

INDIA

Oil and gas

5 March 2008

ONGC IN Outperform

Stock price as of 04 Mar 08	Rs	953.65
12-month target	Rs	1,100
Upside/downside	%	+15.4
Valuation	Rs	1,100.00
- DCF (WACC 10.8%)		
30-day avg turnover	US\$m	32.2
Market cap	US\$m	51,096

CAIR IN Neutral

Stock price as of 04 Mar 08	Rs	217.95
12-month target	Rs	224.00
Upside/downside	%	+2.8
Valuation	Rs	224.00
- DCF (WACC 10.1%)		
30-day avg turnover	US\$m	22.5
Market cap	US\$m	9,638

RIL IN Outperform

Stock price as of 04 Mar 08	Rs	2,243.20
12-month target	Rs	3,110.00
Upside/downside	%	+38.6
Valuation	Rs	3,110.00
- Sum of Parts		
30-day avg turnover	US\$m	220.5
Market cap	US\$m	81,681

Summary of key changes

	TP change (%)	Earnings Revision	
		FY09E	FY10E
ONGC	4.8%	4.1%	3.7%
CAIR	11.0%	24.0%	19.0%
RIL	-3.3%	1.9%	1.8%

Source: Macquarie Research, March 2008

Analysts

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Modest gains from crude upgrade

Event

- Macquarie oil & gas sector head, David Johnson, has upgraded the crude oil forecast by 7–19% for 2008E–11E and long-term forecast from US\$73/bbl to US\$78/bbl. We are revising the target prices for ONGC, CAIR and RIL. We upgrade ONGC to Outperform from Neutral. We maintain an Outperform recommendation on Reliance Industries.

Impact

- Currency and inflation are the new drivers.** Despite the short-term outlook for a seasonal drop in demand and the medium-term outlook for an increasing risk of recession and lower oil demand, crude prices have stayed above US\$90/bbl. The key reasons in David's view are:
 - ⇒ The political unrest in Nigeria and Northern Iraq, and the perceived threat to supplies are the main price drivers. More recently, concerns that OPEC may lower output from March have contributed to firmer oil prices.
 - ⇒ The world may be pricing oil in euro terms and any US\$ weakness translates into a rise in US\$/bbl crude prices. There are signs that oil may now have assumed the mantle of the world's hedge against inflation.
- Crude prices to decline from the current highs.** We have upgraded our 2008 forecast to US\$87/bbl (WTI). However, we look for prices to fall back to around US\$80–85/bbl during the year as the forecast slowdown in economic growth begins to bite. Our 2010 price forecast shows a decline to US\$79/bbl (WTI) and then to US\$78/bbl by 2011.
- ONGC: Oil price hike, offset by subsidy burden.** Oil price upgrade impacts our target price by 5% to Rs1,100 per share, especially as it is tempered by the adjustment in subsidy burden. ONGC's stock price has fallen by 30% from its peak in the last two months and now trades 15% below our target price. We upgrade our recommendation to Outperform from Neutral.
- Cairn India: Spurred by crude price hike.** Similarly, we raise Cairn India's target price by 11% to Rs224 on the back of the increase in long-term crude prices. Cairn India's stock price has fallen by 19% from its peak in the last two months and now trades below our target price. We maintain our Neutral recommendation.
- Reliance Industries: reserve revision led target price cut.** The impact of the crude oil price increase on RIL will be small, given that oil (in comparison to gas, refining and petrochemicals) contributes towards a small portion of its business. We are cutting our target price by 3.3% to factor in the lower reserve estimates announced by Hardy for KG-D9 and KG-D3 blocks. We revised the value of RIL's equity holdings in line with current market prices.

Outlook

- Reliance Industries is our top sector pick.** Reliance Industries has planned huge capex of more than US\$20bn over the next five years, which we estimate is likely to triple its earnings in five years. In addition, the investments in high growth businesses such as E&P and retail should lead to a consistent rise in ROE.

