kotak® Institutional Equities

INDIA DAILY

June 16, 2008

EQUITY MARKETS

			Change, %	
India	**13-Jun**	**1-day**	**1-mo**	**3-mo**
Sensex	15,190	(0.4)	(12.9)	(3.6)
Nifty	4,517	(0.5)	(12.4)	(4.8)
Global/Regional indices				
Dow Jones	12,307	1.4	(5.2)	3.0
Nasdaq Composite	2,455	2.1	(2.9)	10.9
FTSE	5,803	0.2	(8.0)	3.0
Nikkie	14,177	1.5	(0.3)	15.8
Hang Seng	22,814	1.0	(10.9)	2.6
KOSPI	1,765	1.0	(6.5)	10.3

Value traded - India

			Moving avg, Rs bn	
	13-Jun		**1-mo**	**3-mo**
Cash (NSE+BSE)	176.7		192.2	195.3
Derivatives (NSE)	410.0		381.1	449
Deri. open interest	837.2		742	667

Forex/money market

			Change, basis points	
	13-Jun	**1-day**	**1-mo**	**3-mo**
Rs/US$	42.9	0	34	215
6mo fwd prem, %	0.7	(25)	71	24
10yr govt bond, %	8.4	6	43	74

Net investment (US$mn)

	12-Jun		**MTD**	**CYTD**
FIIs	(283)		(1,382)	(5,255)
MFs	75		134	1,660

Top movers -3mo basis

			Change, %	
Best performers	**13-Jun**	**1-day**	**1-mo**	**3-mo**
Chambal Fert	91	9.6	15.2	73.5
Infosys	1,867	(0.4)	(0.3)	36.2
Dr Reddy's	728	3.5	11.7	34.8
i-Flex	1,321	8.5	(5.9)	34.4
Wipro	478	(0.9)	(5.5)	29.4
Worst performers				
BPCL	267	(0.9)	(25.6)	(34.6)
Thermax	414	2.0	(9.4)	(31.5)
HPCL	187	(2.8)	(24.7)	(30.8)
Siemens India	471	(2.0)	(19.1)	(29.4)
Grasim	2,183	(1.4)	(4.7)	(23.5)

Contents

News Roundup

Corporate

- India's Reliance Communications said Reliance Industries had claimed first right of refusal to buy a controlling stake in it, but the mobile operator said this would not delay its tie-up talks with South Africa's MTN Group. *(Reuters)*
- After Essar found itself competing with a Russian firm for an overseas acquisition, it is the turn of Sterlite Industries to discover a rival bidder suddenly challenging its takeover of Asarco Llc—a $2.6 bn transaction that seemed a done deal. On May 31, Sterlite announced the acquisition of Asarco, a US-based copper mining firm, in a cash deal, after negotiating for several months. Much to its surprise, a few days ago, Grupo Mexico, the erstwhile promoter of Asarco, made a $4.1 bn offer to regain control of the Tucson-based copper miner. *(ET)*
- Unnerved by withering global equity markets, India's two leading real estate developers, DLF Ltd and Unitech Ltd, have indefinitely postponed plans to list their real estate investment trusts on the Singapore Stock Exchange until market conditions improve, in turn increasing pressure on them to find alternative means to fund projects. *(Mint)*

Economic and political

- The Reserve Bank of India has allowed a string of foreign venture capital funds to invest in the country. While this decision could be driven partly by fears of a slowdown and drying capital inflows, the shift in mood may also have a lot to do with these funds changing their charter of investments and making upfront commitments to convince RBI. *(ET)*

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

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Industrials

BGRE.BO, Rs286	
Rating	ADD
Sector coverage view	Cautious
Target Price (Rs)	390
52W High -Low (Rs)	989 - 257
Market Cap (Rs bn)	20.6

Financials

March y/e	2008	2009E	2010E
Sales (Rs bn)	15.2	20.9	28.1
Net Profit (Rs bn)	0.9	1.2	1.7
EPS (Rs)	12.3	16.6	23.0
EPS gth	*(67.1)*	*35.3*	*38.6*
P/E (x)	23.4	17	12.5
EV/EBITDA (x)	14.2	10.2	7.9
Div yield (%)	0.4	0.6	0.8

Shareholding, March 2008

	Pattern	% of Portfolio	Over/(under) weight
Promoters	-	-	-
FIIs	-	-	-
MFs	-	-	-
UTI	-	-	-
LIC	-	-	-

BGR Energy Systems: Results first take—strong execution growth; margins lower-than-expected likely due to write-offs on road project

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- **Stronger-than-expected growth in execution**
- **Margin misses expectations possibly due to write-offs related to Cochin road project; likely strong operating performance adjusting for such one-offs**
- **Maintain estimates, target price of Rs390 and our ADD rating**

BGR Energy declared consolidated FY2008 revenues of Rs15.2 bn (up 190% yoy), versus our expectation of Rs14.5 bn. Consolidated PAT for FY2008 was Rs885 mn (up 225% yoy) against our expectation of Rs862 mn. EBITDA margins for FY2008 at 10.2% were lower than our expectation of 11%. We believe margins are lower-than-expected due to write-offs related to the Cochin road project. Adjusting for such one-offs we believe the operating performance of the company has likely been strong given the robust growth in execution (margins will likely exceed/meet expectations post adjustment for such one-offs due to strong operating leverage). We maintain our estimates, FY2009E DCF-based target price of Rs390 and our ADD rating. We will revisit our assumptions after receiving clarifications on one-off items etc and updates on order book etc.

Stronger-than-expected growth in execution

BGR Energy declared consolidated FY2008 revenues of Rs15.2 bn (up 190% yoy), versus our expectation of Rs14.5 bn. Consolidated PAT for FY2008 was Rs885 mn (up 225% yoy) against our expectation of Rs862 mn. EBITDA margins for FY2008 at 10.2% were lower than our expectation of 11%, likely due to one-offs. The miss in margin expectations was led by higher other expense to sales ratio of 3.2% (versus our expectation of 2.4% for FY2008). Our PAT estimates were exceeded due to lower-than-estimated interest (of Rs254 mn versus our expectation of Rs291 mn) and depreciation (of Rs55 mn versus our expectation of Rs67 mn).

Margin misses expectations possibly due to write-offs related to Cochin road project; likely strong operating performance adjusting for such one-offs

We believe margins are lower-than-expected due to write-offs related to the Cochin road project. We highlight this project has been terminated by NHAI and was under litigation. BGR Energy has likely provided for losses on this project (under other expenses), affecting margins. Adjusting for such one-offs we believe the operating performance of the company has likely been strong given the robust growth in execution (margins will likely exceed/meet expectations post adjustment for such one-offs due to strong operating leverage).

Maintain estimates, target price of Rs390 and our ADD rating

We maintain our estimates, FY2009E DCF-based target price of Rs390 and our ADD rating. We will revisit our estimates after receiving clarifications on one-off items etc and updates on order book etc. We highlight that our implied target P/E multiple for BGR Energy is 23.5X based on FY2009E, which is at about 15% discount to our implied target valuation multiple for the industrial sector coverage universe. We highlight that our industrial sector coverage universe is currently trading at a P/E multiple of 21X FY2009E EPS versus P/E multiple of 17X FY2009E for BGR Energy. We maintain our ADD rating based on (1) significant correction in valuations, (2) visible investment momentum in power generation sector with several projects coming up for bidding (likely to be commissioned during FY2010E-12E), (3) limited competition in the provision of turnkey BOP services for large power plants (up to 500 MW) that may potentially ensure strong order inflows (4) BGR Energy's strong design and engineering skills that differentiate it from its competitors, (5) BGR Energy's ability to scale up its business quickly and (6) BGR Energy's presence across several diverse businesses such as process equipment for the oil & gas industry and for water and environmental solutions, that provide several sources of consistent long-term growth.

Key risks arise from (1) margin pressures due to commodity price increase and foreign exchange fluctuations, (2) dependence on further order wins to meet strong growth in earnings (as estimated by us), (3) delays, litigation in large-sized projects that contribute bulk of revenues, (4) execution management given the strong growth across multiple divisions, and (5) dependence on technological partners.

