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### New Release

**Zee News:** Initiating coverage on Zee News (ZEEN): A regional star rises

**Economy:** Grim industrial slowdown in 2HFY09 but glimmer of hope at the end of the tunnel

### Change in recommendations

**Larsen & Toubro:** Reiterate capex slowdown likely to be sharp and may affect earnings momentum significantly; rate REDUCE

### Updates

**Reliance Industries:** Clearing some air about RIL-RNRL gas dispute and other things

**Infosys Technologies:** Revising estimates to factor in increased uncertainty and revised currency assumptions. Maintain BUY

**BPCL, HPCL, IOCL:** Pricing freedom for government-owned R&M companies; practice versus theory

**Asian Paints:** 'Color' less in short term

**IRB Infrastructure Developers:** Management steadfast on executing its plans, however, peer data show cause for concern; cut rating to ADD

**Banks/Financial Institutions:** Banking aggregates record strong growth; investments in Gsecs on the rise

**Telecom:** 3G auctions to start on Jan 15, 2009 but where is the money?

**Cement:** November 2008: Consumption growth shows some resilience

## News Roundup

### Corporate

- UTI Asset Management Company, India's oldest mutual fund, is in advanced stages of discussions to divest 26% to a strategic partner. Sources close to the development said that the AMC is in discussion with three potential buyers, which include US-based T Rowe Price and Vanguard Mutual Fund. T Rowe Price is said to be the front runner. (BS)
- ONGC Videsh Limited, the overseas investment arm of India's largest oil exploration company Oil & Natural Gas Corp, could save around \$1 billion in the \$2.1-billion deal for acquiring the UK-listed Imperial Energy. The Indian firm may opt for picking up only 51% equity stake in the company, if Imperial Energy's shareholders fail to offer a minimum of 90% stake by December 30. (ET)
- The department of telecom is set to ask the Comptroller and Auditor General of India to appoint a special auditor to examine the books of Reliance Communications over allegations that the telco in FY2008 diverted revenue earned from its mobile services to a subsidiary in an attempt to bring down the total amount it had to pay to the government as licence fee and spectrum charge. (ET)

### Economic and political

- Kazakhstan, known to have the second largest uranium reserves in the world, has evinced a keen interest to have civil nuclear cooperation with India and an agreement in this regard is expected to be signed during the visit of President Nursultan Nazarbayev to India next month. (BS)

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

## EQUITY MARKETS

India	Change, %			
	12-Dec	1-day	1-mo	3-mo
Sensex	9,690	0.5	3.2	(28.4)
Nifty	2,921	0.0	4.0	(28.3)
<b>Global/Regional indices</b>				
Dow Jones	8,630	0.8	1.6	(21.0)
FTSE	4,280	(2.5)	1.1	(17.8)
Nikkie	8,618	4.6	1.8	(29.4)
Hang Seng	14,758	(5.5)	9.0	(23.7)
KOSPI	1,152	4.3	5.8	(22.1)
<b>Value traded - India</b>				
	Moving avg, Rs bn			
	12-Dec	1-mo	3-mo	
Cash (NSE+BSE)	155.9	124.7	147.5	
Derivatives (NSE)	410.8	496.2	575	
Deri. open interest	571.9	520	868	

### Forex/money market

	Change, basis points			
	12-Dec	1-day	1-mo	3-mo
Rs/US\$	48.5	0	(90)	252
6mo fwd prem, %	0.7	(25)	71	24
10yr govt bond, %	6.1	(27)	(158)	(220)

### Commodity market

	Change, %			
	12-Dec	1-day	1-mo	3-mo
Gold (US\$/OZ)	831.0	1.1	12.0	5.6
Silver (US\$/OZ)	10.4	1.3	9.4	(6.2)
Crude (US\$/BBL)	46.5	0.8	(8.8)	(48.2)

### Net investment (US\$m)

	11-Dec	MTD	CYTD
	FIs	83	76
MFs	(17)	(60)	3,373

### Top movers -3mo basis

Best performers	Change, %			
	12-Dec	1-day	1-mo	3-mo
Bharat Petroleum C	343	6.0	9.4	(1.5)
Power Finance Corp	127	1.9	20.5	1.6
Union Bank Of India	147	1.9	(8.2)	3.8
Hindustan Unilever	240	(0.5)	2.5	(1.1)
Ntpc Limited	165	(1.3)	10.4	(3.2)
<b>Worst performers</b>				
Housing Developme	109	2.3	(7.2)	(55.0)
Unitech Limited	34	(0.9)	(24.9)	(76.2)
Bajaj Finserv Ltd	106	(1.7)	(22.7)	(76.1)
Suzlon Energy Limit	52	4.4	(4.3)	(75.4)
Bharat Forge Limite	80	(4.9)	(21.6)	(67.8)

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**Media****ZEEN.BO, Rs33**

Rating	BUY
Sector coverage view	Attractive
Target Price (Rs)	40
52W High -Low (Rs)	93 - 25
Market Cap (Rs bn)	7.9

**Financials**

March y/e	2008	2009E	2010E
Sales (Rs bn)	3.7	5.2	6.7
Net Profit (Rs bn)	0.4	0.4	0.5
EPS (Rs)	1.5	1.8	2.2
EPS gth	396.2	17.0	21.0
P/E (x)	21.4	18.3	15.1
EV/EBITDA (x)	11.6	10.1	8.2
Div yield (%)	1.2	1.2	0.9

**Shareholding, September 2008**

	Pattern	% of Portfolio	Over/(under) weight
Promoters	60.6	-	-
FIs	21.1	1.1	0.2
MFs	3.6	1.0	0.0
UTI	-	-	(0.9)
LIC	2.0	0.4	(0.5)

**Initiating coverage on Zee News (ZEEN): A regional star rises**

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- **Leadership position in Marathi and Bengali regional language markets**
- **Robust market share gains in Telugu and Kannada regional language markets**
- **Structural changes in Indian pay-TV market with rising revenue share of broadcasters**
- **Likely consolidation in news genre to benefit ZEEN's Hindi news operations**
- **Initiate coverage with BUY rating and 12-month DCF-based target price of Rs40**

We believe ZEEN, India's leading news and regional language broadcaster, is well positioned to benefit from (1) its leadership position in Marathi and Bengali markets, (2) robust market share gains in Telugu and Kannada markets and (3) likely consolidation in the Hindi news segment. We expect growth in regional ad revenue markets to outpace the slowdown in the overall ad revenue market led by (1) increasing fragmentation in the Hindi GE market and (2) better value proposition offered by regional changes in emerging regional centers. We highlight the structural change in the form of rapid digitalization (DTH and digital cable) in the Indian pay-TV market, which will likely result in strong growth in subscription revenue of established broadcasters such as ZEEN. We initiate coverage on Zee News (ZEEN) with a BUY rating and 12-month DCF-based target price of Rs40. Key risks include significant slowdown in the Indian economy, higher-than-expected competition in key markets and execution risks associated with ZEEN's recently launched Tamil channel. However, possible reduction in 15% marketing commission (on ad revenues) paid to ZEEL will support EBITDA.

**Growth drivers in place—core business and emerging channels.** ZEEN leads the Marathi and Bengali regional markets with a cogent content, distribution and marketing strategy. ZEEN has achieved robust 11-12% market share in the Telugu and Kannada markets, which will likely translate into strong financial performance going forward. The structural changes in the Indian pay-TV market (strong uptake of DTH and digital cable), along with robust growth in ad revenues from core markets and viewership gains in emerging markets, are likely to improve profitability.

**Robust earnings growth despite investments in new channels.** We model ZEEN's EPS to increase to Rs2.6 in FY2011E from Rs1.5 in FY2008 led by (1) strong 30% CAGR in revenues (FY2008-2011E) to Rs8 bn in FY2011E, tempered by (2) flat EBITDA margins to 17.4% in FY2011E from 18.4% in FY2008. We highlight the high profitability of ZEEN's Marathi and Bengali operations. We model improved financial performance from ZEEN's Telugu and Kannada operations to likely negate the initial operating losses from its new Tamil and news channels.

**Initiate coverage with 12-month DCF-based target price of Rs40, which offers 25% potential upside.** We believe DCF is the best valuation methodology for ZEEN since it captures (1) structural changes in the Indian pay-TV market with growing revenue share of broadcasters, (2) the company's presence in the fast-growing vernacular language markets, (3) robust profitability of ZEEN's mature channels, (4) value-accretion from emerging channels—marginally loss-making at present—and thus, resultant strong growth in earnings and cash flows.

**Key risks: Economy, competition and execution.** Advertisement revenues depend on economic cycles and any significant slowdown in the Indian economy will have a negative impact on revenues. Also, higher-than-expected competition will result in fragmentation and lower-than-expected revenues and profits. Finally, ZEEN's Tamil regional language channel has fallen short of expectations and it needs to execute new initiatives effectively to create value.

For more details, please refer to our initiating coverage report 'Zee News: A regional star rises'.

### Forecasts and valuations of Zee News, March fiscal year-ends, 2007-2011E

Year end	Revenues	EBITDA	Net Profit	EPS	EV/EBITDA	P/E
March	(Rs mn)	(Rs mn)	(Rs mn)	(Rs)	(X)	(X)
2007	2,405	77	75	0.3	101.8	104.0
2008	3,675	678	371	1.5	11.6	21.0
2009E	5,190	867	434	1.8	9.1	17.9
2010E	6,716	1,138	525	2.2	6.9	14.8
2011E	8,029	1,400	632	2.6	5.6	12.3

Source: Company, Kotak Institutional Equities estimates

### DCF-based valuation of Zee News (Rs mn)

	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>EBITDA</b>	<b>867</b>	<b>1,138</b>	<b>1,400</b>	<b>1,840</b>	<b>2,200</b>	<b>2,610</b>	<b>3,043</b>	<b>3,504</b>	<b>3,951</b>	<b>4,403</b>	<b>4,667</b>	<b>4,947</b>
Tax expense	(252)	(347)	(460)	(607)	(743)	(878)	(1,020)	(1,170)	(1,315)	(1,461)		
Changes in working capital	(489)	(556)	(420)	(505)	(440)	(474)	(512)	(495)	(526)	(557)		
<b>Cash flow from operations</b>	<b>126</b>	<b>235</b>	<b>520</b>	<b>729</b>	<b>1,017</b>	<b>1,258</b>	<b>1,512</b>	<b>1,839</b>	<b>2,111</b>	<b>2,385</b>		
Capital expenditure	(876)	(609)	(511)	(525)	(554)	(597)	(644)	(678)	(750)	(823)		
Cash flow to minority shareholders	(4)	(7)	(9)	(10)	(12)	(11)	(9)	(14)	(15)	(16)		
<b>Free cash flow</b>	<b>(754)</b>	<b>(382)</b>	<b>1</b>	<b>193</b>	<b>450</b>	<b>651</b>	<b>860</b>	<b>1,147</b>	<b>1,345</b>	<b>1,545</b>	<b>1,638</b>	<b>1,737</b>
<b>PV of free cash flow</b>	<b>(724)</b>	<b>(324)</b>	<b>1</b>	<b>128</b>	<b>265</b>	<b>339</b>	<b>397</b>	<b>468</b>	<b>486</b>	<b>494</b>		
Discounted cash flow-1 year forward		(367)	1	145	300	383	448	529	549	558	524	
Discounted cash flow-2 year forward			1	164	339	433	506	598	621	631	592	555

	Now	+ 1-year	+ 2-years
Total PV of free cash flow (a)	1,529	3,070	4,439
FCF in terminal year	1,545	1,638	1,737
Terminal value in terminal year	22,078	23,403	24,807
PV of terminal value (b)	7,055	7,479	7,927
<b>Total company value (a) + (b)</b>	<b>8,584</b>	<b>10,549</b>	<b>12,366</b>
<b>Total company value (Rs/share)</b>	<b>36</b>	<b>44</b>	<b>52</b>
Net debt/(cash)	78	977	1,591
<b>Value to equity holders</b>	<b>8,507</b>	<b>9,571</b>	<b>10,775</b>
<b>Value to equity holders (Rs/share)</b>	<b>35</b>	<b>40</b>	<b>45</b>

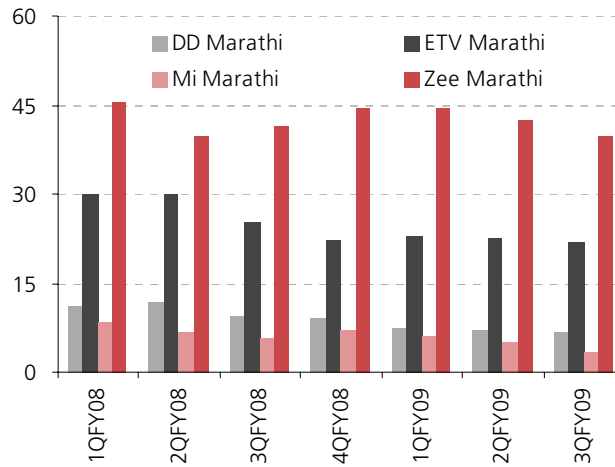
### Calculation of WACC

Growth from 2018 to perpetuity (%)	6.0	Sensitivity of stock price to terminal growth rate and WACC assumptions							
FCF multiple (X)	14.3	WACC (%)							
Exit EV/EBITDA multiple (X)	5.9		12.0	12.5	13.0	13.5	14.0	14.5	
<b>WACC (%)</b>	<b>13.0</b>		<b>5.0</b>	43	39	36	33	30	28
			<b>5.5</b>	46	41	38	34	31	29
		<b>Growth (%)</b>	<b>6.0</b>	49	44	<b>40</b>	36	33	30
			<b>6.5</b>	53	47	42	38	35	32
			<b>7.0</b>	57	51	45	41	37	34
			<b>7.5</b>	63	55	49	44	39	36

Fiscal Year end (March 31, XXXX)	March-09	March-10	March-11	March-12	March-13	March-14	March-15	March-16	March-17	March-18	March-19	March-20
<b>Today</b>	1-Dec-08	1-Dec-08	1-Dec-08	1-Dec-08	1-Dec-08	1-Dec-08	1-Dec-08	1-Dec-08	1-Dec-08	1-Dec-08	1-Dec-08	1-Dec-08
<b>Days left</b>	120	485	850	1,216	1,581	1,946	2,311	2,677	3,042	3,407	3,772	4,138
<b>Years left</b>	0.33	1.33	2.33	3.33	4.33	5.33	6.33	7.33	8.33	9.33	10.33	11.34
<b>Discount factor at WACC</b>	<b>0.96</b>	<b>0.85</b>	<b>0.75</b>	<b>0.67</b>	<b>0.59</b>	<b>0.52</b>	<b>0.46</b>	<b>0.41</b>	<b>0.36</b>	<b>0.32</b>	<b>0.28</b>	<b>0.25</b>

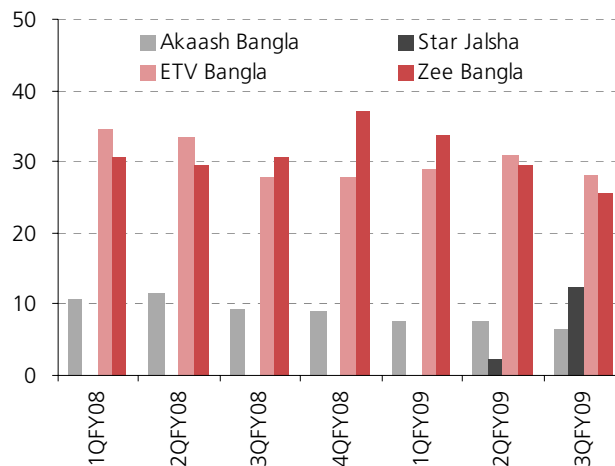
Source: Kotak Institutional Equities estimates

**Market share of Marathi general entertainment channels (%)**



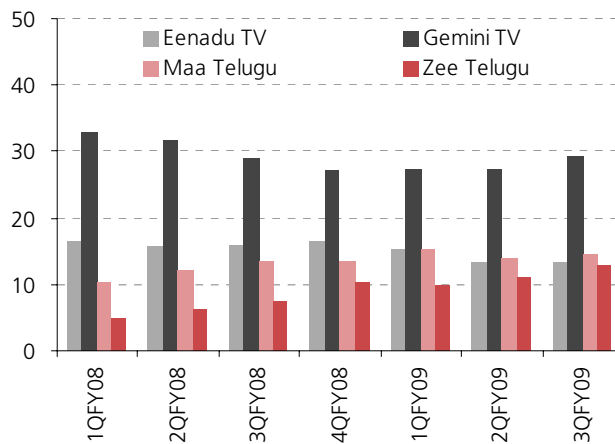
Source: TAM Media Research, compiled by Kotak Institutional Equities

**Market share of Bengali general entertainment channels (%)**



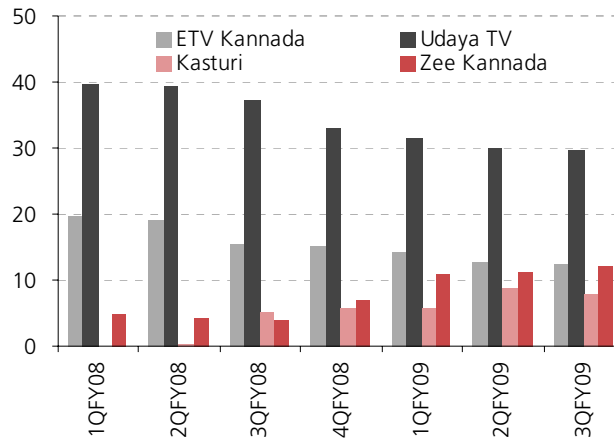
Source: TAM Media Research, compiled by Kotak Institutional Equities

**Market share of Telugu general entertainment channels (%)**



Source: TAM Media Research, compiled by Kotak Institutional Equities

**Market share of Kannada general entertainment channels (%)**



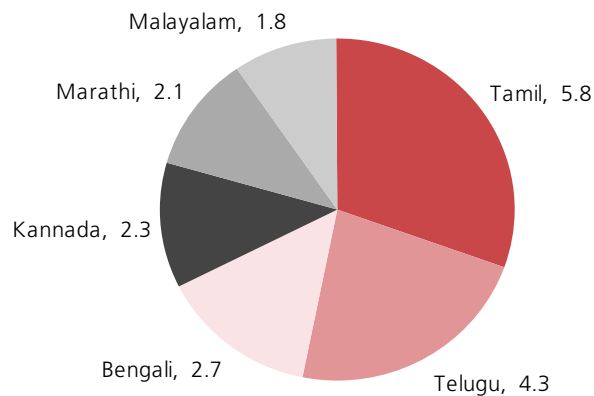
Source: TAM Media Research, compiled by Kotak Institutional Equities

**Estimation of nominal ad revenue market CAGR in India over the FY2008-2018E (%)**

		Ad-spend-to-GDP ratio by 2018E (%)										
		0.50	0.52	0.54	0.56	0.58	0.60	0.62	0.64	0.66	0.68	0.70
Real GDP CAGR over 2008-2018E (%)	3.5	9.6	10.1	10.5	10.9	11.3	11.7	12.0	12.4	12.7	13.1	13.4
	4.0	10.2	10.6	11.0	11.4	11.8	12.2	12.5	12.9	13.3	13.6	13.9
	4.5	10.7	11.1	11.5	11.9	12.3	12.7	13.1	13.4	13.8	14.1	14.4
	5.0	11.2	11.6	12.0	12.4	12.8	13.2	13.6	13.9	14.3	14.6	15.0
	5.5	11.7	12.1	12.5	12.9	13.3	13.7	14.1	14.5	14.8	15.2	15.5
	6.0	12.2	12.6	13.0	13.5	13.9	14.2	14.6	15.0	15.3	15.7	16.0
	6.5	12.7	13.1	13.6	14.0	14.4	14.8	15.1	15.5	15.9	16.2	16.5
	7.0	13.2	13.6	14.1	14.5	14.9	15.3	15.6	16.0	16.4	16.7	17.1
	7.5	13.7	14.1	14.6	15.0	15.4	15.8	16.2	16.5	16.9	17.2	17.6
	8.0	14.2	14.6	15.1	15.5	15.9	16.3	16.7	17.1	17.4	17.8	18.1
	8.5	14.7	15.2	15.6	16.0	16.4	16.8	17.2	17.6	17.9	18.3	18.6
9.0	15.2	15.7	16.1	16.5	16.9	17.3	17.7	18.1	18.5	18.8	19.1	
9.5	15.7	16.2	16.6	17.0	17.4	17.8	18.2	18.6	19.0	19.3	19.7	
10.0	16.2	16.7	17.1	17.5	18.0	18.4	18.7	19.1	19.5	19.8	20.2	

Source: Kotak Institutional Equities estimates

**Breakup of ad revenue spends across regional ad revenue markets (Rs bn)**



Source: Industry, Kotak Institutional Equities estimates

**Estimation of subscription/pay-TV market opportunity in India, March fiscal year-ends, 2007-2017E (mn)**

	2007	2008	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
<b>C&amp;S industry</b>											
Analog cable (mn)	73	77	77	78	78	78	78	78	78	79	80
CAS cable (mn)	1	2	4	5	7	9	11	13	14	15	16
DTH subs (mn)	3	5	11	16	21	25	29	33	36	38	40
<b>Total subscribers (mn)</b>	<b>76</b>	<b>84</b>	<b>92</b>	<b>99</b>	<b>106</b>	<b>112</b>	<b>118</b>	<b>123</b>	<b>128</b>	<b>132</b>	<b>136</b>
<b>Analog cable</b>											
ARPU (Rs/sub/month)	150	153	156	159	162	166	169	172	176	179	183
Analog cable revenues (Rs bn)	131	141	145	148	151	155	158	161	165	170	175
Broadcaster share (%)	14.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	20.0	20.0	20.0
<b>Broadcaster share (Rs mn)</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>24</b>	<b>26</b>	<b>28</b>	<b>30</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>
<b>CAS cable</b>											
ARPU (Rs/sub/month)	150	164	154	165	175	185	194	203	212	222	231
CAS cable revenues (Rs bn)	2	4	7	10	15	20	25	31	36	41	45
Broadcaster share (%)	25.0	25.0	25.0	26.0	27.0	28.0	29.0	30.0	30.0	30.0	30.0
<b>Broadcaster share (Rs bn)</b>	<b>—</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>9</b>	<b>11</b>	<b>12</b>	<b>14</b>
<b>DTH</b>											
ARPU (Rs/sub/month)	150	175	152	170	189	204	220	234	249	264	278
DTH revenues (Rs bn)	5	11	19	33	48	61	76	91	106	120	134
Broadcaster share (%)	50.0	48.0	46.0	44.0	42.0	40.0	40.0	40.0	40.0	40.0	40.0
<b>Broadcaster share (Rs bn)</b>	<b>2</b>	<b>5</b>	<b>9</b>	<b>14</b>	<b>20</b>	<b>25</b>	<b>31</b>	<b>36</b>	<b>42</b>	<b>48</b>	<b>53</b>
<b>C&amp;S industry</b>											
<b>Total revenues (Rs bn)</b>	<b>137</b>	<b>156</b>	<b>171</b>	<b>191</b>	<b>214</b>	<b>236</b>	<b>260</b>	<b>283</b>	<b>307</b>	<b>331</b>	<b>354</b>
<b>Broadcaster share (Rs bn)</b>	<b>21</b>	<b>26</b>	<b>32</b>	<b>41</b>	<b>50</b>	<b>58</b>	<b>68</b>	<b>78</b>	<b>86</b>	<b>94</b>	<b>102</b>
<b>Broadcaster share (%)</b>	<b>15.3</b>	<b>16.6</b>	<b>18.9</b>	<b>21.3</b>	<b>23.3</b>	<b>24.5</b>	<b>26.2</b>	<b>27.5</b>	<b>28.1</b>	<b>28.5</b>	<b>28.8</b>

Source: Kotak Institutional Equities estimates

**Potential of pay-TV market in Maharashtra and West Bengal, FY2008 (Rs bn)**

Number of C&S TV households in Maharashtra (mn)	9.7
Number of C&S TV households in West Bengal (mn)	5.6
Average subscription rate in Maharashtra and West Bengal (Rs/month)	200
<b>C&amp;S subscription/pay-TV revenue market</b>	<b>36.7</b>
Likely size of pay-TV market (@15% share of broadcasters)	5.5
<b>Pay-TV revenues of ZEEN from Maharashtra and West Bengal in FY2008</b>	<b>0.6</b>
Pay-TV revenue share of ZEEN in FY2008 (%)	10
Theoretical size of pay-TV market (@30% share of broadcasters)	11.0
Theoretical pay-TV revenue share of ZEEN (%)	15
<b>Theoretical pay-TV revenue potential of ZEEN from Maharashtra and West Bengal</b>	<b>1.7</b>

Source: Kotak Institutional Equities estimates

**Potential of pay-TV market in Andhra Pradesh and Karnataka, FY2008 (Rs bn)**

Number of C&S TV households in Andhra Pradesh (mn)	13.3
Number of C&S TV households in Karnataka (mn)	7.7
Average subscription rate in Andhra Pradesh and Karnataka (Rs/month)	130
<b>C&amp;S subscription/pay-TV revenue market</b>	<b>32.8</b>
Likely size of pay-TV market (@15% share of broadcasters)	4.9
<b>Pay-TV revenues of ZEEN from Andhra Pradesh and Karnataka in FY2008</b>	<b>0.1</b>
Pay-TV revenue share of ZEEN in FY2008 (%)	2
Theoretical size of pay-TV market (@30% share of broadcasters)	9.8
Theoretical pay-TV revenue share of ZEEN (%)	7
<b>Theoretical pay-TV revenue potential of ZEEN from Andhra Pradesh and Karnataka</b>	<b>0.7</b>

Source: Kotak Institutional Equities estimates

**Derivation of revenues of Zee News, March fiscal year-ends, 2007-2013E (Rs mn)**

	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Advertisement revenues</b>							
<b>Regional channels</b>							
Zee Marathi (inc. Talkies)	460	802	1,135	1,361	1,573	1,803	2,030
Zee Bangla	416	695	856	978	1,122	1,287	1,450
Zee Telugu	96	215	466	678	819	973	1,106
Zee Kannada	25	72	209	405	515	641	730
Zee Tamil	—	—	50	165	294	499	667
Zee Gujarati	50	100	125	150	173	198	218
Zee Punjabi	50	100	125	150	173	198	218
<b>News channels</b>							
Zee News	389	490	594	704	778	859	948
Zee Business	220	289	349	410	466	530	602
Zee 24 Ghanta	48	94	132	158	174	191	210
Zee 24 Taas	—	45	90	126	139	152	168
Zee Telugu News	—	—	—	40	80	120	150
<b>Total advertisement revenues</b>	<b>1,736</b>	<b>2,931</b>	<b>4,131</b>	<b>5,325</b>	<b>6,305</b>	<b>7,451</b>	<b>8,497</b>
<b>Subscription revenues</b>							
<b>Cable revenues</b>							
Regional channels	318	336	451	508	558	635	689
News channels	171	173	170	163	162	160	168
<b>DTH revenues</b>							
Regional channels	34	112	229	407	611	863	1,061
News channels	18	49	84	127	177	219	264
<b>Total subscription revenues</b>	<b>565</b>	<b>669</b>	<b>934</b>	<b>1,205</b>	<b>1,507</b>	<b>1,877</b>	<b>2,182</b>
Syndication revenues	104	75	105	126	145	166	183
Commission revenues	—	—	20	60	72	86	99
<b>Total revenues</b>	<b>2,405</b>	<b>3,675</b>	<b>5,190</b>	<b>6,716</b>	<b>8,029</b>	<b>9,581</b>	<b>10,961</b>

Source: Kotak Institutional Equities estimates

**Consolidated profit model of Zee News, March fiscal year-ends, 2007-2013E (Rs mn)**

	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Net sales</b>	<b>2,405</b>	<b>3,675</b>	<b>5,190</b>	<b>6,716</b>	<b>8,029</b>	<b>9,581</b>	<b>10,961</b>
Production costs	(1,191)	(1,497)	(2,082)	(2,709)	(3,245)	(3,778)	(4,314)
Employee costs	(368)	(487)	(636)	(794)	(931)	(1,080)	(1,249)
Distribution costs	(490)	(670)	(1,161)	(1,531)	(1,802)	(2,121)	(2,372)
Administrative costs	(279)	(343)	(445)	(545)	(651)	(761)	(826)
<b>EBITDA</b>	<b>77</b>	<b>678</b>	<b>867</b>	<b>1,138</b>	<b>1,400</b>	<b>1,840</b>	<b>2,200</b>
Other income	131	14	17	18	20	24	25
Interest (expense)/income	(51)	(5)	(74)	(170)	(225)	(258)	(272)
Depreciation	(52)	(85)	(115)	(150)	(172)	(189)	(211)
<b>Pretax profits</b>	<b>104</b>	<b>601</b>	<b>694</b>	<b>836</b>	<b>1,024</b>	<b>1,416</b>	<b>1,742</b>
Extraordinary inc/(chrg)	—	—	—	—	—	—	—
Prior period adjustments	—	—	—	—	—	—	—
Tax-cash	(53)	(247)	(232)	(294)	(383)	(520)	(651)
Tax-deferred	7	15	(23)	(11)	—	4	9
Minority interest	16	2	(4)	(7)	(9)	(10)	(12)
<b>Net income</b>	<b>75</b>	<b>371</b>	<b>434</b>	<b>525</b>	<b>632</b>	<b>889</b>	<b>1,088</b>
Shares outstanding year-end (mn)	240	240	240	240	240	240	240
Shares primary (mn)	240	240	240	240	240	240	240
Shares fully diluted (mn)	240	240	240	240	240	240	240
<b>EPS primary (Rs)</b>	<b>0.3</b>	<b>1.5</b>	<b>1.8</b>	<b>2.2</b>	<b>2.6</b>	<b>3.7</b>	<b>4.5</b>
<b>EPS fully diluted (Rs)</b>	<b>0.3</b>	<b>1.5</b>	<b>1.8</b>	<b>2.2</b>	<b>2.6</b>	<b>3.7</b>	<b>4.5</b>
<b>Cash flow per share (Rs)</b>	<b>0.0</b>	<b>2.3</b>	<b>2.3</b>	<b>2.8</b>	<b>3.3</b>	<b>4.4</b>	<b>5.3</b>
<b>Growth (%)</b>							
Net income		396	17	21	20	41	22
EPS		396	17	21	20	41	22
Gross cash flow		8,127	1	20	17	34	20
<b>Tax rate-cash (%)</b>	<b>51</b>	<b>41</b>	<b>33</b>	<b>35</b>	<b>37</b>	<b>37</b>	<b>37</b>
<b>Tax rate-effective (%)</b>	<b>44</b>	<b>39</b>	<b>37</b>	<b>36</b>	<b>37</b>	<b>36</b>	<b>37</b>
Dividend per share (Rs)		0.4	0.4	0.5	0.7	0.9	1.1
Dividend pay-out ratio (%)		26	22	23	27	24	24

Source: Company, Kotak Institutional Equities estimates



**Consolidated profit model, balance sheet and cash model of Zee News, March fiscal year-ends, 2007-2013E (Rs mn)**

	2007	2008	2009E	2010E	2011E	2012E	2013E
<b>Profit model (Rs mn)</b>							
Net sales	2,405	3,675	5,190	6,716	8,029	9,581	10,961
<b>EBITDA</b>	<b>77</b>	<b>678</b>	<b>867</b>	<b>1,138</b>	<b>1,400</b>	<b>1,840</b>	<b>2,200</b>
Interest income	131	14	17	18	20	24	25
Interest expense	(51)	(5)	(74)	(170)	(225)	(258)	(272)
Depreciation	(52)	(85)	(115)	(150)	(172)	(189)	(211)
<b>Pretax profits</b>	<b>104</b>	<b>601</b>	<b>694</b>	<b>836</b>	<b>1,024</b>	<b>1,416</b>	<b>1,742</b>
Tax-cash	(53)	(247)	(232)	(294)	(383)	(520)	(651)
Tax-deferred	7	15	(23)	(11)	—	4	9
Minority interest	16	2	(4)	(7)	(9)	(10)	(12)
<b>Net profits after minority interests</b>	<b>75</b>	<b>371</b>	<b>434</b>	<b>525</b>	<b>632</b>	<b>889</b>	<b>1,088</b>
<b>Earnings per share (Rs)</b>	<b>0.3</b>	<b>1.5</b>	<b>1.8</b>	<b>2.2</b>	<b>2.6</b>	<b>3.7</b>	<b>4.5</b>
<b>Balance sheet (Rs mn)</b>							
Total equity	1,813	2,071	2,393	2,777	3,213	3,850	4,629
Deferred Tax	1	(18)	5	16	16	12	3
Minority interest	36	51	55	62	71	81	93
Total borrowings	13	117	1,217	1,867	2,217	2,467	2,467
Current liabilities	973	1,407	1,677	1,871	2,133	2,411	2,666
<b>Total capital</b>	<b>2,835</b>	<b>3,628</b>	<b>5,347</b>	<b>6,593</b>	<b>7,650</b>	<b>8,821</b>	<b>9,859</b>
Cash	41	39	39	76	111	163	162
Current assets	1,501	2,013	2,771	3,520	4,203	4,986	5,681
Total fixed assets	808	812	1,097	1,172	1,151	1,161	1,176
Investments	484	764	1,440	1,824	2,185	2,510	2,840
<b>Total assets</b>	<b>2,835</b>	<b>3,628</b>	<b>5,347</b>	<b>6,593</b>	<b>7,650</b>	<b>8,821</b>	<b>9,859</b>
<b>Free cash flow (Rs mn)</b>							
Operating cash flow, excl. working capital	7	555	560	674	792	1,061	1,277
Working capital	(273)	(306)	(489)	(556)	(420)	(505)	(440)
Capital expenditure	(300)	(96)	(400)	(225)	(150)	(200)	(225)
Investments	964	(279)	(676)	(384)	(361)	(325)	(329)
Other income	122	—	17	18	20	24	25
<b>Free cash flow</b>	<b>(566)</b>	<b>154</b>	<b>(328)</b>	<b>(107)</b>	<b>222</b>	<b>357</b>	<b>612</b>
<b>Ratios (%)</b>							
Debt/equity	1	6	51	67	69	64	53
Net debt/equity	(2)	4	49	64	66	60	50
RoAE	8.2	19.2	19.5	20.2	21.0	25.1	25.6
<b>RoACE</b>	<b>1.5</b>	<b>18.2</b>	<b>16.4</b>	<b>15.2</b>	<b>15.2</b>	<b>17.8</b>	<b>18.7</b>

Source: Company, Kotak Institutional Equities estimates

## Economy

Sector coverage view

N/A

**Grim industrial slowdown in 2HFY09 but glimmer of hope at the end of the tunnel**

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- **Industrial growth contracts in October 2008 for the first time in over a decade**
- **We expect Index of Industrial Production growth to be within 4% till April 2009**
- **We retain our forecast of 4% industrial growth and 7% GDP growth for FY2009**
- **RBI likely to cut repo rate again by 100 bps in January 2009, in our view**

The quick estimates of Index of Industrial Production (IIP) for October 2008 reported yoy IIP growth for the month at (-)0.4%, which was below our expectation. We highlight the significant contraction in manufacturing output, which makes the industrial slowdown worse than expected. We expect IIP growth to remain positive but dismal till at least April 2009; we expect a perceptible recovery in 2HFY10 on account (1) favorable base effects, (2) high growth in mining segment and (3) improved capacity utilization than in the current environment given the lack of business confidence.