Please refer to the important disclosures and analyst certification on inside back cover of this document, or on our website www.macquarie.com.au/research/disclosures.

Summary of earnings estimate changes

Fig 1 ONGC: Subsidy burden offsets gains from oil price hike

	FY08E	FY09E	FY10E	FY11E
Old	221,899	214,465	242,303	240,453
New	225,350	223,268	251,190	243,296
% change	1.6%	4.1%	3.7%	1.2%

Source: Macquarie Research, March 2008

Fig 2 Cairn India: Spurred by crude price hike

	FY08E	FY09E	FY10E	FY11E
Old	5,711	17,814	35,785	34,911
New	6,228	22,097	42,638	38,200
% change	9.0%	24.0%	19.1%	9.4%

Source: Macquarie Research, March 2008

Fig 3 Reliance Industries: small impact of crude price upgrade

	FY08E	FY09E	FY10E	FY11E
Old	139,198	168,538	244,470	261,667
New	139,466	171,741	248,801	263,317
% change	0.2%	1.9%	1.8%	0.6%

Source: Macquarie Research, March 2008

Oil price outlook

Fig 4 Breakdown of our oil forecast

US\$/bbl	2004	2005	2006	2007	2008F	2009F	2010F	2011F
Base OPEC	30.00	35.00	36.00	37.50	40.00	42.00	44.00	46.00
Inventory fear	2.15	5.00	6.75	9.00	10.50	8.50	8.50	8.50
Weather impact	0.50	8.00	6.50	5.50	4.50	4.00	4.00	4.00
Refinery problems	0.50	3.30	3.00	3.00	3.00	3.00	3.00	3.00
Disruption eg Nigeria	0.50	4.00	5.00	8.00	9.00	7.50	6.50	6.50
US\$ weakness	3.30	0.05	0.40	3.00	5.00	3.50	0.00	0.00
Inflation hedge	-	-	-	-	5.00	4.00	2.50	1.00
Speculation	0.00	5.65	13.00	14.00	16.25	15.50	14.00	12.50
OPEC basket price	35.94	50.41	60.93	69.55	83.00	79.00	74.00	73.00
Brent								
Brent-OPEC quality differential*	0.75	2.00	3.00	3.00	3.00	3.00	3.00	3.00
Differential premium/(discount)	1.55	2.10	1.50	0.15	-	-	-	-
Brent price	38.24	54.51	65.43	72.70	86.00	82.00	77.00	76.00
WTI								
WTI-Brent quality differential	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Differential premium/(discount)	2.00	0.80	(0.85)	(1.75)	(0.25)	0.75	0.75	0.75
WTI price	41.49	56.56	65.83	72.20	87.00	84.00	79.00	78.00
<i>Brent high</i>	<i>52.00</i>	<i>66.79</i>	<i>78.63</i>	<i>95.81</i>	<i>103.75</i>	<i>95.50</i>	<i>89.50</i>	<i>87.50</i>
<i>Brent low</i>	<i>28.99</i>	<i>40.36</i>	<i>56.19</i>	<i>51.53</i>	<i>75.38</i>	<i>72.00</i>	<i>67.25</i>	<i>67.00</i>
Actual OPEC basket	35.95	50.44	60.99	69.50				
Actual Brent	38.25	54.53	65.42	72.70				
Actual WTI	41.48	56.59	65.83	72.20				