Exhibit 1. BGR Energy Systems: 4QFY08 results—key numbers (Rs mn)

		qoq			yoy	
	4QFY08	3QFY08	*(%chg)*	FY2008 Cons	FY2007 Cons (18 m)	*(% chg, annualized)*
Sales	**5,786**	**3,828**	***51.2%***	**15,205**	**7,868**	***189.9%***
Expenses	(5,256)	(3,435)	*53.0%*	(13,652)	(6,984)	*193.2%*
Stock	7	(68)	*-110.2%*	(29)	32	*-235.9%*
RM	(4,882)	(3,176)	*53.7%*	(12,682)	(6,315)	*201.2%*
Employee exp	(132)	(97)	*35.9%*	(450)	(328)	*106.1%*
Other exp	(249)	(94)	*164.5%*	(491)	(373)	*97.6%*
Operating profit	**530**	**392**	***35.1%***	**1,553**	**884**	***163.6%***
Other income	29	3	*972.2%*	52	3	*2500.2%*
EBIDT	559	395	*41.5%*	1,605	887	*171.4%*
Interest	(89)	(62)	*43.2%*	(254)	(180)	*112.3%*
Depreciation	(13)	(13)	*4.7%*	(55)	(89)	*-6.4%*
PBT	**457**	**320**	***42.6%***	**1,296**	**619**	***214.1%***
Tax	(138)	(102)	*34.8%*	(411)	(211)	*192.9%*
Net profit	**319**	**218**	***46.2%***	**885**	**408**	***225.1%***
Extraordinary items	-	-		-	-	
RPAT	**319**	**218**	***46.2%***	**885**	**408**	***225.1%***
Key ratios						
RM/Sales	*84.4%*	*83.0%*		*83.4%*	*80.3%*	
Employee exp/Sales	*2.3%*	*2.5%*		*3.0%*	*4.2%*	
Other Exp/Sales	*4.3%*	*2.5%*		*3.2%*	*4.7%*	
OPM	*9.2%*	*10.3%*		*10.2%*	*11.2%*	
PBT margin	*7.9%*	*8.4%*		*8.5%*	*7.9%*	
Tax rate	*30.1%*	*31.9%*		*31.7%*	*34.0%*	

Source: Company data, Kotak institutional equities estimates.

Energy

RELI.BO, Rs2270	
Rating	RS
Sector coverage view	Cautious
Target Price (Rs)	-
52W High -Low (Rs)	3298 - 1666
Market Cap (Rs bn)	2,984

Financials

March y/e	2008	2009E	2010E
Sales (Rs bn)	1,334	1,685	2,424
Net Profit (Rs bn)	142.5	180.8	303.8
EPS (Rs)	101.7	119.5	193.1
EPS gth	*23.0*	*17.4*	*61.6*
P/E (x)	22.3	19.0	11.8
EV/EBITDA (x)	13.3	10.2	5.8
Div yield (%)	0.5	0.6	0.9

Shareholding, March 2008

	Pattern	% of Portfolio	Over/(under) weight
Promoters	44.2	-	-
FIIs	21.5	9.3	0.7
MFs	2.7	6.3	(2.3)
UTI	-	-	(8.6)
LIC	4.9	10.1	1.5

Reliance Industries : Valuations more reasonable now but earnings risks exist from likely cyclical downturn in chemicals and refining

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- **Low implied value of new initiatives currently suggesting valuations are reasonable**
- **Weaker-than-expected margins pose risks to earnings in FY2009-10E**
- **Fair valuation at about Rs2,400 with downside at about Rs2,000 unless margins deteriorate meaningfully versus expectations**

The recent correction in RIL's stock price has substantially bridged the hitherto large gap between RIL stock price and our estimated fair value of its extant assets, investments and known E&P discoveries. Based on our reverse valuation exercise, the current stock price is now factoring an implied value of the new discoveries of about US$4 bn, which looks reasonable given RIL's strong E&P portfolio. We have made changes to our RIL's earnings model to factor (1) information from FY2008 annual report, (2) higher crude price for FY2009E (US$110/bbl versus US$100/bbl previously), (3) higher refining margins to factor in higher diesel crack spreads and (4) weaker rupee (positive for RIL's earnings). We have revised FY2009E-11E consolidated EPS to Rs120, Rs193 and Rs188, respectively, from Rs105, Rs173 and Rs166, respectively, previously. We have also fine-tuned our earnings model of RPET (REDUCE; TP: Rs200 versus Rs185 previously).

Implied valuation of new initiatives now seems reasonable. The gap between RIL stock price and our estimated fair value of its extant businesses (around Rs1,400, including value of investments) has declined significantly over the past few months. Our reverse valuation exercise suggests that the implied value of the new discoveries ascribed by the market currently is about US$4 bn (see Exhibit 1). This has declined considerably from around US$35 bn at the peak of the market in January 2008. Reliance's current stock price is implying about 6 tcf of additional gas reserves (recoverable), which would mean that Reliance would need to bring on stream the equivalent of 12 tcf of recoverable gas reserves assuming a typical discovery-to-production period of six years and cost of capital of 12% (see Exhibit 2). This does not seem very difficult, in our view, in contrast to about 200 tcf of gas being implied by the stock price at the time of its early-2008 peak.

Exhibit 3 shows our 12-month fair valuation of RIL stock at about Rs2,400 based on (1) E&P business being treated as a 'going' concern and (2) 10X FY2010E EPS. Given the rather unfavorable terms of the PSC of the KG D-6 block, we believe the street would like to see more evidence of the sustainability of the earnings of RIL's E&P segment through confirmation of reserves in several discoveries announced in 2007 and 2008. This would give confidence about production of hydrocarbons from new discoveries once the earnings of KG D-6 block begins to decline due to higher share of profit petroleum of the government and higher taxation.

Our SOTP valuation of RIL stock is about Rs2,000 without ascribing any value to potential discoveries (see Exhibit 4). We would treat this is a downside case unless chemical and refining margins were to be meaningfully lower versus our expectations. We already factor a decline in chemical (steep decline over the next three years) and refining (moderate decline over the next three years) margins.

Key changes to and major assumptions behind earnings model

We discuss our key assumptions and the major changes to our earnings model below. Exhibit 5 gives sensitivity of RIL's standalone EPS to key variables (chemical prices, refining margins and rupee-dollar rate).

1. **Chemical margins will likely deteriorate meaningfully over the next few years**. We expect chemical margins to decline in FY2010-11E versus FY2008 led by the start of new ethylene and downstream capacities globally, which will result in a decline in operating rates over the next few years). Exhibit 6 shows details of new ethylene capacities due in CY2008-10E and Exhibit 7 gives likely deterioration in operating rates in CY2008-10E.

2. **Refining margins to likely decline but use of gas will support margins of RIL and RPET.** We model refining margins (standalone) at US$13.9/bbl in FY2009E, lower versus FY2008's US$15/bbl. The yoy decline reflects weaker global margins due to start of several new refining capacities from 2HCY08 and lower adventitious gains in FY2009E (we estimate this at about US$3/bbl in FY2008). We model RIL's standalone refining margin for FY2010E at US$14.5/bbl for RIL's refinery and US$16.1/bbl for RPET's refinery. The sharp jump in refining margin versus FY2009E reflects use of natural gas from KG D-6 block for internal processes, which would lead to significant savings in power and fuel and thus, higher refining margins. We expect the savings to more than compensate for the decline in global margins in FY2010E.

   Exhibit 8 gives details of new refining capacities due in CY2008-12E and Exhibit 9 shows likely refining utilization rates over the same period.

3. **Exchange rate.** We have revised our rupee-dollar exchange rates for FY2009E-11E to Rs42/US Dollar, Rs41.5/US Dollar and Rs41/US Dollar, respectively versus Rs39.5/US Dollar, Rs38.5/US Dollar and Rs38/US Dollar previously.

4. **Crude oil price assumptions.** We have increased our crude oil price (Dated Brent) forecast for FY2009E to US$110/bbl from US$100/bbl previously. We retain our crude price forecasts for FY2010E and FY2011E at US$95/bbl and US$90/bbl, respectively.

5. **Changes in import tariffs.** We have made changes to factor the changes announced by the government in the import tariff structure on June 4, 2008. We have reduced import tariffs on crude oil (to 0% from 5.15%), diesel and gasoline (to 2.6% from 7.7% previously) and other petroleum products (to 5.2% from 10.3%). However, this has negligible impact on RIL and RPET since both refineries export and will export (once RPET starts) a significant portion of their products.

Other updates

RPET refinery; on track for early completion. The company has reiterated that RPET's upcoming 580,000 b/d refinery remains on track for completion before the initial completion date of December 2008. We see this as a remarkable achievement in the current environment of tight equipment and manpower supply. However, the management has not given clear indication of the likely date for commissioning of the refinery.

We have made minor modifications to our RPET earnings model with our revised FY2010-12E EPS estimates at Rs21.9, Rs20.5, Rs21.3 versus Rs20.6, Rs18.9 and Rs19.9 previously.

New petrochemical complex at Jamnagar SEZ and coke gasification project. Reliance Industries has not provided further details of the proposed 2 mtpa cracker and petrochemical complex at its SEZ in Jamnagar. As per the initial announcement by the board, the complex will cost US$3 bn. We expect the project to be likely complete by FY2012. We have assumed certain amount of capex in FY2009-12E but expect to revisit the same once the company shares more details over the next few months.