**IIP growth turns out to be disappointing.** The quick estimates of October IIP growth at (-)0.4% came in below our expectation (see Exhibit 1) with a large (-)4.8% mom contraction. The poor growth is explained by the following factors.

- Contraction in manufacturing activity with a (-)1.2% yoy growth (see Exhibit 2) and (-)6.6% mom growth.
- Manufacturing contraction was led by large contraction in intermediate goods output at (-)3.7% yoy and consumer goods at (-)2.3%. Capital goods growth also fell to 3.1% in October 2008 versus 18.6% in September 2008 (see Exhibit 3).
- Contraction in output in October on a yoy basis was evident in textiles, food products, wood, paper, chemicals, mineral products and transport equipment.
- Disappointing growth of 2.8% in mining segment led by continued contraction in crude oil production (see Exhibit 4).

**October and November IIP growth may turn out to be the worst.** We believe October and November IIP growth could be the worst and growth will likely stay under 4% levels till April 2009. The deceleration in October was expected due to adverse base effects but it magnified into a sharp decline due to several reasons.

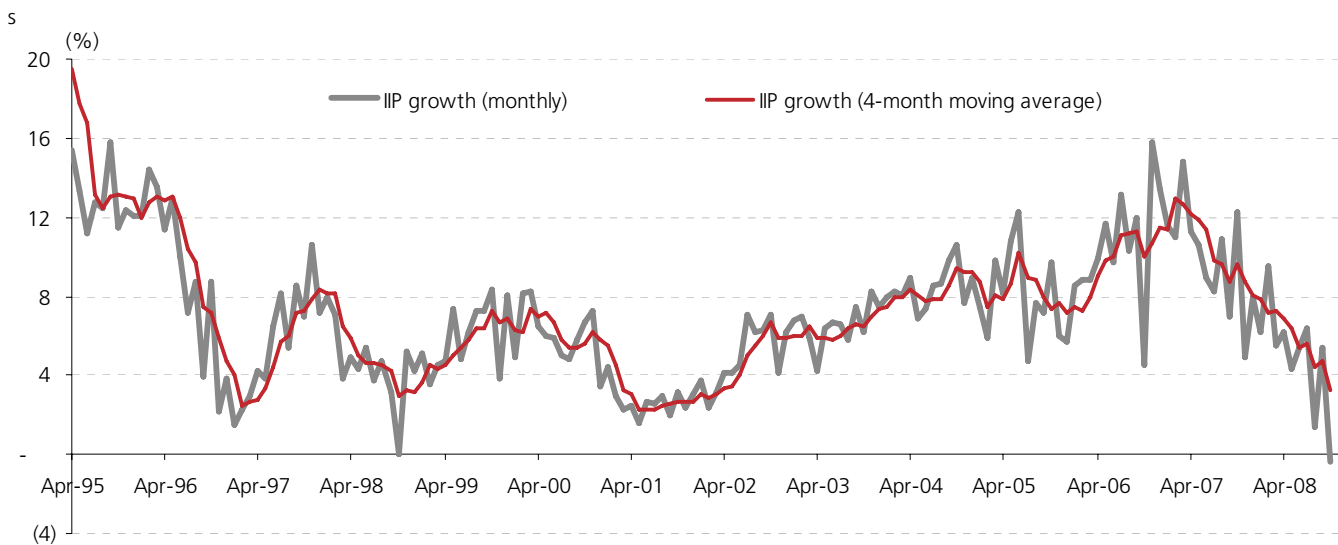
- Several firms cut production levels as they sought to lower inventory levels in the face of expected slowdown in demand in the coming months.
- The main Indian festival, Diwali, fell in October this year versus November last year and the holiday season magnified the impact of slowdown on a yoy basis.
- Normal bank lending came to a standstill due to liquidity crunch following large US dollar sales by RBI and rising credit risk.
- Contraction in world trade as reflected in a steep drop in Baltic dry index.

**Industrial growth at 4% in FY2009 still possible.** We believe industrial growth is in a cyclical trough during 3QFY09 but a glimmer of hope exists at the end of the tunnel as a marked improvement is likely in 2HFY10. In our view, industrial growth for FY2009 may still turn out to be about 4% and real GDP growth at 7%. We highlight that the September IIP growth has been revised upward to 5.5% from 4.7% even though the October IIP growth has come below our expectation. More importantly, we note that the revision in September IIP growth was due to stronger-than-expected growth in manufacturing activity, which grew 5.6% yoy versus the previous estimate of 4.8% yoy growth.

**October IIP numbers makes another repo rate cut a near certainty.** In our assessment, the contraction in October may not force central bank to immediately cut repo rate by another 100 bps as the transmission of earlier cuts has been far from complete. The government is now likely to focus on public sector banks reducing their deposit and lending rates, if necessary by moral suasion or an implicit directive. However, we see another 100 bps repo rate cut as a near certainty by January 2009; the cut may occur around the time the November IIP numbers come out, even ahead of the monetary policy date.

**Exhibit 1: IIP growth decelerates to under 4% on a 4-month moving average basis from 13% in February 2007**

IIP growth on a monthly and 4-month moving average basis, March fiscal year-ends, 1996-2009 (%)



Source: Central Statistical Organization, compiled by Kotak Institutional Equities

**Exhibit 2: October 2008 IIP growth disappointing**

Sectoral classification of IIP growth, March fiscal year-ends, 2007-2009 (%)

	Mining (%)			Manufacturing (%)			Electricity (%)			General (%)		
	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
<b>Weights (%)</b>	<b>10.5</b>			<b>79.4</b>			<b>10.2</b>			<b>100.0</b>		
April	3.4	2.6	6.1	11.0	12.4	6.7	5.9	8.7	1.4	9.9	11.3	6.2
May	2.9	3.8	5.5	13.3	11.3	4.5	5.0	9.4	2.0	11.7	10.6	4.4
June	4.7	1.5	0.1	10.7	9.7	6.1	4.9	6.8	2.6	9.7	8.9	5.4
July	5.1	3.2	2.8	14.3	8.8	6.9	8.9	7.5	4.5	13.2	8.3	6.4
August	(1.7)	14.7	2.7	11.9	10.7	1.4	4.1	9.2	0.8	10.3	10.9	1.4
September	4.3	4.9	5.7	12.7	7.4	5.6	11.3	4.5	4.4	12.0	7.0	5.5
October	5.9	5.1	2.8	3.8	13.8	(1.2)	9.7	4.2	4.4	4.5	12.2	(0.4)
November	8.8	6.3		17.2	4.7		8.7	5.8		15.8	4.9	
December	6.1	5.0		14.5	8.6		9.1	3.8		13.4	8.0	
January	7.7	2.9		12.3	6.7		8.3	3.7		11.6	6.2	
February	7.5	7.9		12.0	9.6		3.3	9.8		11.0	9.5	
March	8.0	4.9		16.0	5.7		7.9	3.7		14.8	5.5	
<b>FY (April-March)</b>	<b>5.3</b>	<b>5.1</b>		<b>12.5</b>	<b>9.0</b>		<b>7.3</b>	<b>6.3</b>		<b>11.5</b>	<b>8.5</b>	
1QFY (April-June)	3.6	2.7	4.0	11.7	11.1	5.8	5.3	8.3	2.0	10.5	10.3	5.3
2QFY (July-Sep)	2.6	7.4	3.7	13.0	8.9	4.6	8.0	7.1	3.2	11.8	8.7	4.4
<b>1HFY (April-Sep)</b>	<b>3.1</b>	<b>4.9</b>	<b>3.9</b>	<b>12.3</b>	<b>10.0</b>	<b>5.2</b>	<b>6.6</b>	<b>7.7</b>	<b>2.6</b>	<b>11.1</b>	<b>9.5</b>	<b>4.9</b>

Source: Central Statistical Organization, compiled by Kotak Institutional Equities

**Exhibit 3: Industrial slowdown spread across various use-based sectors**

Use-based classification of IIP growth, March fiscal year-ends, 2007-2009 (%)

	Basic goods			Capital goods			Intermediate goods			Consumer goods			Consumer durables			Consumer non-durables		
	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
<b>Weights (%)</b>	<b>35.6</b>			<b>9.3</b>			<b>26.5</b>			<b>28.7</b>			<b>5.4</b>			<b>23.3</b>		
April	9.3	8.6	4.0	19.6	10.9	12.4	8.5	10.6	3.1	8.9	14.7	8.5	7.4	2.4	3.2	9.4	18.7	10.0
May	9.1	10.3	3.0	21.4	22.4	4.3	12.5	8.8	1.9	10.5	8.7	7.4	17.5	(0.7)	2.8	8.2	12.1	9.0
June	8.5	9.2	2.2	21.6	23.1	7.8	11.2	8.6	2.8	6.1	3.6	9.9	19.9	(3.6)	4.6	1.8	6.3	11.6
July	10.0	8.7	5.3	18.3	12.3	17.9	10.7	7.7	3.0	16.8	7.1	5.9	16.1	(2.7)	13.9	17.1	10.5	3.4
August	4.8	12.7	3.5	16.6	30.8	0.9	8.7	13.8	(6.1)	15.0	(0.0)	6.6	19.0	(6.2)	3.9	13.6	2.4	7.6
September	11.5	6.5	4.6	9.5	20.9	18.6	13.8	10.1	(2.6)	12.1	(0.2)	7.2	11.8	(7.3)	14.6	12.2	2.6	4.6
October	10.5	6.5	2.7	6.5	20.9	3.1	5.9	13.9	(3.7)	(2.8)	13.7	(2.3)	0.2	9.0	(3.0)	(4.1)	15.8	(2.0)
November	12.1	5.2		29.4	24.2		17.9	5.5		13.5	(2.9)		10.1	(5.5)		14.8	(2.0)	
December	12.4	3.4		26.2	17.6		12.7	7.6		10.7	8.7		1.8	2.8		13.5	10.3	
January	12.0	3.6		16.3	2.6		13.7	8.0		8.2	8.4		5.3	(0.5)		9.1	11.1	
February	10.7	7.3		18.0	10.7		13.3	8.5		7.4	11.7		1.8	3.1		9.3	14.3	
March	11.9	3.3		18.1	20.3		15.3	4.9		15.8	0.9		3.8	(2.0)		20.2	1.9	
<b>FY (April-March)</b>	<b>10.3</b>	<b>7.0</b>		<b>18.2</b>	<b>18.0</b>		<b>12.0</b>	<b>8.9</b>		<b>10.1</b>	<b>6.1</b>		<b>9.2</b>	<b>(1.0)</b>		<b>10.4</b>	<b>8.5</b>	
1QFY (April-June)	9.0	9.4	3.1	21.0	19.1	7.9	10.8	9.3	2.6	8.5	9.0	8.6	14.9	(0.7)	3.5	6.4	12.4	10.1
2QFY (July-Sep)	8.7	9.3	4.5	14.4	21.3	12.3	11.0	10.5	(2.0)	14.6	2.2	6.6	15.5	(5.5)	10.8	14.2	5.1	5.1
<b>1HFY (April-Sep)</b>	<b>8.8</b>	<b>9.3</b>	<b>3.8</b>	<b>17.5</b>	<b>20.2</b>	<b>10.2</b>	<b>10.9</b>	<b>9.9</b>	<b>0.3</b>	<b>11.5</b>	<b>5.5</b>	<b>7.6</b>	<b>15.2</b>	<b>(3.2)</b>	<b>7.2</b>	<b>10.2</b>	<b>8.8</b>	<b>7.7</b>

Source: Central Statistical Organization, compiled by Kotak Institutional Equities

**Exhibit 4: Core infrastructure industries facing supply-side issues**

Sector-wise growth rates in production for six infrastructure industries, March fiscal year-ends, 2008-2009 (%)

Sector	Weight	yoy		yoy		yoy		April-October	
		Oct-07	Oct-08	1QFY08	1QFY09	2QFY08	2QFY09	2008	2009
Crude oil	4.2	(0.1)	(0.3)	(1.1)	(0.0)	2.2	(1.3)	0.6	(0.7)
Petroleum refinery	2.0	2.7	5.0	13.3	3.3	6.6	5.7	8.8	4.5
Coal	3.2	8.9	10.9	0.7	8.2	5.0	7.4	3.7	8.4
Electricity	10.2	4.2	4.4	8.3	2.0	7.0	3.2	7.1	2.8
Cement	2.0	7.5	6.2	7.2	5.7	10.3	6.3	8.5	6.0
Finished steel	5.1	5.2	(0.5)	5.4	5.7	10.0	4.8	7.3	4.2
<b>Total</b>	<b>26.7</b>	<b>4.6</b>	<b>3.4</b>	<b>6.3</b>	<b>3.9</b>	<b>7.5</b>	<b>4.1</b>	<b>6.6</b>	<b>3.9</b>

Source: Central Statistical Organization, compiled by Kotak Institutional Equities

**Industrials****LART.BO, Rs788**

Rating	REDUCE
Sector coverage view	Attractive
Target Price (Rs)	840
52W High -Low (Rs)	2205 - 670
Market Cap (Rs bn)	467.1

**Financials**

March y/e	2008	2009E	2010E
Sales (Rs bn)	293.5	393.2	469.4
Net Profit (Rs bn)	22.2	31.1	36.1
EPS (Rs)	37.9	52.5	60.4
EPS gth	20.8	38.4	15.1
P/E (x)	20.8	15.0	13.0
EV/EBITDA (x)	13.9	9.7	8.5
Div yield (%)	1.1	2.5	2.6

**Shareholding, September 2008**

	% of Pattern Portfolio	Over/(under) weight
Promoters	-	-
FII's	18.4	2.2
MF's	5.5	3.5
UTI	9.0	42.2
LIC	17.0	8.5

**Larsen & Toubro : Reiterate capex slowdown likely to be sharp and may affect earnings momentum significantly; rate REDUCE**

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- **Reiterate corporate expenditure may contract substantially; management too highlighted similar concerns recently**
- **Slowdown in private sector expected to be far worse than public sector spending**
- **Cyclical slowdown in the industry to further exacerbate the situation**
- **Based on past correlation, low IIP growth figures show cause for concern over future order booking growth scenario**
- **Cut earning estimates and target price to Rs840; rate REDUCE from ADD**

We reiterate that cyclical slowdown visible in private sector spending is likely to be aggravated by (1) credit crisis, (2) broad recession across the globe, (3) sharp correction in global commodity sectors such as metals making incremental investments unviable and (4) dominance of private corporate spending this time versus public spending in earlier instances when government could spend its way out of slowdown. We highlight clear tilt of L&T's order booking since beginning FY2008 towards (1) private sector (about 55% of incremental order booking), (2) exposure to seemingly troubled sectors such as metals and real estate (>30% of order booking) and (3) execution issues on about 10-12% of orders related to respective sectoral demand environment in the current backlog. We have cut our rating to REDUCE from ADD earlier based on (1) 10-12% higher price since our last update, (2) further worsening of macroeconomic data points (surprisingly low IIP growth figures -0.4% and export statistics) and (3) management itself highlighting similar concerns on capex scenario. We change our FY2010E earnings estimates to Rs60.4 (from Rs63.4 earlier) and reduced our target price to Rs840/share from Rs900 earlier.

**Reiterate corporate expenditure may contract substantially; management too highlighted similar concerns recently**

We highlight that cyclical slowdown visible in private sector spending is likely to be aggravated by (1) credit crisis, (2) broad recession across the globe, (3) sharp correction in global commodity sectors such as metals making incremental investments unviable and (4) dominance of private corporate spending this time versus public spending in earlier instances when government could spend its way out of slowdown. We highlight clear tilt of L&T's order booking since beginning FY2008 towards (1) private sector (about 55% of incremental order booking), (2) seemingly troubled sectors such as metals and real estate (>30% of order booking) and (3) execution issues on about 10-12% of orders related to respective sectoral demand environment in the current backlog. In his recent interview, Mr AM Naik, CMD, L&T also highlighted concerns over slowdown in the industry especially in the private sector. He believes the private sector spending would decline significantly as it is becoming difficult to financially close projects with only private funding. He highlighted that in such an environment only sovereign guaranteed projects would be able to progress. Due to tight credit situations globally and lack of interest in investing, achieving financial closure has become difficult for projects not going through any public sector agency. He also said the government's step towards investing Rs500 bn in infrastructure may not be enough as perhaps the minimum investment required is of the order of US\$100 bn every year.

### **Slowdown in private sector expected to be far worse than public sector spending heightening the effect of the slowdown**

We reiterate our view that the private sector is likely to slow down more than the public sector in the given environment. Public sector/government spending dependent projects are less likely to be cancelled/deferred as it faces less risk of delays and cancellations related to credit availability, higher interest rates and near-term demand growth concerns. We also highlight that private spending has grown at CAGR of 23% over the seven-year period between FY2000 and FY2007 versus only 12% for the public spending leading to private corporate spending becoming about twice the size of public spending in FY2007. Thus, the effect of the slowdown on total spending could be heightened by the fact that the dominating component of total spending i.e. the private sector is more sensitive to the effects of slowdown. We also highlight that increased government spending to counter the effect of slowdown may be less effective because of its relatively smaller proportion now versus the case in the past (see Exhibit 1).

### **Cyclical slowdown in the industry to further exacerbate the situation**

The expected cyclical slowdown in the industry would further exacerbate the current situation. We highlight that envisaged capital expenditure based on financial closure had slowed down substantially in FY2008 itself and that slowdown would have got intensified by FY2009E (see Exhibit 2). We believe slowdown in financial closure activity is leading indicator of slowdown in capital expenditure activity in the country and may imply lower growth for engineering and EPC companies over the next two to three years.

### **Based on past correlation, low IIP growth figures cause concern over future order booking scenario**

We highlight that growth in order booking for industrials is correlated to the growth in index of industrial production and order booking growth accelerated for industrial stocks with the acceleration in growth of Index of industrial production beyond 6% in September 2003. We highlight that L&T's order booking grew at a CAGR of only 5% and that of ABB contracted at a CAGR of 3% during FY1997-02, a period of low IIP growth hovering below the 6% mark. Order booking growth subsequently accelerated to a CAGR of 30% for L&T and 38% for ABB during the ensuing six-year period between FY2002-08 along with the acceleration in IIP growth to beyond 6%. At a broader level, we highlight that envisaged capital expenditure (based on financial closures achieved by top-1000 corporates) shrinks or broadly stagnates with very low growth in absolute sense whenever the IIP growth is sluggish (drops below 6% or so) (see Exhibit 3).

We highlight that order booking growth would start to reflect the sluggishness in IIP growth trajectory visible since September 2007 for industrial sector stocks.

### **Highlight that order booking so far in December quarter has been relatively low**

We highlight that order booking data for 3QFY09 so far, based on press releases by the company suggest that L&T has received new orders Rs44.9 bn in this quarter so far, versus Rs72.3 bn in the same previous last year (see Exhibit 4).

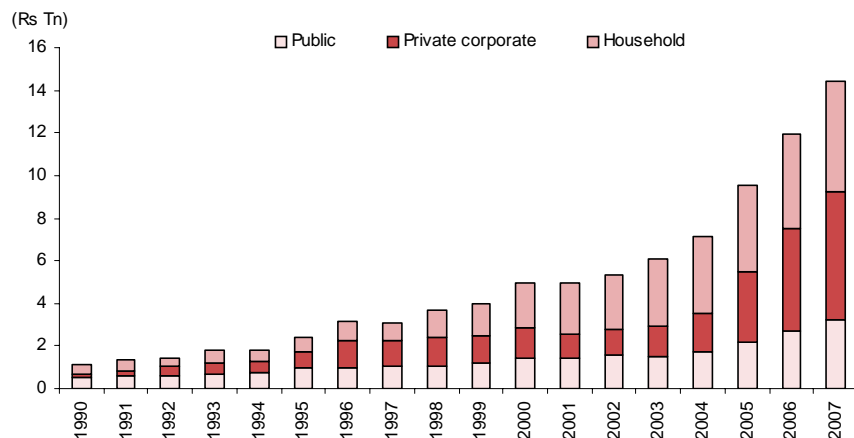
**Reduce earning estimates and target price to Rs840/share; cut rating to REDUCE from ADD earlier based on likely lower earnings momentum**

We have revised our standalone earnings estimate to Rs45 and Rs51.8 for FY2009E and FY2010E, respectively, from Rs55 and Rs54.5 earlier (Exhibit 8). The lower earnings estimates are based on lower order booking assumptions in the near future. We have reduced order booking growth to 15% and an 8% decline in FY2009E and FY2010E, respectively, from 24% and -4% earlier. We have revised our consolidated earnings estimate to Rs52.5 and Rs60.4 for FY2009E and FY2010E, respectively, from Rs52.4 and Rs63.4 earlier. We have cut our SOTP-based target price to Rs840/share (from Rs900 earlier, see Exhibit 9). It comprises (1) Rs671/share from the core company (implying 13X FY2010E earnings), (2) Rs172/share from subsidiaries, associates and investments. We change our rating to REDUCE from ADD earlier based on (1) lower expected earnings momentum going forward, (2) low upside to our target price and (3) about 10-12% higher price since our last update of November 21, 2008.

Key upside risks for L&T originate from (1) order inflows in the power segment, particularly bulk order from NTPC which would add visibility to the development of equipment manufacturing business, (2) shift to business originating from public sector spending over the next two years, (3) higher-than-expected government spending and (4) higher-than-expected margins based on commodity price decline.

**Exhibit 1. Private corporate spending has grown at a CAGR of 25%, roughly double that for the public spending, starting from same level in FY2000**

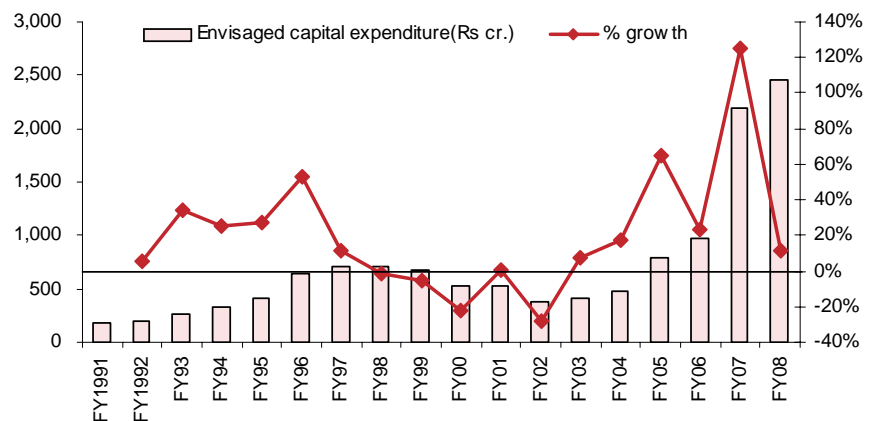
Component of gross fixed capital formation as per national account statistics, March fiscal year-ends 1990-2007



Source: Kotak Institutional Equities

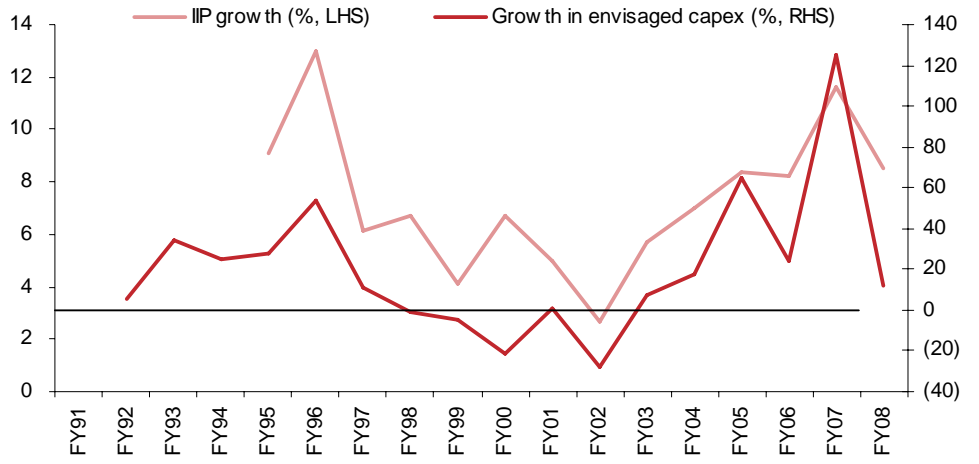
**Exhibit 2. Envisaged capital expenditure growth likely to slow down led by slowdown in financial closure**

Total envisaged capital expenditure FY1991 - FY2008 (Rs bn)



Source: Reserve Bank of India

**Exhibit 3. Growth in envisaged capital expenditure has had strong correlation to IIP growth**  
 Total envisaged capital expenditure and IIP growth, March fiscal year-ends, FY1991 - FY2008 (Rs bn)