Source: Macquarie Research, March 2008

Fig 5 Oil price forecast

		2006	2007					2008	2009	2010	2011
		Year	Year	1Q	2Q	3Q	4Q	Year	Year	Year	Year
Brent	US\$/bbl										
Old forecast		65.42	72.7	80.5	70.5	72.5	70.5	73.5	68.5	69	71
New forecast		-	-	92.49	82.5	84.5	84.5	86	82	77	76
<i>change</i>	US\$/bbl	-	-					+12.5	+13.5	+8	+5
WTI	US\$/bbl										
Old forecast		65.83	72.2	82	72	74	72	75	70.5	71	73
New forecast		-	-	93	83	86	86	87	84	79	78
<i>change</i>		-	-					+12	+13.5	+8	+5
WTI-Brent differential	US\$/bbl	0.41	-0.5	0.51	0.5	1.5	1.5	1	2	2	2
Dubai	US\$/bbl										
Old forecast		61.62	68.46	75.5	65.85	68.05	66.5	69	64.5	65	67
New forecast		-	-	87.49	77.85	80.05	80.5	81.5	78	73	72
<i>change</i>	US\$/bbl	-	-					+12.5	+13.5	+8	+5
Brent-Dubai differential		3.8	4.24	5	4.65	4.45	4	4.52	4	4	4
Consensus - WTI				87.65	80	81.55	82.25	82.85	78.75	79.95	82.05

Source: Macquarie Research, March 2008

INDIA

Oil and Natural Gas Corp

5 March 2008

ONGC IN **Outperform**

Stock price as of 04 Mar 08	Rs	953.65
12-month target	Rs	1,100.00
Upside/downside	%	+15.4
Valuation	Rs	1,100.00
- DCF (WACC 10.8%)		

GICS sector		energy
Market cap	Rs bn	2,040
30-day avg turnover	US\$m	32.2
Market cap	US\$m	51,096
Number shares on issue	m	2,139

Investment fundamentals

Year end 31 Mar		2007A	2008E	2009E	2010E
Total revenue	bn	822.5	1,039.1	1,031.4	1,051.8
EBITDA	bn	351.3	458.5	471.9	496.9
EBITDA growth	%	10.2	30.5	2.9	5.3
EBIT	bn	227.1	324.9	310.1	358.3
EBIT Growth	%	2.9	43.1	-4.5	15.5
Reported profit	bn	177.7	225.4	223.3	251.2
Adjusted profit	bn	172.9	225.4	223.3	251.2
EPS rep	Rs	83.08	105.36	104.39	117.44
EPS adj	Rs	80.86	105.36	104.39	117.44
EPS adj growth	%	12.5	30.3	-0.9	12.5
PE adj	x	11.8	9.1	9.1	8.1
Total DPS	Rs	35.73	36.00	38.00	42.00
Total div yield	%	3.7	3.8	4.0	4.4
ROE	%	29.7	33.2	28.8	29.0
EV/EBITDA	x	5.4	4.2	4.0	3.8
Net debt/equity	%	-14.8	-19.2	-20.2	-27.7
Price/book	x	3.3	2.8	2.5	2.2

ONGC IN rel SENSEX performance, & rec history



Source: Datastream, Macquarie Research, March 2008 (all figures in INR unless noted)

Analysts

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Upgrade follows crude gains

Event

- Macquarie oil and gas sector head, David Johnson, has upgraded crude oil forecasts by 7–19% for 2008E–11E and the long-term forecast from US\$73/bbl to US\$78/bbl. We raise our target price for ONGC by 5% to Rs1,100. ONGC's share price has fallen by 30% from its peak in the last two months. It now trades below our target price. We upgrade our rating to Outperform from Neutral.

Impact

- Currency and inflation are the new drivers.** Despite the short-term outlook for a seasonal drop in demand and the medium-term outlook for an increasing risk of recession and lower oil demand, crude prices have stayed above US\$90/bbl. The key reasons in David's view are:
 - ⇒ The political unrest in Nigeria and Northern Iraq, and the perceived threat to supplies are the main price drivers. More recently, concerns that OPEC may lower output from March have contributed to firmer oil prices.
 - ⇒ The world may be pricing oil in euro terms and any US\$ weakness translates into a rise in US\$/bbl crude prices. There are signs that oil may now have assumed the mantle of the world's hedge against inflation.
- High crude price driven earnings upgrade.** We upgrade ONGC's earnings for FY08E–11E by 2–4% on the back of the 7–19% upgrade in crude oil price forecasts during that period. The sensitivity of ONGC's earnings is reduced due to a similar change in the oil subsidy burden, especially above US\$55/bbl.
- Terminal oil price hike driven target price upgrade.** Our target price for ONGC is based on discounted cashflow (DCF). Terminal value contributes towards 78% of the weight. As we upgrade the long-term price of oil from US\$73/bbl to US\$78/bbl, we raise our target price for ONGC by 5% to Rs1,100.

