**	**98.5**	**153.5**
Balance sheet (Rs mn)								
Total equity	303,744	344,525	404,033	471,043	733,374	813,491	1,084,975	1,270,446
Deferred taxation liability	26,848	34,748	42,668	49,708	58,218	52,874	45,362	36,976
Minority interest	—	—	—	—	28,800	28,800	33,144	53,310
Total borrowings	197,583	209,447	187,846	218,656	163,111	224,119	184,639	130,239
Currrent liabilities	109,666	122,855	171,315	164,545	196,624	191,848	198,088	230,779
Total liabilities and equity	**637,842**	**711,574**	**805,863**	**903,952**	**1,180,127**	**1,311,133**	**1,546,207**	**1,721,750**
Cash	1,472	2,242	36,087	21,461	28,051	28,512	179,724	283,446
Current assets	227,809	218,159	248,438	224,283	269,355	256,455	278,618	369,842
Total fixed assets	340,863	351,460	350,823	626,745	803,248	946,693	1,008,393	988,990
Investments	67,227	139,714	170,515	31,462	79,447	79,447	79,447	79,447
Deferred expenditure	472	—	—	—	26	26	26	26
Total assets	**637,842**	**711,574**	**805,863**	**903,952**	**1,180,127**	**1,311,133**	**1,546,207**	**1,721,750**
Free cash flow (Rs mn)								
Operating cash flow, excl. working capital	67,072	83,301	107,002	119,520	155,612	130,812	191,171	319,757
Working capital	(17,614)	20,265	46,875	(32,188)	(13,050)	8,124	(15,923)	(58,533)
Capital expenditure	(37,043)	(43,191)	(52,440)	(94,273)	(198,407)	(181,924)	(115,152)	(57,816)
Investments	(34,204)	(68,430)	(48,192)	(32,364)	(40,000)	—	—	—
Other income	5,219	5,902	3,032	5,159	1,930	2,000	2,194	4,191
Free cash flow	**(16,569)**	**(2,153)**	**56,276**	**(34,146)**	**(93,915)**	**(40,988)**	**62,291**	**207,598**
Ratios (%)								
Debt/equity	59.8	55.2	42.1	42.0	20.6	25.9	16.3	10.0
Net debt/equity	59.3	54.6	34.0	37.9	17.1	22.6	0.4	(11.7)
RoAE	10.7	12.7	17.6	19.0	17.3	12.6	14.8	19.4
RoACE	**8.8**	**9.7**	**13.0**	**13.4**	**13.5**	**9.9**	**12.5**	**19.0**

Source: Kotak Institutional Equities estimates.

Our 12-month fair value of Reliance stock is Rs1,400

Valuation of Reliance stock (Rs)

	FY2010E EPS (Rs)	P/E (X)	Valuation (Rs/share)	Comments
Chemicals, refining, E&P (a) (b)	173	9	1,557	Consolidated FY2010E EPS including Reliance Petroleum
E&P (higher reserves in KG-DWN-98/3)			—	We model 17 tcf of gas production rom KG-DWN-98/3 block
E&P (NEC-25, CBM)			44	Based on KG D-6 reserves and valuation
Investments			143	
IPCL and other investments			31	
Retailing			112	US$3.75 bn valuation; ~US$1 bn equity invested in Reliance Retail as of end-FY2007
SEZ development			—	SEZs will require investment for the first few years
Valuation based on FY2010E EPS			**1,744**	
12-month forward valuation			**1,407**	**12.5% discount rate; discounted to June 4, 2008**

Notes:

(a) FY2010E EPS is Rs154 on 1.513 bn shares without considering merger of IPCL but conversion of 120 mn warrants issued to the major shareholder.

(b) FY2010E EPS is adjusted for treasury shares or computed using 1.343 bn shares.

(c) Number of shares outstanding after merger of IPCL will be 1.57 bn including 199 mn treasury shares.

Source: Kotak Institutional Equities estimates.

New power plants of NTPC, REL, others critical for gas consumption; internal 'sales' insufficient given large supply

Supply and potential sales of gas from KG D-6 block (mcm/d)

		Comments
Reliance KG D-6 gas peak production	**80**	**This could increase to 120 mcm/d**
1. Firm demand		
Consumption in RIL and RPL refineries	20	
Shortfall + new power generation capacity in KG basin area	8	Shortage of about 3 mcm/d; planned new capacity of 1,878 MW
Sub-total	**28**	
2. Potential demand in short/medium-term		
Conversion of FO/naphtha urea units to gas	11	Most units can switch to gas quickly as pipeline infrastructure exists
Replacement of FO/LSHS from industrial units	25	This will likely take time given wide disperson of consumption
Sub-total	**36**	
3. Possible (medium-term)		
NTPC gas supply	10	Construction of 2 X 1,300 MW power plants not commenced
RNRL/REL gas supply	11	Construction of 2,720 MW power plant not commenced
City gas distribution	5	Submitted plans to various state governments; will take time
Sub-total	**26**	
Total	**90**	

Source: Kotak Institutional Equities estimates.

Domestic gas at US$4.25/mn BTU (delivered price) may be the outer limit

Comparitive cost of power generation using various fuels

	Naphtha (a)	Gas (b)	Coal (d)	Gas (c)	Coal (e)	Coal (f)
Unit	Kg	m3	Kg	m3	Kg	Kg
Price (Rs/unit)	**22.6**	**4.0**	**0.6**	**6.7**	**1.5**	**2.6**
Price (US$/mn BTU))		**2.5**		**4.3**		
Calorific value (Kcal/unit)	10,500	9,000	3,500	9,000	3,500	6,500
Thermal efficiency (%)	54	54	37	54	37	37
Thermal requirement (kcal/kwh)	1,593	1,593	2,324	1,593	2,324	2,324
Cost of generation (Rs/Kwh)	**3.43**	**0.70**	**0.42**	**1.18**	**0.97**	**0.93**
Other operating costs (Rs/Kwh)	**0.20**	**0.20**	**0.20**	**0.20**	**0.20**	**0.20**
Plant load factor (%)	90	90	85	90	85	85
Fixed capital investment (Rs mn/MW)	33	32	40	32	40	40
Depreciation charge (%)	5	5	5	5	5	5
Depreciation charge (Rs/Kwh)	0.21	0.20	0.27	0.20	0.27	0.27
Fixed capital charge (%)	14	14	14	14	14	14
Fixed capital charge (Rs/Kwh)	0.59	0.57	0.75	0.57	0.75	0.75
Total cost (Rs/Kwh)	**4.43**	**1.68**	**1.64**	**2.15**	**2.19**	**2.15**

Note:
(a) Naphtha cost based on FY2006-FY2007 average price.
(b) Gas price at US$2.5/mn BTU (delivered).
(c) Gas price at US$4.25/mn BTU (delivered).
(d) Domestic coal at pithead.
(e) Domestic coal 1,000 kms from pithead.
(f) Imported coal at coastal plant.

Source: Platt's, Indian Railway Budget, Kotak Institutional Equities estimates.

Energy

ONGC.BO, Rs865	
Rating	OP
Sector coverage view	Attractive
Target Price (Rs)	1,075
52W High -Low (Rs)	990 - 627
Market Cap (Rs bn)	######

Financials

March y/e	2007E	2008E	2009E
Sales (Rs bn)	953.1	996.0	984.0
Net Profit (Rs bn)	185.6	211.9	212.5
EPS (Rs)	86.8	99.1	99.3
EPS gth	*18.2*	*14.2*	*0.3*
P/E (x)	10.0	8.7	8.7
EV/EBITDA (x)	4.2	3.7	3.4
Div yield (%)	3.5	3.8	3.8

Shareholding, March 2007

	Pattern	% of Portfolio	Over/(under) weight
Promoters	74.1	-	-
FIIs	8.7	2.7	(3.9)
MFs	1.3	2.5	(4.2)
UTI	-	-	(6.6)
LIC	2.3	3.9	(2.7)

Oil & Natural Gas Corporation: Some good news; government-related negative action may be in the stock price

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- **Agreement with Petrobras for swapping of interests of offshore blocks in India and Brazil**
- **Five new oil and gas discoveries in May 2007**
- **Government-related negative news in the stock price, in our view**

We see two positives for the stock (1) ONGC's recent agreement with Petrobras for swapping of interests in offshore blocks in India and Brazil and (2) ONGC's five discoveries of oil and gas in May. The former development would confirm gas reserves in ONGC's 'controversial' KW-DWN-98/2 block, where ONGC will give 15% stake to Petrobras. In other developments, the company approved investments of Rs12.8 bn for development of B-Cluster fields in the western offshore region. We view these developments as positive for the stock which has underperformed the broader market by 9.5% in the past month. We ascribe the underperfomance to an unexpected increase in the share of subsidy of upstream companies to 41.5% in FY2007 versus 33.33% previously; however, we doubt this figure will go up any further. We find ONGC stock attractively valued at 8.6X FY2008E EPS and 5.4X FY2008E DACF. We retain our 12-month 9X normalized FCF-based target price of Rs1,075 (no value factored for new discoveries). Key downside risk would be higher-than-expected subsidy losses.

Agreement with Petrobras should dispel doubts about reserves in KG-DWN-98/2 block. ONGC has entered into an agreement with Petrobras establishing the basic terms and conditions for assignment of 25% participating interest each in three blocks (BM-SEAL-4, BM-S-17 and BM-BAR-1) in Brazil by Petrobras to OVL (ONGC's 100% overseas subsidiary) and assignment of 15%, 40% and 25% participating interest in blocks KG-DWN-98/2, MN-DWN-98/3 and CY-DWN-2001/1, respectively, in India by ONGC to Petrobras. ONGC (and its partner Cairn) has made six discoveries of gas in KG-DWN-98/2 block including a 'controversial' one (UD-1) in December 2006. The press has put the initial in-place reserves estimates at 2.5-14.8 tcf. ONGC has not disclosed the reserves and it will need to drill more wells to ascertain the size of the discovery. Nonetheless, the fact that Petrobras will take a 15% stake in the block would suggest that the block has good potential. Also, Petrobras with its strong track-record in deep-water exploration and development may help in better exploitation of ONGC's exploration blocks. ONGC has 34 deep-water NELP blocks and we believe the expertise of global majors would improve ONGC's hitherto average track-record.

Five new discoveries. ONGC has made gas discoveries in the KG basin, Mahanadi basin and Tripura and oil discoveries in two fields in Assam. It has made a discovery (MDW-4A well) in Mahanadi basin block, MN-DWN-98/3. As per ONGC, drilling in MDW-4A well has struck gas at a depth of 1,087 meters with a high flow potential. This is the second discovery made by ONGC in the MN-DWN-98/3 block. We assume ONGC will disclose estimates of reserves at a later date.

Approval for investments in development of B-Cluster fields in western offshore. We see the development of these fields as shoring up production once ONGC's major gas fields in the western offshore region (South Bassein) enter the natural decline phase after 2010. ONGC's board has approved the development of B-Cluster Marginal Gas fields (B-46, B-48, B-105 & B-188) located North-west of Mumbai High field at a cost of Rs12.9 bn. As per the press release, the total probable in-place reserves of gas are 11.3 bcm and ONGC will produce 1.64 mcm/d of gas and 2,890 bpd of condensate post development. ONGC expects to produce 5.3 bcm of gas over a period of 12 years.

We believe ONGC stock is attractively valued at current price

Estimation of fair value of ONGC stock based on normalized free cash flow (Rs mn)

	2008E	2009E	2010E
Crude price assumption (US$/bbl)	50.0	50.0	50.0
Recurring operating cash flow			
Operating cash flow = EBIT X (1-t) + D	197,863	225,080	247,303
Add: OCF after normalizing natural gas price	34,977	29,592	22,161
Add: OCF after removing subsidies	101,383	82,343	60,438
Recurring OCF	334,223	337,014	329,902
Recurring capex			
Production per annum (mn bbls)	380	388	380
Replacement or F&D costs (US$/bbl)	8.0	8.0	8.0
Recurring capex	130,798	133,588	130,650
Free cash flow	**203,424**	**203,426**	**199,252**
Free cash flow multiple (X)	9	9	9
Enterprise value	1,830,818	1,830,837	1,793,266
(Net debt)/cash	252,651	395,631	491,663
Investments	88,236	88,236	88,512
Equity value	2,171,706	2,314,705	2,373,441
Equity value per share (Rs)	**1,015**	**1,082**	**1,110**

Source: Kotak Institutional Equities estimates.