We have not assumed any capex for the proposed coke gasification project. RIL management has made no reference to this project in the recent AGM statement as also past two quarter's press releases. We understand that the project is still at a preliminary stage.

Reliance Retail—steady progress. RIL has over 700 stores (in fourteen formats) in 60 cities currently with about 600 Reliance Fresh stores. We value the retailing business at US$4.9 bn (Rs148/share).

CBM. On CBM, the management has indicated in-place gas reserves of 3.8 tcf in Sohagpur CBM blocks and expects production to commence from FY2011E. The DGH has already approved the development plan for Sohagpur East and West blocks. RIL expects peak production of 6 mcm/d from its Sohagpur CBM block.

SEZ—regulatory approval in place. The management has stated that it has received regulatory approvals for the development of separate SEZs in Gurgaon and Jhajjar in Haryana and Jamnagar in Gujarat.

Reserve accretion. Exhibit 10 gives details of RIL's proved reserves (oil & gas) as on March 31, 2008. There has been no accretion in RIL's reserves versus the reserves as on March 31, 2007.

RIL stock price is implying moderate discoveries of hydrocarbons in the future

Estimation of implied valuation of new businesses of Reliance Industries (US$ bn)

		Comments
1. Valuation of extant businesses		**Chemicals, RIL refinery, extant oil and gas**
FY2008 EPS of Reliance (Rs)	105.0	FY2008 EPS included about Rs17 of adventitious gains
FY2008 EPS adjusted for treasury shares (Rs)	121.7	Adjusted for 199 mn treasury shares
Effective tax rate in FY2008 (%)	15.4	
FY2008 EPS adjusted for tax rate	95.0	Normalized for 34% tax rate for extant earnings
Appropriate P/E multiple (X)	9.0	Generous given above mid-cycle margins, earnings and cost of equity of 12.5%
Valuation of extant businesses (Rs)	**855**	
Valuation of extant businesses	**26**	**Reasonable in the context of replacement value, returns**
2. Valuation of investments		**RPL, others (without Reliance Retail)**
Reliance Petroleum	505	3.167 bn shares at 12-month fair valuation of Rs200
Others and cash at end-FY2008E	69	
Total value of investments	**574**	
Valuation of RIL ex-new E&P, retailing, SEZs	**1,429**	
Current stock price	2,270	
3. Valuation of new businesses		**Emerging E&P business, retailing, SEZs**
Market-ascribed value of new businesses	**842**	
Market-ascribed value of new businesses (US$ bn)	**25**	
Estimated valuation of retailing (US$ bn)	4.9	Reliance has invested ~US$1 bn equity in Reliance Retail as of end-FY2008
Estimated valuation of SEZs (US$ bn)	1.8	Value will take time to emerge
Market-ascribed value of emerging E&P business	**18**	**Seems reasonable to us based on official reserves, announced discoveries**
Estimated value of Reliance's stake in KG D-6 (gas)	9.3	Based on gas production of 17 tcf, US$8.8 bn capex, US$4.2/mn BTU net price
Estimated value of Reliance's stake in KG D-6 (oil)	1.8	0.5 bn bbls of OOIP assumed versus current announced reserves of 180 mn bbls
Estimated value of Reliance's stakes in NEC-25	2.1	Based on 5.1 tcf of production, US$1.15 bn capex, US$4.5/mn BTU
Estimated value of Reliance's stakes in CBM	1.7	Based on 2.8 tcf of production
Implied value of new discoveries	**4**	**Higher reserves in KG D-6, NEC-25, Cauvery-III-D5/6, GS-01, MN-D4 blocks?**

Source: Kotak Institutional Equities estimates.

Reliance's current stock price is implying additional recoverable reserves of ~6 tcf of gas today
Valuation of Reliance's E&P segment and implied valuation for potential discoveries (US$ bn)

		Commnets
DCF valuation of KG D-6 block, gas for D1 & D3 fields	9.3	15.4 tcf of net recoverable gas reserves
Valuation of KG D-6 block, oil for MA-1 field	1.8	450 mn bbls of net proved reserves of oil at EV/bbl of US$10
Valuation of Reliance's stakes in NEC-25	2.1	4.6 tcf of net recoverable gas reserves
Valuation of Reliance's stakes in CBM blocks	1.7	2.8 tcf of net recoverable gas reserves
Total valuation of extant announced reserves	**15**	
Total recoverable reserves (tcf)	**25**	
Implied valuation of E&P segment	18	
Implied valuation of new E&P discoveries	4	
Implied additional recoverable reserves in stock price (tcf)	**6**	**This is what Reliance needs to announce today**
# of years from discovery to production	6	KG D-6 first gas discovered in Oct-02, production in 2HFY09
Cost of capital (%)	12.0	
Additional gas reserves required to be added in six years (tcf)	**12**	**This is what Reliance needs to bring in production in six years**

Note:
(a) The above exercise assumes for simplicity that all future gas and oil discovery would have similar PSC terms as the KG D-6 block.

Source: Kotak Institutional Equities estimates.

Valuation of Reliance Industries stock (Rs)

	FY2010E EPS (Rs)	P/E (X)	Valuation (Rs/share)	Comments
Chemicals, refining, E&P (a) (b)	221	10	2,211	Consolidated FY2010E EPS including Reliance Petroleum
Valuation based on FY2010E EPS			**2,024**	**12.5% discount rate; discounted to June, 2009**
E&P (higher reserves in KG-DWN-98/3, other blocks)			—	We model 0.93 tcf of gas per annum production in perpetuity
E&P (NEC-25, CBM)			111	Based on KG D-6 reserves and valuation
New chemical projects (PX, new olefins complex)			26	
Investments			209	
Other investments			1	
Retailing			148	US$4.9 bn valuation; ~US$1 bn equity invested in Reliance Retail as of end-FY2008
SEZ development			60	SEZs will require investment for the first few years
12-month fair valuation			**2,370**	

Notes:
(a) FY2010E EPS is Rs194 on 1.573 bn shares after considering conversion of 120 mn warrants issued to the major shareholder.
(b) FY2010E EPS is adjusted for treasury shares or computed using 1.372 bn shares.

Source: Kotak Institutional Equities estimates.

SOTP valuation of Reliance is Rs2,000 per share on FY2010E estimates

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

	Valuation base (Rs bn)		Multiple (X)		EV	Value share
	Other	EBITDA	Muliple	EV/EBITDA	(Rs bn)	(Rs)
Chemicals		78		6.0	468	340
Refining & Marketing (a)		64		6.0	385	280
Oil and gas—producing		33		5.0	166	121
Gas—developing (DCF-based) (b)	686	—	100%	—	686	499
Oil—KG-DWN-98/3 (c)	97	—	100%	—	97	71
Investments						
RPL (3.167 bn shares at Rs200)	633	—	100%	—	633	461
Others	2	—	100%	—	2	1
Retailing	204	—	100%	—	204	148
SEZ development	75	—	100%	—	75	54
Total					**2,618**	**1,976**
PV of refining division's future sales tax incentives					2	2
Total value					**2,620**	**1,978**
Net debt					(40)	(29)
Implied equity value					**2,660**	**2,007**

Note:

(a) R&M EBITDA computed assuming no use of gas for refining processes.

(b) 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.

(c) 180 mn bbls of recoverable reserves based on gross OOIP of 0.5 bn bbls.

(d) Net debt reflects a standalone (without RPL) scenario; however, we consolidate for RPL otherwise as it a 75% subsidiary.

(e) We use 1.374 bn shares (excluding treasury shares) for our per share computation.

Source: Kotak Institutional Equities estimates.

Reliance has 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
Rupee-dollar exchange rate									
Rupee-dollar exchange rate	41.0	42.0	43.0	40.5	41.5	42.5	40.0	41.0	42.0
Net profits (Rs mn)	161,207	167,335	173,462	226,905	234,278	241,651	224,125	231,471	238,817
EPS (Rs)	106.5	110.6	114.6	144.2	148.9	153.6	142.4	147.1	151.8
% upside/(downside)	**(3.7)**		**3.7**	**(3.1)**		**3.1**	**(3.2)**		**3.2**
Chemical prices									
Change in prices (%)	(5.0)		5.0	(5.0)		5.0	(5.0)		5.0
Net profits (Rs mn)	163,564	167,335	171,105	230,157	234,278	238,399	227,598	231,471	235,344
EPS (Rs)	108.1	110.6	113.1	146.3	148.9	151.5	144.7	147.1	149.6
% upside/(downside)	**(2.3)**		**2.3**	**(1.8)**		**1.8**	**(1.7)**		**1.7**
Refining margins (US$/bbl)									
Margins (US$/bbl)	12.9	13.9	14.9	13.5	14.5	15.5	12.2	13.2	14.2
Net profits (Rs mn)	158,178	167,335	176,491	227,796	234,278	240,759	225,067	231,471	237,874
EPS (Rs)	104.5	110.6	116.6	144.8	148.9	153.0	143.0	147.1	151.2
% upside/(downside)	**(5.5)**		**5.5**	**(2.8)**		**2.8**	**(2.8)**		**2.8**

Source: Kotak Institutional Equities estimates.