Earnings revision

- We upgrade ONGC's FY09E and FY10E earnings by 4.1% and 3.7%, respectively, on the back of US\$13.1/bbl and US\$12.6/bbl upgrades in crude prices.

Price catalyst

- 12-month price target: Rs1,100.00 based on a DCF methodology.
- Catalyst: Oil prices; reserve accretion through exploratory successes.

Action and recommendation

- Small steps to reverse deterioration.** Although ONGC's exploratory success rate is far from satisfactory, we believe its recent moves to farm out interest in the deepwater blocks to experienced global majors such as Petrobras of Brazil are positive. We think there is a higher probability of unlocking value from the deepwater discoveries.
- ONGC is attractive at current valuations.** ONGC has significantly underperformed the SENSEX in the last three years and it now trades at 9.1x FY09E PER. Our new target price of Rs1,100 (previously Rs1,050) suggests 15% potential upside.

Fig 1 Summary of ONGC's net profit changes

Rs m	FY08E	FY09E	FY10E	FY11E
Old	221,899	214,465	242,303	240,453
New	225,350	223,268	251,190	243,296
% change	1.6%	4.1%	3.7%	1.2%

Source: Macquarie Research, March 2008

Fig 2 DCF valuation details

WACC calculation		Rationale behind assumptions	DCF calculation		Terminal value calculation	
WACC	10.8%	High equity contribution	WACC (%)	10.8%	Terminal WACC (%)	10.8%
Risk-free rate	7.5%	10-year government bond yield	PV of FCF to FY10 (Rs m)	473,647	Terminal growth rate (%)	3.0%
Beta	1.04	Forward looking beta: Macquarie Quant team	Terminal value (Rs m)	2,708,215	Implied terminal FCF multiple (x)	12.8
Risk premium	6.0%		PV of terminal value (Rs m)	1,795,223		
Marginal tax rate	33.9%		EV (Rs m)	2,268,870		
Cost of Equity	13.7%		Less: Net debt (Rs m)	-93437		
Gross cost of debt	9.0%		Value for shareholders (Rs m)	2,352,918		
Net cost of debt (post tax)	5.9%		Per share value of ONGC (Rs)	1,100		
Target debt/EV ratio	37.5%					

Source: Macquarie Research, March 2008

Oil and Natural Gas Corporation (ONGC IN, Outperform, Target price: Rs1,100.00)