Source: Reserve Bank of India

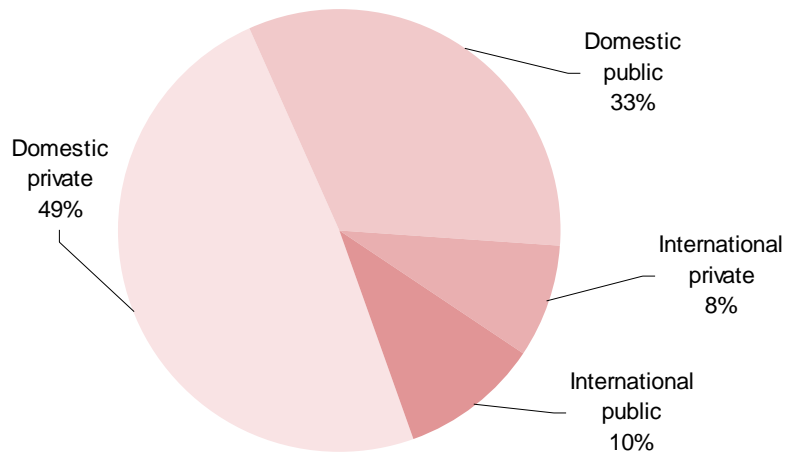


Exhibit 4. Major orders booked by L&T in FY2008 and in FY2009 so far

Date	Customer	Domestic/ International	Sector	Area	Size of Order (Rs bn)	Nature of Work
2-Dec-08	Several Players (TCS, Godrej Developers Private Ltd)	Domestic	Others	Private	14.5	Construction of IT & office space buildings
17-Nov-08	Delhi Jal Board	Domestic	Infrastructure	Public	3.6	Water treatment plant (WTP) at Okhla
17-Nov-08	Hyderabad Water Supply & Sewerage (HMWSSB)	Domestic	Infrastructure	Public	5.8	Bring 735 Million Litres per Day (MLD) to Hyderabad
16-Nov-08	HPCL - Mittal Energy Limited (HMEL)	Domestic	Process	Public	7.0	Hydrogen Generation Units
10-Nov-08	Mumbai Metropolitan Region Development Authority (MMRDA)	Domestic	Infrastructure	Public	14.0	Monorail, Jacob Circle to Chembur via Mahul, Mumbai
<b>Total major order inflows received in 2QFY09</b>					<b>44.9</b>	
	Abu Dhabi	International	Power	Public	3.0	Augmentation and expansion of 33 KV electrical network
	Dubai Lifestyle city	International	Others	Private	3.1	Residential Villa at Dubai
	Qatar Petroleum	International	Oil & gas	Public	5.0	Pipeline project
	Delhi Jal Board	Domestic	Others	Public	2.5	Water treatment plant and supply scheme
	Bramhani Industries Limited	Domestic	Power	Private	2.6	Power distribution system
	Cairn Energy	Domestic	Oil & gas	Private	2.8	Additional order for Barmer - Salaya pipeline project
24-Sep-08	Godrej Properties Ltd, L&T Arun Excello Infrastructure Pvt. Ltd	Domestic	Others	Private	17.6	Construction of IT parks
24-Sep-08	PBEL Property Development Pvt Ltd	Domestic	Others	Private	4.8	Construction of residential buildings in Hyderabad
24-Sep-08	Om Prakash Jindal Graham Jan Kalyan Sansthan	Domestic	Others	Private	6.4	Construction of institutional buildings
24-Sep-08	Honda, Mahi Cement etc	Domestic	Others	Private	3.2	Construction of factory buildings
10-Sep-08	Petrobras, Brazil	International	Process	Private	7.1	Manufacture and supply of hydrating reactors and coke drums
12-Aug-08	SAIL-RSP expansion	Domestic	Process	Public	5.9	EPC order for 360 SqM sinter plant
12-Aug-08	Tata Steel	Domestic	Process	Private	8.4	Pellet plant at Jamshedpur
12-Aug-08	Tata Steel	Domestic	Process	Private	7.4	Blast furnace at Jamshedpur
	Dubai Electricity and Water Authority	International	Power	Public	2.2	132/11 KV substation at Jebel Ali Horse Race course, Dubai
	Sterilite Industries	Domestic	Others	Private	2.0	Railway siding at Jharsuguda, Orissa
	Tata Power	Domestic		Private	3.9	LP/HP feedwater heater, condensers, deaerators for CGPL, Mumdra
	NHAI	Domestic	Infrastructure	Public	6.0	Six lane structural bridge at Chennai, Tamil Nadu
	Tata Steel	Domestic	Process	Private	9.8	Blast furnace at Kalinga Nagar, Orissa
12-Aug-08	Hindustan Zinc	Domestic	Process	Private	5.2	EPC order for leaching, purification and zinc electrolysis plant
8-Jul-08	Indian Railways	Domestic	Others	Public	10.5	Setting up a caste steel wheel manufacturing plant in Saran, Bihar
<b>Total major order inflows received in 2QFY09</b>					<b>119.4</b>	
30-Jun-08	Andhra Pradesh Power Development Company Ltd	Domestic	Power	Public	15.6	Steam turbine generator package
20-Jun-08	HPCL Mittal Energy Ltd	Domestic	Others	Public	2.4	Reactors
20-Jun-08	Kuwait National Petroleum Company, Kuwait (KNPC); UHDE, Germany; PTT Asahi Chem Co. Ltd, Thailand	Domestic	Others	Public	7.6	High-tech equipment and systems
20-May-08	Abu Dhabi Water & Electricity Authority	International	Infrastructure	Public	2.1	Supply and construction of five 33/11 kV GIS substations and 33kV
5-May-08	Power Grid Corporation of India Limited	Domestic	Power	Public	3.4	Construction of 755km. Of 400 KV DC transmission lines
15-Apr-08	Bombay Dyeing	Domestic	Others	Private	2.0	Development of 9 mn Sq. ft at the textile mills and Spring Mills complexes at Worli and Wadala regions of Mumbai
8-Apr-08	Government of Rajasthan	Domestic	Others	Public	3.7	Water supply projects
8-Apr-08	Damodar Valley Corporation (DVC)	Domestic	Others	Public	3.3	Coal handling plant at Jharkhand
8-Apr-08	Bhushan Steel-Orissa, SAIL Bokaro Steel Plant	Domestic	Others	Private	9.9	Sinter plant and cold roll mill
21-Feb-08	Cairn India	Domestic	Oil & gas	Private	7.3	EPC services for export crude oil insulated and gas pipeline from Barmer
<b>Total major order inflows received in 1QFY09</b>					<b>57.3</b>	
31-Mar-08	Hindustan Petroleum Corporation Ltd	Domestic	Oil & gas	Public	5.8	LSTK of lube oil base stock plant
18-Mar-08	Hebi Coal and Electricity Co. Ltd	International	Process	Private	1.7	Supply of coal gasifier and syngas cooler assembly for methanol plant
11-Mar-08	Oil & Natural Gas Corporation	Domestic	Oil & gas	Public	0.7	Setting up of SCADA system for Onshore Control Centres for offshore
5-Mar-08	Jaypee Powergrid Ltd and Power Grid Corporation	Domestic	Power	Private	4.6	Transmission line projects
18-Feb-08	Oil & Natural Gas Corporation	Domestic	Oil & gas	Public	12.5	Engineering, procurement, fabrication and installation of offshore platforms at Mumbai High South field
14-Feb-08	Qatar General Electricity and Water Corporation	International	Power	Public	3.1	Design, supply, installation and commissioning of five 66/11 substations
8-Feb-08	SAIL, ISCO Steel Plant, Burnpur	Domestic	Process	Public	11.1	Construction of Coal & Coke Handling Plant and Base Mix Preparation
23-Jan-08	Transmission and distribution companies in the Middle-east	International	Power	Public	10.6	Construction of substations, switchgears and grid stations among others
21-Jan-08	Kuwait National Petroleum Company	International	Oil & gas	Public	17.0	Manufacture of 22 hydrocracker & atmospheric residue desulphurisation
10-Jan-08	Kingston Properties and others	Domestic	Others	Private	35.0	Construction of IT parks, hotels and malls
7-Jan-08	Cairn India	Domestic	Oil & gas	Private	13.0	Construction works for Northern Area Development Project, Barmer,
26-Dec-07	Muscat Golf Course Project LLC	International	Others	Private	4.3	Township development
26-Dec-07	Dhofar Power Co. and Muscat Electricity Distribution Co.	International	Power	Public	3.2	Electrical substations & associated works in Oman
19-Dec-07	Mumbai Metropolitan Region Development Authority	Domestic	Infrastructure	Public	2.9	Access road from Western Express Highway to the International Airport,
19-Nov-07	Delhi Metro Railway Corporation	Domestic	Infrastructure	Public	1.4	Underground Twin Tunnel with Shanghai Urban Construction (Group)
15-Nov-07	SAIL - Bokaro Steel Plant	Domestic	Process	Public	3.6	Blast Furnace Rebuild in consortium with Paul Wurth
1-Nov-07	Mumbai International Airport Pvt Ltd	Domestic	Infrastructure	Private	55.0	Integrated passenger terminal, airside and landside works at Mumbai
18-Oct-07	NTPC and Andhra Pradesh state government agencies	Domestic	Power & Infrastructure	Public	4.5	Simhadri Coal Handling Plant and water supply/sanitation projects
10-Oct-07	Methanol Chemical Company, Saudi Arabia	International	Process	Private	2.3	Setting up high technology Methyl Amines & Dimethyl Formamide Plants
9-Oct-07	Indian Oil Corporation	Domestic	Oil & gas	Public	6.9	EPC of sulphur recovery units
17-Sep-07	Rashtriya Chemicals and Fertilizers Limited	Domestic	Process	Public	0.8	Methanol Reformer Package as a part of Trombay Methanol Revamp
14-Sep-07	Steel Authority of India Limited	Domestic	Process	Private	7.6	Turnkey sinter plant project in consortium with Outotec GmbH, Germany
5-Sep-07	Bhushan Steel Limited	Domestic	Process	Private	12.1	2.5 mn TPA blast furnace in Orissa in consortium with Paul Wurth, Italy
4-Sep-07	Indian Oil Corporation Limited and Liaoning Huajin Chemical	Domestic	Oil & gas	Public	2.7	2 separate orders - both are capacity expansion projects
23-Aug-07	RollDock BV, Netherlands	International	Shipbuilding	Private	2.7	Construction of two ships
13-Aug-07	Delhi Metro Railway Corporation	Domestic	Infrastructure	Public	2.0	Construction of underground station and a tunnel as part of Phase II of the project
17-Jul-07	Tata Steel	Domestic	Process	Private	9.8	Supply and installation of blast furnace
16-Jul-07	Tata Steel	Domestic	Process	Private	6.2	Supply & installation of sinter plant and other packages
16-Jul-07	Various companies in the Gulf	International	Process	Private	7.2	Manufacture and supply of process modules for handling & processing of
13-Jul-07	Abu Dhabi Water & Electricity Authority	International	Infrastructure	Public	3.7	Design and commissioning of substations
13-Jul-07	Power Grid Corporation of India Limited	Domestic	Infrastructure	Public	2.0	Turnkey construction of substations
13-Jul-07	Different entities in the water and utilities sector	Domestic	Infrastructure	Public	2.9	Various projects in the water sector
10-Jul-07	Indian Oil Corporation Limited	Domestic	Process	Public	5.4	Order for motor spirit quality upgradation unit
21-Jun-07	BigLift Shipping BV, Netherlands	International	Others	Private	3.8	Construction of two ships
19-Jun-07	Victory Heights Golf Residential and Development LLC, UAE	International	Others	Private	6.1	Residential building project in Dubai, in JV with Eastern Contracting LLC
12-Jun-07	Oil & Natural Gas Corporation	Domestic	Oil & gas	Public	8.8	Re-construction of offshore facilities at NQ complex in Mumbai High north field
12-Jun-07	Steel Authority of India Limited	Domestic	Power	Public	1.1	Turnkey construction of substation and associated transmission networks
7-Jun-07	ENOC Processing Company LLC, Dubai	International	Process	Private	2.1	Mechanical erection of new process plants
18-May-07	Irrigation & Command Area Development Dept, Govt of AP	Domestic	Infrastructure	Public	2.7	Engineer-Procure-Construct lift irrigation
8-May-07	Abu Dhabi Water & Electricity Authority	International	Infrastructure	Public	2.1	Supply and installation of power cables and fibre optic cables
25-Apr-07	Nakheel, UAE	International	Others	Private	2.0	Residential project in Dubai
<b>Total major order inflows received in FY2008</b>					<b>292.8</b>	

Source: Company Data

**Exhibit 5. Private sector contributed to 57% of order book of L&T, since the beginning of FY2008**  
 Mix of L&T's order backlog in terms of distribution between public and private (%)



Note: We highlight that this categorisation does not exactly match with categorisation of total order inflows provided by L&T probably based on (a) these are only announced orders and (b) internal categorisation may be different, (c) specific order amount recognised in reported order book may be different.

Source: Kotak Institutional Equities

**Exhibit 6. As per our analysis, real estate and metals related orders contributed 34% of order booking since the beginning of FY2008**

Segment-wise and geographical breakup of major order inflows for L&T since beginning of FY2008

Segment	Domestic/ International	Size of order (Rs bn)	% share
Real Estate	Domestic	59	11.6
	International	16	3.1
	<b>Total</b>	<b>75</b>	<b>14.7</b>
Infrastructure	Domestic	132	25.9
	International	-	-
	<b>Total</b>	<b>132</b>	<b>25.9</b>
<b>Infrastructure + Real estate</b>		<b>207</b>	<b>40.5</b>
Metals	Domestic	97	19.0
	International	-	-
	<b>Total</b>	<b>97</b>	<b>19.0</b>
Process	Domestic	34	6.6
	International	37	7.3
	<b>Total</b>	<b>71</b>	<b>13.9</b>
<b>Process total</b>		<b>168</b>	<b>32.9</b>
Power	Domestic	41	8.0
	International	30	5.8
<b>Power total</b>		<b>71</b>	<b>13.9</b>
Oil & gas	Domestic	53	10.4
	International	5	1.0
<b>Oil &amp; gas total</b>		<b>58</b>	<b>11.4</b>
<b>Others</b>		<b>7</b>	<b>1.3</b>
<b>Total</b>		<b>511</b>	<b>100.0</b>

Note: We highlight that this categorisation does not exactly match with categorisation of total order inflows provided by L&T probably based on (a) these are only announced orders, (b) internal categorisation may be different and (c) specific order amount may be different.

Source: Company Data

**Exhibit 7. Order equivalent to about 12% of backlog at end 2QFY09, may face delays in execution, not counting Mumbai airport order**

Review of real estate and metal related orders announced by L&amp;T in last one-and-a-half years

Date	Customer	Domestic/ International	Sector	Size of Order (Rs bn)	Nature of Work
	Dubai Lifestyle city	International	Others	3.13	Residential Villa at Dubai
	Bramhani Industries Limited	Domestic	Power	2.6	Power distribution system
24-Sep-08	Godrej Properties Ltd (Hyderabad property),	Domestic	Infrastructure	17.6	Construction of IT parks
24-Sep-08	PBEL Property Development Pvt Ltd, Hyderabad	Domestic	Infrastructure	4.8	Construction of residential buildings in Hyderabad
17-Jul-07	Tata Steel	Domestic	Process	9.8	Blast furnace at Kalinga Nagar, Orissa
16-Jul-07	Tata Steel		Process	6.2	Supply & installation of sinter plant and other packages
10-Jan-08	Kingston Properties Pvt. Ltd	Domestic	Infrastructure	20.0	Construction of various office & residential buildings in Mumbai
10-Jan-08	CSJ Infrastructure Pvt. Ltd	Domestic	Others	3.0	Construction of 3 million sq ft building at Chandigarh for development of malls, office space & hotel
26-Dec-07	Muscat Golf Course Project LLC		Infrastructure	4.3	Township development
1-Nov-07	Mumbai international Airport Pvt Ltd		Infrastructure	55.0	Integrated passenger terminal, airside and landside works at Mumbai airport
19-Jun-07	Victory Heights Golf Residential and Development LLC, UAE		Infrastructure	6.1	Residential building project in Dubai, in JV with Eastern Contracting LLC
25-Apr-07	Nakheel, UAE		Infrastructure	2.0	Residential project in Dubai

Note: We highlight that this categorisation does not exactly match with categorisation of total order inflows provided by L&T probably based on (a) these are only announced order © specific order amount may be different.

Source: Company Data

**Exhibit 8.summary of change in earnings estimates of L&T (Rs mn)**

	LnT			
	New estimates		Old estimates	
	FY2009E	FY2010E	FY2009E	FY2010E
<b>Standalone estimates</b>				
Order booking	482,810	443,794	520,628	501,509
Order booking growth (%)	15	(8)	24	(4)
Revenues	339,002	405,272	342,546	432,604
EPS	45	52	45	54
<b>Consolidated</b>				
Revenues	393,194	469,425	396,315	498,644
Operating profit	54,897	66,084	54,948	69,383
PAT	31,118	36,065	31,052	37,858
Net debt	135,985	156,470	141,693	169,274
EPS	52.5	60.4	52.4	63.4
<i>Revenue growth</i>	34.0	19.4	35.0	25.8
<i>PAT growth</i>	37.0	15.9	36.7	21.9
<i>EPS growth</i>	35.1	15.1	34.9	21.1
<i>Operating profit margin</i>	14.0	14.1	13.9	13.9
<i>RoE</i>	22.7	20.8	22.6	21.8
<i>RoCE</i>	19.1	13.0	18.9	13.4

Source: Kotak Institutional Equities estimates

Exhibit 9. SOTP valuation results in a target price of Rs900/share

	Original invt (Rs mn)	Mkt value (Rs mn)	Implied val on FY10 estimates (X)			L&T's stake %	Value of L&T's stake (Rs mn)	Value per share of L&T (Rs)	Basis of valuation
			P/E	P/B	EV/EBIDTA				
<b>Core company valuation</b>			<b>12.9</b>	<b>2.7</b>	<b>9.5</b>		<b>397,622</b>	<b>671</b>	<b>FY10 based DCF</b>
Key subsidiaries - services	5,792	29,080					29,080	49	
L&T Finance	4,910	7,797	5.6	0.8	NA	100	7,797	13	Relative P/E
L&T Infotech	883	21,283	6.4	1.8	3.7	100	21,283	36	Relative P/E
Key subsidiaries - manufacturing	1,079	30,885					15,985	47	
Tractor Engineers	3	1,084	7.7	1.3	6.0	100	1,084	2	Relative P/E
Associate companies*	1,076	29,801	7.7	NA	NA	50	14,901	25	Relative P/E
Power equipment JVwth MHI	7,500	22,768	NA	NA	NA	51	11,612	20	DCF of the JV
Infrastructure SPVs	10,989	32,966				79	26,043	44	P/B
Other subsidiaries	11,087						13,858	23	P/B
<b>Total subsidiaries</b>	<b>24,922</b>						<b>84,966</b>	<b>163</b>	
UltraTech Cement	143	4,520					3,842	6	15% discount to market value
Other associate companies	76	153					153	0	2X investment
Integrated JVs	759	1,517					1,517	3	2X investment
<b>Total associates and IJVs</b>	<b>978</b>	<b>6,189</b>					<b>5,511</b>	<b>9</b>	
<b>Grand total</b>	<b>25,899</b>	<b>6,189</b>					<b>488,099</b>	<b>843</b>	

Source: Company, Kotak Institutional Equities estimates

**Energy****RELI.BO, Rs1307**

Rating	REDUCE
Sector coverage view	Neutral
Target Price (Rs)	1,325
52W High -Low (Rs)	3298 - 930
Market Cap (Rs bn)	1,795

**Financials**

March y/e	2008	2009E	2010E
Sales (Rs bn)	1,334	1,567	2,281
Net Profit (Rs bn)	142.5	126.6	189.0
EPS (Rs)	101.7	83.6	120.1
EPS gth	23.0	(17.8)	43.6
P/E (x)	12.8	15.6	10.9
EV/EBITDA (x)	8.4	8.7	4.9
Div yield (%)	0.9	1.1	1.5

**Shareholding, September 2008**

	% of		Over/(under)
	Pattern	Portfolio	weight
Promoters	37.6	-	-
FII's	21.1	10.1	1.5
MFs	2.7	6.7	(1.9)
UTI	-	-	(8.6)
LIC	5.4	10.7	2.1

**Reliance Industries : Clearing some air about RIL-RNRL gas dispute and other things**

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- **Government's withdrawal of affidavits surprising but not material to the outcome of RIL-RNRL gas dispute**
- **Outcome of ongoing gas disputes remains uncertain; outcome will be neutral-to-negative for RIL versus street expectations**
- **Use recent rally to cut position in RIL stock; industry fundamentals continue to be poor**

We are puzzled by the spurt in stock prices of RIL and RNRL following the government's withdrawal of affidavits in the ongoing RIL-RNRL gas dispute. We believe that the outcome of this case will be neutral-to-negative for RIL's earnings versus street's expectations and there is no impact on RNRL's earnings in any eventuality. A section of the street expects an amicable resolution of the gas and other issues between RIL and R-ADAG groups, which may be the other reason for the surge in stock prices of both groups in the past week. However, we do not see much impact of any settlement on the fundamentals of either group's operations. We recommend investors cut exposure to RIL stock at current levels as the stock is trading close to our 12-month SOTP-based fair valuation of Rs1,325. Chemical and refining margins continue to be subdued (see Exhibits 1 and 2) and will likely remain very weak for the next two years. Investors seeking exposure to RIL's E&P business may look at the following two strategies—(1) buy RIL and short RPET and any other global chemical company or (2) buy Niko Resources and short RIL.

**Withdrawal of affidavit by government does little to lend clarity on the ongoing gas dispute.** We see the recent withdrawal of affidavits filed by the government as largely irrelevant for the RIL-RNRL gas dispute. The government had filed an affidavit with the Mumbai High Court stating that RIL cannot sell gas below US\$4.2/mn BTU, which is the government-approved price for five years. However, it has withdrawn the affidavits seemingly to avoid cross-examination of the secretaries of government of India. We believe that the withdrawal of the affidavits will not prejudice the government's stand in the case given that it can still make a written submission to the courts. The government's stance suggests that it would use US\$4.2/mn BTU to compute royalty, income tax and its share of profit petroleum irrespective of the outcome of the case(s).

We note that RNRL has claimed that (1) the price of US\$4.2/mn BTU is valid for computation of the government's share of profit petroleum and taxes only and (2) the disputed US\$2.34/mn BTU price for sale of gas to RNRL need not be approved by the government. RIL has argued previously that the government has rejected the US\$2.34/mn BTU since it has approved a price of US\$4.2/mn BTU as per a decision of the EGOM.

We have previously highlighted that the government stance may be of limited significance if the courts have a different view on the sale of gas to RNRL; the judiciary is above the executive and legislative branches of the government. We compute an impact of Rs115/share on our valuation of RIL's E&P segment in case RIL has to sell gas to NTPC and RNRL at US\$2.34/mn BTU but compensate the government for its share of profit petroleum, income tax and royalty at US\$4.2/mn BTU.

**What the current situation is.** Gas production from RIL's KG D-6 block will likely start by January 2009. However, this is contingent on the RIL-RNRL legal dispute getting resolved as currently there is a stay order on the sale of gas to third parties (other than NTPC, RNRL and RIL). The stay order says that RIL will have to reserve 40 mcm/d of gas for NTPC and RNRL. The hearing on the case has been adjourned to January 12, 2009.

The continued impasse may jeopardize RIL's planned schedule of production of gas from KG D-6 over the next few months unless RIL and RNRL can arrive at an out-of-court settlement in the interim. We do not rule out the possibility of the losing party approaching the Supreme Court to appeal against the decision of the Mumbai High Court if it is not satisfied with the decision.

**What the likely outcomes could be.** We believe that the outcome of the dispute may be neutral-to-negative for RIL's earnings and valuation. We discuss the impact of various plausible outcomes (as decided by Mumbai High Court or eventually the Supreme Court if the matter goes there) on RIL's earnings and valuations.

1. **Scenario 1—Reliance sells contracted amount of gas to RNRL at government-approved price; neutral impact.** This would be neutral versus street expectation since it would not matter who Reliance sells gas to as long as it receives the government-approved price. We believe the street is factoring a selling price of about US\$4.2/mn BTU for the price of gas. We model US\$4.2/mn BTU for FY2009-12E and bring it down moderately after that assuming Reliance will sell 12 mcm/d of gas to NTPC at a lower price of US\$2.34/mn BTU and the balance (including sale of gas to RNRL, if any) at US\$4.2/mn BTU or higher. Exhibit 3 gives our base-case fair valuation for RIL.
2. **Scenario 2—Reliance sells contracted amount of gas to RNRL at a price lower than the government approved price; negative impact.** It might be possible that under a renegotiated GSMA RIL supplies gas to RNRL at a price, which is lower than the government-approved price of US\$4.2/ mn BTU. This would be lower than street and our expectations and would result in a drop in the profits of Reliance and valuation of KG D-6 block. We currently value the KG D-6 block at US\$9.4 bn; however, if Reliance were to sell 28 mcm/d of gas to RNRL for the contracted period of 17 years, then the value of the block would decline to US\$8.1 bn.
3. **Scenario 3—Reliance sells contracted amount of gas to RNRL at a price lower than the government-approved price of US\$4.2/ mn BTU but the government uses the 'approved price' for royalty, income tax and share of profit petroleum; large negative impact on valuation of D6 block in that case.** This would be hugely negative versus street expectations since RIL will have to supply 28 mcm/d of gas at US\$2.34/mn BTU to RNRL and yet compensate the government for its share of profit petroleum, royalty and income tax on the basis of the government-fixed price of US\$4.2/mn BTU. We compute an impact of Rs115/share on our valuation of RIL's E&P segment in this case. Exhibit 4 shows our trough-case valuation for RIL, which factors in this outcome.

**Chemical margins have collapsed in recent weeks**

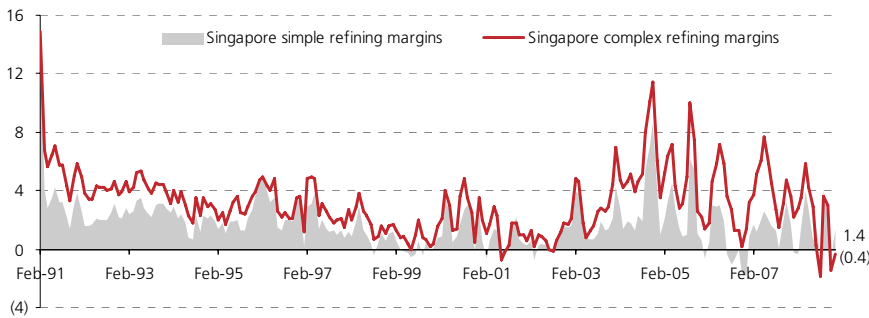
Asia chemical margins, calendar year-ends (US\$/ton)

	Annual average prices					Quarterly average					Monthly average				Recent			
	2004	2005	2006	2007	2008	1Q08	2Q08	3Q08	4Q08	4Q08 vs. 3Q08 (%)	Aug	Sep	Oct	Nov	Nov 21	Nov 28	Dec 5	Dec 12
<b>Ethylene chain</b>																		
Ethylene – naphtha	515	389	549	441	349	458	401	359	93	(74)	359	239	129	57	104	82	149	122
HDPE – 1.015 x ethylene	28	147	88	171	255	208	237	252	354	40	276	346	372	336	375	339	364	333
LLDPE – 1.015 x ethylene	53	175	87	185	315	262	223	352	475	35	405	467	550	401	425	384	434	403
LDPE – 1.015 x ethylene	181	243	94	291	427	364	335	464	602	30	522	592	696	509	475	434	484	453
<b>HDPE – naphtha</b>	<b>556</b>	<b>548</b>	<b>655</b>	<b>629</b>	<b>622</b>	<b>687</b>	<b>660</b>	<b>632</b>	<b>454</b>	<b>(28)</b>	<b>656</b>	<b>601</b>	<b>510</b>	<b>398</b>	<b>484</b>	<b>427</b>	<b>519</b>	<b>462</b>
<b>LLDPE – naphtha</b>	<b>582</b>	<b>577</b>	<b>654</b>	<b>643</b>	<b>682</b>	<b>740</b>	<b>646</b>	<b>732</b>	<b>576</b>	<b>(21)</b>	<b>785</b>	<b>722</b>	<b>688</b>	<b>463</b>	<b>534</b>	<b>472</b>	<b>589</b>	<b>532</b>
<b>LDPE – naphtha</b>	<b>710</b>	<b>644</b>	<b>660</b>	<b>749</b>	<b>794</b>	<b>843</b>	<b>758</b>	<b>844</b>	<b>703</b>	<b>(17)</b>	<b>901</b>	<b>847</b>	<b>834</b>	<b>571</b>	<b>584</b>	<b>522</b>	<b>639</b>	<b>582</b>
<b>Propylene chain</b>																		
Propylene – naphtha	414	424	509	373	369	330	471	468	128	(73)	502	346	154	102	199	147	224	157
PP – 1.01 x propylene	142	154	125	244	261	265	192	264	354	34	252	250	403	306	295	290	300	290
<b>PP – naphtha</b>	<b>564</b>	<b>587</b>	<b>645</b>	<b>628</b>	<b>643</b>	<b>607</b>	<b>678</b>	<b>748</b>	<b>488</b>	<b>(35)</b>	<b>769</b>	<b>609</b>	<b>564</b>	<b>411</b>	<b>499</b>	<b>442</b>	<b>529</b>	<b>452</b>
<b>Styrene chain</b>																		
Benzene – naphtha	435	339	278	325	166	175	184	183	104	(43)	164	229	155	52	65	12	50	(25)
Styrene – 0.81 x benzene	142	131	139	163	129	136	114	133	132	(1)	142	171	126	138	152	119	173	175
– 0.29 x ethylene																		
Polystyrene – 0.98 styrene	124	125	90	132	160	90	107	173	323	87	180	174	377	270	273	237	172	181
PS – naphtha	786	670	649	730	585	561	560	630	594	(6)	630	659	700	487	524	412	444	392
<b>Vinyl chain</b>																		
EDC – (0.3 x ethylene)	186	99	11	85	41	35	24	73	28	(61)	85	96	58	(2)	(7)	(19)	(14)	(16)
PVC – 1.025 (0.235 x ethylene + 0.864 x EDC)	258	281	249	294	406	349	435	428	413	(3)	483	388	421	405	416	412	432	411
<b>PVC – naphtha</b>	<b>492</b>	<b>326</b>	<b>250</b>	<b>249</b>	<b>188</b>	<b>181</b>	<b>145</b>	<b>174</b>	<b>282</b>	<b>62</b>	<b>240</b>	<b>163</b>	<b>280</b>	<b>283</b>	<b>334</b>	<b>277</b>	<b>369</b>	<b>304</b>
<b>Polyester/intermediates</b>																		
<b>PSF – 0.85 x PTA – 0.34 x MEG</b>	<b>157</b>	<b>247</b>	<b>240</b>	<b>324</b>	<b>394</b>	<b>333</b>	<b>278</b>	<b>385</b>	<b>674</b>	<b>75</b>	<b>361</b>	<b>441</b>	<b>618</b>	<b>729</b>	<b>729</b>	—	—	—
<b>PFY – 0.85 x PTA – 0.34 x MEG</b>	<b>398</b>	<b>398</b>	<b>391</b>	<b>541</b>	<b>621</b>	<b>651</b>	<b>553</b>	<b>584</b>	<b>734</b>	<b>26</b>	<b>586</b>	<b>551</b>	<b>678</b>	<b>789</b>	<b>789</b>	—	—	—
PTA – 0.67 x PX	225	201	124	123	123	127	103	110	169	53	128	106	188	149	155	141	161	180
PX – naphtha	418	414	572	435	335	290	389	359	288	(20)	371	289	294	281	313	295	358	302
MEG – naphtha	564	384	270	419	95	308	59	(84)	100	(219)	(98)	(60)	58	142	186	135	217	174
MEG – 0.6 x ethylene	410	345	174	433	236	383	235	106	209	97	93	146	189	229	229	215	230	227

Source: Platts, Kotak Institutional Equities

**Refining margins continue to remain weak**

Singapore refining margins (US\$/bbl)



Simple refining margins, March fiscal year-ends (US\$/bbl)										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 YTD
1Q	(0.32)	1.29	0.51	0.30	1.05	1.69	3.02	2.52	2.25	2.40
2Q	(0.08)	2.47	0.45	0.07	1.20	3.13	2.78	(0.70)	0.99	1.71
3Q	0.14	1.74	1.06	1.44	1.57	6.46	2.22	(1.25)	2.32	0.92
4Q	1.86	0.21	(0.03)	2.98	2.88	2.08	1.09	1.25	0.25	
<b>Average</b>	<b>0.40</b>	<b>1.43</b>	<b>0.50</b>	<b>1.20</b>	<b>1.67</b>	<b>3.34</b>	<b>2.28</b>	<b>0.45</b>	<b>1.45</b>	<b>1.72</b>

Weekly margins				
Current	-1 Wk	-2 Wk	-3 Wk	-4 Wk
1.93	0.80	(1.17)	0.44	(0.04)

Singapore refining margins, March fiscal year-ends (US\$/bbl)										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 YTD
Simple	0.40	1.43	0.50	1.20	1.67	3.34	2.28	0.45	1.45	1.72
Complex	0.43	1.86	1.34	0.79	1.24	4.57	4.93	3.45	4.05	1.98

Source: Bloomberg

Complex refining margins, March fiscal year-ends (US\$/bbl)										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 YTD
1Q	0.43	1.86	1.34	0.79	1.24	4.57	4.93	6.24	6.58	4.31
2Q	1.19	3.96	0.58	0.14	2.35	5.80	6.11	2.46	2.91	0.66
3Q	0.41	2.25	1.22	1.56	3.23	9.04	3.94	0.98	3.91	0.78
4Q	2.64	1.60	0.65	3.70	5.44	5.02	2.77	4.11	2.78	
<b>Average</b>	<b>1.17</b>	<b>2.42</b>	<b>0.95</b>	<b>1.55</b>	<b>3.06</b>	<b>6.10</b>	<b>4.44</b>	<b>3.45</b>	<b>4.05</b>	<b>1.98</b>

Weekly margins				
Current	-1 Wk	-2 Wk	-3 Wk	-4 Wk
0.24	(1.01)	(2.53)	(1.13)	(0.18)

**SOTP valuation of Reliance is Rs1,325 per share on FY2010E estimates**

Sum-of-the-parts valuation of Reliance Industries, FY2010E basis (Rs)

	Valuation base (Rs bn)		Multiple (X)		EV (Rs bn)	Value share (Rs)
	Other	EBITDA	Multiple	EV/EBITDA		
Chemicals		52		6.0	315	229
Refining & Marketing (a)		79		5.0	393	286
Oil and gas—producing		33		3.0	100	73
Gas—developing (DCF-based) (b)	600	—	100%	—	600	436
Oil—KG-DWN-98/3 (c)	101	—	100%	—	101	73
Investments						
RPL (3.167 bn shares at Rs80)	253	—	100%	—	253	184
Others	27	—	100%	—	27	20
Loans & advances to affiliates less accounts payables to affiliate:	46	—	100%	—	46	34
Retailing	40	—	1.0	—	40	29
SEZ development	75	—	80%	—	60	43
<b>Total</b>					<b>1,834</b>	<b>1,408</b>
PV of refining division's future sales tax incentives					2	2
<b>Total value</b>					<b>1,836</b>	<b>1,409</b>
Net debt					108	79
<b>Implied equity value</b>					<b>1,728</b>	<b>1,331</b>

Note:

- (a) We value the KG D-6 gas find on DCF and offshore Orissa (NEC-25) and CBM discoveries based on KG D-6's valuation.  
(b) 180 mn bbls of recoverable reserves based on gross OOIP of 0.5 bn bbls.  
(c) Net debt reflects is for standalone (without RPL); however, we consolidate for RPL otherwise as it a 71% subsidiary.  
(d) We use 1.374 bn shares (excluding treasury shares) for per share computations.