Consolidated profit model, balance sheet, cash model of ONGC, March fiscal year-ends, 2004-2010E (Rs mn)

	2004	2005	2006	2007E	2008E	2009E	2010E
Profit model (Rs mn)							
Net sales	433,264	635,956	742,532	953,141	996,048	984,050	1,027,690
EBITDA	**192,480**	**269,526**	**318,069**	**379,374**	**400,875**	**394,939**	**438,201**
Other income	18,220	21,811	28,446	21,848	21,335	21,965	23,127
Interest	(6,964)	(3,950)	(955)	(1,417)	(941)	(777)	(555)
Depreciation and depletion	(65,480)	(73,466)	(98,007)	(110,238)	(104,941)	(104,331)	(101,834)
Pretax profits	138,255	213,921	247,553	289,567	316,329	311,796	358,939
Tax	(46,101)	(74,003)	(71,523)	(106,205)	(109,239)	(105,901)	(128,490)
Deferred tax	(4,218)	(770)	(16,585)	3,299	6,713	8,056	10,591
Net profits	86,811	138,943	159,706	186,661	213,802	213,951	241,040
Net profits after minority interests	**87,979**	**137,639**	**157,201**	**185,607**	**211,907**	**212,495**	**238,694**
Earnings per share (Rs)	**41.1**	**64.4**	**73.5**	**86.8**	**99.1**	**99.3**	**111.6**
Balance sheet (Rs mn)							
Total equity	415,582	488,912	578,830	692,277	819,015	949,639	1,080,511
Deferred tax liability	54,250	57,911	71,557	70,184	62,528	51,632	41,535
Liability for abandonment cost	80,292	80,941	128,675	128,675	128,675	128,675	128,675
Total borrowings	60,961	39,028	22,259	18,584	16,484	7,192	45,491
Currrent liabilities	85,376	128,346	152,162	88,040	88,061	88,472	87,116
Total liabilities and equity	**696,461**	**795,138**	**953,483**	**997,760**	**1,114,762**	**1,225,610**	**1,383,329**
Cash	95,721	101,843	91,132	135,991	269,135	402,823	537,154
Current assets	133,039	178,421	240,479	198,807	172,660	163,528	167,456
Total fixed assets	419,213	471,543	568,252	609,340	619,345	605,637	625,129
Goodwill	11,661	10,753	14,172	14,172	14,172	14,172	14,172
Investments	30,811	26,961	35,480	35,480	35,480	35,480	35,753
Deferred expenditure	6,017	5,617	3,969	3,969	3,969	3,969	3,663
Total assets	**696,461**	**795,138**	**953,484**	**997,759**	**1,114,761**	**1,225,609**	**1,383,327**
Free cash flow (Rs mn)							
Operating cash flow, excl. working capital	120,499	178,158	225,995	217,179	239,998	236,903	258,173
Working capital changes	24,950	18,839	44,082	(7,825)	23,324	(52,601)	35,067
Capital expenditure	(56,366)	(102,727)	(110,836)	(103,311)	(65,780)	(41,550)	(32,550)
Investments	(10,608)	(9,887)	(28,640)	—	—	—	—
Other income	9,765	12,964	14,539	22,573	21,990	22,340	23,127
Free cash flow	**88,240**	**97,347**	**145,141**	**128,615**	**219,532**	**165,092**	**283,817**
Ratios (%)							
Debt/equity	14.7	8.0	3.8	2.7	2.0	0.8	4.2
Net debt/equity	(8.4)	(12.8)	(11.9)	(17.0)	(30.8)	(41.7)	(45.5)
RoAE	20.2	27.4	26.5	26.6	26.1	22.8	22.7
RoACE	**19.2**	**24.1**	**22.8**	**22.5**	**22.6**	**20.0**	**20.3**
Key assumptions							
Rs/dollar rate	46.0	45.0	44.3	45.3	43.0	43.0	43.0
Crude fob price (US$/bbl)	28.7	40.6	57.2	64.8	65.0	60.0	60.0
Ceiling natural gas price (Rs/'000 cm)	2,850	2,850	3,515	3,750	4,000	4,500	5,000
Subsidy loss (Rs bn)	26.9	41.0	119.6	170.3	150.0	120.0	90.0

Source: Kotak Institutional Equities estimates.

Natural gas price increase and moderate volume growth are key earnings drivers

Key assumptions, March fiscal year-ends, 2003-2010E

	2003	2004	2005	2006	2007E	2008E	2009E	2010E
Rs/US$ rate	48.4	46.0	45.0	44.3	45.3	43.0	43.0	43.0
Subsidy share scheme loss (Rs bn)	—	26.9	41.0	119.6	170.3	150.0	120.0	90.0
Import tariff on crude oil (%)	10	10	10	5	5	5	3	3
Crude/natural gas prices								
Crude price								
Crude price, WTI (US$/bbl)					66.8	67.0	62.0	62.0
Crude price, Dated Brent (US$/bbl)	27.0	28.7	40.6	57.2	64.8	65.0	60.0	60.0
Net crude price, ONGC-India (Rs/tonne)	7,284	6,255	9,196	10,390	10,444	10,289	9,855	10,977
Net crude price, ONGC-India (US$/bbl)	20.6	18.6	28.0	32.1	31.6	32.8	31.4	35.0
Natural gas price								
Ceiling natural gas price, India (Rs/cu m)	2.85	2.85	2.85	3.52	3.75	4.00	4.50	5.00
Ceiling natural gas price, India (US$/mn BTU)	1.57	1.66	1.69	2.12	2.21	2.49	2.80	3.11
Net natural gas price, ONGC-India (Rs/cu m)	2.24	2.18	2.18	3.11	3.33	3.56	4.02	4.49
Net natural gas price, ONGC-India (US$/mn BTU)	1.24	1.27	1.29	1.88	1.97	2.21	2.50	2.79
International operations								
Net natural gas price, OVL-Vietnam (Rs/cu m)	3.4	3.2	3.2	3.1	3.2	3.0	3.0	3.0
Net crude price, OVL-Sudan (Rs/tonne)	4,253	4,285	5,893	8,118	9,384	8,943	8,264	8,264
Net crude price, OVL-Russia (Rs/tonne)	—	—	—	8,320	9,633	9,182	8,475	8,475
Sales volumes—Domestic fields (a)								
Crude oil (mn tonnes)	23.9	23.9	24.1	22.5	23.5	23.4	23.4	23.4
Natural gas (bcm)	21.1	21.1	20.6	20.5	20.8	20.2	20.2	19.4
Sales volumes—Overseas fields								
Crude oil (mn tonnes)	0.2	3.3	3.7	4.5	6.5	7.8	7.6	7.1
Natural gas (bcm)	0.0	0.5	1.3	1.8	2.0	2.1	2.4	2.4
Total sales								
Crude oil (mn tonnes)	24.1	27.3	27.8	27.0	30.0	31.2	31.0	30.5
Natural gas (bcm)	21.1	21.6	22.0	22.3	22.7	22.3	22.6	21.8
Total sales (mn toe)	**42.9**	**46.6**	**47.4**	**46.9**	**50.3**	**51.1**	**51.2**	**50.0**
Total sales (mn boe)	**313**	**340**	**346**	**342**	**367**	**373**	**373**	**365**
Crude oil (%)	56	59	59	58	60	61	61	61
Natural gas (%)	44	41	41	42	40	39	39	39

(a) Includes ONGC's share of production from joint venture fields.

Source: Company data, Kotak Institutional Equities estimates.

ONGC's earnings are highly leveraged to crude prices

Earnings sensitivity of ONGC to key variables

	2008E			2009E			2010E		
	Downside	Base case	Upside	Downside	Base case	Upside	Downside	Base case	Upside
Exchange rate									
Rs/US$	42.0	43.0	44.0	42.0	43.0	44.0	42.0	43.0	44.0
Net profits (Rs mn)	202,154	211,907	221,659	203,216	212,495	221,773	229,265	238,694	248,124
Earnings per share (Rs)	94.5	99.1	103.6	95.0	99.3	103.7	107.2	111.6	116.0
% upside/(downside)	**(4.6)**		**4.6**	**(4.4)**		**4.4**	**(4.0)**		**4.0**
Average crude prices									
Crude price (US$/bbl)	63.0	65.0	67.0	58.0	60.0	62.0	58.0	60.0	62.0
Net profits (Rs mn)	199,481	211,907	224,326	199,772	212,495	225,211	225,741	238,694	251,643
Earnings per share (Rs)	93.3	99.1	104.9	93.4	99.3	105.3	105.5	111.6	117.7
% upside/(downside)	**(5.9)**		**5.9**	**(6.0)**		**6.0**	**(5.4)**		**5.4**
Cess									
Cess on domestic crude (Rs/tonne)	3,060	2,550	2,040	3,060	2,550	2,040	3,060	2,550	2,040
Net profits (Rs mn)	204,143	211,907	219,671	204,745	212,495	220,245	230,855	238,694	246,534
Earnings per share (Rs)	95.4	99.1	102.7	95.7	99.3	103.0	107.9	111.6	115.3
% upside/(downside)	**(3.7)**		**3.7**	**(3.6)**		**3.6**	**(3.3)**		**3.3**
Natural gas prices									
Natural gas price ceiling (Rs/'000 cum)	3,500	4,000	4,500	4,000	4,500	5,000	4,500	5,000	5,500
Net profits (Rs mn)	206,504	211,907	217,306	207,097	212,495	217,889	233,510	238,694	243,876
Earnings per share (Rs)	96.5	99.1	101.6	96.8	99.3	101.9	109.2	111.6	114.0
% upside/(downside)	**(2.5)**		**2.5**	**(2.5)**		**2.5**	**(2.2)**		**2.2**

Source: Kotak Institutional Equities estimates.

Technology

INFY.BO, Rs1951	
Rating	OP
Sector coverage view	Attractive
Target Price (Rs)	2,300
52W High -Low (Rs)	2439 - 1225
Market Cap (Rs bn)	1,120

Financials

March y/e	2007E	2008E	2009E
Sales (Rs bn)	138.9	180.1	232.1
Net Profit (Rs bn)	37.5	48.2	59.5
EPS (Rs)	67.0	83.8	103.4
EPS gth	*48.7*	*25.1*	*23.5*
P/E (x)	29.1	23.3	18.9
EV/EBITDA (x)	24.1	18.7	14.2
Div yield (%)	0.7	0.9	1.1

Shareholding, March 2007

	Pattern	% of Portfolio	Over/(under) weight
Promoters	16.5	-	-
FIIs	51.7	10.0	5.9
MFs	3.3	4.0	(0.1)
UTI	-	-	(4.1)
LIC	1.9	2.0	(2.1)

Infosys Technologies: Window of opportunity. Maintain OP

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- **Reduction in variable compensation payout can be another lever to protect margins**
- **Volumes growth can surprise on the upside**
- **Maintain Outperform rating with a Mar'09 DCF based target price of Rs2,300**

We believe that the risk- reward ratio in Infosys is favorable even at the current Re/ US$ rate. We believe that most of the negative news in the stock related to rupee appreciation and poor 4QFY07 performance is already in the price. Core business fundamentals remain intact; we expect another year of strong (39%) revenue growth. A flexible cost structure, pricing increase and aggressive cost optimization can ensure positive surprises on margins on the back of reduced expectations. We maintain our Outperform rating with a end-March 2009 DCF based target price of Rs2,300 (at Re/ US$ rate of 42) Key risk to our call: (a) reduction in FY2008 guidance, if any may be viewed negatively and (b) further appreciation of the rupee against the US$.

Margins—what can be done in the near term to stave off operating margin pressure? We believe that the company can partly offset the impact of rupee appreciation through levers such as

1. **Variable compensation may come to the rescue:** Infosys pays out nearly 30% of the offshore salaries in the form of variable compensation. Offshore salaries account for 13% of revenues—effectively 3.9% (30% of revenues) is the leverage available. Variable compensation calculations are complex but is dependent on three components (a) revenue growth target which in turn is linked with the guidance has the highest weightage (at around 40%) (b) OPM of individual business units has the second highest weightage (maybe around 30-40%) and (c) individual performance has a weight of 20-30%. We believe that the company may exceed revenue growth guidance—hence variable compensation linked to revenue growth may be paid out fully. Effectively, this leaves 120-150 bps of operating margin leverage related to OPM performance, which if not met would reduce the variable compensation pool partially. Infosys has a fairly transparent variable compensation structure; they would be able to pass on some of the burden to the employees. This view is reinforced by the fact that the company paid more than 100% of normal variable compensation in good times of FY2007 and less than 1x during the weak year of FY2006.
2. **Utilization rates can improve from hereon:** A 1% improvement in utilization rate can drive 30 bps improvement in operating margin. We expect 4% improvement in utilization rates adding 120 bps to margins. We further expect reduction in SG&A expenses
3. **Pricing:** We expect 4% pricing improvement for FY2008. This could add 160 bps to the margins in FY2008

Volumes remain strong: We forecast revenue growth of 39% in US$ terms for FY2008 as against the company guidance of 30%. Telecom and insurance verticals along with new service offerings are the drivers in our view.