Profit & Loss					Profit & Loss						
		2003A	2004A	2005A	2006A		2007A	2008E	2009E	2010E	
Revenue	m	348,463	442,517	600,362	714,636	Revenue	m	822,529	1,039,069	1,031,418	1,051,821
Gross Profit	m	251,896	256,341	351,312	376,280	Gross Profit	m	440,134	653,131	668,907	704,703
Cost of Goods Sold	m	96,567	186,175	249,050	338,356	Cost of Goods Sold	m	382,395	385,937	362,512	347,118
EBITDA	m	198,821	202,034	283,610	318,627	EBITDA	m	351,253	458,453	471,931	496,939
Depreciation	m	41,514	65,525	73,586	97,852	Depreciation	m	124,153	133,575	161,798	138,594
Amortisation of Goodwill	m	0	0	0	0	Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0	Other Amortisation	m	0	0	0	0
EBIT	m	157,307	136,509	210,024	220,775	EBIT	m	227,100	324,877	310,133	358,345
Net Interest Income	m	-1,681	-3,822	-1,877	-1,135	Net Interest Income	m	-1,906	-5,953	-3,702	-1,389
Associates	m	0	0	0	0	Associates	m	0	0	0	0
Exceptionals	m	-10,407	1,164	-532	262	Exceptionals	m	4,751	0	0	0
Forex Gains / Losses	m	0	0	0	0	Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	16,781	15,054	16,680	19,905	Other Pre-Tax Income	m	47,527	37,243	43,982	37,519
Pre-Tax Profit	m	161,999	148,905	224,294	239,808	Pre-Tax Profit	m	277,472	356,167	350,414	394,475
Tax Expense	m	-57,576	-54,021	-79,471	-84,932	Tax Expense	m	-98,454	-131,489	-127,728	-143,681
Net Profit	m	104,423	94,884	144,823	154,875	Net Profit	m	179,018	224,678	222,685	250,794
Minority Interests	m	-251	1,078	1,816	899	Minority Interests	m	-1,322	672	582	396
Reported Earnings	m	104,675	93,805	143,007	153,976	Reported Earnings	m	177,696	225,350	223,268	251,190
Adjusted Earnings	m	115,082	92,641	143,540	153,714	Adjusted Earnings	m	172,945	225,350	223,268	251,190
EPS (rep)		48.94	43.86	66.86	71.99	EPS (rep)		83.08	105.36	104.39	117.44
EPS (adj)		53.81	43.31	67.11	71.87	EPS (adj)		80.86	105.36	104.39	117.44
EPS Growth yoy (adj)	%	85.12	-19.50	54.94	7.09	EPS Growth (adj)	%	12.5	30.3	-0.9	12.5
						PE (rep)	x	11.5	9.1	9.1	8.1
						PE (adj)	x	11.8	9.1	9.1	8.1
Total DPS		21.11	16.00	26.67	30.00	Total DPS		35.73	36.00	38.00	42.00
Total Div Yield	%	2.3	1.7	2.8	3.2	Total Div Yield	%	3.7	3.8	4.0	4.4
Weighted Average Shares	M	2139	2139	2139	2139	Weighted Average Shares	m	2,139	2,139	2,139	2,139
Period End Shares	m	2139	2139	2139	2139	Period End Shares	m	2,139	2,139	2,139	2,139

Profit and Loss Ratios					Cashflow Analysis						
		2007A	2008E	2009E	2010E		2007A	2008E	2009E	2010E	
Revenue Growth	%	15.1	26.3	-0.7	2.0	EBITDA	m	351,253	458,453	471,931	496,939
EBITDA Growth	%	10.2	30.5	2.9	5.3	Tax Paid	m	-98,454	-131,489	-127,728	-143,681
EBIT Growth	%	2.9	43.1	-4.5	15.5	Chgs in Working Cap	m	16,758	-12,855	-20,734	-6,795
Gross Profit Margin	%	53.5	62.9	64.9	67.0	Net Interest Paid	m	-1,906	-5,953	-3,702	-1,389
EBITDA Margin	%	42.7	44.1	45.8	47.2	Other	m	25,078	20,018	21,290	17,725
EBIT Margin	%	27.6	31.3	30.1	34.1	Operating Cashflow	m	292,729	328,173	341,057	362,799
Net Profit Margin	%	21.8	21.6	21.6	23.8	Acquisitions	m	0	0	0	0
Payout Ratio	%	44.2	34.2	36.4	35.8	Capex	m	-233,956	-204,810	-222,013	-157,877
EV/EBITDA	x	5.4	4.2	4.0	3.8	Asset Sales	m	0	0	0	0
EV/EBIT	x	8.4	5.9	6.2	5.3	Other	m	47,527	37,243	43,982	37,519
Balance Sheet Ratios						Investing Cashflow	m	-186,429	-167,566	-178,031	-120,358
ROE	%	29.7	33.2	28.8	29.0	Dividend (Ordinary)	m	-76,430	-77,000	-81,278	-89,833
ROA	%	21.6	27.8	24.4	26.0	Equity Raised	m	0	0	0	0
ROIC	%	29.8	38.1	32.7	34.4	Debt Movements	m	-34,096	-6,207	9,918	9,191
Net Debt/Equity	%	-14.8	-19.2	-20.2	-27.7	Other	m	-19,728	-34,342	-57,178	-62,768
Interest Cover	x	119.2	54.6	83.8	258.0	Financing Cashflow	m	-130,254	-117,549	-128,537	-143,411
Price/Book	x	3.3	2.8	2.5	2.2	Net Chg in Cash/Debt	m	-19,204	43,058	34,489	99,030
Book Value per Share		291.0	343.4	382.2	427.7						