Large new capacity additions in ethylene in CY2008-10E

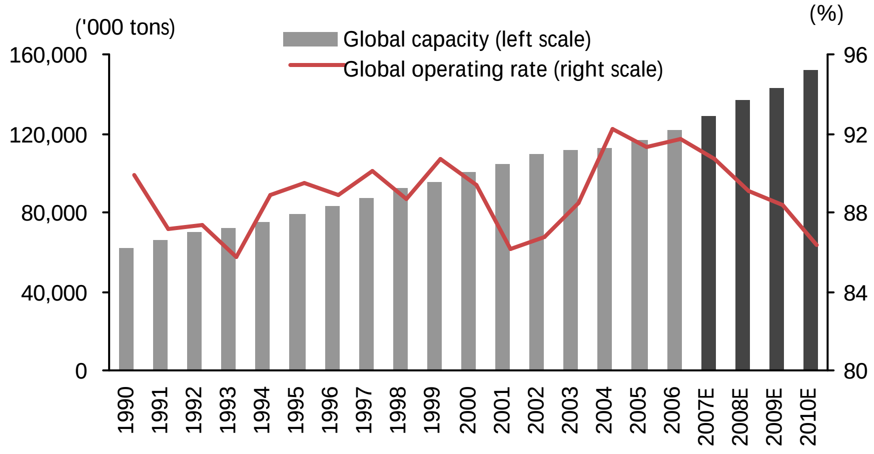
Major additions to ethylene capacity in Asia and Middle-East, calendar year-ends, 2008-2010E ('000 tons)

	2008	2009	2010
China			
Fujian Petrochemical		800	
PetroChina Dushanzi		1,000	
PetroChina Fushun			800
Shanghai Secco Petrochemical			500
Sinopec Tianjin			800
Sinopec Zhenhai			1,000
Total China	**—**	**1,800**	**3,100**
India			
Haldia Petrochemicals	180		
Indian Oil Corp.			800
Total India	**180**	**—**	**800**
Iran			
Arya Sasol	1,000		
Jam Petrochemical	1,320		
NPCL, Illam		318	
Total Iran	**2,320**	**318**	**—**
Korea			
Lotte Daesan	350		
Samsung Total	200		
Total Korea	**550**	**—**	**—**
Kuwait			
Equate	850		
Total Kuwait	**850**	**—**	**—**
Qatar			
QAPCO	200		
Q-Chem/Atofina		1,300	
Total Qatar	**200**	**1,300**	**—**
Saudi Arabia			
Petro-Rabigh		650	650
Petrokemya			800
Saudi ChevronPhillips Petrochem	300		
SEPC	1,000		
SHARQ	600	600	
Yanbu Petrochemical Complex	1,300		
Total Saudi Arabia	**3,200**	**1,250**	**1,450**
Singapore			
Shell Singapore			800
Total Singapore	**—**	**—**	**800**
Total Asia	**7,300**	**4,668**	**6,150**
Total globe (including expansions)	**8,300**	**5,628**	**8,610**

Source: Kotak Institutional Equities estimates.

Continued steep decline in operating rates through CY2010E

Ethylene capacity and operating rates, 1991-2010E



Source: Kotak Institutional Equities estimates.

Significant capacity coming onstream from 2HCY08

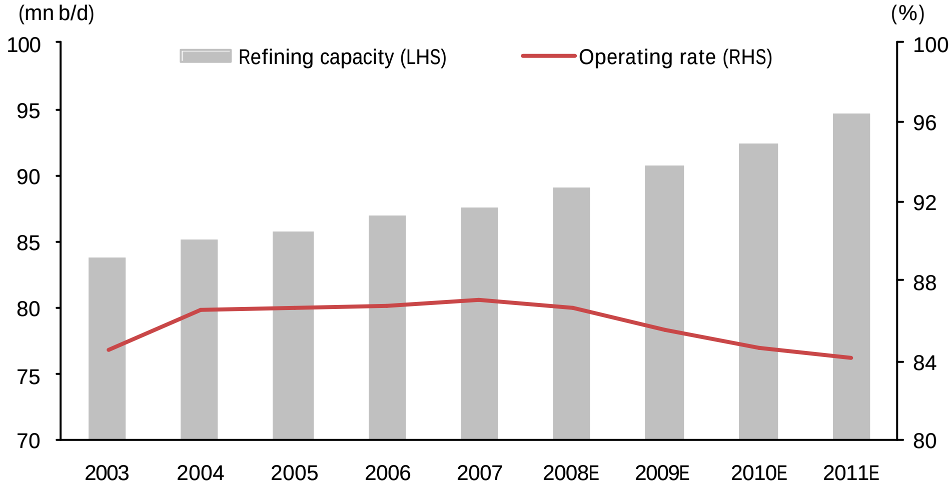
Status of large (>200,000 b/d) refining projects, ongoing and announced

Company	Location	Capacity addition (b/d)	Expected completion	Status
Kuwait National Petroleum Co.	Al-Zour, Kuwait	615,000	2010	Engineering
Reliance Petroleum	**Jamnagar, India**	**580,000**	**2008**	**Under construction**
Petrobras/PDVSA	Abreu e Lima, Brazil	500,000	2014	Planning
ConocoPhillips	Fujairah, UAE	500,000		Feasibility study
Saudi Aramco	Jubail, Suadi Arabia	400,000	2011	Engineering
Saudi Aramco	Yanbu, Saudi Arabia	400,000	2012	Engineering
PDVSA	Cabruta, Venezuela	400,000	2011	Engineering
Motiva Enterprises LLC	Port Arthur, Texas, USA	325,000	2010	Engineering
Ministry of Energy and Mines	Jaraminjo, Manabi, Ecuador	300,000	2012	Planning
Kuokuang Petrochemical Technology Corp.	Yunlin Co., Taiwan	300,000	2012	Planning
HPCL Mittal	**Bhatinda, India**	**300,000**	**2011**	**Under construction**
Shell	Ft. Saskatchewan Sarnia, ON, Canada	250,000	2014	Planning
US Army Corps of Engineers	Northern Iraq, Iraq	250,000	2012	Engineering
CNOOC	**Daya Bay, Huizhou, Guangdong, China**	**240,000**	**2008**	**Under construction**
Sinopec	**Qingdao, China**	**200,000**	**2008**	**Under construction**
Sonangol	Lobito, Angola	200,000	2010	Engineering
Petrobras/PDVSA	Abreu e Lima, Brazil	200,000	2010	Under construction
Petrochina	**Dagang, Quinzhou, China**	**200,000**	**2009**	**Under construction**
Bharat Oman Refineries Ltd	**Bina, India**	**120,000**	**2010**	**Under construction**

Source: Oil & Gas journal.

Global refining operating rates to decline led by large capacity addition

Global refining capacity versus operating rate, calendar year ends, 2003-2011E



Source: IEA, BP Statistical Review of World Energy, 2007, Kotak Instiutional Equities estimates.

Reserves data of Reliance Industries as on March 31, 2008

	Oil	Gas	O + OEG		% of total	
	(mn tons)	(bcm)	(mn tons)	(mn bbls)	Oil	gas
Proved developed	4	17	19	136	19	81
Proved undeveloped	8	205	191	1,397	4	96
Total proved reserves	**12**	**222**	**210**	**1,533**	**6**	**94**
Proved developed/Proved (%)	29	8	9	9		
Proved undeveloped/Proved (%)	65	92	91	91		

Reserves data of Reliance Industries as on March 31, 2007

	Oil	Gas	O + OEG		% of total	
	(mn tons)	(bcm)	(mn tons)	(mn bbls)	Oil	gas
Proved developed	4	17	19	140	22	78
Proved undeveloped	8	205	192	1,399	4	96
Total proved reserves	**12**	**222**	**211**	**1,539**	**6**	**94**
Proved developed/Proved (%)	34	8	9	9		
Proved undeveloped/Proved (%)	66	92	91	91		

Note:
(a) The reserves are net quantities of RIL's interest within India.

Source: Company data.