Valuations: We forecast EPS of Rs83.8 for FY2008, Rs103.4 for FY2009 and Rs110 for FY2010. We base our earnings on Re/US$ rate of 42 for FY2008, 42 for FY2009 and 41 for FY2010. We maintain our Outperform rating with end-March 2009 DCF based target price of Rs2300. The implied P/E multiple works out to 23.5x FY2009, lower than historical multiple but fair noting impact of tax and currency on earnings growth over the next three years. Note that EPS would reduce to Rs80.2 for FY2008, Rs98.9 for FY2009 and Rs110 for FY2010 at a Re/US$ rate of 41

EBITDA margin decline can be restricted to 80 bps for FY2008 at a Re/US$ rate of 42

	%
EBITDA margin for FY2007	**31.60**
Less:	
Wage increase (onsite and offshore)	(3.15)
Rupee appreciation	(2.04)
Add:	
Pricing improvement	1.60
Variable comps and increase in fresher hiring	1.00
Utilization rates	1.20
SG&A efficiencies	0.60
EBITDA margins for FY2008E	**30.81**

Source: Company

Rs mn	2005	2006	2007	2008E	2009E	2010E
Income From Software Development						
Overseas	69,962	93,542	136,732	177,338	229,257	276,265
Domestic	1,335	1,668	2,198	2,726	2,849	3,147
Revenues	**71,296**	**95,210**	**138,930**	**180,064**	**232,106**	**279,413**
Software Development Costs	(37,647)	(50,654)	(74,580)	(99,194)	(128,975)	(158,391)
Gross profit	**33,650**	**44,556**	**64,350**	**80,870**	**103,132**	**121,022**
Selling and marketing exp	(4,610)	(6,005)	(9,290)	(11,333)	(14,876)	(18,027)
Administration exp	(5,690)	(7,639)	(11,150)	(14,103)	(17,810)	(21,513)
Total SG&A Expenses	(10,300)	(13,643)	(20,440)	(25,436)	(32,687)	(39,540)
EBITDA	**23,350**	**30,912**	**43,910**	**55,434**	**70,445**	**81,482**
Depreciation	(2,869)	(4,371)	(5,140)	(6,161)	(7,896)	(10,272)
EBIT	**20,481**	**26,541**	**38,770**	**49,273**	**62,550**	**71,210**
Interest	-	-	-	-	-	-
Other Income	1,239	1,380	3,750	5,150	5,805	7,859
Profit Before Tax	**21,720**	**27,921**	**42,520**	**54,424**	**68,355**	**79,069**
Provision for Tax	(3,256)	(3,132)	(5,100)	(6,283)	(8,908)	(15,859)
Net Profit	**18,464**	**24,790**	**37,420**	**48,141**	**59,447**	**63,210**
Minority Interest	-	(210)	(110)	(62)	(79)	(69)
Net Income	**18,464**	**24,580**	**37,310**	**48,079**	**59,367**	**63,141**
Extraordinaries	457	-	1,250	-	-	-
Net Profit- Reported	**18,922**	**24,580**	**38,560**	**48,079**	**59,367**	**63,141**
EPS (Rs/ share)	**34.2**	**45.0**	**67.0**	**83.8**	**103.4**	**110.0**
No of shares outstanding (mn)	540.2	550.2	562.8	574.0	574.0	574.0
Margins (%)						
Gross Profit margin	47.2	46.8	46.3	44.9	44.4	43.3
EBITDA Margin	32.8	32.5	31.6	30.8	30.4	29.2
EBIT Margin	28.7	27.9	27.9	27.4	26.9	25.5
NPM	25.9	26.0	26.9	26.7	25.6	22.6
Growth Rates (%)						
Revenues	46.9	33.5	45.9	29.6	28.9	20.4
Gross Profit	45.4	32.4	44.4	25.7	27.5	17.3
EBITDA	46.5	32.4	42.0	26.2	27.1	15.7
EBIT	50.9	29.6	46.1	27.1	26.9	13.8
Net Profit	47.4	34.3	50.9	28.7	23.5	6.3
Net Income	47.4	33.1	51.8	28.9	23.5	6.4
As percentage of Sales						
-Overseas Revenue	98.1	98.2	98.4	98.5	98.8	98.9
-Domestic Revenue	1.9	1.8	1.6	1.5	1.2	1.1
Revenues	100.0	100.0	100.0	100.0	100.0	100.0
Software Development Expenses	52.8	53.2	53.7	55.1	55.6	56.7
Gross Profit	47.2	46.8	46.3	44.9	44.4	43.3
Selling Expenses	6.5	6.3	6.7	6.3	6.4	6.5
Administrative Expenses	8.0	8.0	8.0	7.8	7.7	7.7
S G & A Expenses	14.4	14.3	14.7	14.1	14.1	14.2
EBITDA	32.8	32.5	31.6	30.8	30.4	29.2
Depreciation	4.0	4.6	3.7	3.4	3.4	3.7
EBIT	28.7	27.9	27.9	27.4	26.9	25.5
Net Profit	25.9	26.0	26.9	26.7	25.6	22.6
Tax Rate	15.0	11.2	12.0	11.5	13.0	20.1

Telecom

VSNL.BO, Rs454	
Rating	OP
Sector coverage view	Cautious
Target Price (Rs)	560
52W High -Low (Rs)	515 - 301
Market Cap (Rs bn)	129.5

Financials

March y/e	2007E	2008E	2009E
Sales (Rs bn)	40.4	48.2	53.8
Net Profit (Rs bn)	4.9	5.3	5.8
EPS (Rs)	17.2	18.6	20.3
EPS gth	*(7.9)*	*8.5*	*8.9*
P/E (x)	26.5	24.4	22.4
EV/EBITDA (x)	11.4	10.6	9.6
Div yield (%)	1.0	1.0	1.1

Shareholding, March 2007

	Pattern	% of Portfolio	Over/(under) weight
Promoters	76.2	-	-
FIIs	9.0	0.2	(0.2)
MFs	1.8	0.2	(0.2)
UTI	-	-	(0.4)
LIC	7.0	0.7	0.3

VSNL: TRAI recommendations on access at cable landing stations will not have a material impact on VSNL

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- **Access to CLS to be provided at a reasonable price, no impact on VSNL**
- **Pricing competition can increase; already built into our model**
- **A good time to look at VSNL stock**

TRAI recently released regulations mandating fair and open access of cable landing stations (CLS) to ILD operators. This is aimed at increasing competition in the IPLC market. At present, players such as VSNL and Reliance (Flag) own majority of the cable landing stations (CLS). TRAI has stipulated a time frame within which a CLS owner has to provide access to ILD operators on cost-plus prices. Given the entry of players such as AT&T and BT in the ILD market, we have already modeled sharp decline in bandwidth prices (though backed by strong growth in volumes) for VSNL. Also, VSNL had pro-actively reduced CLS access charges in the previous quarter; this revenue stream is now less than Rs100 mn per annum. We maintain our estimates and 12-month forward SOTP target price of Rs560. Key risk stems from continued delay in unlocking of land value and aggressive pricing competition.

New regulations make it easier for new operators to access CLS of incumbent operators. The TRAI has mandated sharing of CLS (Exhibit 1) with new ILD players on cost-plus prices. VSNL's revenues from CLS access is less than Rs100 mn per annum. More important, VSNL proactively reduced access charges in the previous quarter. The TRAI has laid out a time frame within which the owner of CLS will have to provide access facilitation services (maximum 25 days) or co-location services (approximately 25 days) to anybody asking for access to the CLS.

Competition set to increase further. The DOT had significantly reduced license fees for new players entering the ILD and NLD businesses. In the last 12-months, six new players have received ILD licenses, prominent ones being AT&T, BT and Dishnet. Easier access to CLS and submarine cable capacity will likely increase pricing competition. We believe that players like AT&T and BT can buy IRUs and offer complete circuit solution for traffic originating and terminating in India. However, these players would still have to buy capacity (or IRUs) from large submarine cable companies such as VSNL and RCL for traffic to and from India. For VSNL, this could mean shift in revenue pattern from enterprise segment to carrier segment; lower pricing but strong cash flows from sale of IRUs. We highlight that VSNL has been facing stiff pricing competition in the data segment in the last two quarters but this has been compensated by strong volume growth.

Capacities of various submarine cables in India and their landing stations

Submarine cable	Cable landing station	Owner	Type of cable system	Designed capacity (Gbps)	Equipped/ owned capacity (Gbps)
SMW3	Mumbai	VSNL	Consortium, protected	212	20
SMW4 (a)	Chennai, Mumbai	Bharti, VSNL	Consortium, protected	1,200	40
SAFE	Cochin	VSNL	Consortium, unprotected	5	5
FLAG (Reliance) (b)	Mumbai	VSNL	Hybrid, protected	160	20
i2i	Chennai	Bharti	Private, unprotected	8,400	160
Tata Indicom cable	Chennai	VSNL	Private, unprotected	5,100	320
Falcon	Mumbai	Reliance	Private, unprotected	2,560	80
Indo-Sri Lanka cable	Tuticorin	BSNL	Private, unprotected	960	10

Note:
(a) Bharti and VSNL own 20 Gbps of equipped capacity each.
(b) After the arbitration award by International Court, FLAG is allowed to upgrade capacity to 80 Gbps in both directions

Source: TRAI, Kotak Institutional Equities.

Automobiles

Freight rates move up in May

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- **Freight rates move up in May: Freight index is up 0.6%**

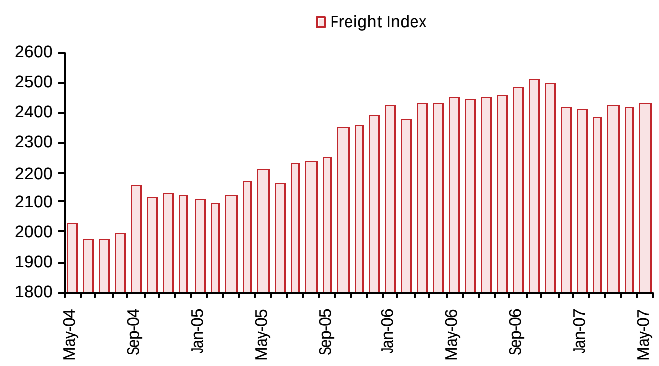
Freight rates in India moved up in May after remaining stable in April. Our freight index is up 0.6% mom in May while our diesel adjusted freight index is also up 2.3% mom. The M&HCV sales for the month of May have disappointed with both Tata Motors and Ashok Leyland reporting a 17% yoy decline. The decline in M&HCV growth rates is mainly on account of expensive vehicle loans. The M&HCV volumes have been lackluster for the last two months in spite of the increase in freight rates during this period.

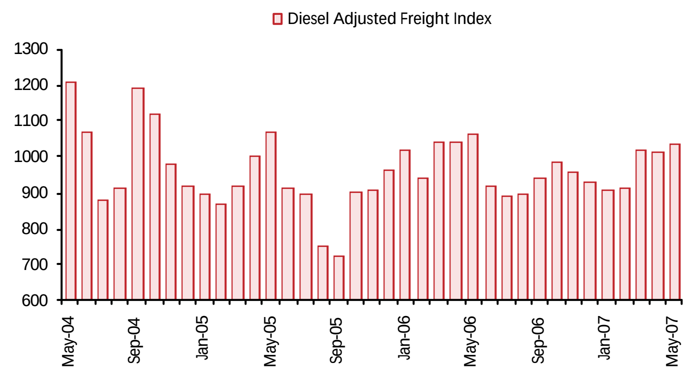
Our current FY2008 estimates for Tata Motors and Ashok Leyland factor in a domestic growth of 2.5% for M&HCVs and 10% for LCVs. Tata Motors has indicated a reduction in its production volumes and has also indicated a reduced demand for CV tyres to its suppliers for the months of June and July. This, in our opinion is a strong negative for the industry and given the high interest rates, if this trend were to spill over to the next month, CV growth could be impacted negatively.