Balance Sheet					
		2007A	2008E	2009E	2010E
Cash	m	162,790	205,847	240,336	339,366
Receivables	m	55,584	63,262	67,191	70,713
Inventories	m	77,952	87,443	93,015	97,721
Investments	m	16,976	16,976	16,976	16,976
Fixed Assets	m	649,852	708,648	754,175	763,241
Intangibles	m	0	0	0	0
Other Assets	m	145,836	145,836	145,836	145,836
Total Assets	m	1,108,990	1,228,012	1,317,530	1,433,852
Payables	m	82,744	80,472	73,608	70,917
Short Term Debt	m	44,714	37,992	21,911	31,101
Long Term Debt	m	24,638	25,154	51,154	51,154
Provisions	m	51,563	54,872	52,677	54,749
Other Liabilities	m	273,594	284,347	288,675	298,130
Total Liabilities	m	477,254	482,837	488,024	506,051
Shareholders' Funds	m	627,707	739,789	822,923	920,057
Minority Interests	m	9,389	10,744	11,943	13,103
Other	m	-5,359	-5,359	-5,359	-5,359
Total S/H Equity	m	631,737	745,174	829,506	927,801
Total Liab & S/H Funds	m	1,108,990	1,228,012	1,317,530	1,433,852

All figures in INR unless noted.

Source: Macquarie Research, March 2008

INDIA

Cairn India

5 March 2008

CAIR IN Neutral

Stock price as of 04 Mar 08	Rs	217.95
12-month target	Rs	224.00
Upside/downside	%	+2.8
Valuation - DCF	Rs	224.00

GICS sector		energy
Market cap	Rs m	384,750
30-day avg turnover	US\$m	22.5
Market cap	US\$m	9,638
Number shares on issue	m	1,765

Investment fundamentals

Year end 31 Dec		2006A	2007E	2008E	2009E
Total revenue	bn	0.1	12.8	15.8	50.3
EBITDA	bn	-0.3	5.4	6.7	25.6
EBITDA growth	%	0.0	0.0	24.1	280.6
EBIT	bn	-0.3	5.1	6.2	24.0
EBIT Growth	%	nfm	nfm	21.7	284.8
Reported profit	bn	-0.3	5.1	6.2	22.1
Adjusted profit	bn	-0.3	5.1	6.2	22.1
EPS rep	Rs	-0.17	2.90	3.53	12.52
EPS adj	Rs	-0.17	2.90	3.53	12.52
EPS adj growth	%	nfm	nfm	21.7	254.8
PE adj	x	nfm	75.2	61.8	17.4
Total DPS	Rs	0.00	0.00	0.00	0.00
Total div yield	%	0.0	0.0	0.0	0.0
ROE	%	-0.1	1.7	2.1	7.0
EV/EBITDA	x	-1,191.5	63.9	51.5	13.5
Net debt/equity	%	-19.2	-11.0	-9.3	-7.2
Price/book	x	1.3	1.3	1.3	1.2

CAIR IN rel SENSEX performance, & rec history



Source: Datastream, Macquarie Research, March 2008 (all figures in INR unless noted)

Analyst

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Terminal value-driven upgrade

Event

- Our oil and gas sector head, David Johnson, has upgraded his crude oil forecast by 7–19% for 2008–11 and his long-term forecast from US\$73/bbl to US\$78/bbl. We are raising our target price for Cairn India by 11% due to the significant effect on the terminal value of our DCF-based valuation model. We maintain our Neutral recommendation.