Reliance Petroleum has high leverage to refining margins

Sensitivity of RPL's earnings to key variables

	Fiscal 2009E			Fiscal 2010E			Fiscal 2011E		
	Downside	Base case	Upside	Downside	Base case	Upside	Downside	Base case	Upside
Rupee-dollar exchange rate									
Rupee-dollar exchange rate	41.0	42.0	43.0	40.5	41.5	42.5	40.0	41.0	42.0
Net profits (Rs mn)	18,183	19,149	20,116	95,096	98,761	102,426	88,699	92,052	95,404
EPS (Rs)	4.0	4.3	4.5	21.1	21.9	22.8	19.7	20.5	21.2
% upside/(downside)	**(5.0)**		**5.0**	**(3.7)**		**3.7**	**(3.6)**		**3.6**
Refining margins (US$/bbl)									
Margins (US$/bbl)	15.5	16.5	17.5	15.1	16.1	17.1	14.0	15.0	16.0
Net profits (Rs mn)	16,850	19,149	21,449	89,984	98,761	107,538	83,380	92,052	100,723
EPS (Rs)	3.7	4.3	4.8	20.0	21.9	23.9	18.5	20.5	22.4
% upside/(downside)	**(12.0)**		**12.0**	**(8.9)**		**8.9**	**(9.4)**		**9.4**

Source: Kotak Institutional Equities estimates.

RIL consolidated with RPL: Profit model, balance sheet, cash model, March fiscal year-ends, 2003-2012E (Rs mn)

	2003	2004	2005	2006	2007	2008	2009E	2010E	2011E	2012E
Profit model (Rs mn)										
Net sales	451,133	510,715	656,223	809,113	1,114,927	1,334,430	1,685,467	2,424,103	2,381,419	2,360,701
EBITDA	**75,808**	**91,148**	**123,820**	**139,991**	**198,462**	**233,056**	**282,726**	**484,261**	**456,250**	**464,788**
Other income	10,012	11,381	14,498	6,829	4,783	8,953	15,279	15,090	22,877	37,987
Interest	(15,552)	(14,347)	(14,687)	(8,770)	(13,247)	(15,509)	(19,793)	(20,741)	(8,852)	(2,311)
Depreciation & depletion	(28,371)	(32,470)	(37,235)	(34,009)	(48,152)	(48,471)	(65,350)	(89,321)	(95,223)	(101,765)
Pretax profits	41,897	55,711	86,397	104,041	141,846	178,028	212,862	389,289	375,052	398,698
Extraordinary items	7,845	7,300	4,290	3,000	2,000	47,335	—	—	—	—
Tax	(2,459)	(3,510)	(7,050)	(9,307)	(16,574)	(26,520)	(28,518)	(58,207)	(58,053)	(69,630)
Deferred taxation	(6,240)	(7,900)	(7,920)	(7,040)	(9,196)	(8,999)	2,140	1,957	6,524	10,237
Minority interest	—	—	—	—	—	—	(5,672)	(29,253)	(27,266)	(28,362)
Net profits	41,043	51,601	75,717	90,693	118,076	189,844	180,812	303,786	296,257	310,943
Adjusted net profits	**34,570**	**45,623**	**72,135**	**88,152**	**116,434**	**147,869**	**180,812**	**303,786**	**296,257**	**310,943**
Earnings per share (Rs)	**24.8**	**32.7**	**51.7**	**63.3**	**80.1**	**101.7**	**119.5**	**193.1**	**188.3**	**197.6**
Balance sheet (Rs mn)										
Total equity	303,744	344,525	404,033	430,543	673,037	847,853	1,158,454	1,426,746	1,687,199	1,938,818
Deferred taxation liability	26,848	34,748	42,668	49,708	69,820	78,725	76,585	74,629	68,105	57,868
Minority interest	—	—	—	—	33,622	33,622	38,410	60,468	80,848	94,257
Total borrowings	197,583	209,447	187,846	218,656	332,927	493,072	331,230	151,342	56,104	28,702
Currrent liabilities	109,666	122,855	171,315	164,545	192,305	251,427	281,521	317,688	312,387	305,400
Total liabilities and equity	**637,842**	**711,574**	**805,863**	**863,452**	**1,301,712**	**1,704,700**	**1,886,201**	**2,030,872**	**2,204,643**	**2,425,045**
Cash	1,472	2,242	36,087	21,461	18,449	42,822	27,771	41,679	187,897	365,491
Current assets	227,809	218,159	248,438	224,283	286,566	402,721	481,575	579,547	573,407	567,209
Total fixed assets	340,863	351,460	350,823	626,745	899,403	1,081,638	1,166,834	1,162,127	1,155,820	1,189,825
Investments	67,227	139,714	170,515	(9,038)	97,294	177,519	210,019	247,519	287,519	302,519
Deferred expenditure	472	—	—	—	—	—	—	—	—	—
Total assets	**637,842**	**711,574**	**805,863**	**863,452**	**1,301,712**	**1,704,700**	**1,886,200**	**2,030,872**	**2,204,643**	**2,425,045**
Free cash flow (Rs mn)										
Operating cash flow, excl. working cap	67,072	83,301	107,002	119,520	164,285	180,718	228,084	403,681	386,766	390,961
Working capital	(17,614)	20,265	46,875	(32,188)	(13,075)	(31,071)	(48,761)	(61,805)	838	(788)
Capital expenditure	(37,043)	(43,191)	(52,440)	(94,273)	(247,274)	(239,691)	(136,077)	(82,983)	(86,338)	(133,886)
Investments	(34,204)	(68,430)	(48,192)	(32,364)	(105,760)	(78,953)	(32,500)	(37,500)	(40,000)	(15,000)
Other income	5,219	5,902	3,032	5,159	4,143	6,132	15,279	15,090	22,877	37,987
Free cash flow	**(16,569)**	**(2,153)**	**56,276**	**(34,146)**	**(197,681)**	**(162,865)**	**26,026**	**236,485**	**284,144**	**279,275**
Ratios (%)										
Debt/equity	59.8	55.2	42.1	45.5	44.8	53.2	26.8	10.1	3.2	1.4
Net debt/equity	59.3	54.6	34.0	41.1	42.3	48.6	24.6	7.3	(7.5)	(16.9)
RoAE	10.7	12.7	17.6	19.9	20.1	18.3	17.1	22.5	18.4	16.6
RoACE	**8.8**	**9.7**	**13.0**	**13.8**	**13.9**	**12.6**	**13.2**	**21.1**	**18.5**	**17.3**

Source: Kotak Institutional Equities estimates.

Profit model, balance sheet, cash model of Reliance Petroleum 2009-2014E, March fiscal year-ends (Rs mn)

	2009E	2010E	2011E	2012E	2013E	2014E
Profit model						
Net revenues	228,509	874,759	851,322	829,658	808,039	807,162
EBITDA	**34,841**	**130,341**	**115,506**	**111,057**	**106,622**	**105,492**
Other income	69	190	251	1,429	2,519	2,374
Interest (expense)/income	(10,756)	(16,881)	(8,715)	(1,630)	—	—
Depreciation	(4,986)	(14,791)	(14,899)	(15,007)	(15,116)	(15,224)
Pretax profits	**19,168**	**98,859**	**92,142**	**95,849**	**94,025**	**92,642**
Extraordinary items	—	—	—	—	—	—
Tax	(19)	(98)	(91)	(95)	(93)	(13,373)
Deferred taxation	—	—	—	—	—	1,624
Net income	**19,149**	**98,761**	**92,052**	**95,754**	**93,932**	**80,893**
Earnings per share (Rs)	**4.3**	**21.9**	**20.5**	**21.3**	**20.9**	**18.0**
Balance sheet						
Total equity	153,639	241,870	323,392	377,029	361,065	347,317
Deferred taxation liability	—	—	—	—	—	(1,624)
Total borrowings	165,775	119,775	26,075	—	—	—
Current liabilities	16,976	60,051	59,348	57,942	56,535	56,535
Total liabilities and equity	**336,390**	**421,697**	**408,816**	**434,970**	**417,600**	**402,228**
Cash	2,272	5,079	7,867	50,267	49,125	47,040
Other current assets	42,881	138,172	135,401	132,163	129,051	128,987
Net fixed assets	266,854	254,063	241,164	228,157	215,041	201,817
Capital work-in-progress	—	—	—	—	—	—
Investments	24,383	24,383	24,383	24,383	24,383	24,383
Deferred expenditure	—	—	—	—	—	—
Total assets	**336,390**	**421,697**	**408,816**	**434,970**	**417,600**	**402,228**
Free cash flow						
Operating cash flow, excl. working capital	24,066	113,362	106,700	109,332	106,529	92,119
Working capital changes	(20,289)	(52,214)	2,067	1,832	1,706	64
Capital expenditure	(39,097)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
Investments	—	—	—	—	—	—
Other income	69	190	251	1,429	2,519	2,374
Free cash flow	**(35,251)**	**59,337**	**107,018**	**110,593**	**108,754**	**92,557**
Ratios (%)						
Debt/equity	107.9	49.5	8.1	—	—	—
Net debt/equity	106.4	47.4	5.6	(13.3)	(13.6)	(13.5)
ROAE (%)	13.3	49.9	32.6	27.3	25.5	22.9
ROACE (%)	**10.3**	**34.0**	**28.3**	**26.8**	**25.5**	**22.9**

Source: Kotak Institutional Equities estimates.