Description of our proprietary Freight Index

We track freight rates across 26 routes in India using our proprietary freight index (FI). We adjust the freight rates for diesel prices and arrive at a "Diesel adjusted freight index" (DAFI), which is a measure of the operating profitability of freight operators. Historically, our DAFI has been a good leading indicator to CV industry growth rates. DAFI growth rates have historically risen and fallen ahead of CV cycle upturns and downturns respectively.

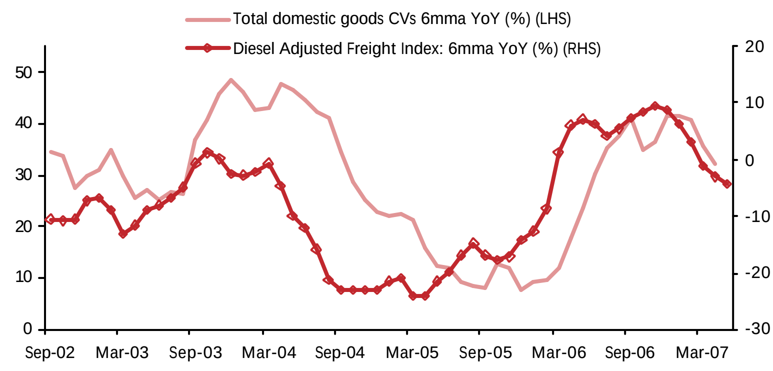
Our freight index is up 0.6% mom while diesel adjusted freight index is up 2.3% mom in May





Source: Kotak Institutional Equites

Our diesel adjusted freight index has historically been a good leading indicator for the CV cycle



Source: SIAM, Kotak Institutional Equites

Telecom

Sector coverage view			Cautious

		Price, Rs	
Company	**Rating**	**8-Jun**	**Target**
Bharti	U	815	600
Rcom	U	516	400
MTNL	U	155	135
VSNL	OP	454	560
Idea Cellular	U	118	100

5 mn GSM net adds in May 2007; Bharti continues to excel on execution

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- **GSM operators add 5 mn subs in May 2007 led by Bharti and Vodafone-Essar**
- **RCL did not report GSM numbers for a second month in succession**
- **De-activation continues for BSNL; others take advantage of its capacity problems**

GSM operators added 5 mn subs in May 2007, an increase from 4.1 mn in April 2007 led by strong subscriber additions by Bharti and Vodafone. RCL failed to provide its GSM subs figures for the second successive month but has added 1.4 mn total (GSM + CDMA) subs. Bharti led the industry adding 1.85 mn subs (36.7% of net additions), its highest net monthly additions to date. Idea also reported a good increase in subs addition after three sluggish months. We believe the increase in subs addition rate was likely aided by the introduction of Rs495 lifetime prepaid plans during the month and 'happy recharge', both of which will likely have a negative impact on ARPU/RPM. We expect the Indian market to add 6.75 mn subs/month and Bharti to add 1.92 mn subs/month in FY2008E. We maintain our FY2008, FY2009 and long-term (FY2017) subscribers forecast of 238 mn, 311 mn and 573 mn, respectively. We retain our DCF-based 12-month target prices of Rs600 for Bharti, Rs400 for RCL and Rs100 for Idea. Key risk is level of profitability.

Record additions for Bharti on the back of new plan launches. Bharti continued to lead the industry in subscriber growth with a net addition of 1.85 mn subs in May 2007, its highest in a single month. The increase in subs addition pace was likely aided by introduction of (a) lifetime prepaid plan at Rs495 as opposed to Rs999 previously and (b) ‘happy recharge’ plan with zero processing fee (lowest denomination of Rs249 per month) in the month of April. Both these plans will likely have a negative impact on ARPU/RPM (Exhibits 2 and 3). We see these price cuts as a precursor to further price reductions given (a) likely increase in competition as operators expand their reach and (b) high levels of industry profitability and returns. We are wary of the recent pricing developments given the high impact of pricing on valuations of Indian telecom stocks; a 1% decline in our pricing assumption leads to a decline of 3.4%, 9.4% and 2.9% in the fair value of Bharti, Idea, and RCL respectively (Exhibits 4 and 5). We see pricing pressure as the major risk to valuations of Indian telcos, a fact that we believe is getting lost in the street’s focus on volume growth, value-unlocking from restructuring of companies (de-merger of tower businesses into subsidiaries), and M&A-related speculation. Bharti would need to add 1.95 mn subs/month over the next 10 months to reach our end-FY2008E forecast of 60.2 mn.

Vodafone-Essar—not to be left behind, sets its own new record. Vodafone-Essar accelerated its pace of subscriber additions significantly, adding 1.5 mn subs in May 2007 as compared to its previous three-month average monthly addition of 1.1 mn. Vodafone-Essar added 1.5 mn subscribers (30% of GSM market net additions), substantially higher than its additions in the previous months (1.1 mn average net subs addition in the past three months). We find the acceleration in Vodafone-Essar’s subs addition pace impressive given its limited presence (16 out of 23 circles); we believe that Vodafone’s subs addition pace will increase further once it gets spectrum for the other 7 circles and establishes a pan-India presence. Vodafone-Essar is now the third largest wireless player with 29.2 mn subs ahead of BSNL with 28 mn subs.

RCL—add 1.4 mn subs, split between CDMA and GSM not available. RCL has reported a total subs addition of 1.4 mn for the month of May (an improvement over 1.1 mn in April 2007); however, it has not provided the split between GSM and CDMA. The last reported (and revised) GSM subs base of RCL stands at 3.38 mn (end-March 2007).

Idea Cellular—subs growth picks up after three sluggish months. Idea added 703,000 subs (13.9% of GSM market net adds, the highest for the company since Nov 2006). However, its performance in the three new circles remains disappointing—the company added only 63,900 subs in the three circles as opposed to its average net adds of 130,000 in these circles in the past six months. Idea would need to add 663,000 subs for the remaining 10 months of FY2008 to reach our end-FY2008 estimate of 21.9 mn subs.

BSNL—another slow month of subs addition. BSNL's subs addition pace slackened further with only 239,000 net additions in May. BSNL has de-activated subscribers for a second consecutive month with its subs base declining in four circles—Bihar, Karnataka, Kolkata and West Bengal.

Others—strong months for Aircel and Spice; MTNL remains a laggard. Aircel and Spice had strong monthly net adds of 481,000 and 192,000, 9.5% and 3.8% of GSM net adds, respectively. MTNL had another average month with net adds of 64,000 for the month.

Subscriber details of leading GSM cellular operators ('000)

	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
Subs ('000)													
Bharti Airtel	21,860	23,073	24,338	25,649	27,061	28,612	30,262	31,974	33,732	35,440	37,141	38,892	40,744
Vodafone-Essar	16,768	17,544	18,399	19,380	20,357	21,267	22,275	23,306	24,414	25,343	26,442	27,703	29,209
IDEA Cellular	8,063	8,537	9,122	9,735	10,364	10,980	11,841	12,442	13,072	13,640	14,011	14,563	15,267
BPL	1,293	1,297	1,285	1,043	1,045	1,049	1,053	1,056	1,062	1,066	1,071	1,077	1,082
Spice Telecom	2,028	2,055	2,095	2,148	2,197	2,266	2,357	2,450	2,520	2,579	2,729	2,815	3,007
Reliance	2,156	2,317	2,517	2,737	2,958	3,184	3,410	3,641	3,876	4,111	4,348	4,348	4,348
MTNL	2,097	2,170	2,238	2,264	2,290	2,326	2,375	2,425	2,498	2,579	2,747	2,484	2,548
BSNL	18,001	18,294	19,031	20,063	20,936	22,054	22,975	23,619	24,442	25,444	27,429	27,756	27,994
Others	3,025	3,199	3,391	3,601	3,804	4,005	4,238	4,513	4,802	5,095	5,514	5,928	6,409
Total market	**75,290**	**78,485**	**82,415**	**86,620**	**91,014**	**95,742**	**100,786**	**105,425**	**110,420**	**115,297**	**121,431**	**125,566**	**130,608**
Market share of subs (%)													
Bharti Airtel	29.0	29.4	29.5	29.6	29.7	29.9	30.0	30.3	30.5	30.7	30.6	31.0	31.2
Vodafone-Essar	22.3	22.4	22.3	22.4	22.4	22.2	22.1	22.1	22.1	22.0	21.8	22.1	22.4
IDEA Cellular	10.7	10.9	11.1	11.2	11.4	11.5	11.7	11.8	11.8	11.8	11.5	11.6	11.7
BPL	1.7	1.7	1.6	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.8
Spice Telecom	2.7	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.3
Reliance	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.5	3.5	3.6	3.6	3.5	3.3
MTNL	2.8	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.3	2.2	2.3	2.0	2.0
BSNL	23.9	23.3	23.1	23.2	23.0	23.0	22.8	22.4	22.1	22.1	22.6	22.1	21.4
Others	4.0	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.4	4.5	4.7	4.9
Growth (%)													
Bharti Airtel	5.7	5.5	5.5	5.4	5.5	5.7	5.8	5.7	5.5	5.1	4.8	4.7	4.8
Vodafone-Essar	4.4	4.6	4.9	5.3	5.0	4.5	4.7	4.6	4.8	3.8	4.3	4.8	5.4
IDEA Cellular	5.5	5.9	6.8	6.7	6.5	5.9	7.8	5.1	5.1	4.3	2.7	3.9	4.8
BPL	(1.2)	0.4	(1.0)	(18.8)	0.2	0.4	0.3	0.3	0.6	0.3	0.5	0.6	0.5
Spice Telecom	2.2	1.3	2.0	2.5	2.3	3.1	4.0	3.9	2.9	2.3	5.8	3.1	6.8
Reliance	7.3	7.5	8.6	8.7	8.1	7.6	7.1	6.8	6.5	6.0	5.8	-	-
MTNL	4.0	3.4	3.1	1.2	1.2	1.5	2.1	2.1	3.0	3.2	6.5	(9.6)	2.6
BSNL	2.4	1.6	4.0	5.4	4.4	5.3	4.2	2.8	3.5	4.1	7.8	1.2	0.9
Others	6.9	5.8	6.0	6.2	5.6	5.3	5.8	6.5	6.4	6.1	8.2	7.5	8.1
Total market	**4.4**	**4.2**	**5.0**	**5.1**	**5.1**	**5.2**	**5.3**	**4.6**	**4.7**	**4.4**	**5.3**	**3.4**	**4.0**
Net monthly adds ('000)													
Bharti Airtel	1,176	1,212	1,265	1,311	1,413	1,551	1,650	1,712	1,758	1,708	1,701	1,751	1,851
Vodafone-Essar	705	777	855	981	977	910	1,008	1,032	1,108	929	1,099	1,261	1,506
IDEA Cellular	422	474	584	613	629	616	862	601	629	568	371	553	703
BPL	(15)	5	(13)	(242)	3	4	4	4	6	4	5	6	5
Spice Telecom	43	27	40	53	49	69	91	92	70	59	150	86	192
Reliance	146	161	200	220	222	225	226	231	235	235	237	-	-
MTNL	80	72	68	26	26	35	49	50	74	81	168	(263)	64
BSNL	417	293	737	1,032	873	1,118	921	643	824	1,002	1,985	327	239
Others	194	174	193	210	203	201	233	275	290	292	420	413	481
Total market	**3,168**	**3,195**	**3,930**	**4,205**	**4,394**	**4,728**	**5,044**	**4,639**	**4,994**	**4,877**	**6,135**	**4,134**	**5,042**
Market share of net adds (%)													
Bharti Airtel	37.1	37.9	32.2	31.2	32.1	32.8	32.7	36.9	35.2	35.0	27.7	42.4	36.7
Vodafone-Essar	22.3	24.3	21.8	23.3	22.2	19.2	20.0	22.2	22.2	19.0	17.9	30.5	29.9
IDEA Cellular	13.3	14.8	14.9	14.6	14.3	13.0	17.1	13.0	12.6	11.6	6.0	13.4	13.9
BPL	(0.5)	0.1	(0.3)	(5.8)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Spice Telecom	1.4	0.8	1.0	1.3	1.1	1.5	1.8	2.0	1.4	1.2	2.5	2.1	3.8
Reliance	4.6	5.0	5.1	5.2	5.0	4.8	4.5	5.0	4.7	4.8	3.9	-	-
MTNL	2.5	2.3	1.7	0.6	0.6	0.7	1.0	1.1	1.5	1.7	2.7	(6.4)	1.3
BSNL	13.1	9.2	18.8	24.6	19.9	23.6	18.3	13.9	16.5	20.5	32.4	7.9	4.7
Others	6.1	5.4	4.9	5.0	4.6	4.2	4.6	5.9	5.8	6.0	6.8	10.0	9.5
Circlewise subs ('000)													
Metros	16,654	17,104	17,577	17,924	18,525	18,977	19,472	20,072	20,634	21,322	21,959	22,182	22,855
Circle A	26,646	27,813	29,359	30,825	32,443	34,191	36,059	37,443	39,237	40,717	42,680	44,453	46,252
Circle B	24,788	25,951	27,512	29,462	31,101	33,073	35,097	37,130	39,137	41,072	43,543	45,103	47,090
Circle C	7,201	7,616	7,966	8,409	8,945	9,501	10,159	10,779	11,412	12,185	13,250	13,828	14,411
Total	**75,290**	**78,485**	**82,415**	**86,620**	**91,014**	**95,742**	**100,786**	**105,425**	**110,420**	**115,297**	**121,431**	**125,566**	**130,608**
Circlewise net adds ('000)													
Metros	438	450	473	347	600	452	495	601	561	688	637	223	673
Circle A	1,204	1,167	1,546	1,465	1,618	1,749	1,867	1,385	1,794	1,480	1,963	1,772	1,800
Circle B	1,054	1,163	1,561	1,949	1,639	1,972	2,024	2,033	2,007	1,935	2,470	1,560	1,987
Circle C	473	415	350	443	536	555	659	620	632	774	1,064	578	583
Total	**3,168**	**3,195**	**3,930**	**4,205**	**4,394**	**4,728**	**5,044**	**4,639**	**4,994**	**4,877**	**6,135**	**4,134**	**5,042**
Circlewise subs (%)													
Metros	22	22	21	21	20	20	19	19	19	18	18	18	17
Circle A	35	35	36	36	36	36	36	36	36	35	35	35	35
Circle B	33	33	33	34	34	35	35	35	35	36	36	36	36
Circle C	10	10	10	10	10	10	10	10	10	11	11	11	11
Circlewise net adds (%)													
Metros	14	14	12	8	14	10	10	13	11	14	10	5	13
Circle A	38	37	39	35	37	37	37	30	36	30	32	43	36
Circle B	33	36	40	46	37	42	40	44	40	40	40	38	39
Circle C	15	13	9	11	12	12	13	13	13	16	17	14	12