Source: Kotak Institutional Equities estimates

**SOTP valuation of Reliance is around Rs975 per share assuming trough-margin scenario**

Sum-of-the-parts valuation of Reliance Industries, FY2010E basis (Rs)

	Valuation base (Rs bn)		Multiple (X)		EV (Rs bn)	Value share (Rs)
	Other	EBITDA	Multiple	EV/EBITDA		
Chemicals (a)		17		7.0	116	84
Refining & Marketing (b)		56		5.5	307	224
Oil and gas—producing		33		3.0	100	73
Gas—developing (DCF-based) (c)	477	—	100%	—	477	347
Oil—KG-DWN-98/3 (d)	107	—	100%	—	107	78
Investments						
RPL (3.167 bn shares at Rs80)	253	—	100%	—	253	184
Others	27	—	100%	—	27	20
Loans & advances to affiliates less accounts payables to affiliates	46	—	100%	—	46	34
Retailing	40	—	1.0	—	40	29
SEZ development	75	—	50%	—	37	27
<b>Total</b>					<b>1,404</b>	<b>1,099</b>
PV of refining division's future sales tax incentives					2	2
<b>Total value</b>					<b>1,406</b>	<b>1,101</b>
Net debt					163	119
<b>Implied equity value</b>					<b>1,243</b>	<b>982</b>

Note:

- (a) We reduce chemical margins by US\$100/ton versus our base-case margins.  
(b) We reduce refining margin by US\$2/bbl versus our base-case assumption.  
(c) We value the KG D-6 gas find on DCF and offshore Orissa (NEC-25) and CBM discoveries based on KG D-6's valuation.  
(d) 180 mn bbls of recoverable reserves based on gross OOIP of 0.5 bn bbls.  
(e) Net debt is for RIL standalone (without RPL); however, we consolidate for RPL otherwise as it a 71% subsidiary.  
(f) We use 1.374 bn shares (excluding treasury shares) for per share computations.

Source: Kotak Institutional Equities estimates



**Reliance's earnings have high leverage to refining margins**

Sensitivity of RIL's standalone (without RPET) earnings to key variables

	Fiscal 2009E			Fiscal 2010E			Fiscal 2011E		
	Downside	Base case	Upside	Downside	Base case	Upside	Downside	Base case	Upside
<b>Rupee-dollar exchange rate</b>									
Rupee-dollar exchange rate	45.1	46.1	47.1	47.0	48.0	49.0	46.0	47.0	48.0
Net profits (Rs mn)	121,923	126,608	131,293	152,798	157,597	162,391	176,407	181,768	187,120
EPS (Rs)	80.6	83.7	86.8	97.1	100.2	103.2	112.1	115.5	118.9
<b>% upside/(downside)</b>	<b>(3.7)</b>		<b>3.7</b>	<b>(3.0)</b>		<b>3.0</b>	<b>(2.9)</b>		<b>2.9</b>
<b>Chemical prices</b>									
Change in prices (%)	(5.0)		5.0	(5.0)		5.0	(5.0)		5.0
Net profits (Rs mn)	122,637	126,608	130,579	154,238	157,597	160,955	178,330	181,768	185,206
EPS (Rs)	81.0	83.7	86.3	98.0	100.2	102.3	113.3	115.5	117.7
<b>% upside/(downside)</b>	<b>(3.1)</b>		<b>3.1</b>	<b>(2.1)</b>		<b>2.1</b>	<b>(1.9)</b>		<b>1.9</b>
<b>Refining margins (US\$/bbl)</b>									
Margins (US\$/bbl)	10.7	11.7	12.7	8.4	9.4	10.4	8.5	9.5	10.5
Net profits (Rs mn)	116,519	126,608	136,698	150,100	157,597	165,093	174,428	181,768	189,109
EPS (Rs)	77.0	83.7	90.3	95.4	100.2	104.9	110.9	115.5	120.2
<b>% upside/(downside)</b>	<b>(8.0)</b>		<b>8.0</b>	<b>(4.8)</b>		<b>4.8</b>	<b>(4.0)</b>		<b>4.0</b>

Source: Kotak Institutional Equities estimates

**RIL consolidated with RPL: Profit model, balance sheet, cash model, March fiscal year-ends, 2004-2012E (Rs mn)**

	2004	2005	2006	2007	2008	2009E	2010E	2011E	2012E
<b>Profit model (Rs mn)</b>									
Net sales	510,715	656,223	809,113	1,114,927	1,334,430	1,567,371	2,281,167	2,317,595	2,324,548
<b>EBITDA</b>	<b>91,148</b>	<b>123,820</b>	<b>139,991</b>	<b>198,462</b>	<b>233,056</b>	<b>208,083</b>	<b>364,833</b>	<b>391,988</b>	<b>418,421</b>
Other income	11,381	14,498	6,829	4,783	8,953	10,852	11,192	15,604	22,962
Interest	(14,347)	(14,687)	(8,770)	(13,247)	(15,509)	(14,795)	(23,602)	(13,540)	(1,096)
Depreciation & depletion	(32,470)	(37,235)	(34,009)	(48,152)	(48,471)	(52,803)	(89,982)	(97,456)	(105,176)
Pretax profits	55,711	86,397	104,041	141,846	178,028	151,337	262,440	296,597	335,111
Extraordinary items	7,300	4,290	3,000	2,000	47,335	—	—	—	—
Tax	(3,510)	(7,050)	(9,307)	(16,574)	(26,520)	(24,578)	(61,984)	(78,358)	(92,729)
Deferred taxation	(7,900)	(7,920)	(7,040)	(9,196)	(8,999)	(213)	1,761	6,370	10,220
Minority interest	—	—	—	—	—	18	(13,217)	(12,689)	(15,071)
Net profits	51,601	75,717	90,693	118,076	189,844	126,565	189,000	211,919	237,531
<b>Adjusted net profits</b>	<b>45,623</b>	<b>72,135</b>	<b>88,152</b>	<b>116,434</b>	<b>147,869</b>	<b>126,565</b>	<b>189,000</b>	<b>211,919</b>	<b>237,531</b>
<b>Earnings per share (Rs)</b>	<b>32.7</b>	<b>51.7</b>	<b>63.3</b>	<b>80.1</b>	<b>101.7</b>	<b>83.6</b>	<b>120.1</b>	<b>134.7</b>	<b>151.0</b>
<b>Balance sheet (Rs mn)</b>									
Total equity	344,525	404,033	430,543	673,037	847,853	1,103,319	1,254,325	1,428,167	1,597,869
Deferred taxation liability	34,748	42,668	49,708	69,820	78,725	78,938	77,177	70,808	60,587
Minority interest	—	—	—	33,622	33,622	33,607	42,130	50,207	52,398
Total borrowings	209,447	187,846	218,656	332,927	493,072	380,510	342,098	209,807	147,977
Current liabilities	122,855	171,315	164,545	192,305	251,427	297,107	306,711	306,726	301,049
<b>Total liabilities and equity</b>	<b>711,574</b>	<b>805,863</b>	<b>863,452</b>	<b>1,301,712</b>	<b>1,704,700</b>	<b>1,893,481</b>	<b>2,022,441</b>	<b>2,065,715</b>	<b>2,159,880</b>
Cash	2,242	36,087	21,461	18,449	42,822	12,589	12,152	13,741	52,029
Current assets	218,159	248,438	224,283	286,566	402,721	475,793	563,461	565,516	561,822
Total fixed assets	351,460	350,823	626,745	899,403	1,081,638	1,195,079	1,199,308	1,198,939	1,243,510
Investments	139,714	170,515	(9,038)	97,294	177,519	210,019	247,519	287,519	302,519
Deferred expenditure	—	—	—	—	—	—	—	—	—
<b>Total assets</b>	<b>711,574</b>	<b>805,863</b>	<b>863,452</b>	<b>1,301,712</b>	<b>1,704,700</b>	<b>1,893,480</b>	<b>2,022,441</b>	<b>2,065,715</b>	<b>2,159,880</b>
<b>Free cash flow (Rs mn)</b>									
Operating cash flow, excl. working cap	83,301	107,002	119,520	164,285	180,718	161,184	273,760	291,367	311,942
Working capital	20,265	46,875	(32,188)	(13,075)	(31,071)	(27,393)	(78,064)	(2,040)	(1,983)
Capital expenditure	(43,191)	(52,440)	(94,273)	(247,274)	(239,691)	(141,981)	(86,540)	(88,363)	(137,093)
Investments	(68,430)	(48,192)	(32,364)	(105,760)	(78,953)	(32,500)	(37,500)	(40,000)	(15,000)
Other income	5,902	3,032	5,159	4,143	6,132	10,852	11,192	15,604	22,962
<b>Free cash flow</b>	<b>(2,153)</b>	<b>56,276</b>	<b>(34,146)</b>	<b>(197,681)</b>	<b>(162,865)</b>	<b>(29,837)</b>	<b>82,849</b>	<b>176,569</b>	<b>180,827</b>
<b>Ratios (%)</b>									
Debt/equity	55.2	42.1	45.5	44.8	53.2	32.2	25.7	14.0	8.9
Net debt/equity	54.6	34.0	41.1	42.3	48.6	31.1	24.8	13.1	5.8
RoAE	12.7	17.6	19.9	20.1	18.3	12.3	15.3	15.2	15.1
<b>RoACE</b>	<b>9.7</b>	<b>13.0</b>	<b>13.8</b>	<b>13.9</b>	<b>12.6</b>	<b>9.0</b>	<b>13.2</b>	<b>13.5</b>	<b>14.0</b>

Source: Kotak Institutional Equities estimates

**Technology****INFY.BO, Rs1105**

Rating	BUY
Sector coverage view	Cautious
Target Price (Rs)	1,500
52W High -Low (Rs)	2047 - 1040
Market Cap (Rs bn)	634.2

**Financials**

March y/e	2008	2009E	2010E
Sales (Rs bn)	166.9	216.2	240.9
Net Profit (Rs bn)	45.4	57.9	62.4
EPS (Rs)	79.1	100.8	108.6
EPS gth	18.0	27.5	7.8
P/E (x)	14.0	11.0	10.2
EV/EBITDA (x)	10.5	7.8	6.7
Div yield (%)	3.0	2.2	2.4

**Shareholding, September 2008**

	% of Pattern Portfolio	Over/(under) weight
Promoters	16.5	-
FIs	51.7	7.0
MFs	3.9	2.7
UTI	-	(2.4)
LIC	4.1	2.3

**Infosys Technologies : Revising estimates to factor in increased uncertainty and revised currency assumptions. Maintain BUY**

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- **Dec quarter US\$ revenue guidance will likely be missed on cross-currency factors**
- **Low volumes visibility for the March 2009 quarter could mean a downward revision in FY2009E US\$ revenue guidance**
- **Greater control on cost structure should aid margin protection**
- **Lack of catalysts will cap near-term stock performance; we continue to rate the stock a BUY from a 12-month perspective**

Our discussions with the Infosys management reaffirmed the sustained uncertainty and weakness in the demand environment. Consistent with our expectations, near-term volumes visibility continues to be low, with no indications of an improvement before Feb-March 2009. Adverse cross-currency movements put additional pressure of US\$ revenue growth and will likely lead to the company missing the lower end of its 3QFY09E US\$ revenue growth guidance and revising downwards its FY2009E US\$ revenue guidance as well. However, this does not change our FY2010 revenue outlook. We expect a demand uptick starting 2HCY09E as decision making picks pace and benefits of vendor consolidation trickle in. We tweak our volume estimates marginally, build in the cross-currency headwinds on US\$ revenue growth and also factor in our revised Re/US\$ assumptions. Infosys' greater control on cost-structure (best placed to manage profitability in a tough pricing environment), and conservative hedging should mean a reasonable EPS growth in FY2010E despite the volume/pricing headwinds. Maintain our BUY rating on the stock with a target price of Rs1,500/share (Rs1,600 earlier). Near-term upside may be limited by lack of catalysts. However, a sharp fall or excessive pessimism would be a good opportunity to buy the stock, in our view. Key risk to our call is the possibility of trade barriers and greater protectionism with the recent nationalization of some US and European banks.

**Dec quarter US\$ revenue guidance will likely be missed on cross-currency factors, volumes guidance to be met.** We expect Infosys to miss the lower end of its 3QFY09E US\$ revenue guidance of US\$1,176 mn (-3.4%). Adverse cross-currency movements explain the guidance miss. The company would, however, achieve its constant currency revenue growth/volumes guidance of -1.6% to 2.1%. The company indicates that there is an absolute freeze in decision making by clients, project renewals have been below expectations, and specific clients have extended the 'holiday shutdown' period from the typical one week to 2-3 weeks. However, we do not see a risk to the company's Rupee revenue and EPS guidance for the quarter.

**Low volumes visibility for the March 2009 quarter and cross currency factors could lead to a downward revision in FY2009E US\$ revenue guidance.** We expect the delays in decision making, and lower-than-usual pace of project renewals to continue atleast mid-way through the March 2009 quarter. This could reflect in another quarter of negligible sequential volume growth or even a volume decline. March could also be the first quarter of like-on-like pricing reductions as contracts get renegotiated. We expect Infosys to reduce its FY2009E US\$ revenue guidance to below the current lower-end of US\$4.72 bn (+13% yoy) to US\$4.7 bn (+12.6% yoy).

**Volume/pricing equation—we expect uptick in volumes starting 2HCY09E and are not as pessimistic on pricing as the street.** Assuming no further systemic shocks to the global economy, we expect an uptrend in the volume growth trajectory starting 2HCY09E (yoy volume growth could touch a low of 6-7% over 3Q-4QCY09E). The uptrend, in our view would be driven by (1) stability in IT spend decision making, (2) acceleration in release of IT budgets by clients and (3) benefits of vendor rationalization. Key risk to our volume uptick expectation is the possibility of trade barriers and greater protectionism with the recent nationalization of some US and European banks.

We also do not share the street's excessive pessimism on the pricing environment in the industry (reflected in statements like 'clients X, Y, Z are asking for a 10-15% pricing discount'). In our view, the more likely situation would be the 'troubled' clients looking at a 15-20% reduction in overall IT spend (including hardware, software, and services). We emphasize that like-on-like pricing reduction is only one of the means of achieving a reduction in IT budgets. The targeted reduction in total cost of ownership would be achieved through several measures, including pricing reduction, in our view. The other measures of achieving IT spend reduction include higher offshoring, change in engagement structures (more fixed price engagements), and vendor rationalization (reduction in program/project management expenses and not just pricing discount achieved through vendor consolidation).

In any case, we do not expect 10-15% discounts to be demanded (by the clients) or yielded to (by the vendors) on onsite pricing as the same works on a cost+ model (with the benefits of higher utilization of Indian companies as compared to MNCs and other local players passed on to the clients), in our view. Even in the previous downturn (FY2001-04, see Exhibit 1), onsite pricing was down just 1% versus a cumulative offshore pricing decline of 17% over three years. We also highlight that a large portion of the reported realization decline in the last downturn was on account of change in client mix. More important, clients would always use such media bytes to put vendors on the back foot. Actual change would be far different from the rumors as was the case in some of the recent renegotiations (where rumors turned into market expectation/belief). Nonetheless, we believe a 4-5% decline in blended realizations for different offshore vendors is reasonable to expect (reported pricing decline would be higher on account of cross-currency movements).

**Greater control on cost structure should aid margin protection in FY2010E.** We believe that Infosys is the best-positioned in the industry to absorb margin pressure on account of likely pricing decline in FY2010E. Some of the key levers at Infosys' disposal are (1) variable costs – Infosys pays ~30% of its offshore salaries (~15% of revenues) in the form of variable compensation; two-thirds of the variable payout is linked to the overall company and BU performance, thus providing the company a 300 bps margin cushion, (2) G&A costs – Infosys can pull around 50-70 bps of margins by reducing its G&A expenses; G&A expenses have remained at a constant 8% of revenues for the past four years (FY2005-08), and (3) utilization – while an increase in utilization rates may not happen before 1QFY10E in the absence of incremental growth and given the company's stance of honoring its campus commitments, a volume uptick beyond 1QFY10E should lead to a sharp and sustained increase in utilization rates, this providing additional cushion to margins. Overall, we believe that Infosys can manage up to 4% of pricing reduction in FY2010E without a hit on margins.

**Putting it all together—an assessment of FY2010E.** We have reduced our FY2010E US\$ revenue growth estimate to 6.5% from 12.7% earlier on account of a marginal reduction in volume growth expectations and to factor in the cross-currency impact. We now forecast a 8.7% EBITDA growth and an EPS of Rs108.6 (Rs108.8 earlier) for FY2010E. We discuss the key operational drivers below

- 1. Volumes.** We model volumes growth of 13% in FY2010E (down from 15% earlier). We expect sequential volume growth to remain muted till the June 2009 quarter, but expect an uptick starting September 2009 quarter. We expect Infosys to be a net gainer in the vendor consolidation exercise being undertaken by several clients, especially in the BFSI and telecom verticals.
- 2. Pricing.** On a yoy basis, we model 3% onsite and 4% offshore like-on-like pricing decline in FY2010E. This would however, reflect in a 5-6% onsite and 6-7% offshore pricing decline in US\$ terms on account of cross-currency impact. From the September quarter levels, we model pricing decline of 9% onsite and 11% offshore by 4QFY10E. Our uptick on volumes is predicated on moderate pricing concessions for new as well as existing accounts.

- 3. US\$ revenue growth.** Our volume and pricing assumptions result in a 10% constant currency revenue growth for Infosys in FY2010E. However, adverse cross-currency (GBP, EUR, and AUD versus the USD) would hit the growth rates by another 3.5%pts, in our view, leading to a US\$ revenue growth of 6.5%. Exhibit 2 depicts the impact of adverse cross-currency movements on US\$ revenue growth for FY2010E.
- 4. Operating profit margin.** We model OPM decline of 80 bps in FY2010E largely on the back of assumption of pricing decline. We assume an average Re/USD rate of 48 for FY2010E (versus an average of 46 for FY2009E). In addition to rupee depreciation, we expect a moderate increase in utilization, G&A efficiencies, and reduction in variable payout to absorb margin pressure on account of pricing.
- 5. Tax rates.** The company will lose tax exemptions on many of the STPI units in FY2009. Accordingly, we model a 300 bps increase in FY2010E tax rates. We highlight that a lower growth rate in FY2010E will delay the migration of substantial portion of offshore revenues to SEZ's; this may drive higher tax rates than our base case in FY2010-11E.
- 6. Hedging gains/losses.** We do not model any forex gains/losses on hedging in our FY2010E estimates.
- 7. Capex.** We expect Infosys to rationalize its capital expenditure in FY2010E and expect a reduction in growth capex as (1) the company builds in lower near-term growth in its capex planning, and (2) Infosys is already significantly ahead of competition on SEZ expansion and can afford to defer further SEZ capacity build-out, unless there is a sharp uptick in revenue growth. We build in a capex of US\$200 mn for FY2010E and US\$250 mn for FY2011E (versus US\$320 mn in FY2009E).

**Earnings revision.** Revision in volume expectations for 3Q-4QFY09E and FY2010E, and currency assumptions have led to revised EPS of Rs108.6 and Rs115.2 (from Rs108.8, and Rs116.6 previously) for FY2010E and FY2011E respectively. Exhibit 3 depicts the revisions to our volume, pricing, revenue growth, margins, and EPS estimates for FY2009-11E.

**Lack of catalysts will cap near-term stock performance; we continue to rate the stock a BUY from a 12-month perspective.** We concede that lack of near-term catalysts and likely negative news flow will continue to remain an overhang on the stock over the next few months. However, we would view any excess pessimism in the market as an opportunity to buy into the stock. The stock is trading at 10.2X FY2010E earnings and has a normalized FCF yield of 9% at CMP. Our March 2010 DCF-based target price of Rs1,500/share implies an upside of 35% from current levels.

**Sharp pricing decline in the previous downturn (2001-2004) was driven by irrational spending (and price increases in 2000 and 2001) and higher dependence on App Dev**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Pricing</b>										
Onsite realization (US\$/manmonth)	7,932	8,510	10,967	11,450	11,142	10,869	11,282	10,892	11,369	12,149
Growth yoy (%)		7.3	28.9	4.4	(2.7)	(2.4)	3.8	(3.5)	4.4	6.9
Offshore realization (US\$/manmonth)	3,713	4,359	5,333	4,925	4,698	4,446	4,659	4,574	4,698	4,984
Growth yoy (%)		17.4	22.4	(7.7)	(4.6)	(5.4)	4.8	(1.8)	2.7	6.1
<b>Service offering mix (% of revenues)</b>										
<b>Development</b>	<b>34.8</b>	<b>43.7</b>	<b>40.0</b>	<b>32.0</b>	<b>32.1</b>	<b>25.7</b>	<b>23.2</b>	<b>20.2</b>	<b>21.0</b>	<b>19.6</b>
Maintenance, including Y2K	41.0	28.6	25.4	29.0	28.2	30.1	29.9	30.2	29.3	26.5
Re-engineering	10.7	10.1	9.3	10.1	5.5	6.0	6.2	4.7	2.1	2.1
<b>Others, of which</b>	<b>10.4</b>	<b>15.0</b>	<b>22.8</b>	<b>24.9</b>	<b>29.6</b>	<b>35.4</b>	<b>37.7</b>	<b>41.1</b>	<b>43.7</b>	<b>48.2</b>
- Package implementation	5.5	6.0	7.2	9.8	11.0	14.5	15.2	16.2	17.5	18.8
- Consulting	—	1.6	4.9	4.2	4.3	3.7	3.6	3.5	3.6	5.0
- Testing	0.2	0.7	2.9	2.9	3.4	5.3	5.8	5.9	6.9	7.5
- Engineering services	0.8	2.0	1.7	2.6	2.6	2.2	2.0	1.8	1.6	1.6
- Business Process Management	—	—	—	—	—	1.6	2.7	4.0	4.7	5.7
- Other services	3.9	4.7	6.1	5.4	8.3	8.1	8.4	9.7	9.4	9.6
<b>Total services</b>	<b>96.9</b>	<b>97.4</b>	<b>97.5</b>	<b>96.0</b>	<b>95.4</b>	<b>97.2</b>	<b>97.0</b>	<b>96.2</b>	<b>96.1</b>	<b>96.4</b>
Products	3.1	2.6	2.5	4.0	4.6	2.8	3.0	3.8	3.9	3.6

Source: Company, Kotak Institutional Equities

## Assessing cross-currency impact on Infosys' 3Q-4QFY09 and FY2010E US\$ revenue growth for Infosys

	1QFY09	2QFY09	3QFY09	4QFY09	FY2008	FY2009E	FY2010E
<b>Revenues (US\$ mn)</b>	<b>1,156</b>	<b>1,218</b>	<b>1,174</b>	<b>1,161</b>	<b>4,176</b>	<b>4,709</b>	<b>5,016</b>
<b>US\$ revenue growth (%)</b>	<b>1.2</b>	<b>5.4</b>	<b>(3.6)</b>	<b>(1.1)</b>		<b>12.8</b>	<b>6.5</b>
<b>Constant currency revenue growth (%)</b>	<b>1.0</b>	<b>7.0</b>	<b>0.6</b>	<b>0.3</b>		<b>16.1</b>	<b>9.9</b>
<b>Proportion of revenues from major currencies</b>							
USD	68.4	70.4	73.8	74.9	69.5	71.9	74.2
GBP	16.5	13.3	11.0	9.9	14.9	12.7	10.0
Euro	7.0	7.2	6.7	6.6	5.7	6.9	6.9
AUD	4.9	4.4	3.4	3.3	4.8	4.0	3.7
Rest	3.2	4.7	5.1	5.3	5.1	4.6	5.2
<b>Revenues (US\$ mn) after translation (major currencies)</b>							
USD invoicing	791	857	866	870	2,903	3,385	3,723
GBP invoicing	191	162	129	115	621	597	502
Euro invoicing	81	88	79	77	238	324	348
AUD invoicing	57	54	40	39	201	189	185
Rest invoicing	37	57	60	61	213	216	259
<b>Average rates (versus US\$)</b>							
USD	1.00	1.00	<b>1.00</b>	<b>1.00</b>	1.00	1.00	<b>1.00</b>
GBP	1.98	1.87	<b>1.55</b>	<b>1.40</b>	2.01	1.71	<b>1.40</b>
Euro	1.56	1.49	<b>1.30</b>	<b>1.25</b>	1.44	1.39	<b>1.30</b>
AUD	0.95	0.87	<b>0.66</b>	<b>0.65</b>	0.88	0.78	<b>0.70</b>
Rest	1.00	1.00	<b>1.00</b>	<b>1.00</b>	1.00	1.00	<b>1.00</b>
<b>Revenues (local currency, mn)</b>							
USD invoicing	791	857	866	870	2,903	3,385	3,723
<b>GBP invoicing</b>	<b>96</b>	<b>87</b>	<b>83</b>	<b>82</b>	<b>308</b>	<b>348</b>	<b>358</b>
Euro invoicing	52	59	61	61	165	233	267
AUD invoicing	60	62	60	59	230	241	265
Rest	37	57	60	61	213	216	259
<b>Revenues (@ constant currency) in US\$</b>							
USD	791	857	866	870		3,385	3,723
GBP	192	172	156	127		701	614
Euro	79	92	90	80		335	373
AUD	55	59	53	39		211	208
Rest	37	57	60	61		216	259
<b>Total</b>	<b>1,154</b>	<b>1,237</b>	<b>1,225</b>	<b>1,177</b>		<b>4,848</b>	<b>5,176</b>
<b>GBP revenues (£ mn)</b>							
<b>BT</b>	<b>46.1</b>	<b>49.5</b>	<b>47.0</b>	<b>44.7</b>	<b>189.3</b>	<b>187.3</b>	<b>179.8</b>
<b>Ex-BT</b>	<b>50.2</b>	<b>37.1</b>	<b>36.4</b>	<b>37.1</b>	<b>119.1</b>	<b>160.9</b>	<b>178.6</b>

Note:

(a) Assuming 100% of BT revenues are GBP-invoiced

Source: Company, Kotak Institutional Equities estimates

**Key changes to estimates, March fiscal year-ends, 2009E-2011E (Rs mn)**

	New			Old			Change (%)		
	2009E	2010E	2011E	2009E	2010E	2011E	2009E	2010E	2011E
<b>Revenues</b>	<b>216,207</b>	<b>240,880</b>	<b>275,975</b>	<b>216,343</b>	<b>244,249</b>	<b>287,554</b>	<b>(0.1)</b>	<b>(1.4)</b>	<b>(4.0)</b>
EBITDA	68,131	74,027	82,129	67,893	72,476	81,910	0.3	2.1	0.3
Depreciation	(7,055)	(7,906)	(8,945)	(7,071)	(8,119)	(9,407)	(0.2)	(2.6)	(4.9)
EBIT	61,076	66,121	73,184	60,823	64,357	72,503	0.4	2.7	0.9
<b>Net Profit</b>	<b>57,856</b>	<b>62,355</b>	<b>66,151</b>	<b>57,842</b>	<b>62,434</b>	<b>66,929</b>	<b>0.0</b>	<b>(0.1)</b>	<b>(1.2)</b>
<b>EPS (Rs/ share)</b>	<b>100.8</b>	<b>108.6</b>	<b>115.2</b>	<b>100.8</b>	<b>108.8</b>	<b>116.6</b>	<b>0.0</b>	<b>(0.1)</b>	<b>(1.2)</b>
<b>Revenues (US\$ mn)</b>	<b>4,709</b>	<b>5,016</b>	<b>5,870</b>	<b>4,813</b>	<b>5,425</b>	<b>6,451</b>	<b>(2.2)</b>	<b>(7.5)</b>	<b>(9.0)</b>
<b>Revenue growth (%)</b>	<b>12.8</b>	<b>6.5</b>	<b>17.0</b>	<b>15.2</b>	<b>12.7</b>	<b>18.9</b>			
<b>Volume Growth (%)</b>	<b>13.6</b>	<b>13.0</b>	<b>17.6</b>	<b>14.1</b>	<b>15.0</b>	<b>18.8</b>			
<b>Billing Rates (US\$/ manmonth)</b>									
Onsite	12,073	11,459	11,344	12,234	11,940	11,940	(1.3)	(4.0)	(5.0)
Offshore	4,947	4,630	4,584	5,015	4,855	4,855	(1.3)	(4.6)	(5.6)
<b>Margins (%)</b>									
EBITDA	31.5	30.7	29.8	31.4	29.7	28.5			
EBIT	28.2	27.4	26.5	28.1	26.3	25.2			
Rs/ US\$ rate	45.9	48.0	47.0	45.0	45.0	44.6	2.1	6.7	5.5

Source: Kotak Institutional Equities estimates

**Infosys Technologies: Consolidated Indian GAAP Income Statement (Rs mn)**

Rs mn	2007	2008	2009E	2010E	2011E
<b>Revenues</b>	<b>138,930</b>	<b>166,920</b>	<b>216,207</b>	<b>240,880</b>	<b>275,975</b>
Software Development Costs	(74,580)	(92,070)	(118,367)	(132,667)	(154,826)
<b>Gross profit</b>	<b>64,350</b>	<b>74,850</b>	<b>97,840</b>	<b>108,213</b>	<b>121,149</b>
Selling and marketing exp	(9,290)	(9,160)	(12,502)	(14,924)	(17,849)
Administration exp	(11,150)	(13,310)	(17,207)	(19,261)	(21,171)
Total SG&A Expenses	(20,440)	(22,470)	(29,709)	(34,185)	(39,020)
<b>EBITDA</b>	<b>43,910</b>	<b>52,380</b>	<b>68,131</b>	<b>74,027</b>	<b>82,129</b>
Depreciation	(5,140)	(5,980)	(7,055)	(7,906)	(8,945)
<b>EBIT</b>	<b>38,770</b>	<b>46,400</b>	<b>61,076</b>	<b>66,121</b>	<b>73,184</b>
Interest	-	-	-	-	-
Other Income	3,750	7,040	6,104	8,750	10,329
<b>Profit Before Tax</b>	<b>42,520</b>	<b>53,440</b>	<b>67,180</b>	<b>74,871</b>	<b>83,513</b>
Provision for Tax	(5,100)	(8,060)	(9,324)	(12,517)	(17,362)
<b>Net Profit</b>	<b>37,420</b>	<b>45,380</b>	<b>57,856</b>	<b>62,355</b>	<b>66,151</b>
Minority Interest	(110)	-	-	-	-
<b>Net Income</b>	<b>37,310</b>	<b>45,380</b>	<b>57,856</b>	<b>62,355</b>	<b>66,151</b>
Extraordinaries	1,250	1,210	310	-	-
<b>Net Profit- Reported</b>	<b>38,560</b>	<b>46,590</b>	<b>58,166</b>	<b>62,355</b>	<b>66,151</b>
<b>EPS (Rs/ share)</b>	<b>67.0</b>	<b>79.1</b>	<b>100.8</b>	<b>108.6</b>	<b>115.2</b>
<b>Margins (%)</b>					
Gross Profit margin	46.3	44.8	45.3	44.9	43.9
EBITDA Margin	31.6	31.4	31.5	30.7	29.8
EBIT Margin	27.9	27.8	28.2	27.4	26.5
NPM	26.9	27.2	26.8	25.9	24.0
<b>Growth Rates (%)</b>					
Revenues	45.9	20.1	29.5	11.4	14.6
Gross Profit	44.4	16.3	30.7	10.6	12.0
EBITDA	42.0	19.3	30.1	8.7	10.9
EBIT	46.1	19.7	31.6	8.3	10.7
Net Profit	50.9	21.3	27.5	7.8	6.1
Net Income	51.8	21.6	27.5	7.8	6.1

Source: Kotak Institutional Equities estimates.