Energy

CAIR.BO, Rs285	
Rating	SELL
Sector coverage view	Cautious
Target Price (Rs)	230
52W High -Low (Rs)	343 - 125
Market Cap (Rs bn)	532.5

Financials

December y/e	2007	2008E	2009E
Sales (Rs bn)	16.6	35.7	68.8
Net Profit (Rs bn)	1.9	7.3	36.7
EPS (Rs)	(0.1)	3.9	19.4
EPS gth	*(108.2)*	-	*407.0*
P/E (x)	(2,392)	72.7	14.7
EV/EBITDA (x)	66.5	29.8	10.2
Div yield (%)	-	-	-

Shareholding, March 2008

	Pattern	% of Portfolio	Over/(under) weight
Promoters	69.0	-	-
FIIs	3.5	0.2	(0.9)
MFs	8.7	2.4	1.4
UTI	-	-	(1.0)
LIC	2.2	0.5	(0.5)

Cairn India: Recent run-up led by surge in crude prices; significant risks at current levels

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- **Stock price is discounting crude price (Dated Brent) of US$105/bbl in perpetuity**
- **Decline in crude price will likely result in significant correction in stock price**
- **Retain our SELL rating with 12-month DCF-based target price of Rs230**

The recent strong performance in Cairn's stock price has been the result of surge in crude prices; Cairn has outperformed the Sensex by 33% in the past three months led by a sharp rise in crude price over the same period (+US$28/bbl, +27%). We reiterate our SELL rating with a 12-month DCF-based target price of Rs230 (Rs220 previously) as we see significant risks at current levels. The stock price is now discounting crude price of US$105/bbl in perpetuity and also we do not assume any cess or royalty on Cairn's portion of crude oil. We have made housekeeping changes to our Cairn's earnings model to factor (1) information from CY2007 annual report, (2) higher crude price for CY2008E (US$110/bbl versus US$100/bbl previously) and (3) weaker rupee. We have revised CY2008E-10E EPS to Rs3.9, Rs19.4 and Rs62.2, respectively, from Rs3.2, Rs18.4 and Rs59.2, respectively. Key upside risks stem from higher-than-expected crude oil price in perpetuity.

Significant risks at current levels. We note that the stock price is presently discounting crude price (Dated Brent) of US$105/bbl in perpetuity. Our current fair value of Cairn stock is Rs189 and 12-month fair value Rs227 (see Exhibit 1) based on (1) US$75/bbl normalized Dated Brent price from 2013E, US$110/bbl in CY2008E, US$95/bbl in CY2009E and US$90/bbl in CY2010E-12E and (2) nil royalty and cess. Exhibit 2 shows the sensitivity of valuation of Cairn's Rajasthan asset to (1) the assumed price of crude and (2) quantum of royalty and cess, if any. We discuss the significant risks to our assumptions which might have a negative impact on valuations.

1. **Crude price.** The recent strong performance of the stock has been the result of a surge in crude prices, although the valuation for Cairn does not vary significantly with higher crude oil prices. Cairn stock has rallied 32% in the past three months versus the BSE-30 Index's 0.7% decline over the same period on the back of a rise in crude prices (see Exhibit 3). We believe a decline in crude price will likely result in a sharp correction in the stock price. We would highlight that at US$75/bbl in perpetuity from CY2013E, our 12-month fair value for Cairn stock comes to Rs227. However, it rises to only Rs248/share even if we change our normalized crude price assumption (beyond CY2013E) to US$90/bbl and to Rs262/share on US$100/bbl.

   We note that PSC terms meaningfully limit the upside from higher crude prices. We clarify that Cairn's moderate leverage to crude price is due to the nature of the PSC under which Cairn will operate its Rajasthan block; higher crude prices will increase Cairn's investment multiple (IM) faster and move the share of the government in profit petroleum to a higher bracket faster. Exhibit 4 shows the share of government in profit petroleum at various levels of IM; the share of the government increases to 50% once IM exceeds 2.5X.

2. **Royalty and cess.** We currently assume Cairn will not bear any royalty and cess on the portion of crude oil (70%) produced by it from the Rajasthan block. However, imposition of cess (Rs927/ton or Rs2,575/ton) may be a large negative for Cairn's earnings and valuation.

Key changes to and major assumptions behind earnings model

We discuss our key assumptions and the major changes to our earnings model below. Exhibit 5 gives sensitivity of Cairn's EPS to key variables (rupee-dollar rate and crude oil price).

1. **Crude oil price assumptions.** We have increased our crude oil price (Dated Brent) forecast for CY2008E to US$110/bbl from US$100/bbl previously. We retain our crude price forecasts for CY2009E and CY2010E at US$95/bbl and US$90/bbl, respectively. We retain our long-term crude price assumption of US$75/bbl.

2. **Exchange rate.** We have revised our rupee-dollar exchange rates for CY2008E-10E to Rs42/US Dollar, Rs41.3/US Dollar and Rs40.3/US Dollar, respectively, versus Rs39.3/US Dollar, Rs38.8/US Dollar and Rs38/US Dollar previously.

We value Cairn India stock at Rs230

EV and equity value of Cairn (US$ mn)

	Now	+ 1-year	+ 2-years
RJ-ON-90/1	8,014	9,416	10,715
CB-OS-2	126	81	57
Ravva	456	379	330
Upside potential (KG-DWN-98/2)	100	112	125
Total	**8,696**	**9,988**	**11,227**
Net debt	39	(247)	(167)
Equity value	**8,657**	**10,234**	**11,393**
Equity shares (mn)	1,891	1,891	1,891
Equity value per share (Rs/share)	**189**	**227**	**248**

Source: Kotak Institutional Equities estimates.

Cairn's Rajasthan field's enterprise value has moderate leverage to crude prices but high leverage to regulations

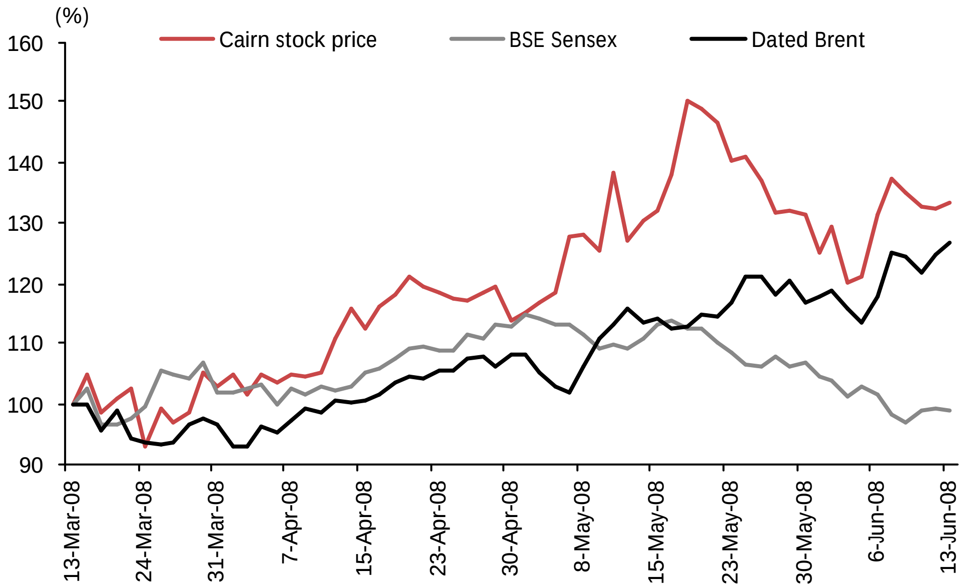
Enterprise value sensitivity of Cairn to key variables (US$ bn)

	Sensitivity of current valuation			Sensitivity of +1-year valuation		
	Enterprise value (US$ bn)	Equity value (Rs/share)	Change from base case (%)	Enterprise value (US$ bn)	Equity value (Rs/share)	Change from base case (%)
Average crude prices (2013 and beyond)						
Dated Brent price (US$110/bbl)	9.9	232	23	11.6	276	21
Dated Brent price (US$100/bbl)	9.4	220	16	10.9	262	15
Dated Brent price (US$90/bbl)	8.8	208	10	10.3	248	9
Dated Brent price (US$80/bbl)	8.3	195	3	9.7	234	3
Dated Brent price (US$75/bbl)	**8.0**	**189**		**9.4**	**227**	
Dated Brent price (US$60/bbl)	7.2	171	(10)	8.5	207	(9)
Dated Brent price (US$50/bbl)	6.6	158	(16)	7.9	193	(15)
Dated Brent price (US$40/bbl)	6.1	146	(23)	7.3	178	(21)
Cess, royalty						
Royalty (Rs0/ton), Cess (Rs0/ton)	**8.0**	**189**		**9.4**	**227**	
Royalty (Rs0/ton), Cess (Rs927/ton)	7.6	180	(5)	9.0	217	(4)
Royalty (Rs0/ton), Cess (Rs2,575/ton)	6.9	165	(13)	8.2	200	(12)
Royalty (Rs481/ton), Cess (Rs927/ton)	5.5	135	(29)	6.7	166	(27)
Royalty (Rs481/ton), Cess (Rs2,575/ton)	4.9	121	(36)	6.1	151	(33)

Source: Kotak Institutional Equities estimates.