Source: Cellular Operator's Association of India, Compiled by Kotak Institutional Equities

Bharti's new plans will put pressure on others to match its lower tariffs

Comparison of estimated prepaid voice revenue/min for leading wireless operators (Rs)

		Bharti (a)	Bharti (a)	BSNL	Idea	RCL	TTSL
Monthly refill amount		400	249	337	350	337	337
Service tax @ 12%		44	27	37	39	37	37
Outgoing ARPU		**356**	**222**	**300**	**311**	**300**	**300**
Fixed (processing) charges		—	—	125	112	151	—
Maximum talk value		**356**	**222**	**175**	**199**	**149**	**300**
Blended average tariffs (Rs/min)		**1.48**	**1.67**	**1.16**	**1.74**	**1.54**	**2.04**
Local 'on-net' tariff	40%	1.25	1.49	0.90	0.99	0.99	1.80
Local 'off-net' tariff (b)	40%	1.25	1.49	1.05	1.99	1.79	1.80
Average DLD tariff (c)	20%	2.40	2.40	1.90	2.75	2.14	3.00
Billing pulse (sec)		**60**	**60**	**60**	**60**	**60**	**1**
Effective tariff (Rs/min) (d)		1.63	1.84	1.28	1.74	1.69	2.04
Outgoing MOU (mins)		**219**	**120**	**137**	**115**	**88**	**147**
Share of outgoing MOUs (%)		46	46	46	46	46	46
Total MOU (mins)		**475**	**262**	**298**	**249**	**191**	**319**
Termination revenues (e)		46	25	29	24	19	31
Gross ARPU (Rs/month)		**402**	**247**	**329**	**336**	**318**	**331**
Revenue per minute (RPM)		**0.85**	**0.94**	**1.10**	**1.35**	**1.66**	**1.04**

Notes:
(a) Bharti's recently launched happy recharge plan with zero processing fee
(b) Assuming 50:50 ratio of local M2M and M2F calls.
(c) Assuming a uniform distribution of DLD calls across various categories.
(d) Effective tariff assumed 10% higher than the average rate due to a 60-second billing pulse.
(e) Assuming 60% of incoming calls are off-network calls, which result in a termination charge of Rs0.30/min.

Source: Companies, Kotak Institutional Equities estimates.

Bharti's new Rs495 lifetime prepaid plan has lower RPM than the Rs999 plan

Analysis of economics of Bharti's lifetime prepaid plans (Rs/annum)

	Rs495 plan		Rs999 plan
One-time fee (Rs)	495		999
Capex	3,010	Assuming capex at US$70/sub	3,010
Recurring economics			
Fixed recurring charges (a)	24		48
Outgoing ARPU (Rs/month)	100	Enough to take care of six-monthly recharge	100
Outgoing local airtime tariff (Rs/min)	2.0		2.0
Outgoing MOU (min/month)	36	Based on 70-seconds call duration	36
Incoming MOU (min/month)	108	Assuming 3X outgoing MOU	108
Total MOU (min/month)	144	4QFY07 blended MOU was 475	144
Incoming ARPU (Rs/month)	32		32
ARPU (Rs/month)	**157**	**4QFY07 ARPU wasRs406**	**180**
RPM (Rs/min)	**1.09**	**4QFY07 RPM was Rs0.85**	**1.25**
Revenues	1,882		2,165
EBITDA (@ 42% margin)	791	4QFY07 EBITDA margin = 41.3%	909
Depreciation	241		241
EBIT	550		668
EBIT * (1-t)	484	FY2007 tax rate = 12%	588
CROCI (%)	**24.1**		**27.5**

Note:

(a) Recurring charges under the Rs495 plan factor in the required recharge of Rs200 every six months; however, our assumed ARPU of Rs100/month is sufficient to take care of the mandatory six-monthly recharge.

Source: Kotak Institutional Equities estimates.

A moderate change in pricing results in significant impact on valuation

Valuation sensitivity to change in pricing

	Change in pricing from base case							
	-15%	-10%	-5%	Base case	5%	10%	15%	Sensitivity (d)
12-month forward DCF valuation (Rs)								(%)
Bharti	405	468	526	611	696	753	815	3.4
Idea	42	62	81	101	121	141	161	9.4
RCL	286	327	368	410	449	490	531	2.9
RoACE in terminal year, FY2017E (%)								
Bharti	30	35	39	46	53	57	62	
Idea	14	19	24	27	35	40	46	
RCL	18	20	21	23	25	27	28	

Note:

(a) Lower sensitivity of RCL versus peers reflects a lower proportion of revenues from wireless.

(b) Highlighted figures denote required returns to justify current stock prices.

(c) RCL's ROACE is lower versus peers due to revaluation of assets, lower returns in wireless and from other assets (long distance network).

(d) Sensitivity defined as % change in DCF valuation per percent change in pricing (RPM) assumption

Source: Kotak Institutional Equities estimates.

Idea's earnings estimates are the most sensitive to change in pricing assumptions

EPS sensitivity to change in pricing assumption, FY2008E-FY2009E

	Change in pricing from base case							
	-15%	-10%	-5%	Base case	5%	10%	15%	Sensitivity (d)
FY2008E EPS (Rs)								(%)
Bharti	31.7	32.8	33.9	35.1	36.2	37.3	38.5	0.7
Idea	2.4	2.7	3.0	3.3	3.6	3.9	4.1	2.4
RCL	19.5	20.4	21.3	22.2	23.1	24.0	24.9	0.9
FY2009E (EPS)								
Bharti	42.3	43.7	45.2	46.7	48.2	49.7	51.2	0.7
Idea	3.0	3.4	3.7	4.1	4.5	4.9	5.2	2.5
RCL	28.2	29.3	30.4	31.6	32.7	33.8	34.9	0.8

Note:

(a) Lower sensitivity of RCL versus peers reflects a lower proportion of revenues from wireless.

(b) Highlighted figures denote required returns to justify current stock prices.

(c) RCL's ROACE is lower versus peers due to revaluation of assets, lower returns in wireless and from other assets (long distance network).

(d) Sensitivity defined as % change in EPS per percent change in pricing (RPM) assumption

Source: Kotak Institutional Equities estimates.

Strategy

Sector coverage view	N/A

India equity strategy: A summer of rising mercury (and a bit of opportunity)

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- **Strategy: Stick to large caps, avoid rate sensitives, overweight PSU banks, select IT**
- **Market view: Volatility ahead, fairly valued but risk-prone, 2HFY08 consolidation**
- **Multiple event risks: FOMC, issuances, softlanding data, monsoons, politics**
- **BSE Sensex fair band: 12,800-15,400 on FY09E earnings (11,300-13,600 FY08E)**
- **Overweight: PSU Banks, Construction, Industrials, IT, Oil & Gas, Utilities**
- **Neutral: Autos, Private Banks, Consumers, Media**
- **Underweight: Cement, Chemicals, Metals, Pharmaceuticals, Telecom**
- **Top Ten: In - Infosys, ONGC, PNB; Out — Satyam, RPL, SBI**

We advise investors to capitalize on pullbacks as buying opportunities, as the market flies into the turbulence of multiple uncertainties. A series of event risks — the June 28-29 FOMC meeting, mega issuances during the next two weeks, data on softlanding/quarterly results, greater clarity on monsoons (July-August) and political alignments before the July 18, 2007 Presidential polls — will likely test market nerves ahead. While each of the other factors have the ability to impact market sentiment, we believe that the bottom line is that our thesis of 2HFY08 market consolidation will hold good as long as a normal monsoon douses agro price inflation. This will allow monetary policy to top off, perhaps with a final CRR hike in case of large-scale forex intervention to stem Rupee appreciation. This will, in turn, softland the economy into a pretty strong FY2008E 8.2% real GDP growth. As our expected 1QFY08E inflation top off has demonstrated, the recent bout of inflation reflected reversible supply shocks rather than fundamental overheating. In our Top Ten, we introduce Infosys, ONGC and PNB in place of Satyam, RPL and SBI on relatively favorable risk-reward balance (Exhibits 1-2). SBI and RPL have yielded us pretty solid returns on our Top Ten portfolio which has outperformed the BSE Sensex by 2.1% YTD.

Market view: Volatility ahead, fairly valued, but risk-prone; 2HFY08 consolidation. We believe that a series of event risks – the June 28-29 FOMC meeting, mega issuances during the next two weeks, first set of data on softlanding (early July onwards), greater clarity on monsoons (July-August) and political alignments before the July 18, 2007 Presidential polls – will likely test market nerves in the coming two months.

- While the market is likely to be susceptible to event risks, the probability of actual damage – Fed hinting at a rate hike rather than a longish pause, large-scale portfolio rebalancing to accommodate mega issues, poor macro data/results, and sudden political re-alignment before the presidential polls – do not appear very significant.
- As a matter of fact, we believe that the key issue really is if a normal monsoon will douse agro price inflation. This will then allow monetary policy to top off at a neutral interest rate regime, perhaps with a CRR hike in case of significant forex intervention in order to stem Rupee appreciation. This, in turn, will likely enable the economy to softland to pretty strong 8%+ real GDP growth.
- It is nevertheless difficult to ignore the risks of over-reaction. As May 2006 demonstrated, market uncertainty tends to be amplified at the cusp of the switchover from FY09E earnings from FY08E earnings which itself often becomes a function of the market mood.

- Our market indicators – 1-year rolling forward P/E, M3 growth adjusted valuations and implied equity risk premium – all point to relatively rich valuations on 1-year rolling forward basis (Exhibits 3-4). This implies that a shock that pushes the clock back to FY08 earnings, could pull the market back, providing decent entry points.

A closer look at event risks ahead: Fed, IPOs, softlanding, monsoons, politics. We expect some degree of risk repricing of emerging market paper as expectations of immediate US Fed funds rate cuts cool down. Markets will thus look the June 27-28, 2007 FOMC meeting statement for cues about future monetary policy, including the possibility – low, in our view – of a rate hike.