**Energy****BPCL.BO, Rs343**

Rating	REDUCE
Sector coverage view	Neutral
Target Price (Rs)	370
52W High -Low (Rs)	560 - 206
Market Cap (Rs bn)	112.4

**Financials**

March y/e	2008	2009E	2010E
Sales (Rs bn)	1,102	1,652	1,669
Net Profit (Rs bn)	14.9	11.0	15.5
EPS (Rs)	41.3	30.4	42.8
EPS gth	(21.2)	(26.4)	41.0
P/E (x)	8.3	11.3	8.0
EV/EBITDA (x)	4.0	4.5	3.4
Div yield (%)	1.3	0.9	1.3

**Energy****HPCL.BO, Rs237**

Rating	REDUCE
Sector coverage view	Neutral
Target Price (Rs)	270
52W High -Low (Rs)	406 - 163
Market Cap (Rs bn)	80.2

**Financials**

March y/e	2008	2009E	2010E
Sales (Rs bn)	1,043	1,578	1,592
Net Profit (Rs bn)	8.1	8.8	11.4
EPS (Rs)	33.5	26.0	33.6
EPS gth	(16.4)	(22.3)	29.0
P/E (x)	7.1	9.1	7.1
EV/EBITDA (x)	6.8	5.3	3.7
Div yield (%)	1.3	1.0	1.3

**Energy****IOC.BO, Rs386**

Rating	REDUCE
Sector coverage view	Neutral
Target Price (Rs)	450
52W High -Low (Rs)	810 - 299
Market Cap (Rs bn)	455.0

**Financials**

March y/e	2008	2009E	2010E
Sales (Rs bn)	2,444	4,053	4,137
Net Profit (Rs bn)	73.1	38.6	64.1
EPS (Rs)	61.3	32.4	53.8
EPS gth	31.0	(47.2)	66.0
P/E (x)	6.3	11.9	7.2
EV/EBITDA (x)	3.9	8.0	6.3
Div yield (%)	1.4	0.8	1.4

**BPCL, HPCL, IOCL : Pricing freedom for government-owned R&M companies; practice versus theory**

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- **We believe implementation would be key; historical experience has been bad**
- **Poor refining margins and new competition to keep earnings subdued**
- **Use any rally in R&M stocks to sell and move to upstream stocks**

We are not overly excited by press reports about the government likely granting freedom to government-owned oil marketing companies (OMC) to set prices of diesel and gasoline independently. Also, press reports indicate the government is close to finalizing a mechanism for subsidy sharing and compensation for under-recoveries on kerosene and LPG. We believe implementation of a transparent mechanism would be critical; on paper, there is no government control on the OMCs to set prices even now. Even in the eventuality of the establishment of a proper pricing system, we do not see much upside to earnings of the OMCs given (1) likely low contribution from refining segment due to poor refining margins, (2) likely strong competition from private players, which would cap marketing margins on auto fuels and (3) likely extremely poor marketing margins in case of free-market products such as naphtha, fuel oil due to competition from natural gas. We maintain our REDUCE rating on BPCL, HPCL and IOCL with key upside risk being higher-than-expected refining margins.

**Implementation of a proper pricing system would be key, especially at higher crude oil prices.** We are skeptical of the government's willingness and ability to implement a proper and transparent pricing mechanism in the Indian downstream oil sector for the following reasons.

- 1. Current and previous governments have violated current market pricing mechanism.** We note that the pricing of petroleum products has been already deregulated from April 1, 2002 as per a government notification in 2001. Thus, the government does not have a legal position to control or set prices of petroleum products; yet, it continues to set prices in 'violation' of the government's decision to deregulate pricing of petroleum products from April 1, 2002. So, we do not see much merit in the government deregulating pricing (again) through an executive decision. We would have more confidence if the control of prices is made illegal by an act of parliament; we rule out this possibility.
- 2. A future government can always discard an executive decision.** We note that Indian governments (current and previous) have exercised control on pricing of petroleum products despite deregulation of pricing and dismantling of administered pricing mechanism from April 1, 2002. We do not rule out future governments ignoring previous and new executive decisions for political and social reasons.
- 3. Implementation may be challenging, especially at higher crude oil prices.** We believe that the real test of deregulation (even if the government allows the OMCs to set prices independently) would be when (and if) crude oil prices rise. The previous government had followed free-market pricing for a few months after deregulation but started exercising control once crude prices increased sharply (see Exhibit 1). The current government has continued the practice followed by the previous government.

**Low upside to earnings even in case of full deregulation.** Our hypothetical earnings exercise for BPCL, HPCL and IOCL suggests limited earnings upside even in case of full deregulation (see Exhibit 2). We assume (1) actual forecast refining margin, (2) Rs1,500/ton (Rs1.25/liter) and Rs2,000/ton (Rs1.5/liter) marketing margin for diesel and gasoline and (3) compensation of the full amount of under-recoveries on kerosene and LPG from the government (two-thirds) and upstream companies (one-upstream) in this exercise. Our assumptions may be generous in case the government gives only one-third of the gross under-recovery on kerosene and LPG against our assumed two-third amount.



- 1. BPCL.** We compute BPCL's EPS at Rs32 in our hypothetical exercise versus our estimate of Rs43 in FY2010E. We model BPCL's refining margin at US\$2.1/bbl for FY2010E versus US\$5.6/bbl in FY2008. However, our forecast EPS drops to Rs19 in our hypothetical exercise if we reduce our refining margin assumption by US\$1/bbl. We note that current refining margins are negative and we see limited scope of a meaningful increase in refining margins without a large reduction in global refining capacity. Exhibit 3 gives our computation of Singapore refining margins and Exhibit 4 shows the deterioration in global-supply demand balance over the next few years.
- 2. HPCL.** We compute HPCL's EPS at Rs38 in our hypothetical exercise versus our estimate of Rs34 in FY2010E. We model HPCL's refining margin at US\$2.4/bbl for FY2010E versus US\$6.5/bbl in FY2008. However, our forecast EPS drops to Rs26 in our hypothetical exercise if we reduce our refining margin assumption by US\$1/bbl.
- 3. IOCL.** We compute IOCL's consolidated EPS at Rs52 in our hypothetical exercise versus our estimate of Rs55 in FY2010E. We model IOCL's (standalone) refining margin at US\$3.9/bbl for FY2010E versus US\$9/bbl in FY2008. However, our forecast EPS drops to Rs42 in our hypothetical exercise if we reduce our refining margin assumption by US\$1/bbl.

**Free-market pricing followed previously for a few months and government started exercising control once crude prices increased sharply**

Calculation of marketing margins/subsidy of key products

	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03	Jan-04	Feb-04	Mar-04	
<b>Dated Brent crude price (US\$/bbl)</b>	25.7	25.5	24.2	25.8	26.7	28.3	27.5	24.2	28.5	31.3	32.6	30.3	25.0	25.8	27.5	28.4	29.8	27.0	29.8	28.8	29.8	31.1	30.9	33.8	
<b>International price (US\$/ton)</b>																									
LPG	197	215	220	221	225	247	288	327	330	334	367	375	338	256	227	275	266	274	266	269	306	319	332	277	
Gasoline	203	222	224	213	209	204	228	221	208	229	264	314	293	216	213	242	263	285	252	273	271	309	350	313	
Kerosene	190	208	215	203	208	219	249	248	221	233	250	292	256	191	203	211	215	243	231	258	271	277	296	264	
Diesel	175	198	203	196	196	197	217	233	204	210	227	268	251	186	192	200	195	218	216	231	238	243	276	250	
<b>India IPP price (incl. transport)</b>																									
LPG (Rs/cylinder)	256	271	274	274	276	293	323	352	354	355	379	384	355	294	270	303	295	300	293	295	322	331	338	298	
Gasoline (Rs/liter)	10.7	11.5	11.6	11.1	10.9	10.7	11.6	11.3	10.8	11.6	13.0	15.1	14.2	10.9	10.7	11.8	12.5	13.4	12.0	12.8	12.8	14.3	15.9	14.3	
Kerosene (Rs/liter)	10.2	11.0	11.3	10.7	10.9	11.4	12.6	11.4	11.8	12.5	14.3	12.7	9.9	10.3	10.6	10.7	11.8	11.2	12.3	12.9	13.1	13.8	12.4		
Diesel (Rs/liter)	10.2	11.4	11.6	11.2	11.2	11.2	12.1	12.8	11.4	11.7	12.5	14.3	13.5	10.4	10.6	10.9	10.6	11.6	11.4	12.1	12.4	12.6	14.0	12.8	
<b>India retail price without taxes</b>																									
LPG (Rs/cylinder)	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	
Gasoline (Rs/liter)	10.8	10.8	12.6	12.7	12.6	12.8	13.3	13.1	12.3	13.0	13.4	14.4	14.4	13.2	12.8	12.8	12.8	14.1	13.9	13.7	14.0	14.9	14.9	14.9	
Kerosene (Rs/liter)	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	
Diesel (Rs/liter)	11.0	11.0	12.4	12.5	12.5	12.7	13.2	13.0	12.4	13.3	13.8	14.8	14.6	13.2	12.8	12.8	12.8	13.7	13.5	13.3	13.7	14.8	14.8	14.8	
<b>Marketing margin or (subsidy)</b>																									
LPG (Rs/cylinder)	(87)	(101)	(104)	(105)	(107)	(124)	(154)	(182)	(184)	(186)	(209)	(215)	(186)	(124)	(101)	(133)	(126)	(131)	(123)	(126)	(152)	(161)	(169)	(129)	
Gasoline (Rs/liter)	0.2	(0.7)	1.0	1.6	1.7	2.2	1.6	1.8	1.5	1.5	0.4	(0.8)	0.2	2.3	2.1	1.0	0.2	0.7	1.9	0.8	1.2	0.7	(0.9)	0.7	
Kerosene (Rs/liter)	(3.3)	(4.2)	(4.4)	(3.9)	(4.1)	(4.5)	(5.8)	(5.7)	(4.5)	(5.0)	(5.7)	(7.4)	(5.8)	(3.0)	(3.5)	(3.7)	(3.8)	(4.9)	(4.4)	(5.5)	(6.0)	(6.2)	(7.0)	(5.6)	
Diesel (Rs/liter)	0.8	(0.3)	0.9	1.3	1.3	1.5	1.0	0.2	1.0	1.7	1.3	0.4	1.1	2.8	2.2	1.9	2.2	2.1	2.1	1.1	1.2	2.2	0.8	2.0	

Source: Industry data, Kotak Institutional Equities estimates

**Our hypothetical earnings exercise suggests limited earnings upside even in case of full deregulation**

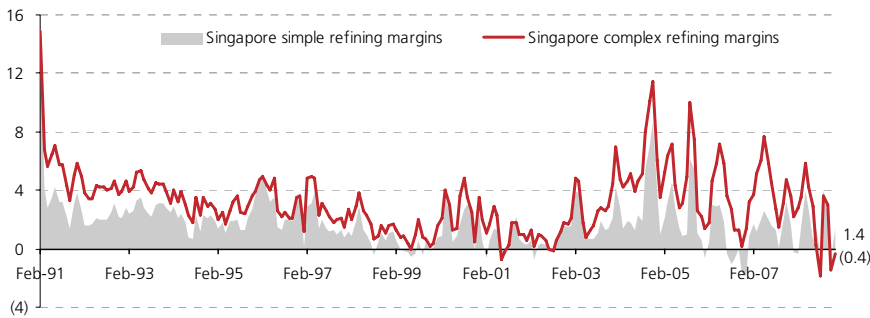
Earnings of BPCL, HPCL and IOCL under full deregulation, March fiscal year-ends 2010 (Rs)

	BPCL	HPCL	IOCL
Base case	43	34	55
Scenario 1	32	38	52
Scenario 2	19	26	42

Source:Kotak Institutional Equities

**Refining margins continue to remain weak**

Singapore refining margins (US\$/bbl)

**Simple refining margins, March fiscal year-ends (US\$/bbl)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 YTD
<b>1Q</b>	(0.32)	1.29	0.51	0.30	1.05	1.69	3.02	2.52	2.25	2.40
<b>2Q</b>	(0.08)	2.47	0.45	0.07	1.20	3.13	2.78	(0.70)	0.99	1.71
<b>3Q</b>	0.14	1.74	1.06	1.44	1.57	6.46	2.22	(1.25)	2.32	0.92
<b>4Q</b>	1.86	0.21	(0.03)	2.98	2.88	2.08	1.09	1.25	0.25	
<b>Average</b>	<b>0.40</b>	<b>1.43</b>	<b>0.50</b>	<b>1.20</b>	<b>1.67</b>	<b>3.34</b>	<b>2.28</b>	<b>0.45</b>	<b>1.45</b>	<b>1.72</b>

**Weekly margins**

Current	-1 Wk	-2 Wk	-3 Wk	-4 Wk
1.93	0.80	(1.17)	0.44	(0.04)

**Singapore refining margins, March fiscal year-ends (US\$/bbl)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 YTD
Simple	0.40	1.43	0.50	1.20	1.67	3.34	2.28	0.45	1.45	1.72
Complex	0.43	1.86	1.34	0.79	1.24	4.57	4.93	3.45	4.05	1.98

Source: Bloomberg

**Complex refining margins, March fiscal year-ends (US\$/bbl)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 YTD
<b>1Q</b>	0.43	1.86	1.34	0.79	1.24	4.57	4.93	6.24	6.58	4.31
<b>2Q</b>	1.19	3.96	0.58	0.14	2.35	5.80	6.11	2.46	2.91	0.66
<b>3Q</b>	0.41	2.25	1.22	1.56	3.23	9.04	3.94	0.98	3.91	0.78
<b>4Q</b>	2.64	1.60	0.65	3.70	5.44	5.02	2.77	4.11	2.78	
<b>Average</b>	<b>1.17</b>	<b>2.42</b>	<b>0.95</b>	<b>1.55</b>	<b>3.06</b>	<b>6.10</b>	<b>4.44</b>	<b>3.45</b>	<b>4.05</b>	<b>1.98</b>

**Weekly margins**

Current	-1 Wk	-2 Wk	-3 Wk	-4 Wk
0.24	(1.01)	(2.53)	(1.13)	(0.18)

**We expect sharp deterioration in global-supply demand balance over the next few years**

Estimated global crude demand, supply and prices, Calendar year-ends

	2004	2005	2006	2007	2008E	2009E	2010E	2011E	2012E	2013E
<b>Demand (mb/d)</b>										
Total demand	82.5	84.0	85.1	86.0	85.8	86.3	87.4	88.5	89.6	91.2
Yoy growth	3.3	1.5	1.1	0.9	(0.2)	0.5	1.1	1.1	1.1	1.6
<b>Supply (mb/d)</b>										
Non-OPEC	48.8	48.7	49.2	49.7	49.6	50.1	50.1	50.3	50.5	50.8
Yoy growth	0.6	(0.1)	0.5	0.5	(0.1)	0.5	0.0	0.2	0.2	0.3
OPEC										
Crude	29.5	30.8	31.3	31.7	31.2	30.6	31.1	31.7	32.3	33.4
NGLs	4.2	4.5	4.6	4.8	5.0	5.6	6.2	6.5	6.8	7.0
<b>Total OPEC</b>	<b>33.7</b>	<b>35.3</b>	<b>35.9</b>	<b>36.5</b>	<b>36.2</b>	<b>36.2</b>	<b>37.3</b>	<b>38.2</b>	<b>39.1</b>	<b>40.4</b>
<b>Total supply</b>	<b>83.4</b>	<b>84.7</b>	<b>85.5</b>	<b>86.2</b>	<b>85.8</b>	<b>86.3</b>	<b>87.4</b>	<b>88.5</b>	<b>89.6</b>	<b>91.2</b>
Total stock change	1.0	0.7	0.8							
<b>OPEC crude capacity</b>				<b>34.4</b>	<b>35.3</b>	<b>36.4</b>	<b>37.4</b>	<b>37.3</b>	<b>37.6</b>	<b>37.9</b>
<b>Implied OPEC spare capacity</b>				<b>2.7</b>	<b>4.1</b>	<b>5.8</b>	<b>6.3</b>	<b>5.6</b>	<b>5.3</b>	<b>4.5</b>
<b>Demand growth (yoy, %)</b>	<b>4.2</b>	<b>1.8</b>	<b>1.3</b>	<b>1.1</b>	<b>(0.2)</b>	<b>0.6</b>	<b>1.3</b>	<b>1.3</b>	<b>1.2</b>	<b>1.8</b>
<b>Supply growth (yoy, %)</b>										
Non-OPEC	1.2	(0.2)	1.0	1.0	(0.2)	1.0	0.0	0.4	0.4	0.6
OPEC	8.4	4.6	1.9	1.5	(0.7)	0.0	3.0	2.4	2.4	3.3
<b>Total</b>	<b>4.4</b>	<b>1.6</b>	<b>0.9</b>	<b>0.8</b>	<b>(0.4)</b>	<b>0.6</b>	<b>1.3</b>	<b>1.3</b>	<b>1.2</b>	<b>1.8</b>
<b>Dated Brent (US\$/bbl)</b>	<b>38.3</b>	<b>54.4</b>	<b>65.8</b>	<b>72.7</b>	<b>102.0</b>	<b>73.0</b>	<b>75.0</b>	<b>75.0</b>	<b>75.0</b>	<b>75.0</b>

Source: IEA, BP Statistical Review of World Energy, and various government and industry sources

## Consolidated profit model, balance sheet, cash model of BPCL, March fiscal year-ends, 2005-2011E (Rs mn)

	2005	2006	2007	2008	2009E	2010E	2011E
<b>Profit model (Rs mn)</b>							
Net sales	578,774	755,333	965,569	1,102,081	1,652,439	1,668,719	1,701,591
<b>EBITDA</b>	<b>26,231</b>	<b>9,407</b>	<b>35,362</b>	<b>28,472</b>	<b>43,402</b>	<b>42,899</b>	<b>51,111</b>
Other income	4,015	4,653	7,332	13,954	4,207	24,197	22,984
Interest	(1,748)	(2,474)	(4,774)	(6,725)	(21,804)	(33,405)	(39,614)
Depreciation	(7,130)	(7,680)	(9,041)	(10,982)	(9,167)	(10,234)	(11,983)
Pretax profits	21,368	3,906	28,879	24,719	16,638	23,457	22,499
Extraordinary items	810	176	(68)	—	—	—	—
Tax	(7,250)	(140)	(9,286)	(9,059)	(4,267)	(5,724)	(5,864)
Deferred taxation	(1,230)	(1,025)	(268)	(1,108)	(1,388)	(2,250)	(1,784)
Net profits	13,698	2,916	18,055	15,806	10,982	15,484	14,851
<b>Net profits after minority interests</b>	<b>11,334</b>	<b>2,916</b>	<b>18,055</b>	<b>15,806</b>	<b>10,982</b>	<b>15,484</b>	<b>14,851</b>
<b>Earnings per share (Rs)</b>	<b>37.2</b>	<b>7.6</b>	<b>50.1</b>	<b>43.7</b>	<b>30.4</b>	<b>42.8</b>	<b>41.1</b>
<b>Balance sheet (Rs mn)</b>							
Total equity	82,887	91,394	102,735	116,768	126,575	140,402	153,664
Deferred taxation liability	12,533	13,558	13,826	14,814	16,202	18,451	20,235
Total borrowings	46,589	83,736	108,292	150,224	309,936	397,436	427,546
Current liabilities	104,462	94,070	112,767	145,803	131,603	135,145	140,930
<b>Total liabilities and equity</b>	<b>246,472</b>	<b>282,758</b>	<b>337,620</b>	<b>427,608</b>	<b>584,316</b>	<b>691,434</b>	<b>742,375</b>
Cash	6,644	4,921	8,640	9,616	6,719	9,061	7,585
Current assets	130,393	128,208	127,698	187,457	213,854	215,793	219,548
Goodwill	—	—	—	—	—	—	—
Total fixed assets	98,542	110,855	118,334	127,354	145,679	173,517	172,178
Investments	10,893	38,774	82,949	103,182	218,064	293,064	343,064
<b>Total assets</b>	<b>246,472</b>	<b>282,758</b>	<b>337,621</b>	<b>427,608</b>	<b>584,316</b>	<b>691,434</b>	<b>742,375</b>
<b>Free cash flow (Rs mn)</b>							
Operating cash flow, excl. working capital	21,118	9,275	29,920	22,988	17,331	3,771	5,634
Working capital	(18,393)	1,577	11,451	(25,161)	(53,497)	6,993	3,323
Capital expenditure	(17,120)	(19,945)	(17,908)	(20,665)	(27,493)	(38,072)	(10,644)
Investments	2,992	(28,146)	(45,481)	(21,684)	(114,882)	(75,000)	(50,000)
Other income	2,445	1,785	4,337	6,434	17,108	18,807	21,691
<b>Free cash flow</b>	<b>(8,957)</b>	<b>(35,455)</b>	<b>(17,682)</b>	<b>(38,088)</b>	<b>(161,433)</b>	<b>(83,501)</b>	<b>(29,996)</b>
<b>Ratios (%)</b>							
Debt/equity	48.8	91.6	105.4	128.7	244.9	283.1	278.2
Net debt/equity	41.9	86.2	97.0	120.4	239.6	276.6	273.3
RoAE	14.4	3.3	16.3	12.7	8.0	10.3	8.9
<b>RoACE</b>	<b>12.0</b>	<b>4.1</b>	<b>11.0</b>	<b>7.9</b>	<b>7.8</b>	<b>8.5</b>	<b>7.9</b>
<b>Key assumptions (standalone until FY2005)</b>							
Crude throughput (mn tons)	9.1	17.2	19.8	20.9	21.0	21.5	23.0
Effective tariff protection (%)	4.8	2.9	1.6	1.4	2.3	2.3	2.3
Net refining margin (US\$/bbl)	3.8	2.1	3.1	5.6	4.1	2.1	2.6
Sales volume (mn tons)	21.5	23.3	24.5	26.7	29.0	30.1	31.3
Marketing margin (Rs/ton)	1,732	(671)	(1,140)	(3,010)	(6,928)	(492)	1,424
Subsidy under-recoveries (Rs mn)	(25,821)	(31,847)	(20,159)	(26,680)	(7,688)	6,685	11,222

Source: Kotak Institutional Equities estimates.

## Profit model, balance sheet, cash model of HPCL, March fiscal year-ends, 2005-2011E (Rs mn)

	2005	2006	2007	2008	2009E	2010E	2011E
<b>Profit model (Rs mn)</b>							
Net sales	597,020	708,609	889,959	1,043,130	1,578,297	1,591,959	1,608,462
<b>EBITDA</b>	<b>20,511</b>	<b>8,056</b>	<b>24,036</b>	<b>15,757</b>	<b>41,951</b>	<b>35,159</b>	<b>45,077</b>
Other income	3,295	3,285	6,845	11,980	1,991	26,741	25,725
Interest	(816)	(1,587)	(4,230)	(7,925)	(18,346)	(33,801)	(43,020)
Depreciation	(6,584)	(6,902)	(7,040)	(8,508)	(10,420)	(10,868)	(11,624)
Pretax profits	16,406	2,851	19,611	11,303	15,176	17,231	16,159
Extraordinary items	1,471	2,201	3,030	—	—	—	—
Tax	(5,897)	(898)	(6,625)	(1,799)	(1,719)	(4,059)	(3,649)
Deferred taxation	793	(97)	(365)	(2,025)	(4,641)	(1,798)	(1,843)
Prior period adjustment	—	—	61	3,870	—	—	—
<b>Net profits</b>	<b>12,773</b>	<b>4,056</b>	<b>15,712</b>	<b>11,349</b>	<b>8,816</b>	<b>11,374</b>	<b>10,666</b>
<b>Earnings per share (Rs)</b>	<b>34.8</b>	<b>6.6</b>	<b>40.0</b>	<b>33.5</b>	<b>26.0</b>	<b>33.6</b>	<b>31.5</b>
<b>Balance sheet (Rs mn)</b>							
Total equity	84,409	87,357	95,987	105,633	113,524	123,706	133,254
Deferred tax liability	13,748	13,844	14,209	15,960	20,600	22,398	24,242
Total borrowings	21,854	66,638	105,175	167,867	375,367	423,066	441,066
Current liabilities	69,887	79,549	101,195	124,337	118,719	127,299	126,734
<b>Total liabilities and equity</b>	<b>189,896</b>	<b>247,389</b>	<b>316,566</b>	<b>413,797</b>	<b>628,211</b>	<b>696,469</b>	<b>725,296</b>
Cash	2,016	426	868	2,940	3,195	1,640	1,005
Current assets	93,007	109,674	113,779	190,034	225,384	232,551	232,481
Total fixed assets	77,305	97,013	130,644	152,452	168,810	176,456	180,988
Investments	17,568	40,276	71,275	68,371	230,823	285,823	310,823
<b>Total assets</b>	<b>189,896</b>	<b>247,389</b>	<b>316,566</b>	<b>413,796</b>	<b>628,211</b>	<b>696,470</b>	<b>725,296</b>
<b>Free cash flow (Rs mn)</b>							
Operating cash flow, excl. working capital	15,977	10,126	23,966	(18,679)	20,207	(3,330)	(1,591)
Working capital changes	(3,614)	(5,351)	8,936	(6,504)	(52,957)	6,971	714
Capital expenditure	(12,849)	(25,298)	(38,510)	(31,638)	(25,099)	(17,886)	(16,156)
Investments	2,995	(22,884)	(31,704)	(1,851)	(162,452)	(55,000)	(25,000)
Other income	800	941	2,067	4,692	13,980	21,183	24,517
<b>Free cash flow</b>	<b>3,310</b>	<b>(42,466)</b>	<b>(35,246)</b>	<b>(53,980)</b>	<b>(206,321)</b>	<b>(48,062)</b>	<b>(17,517)</b>
<b>Ratios (%)</b>							
Debt/equity	22.3	65.8	95.4	138.1	279.9	289.6	280.0
Net debt/equity	20.2	65.4	94.7	135.6	277.5	288.4	279.4
RoAE	13.4	4.1	14.9	9.8	6.9	8.1	7.0
<b>RoACE</b>	<b>10.1</b>	<b>2.5</b>	<b>8.8</b>	<b>6.4</b>	<b>7.4</b>	<b>7.2</b>	<b>7.8</b>
<b>Key assumptions</b>							
Crude throughput (mn tons)	13.9	14.0	16.7	16.8	17.3	19.3	19.3
Effective tariff protection (%)	5.6	3.1	1.4	1.3	2.3	2.4	2.4
Net refining margin (US\$/bbl)	4.5	3.9	4.3	6.6	2.8	2.4	1.4
Sales volume (mn tons)	20.6	20.1	23.4	26.2	28.1	29.1	30.2
Marketing margin (Rs/ton)	1,688	(463)	(710)	(2,345)	(5,615)	(259)	1,369
Subsidy under-recoveries (Rs mn)	(26,708)	(29,671)	(18,899)	(28,549)	(12,148)	(4,084)	(17,751)

Source: Kotak Institutional Equities estimates.