Cairn's strong performance has been the result of a sharp rise in crude prices

Cairn's stock performance versus BSE Sensex (%)



Source: Bloomberg, Kotak Institutional Equities.

Maximum share of government in profit petroleum at 50% for Rajasthan block

Details of share of profit petroleum between the government and Cairn for Cairn's key assets

IM	Government share (%)
<1	**20**
>1, <1.5	20
>1.5, <2	30
<2, <2.5	40
>2.5, <3	**50**
>3	**50**

Note:
(a) IM = Investment Multiple.

Source: Company data.

Cairn's earnings are highly leveraged to crude prices

Earnings sensitivity of Cairn to key variables

	2009E			2010E			2011E		
	Downside	Base case	Upside	Downside	Base case	Upside	Downside	Base case	Upside
Average crude prices									
Crude price (US$/bbl)	93.0	95.0	97.0	88.0	90.0	92.0	88.0	90.0	92.0
Net profits (Rs mn)	35,660	36,724	37,789	115,020	117,697	120,374	87,122	89,582	92,043
Earnings per share (Rs)	18.9	19.4	20.0	60.8	62.2	63.6	46.1	47.4	48.7
% upside/(downside)	**(2.9)**		**2.9**	**(2.3)**		**2.3**	**(2.7)**		**2.7**
Exchange rate									
Rs/US$	40.3	41.3	42.3	39.3	40.3	41.3	38.3	39.3	40.3
Net profits (Rs mn)	35,608	36,724	37,841	114,798	117,697	120,596	87,106	89,582	92,059
Earnings per share (Rs)	18.8	19.4	20.0	60.7	62.2	63.8	46.1	47.4	48.7
% upside/(downside)	**(3.0)**		**3.0**	**(2.5)**		**2.5**	**(2.8)**		**2.8**

Source: Kotak Institutional Equities estimates.

Profit model, balance sheet, cash model of Cairn 2006-2013E, calendar year-ends (Rs mn)

	2006	2007	2008E	2009E	2010E	2011E	2012E	2013N
Profit model (Rs mn)								
Net sales	18,417	16,561	35,699	68,766	182,376	176,922	171,594	138,905
EBITDA	**5,332**	**6,705**	**17,316**	**51,384**	**142,361**	**107,985**	**75,705**	**59,776**
Other income	1,100	1,324	207	301	1,096	2,724	4,077	5,080
Interest	(201)	(27)	(7)	—	—	—	—	—
Depreciation	(497)	(4,589)	(6,284)	(6,893)	(8,785)	(8,282)	(8,398)	(8,373)
Pretax profits	5,734	3,413	11,231	44,792	134,671	102,427	71,384	56,483
Extraordinary items	—	(2,120)	—	—	—	—	—	—
Tax	(1,580)	(740)	(3,832)	(6,823)	(15,874)	(12,286)	(8,843)	(6,876)
Deferred taxation	(22)	(764)	(74)	(1,244)	(1,099)	(558)	(131)	129
Net profits	**4,132**	**(212)**	**7,325**	**36,724**	**117,697**	**89,582**	**62,409**	**49,737**
Earnings per share (Rs)	**2.3**	**(0.1)**	**3.9**	**19.4**	**62.2**	**47.4**	**33.0**	**26.3**
Balance sheet (Rs mn)								
Total equity	292,804	294,358	327,029	363,754	415,065	449,327	473,195	492,217
Deferred tax liability	4,258	4,916	4,991	6,235	7,334	7,892	8,023	7,895
Total borrowings	5,122	3,124	—	—	—	—	—	—
Currrent liabilities	39,716	8,372	2,597	2,449	5,859	10,225	14,293	11,774
Total liabilities and equity	**341,900**	**310,771**	**334,617**	**372,438**	**428,258**	**467,444**	**495,512**	**511,886**
Cash	61,348	1,504	10,353	6,878	55,890	100,169	133,445	157,626
Current assets	6,470	19,029	3,423	6,594	17,488	16,965	16,454	13,320
Total fixed assets	17,609	25,157	56,288	68,047	25,900	23,600	21,195	18,854
Net producing properties	2,354	4,390	3,862	30,228	68,289	66,018	63,726	61,396
Investments	4	7,129	7,129	7,129	7,129	7,129	7,129	7,129
Goodwill	254,115	253,193	253,193	253,193	253,193	253,193	253,193	253,193
Deferred expenditure	—	370	370	370	370	370	370	370
Total assets	**341,900**	**310,771**	**334,617**	**372,438**	**428,258**	**467,444**	**495,512**	**511,886**
Free cash flow (Rs mn)								
Operating cash flow, excl. working capital	2,990	6,387	10,560	42,411	124,336	94,248	65,411	51,451
Working capital changes	34,256	(908)	9,831	(3,319)	(7,484)	4,890	4,578	616
Capital expenditure	(5,619)	(11,739)	(33,970)	(42,869)	(2,550)	(2,261)	(2,252)	(2,252)
Investments/Goodwill	(252,717)	(53,863)	—	—	—	—	—	—
Other income	1,100	1,298	207	301	1,096	2,724	4,077	5,080
Free cash flow	**(219,990)**	**(58,824)**	**(13,372)**	**(3,476)**	**115,398**	**99,601**	**71,815**	**54,895**
Key assumptions								
Gross production ('000 boe/d)	91.0	78.4	81.3	115.0	245.6	240.2	231.7	224.2
Net production ('000 boe/d)	25.1	21.5	25.7	52.6	147.0	145.7	141.9	139.0
Dated Brent (US$/bbl)	65.3	70.3	110.0	95.0	90.0	90.0	90.0	75.0
Discount of Rajasthan crude to Dated Brent (US$/bbl)	2.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Source: Kotak Institutional Equities estimates.

Economy

Sector coverage view	N/A

Friday the 13th raises inflation trajectory further; the genie is out of the bottle

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- **Inflation (week-ended May 30) jumps to 8.75% from 8.24% in the previous week and street expectation of about 8.3%**
- **Inflation dynamics changing; pressure building on manufactured product prices in addition to food and energy**
- **Fuel price impact in the next week's data likely to take inflation past the 10% mark**
- **Further fiscal and monetary steps likely**

Headline inflation is all set to surpass the 10% mark when WPI data for the week-ended June 7 will be released next Friday. Worse, this week's data suggests inflation is becoming more general in nature affecting a wide range of prices. This leads further credence to our expectation of a likely increase in CRR in July as a sequel to the repo rate hike on June 12, 2008. In addition, we can expect further fiscal-side measures. But we fear combating inflation is neither easy nor feasible and can end up choking growth if more aggressive steps are taken.

This week's inflation numbers raises added concerns

The inflation was expected to jump next week. However, ahead of that, the spurt in this week's inflation number is far more important because of its information content and its unanticipated nature. The reasons are:

- The increase was way beyond expectations, with a 1.3 tick increase in the WPI. Since the inflation rate started firming up in mid-October 2007, larger tick rises have been seen only in the first two weeks of March 2008.
- Inflation in manufacturing products (yoy) increased to 8.77% from 7.95% (see Exhibit)
- Nature of inflation appears to have changed from essentially food and energy price rise to general increase in prices spread across commodities. For instance, textile prices increased 3.9% in just one week. Similarly, leather and leather prices increased 1.3%, while those for paper and paper product rose 1.2%. Prices of machinery and machine tools, chemical and chemical products, beverages, tobacco and tobacco products also increased. Manufactured food product prices increased 1% in a week's time, while that of primary food articles by 0.6%. Non-food primary articles prices (mainly minerals) also increased 1.9% this week. Only fuels prices remained unchanged—perhaps its a lull before the storm in this number expected next week.