- This will likely put a question mark on the degree to which the US$ 20 bn FY2008E issuance pipeline – given the two mega issues ahead – are able to induce additive allocations rather than cannibalizing the existing portfolio.
- Emerging data on IIP and credit and first quarter results will test our expectation of FY2008E 8.2% real GDP growth rate (and 20.5% BSE Sensex EPS, ex energy, commodities; Exhibit 5) softlanding. A gradual normalization in credit offtake – we expect 21%E in FY2008E from 26% last year – already suggests some softening.
- Clarity about the progress of the south-west monsoon 2007 will likely provide a direction to the markets in July-August 2007. Given the backdrop of agro supply shocks, monsoons will determine the immediate path of inflation, interest rates and the Rupee. Interest rate sensitives – autos, banks – and Rupee sensitives – IT – join the usual suspects – agro commodities, consumers – as monsoon sensitives.
- The July 18 2007 presidential elections will provide a pointer to the alignment of political forces between the Congress-led ruling UPA and the BJP-led opposition NDA in the run up to the summer 2009 general elections. Key watch: the revealed political preference of Mayawati, the recently elected chief minister of UP, with her large scheduled caste votebank in the Hindi heartland.

Strategy: Buy on dips, stick to large caps, avoid rate sensitives, overweight banks, IT. We believe risk and reward are now balanced in Indian equities, with reasonable valuations pitted against multiple risks. We, therefore, continue to advise investors to buy on dips, especially should the series of event risks ahead open up better entry points.

- Given our view of 1HFY08E market volatility, we continue to favor large caps over mid-caps.
- In case of mid-caps, we limit ourselves to the core India themes of our mid-cap infrastructure basket for the assurance of scalability. Besides, we also continue to stress the importance of liquidity in a market prone to event risks. In view of large-scale issuances, we also expect some re-allocation of portfolios from less liquid, less quality names.
- We continue to overweight PSU banks on reasonable valuations and a sustained regime switch to stable yields and rising lending rates from rising yields and cheap lending rates. This assumes that a monetary policy tops off, perhaps with a final 50bp CRR hike especially in the event of large-scale RBI forex intervention to arrest the rising overvaluation of the Rupee.
- We continue to favor IT stocks given our view that the Rupee is likely to retrace to Rs43/USD levels in FY2008E (although immediate IPO flows could exert pressure). As a matter of fact, the RBI has already begun to intervene – US$21.5 bn FY2008E forex intervention – to cap Rupee appreciation following the inflation top off. Besides, the US Dollar is also beginning to strengthen as hopes of an immediate US Fed cut recede.
- We continue to avoid interest rate sensitives – autos, for example – given our expectation of a 50-100 bp hike in lending rates in FY2008E on the back of a persistent credit gap and a possible CRR hike.

Exhibit 1: Kotak Institutional Equities Top 10 List

8-Jun-07			CMP	Mkt Cap	Target	EPS (Rs)			P/E (X)			EV/EBDITA (X)			Liquidity: 3mo
Companies	**Sector**	**Rating**	**(Rs)**	**(mn USD)**	**(Rs)**	**2007**	**2008E**	**2009E**	**2007**	**2008E**	**2009E**	**2007**	**2008E**	**2009E**	**(Rs mn)**
Larsen & Toubro	Industrials	OP	1,905	13,235	2,125	65.1	73.3	87.9	29.3	26.0	21.7	19.3	16.1	13.3	186
Infosys technologies	Technology	OP	1,954	27,260	2,300	67.0	83.8	103.4	29.2	23.3	18.9	24.1	18.7	14.3	3,805
Punjab National Bank	Banking	OP	506	3,879	610	48.8	60.5	66.3	10.4	8.4	7.6	0.0	0.0	0.0	422
Tata Power	Utilities	IL	580	2,999	670	20.2	33.4	44.3	28.8	17.4	13.1	14.1	10.0	8.4	180
Oil & Natural Gas Corporation	Energy	OP	856	44,503	1,075	86.8	99.1	99.3	9.9	8.6	8.6	4.2	3.7	3.4	1,109
Wipro	Technology	OP	541	19,170	655	20.3	24.3	30.4	26.7	22.2	17.8	21.7	16.9	12.7	807
Bharat Heavy Electricals	Industrials	OP	1,343	15,982	1,350	48.7	63.6	74.5	27.6	21.1	18.0	12.9	12.1	10.0	1,639
HDFC Bank	Banking	IL	1,113	8,638	1,180	35.7	47.0	60.7	31.1	23.6	18.3	0.0	0.0	0.0	870
Maruti Udyog	Automobiles	OP	768	5,397	910	54.0	58.4	68.5	14.2	13.1	11.2	7.1	6.0	5.0	753
Mid Cap Basket															
Indian Overseas Bank	Banking	OP	112	1,483	150	18.5	20.6	23.0	6.0	5.4	4.9	0.0	0.0	0.0	43
Kalpataru	Transmission	OP	1,345	866	1,495	60.2	77.4	91.8	22.4	17.4	14.6	13.8	10.9	8.9	64
Mahindra Gesco	Property	OP	575	587	920	10.1	16.3	44.4	57.0	35.3	12.9	32.4	21.5	10.3	448
NCCL	Construction	OP	168	848	204	7.3	8.9	12.0	23.0	18.9	14.0	15.8	11.5	9.2	206
Maharashtra Seamless	Industrials	OP	587	1,011	600	32.7	42.6	46.3	18.0	13.8	12.7	11.0	8.1	6.9	120
BSE-30			**14,064**												

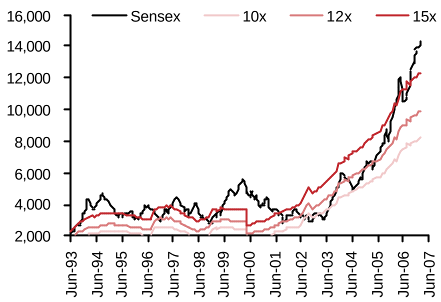
Source: Company, Bloomberg, Kotak Institutional Equities.

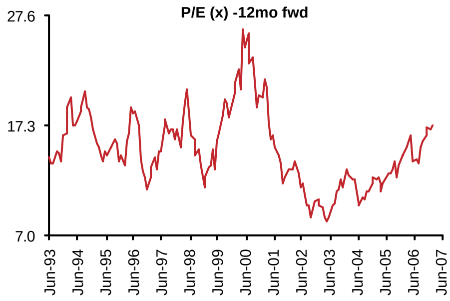
KS Model Portfolio

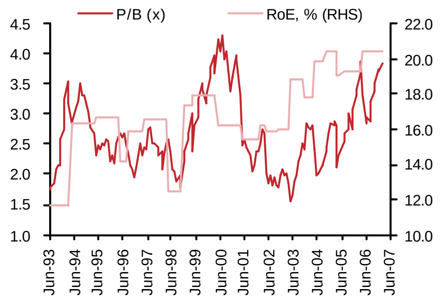
Company	8-Jun Price (Rs)	Rating	Weightage, % BSE-30	Weightage, % KS Reco	Diff (bps)
Punjab National Bank	510	OP	-	2.0	200
State Bank of India	1,388	OP	3.7	3.0	-
Indian Overseas Bank	114	OP	-	0.8	80
Banking			**3.7**	**6.5**	**280**
HDFC Bank	1,127	IL	3.2	5.2	200
ICICI Bank	911	IL	9.1	9.1	-
HDFC	1,831	IL	4.6	-	(464)
Pvt Banking/ Financing			**17.0**	**14.3**	**(264)**
Infosys Technologies	1,939	OP	9.7	11.7	200
Satyam Computer Services	465	IL	3.2	3.2	-
Wipro	532	OP	1.7	3.7	200
Technology			**17.3**	**18.6**	**139**
Reliance Industries	1,687	U	14.4	10.1	(429)
Chemicals			**14.4**	**10.1**	**(429)**
Hindustan Lever	195	IL	2.4	0.4	(200)
ITC	158	OP	4.6	4.6	-
Consumers			**7.0**	**5.0**	**(200)**
Ranbaxy Laboratories	380	OP	1.1	1.1	-
Sun Pharmaceuticals	1,075	OP	-	1.0	100
Pharmaceuticals			**3.2**	**2.1**	**(109)**
Tata Motors	687	OP	1.9	1.9	-
Maruti Udyog	777	OP	1.0	3.0	200
Bajaj Auto	2,218	OP	1.7	1.7	-
Automobiles			**5.4**	**6.6**	**121**

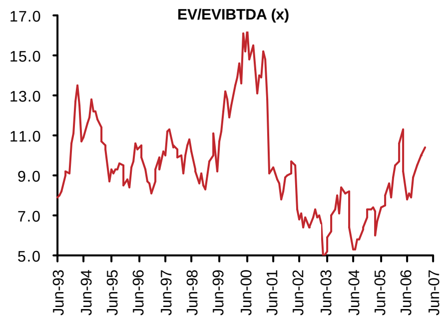
Company	8-Jun Price (Rs)	Rating	Weightage, % BSE-30	Weightage, % KS heco	Diff (bps)
Bharat Heavy Electricals	1,340	OP	2.6	4.6	200
Larsen & Toubro	1,920	OP	5.4	7.4	200
Industrials			**8.0**	**12.0**	**400**
NTPC	156	IL	2.1	2.1	-
Tata Power	592	IL	-	2.0	200
Utilities			**3.1**	**4.1**	**106**
Grasim Industries	2,452	OP	2.0	2.0	-
ACC	822	IL	1.1	1.1	-
Cement			**4.6**	**3.1**	**(149)**
Bharti Airtel Limited	825	U	6.1	3.7	(239)
Reliance Communication	516	U	1.8	-	(176)
Telecom	**-**	**0**	**7.9**	**3.7**	**(415)**
Maharashtra Seamless	596	OP	-	0.8	80
NCCL	172	OP	-	0.8	80
Mahindra Gesco	602	OP	-	0.8	80
Kalpataru	1,350	OP	-	0.8	80
Infrastructure basket			**-**	**3.2**	**320**
Oil & Natural Gas Corporation	864	OP	4.1	6.1	200
Bharat Petroleum	341	OP	-	0.5	50
Reliance Petroleum	99	OP	-	0.5	50
Energy			**4.1**	**7.1**	**300**
Tata Iron & Steel Co	618	U	3.1	3.1	-
Sterlite Industries	541	OP	-	0.5	50
Metals			**4.5**	**3.6**	**(94)**
BSE-30			**100.0**	**100.0**	**-**

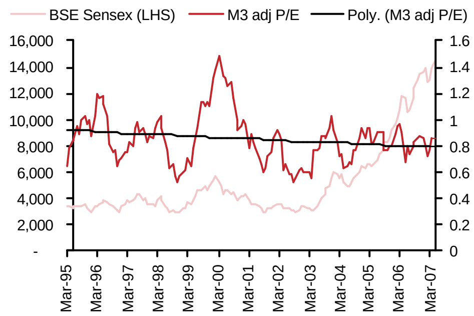
Exhibit 3: Sensex 12-month rolling forward P/E at 16.6x
Sensex (BSE-30) P/B, EV/EBITDA and 12momth forward rolling P/E, April 1993 - current











Source: Kotak Institutional Equities.

Exhibit 4: Equity risk premium has dipped below 400bps benchmark
Equity risk premium (%) for BSE Universe, using our proprietary tool, Whizdom

Equity risk premium		Implied BSE Sensex	
	Rf = 8%	Rf = 7.5%	Rf = 7%
5.5	10,580	11,407	12,369
5.0	11,220	12,147	13,234
4.5	11,941	12,987	14,227
4.0	12,757	13,948	15,378
3.5	13,691	15,061	16,731

Source: Kotak Institutional Equities estimates.