## Consolidated profit model, balance sheet, cash model of IOCL, March fiscal year-ends, 2004-2011E (Rs mn)

	2004	2005	2006	2007	2008	2009E	2010E	2011E
<b>Profit model (Rs mn)</b>								
Net sales	1,173,450	1,379,018	1,729,474	2,149,428	2,444,378	4,052,535	4,136,990	4,203,849
<b>EBITDA</b>	<b>114,303</b>	<b>86,765</b>	<b>82,044</b>	<b>110,451</b>	<b>120,872</b>	<b>133,714</b>	<b>125,041</b>	<b>132,675</b>
Other income	17,565	16,138	21,310	27,451	43,748	6,661	77,906	71,285
Interest	(5,043)	(7,433)	(12,101)	(17,058)	(17,556)	(47,107)	(75,258)	(81,992)
Depreciation	(20,626)	(23,140)	(24,711)	(28,686)	(29,918)	(31,497)	(33,053)	(37,781)
Pretax profits	106,199	72,330	66,542	92,157	117,145	61,771	94,637	84,186
Extraordinary items	3,553	4,283	5,590	24,757	5,374	5,584	5,315	5,271
Tax	(25,966)	(13,658)	(19,975)	(25,834)	(38,293)	(19,579)	(31,293)	(32,417)
Deferred taxation	(5,157)	(2,335)	(1,282)	(8,040)	(473)	(571)	64	1,696
Net profits	79,052	59,475	51,125	82,729	83,430	47,205	68,722	58,736
<b>Net profits after minority interests</b>	<b>73,298</b>	<b>52,666</b>	<b>45,362</b>	<b>62,469</b>	<b>74,573</b>	<b>40,415</b>	<b>65,904</b>	<b>57,223</b>
<b>Earnings per share (Rs)</b>	<b>62.8</b>	<b>45.1</b>	<b>38.8</b>	<b>52.4</b>	<b>62.5</b>	<b>33.9</b>	<b>55.3</b>	<b>48.0</b>
<b>Balance sheet (Rs mn)</b>								
Total equity	233,386	271,302	317,977	378,117	450,449	491,303	552,890	605,732
Deferred tax liability	47,934	50,367	50,602	59,859	60,331	60,902	60,838	59,142
Total borrowings	146,147	197,809	292,395	290,215	382,818	859,549	1,006,971	1,067,957
Current liabilities	219,522	266,430	286,716	330,791	386,724	516,983	526,760	540,507
<b>Total liabilities and equity</b>	<b>646,988</b>	<b>785,907</b>	<b>947,691</b>	<b>1,058,981</b>	<b>1,280,322</b>	<b>1,928,737</b>	<b>2,147,458</b>	<b>2,273,339</b>
Cash	13,777	13,356	8,080	9,385	8,413	7,248	8,540	9,849
Current assets	278,550	368,158	413,904	437,178	599,256	928,296	939,722	949,326
Total fixed assets	320,647	370,003	383,717	415,014	460,307	486,649	527,652	532,620
Investments	34,013	34,391	141,990	197,403	212,345	506,543	671,543	781,543
<b>Total assets</b>	<b>646,988</b>	<b>785,907</b>	<b>947,691</b>	<b>1,058,981</b>	<b>1,280,322</b>	<b>1,928,736</b>	<b>2,147,458</b>	<b>2,273,338</b>
<b>Free cash flow (Rs mn)</b>								
Operating cash flow, excl. working capital	93,713	71,765	(10,334)	(44,660)	(107,263)	61,864	26,823	22,616
Working capital changes	1,710	(33,421)	(8,136)	2,237	(1,414)	(239,640)	15,931	2,460
Capital expenditure	(47,179)	(73,626)	(49,042)	(50,969)	(79,586)	(49,667)	(53,843)	(22,620)
Investments	(509)	(1,172)	(17,778)	99,768	92,665	(294,083)	(165,000)	(111,044)
Other Income	5,826	7,814	10,317	13,582	18,253	63,946	39,161	62,887
<b>Free cash flow</b>	<b>53,560</b>	<b>(28,641)</b>	<b>(74,973)</b>	<b>19,958</b>	<b>(77,346)</b>	<b>(457,580)</b>	<b>(136,928)</b>	<b>(45,701)</b>
<b>Ratios (%)</b>								
Debt/equity	52.0	61.5	79.3	66.3	74.9	155.7	164.1	160.6
Net debt/equity	47.1	57.3	77.1	64.1	73.3	154.3	162.7	159.1
RoAE	30.0	18.3	13.7	16.1	16.3	7.9	11.8	9.3
<b>RoACE</b>	<b>20.4</b>	<b>13.7</b>	<b>9.3</b>	<b>11.3</b>	<b>11.2</b>	<b>6.5</b>	<b>7.5</b>	<b>6.1</b>
<b>Key assumptions (IOC standalone)</b>								
Crude throughput (mn tons)	37.7	36.6	38.5	44.0	47.4	47.9	48.1	49.9
Effective tariff protection (%)	7.6	5.7	3.1	1.6	1.4	2.8	2.8	2.8
Net refining margin (US\$/bbl)	5.4	6.2	4.8	4.2	8.1	5.8	3.9	3.1
Sales volume (mn tons)	47.1	48.2	50.4	53.4	57.4	62.3	64.8	67.3
Marketing margin (Rs/ton)	2,092	1,982	26	(633)	(2,203)	(6,072)	(251)	1,539
Subsidy under-recoveries (Rs mn)	(28,078)	(64,309)	(95,361)	(34,041)	(64,486)	(8,988)	(103)	(33,850)

Source: Kotak Institutional Equities estimates.

**Consumer products****ASPN.BO, Rs860**

Rating	ADD
Sector coverage view	Cautious
Target Price (Rs)	1,075
52W High -Low (Rs)	1334 - 826
Market Cap (Rs bn)	82.5

**Financials**

March y/e	2008	2009E	2010E
Sales (Rs bn)	34.1	42.6	49.3
Net Profit (Rs bn)	3.8	4.3	4.9
EPS (Rs)	39.5	45.2	50.9
EPS gth	40.4	14.5	12.6
P/E (x)	22	19.0	16.9
EV/EBITDA (x)	13.1	11.5	9.8
Div yield (%)	1.7	2.0	2.3

**Asian Paints : 'Color' less in short term**

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- **Our dipstick survey covering 20 dealers suggest mix deterioration in first-time painting**
- **Expect a muted 2HFY09 for paint volumes due to higher primary sales in 1H as stockists increased inventory levels in anticipation of price increases**
- **Management indicated short-term intent is "to meet planned profits even if volumes fall". We endorse this view—consumer confidence is the key and not price elasticity**
- **At 15XFY10E (lowest in 5 years), reiterate ADD; we forecast 13% EPS growth in FY10E**

Our dipstick survey covering 20 dealers across all four regions in India suggest modest decline of about 5% in footfalls (postponement of repainting) and mix deterioration (first-time painting with distempers rather than emulsions) in the past two months. However, the demand for exterior paints continues to be strong led by South Indian states—augurs well for the company as exteriors account for about one-third of sales. We forecast sales growth and PAT growth of 17.7% and 10.2% for 2HFY09E. After a 15% price increase in 1HFY09, the company has already implemented a 1.5% reduction in prices in November, company plans to pass on the entire benefit of CENVAT reduction in December itself. Management indicated that short term intent is "to meet planned profits even if volumes fall"—we endorse this view—consumer confidence is the key and not price elasticity. We model 15% sales growth for FY10E (13% volume growth and 2% realization growth) inline with long-term correlation trends with GDP. We forecast EPS growth of 15.1% and 12.6% for FY09E and FY10E respectively. Over the past five years, the minimum, maximum and average P/E commanded by Asian Paints stock was 15.9X, 31.5X, 22.2X respectively and the average over the last ten years was 19.1X. At the current price of Rs860/share, the stock trades at 15XFY10E (adjusting for value of international operations). We believe any likely weakness in the stock on muted 2HFY09E performance should be viewed as a buying opportunity and recommend ADD rating.

**Dipstick survey suggests mix deterioration in first-time painting**

Our dipstick survey covering 20 dealers across all four regions in India suggest modest decline of about 5% in footfalls (postponement of repainting) and mix deterioration (first-time painting with distempers rather than emulsions) in the past two months (November and December). However, the demand for exterior paints continues to be strong led by South Indian states—augurs well for the company as exteriors account for about one-third of sales. One of the dealers whom we interviewed in fact commented that the declining popularity of mega serials (family drama) on general entertainment channels is also one of the reasons for mix deterioration (the serials portray close-up visuals which are mostly shot interiors).

Our discussions with industry sources suggest that the company's value sales mix is skewed towards emulsions which are at the top-end of value chain. The likely sales mix is Emulsions 35%, Distempers 20%, Enamels 25% and Primers /wood finishes /ancillaries 20%. We believe the key risks facing Asian Paints in FY10E are (1) postponement of demand from repainting segment and (2) consumer trading down in first-time painting segment—where the price differential between an emulsion and distemper is about 25%. Please refer Exhibit 5 wherein we highlight the indexed price to paint one square foot area using emulsions, distempers and enamels. While we agree that initial painting in new construction can be usually done with cheaper quality paints, consumer trading down in repainting is sub-optimal for consumer and is generally avoided.

### Expect a muted 2HFY09E for demand

In our earlier note dated October 29 titled *Moving parts trending in diverse direction and at varied pace* we had highlighted that (1) slowdown in new real estate construction and existing home sales and (2) consumer confidence likely lower could act as a dampener to paint sales going forward. We continue to believe that Sixth Pay Commission payouts would likely prevent a sharp deceleration in paint sales in 1HCY09E. However, we temper the optimism on Sixth Pay Commission payout providing support for a significant period of time as we believe (1) government employees typically reside in government-owned quarters and hence may choose not to paint and (2) even though government employees have job security, when blip in consumer confidence is observed across the economy, they may likely choose to save than to spend.

The company had a stellar 1HFY09 (sales up +32.6%, PAT up +20.6%) aided by (1) staggered price increases totaling 15%—with higher primary sales as stockists increased the inventory levels in anticipation of price increases and (2) diwali festival sales booked in this period. With price correction setting in, the company could likely see a reversal in 2HFY09—we forecast sales growth and PAT growth of 17.7% and 10.2%.

### Higher prices and inventory levels with dealers are short-term worries

After a 15% price increase in 1HFY09, the company has already implemented a 1.5% reduction in prices in November. Moreover according to the management, there are plans to pass on the entire benefit of CENVAT reduction (to 10% from 14%; estimated annualized benefit of over Rs2500 mn) in December itself. However, management indicated that the short-term intent is “to meet planned profits even if volumes fall”. We endorse the management’s strategy as we believe the current demand condition is constrained by lack of consumer confidence, hence the ability to activate demand through price reductions is limited. However, we believe that Asian Paints is likely to resort to price cuts in line with competition to maintain market shares.

In a recent interaction, management indicated that the slowdown in industrial demand is exacerbated by non-availability of credit. This in turn is resulting in extended credit periods and the necessity for the company to be careful in choosing clients (to avoid bad debts).

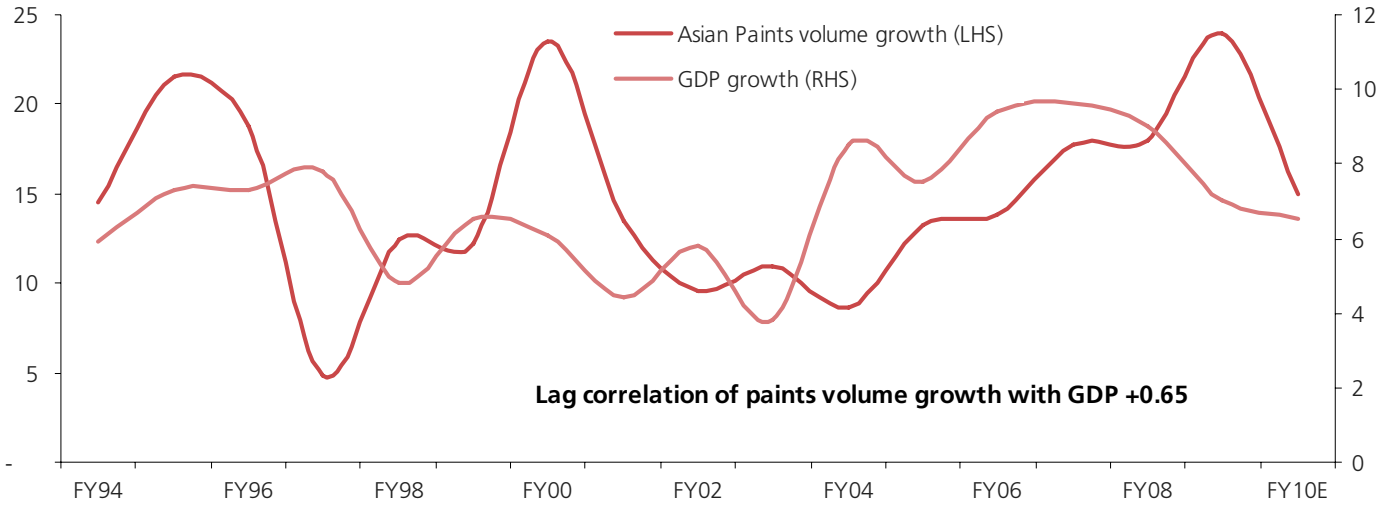
### At 15XFY10E (lowest in 5 years), retain ADD rating; we forecast 13% EPS growth in FY10E

An analysis of correlation between the company’s paints volume growth vis-à-vis GDP growth rate indicates a lag correlation of 0.65 (GDP growth in year 1 vs. paints volume growth in year 2). Moreover, the mean and mode of the multiplier relationship between paints volume growth and GDP growth works out to 2.1 (Exhibit 1 and 2). We model 15% sales growth for FY10E (13% volume growth and 2% realization growth) inline with long-term correlation trends with GDP.

Our target price of Rs1,075/share comprises Rs1,010 for domestic business based on DCF and Rs65/share for international operations. We value international business at 6X EV/EBITDA or Rs65/share. We forecast EPS growth of 15.1% and 12.6% for FY09E and FY10E respectively. Over the past five years, the minimum, maximum and average P/E commanded by Asian Paints stock was 15.9X, 31.5X, 22.2X respectively and the average over the past ten years was 19.1X. At the current price of Rs860/share, the stock trades at 15XFY10E (adjusting for value of international operations). We believe any likely weakness in the stock on muted 2HFY09E performance should be viewed as a buying opportunity and recommend ADD rating. The stock has delivered a relative return of +8% and +20% vis-à-vis Sensex over the past six months and one-year, respectively.

**Exhibit 1: Paints volume growth has high correlation to GDP growth**

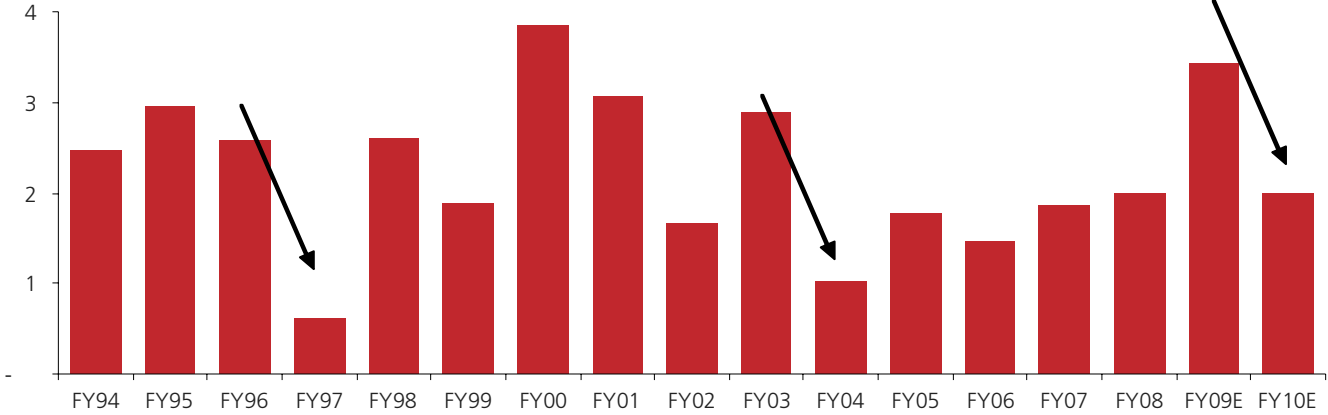
Asian Paints' volume growth and India's GDP growth (%)



Source: Kotak Institutional Equities

**Exhibit 2: Volume growth in FY10E likely cushioned by ability to ignite demand by price reductions**

Index of Asian Paints' volume growth to GDP growth (X)

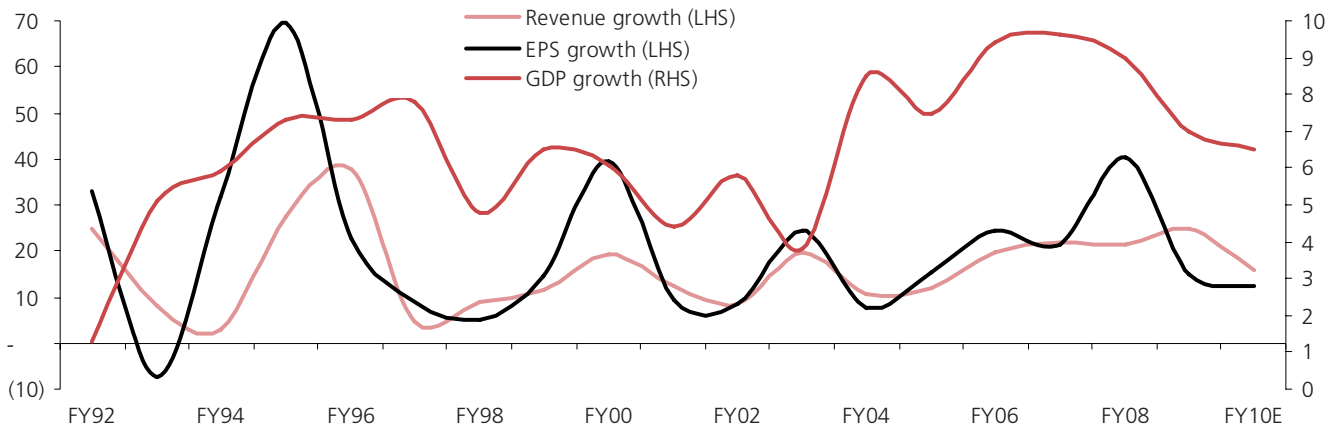


Source: Kotak Institutional Equities



**Exhibit 3: Revenue growth will likely slowdown in FY10E; cost comfort provides margin expansion**

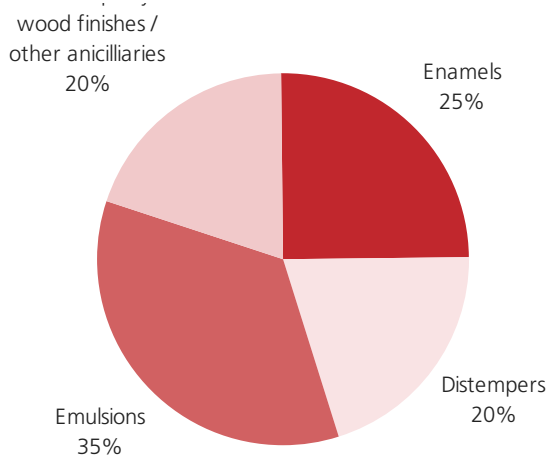
Asian Paints' revenue growth, EPS growth and India's GDP growth (%)



Source: Kotak Institutional Equities

**Exhibit 4: Asian Paints' decorative business is dominated by emulsions**

Asian Paints estimated sales mix, %



Source : Industry sources, Kotak Institutional Equities

**Exhibit 5: Mix deterioration is a significant risk**

Indexed price to paint 1 square feet area using emulsions, distempers and enamels of Asian Paints

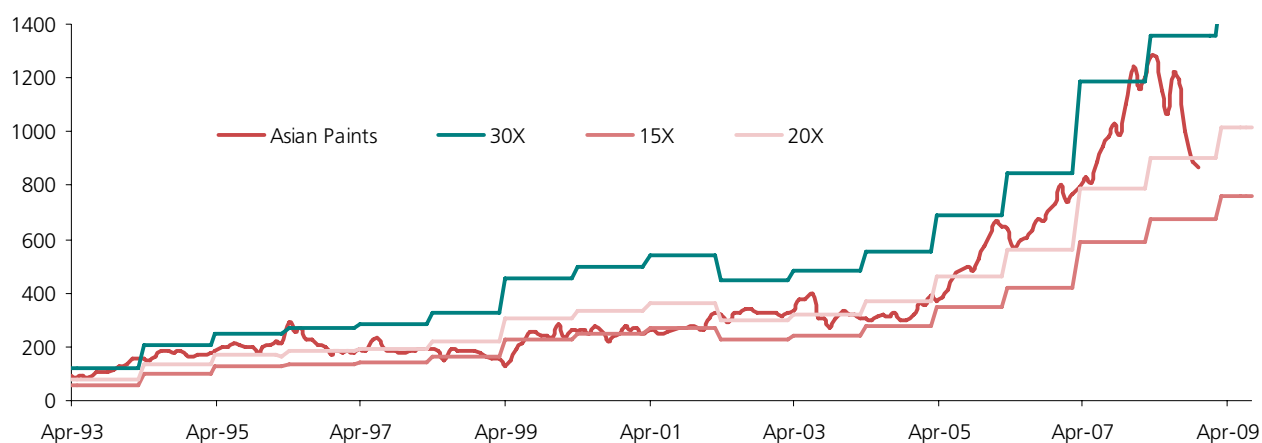
	<b>Painting</b>	<b>Re-painting</b>
<b>Emulsions</b>		
Interior Wall Finish - Lustre	100	73
Interior Wall Finish - Matt	100	73
Premium Emulsion	90	64
Tractor Emulsion	84	58
<b>Distempers</b>		
Tractor Acrylic Distemper	71	47
Tratcor Synthetic Distemper	56	43
Utsav Acrylic Distemper	46	34
<b>Enamels</b>		
Luxury Ultra Gloss Enamel	77	58
Apcolite Premium Gloss Enamel	59	44
Apcolite Premium Satin Enamel	59	46
Premium Semi Gloss Enamel	46	34
Gattu General Purpose Synthetic Enamel	39	28

Source : Market sources, Kotak Institutional Equities

**Asian Paints: Standalone profit model, balance sheet, cash model 2006-2010E, March fiscal year-ends (Rs mn)**

	2006	2007	2008	2009E	2010E
<b>Profit model (Rs mn)</b>					
<b>Net sales</b>	<b>23,112</b>	<b>28,196</b>	<b>34,170</b>	<b>42,649</b>	<b>49,330</b>
<b>EBITDA</b>	<b>3,439</b>	<b>4,200</b>	<b>5,540</b>	<b>6,494</b>	<b>7,516</b>
Other income	439	405	626	675	755
Interest	(38)	(69)	(83)	(92)	(141)
Depreciation	(455)	(454)	(438)	(589)	(801)
Pretax profits	3,384	4,082	5,645	6,488	7,329
Tax	(1,171)	(1,400)	(1,880)	(2,153)	(2,449)
<b>Net profits</b>	<b>2,213</b>	<b>2,682</b>	<b>3,766</b>	<b>4,335</b>	<b>4,880</b>
<b>Earnings per share (Rs)</b>	<b>23.1</b>	<b>28.0</b>	<b>39.3</b>	<b>45.2</b>	<b>50.9</b>
<b>Dividend per share (Rs)</b>	<b>12.5</b>	<b>13.0</b>	<b>15.0</b>	<b>17.5</b>	<b>20.0</b>
<b>Balance sheet (Rs mn)</b>					
Total equity	6,223	7,441	9,285	11,656	14,292
Total borrowings	911	1,257	947	1,647	1,647
Current liabilities	5,408	6,482	9,516	11,789	13,572
Deferred tax liability	285	221	315	359	398
<b>Total liabilities and equity</b>	<b>12,827</b>	<b>15,401</b>	<b>20,063</b>	<b>25,452</b>	<b>29,908</b>
Cash	284	425	414	1,241	2,801
Current assets	6,550	8,167	10,029	12,616	14,562
Total fixed assets	3,247	3,465	5,392	7,303	8,252
Investments	2,746	3,344	4,229	4,229	4,229
<b>Total assets</b>	<b>12,827</b>	<b>15,401</b>	<b>20,063</b>	<b>25,389</b>	<b>29,844</b>
<b>Free cash flow (Rs mn)</b>					
Operating cash flow, excl. working capital	2,150	2,802	4,176	4,706	5,420
Working capital	(522)	282	27	(366)	(339)
Capital expenditure	(507)	(673)	(2,365)	(2,500)	(1,750)
Investments etc	(1,048)	(2,171)	(1,914)	(949)	(1,770)
<b>Free cash flow</b>	<b>73</b>	<b>241</b>	<b>(75)</b>	<b>891</b>	<b>1,560</b>
<b>Key assumptions (%)</b>					
Revenue growth	19.8	22.0	21.2	24.8	15.7
EBITDA margin	14.9	14.9	16.2	15.2	15.2
EPS growth	24.3	21.2	40.4	15.1	12.6

Source: Kotak Institutional Equities estimates.

**Asian Paints - P/E bands**

Source: Kotak Institutional Equities estimates

**Infrastructure****IRBI.BO, Rs107**

Rating	ADD
Sector coverage view	Attractive
Target Price (Rs)	130
52W High -Low (Rs)	222 - 64
Market Cap (Rs bn)	35.5

**Financials**

March y/e	2008	2009E	2010E
Sales (Rs bn)	7.3	11.9	23.7
Net Profit (Rs bn)	1.1	2.3	4.7
EPS (Rs)	3.4	7.0	14.0
EPS gth	150.9	104.8	99.7
P/E (x)	31.2	15.2	7.6
EV/EBITDA (x)	11.8	9.9	5.3
Div yield (%)	-	-	-

**Shareholding, September 2008**

	% of Pattern Portfolio	Over/(under) weight
Promoters	74.4	-
FIs	6.2	0.0 (0.1)
MFs	4.1	0.1
UTI	-	(0.1)
LIC	-	(0.1)

**IRB Infrastructure Developers : Management steadfast on executing its plans, however, peer data show cause for concern; cut rating to ADD**

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- **Management confident of minimum 6% traffic growth, however, peer data shows cause for concern**
- **Surat-Dahisar financial closure completed—may bring in toll revenues in Jan itself**
- **Expect construction revenues of Rs5 bn in FY2009E and Rs13 bn in FY2010E**
- **Qualified as top 6 in 7 projects and expect to qualify in 3 more projects where currently are below top 6**
- **Change estimates and target price to Rs130/ share; reduce rating to ADD from BUY**

We highlight key takeaways from meeting with IRB Infrastructure management: (1) Expect minimum traffic growth of 6% on average across various road projects even though industry data points have been worrying, (2) Surat-Dahisar has been finally financially closed, (3) would have benefit of falling interest rates as all loans are now PLR linked, (4) qualified among the top-6 players in seven projects and expect to get a couple of projects without top-six ranking, (5) industry out look is that current rush of NHAI to award projects may meet with only partial success as several steps need to be taken for making projects more viable. We revise our estimates to Rs7 and Rs14 for FY2009E and FY2010E respectively from Rs5.8 and Rs12.5 earlier. We reduce our rating to ADD from BUY earlier with a target price of Rs130/ share as traffic levels on various BOT projects could face a slowdown in growth which would affect the cash flows of the company.

**Management confident of minimum 6% traffic growth, however, peer data show cause for concern**

Management expects a traffic growth on and aggregate basis (commercial + personal) of 6% to 7% (minimum 6%) in FY2009E despite slowdown. Management highlighted that even during earlier slowdowns traffic growth of 7-7.5% was witnessed.

Management confidence, however, does not gel well with traffic growth being reported at another road SPV for which consistent data is available. We highlight only 2% PCU growth in 1HFY09 for GVK Jaipur-Kishengarh Expressway road project of GVK Power and Infrastructure (Exhibit 1, 2 and 3). However we highlight that IRB Infrastructure has reported a traffic growth of about 6.5%-7% on its key operational asset i.e. Mumbai-Pune Expressway Ltd in 1HFY09 (Exhibit 4). We believe that most of the traffic growth on MPEW and NH4 combination has been contributed by NH4 only as our basic analysis of toll data on MPEW suggest a traffic growth of 2% only.

**Surat-Dahisar financial closure completed - May bring in toll revenues in January itself versus our expectation of April 2009**

The financial closure of the Surat-Dahisar project has been completed (including the earlier gap of Rs1 bn - now actually there is an overflow of sanctions). Only documentation is left which is expected to get completed by the last week of December and the company expects to start collecting toll on this project from the 1st week of January 2009. This would contribute about Rs10 mn/ day on a net basis (post-revenue share) to the company. The project would incur overhead to the tune of Rs3.35 bn for loan appraisal, debt service reserve account etc., thereby bringing the total project cost to Rs28.4 bn at the SPV level.

**Interest rates are PLR linked and are expected to ease off**

Majority of loans in the SPVs are now linked to BPLR of banks and current prevailing rates are around 13%. The management expects these rates to decline from these levels given the recent monetary measures which have not been reflected in PLR of several banks.

**Construction revenues of Rs5 bn in FY2009E and Rs13 bn in FY2010E expected**

We expect IRB to report construction revenues of about Rs6 bn (Rs3.50 bn from Surat-Bharuch, Rs1.0-1.5 bn from Surat-Dahisar and Rs1 bn from 3rd party cash contracts). In FY2010E the construction order book would comprise of Rs26 bn Surat-Dahisar project and Rs3.5 bn Kolhapur urban road project). These two projects are expected to contribute about Rs12-13 bn of construction revenues at a minimum in FY2010E and another Rs1 bn may come from outstanding cash contracts.

**Ready to start Kolhapur road project before financial closure based on own equity**

The management highlighted that regards the Kolhapur project they are ready to pay upfront the entire Rs0.27 bn of negative grant with their own equity and hence have requested MSRDC to waive off the financial closure requirement for the project. They have already completed a feasibility study for the project and have moved forward with respect to putting up a hotel on the plot of real estate that is coming along with the project.

**Qualified as top 6 in 7 projects and expect to qualify in 3 more projects where currently are below top 6**

IRB has qualified as the top 6 bidders for 7 NHDP projects and expects to qualify for 3 more projects where it currently ranks below the top 6. These projects amount to a total NHAI appraised TPC of greater than Rs120 bn of which the company expects to win Rs30-Rs50 bn (Exhibit 5). These projects are expected to start execution by about January 2010 by which time the company would have spare execution capability as execution of Surat-Bharuch and current cash contracts would be complete while Surat-Dahisar would have stabilized.

**Current rush of NHAI to award projects may meet with only partial success**

Management believes that NHAI may not meet with success in its attempt to kick-start all the sixty-eighty odd projects as (a) some of them do not have qualified bidders, (b) VGF quoted may be too high, (c) may not achieve financial closure post-award etc. The management believes that in order for the award of NHAI road projects to proceed effectively in the future the following measures need to be taken:

**Increase project cost** - Revision of Total project cost set by NHAI to current levels as this has implication for amount of viability gap funding that the government is ready to provide to developers

**Reduce Scope** - Reduce the scope of work and thereby costs (especially for 2 to 4 laning projects) to make the projects more viable as lots of extraneous work could be removed from original scope

**Concession period** - Increase the concession period for the projects to make them more bankable

**Upfront VGF** - Upfront the grant components of the projects versus current practice of giving 50% of GVF decided by bid process during construction and 50% during operational phase of the project

### **Revise earnings estimates and reduce target price to Rs130/ share from Rs145/ share earlier**

We change our EPS estimates to Rs7 (from Rs5.9 earlier) and Rs14 from (Rs12.5 earlier) for FY2009E and FY2010E respectively based on (1) lower traffic growth assumptions of 5% for the next 2 years (from 7% earlier, Exhibit 6) and (2) higher construction sector revenue estimate of Rs6.9 bn and Rs13.6 bn for FY2009E and FY2010E from Rs6 bn and Rs10.5 bn. The higher construction revenues are due to moving forward the revenues from the Surat-Dahisar project by three months. With an order book of about Rs30 bn and cumulative revenues of Rs20.5 bn in FY2009E and FY2010E we get a operating profit of Rs3.6 bn in the first two years itself, assuming construction margins of 17.5%. We reduce our SOTP-based target price to Rs130 from Rs145 earlier (Exhibit 7) comprised of (1) Rs94.4 per share for the road BOT portfolio that we value based on free cash flow to equity method (based on March FY2010E, using an expected return on equity of 14%), (2) Rs25.6 per share for the construction business, applying an EV/EBITDA multiple of 4X FY2010E EBITDA and (3) Rs9 per share of estimated net cash on books as of end-FY2009E.