Upward revisions in the past data remain significant indicating inflation may already be above 9%

We continue to find large upward revisions in the past data. For the week-ended April 5, 2008 headline inflation rate now stands at 7.71% due to the revision effected this week compared with 7.14% in the provisional estimates released earlier. By deduction, it appears inflation rate has already crossed the 9% mark.

Inflation trajectory rises further

We see this week's inflation data as raising the inflation trajectory further. Headline inflation rate is now expected to escalate to about 10.2% in next Friday's data release. It is expected to stay at around the same level till end-September 2008.

The progress of the monsoon has been satisfactory so far. And if it remains good, it may help soothe frayed inflation expectations and lower the inflation rate in 3QFY2009. But in case crop turns bad we could see double digit inflation in 3Q as well. We, however, expect inflation rate to fall in 4QFY2008 to about 6.5% by the year-end.

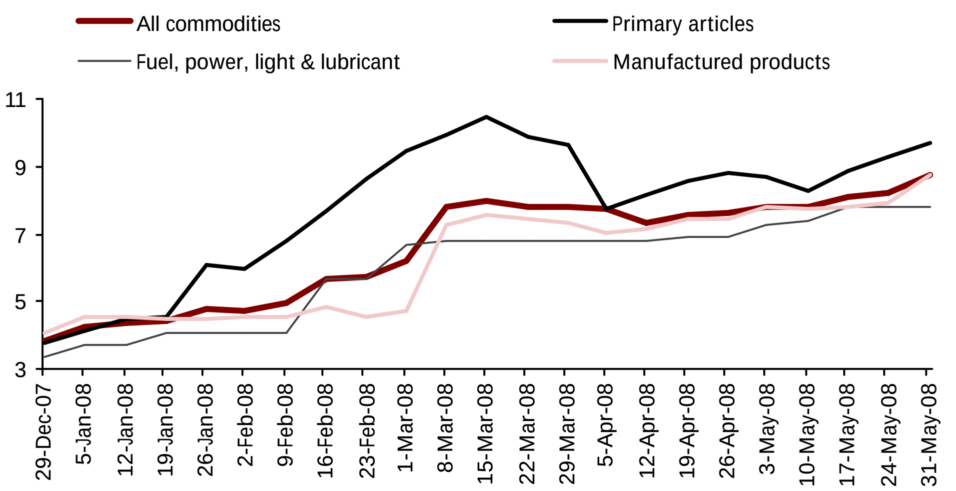
Policy ineffectiveness likely to persist though further measures are likely

We believe policy measures are unlikely to contain inflation. However, as already stated in our Economy note of June 12, 2008, *Repo rate hike may have a sequel in July*, we expect RBI to raise CRR by 50 bps on or before July 29—the scheduled policy review date. This is because we expect surplus liquidity to return to the money markets as the last week of June and early July sees large government spending. The WPI data of this week has reaffirmed our belief in the above.

RBI has already hiked repo rate from June 12 in anticipation of higher inflation rate. Further monetary tightening can be expected. This is in view of the expected liquidity swing and turning of supply-side shock to a more general price rise across commodities. However, we believe that if RBI continues to tighten monetary policy through the year to combat inflation, growth could suffer badly. It can push the economy into a low-growth scenario of under 6.5% in FY2010E.

We also expect the government to take more steps on the fiscal side to arrest inflation by altering trade and production taxes. However, both monetary and fiscal measures are unlikely to contain double-digit inflation any time soon as the genie is already out of the bottle and inflation expectations are running high.

Exhibit : Inflation in manufactured goods join in to create all round price pressures
WPI inflation rate for major groups (yoy %)



Source: Office of the Economic Advisor, Ministry of Commerce & Industry, Government of India

Automobiles

Sector coverage view			Attractive

		Price, Rs	
Company	**Rating**	**13-Jun**	**Target**
Hero Honda	REDUCE	784	710
Tata Motors	SELL	516	525
Maruti Suzuki	BUY	722	1,000
Mah & Mah	ADD	570	720

Govt. increases excise duty on cars, UVs with engine capacity greater than 1,500 cc—to have negative impact on premium cars and UVs

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- **Govt. imposes specific excise duty of Rs15,000 on cars, UVs having engine capacity greater than 1,500 cc; Rs20,000 for engine capacity greater than 2,000 cc**
- **Move to negatively impact sales of utility vehicles (UVs), premium and luxury cars**
- **Recent price hikes by auto companies leave little scope for further price hikes**
- **We believe M&M will be impacted the most as UVs form bulk of its portfolio**

The Government of India has imposed a specific excise duty of Rs15,000 on cars having engine capacity greater than 1,500 cc but below 2,000 cc and a specific duty of Rs20,000 on cars having engine capacity greater than 2,000 cc. This has been done to discourage vehicles with higher fuel consumption. We believe this move will negatively impact the sales of luxury and premium cars along with Utility Vehicles as these vehicles have engine capacity greater than 1,500 cc. The recent price hikes announced by auto companies across the board leave little scope for further price hikes in order to absorb this hike in excise duty. We believe this could hurt the growth prospects of the higher-end car segment and the UV segment. We believe M&M would be hurt the most as UVs form bulk of its portfolio.

Govt. imposes additional excise duty on cars and UVs with engine capacity greater than 1,500 cc

The government has imposed a specific excise duty of Rs15,000 on cars having engine capacity greater than 1,500 cc but below 2,000 cc and a specific duty of Rs20,000 on cars having engine capacity greater than 2,000 cc. This has been done to discourage the vehicles with higher fuel consumption. We believe this move will likely negatively impact the growth of the higher-end car segment and the utility vehicle segment. The premium cars, along with the UV segment, form around 25% of the total car and UV industry.

Recent price hikes by auto companies leave little scope for further price hikes

The recent price hikes announced by the auto companies leave little scope for further price hikes, in our view. We believe the impact of this excise hike will be felt in the sales of these vehicles and any attempt to pass on the hike in excise duty by the companies will hurt volume growth. The increase in excise will have to be absorbed by the auto companies and this will impact operating margins by 100-150 bps. We believe M&M will be hurt the most as UVs form bulk of its portfolio while Maruti would be affected marginally as SX4 and Grand Vitara form only a small part of its sales.

"Each of the analysts named below hereby certifies that, with respect to each subject company and its securities for which the analyst is responsible in this report, (1) all of the views expressed in this report accurately reflect his or her personal views about the subject companies and securities, and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report: Sanjeev Prasad, Lokesh Garg, Mridul Saggar, Amit Agarwal."

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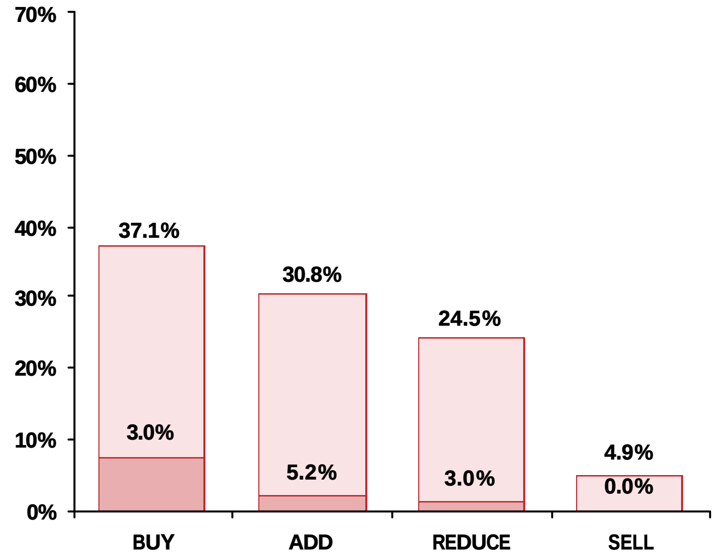

Percentage of companies covered by Kotak Institutional Equities, within the specified category.

Percentage of companies within each category for which Kotak Institutional Equities and or its affiliates has provided investment banking services within the previous 12 months.

* The above categories are defined as follows: Buy = OP; Hold = IL; Sell = U. Buy, Hold and Sell are not defined Kotak Institutional Equities ratings and should not be constructed as investment opinions. Rather, these ratings are used illustratively to comply with applicable regulations. As of 31/03/2008 Kotak Institutional Equities Investment Research had investment ratings on 143 equity securities.

Source: Kotak Institutional Equities. As of March 31, 2008

Ratings and other definitions/identifiers

New rating system

Definitions of ratings

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Old rating system

Definitions of ratings

OP = Outperform. We expect this stock to outperform the BSE Sensex over the next 12 months.
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U = Underperform. We expect this stock to underperform the BSE Sensex over the next 12 months.

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