Exhibit 5: Valuation summary of BSE-30 sectors

8-Jun-07	Mkt cap	EPS Growth, %				PER (X)			EV/EBITDA (X)		Price/BV (X)		Div Yield (%)		RoE, %	
Company	**(US$ m)**	**2006**	**2007E**	**2008E**	**2009E**	**2007**	**2008E**	**2009E**	**2007E**	**2008E**	**2007E**	**2008E**	**2007E**	**2008E**	**2007E**	**2008E**
Banking	57,677	13.3	14.2	19.5	18.9	22.9	19.2	16.1	—	—	3.8	3.1	1.0	1.1	16.6	16.3
Technology	81,144	28.6	44.4	25.3	22.9	27.5	21.9	17.9	20.5	16.0	9.2	7.2	0.9	1.4	33.5	32.6
Chemicals	57,146	22.6	21.8	(10.0)	45.7	21.9	24.4	16.7	12.8	13.7	3.2	2.9	0.7	0.7	14.6	11.9
Consumers	24,851	21.2	18.9	16.0	13.8	24.2	20.9	18.3	16.4	13.1	7.6	6.7	2.5	2.8	31.2	31.9
Pharmaceuticals	10,068	(15.1)	136.7	(17.2)	20.0	18.2	22.0	18.3	13.2	14.8	3.9	3.5	1.4	1.4	21.3	15.7
Metals	13,132	6.3	34.3	(13.1)	(11.6)	7.7	8.9	10.1	4.4	4.2	1.8	1.2	2.0	2.6	22.9	14.0
Automobiles	21,148	25.1	17.1	8.3	14.2	16.0	14.7	12.9	7.7	6.8	3.8	3.2	1.8	2.0	24.1	22.0
Energy	44,937	14.0	18.2	14.2	0.3	10.0	8.7	8.7	4.2	3.7	2.1	1.8	3.5	3.8	20.8	21.0
Industrials	29,071	57.2	55.2	23.5	19.1	28.4	23.0	19.3	15.2	13.7	7.3	5.7	0.7	0.8	25.8	24.8
Cement	13,266	28.9	82.6	9.9	4.4	12.8	11.7	11.2	7.4	6.5	3.4	2.7	1.0	1.2	26.5	23.0
Telecom	63,662	(107.4)	192.9	54.4	37.0	34.9	22.6	16.5	19.3	12.8	8.8	6.4	—	—	25.2	28.5
Utilities	33,981	17.0	11.6	7.1	11.1	19.1	17.8	16.0	12.7	12.6	2.4	2.2	2.0	2.2	12.7	12.6
bse30	**450,083**	**20.4**	**33.3**	**13.3**	**16.8**	**19.7**	**17.4**	**14.9**	**10.8**	**9.7**	**4.0**	**3.4**	**1.3**	**1.5**	**20.5**	**19.5**
BSE-30 ex-Energy	**405,146**	**22.4**	**37.6**	**13.1**	**20.8**	**22.1**	**19.5**	**16.2**	**13.3**	**11.7**	**4.5**	**3.7**	**1.0**	**1.3**	**20.4**	**19.2**
BSE-30 ex-Energy ex Com	**334,868**	**24.8**	**41.5**	**20.5**	**20.2**	**23.9**	**19.8**	**16.5**	**14.9**	**12.3**	**5.2**	**4.3**	**1.0**	**1.3**	**21.7**	**21.7**

(a) EV/EBITDA excludes Banking Sector

Source: Company reports, Kotak Institutional Equities estimates.

Economy

Sector coverage view N/A

India still not overheating: On why the Economist is wrong again!

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- **The Economist's overheating thesis: Logical fallacies, data misinterpreted**
- **Inflation demand rather than supply shock driven: Disproved by expected top off**
- **Monetary policy more effective than supply measures: Can CRR hikes grow wheat?**
- **Investment not sufficient to sustain 9% real GDP growth: No dispute**
- **Rate hikes insufficient to slow growth: Real lending rates approaching nuetral**
- **Price stability supports growth: But what about excessive monetary tightening?**

We believe that the venerable Economist is wrong twice over in claiming India overheating. There is, of course, nothing unusual with the basic thesis that all upcycles must eventually overheat. Simplistic macroeconomics, however, do not quite apply in an economy as complex as India's, especially at a time of structural transformation. The Economist tries to bust five 'common myths' propagated by 'local economists' to make a case for India overheating. It is unfortunately mistaking reality for myths by ignoring the fineprint (and sometimes, the headings in bold as well).

Myth #1: Supply shock driven inflation. The Economist argues that the supply shock driven inflation theory – in which we believe (Exhibit 1) – is a 'myth'. Pray why? Because "manufactured goods have accounted for much more of the rise in inflation over the past year". Manufacturing inflation accounted for 55.9% of FY2007 WPI inflation, higher than 40.4% from primary articles price inflation (Exhibit 2).

- This ignores the fact that primary articles contributed almost <u>double</u> their 22% WPI weightage. And manufacturing actually contributed <u>less</u> than its 63.7% weight.
- Besides, manufactured food products like edible oils and cotton textiles, whose prices depend on the oilseed and cotton crops, contributed about 10% of WPI inflation and about 20% of manufacturing price inflation.
- Finally, metals price inflation – essentially arising from international price shocks – accounted for 17.6% of WPI inflation and 30% of manufactured price inflation.

Myth #2: Supply side measures more effective than monetary policy. The Economist argues that supply-side measures merely suppress the symptoms of overheating without tackling the underlying problem of imbalances by monetary policy action.

- We are, of course, not the Economist. This presumably blinkers us from espying the subtle undertone of overheating in a spike in agricultural prices when bad rains affect the crop. This limitation, in turn, leads us to believe that imports augmenting supply are the best way of cooling agro inflation (Exhibit 3).
- The Economist also points out that "…although the various schemes have helped to reduce wholesale-price inflation, the measure that the government likes to focus on, consumer-price inflation, the choice of all other central banks, is still running at almost 8%...".
- As before, the Economist again got its facts wrong. Food products have a lower weight in the WPI (22%) than the CPI (47-73%) (Exhibit 4). It is thus higher food price inflation that has pushed CPI inflation higher than WPI inflation. And since food prices form a higher part of the CPI than the WPI, the government's supply-side measures, as and when effective, will impact the CPI far more than the WPI!

Myth #3: Higher investment to immediately lift the economy's speed limit. The Economist pontificates that while long term investment will indeed add to productive capacity, in the short term, higher capital spending boosts demand and adds to overheating.

- It is not very clear who disputes this. The very fact that we estimate potential real GDP growth rate at 7.8% implies that 9% real GDP growth is not immediately sustainable. Two sectors – cement and electrical motors – already suffer from systemic imbalances.
- The point is not whether India could overheat – all upcycles obviously do unless monetary policy softlands – but whether it is overheating. We believe that reasonable sub-5% core inflation suggests that India is still not overheating (Exhibit 5). And that the Economist is being unduly – and uncharacteristically – sensational.

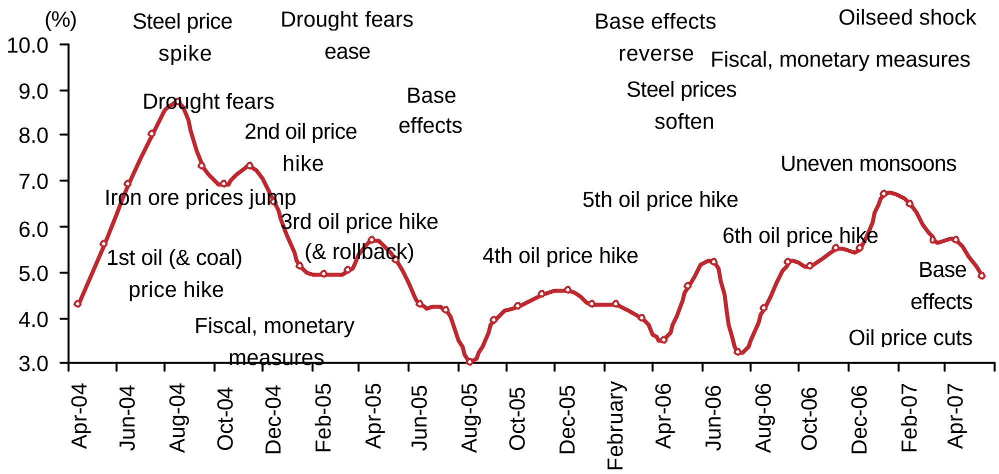
Myth #4: Higher interest rates to slow the economy in the coming months. The Economist informs us that India's interest rates are still too low to slow the economy. Rate hikes have – shockingly! - not kept pace with the acceleration in CPI inflation. The Economist, therefore, recommends Rupee appreciation to compress demand.

- First, real interest rates are computed as the difference between lending rates and interest rate expectations (say, 5%). They can hardly be approximated from contemporaneous lending rates and inflation. For all the stress on the CPI, the fact is that CPI inflation and WPI inflation, more or less, co-move medium term.
- Second, we believe that real lending rates – currently 7.25% - will likely close in on our 7.8% potential real GDP growth rate this year on the back of a persistent credit gap (Exhibit 6). This will, in turn, push the interest rate regime into neutral territory. And a neutral interest rate regime should, ipso facto, softland the Indian economy into 8.2% FY2008E real GDP growth rate from 9%+ real GDP growth rate in FY2006-07. Given that the Economist had earlier pitched India 's potential real GDP growth rate at an even more conservative 7%, it is not clear why they still argue that real lending rates are still accommodative.
- Third, the Economist's advocacy of a stronger Rupee to quell inflation overlooks its limited efficacy. The RBI's own research estimates that 1% appreciation cuts WPI inflation by a mere 4bps. It also overlooks the growing monetary dependence on forex intervention – US$21.5 bn FY2008E - to support domestic liquidity (Exhibit 7). The RBI can generate base money by either repo-ing gilts or buying forex. The repo route is beginning to contract with banks facing an SLR deficit.

Myth #5: Monetary tightening would kill growth. The Economist ends by reminding us – much of the article magisterially states the obvious - that price stability – guarded by a strict monetary policy - is the best support for growth.

- This ignores the simple home truth – an advantage of being local – that Indian inflation is driven by monetary as well as non-monetary – agricultural shocks, for instance – factors. This is why successive RBI governors – including Governor Reddy himself – have resisted adopting inflation targeting.
- Since the recent inflationary spike was largely supply-shock driven and expected to reverse in 1QFY08 (Exhibit 8), it were the well-wishers of sound monetary policy – rather than "critics of the central bank" – that hoped that the RBI would not tilt at the windmills of transient supply-side 6%+ inflation.
- Unlike his predecessor, Jalan, who used to resolutely ignore agro supply shocks, Governor Reddy has panicked into frentic tightening at – and actually, slightly past - the peak of both the episodes of supply-shock driven inflation – mid-2004 and 2HFY07 - during his tenure (Exhibit 9).

Exhibit 1: Inflation essentially driven by supply-side factors
WPI, y-o-y %



Source: Ministry of Industry, Government of India.

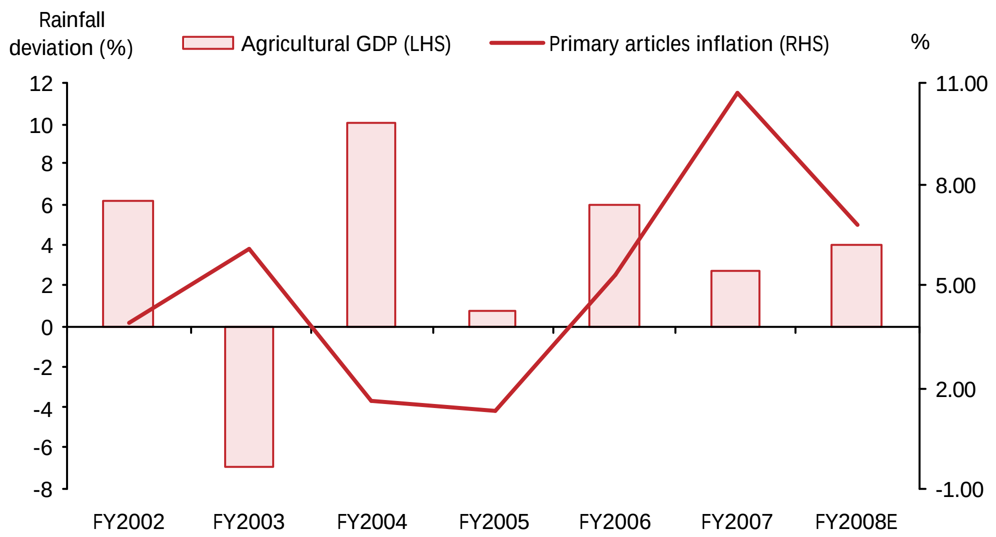
Exhibit 2: Agro price inflation contributed 50% of WPI inflation, higher than 40% WPI weightage
WPI, commodity-wise inflation (%)

		Inflation Rate (Year-on-year)						Weighted contribution to inflation
Major group / Item	**Weight**	**FY 2003**	**FY 2004**	**FY 2005**	**FY 2006**	**FY2007**	**FY 2008E**	**FY 2007E**
All Commodities	**100.0**	**6.5**	**4.6**	**5.1**	**4.0**	**5.7**	**5.0**	**100.0**
Primary Articles	**22.0**	**6.1**	**1.6**	**1.3**	**5.3**	**10.7**	**6.8**	**40.4**
Food Articles	15.4	0.8	0.2	3.0	6.3	8.3	4.8	22.3
Fuel, Power, Light and Lubricants	**14.2**	**10.8**	**2.5**	**10.5**	**8.9**	**1.0**	**2.5**	**4.1**
Mineral oils	7.0	18.4	—	16.0	13.2	0.5	1.5	1.2
Manufactured Products	**63.8**	**5.1**	**6.7**	**4.6**	**1.5**	**5.8**	**5.2**	**55.9**
Food Products	11.5	8.7	9.7	0.4	2.4	6.4	6.9	11.3
Textiles	9.8	8.3	15.6	(12.7)	(0.6)	1.1	8.0	(0.6)
Chemicals and Chemical Products	11.9	4.2	0.1	3.9	1.8	2.9	3.0	5.8
Basic Metals, Alloys & Metal Products	8.3	6.6	22.1	17.1	(2.9)	11.0	5.0	17.6
Machinery and Machine Tools	8.4	0.5	3.1	7.1	3.3	8.0	8.0	8.8

Source: Ministry of Industry, Kotak Institutional Equities estimates.