### **Reduce rating to ADD from BUY earlier based on risk of slower traffic growth**

We reduce our rating to ADD from BUY earlier due to concerns on further slowdown in traffic growth. We however believe IRB has the ability to create value by leveraging further growth opportunities based on the experience that it has accumulated so far in the toll-road segment.

Key risks to existing projects are (1) further slowdown in traffic growth, (2) higher interest rates, affecting interest cost of BOT projects, (3) cost and time escalations in projects under execution, affecting expected returns. We highlight that a 1% lower traffic growth rate and 1% higher interest rate assumption (throughout the life of the project versus our base case assumption) reduces our target price by about 10% while 1% higher traffic growth rate and 1% lower interest rate assumption increases our target price by 10%. Risks to growth opportunities are posed by (1) government delays in offering projects for development and (2) increasing competition, which would probably reduce equity returns.

### **Other key takeaways:**

#### **Recent decline in commodity prices would help keep construction margins intact -**

The recent decline in commodity prices would help the margins of the company provided they continue to remain low as the firm cannot hedge commodities.

**Surat-Bharuch expected to complete on time -** The Surat-Bharuch project is expected to be completed by April 2009. Committed timeline for completing this road project is June 2009.

**Real estate continues to take the back seat -** Management highlighted that work in the real estate project (township development project along the Mumbai-Pune expressway) is progressing as planned with the start of fencing of the plots. However, no turnover is expected from the real estate project at least till March 2010.

**Exhibit 1. While car and LCV growth has sustained, Multi-axel vehicle traffic growth rate has substantially declined**

Vehicle count analysis for GVK Infrastructure road SPV - GVK Jaipur-Kishengarh

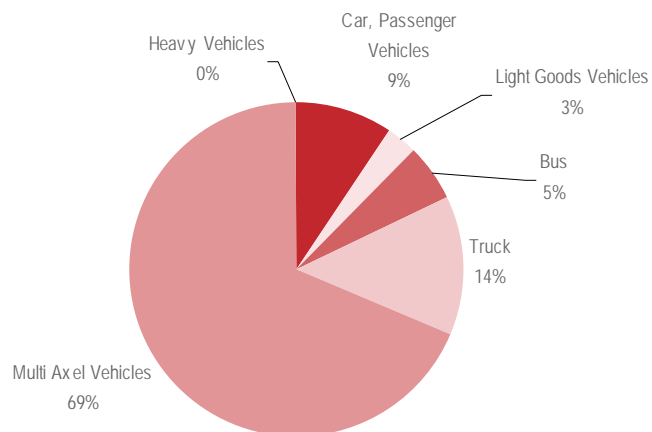
Vehicle type	1HFY09	1HFY08	% growth	FY2008	yoy 2008%	FY2007	yoy 2007%	FY2006
Car, Passenger Vehicles	1,120,532	996,067	12.5	2,128,528	11.4	1,910,398	18.1	1,618,135
Light Goods Vehicles	211,094	193,242	9.2	408,025	8.9	374,646	11.9	334,848
Bus	188,410	182,690	3.1	372,153	2.0	364,835	10.2	331,130
Truck	462,859	516,020	(10.3)	1,029,984	(16.2)	1,229,533	(12.0)	1,396,957
Multi Axel Vehicles	1,444,704	1,405,549	2.8	2,911,211	21.5	2,395,453	24.4	1,925,769
Heavy Vehicles	926	870	6.4	1,750	(31.1)	2,539	33.8	1,897
<b>Total</b>	<b>3,428,525</b>	<b>3,294,438</b>	<b>4.1</b>	<b>6,851,651</b>	<b>9.1</b>	<b>6,277,404</b>	<b>11.9</b>	<b>5,608,736</b>

Source: Company

**Exhibit 2. PCU growth has slowed to about 2% from about 12% for the last two years led by slowdown in multi-axel vehicle growth rate**  
PCU analysis for traffic data of GVK Jaipur Kishengarh

Vehicle type	1HFY09	1HFY08	% growth	FY2008	yoy 2008%	FY2007	yoy 2007%	FY2006
Car, Passenger Vehicles	1,120,532	996,067	12.5	2,128,528	11.4	1,910,398	18.1	1,618,135
Light Goods Vehicles	379,969	347,836	9.2	734,445	8.9	674,363	11.9	602,726
Bus	659,435	639,415	3.1	1,302,536	2.0	1,276,923	10.2	1,158,955
Truck	1,620,007	1,806,070	(10.3)	3,604,944	(16.2)	4,303,366	(12.0)	4,889,350
Multi Axel Vehicles	8,234,813	8,011,629	<b>2.8</b>	16,593,903	21.5	13,654,082	24.4	10,976,883
Heavy Vehicles	7,038	6,612	6.4	13,300	(31.1)	19,296	33.8	14,417
<b>Total</b>	<b>12,021,793</b>	<b>11,807,629</b>	<b>1.8</b>	<b>24,377,655</b>	<b>11.6</b>	<b>21,838,427</b>	<b>13.4</b>	<b>19,260,466</b>

Source: Company

**Exhibit 3. Commercial traffic - Multi-axel vehicles and trucks dominate with 83% share of total traffic**  
Vehicle-type mix for GVK Jaipur Kishengarh, 1HFY09 (%)

Source: Company

**Exhibit 4. IRB - key numbers - 1HFY09 (Rs mn)**

	2QFY09	1QFY09	1HFY09	FY2009E	FY2008
<b>Revenues</b>	<b>2,098</b>	<b>2,301</b>	<b>4,398.4</b>	<b>11,917</b>	<b>7,327</b>
BOT	1,082	1,097	2,179.7	4,943	3,696
Construction	1,015	1,203	2,218.7	6,974	3,631
<b>EBITDA</b>	<b>1,067</b>	<b>1,169</b>	<b>2,235.5</b>	<b>5,340</b>	<b>4,110</b>
BOT	904	923	1,826.5	4,120	3,380
Construction	163	246	409.0	1,220	730
<b>Margins (%)</b>	<b>50.8</b>	<b>50.8</b>	<b>101.7</b>	<b>44.8</b>	<b>56.1</b>
BOT	83.5	84.1	167.6	83.3	91.4
Construction	16.0	20.5	36.5	17.5	20.1
<b>PBT</b>	<b>491</b>	<b>667</b>	<b>1,158.2</b>	<b>3,120</b>	<b>1,666</b>
BOT	373	427	800.2		
Construction	118	240	358.0		
<b>PAT</b>	<b>412</b>	<b>542</b>	<b>953.8</b>	<b>2,333</b>	<b>1,139</b>
BOT	324	378	702.2		
Construction	88	164	251.6		
<b>Toll collection</b>	<b>1,068</b>	<b>1,097</b>	<b>2,165</b>	<b>4,200</b>	<b>3,635</b>
4 BOT projects	143	163	305	497	529
Kharpada Bridge	17	20	37	78	75
Nagar - Karmala - Tembhorni	29	31	60	116	110
Pune - Solapur	31	37	67	156	137
Pune - Nashik	42	40	82	182	160
Mumbai - Pune	726	720	1,447	2,884	2,352
Thane - Ghodbunder	64	68	132	285	273
MMK	17	18	35		

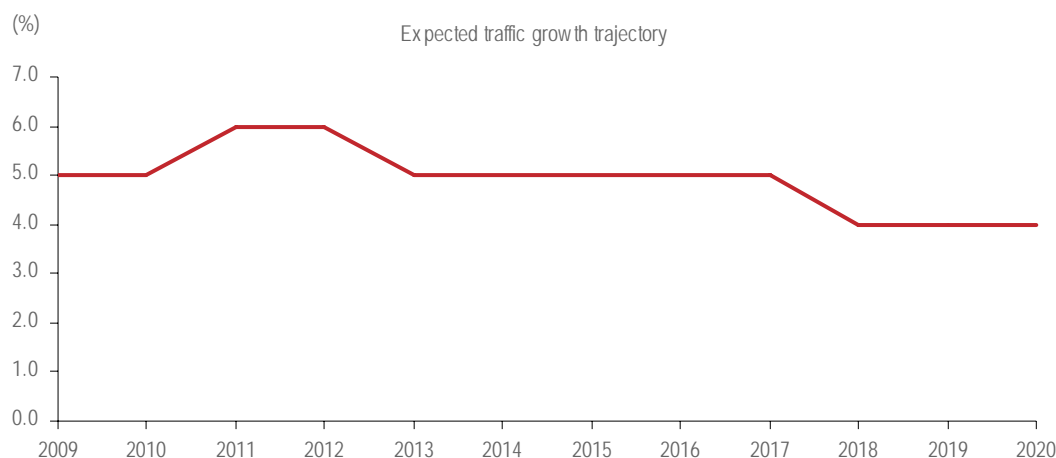
Source: Company, Kotak Institutional Equities estimates

**Exhibit 5. Details of projects where IRB has qualified in top 6 bidders**

	Phase	Section	TPC (Rs mn)	State	Length
<b>Qualified in Top 6</b>	II	Madhya Pradesh/ Maharashtra border - Nagpur	11,338	Maharashtra	95
	III	Tirupathi - Tirunathi - Chennai	8,020	Andhra Pradesh - Tamil Nadu	125
	III	Goa/ Karnataka border - Panaji	3,825	Goa	65
	III	Amritsar - Pathankot	7,040	Punjab	102
	III	Rohtak - Hissar	6,470	Haryana	89
	III	Pune - Solapur (Pkg II)	8,130	Maharashtra	101
	III	Talegaon - Amravati	6,190	Maharashtra	67
	V	Pune - Satara	17,246	Maharashtra	140
<b>Not in Top 6 ranking</b>	V	Samakhiali - Gandhidham	8,054	Gujarat	56
	V	Udaipur - Ahmedabad	25,450	Rajasthan - Gujarat	243
		MSRDC Securitization of Mumbai entry points; improvement of Sion Panvel highway	21,600	Maharashtra	NA
<b>Total cost of projects</b>			<b>123,363</b>		<b>1,084</b>

Source: Company



**Exhibit 6. Expected average traffic growth for various BOT projects for IRB, March fiscal year-ends, 2009E-2020E (%)**

Source: Kotak Institutional Equities estimates

**Exhibit 7. IRB Infrastructure Developers - SOTP valuation**

	Equity value of asset (Rs mn)	IRB's stake (%)	Value of IRB's stake (Rs mn)	Contribution to value of IRB (%)	Per share contribution to IRB (%)	Asset valuation methodology
<b>Roads</b>	<b>31,285</b>		<b>31,376</b>	<b>72.4</b>	<b>94.4</b>	<b>FCFE</b>
4 BOT projects	3,127	100.0	3,127	7.2	9.4	FCFE based on FY2010E
Kharpada Bridge	378	100.0	378	0.9	1.1	FCFE based on FY2010E
Nagar - Karmala - Tembhorni	633	100.0	633	1.5	1.9	FCFE based on FY2010E
Pune - Solapur	1,332	100.0	1,332	3.1	4.0	FCFE based on FY2010E
Pune - Nashik	1,562	100.0	1,562	3.6	4.7	FCFE based on FY2010E
Mumbai - Pune	12,134	100.0	12,134	28.0	36.5	FCFE based on FY2010E
Thane - Ghodbunder	2,854	100.0	2,854	6.6	8.6	FCFE based on FY2010E
Bharuch - Surat	8,717	100.0	8,717	20.1	26.2	FCFE based on FY2010E
Surat-Dahisar	(455)	80.0	(364)	(0.8)	(1.1)	FCFE based on FY2010E
Kolhapur urban road project	1,002	100.0	1,002	2.3	3.0	FCFE based on FY2010E
<b>Construction</b>	<b>8,512</b>	<b>100.0</b>	<b>8,512</b>	<b>19.6</b>	<b>25.6</b>	<b>EV/EBITDA multiple of 4X based on FY2010E</b>
<b>Net cash at parent level and investments</b>	<b>3,460</b>	<b>100.0</b>	<b>3,460</b>	<b>8.0</b>	<b>10.4</b>	<b>Estimated balance at end-FY2009E</b>
<b>Grand total</b>	<b>43,257</b>		<b>43,348</b>	<b>100</b>	<b>130.4</b>	<b>SOTP</b>

Source: Kotak Institutional Equities estimates

**Exhibit 8. Financial snapshot of IRB Infrastructure Developers, March fiscal 2006-2012E (Rs bn)**

	2006	2007	2008	2009E	2010E	2011E	2012E	2013E	2014E	2015E
<b>Roads</b>										
Revenues	1,856	2,802	3,696	4,943	10,090	11,339	13,004	13,986	15,094	17,040
EBIDTA	1,725	2,300	3,380	4,120	9,091	10,335	11,739	12,460	12,017	14,578
EBITDA margin (%)	92.9	82.1	91.4	83.3	90.1	91.1	90.3	89.1	79.6	85.5
<b>Construction</b>										
Revenues	2,506	2,373	3,631	6,974	13,587	18,650	23,220	27,516	31,709	35,931
EBIDTA	127	412	730	1,220	2,378	2,984	3,715	4,403	5,073	5,749
EBITDA margin (%)	5.1	17.4	20.1	17.5	17.5	16.0	16.0	16.0	16.0	16.0
<b>Real estate</b>										
Revenues	-	-	-	-	-	0	1,122	1,798	3,620	6,053
EBIDTA	-	-	-	(13)	(16)	(19)	217	364	786	1,322
EBITDA margin (%)							19.3	20.3	21.7	21.8
<b>Total</b>										
Revenues	4,362	5,175	7,327	11,917	23,676	29,989	37,345	43,301	50,422	59,025
EBIDTA	1,852	2,712	4,110	5,327	11,453	13,300	15,671	17,227	17,876	21,649
EBITDA margin (%)	42.5	52.4	56.1	44.7	48.4	44.4	42.0	39.8	35.5	36.7

Source: Company, Kotak Institutional Equities estimates

**Banking**

Sector coverage view

Attractive

Company	Rating	Price, Rs	
		12-Dec	Target
SBI	BUY	1,217	1,600
HDFC	ADD	1,634	2,100
HDFC Bank	BUY	920	1,350
ICICI Bank	ADD	411	450
Corp Bk	BUY	182	310
BoB	ADD	256	330
PNB	BUY	468	650
OBC	ADD	142	200
Canara Bk	REDUCE	163	220
LIC Housing	ADD	215	325
Axis Bank	REDUCE	469	750
IOB	BUY	69	130
Shriram Transf	ADD	190	305
SREI	BUY	47	100
MMFSL	SELL	180	190
Andhra	REDUCE	58	65
IDFC	ADD	65	85
PFC	ADD	127	140
Federal Bank	BUY	139	300
J&K Bank	ADD	340	500
India Infoline	ADD	39	70
Indian Bank	ADD	121	160
Union Bank	BUY	147	220
Central Bank c	SELL	35	55
Future Capital	BUY	144	440
Bank of India	BUY	269	370

**Banking aggregates record strong growth; investments in Gsecs on the rise**

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- **Loan and deposit growth remain strong at 29.8% yoy and 23.6% yoy as of November 2008**
- **Bank holdings of Gsecs record a sharp increase in November 2008**
- **Treasury gains on Gsecs are likely to mitigate credit losses**
- **Prefer public banks like SBI, PNB, Union Bank, BoB and Bol; HDFC Bank among the private banks at the current prices**

The latest RBI release on the banking sector aggregates suggests the following: (1) growth in deposits and credit continues to remain robust, (2) banks are deploying a larger proportion of their incremental resources in Government securities, which is in contrast to the trend observed in 2QFY09. The increased bank holding of Gsecs are likely a key reason for the sharp fall in Gsec yields over the past few weeks. The lower yields on Gsec are also likely influenced by the monetary stance of RBI and expected easing of inflationary pressures. This development is likely to help the banks make sizable gains on their treasury book. However, the expected moderation in economic growth is likely to impact the credit quality of banks adversely over a period of time. Banks may probably restructure the loans to stressed sectors, given the relaxation of norms by RBI, which will likely postpone the recognition of NPLs for the next few quarters. However, the risk of delinquencies will increase if the economic stress persists in 2HFY10E despite the efforts of Government of India to reflate the economy. We continue to prefer public banks like SBI, PNB, Union Bank, BoB and Bol; HDFC Bank among the private banks at the current prices.

**Banking aggregates continue to maintain strong growth momentum**

The credit and deposit growth of the banking system continues to remain strong at 29.8% yoy and 23.6% yoy as of November 30, 2008. The incremental growth in credit has come off to Rs703 bn in November 2008 from Rs1.1 tn in October 2008, while the incremental growth in deposits was Rs1.3 tn in November 2008 compared to Rs733 bn in October 2008. Nevertheless, these numbers are much stronger compared to the previous year. The drying up liquidity from other sources in the financial sector is the likely reason for the continued growth in banking sector credit, while the deposits growth is probably driven by the monetary easing by RBI. In a related development, bank holdings of Gsec investments witnessed a sharp increase— Rs932 bn in November 2008 compared to Rs374 bn in October 2008. The growth in banking aggregates continues to be ahead of our expectations; we expect this to moderate in the coming months given the expected moderation in economic growth.

The lower growth in incremental credit of the banking sector is likely driven by both the demand and supply side factors. On the demand side: (1) credit demand from the oil marketing companies could be tapering off given the steep fall in crude prices, (2) expectation of a further fall in interest rates could be motivating a postponement of credit demand and (3) credit demand could genuinely be impacted by the deterioration in economic outlook. On the supply side: (1) the sharp fall in Gsec yields is likely enticing banks to deploy a larger proportion of resources in government securities and make treasury profits, (2) banks are also likely being risk averse and not taking higher exposure on the credit side.

**Gsec yields likely to remain soft despite higher government borrowing**

Government of India (Gol) is expected to increase spending in the economy to boost domestic demand and provide support to economic growth over the next few years. This in turn is likely to lead to higher market borrowings given the fiscal balances of the Gol and exert upward pressure on Gsec yields. However, in the recent past RBI has been timing the redemptions of bonds under the market stabilization scheme (MSS) with the borrowing programme of the Gol and preventing an increase in the stock of government securities in the market. The outstanding MSS bonds as of December 5, 2008 were Rs1.3 tn, which is 1.2X the net borrowing programme of Gol in FY2008. This provides significant cushion to RBI to support lower Gsec yields despite higher borrowings by the Gol. The lower Gsec yields are also supported by the expected drop in inflation and further lowering of interest rates by the RBI. Our economist, Dr Mridul Saggarr, expects the benchmark 10-year Gsec to be at 6% by March 2009.

The softening of interest rates in the Gsec market appears to be impacting the interest rates in the other financial markets. The interest rates in the commercial paper market are lower by 300 bps since October 2008. This is likely to be positive for the investment book of private banks like Axis Bank and ICICI Bank, which likely have an exposure to this market.

**Sharp increase in delinquencies unlikely in the near term**

The banks are likely to witness a rise in NPLs given the moderation in economic growth. However, we do not expect a sharp rise in delinquencies in the near term given the relaxation of RBI norms pertaining to restructuring of loans. Banks could use this relaxation to postpone the recognition of NPLs over the next 2-3 quarters. However, if the economic conditions continue to remain stressed even in 2HFY10E the risk of NPLs for the banking sector is likely to increase.

**There has been a sharp rise in bank investments in SLR securities in November 2008**

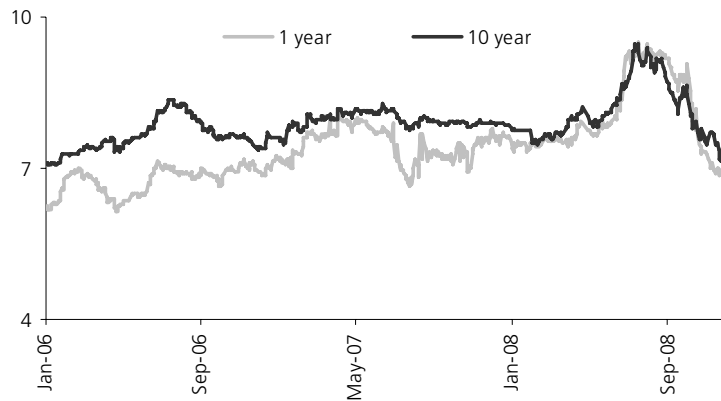
Incremental deposits, credit and investments of the banking sector, (Rs bn)

	FY2008			FY2009E		
	Incremental deposits	Incremental credit	Incremental SLR investments	Incremental deposits	Incremental credit	Incremental SLR investments
April	(188)	(434)	127	1	(194)	416
May	174	(41)	75	615	433	(85)
June	1,080	327	309	258	407	(159)
July	541	(19)	246	334	(66)	25
August	42	478	327	786	519	265
September	969	752	38	507	841	(313)
October	64	(108)	413	733	1,091	374
November	729	644	140	1,341	703	932

Source: RBI.

**Yields have corrected sharply over the past few months**

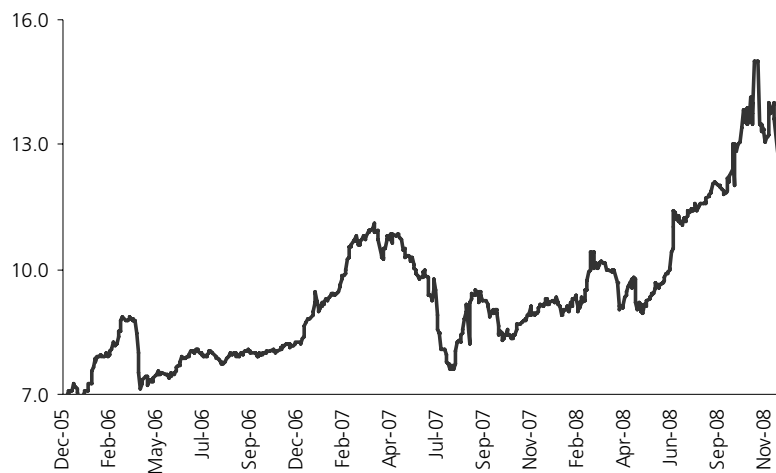
Yields on 1-year and 10-year Gsecs (%)



Source: Bloomberg.

**Interest rates on commercial paper of corporates have also come off by 300 bps since October 2008**

Yield on 12 month CP rate (%)



Source: Bloomberg.

**Public banks are likely to benefit more from lower Gsec yields**

Details on AFS book as of 2QFY09

	AFS book (Rs bn)	Proportion of AFS (%)	Duration (years)
Andhra Bank	25.5	17.9	1.4
Bank of Baroda	125.4	31.0	1.8
Bank of India	50.9	13.6	2.5
Canara Bank	128.4	25.6	1.6
Corporation Bank	37.1	19.3	1.8
<b>Indian Bank</b>	<b>68.9</b>	<b>38.8</b>	<b>3.3</b>
IOB	69.7	25.0	2.0
<b>OBC</b>	<b>88.0</b>	<b>34.2</b>	<b>2.9</b>
PNB	64.0	11.0	2.0
<b>State Bank of India</b>	<b>585.0</b>	<b>30.0</b>	<b>2.5</b>
<b>Union Bank</b>	<b>115.0</b>	<b>33.2</b>	<b>2.2</b>

Source: Companies.

**Telecom**

Sector coverage view

Cautious

Company	Rating	Price, Rs	
		12-Dec	Target
Bharti	BUY	724	800
Rcom	SELL	249	265
MTNL	REDUCE	75	80
Tata Communi	REDUCE	495	400
Idea Cellular	REDUCE	54	70

**3G auctions to start on Jan 15, 2009 but where is the money?**

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- **Limited spectrum availability in important circles can result in aggressive bidding**
- **No details provided on 3G spectrum charges, increase in 2G spectrum charges across all slabs proposed**
- **New players can bid for 3G spectrum though building a business case is challenging**
- **Aggressive bid on a pan-India basis unlikely**

The Department of Telecommunications has released detailed information memorandum for auction and allocation of spectrum for 3<sup>rd</sup> Generation (3G) telecom services in India. We expect to see strong bidding wars for 3G spectrum in metro areas and circles will lesser blocks of spectrum (Delhi, Gujarat, UP (W), West Bengal and HP). We believe that at least in the initial phase, 3G spectrum would be used to augment 2G voice capacity (especially in metros and a few A circles) rather than high data usage. We also do not see significant value accretion from a pure-play green-field 3G network roll-out; hence, we do not expect aggressive bidding from new international players, especially in B & C circles. Impact on valuations of the listed wireless plays would primarily depend on the result of the auction; however, we do not see a meaningful impact (either positive or negative) in case of a reasonable auction. The DOT information memorandum is silent on the 3G spectrum usage charges and only details the auction process.

**Limited spectrum availability in important circles can result in aggressive bidding.**

Exhibit 1 gives the spectrum blocks available in each circle. The number of blocks of spectrum available for auction varies from one to four (each operator is allowed to bid for only one block of 2X5 MHz). Delhi (only two blocks), Gujarat (2 blocks), West Bengal (1 block) and UP (W) (3 blocks) may see aggressive bidding, while there is no spectrum available in Rajasthan (for any player) and North-East (for private players). The Reserve Price for bidding has been determined circle wise. For Mumbai, Delhi, and Circle A, the reserve price is Rs1.6 bn; for Kolkata and Category B circles, it is Rs800 mn, while for Category C circles, the same is Rs300 mn per circle. The country-wide reserve price works out to Rs20.2 bn.

DOT also does not intend to make a further spectrum allotment in the 2.1GHz, 2.3GHz and 2.5GHz band within the next twelve months. In case any auction is carried out in this timeframe, then the reserve price for the spectrum would be the winning price for that circle expect for Rajasthan.

Exhibit 2 gives the indicative timeline for 3G auctions. The DOT expects commencement of 3G auction from 16<sup>th</sup> Jan 2009. Broadband wireless access (BWA) spectrum auction (4 blocks of unpaired spectrum in 2.3 GHz and 2.5GHz of 20 MHz, 1 reserved for MTNL/BSNL) would commence after two days from the date of close of the 3G auction.

**Auction process designed to prevent irrational bidding and maximize number of slots sold.** The 3G as well as BWA auction process would be simultaneous ascending e-auction with two stages—(1) the clock stage, which would determine the winning price and winning bidders (of generic slots) in various circles, and (2) the assignment stage, where the winning bidders would bid for specific frequency slots of their choice. The clock stage would be conducted over multiple rounds with the bid increment in each round determined by a formula based on the excess of demand over supply. In other words, the bid price has been kept independent of the operators and the operators will just have to indicate whether they want to bid for the spectrum in a specific circle in a given round (at that round's bid price). Also, the final winning price would aim to maximize the number of slots sold which implies that the final winning price may be lower than the bid price in the final round.

**No details provided on 3G spectrum charges, increase in 2G spectrum charges across all slabs proposed.** DOT did not specify the incremental 3G spectrum usage charges. However it did clarify that the 2G spectrum usage charges would be based on combined 2G+3G Adjusted Gross Revenues (AGR). DOT has also clarified that (1) it would not combine 2G and 3G spectrum for the purposes of arriving at relevant slab for spectrum usage charges and (2) No moratorium on payment of 3G spectrum usage charges in the first year. However new 3G players will be allowed moratorium on payment of spectrum usage charges in the first year though they would have to pay 3% of AGR for spectrum usage (corresponding to the lowest slab in the 2G segment). Exhibit 3 gives the revised 2G spectrum charges proposed by the DOT. We note that TRAI had recommended levying additional 2% annual administrative charges that would be linked to the highest bid price for 3G spectrum instead of levying separate 3G spectrum charges.

**New players can bid for 3G spectrum though building a business case is challenging.** New players (overseas or Indian) can bid for 3G spectrum. Foreign players can bid in 3G auction directly though they will have to comply with the regulations i.e. have an Indian subsidiary in which it has to dilute down its holding to 74% in favor of a local partner/ shareholder. In addition, a new player will have to pay a separate entry fee for grant of UAS license for 3G services in addition to the spectrum auction price. This shall be equal to the entry fee of the UAS license; this amount is Rs16.5 bn for a pan-India license (varies by circle). A combination of high equipment costs, higher cell sites for population coverage and high terminal equipment prices makes business case for a standalone 3G entity difficult.

**Details on spectrum auction in 800 Mhz band for EVDO not provided.** The DOT information memo does not provide details on the auctions for spectrum in the 800 MHz band (for CDMA providers). We note that the earlier DOT guidelines provided an option for CDMA providers for spectrum in the 800 MHz band in a block of 1X1.25 MHz at a price equivalent to the highest winning bid in 2.1GHz auction prorated to a 2X1.25 MHz price. Subsequent newspaper reports indicated that spectrum in this band may be auctioned.

**Valuing 3G spectrum is a challenge.** We believe that the value for 3G spectrum would be operator specific (whether existing or new) and depend on the extent of congestion in extant 2G networks (for incumbents). As indicated earlier, we believe that at least in the initial phase, 3G spectrum would be used to augment 2G voice capacity (especially in metros) rather than high data usage. Further, we expect 3G services to be viable (for the time being) only in select large cities and metro circles.

For an existing operator in circles with choked 2G networks, the value of 3G spectrum would be determined by multiple factors (1) value of capex savings from using 3G spectrum for voice versus deploying expensive microcells, picocells, etc. to augment 2G voice capacity, (2) number of blocks of spectrum available for auction in each circle and (3) potential incremental revenues from 3G services such as high-speed data and other VAS. This in our view will be adjusted for factors such as higher capex per sub (2-2.5X assuming allocation of spectrum in 900 MHz band) and higher spectral efficiency (1.5X the number of minutes as compared to 2G in 900 MHz band). For operators that have limited congestion in the 2G networks, value for 3G spectrum would largely be a function of NPV of incremental revenues minus the capex, spectrum costs and meeting mandatory roll out obligations.

Given these variables, valuing spectrum is a challenge though it is reasonable to assume that bidding would be aggressive in Metros and circle with lower blocks available for auction. Exhibit 4 gives the wireless landscape and Exhibit 5 the 2G spectrum allocation to operators by circle.

**Aggressive bid on a pan-India basis unlikely.** We rule out aggressive bidding noting weak financials of most of the players other than Bharti (which would be a prime beneficiary as a result). We also rule out pan-India bidding by players such as Aircel, Idea and believe that some of the newer license holders (SWAN, Unitech) may not bid for 3G spectrum. Against this backdrop, we find the Rs400 bn 3G/BWA spectrum auction target of the telecom ministry aggressive.