Exhibit 3: A poor crop - surprise,surprise - invariably pushes up agro- price inflation

Agricultural GDP growth rate, primary articles inflation rate (%)



Source: Ministry of Agriculture, BSE.

Exhibit 4: Higher weightage of food drives up CPI inflation during agro shocks

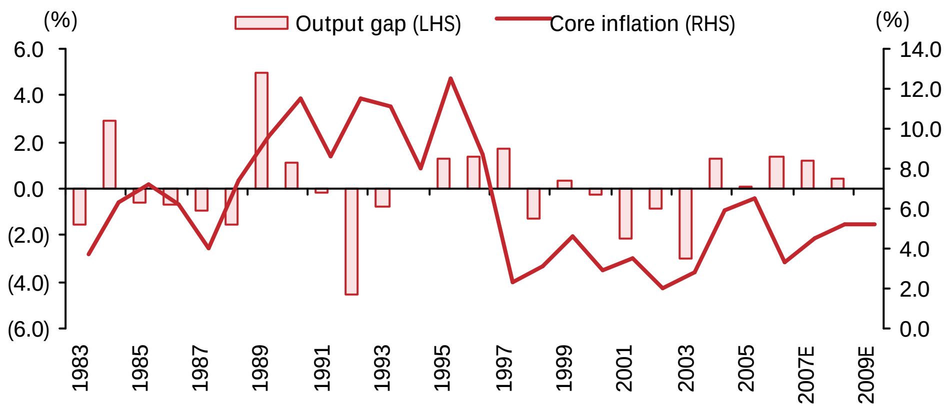
weighting diagram of India's consumer price indices

No	Group/Sub-Group	CPI-UNME Base:1984-85	CPI-IW Base:2001	CPI-AL Base: 1986-87	CPI-RL Base: 1988-87
I.	**Food, Beverages and Tobacco**	**47.1**	**48.5**	**72.9**	**70.5**
	1. Cereals	11.0	13.5	40.9	38.2
	2. Pulses	2.5	2.9	3.4	3.4
	3. Milk	9.0	7.3	3.7	3.9
	4. Edible Oils	4.4	3.2	3.8	3.8
	5. Meat	3.0	4.0	3.1	3.3
	6. Vegetables	4.3	6.1	4.2	4.1
	7. Fruits	2.0		0.9	1.0
	8. Sugar	1.8		2.6	2.6
	9. Salt and spices	1.5	2.6	4.1	3.9
	10. Beverages	6.1		2.4	2.6
	11. Pan, Tobacco etc.	1.5	2.3	3.8	3.7
II.	**Fuel & Light**	**5.5**	**6.4**	**8.4**	**7.9**
III.	**Housing**	**16.4**	**15.3**	**-**	**-**
IV.	**Clothing & Footwear**	**7.0**	**6.6**	**7.0**	**9.8**
	1. Clothing	6.1		6.3	6.2
	2. Footwear	0.9		0.7	3.6
V.	**Miscellaneous**	**24.0**	**23.3**	**11.7**	**11.9**
	1. Amusement	2.2		0.5	0.6
	2. Personal care	4.6	4.2	2.0	2.3
	3. Transport and Communication	5.2	4.9	1.7	1.8
	4. Education	4.6	6.2	0.4	0.4
	5. Medical	2.5	4.6	4.4	4.2
	6. Household Requisites	2.0		2.7	2.6
	7. Others	2.9			
	Total	**100**	**100**	**100**	**100**

Source: Labour Bureau.

Exhibit 5: Reasonable core inflation does not suggest overheating

Core (ex food, ex energy) inflation, output gap (%)

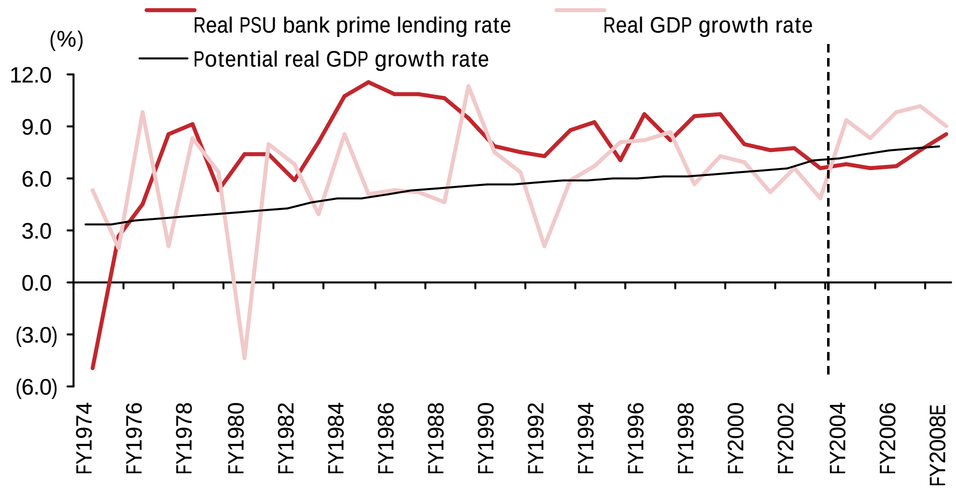


Note: Output gap measures the difference between actual and potential growth rate. Potential growth rate is calculated by a standard Hodrick Prescott filter 'adjusted' for structural break.

Source: CSO, Ministry of Industry, Kotak Institutional Equities estimates.

Exhibit 6: Indian interest rates approaching nuetral territory

Real PSU bank prime lending rate, real GDP growth rate (%)



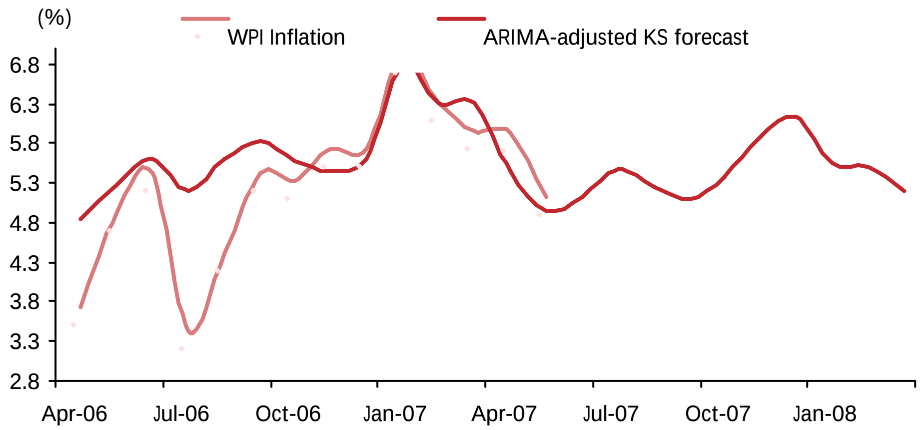
Source: CSO, RBI, Kotak Institutional Equities.

Exhibit 7: The RBI needs to buy US$21.5 bn to sustain FY2008E 8.2% real GDP growth rate
Monetary projections (Rsbn)

- The demand for overall liquidity is arrived by a broad money (M3) demand function:
  M3 growth rate = 1.4 x real GDP growth rate + inflation rate …(1)
  where the income elasticity of money demand is estimated at 1.4
- Estimated 8.2% real GDP growth rate and 5% inflation rate in FY2008 requires an M3 growth rate of 16.5%.
- In absolute terms, this works out to Rs5433 bn (US$126 bn).
- The supply of liquidity is arrived by a money supply function:
  M3 growth = 4.9 x Reserve money growth …(2)
  where the money multiplier is taken at 4.9 (assuming constant 6.5% CRR).
  Reserve money = RBI's net domestic assets + RBI's net foreign assets …(3)
- Primary liquidity of Rs1264 bn/US$29.4 bn (= 5433/4.9 + 155 bn, of 50bp CRR hike) is needed to support our FY2008 scenario.
- FY2008 likely begins with a domestic liquidity overhang of about Rs338 bn (US$8.0 bn)
- These include: balances in the Market Stabilization Scheme, adjusted for RBI's LAF repos.
- This implies that the RBI will need to buy about Rs926 bn / US$21.5 bn of foreign currency to produce the necessary primary liquidity.

Source: RBI, Kotak Institutional Equities estimates.

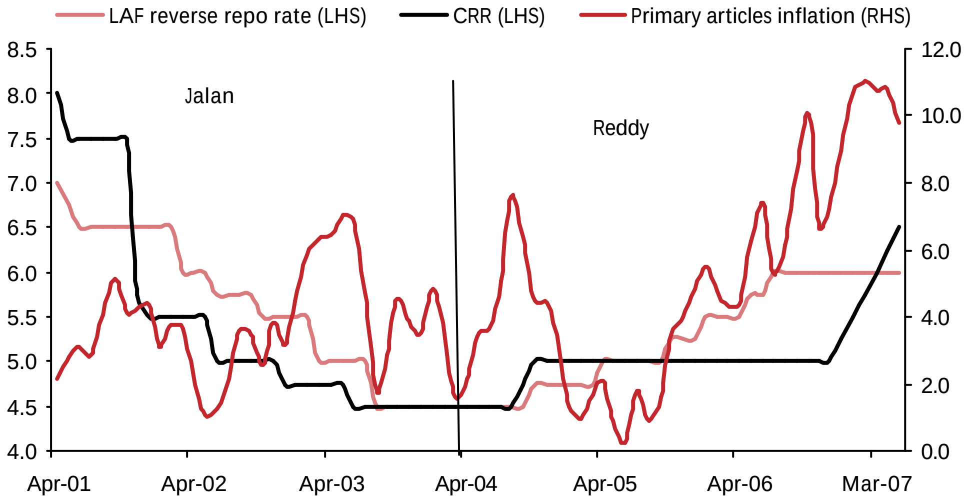
Exhibit 8: Simple time series models predicted a 1QFY08 inflation top off, underscoring the futility of CRR hikes
WPI, WPI (auto-regressive integrated moving average - ARIMA - forecast) y-o-y %



Source: Ministry of Industry, Government of India, Kotak Institutional Equities estimates.

Exhibit 9: Gov Reddy hikes CRR against agro shocks - often post peak - unlike Gov Jalan

LAF reverse repo rate, primary articles inflation (%), cash reserve ratio (% of demand and time liabilities)



Source: Ministry of Industry, RBI.

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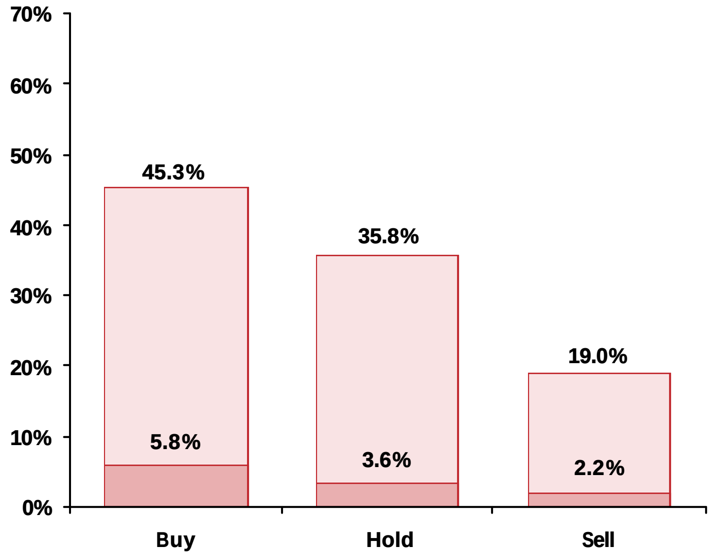

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Source: Kotak Institutional Equities. As of March 31, 2007

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