**Guidelines on auction of BWA spectrum auction.** The Government would auction three blocks of unpaired spectrum out of the available four in all the 22 circles in the 2.3GHz and 2.5GHz band. DOT has reserved 1 block in the 2.5 GHz band for MTNL/BSNL for WIMAX operations. Exhibit 6 gives the reserve price and spectrum available in the 22 circles. The reserve price for a pan-India spectrum allocation is Rs10.1 bn. The auction rules for BWA are largely on the lines of 3G auctions and would take place two days after closure of 3G spectrum auction. We expect Bharti, RCOM, Tata group and select ISPs to bid for spectrum. Spectrum charges are payable on the combined 2G+3G+BWA AGR at the 2G slab rates for existing UASL license holders. The DOT has not clarified on additional spectrum charges to be levied on allocation of BWA spectrum. Standalone BWA operators would pay 3% of AGR for spectrum usage from the second year of spectrum allocation (moratorium in the first year).

### 3G spectrum availability in various circles

	Reserve price for 3G spectrum (Rs mn)	No of 2X5 MHz blocks available	Blocks allotted to MTNL/BSNL	Blocks available for private players
<b>Metro</b>				
Calcutta	800	5	1	4
Chennai		Clubbed with Tamil Nadu		
<b>Delhi</b>	<b>1,600</b>	<b>3</b>	<b>1</b>	<b>2</b>
Mumbai	1,600	5	1	4
<b>Circle A</b>				
Andhra Pradesh	1,600	5	1	4
<b>Gujarat</b>	<b>1,600</b>	<b>3</b>	<b>1</b>	<b>2</b>
Karnataka	1,600	5	1	4
Maharashtra	1,600	5	1	4
Tamil Nadu	1,600	5	1	4
<b>Circle B</b>				
Haryana	800	5	1	4
Kerala	800	5	1	4
Madhya Pradesh	800	5	1	4
Punjab	800	5	1	4
Rajasthan	800	-	NA	-
Uttar Pradesh (east)	800	5	1	4
<b>Uttar Pradesh (west)</b>	<b>800</b>	<b>4</b>	<b>1</b>	<b>3</b>
<b>West Bengal and A&amp;N islands</b>	<b>800</b>	<b>2</b>	<b>1</b>	<b>1</b>
<b>Circle C</b>				
Assam	300	5	1	4
Bihar	300	5	1	4
Himachal Pradesh	300	4	1	3
<b>North East</b>	<b>300</b>	<b>1</b>	<b>1</b>	<b>-</b>
Orissa	300	5	1	4
J&K	300	5	1	4

Source: DOT

**Indicative timeline of the 3G/BWA auction process**

Process	Timeline
Pre-bid conference	23-Dec-08
Final date for applications	5-Jan-09
Publication of ownership details of applicants	6-Jan-09
Bidder ownership compliance certificate	8-Jan-09
Pre-qualification of bidders	9-Jan-09
Mock auction	12/13-Jan-09
Start of the 3G auction	16-Jan-09
Start of the BWA auction	2 days from the day of close of the 3G auction

Source: DOT

**Spectrum charges applicable from Jan 1, 2009**

Changes to spectrum usage charges		
Spectrum (upto)	Existing charges	Revised
MHz	% of AGR	% of AGR
4.4	2	3
6.2	3	4
<b>8.0</b>	<b>4</b>	<b>5</b>
<b>10.0</b>	<b>4</b>	<b>6</b>
<b>12.0</b>	<b>5</b>	<b>7</b>

Source: DOT, Press reports

**Wireless operators in India**

	Bharti	Reliance	BSNL	VOD	IDEA	TTSL	Aircel	MTNL	Spice	BPL	Others	Total	Penetration
<b>Total subs - October 2008</b>	<b>80,200</b>	<b>57,803</b>	<b>39,811</b>	<b>56,704</b>	<b>31,583</b>	<b>25,584</b>	<b>14,659</b>	<b>3,850</b>	<b>3,637</b>	<b>1,808</b>	<b>432</b>	<b>316,070</b>	<b>(%)</b>
<b>Current mobile market share (%)</b>	<b>25.4%</b>	<b>18.3%</b>	<b>12.6%</b>	<b>17.9%</b>	<b>10.0%</b>	<b>8.1%</b>	<b>4.6%</b>	<b>1.2%</b>	<b>1.2%</b>	<b>0.6%</b>	<b>0.1%</b>	<b>100%</b>	<b>28.4</b>
<b>Circle-wise subscribers ('000)</b>													
<b>Metro</b>													
Calcutta	2,125	2,340	1,143	2,402		1,178	311					9,498	55.2
Chennai	2,008	1,294	992	1,460		278	2,215					8,248	110.0
Delhi	4,317	2,925		3,658	2,216	3,575		1,817				18,507	88.9
Mumbai	2,700	3,348		4,043	178	1,660		2,033		1,808		15,771	69.7
<b>Circle A</b>													
Andhra Pradesh	7,793	4,724	2,649	3,327	4,325	2,482						25,299	31.0
Gujarat	3,659	2,881	2,309	7,076	3,327	922						20,174	36.0
Karnataka	8,723	3,176	1,866	3,282	1,432	932						19,411	33.9
Maharashtra	5,006	3,488	3,294	3,670	6,261	3,015						24,733	28.6
Tamil Nadu	5,193	3,155	2,558	4,374		523	6,491					22,294	37.1
<b>Circle B</b>													
Haryana	1,149	1,183	1,268	1,777	1,341	1,018						7,736	39.9
Kerala	1,974	2,450	2,308	2,609	3,713	603						13,656	40.3
Madhya Pradesh	3,866	5,198	2,212		4,137	899						16,311	18.1
Punjab	3,450	1,215	2,241	1,886	2,205	950				301		12,247	44.6
Rajasthan	5,753	2,172	2,459	4,153	1,063	2,027				131		17,758	28.0
Uttar Pradesh (east)	4,989	3,656	4,676	5,279	1,458	1,137						21,194	17.3
Uttar Pradesh (west)	2,039	2,790	2,165	3,684	3,373	1,705						15,757	21.9
West Bengal and A&N islands	2,886	2,552	1,583	3,851		775	917					12,563	17.8
<b>Circle C</b>													
Assam	1,201	1,236	874	30			1,490					4,830	16.6
Bihar	6,068	4,911	2,049			1,247	1,122					15,398	12.6
Himachal Pradesh	873	871	614		117	123	99					2,696	40.8
North East	738	425	547	16			834					2,560	18.4
Orissa	2,402	1,813	1,169	96			536	697				6,713	16.9
J&K	1,291		838				482					2,610	23.1

Source: COAI, AUSPI, Compiled by Kotak Institutional Equities.



**Current 2G spectrum allocated to various operators**

	Bharti	Reliance	BSNL/MTNL	VOD/Essar	Idea	Aircel	BPL	TTSL	Datacom	Swan	Unitech	Loop
<b>Metro</b>												
Calcutta	8.0	6.2	10.0	9.8	4.4	4.4					4.4	
Chennai	9.2	4.4	10.0	8.0	4.4	8.6		4.4	4.4	4.4	4.4	4.4
Delhi	10.0	4.4	12.4	10.0	8.0	4.4						
Mumbai	9.2	4.4	12.4	10.0	4.4	4.4	10.0	4.4			4.4	
<b>Circle A</b>												
Andhra Pradesh	9.2	4.4	10.0	6.2	8.0	4.4		4.4	4.4	4.4	4.4	4.4
Gujarat	6.2	4.4	7.4	9.8	6.2	4.4					4.4	4.4
Karnataka	9.8	4.4	10.0	8.0	6.2	4.4		4.4	4.4	4.4	4.4	4.4
Maharashtra	6.2	4.4	10.0	6.2	9.8	4.4			4.4		4.4	4.4
Tamil Nadu	9.2	4.4	10.0	7.2	4.4	9.8		4.4	4.4	4.4	4.4	4.4
<b>Circle B</b>												
Haryana	6.2	4.4	10.0	6.2	6.2	4.4		4.4	4.4	4.4	4.4	4.4
Kerala	6.2	4.4	10.0	6.2	8.0	4.4		4.4	4.4	4.4	4.4	4.4
Madhya Pradesh	6.2	6.2	10.0	4.4	8.0	4.4					4.4	4.4
Punjab	7.8	4.4	6.2	6.2	7.8	4.4			4.4		4.4	4.4
Rajasthan	6.2	4.4	8.0	6.2	6.2	4.4						
Uttar Pradesh (east)	6.2	4.4	10.0	8.0	6.2	4.4		4.4	4.4	4.4	4.4	4.4
Uttar Pradesh (west)	6.2	4.4	10.0	6.2	8.0	4.4					4.4	4.4
West Bengal and A&N islands	6.2	6.2	8.0	6.2	4.4	4.4					4.4	4.4
<b>Circle C</b>												
Assam	6.2	6.2	10.0	4.4		6.2						
Bihar	8.0	8.0	10.0	4.4	4.4	4.4					4.4	4.4
Himachal Pradesh	6.2	6.2	10.0	4.4	4.4	4.4					4.4	4.4
North East	4.4	6.2	10.0	4.4		4.4						
Orissa	8.0	6.2	10.0	4.4	4.4	4.4		4.4	4.4		4.4	4.4
J&K	6.2	4.4	8.0	4.4		4.4						

Source: COAI, AUSPI, DOT, press reports, compiled by Kotak Institutional Equities.

**BWA spectrum (2 blocks in 2.3GHz and 2 blocks in 2.5GHz) availability in various circles**

	Reserve price for BWA spectrum (Rs mn)	No of 2X5 MHz blocks available	Blocks allotted to MTNL/BSNL	Blocks available for private players
<b>Metro</b>				
Calcutta	400	4	1	3
Chennai		Clubbed with Tamil Nadu		
Delhi	800	4	1	3
Mumbai	800	4	1	3
<b>Circle A</b>				
Andhra Pradesh	800	4	1	3
Gujarat	800	4	1	3
Karnataka	800	4	1	3
Maharashtra	800	4	1	3
Tamil Nadu	800	4	1	3
<b>Circle B</b>				
Haryana	400	4	1	3
Kerala	400	4	1	3
Madhya Pradesh	400	4	1	3
Punjab	400	4	1	3
Rajasthan	400	4	1	3
Uttar Pradesh (east)	400	4	1	3
Uttar Pradesh (west)	400	4	1	3
West Bengal and A&N islands	400	4	1	3
<b>Circle C</b>				
Assam	150	4	1	3
Bihar	150	4	1	3
Himachal Pradesh	150	4	1	3
North East	150	4	1	3
Orissa	150	4	1	3
J&K	150	4	1	3

Source: DOT

**Cement**

Sector coverage view

Cautious

Company	Rating	Price, Rs	
		12-Dec	Target
Gujarat Ambuj	REDUCE	62	60
ACC	REDUCE	493	550
Grasim	ADD	1,073	1,400
India Cements	BUY	95	145
UltraTech Cem	BUY	340	550
Shree Cement	BUY	450	850

**November 2008: Consumption growth shows some resilience**

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**Despatch growth of 12% yoy in November 2008—aided by base effect and low offtake in the previous month.** Cement despatch growth rate improved in November recording 12% yoy (partially aided by the base of 3.7% yoy growth in November 2007) improving YTD growth for the sector to 7.4%. Jaiprakash Associates and Shree Cements recorded ~34% yoy growth in dispatched led by production from their enhanced capacities. Ultratech also recorded a 16% increase in cement despatches (the new clinker line has started production) improving the YTD performance to 3.5%. Consumption growth would likely have benefited from the spillover of demand from October, when the credit crunch being faced by construction companies impacted offtake of cement for infrastructure projects. Cement volumes for India Cements and Madras Cement were subdued during November—largely seasonal impact due to the monsoon activity in South India.

Infrastructure stimulus and easing of liquidity conditions will likely help aid demand from industrial and infrastructure projects. However, sustainable revival of consumption growth for cement is dependent on demand from the real estate sector (60% of cement consumption is from the housing sector). Slower consumption growth will likely further widen the demand-supply gap as new capacities continue to come on stream faster than the growth in consumption. We have factored 8.5% domestic demand growth in our estimates, and expect a decline in utilization rates to have a corresponding impact on realizations.

**Cement prices stable at Rs238/bag—decline of Rs4-6/bag due to CENVAT cut in December.** All India average cement prices during November 2008 declined marginally to Rs238/bag (Rs239/bag in October 2008). Cement prices continue to remain soft in East and Central, though prices in North, West and South have remain largely unchanged over the last three months. The CENVAT cut of 4% (~Rs10/bag) proposed by the government will likely result in a price decline of Rs4-6/bag in December while the balance will be retained by the cement companies to offset increase in railway freight rates and help counter the expected decline in cement prices. As demand growth continues to disappoint and capacity utilization drops, we expect cement prices to come under pressure. We currently factor a marginal decline in realizations during 4QFY09 followed by a 5-7% decline in prices during FY2010.

**Favor stocks with low trading multiples, volume growth and superior margins.** Valuations of cement companies have come off significantly and look reasonable both in terms of historical multiples and on a replacement cost basis. However, cement sector valuations typically remain below the replacement cost in declining price (and profit margin) environment. We recommend accumulating stocks (1) which are trading at deep-discounts to their replacement costs, (2) have reasonable volumes growth (which partially compensates for decline in realizations), and (3) have lower margin erosion through available cost-management levers. While we estimate earnings decline for most cement companies led by decline in realizations, we have build in some cost-side relief to come from declining prices of imported coal and pet coke from 1QCY09. Our preferred picks in the cement sector remain Shree Cements, India Cements and Ultratech. We have an ADD rating on Grasim and REDUCE rating on ACC and Ambuja Cement.

**Exhibit 1: Despatch growth improves in November**

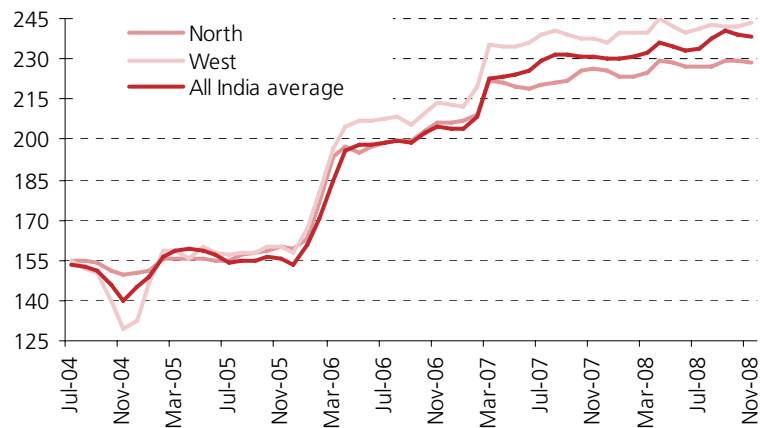
Cement despatch growth rate for major companies

	Nov-08	Growth (%)	
	(mn tons)	y-o-y	YTD
ACC	1.71	8.8	2.3
Ambuja Cement	1.48	8.7	2.7
UltraTech	1.26	16.2	3.5
Grasim Industries	1.26	5.3	(2.1)
Shree Cement	0.61	34.4	22.9
India Cements	0.67	(3.1)	1.3
Madras Cements	0.47	0.8	16.4
Jaiprakash	0.65	33.8	12.2
<b>Industry</b>	<b>14.4</b>	<b>12.0</b>	<b>7.4</b>

Source: CMA, Kotak Institutional Equities.

**Exhibit 2: All India average at Rs238/bag**

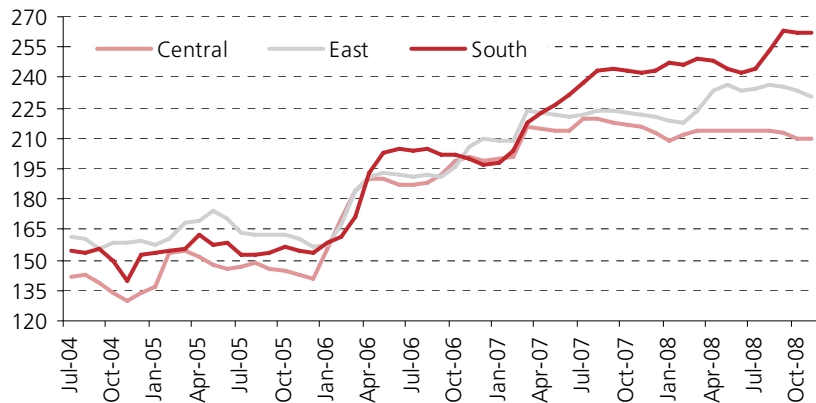
Regional cement prices (Rs per 50 kg bag)



Source: CMA, Kotak Institutional Equities.

**Exhibit 3: Prices stable so far, we expect prices to start declining**

Regional cement prices (Rs per 50 kg bag)



Source: CMA, Kotak Institutional Equities.

**Exhibit 4: Cement comparative valuation**

Company	Market cap. (US\$ mn)	CMP (Rs) 12-Dec	Target price (Rs)	Rating	EPS (Rs)			P/E (X)		
					2008	2009E	2010E	2008	2009E	2010E
ACC	1,916	493	550	REDUCE	64.1	56.2	43.4	7.7	8.8	11.4
Ambuja Cements	1,929	62	60	REDUCE	7.6	7.8	5.4	8.1	7.9	11.4
Grasim Industries	2,027	1,073	1,400	ADD	284.6	220.9	176.1	3.8	4.9	6.1
India Cements	554	95	145	BUY	24.5	22.7	20.1	3.9	4.2	4.7
Jaiprakash Associates	2,061	84	205	BUY	4.9	7.3	11.0	17.2	11.5	7.6
Shree Cement	323	450	850	BUY	90.2	109.0	70.5	5.0	4.1	6.4
UltraTech Cement	877	340	550	BUY	81.4	70.9	53.3	4.2	4.8	6.4

Company	EV/EBITDA (X)			EV/ton of production (US\$)			EV/ton of capacity (US\$)		
	2008	2009E	2010E	2008	2009E	2010E	2008	2009E	2010E
ACC	3.9	4.1	5.6	82	75	79	77.8	70.8	77.4
Ambuja Cements	3.7	3.8	5.2	100	88	89	91.1	80.5	77.9
Grasim Industries	3.0	3.7	3.9	NA	NA	NA	NA	NA	NA
India Cements	3.6	3.1	3.3	91	78	69	94.2	71.3	62.7
Jaiprakash Associates	10.6	8.4	7.9	NA	NA	NA	NA	NA	NA
Shree Cement	2.0	2.2	2.4	57	45	39	53.4	41.4	37.2
UltraTech Cement	3.2	3.6	4.0	71	69	58	71.5	65.4	50.1

Source: Company reports, Kotak Institutional Equities estimates.





Kotak Institutional Equities: Valuation Summary of Key Indian Companies

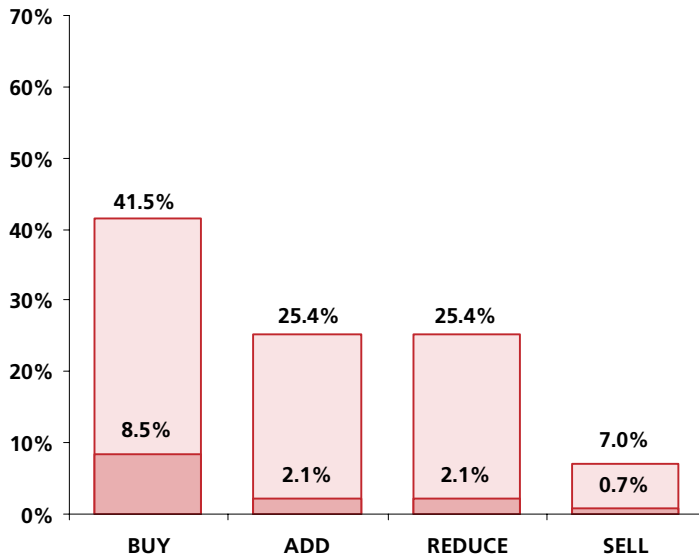
Company	12-Dec-08 Price (Rs)	Rating	Mkt cap.		EPS (Rs)		EPS growth (%)		PER (X)		EV/EBITDA (X)		Price/BV (X)		Dividend yield (%)		RoE (%)		Target price 3mo Upside (%)	ADV-3mo (US\$ mn)									
			(Rs mn)	(US\$ mn)	2008	2009E	2010E	2008	2009E	2010E	2008	2009E	2010E	2008	2009E	2010E	2008	2009E			2010E								
Property	Cautious		627,874	12,934			199.3	(7.7)	5.0	5.1	5.6	5.3	5.7	5.7	4.8	1.6	1.3	1.1	2.0	2.8	3.4	32.1	23.2	20.4					
Company					O/S shares																								
Retail																													
Pantaloon Retail	230	BUY	39,540	815	172	80	12.1	18.4	93.1	50.4	52.2	28.6	19.0	12.5	11.0	7.6	6.2	2.3	1.5	1.3	0.2	0.3	0.4	8.5	9.1	10.8	37.0	60.9	1.6
Titan Industries	873	BUY	38,739	798	44	35.1	48.5	54.7	55.2	38.4	12.8	24.9	18.0	15.9	16.9	11.4	9.7	8.2	6.0	4.6	0.9	1.1	1.3	37.7	38.5	32.6	1,280	46.7	2.9
Vishal Retail	106	ADD	2,365	49	22	18.1	14.9	20.7	37.2	(17.6)	38.4	5.8	7.1	5.1	5.8	4.9	3.7	0.9	0.8	0.7	—	—	—	20.2	11.5	14.0	125	18.4	0.1
Retail			80,644	1,661					31.8	41.8	32.6	25.0	17.7	13.3	11.9	8.3	6.7	3.3	2.2	1.9	0.6	0.7	0.8	13.2	12.6	14.6			
Technology																													
HCL Technologies	107	REDUCE	74,539	1,535	695	15.3	20.6	21.7	(19.0)	35.0	5.4	7.0	5.2	4.9	3.2	2.2	2.0	1.5	1.2	1.1	7.5	7.5	21.4	23.8	22.7	200	86.5	3.9	
Hexaware Technologies	21	SELL	2,914	60	142	7.7	2.9	3.8	(13.7)	62.4	32.1	2.7	7.1	5.4	(0.2)	0.9	0.6	0.4	0.4	0.4	4.4	7.8	7.8	15.1	5.8	7.4	25	22.0	0.1
Infosys Technologies	1,105	BUY	634,184	13,064	574	79.1	100.8	108.6	18.0	27.5	7.8	14.0	11.0	10.2	10.5	7.8	6.7	4.6	3.5	2.8	3.0	2.2	2.4	36.1	36.4	30.9	1,500	35.8	71.5
Mphasis BFL	154	REDUCE	32,024	660	208	12.2	22.3	23.4	67.6	18.7	5.0	12.5	6.9	6.6	7.4	4.4	3.5	2.8	0.3	1.7	2.3	2.6	2.9	23.6	34.6	28.4	190	23.7	1.4
Mindtree	241	BUY	9,529	196	40	28.7	30.7	39.6	12.3	14.7	29.0	9.0	7.9	6.1	7.9	4.1	3.7	1.8	1.4	1.1	1.1	—	—	21.3	17.2	17.8	450	86.5	0.2
Patni Computer Systems	133	SELL	17,151	353	129	33.2	26.3	30.8	(29.2)	(20.8)	16.9	4.0	5.1	4.3	0.8	0.9	(0.1)	0.6	0.6	0.5	1.6	2.0	2.3	19.2	14.1	12.0	160	20.0	0.8
Polaris Software Lab	40	SELL	3,922	81	98	7.4	12.8	11.6	(27.6)	71.6	(9.6)	5.4	3.1	3.5	1.8	0.9	0.6	0.5	0.5	4.4	4.4	4.4	11.7	17.8	14.1	70	75.4	0.8	
Satyam Computer Services	221	BUY	150,419	3,099	682	25.2	33.7	35.5	17.7	33.3	5.3	8.7	6.6	6.2	5.9	3.7	3.0	2.1	1.7	1.4	5.4	5.4	6.3	26.0	28.2	24.2	400	81.4	34.8
TCS	481	REDUCE	471,005	9,703	979	51.3	56.4	63.0	21.5	10.0	11.6	9.4	8.5	7.6	7.4	6.1	5.5	3.8	3.0	2.5	2.9	4.1	5.2	47.0	39.3	35.6	650	35.1	28.9
Tech Mahindra	261	BUY	32,514	670	125	59.1	76.4	85.0	25.7	29.4	11.2	4.4	3.4	3.1	3.9	1.9	1.2	2.6	1.5	1.0	2.1	2.3	2.4	70.7	58.0	40.9	700	168.3	2.3
Wipro	238	ADD	344,883	7,105	1,450	22.2	26.0	28.7	12.6	17.0	10.4	10.7	9.1	8.3	8.4	6.1	5.2	2.7	2.2	1.9	2.7	3.2	3.7	27.9	26.3	24.3	360	51.4	12.9
Technology			1,773,082	36,525					16.1	21.0	9.2	10.3	8.4	7.7	7.5	5.5	4.8	3.0	2.4	2.0	3.2	3.4	4.0	29.4	28.3	25.6			
Telecom																													
Bharti Airtel Ltd	724	BUY	1,373,131	28,286	1,898	35.3	45.3	55.1	65.0	28.3	21.7	20.5	16.0	13.1	12.4	9.4	7.2	6.1	4.4	3.3	—	0.5	0.8	39.1	31.9	28.5	800	10.6	99.4
IDEA	54	REDUCE	173,792	3,580	3,236	3.9	3.3	3.4	78.5	(17.6)	5.7	13.6	16.5	15.6	10.2	6.5	5.6	4.9	1.2	1.1	—	—	—	36.4	12.0	8.0	70	30.4	9.1
MTNL	75	REDUCE	47,124	971	630	7.1	5.1	5.5	(11.0)	(28.4)	7.6	10.5	14.6	13.6	1.8	2.7	2.4	0.4	0.4	0.4	5.3	8.0	8.0	3.5	2.2	2.4	80	7.0	1.6
Reliance Communications	249	SELL	513,941	10,587	2,064	26.1	26.3	33.1	84.3	0.5	25.8	9.5	9.5	7.5	8.0	7.7	6.2	1.8	1.5	1.2	0.3	—	—	16.8	18.3	18.7	265	6.4	60.5
Tata Communications	495	REDUCE	141,075	2,906	285	10.9	13.6	14.0	(56.3)	24.0	3.2	45.2	36.4	35.3	18.8	15.5	14.1	2.1	2.0	2.0	0.9	1.0	1.3	4.4	5.4	5.2	400	(19.2)	5.0
Telecom			2,249,063	46,331					65.7	16.3	21.0	15.6	13.4	11.1	10.5	8.6	6.8	3.1	2.3	1.9	0.4	0.6	0.8	19.6	17.0	17.3			
Transportation																													
Container Corporation	623	REDUCE	80,932	1,667	130	57.7	69.4	74.2	7.8	20.3	6.8	10.8	9.0	8.4	6.9	5.5	4.8	2.5	2.1	1.8	2.0	2.4	2.5	25.8	25.6	22.8	800	28.5	1.2
Transportation			80,932	1,667					7.8	20.3	6.8	10.8	9.0	8.4	6.9	5.5	4.8	2.5	2.1	1.8	2.0	2.4	2.5	25.8	25.6	22.8	800	28.5	1.2
Utilities																													
CECS	238	BUY	29,672	611	125	27.8	31.9	36.9	(23.3)	14.9	15.8	8.6	7.4	6.4	4.4	4.1	5.2	0.9	0.8	0.7	1.7	1.9	2.2	12.5	11.7	11.9	450	89.5	1.5
Lanco InfraTech	136	BUY	30,333	625	222	14.8	17.5	26.0	75.2	18.2	48.3	9.2	7.8	5.2	8.6	12.0	10.2	1.7	1.4	1.1	—	—	—	19.7	19.2	23.0	370	171.2	8.7
NTPC	165	REDUCE	1,359,677	28,009	8,245	9.3	9.0	9.7	7.9	(3.2)	7.9	17.7	18.3	16.9	12.3	13.2	12.6	2.5	2.3	2.1	2.1	2.1	2.2	14.9	13.2	13.1	160	(3.0)	35.4
Reliance Infrastructure	650	BUY	150,184	3,094	231	37.6	53.6	56.8	13.9	42.6	6.0	17.3	12.1	11.4	23.9	19.0	18.6	0.9	0.9	0.8	1.0	1.1	1.3	4.3	6.2	6.6	1,250	92.2	77.1
Reliance Power	117	REDUCE	279,826	5,764	2,397	0.4	2.1	2.6	—	443.9	25.2	307.0	56.4	45.1	—	—	—	—	—	—	—	—	—	1.2	3.5	4.3	180	54.2	19.7
Tata Power	752	BUY	167,448	3,449	223	31.8	69.9	103.4	19.5	119.6	47.9	23.6	10.8	7.3	11.5	8.1	7.4	1.9	1.6	1.3	1.4	1.5	1.6	9.6	16.3	20.1	1,230	63.5	17.5
Utilities			2,017,140	41,553					12.2	14.9	15.4	20.1	17.5	15.2	13.3	13.9	14.1	2.1	1.9	1.7	1.6	1.6	1.7	10.3	10.8	11.5			
Others																													
Aban Offshore	762	BUY	28,855	594	38	72.3	147.5	410.7	(1,066)	104.0	178.5	10.5	5.2	1.9	12.0	7.5	4.2	3.3	1.8	0.9	0.5	0.7	1.0	51.7	47.1	57.4	1,100	44.4	16.5
Educomp Solutions	2,088	BUY	39,718	818	19	35.2	63.9	108.1	114	81.7	69.2	59.4	32.7	19.3	31.6	13.5	8.4	12.9	5.4	4.4	0.1	0.3	0.5	33.5	23.3	24.3	2,550	22.1	48.3
Havells India	124	BUY	7,510	155	61	26.6	19.7	34.5	40	(25.9)	75.1	4.7	6.3	3.6	5.2	5.2	3.6	1.1	0.9	0.7	1.9	2.5	3.3	33.7	16.5	22.2	365	194.1	0.4
Jaiprakash Associates	84	BUY	100,026	2,061	1,188	4.9	7.3	11.0	7	49.5	50.9	17.2	11.5	7.6	11.7	9.0	8.4	2.0	1.7	1.4	0.0	0.0	0.0	15.4	16.1	20.5	205	143.5	44.4
Jindal Saw	246	BUY	15,099	311	61	66.6	86.9	82.9	(43)	30.6	(4.7)	3.7	2.8	3.0	3.1	1.7	1.3	0.5	0.4	0.4	2.9	5.3	6.1	12.5	14.4	12.3	500	103.1	1.4
PSL	82	BUY	3,589	74	44	21.1	43.6	58.3	4	106.9	33.7	3.9	1.4	1.4	3.4	2.9	2.0	0.6	0.5	0.4	6.2	7.3	9.1	11.3	15.0	17.5	280	240.0	0.2
Sintex	192	BUY	31,128	641	1																								



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Source: Kotak Institutional Equities

As of September 30, 2008

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