Impact

- Currency and inflation are the new drivers.** Despite the short-term outlook for a seasonal drop in demand and the medium-term outlook for an increasing risk of recession and lower oil demand, crude prices have stayed above US\$90/bbl. The key aspects of David's view are as follows.

⇒ The political unrest in Nigeria and northern Iraq and the perceived threat to supplies are the main price drivers, in our view. More recently, concerns that OPEC may lower output from March have contributed to firmer oil prices.

⇒ The world may be pricing oil in euro terms, and any US\$ weakness translates into a rise in US\$/bbl crude prices. There are signs that oil may now have assumed the mantle of the world's hedge against inflation.

- Sharp rise in target price driven by long-term crude price hike.** As we upgrade our long-term oil-price forecast from US\$73/bbl to US\$78/bbl, we raise our target price for Cairn India by 11% to Rs224. Similar to ONGC (ONGC IN, Rs954, Outperform, TP: Rs1100), the terminal value in our DCF-based valuation of Cairn contributes a significant 50% of weight.
- Longer-term concerns remain.** Cairn has received approval for the pipeline, which, in our view, is a positive development. However, the crude benchmark and potential discount for pricing the Rajasthan crude are still undecided. In addition, the government has asked Cairn India to pay a cess (ranging between US\$2.8–8.1/bbl) for its fields in Rajasthan – a cess it has disputed.

Earnings revision

- We have increased our FY08 and FY09 earnings forecasts for Cairn India by 9.0% and 24%, respectively.

Price catalyst

- 12-month price target: Rs224.00 based on a DCF methodology.
- Catalyst: New finds, upward revision of reserves and tax (cess) incidence.

Action and recommendation

- We derive a sum-of-parts value (DCF valuations for Rajasthan and Ravva fields and relative valuation for other fields) of Rs224ps, or US\$17.8/boe. We have assigned a premium of Rs27ps (~12% of equity value) to Cairn's strong track record in striking oil. We maintain our Neutral recommendation.

Fig 1 Summary of Cairn India's net profit changes

	FY08E	FY09E	FY10E	FY11E
Old	5,711	17,814	35,785	34,911
New	6,228	22,097	42,638	38,200
% change	9.0%	24.0%	19.1%	9.4%

Source: Macquarie Research, March 2008

Fig 2 Cairn's sum-of-parts valuation

Oil reserves	Pessimistic scenario	Base scenario	Optimistic scenario	Valuation Methodology
Ravva Fields	16	18	18	DCF
Rajasthan Fields	144	177	192	DCF
Other Fields	3	4	5	EV/Reserve
Management Premium	8	29	34	
Total	171	227	249	DCF
Market Value	301,973	401,208	439,340	
Probability	15%	60%	25%	
Share Price	224			
Net Market Value (Rs bn)	395,856			
Add: Debt	27,000			
Enterprise Value	422,856			
EV/Reserves	17.8			
# of Shares	1765.3			

Source: Macquarie Research, January 2008

Cairn India (CAIR IN, Neutral, Target price: Rs224.00)

Balance Sheet					Profit & Loss						
		2006A	2007E	2008E	2009E		2006A	2007E	2008E	2009E	
Cash	m	61,348	44,626	55,209	48,551	Revenue	m	59	12,827	15,839	50,348
Receivables	m	1,917	3,514	4,340	13,794	Gross Profit	m	59	12,648	15,623	49,358
Inventories	m	1,251	7,028	8,679	20,691	Cost of Goods Sold	m	0	179	217	990
Investments	m	0	0	0	0	EBITDA	m	-291	5,417	6,726	25,594
Fixed Assets	m	19,962	42,105	59,613	75,999	Depreciation	m	0	301	498	1,630
Intangibles	m	254,115	254,115	254,115	254,115	Amortisation of Goodwill	m	0	0	0	0
Other Assets	m	3,518	3,518	3,518	3,518	Other Amortisation	m	0	0	0	0
Total Assets	m	342,112	354,907	385,474	416,668	EBIT	m	-291	5,116	6,228	23,964
Payables	m	3,269	4,153	13,492	24,589	Net Interest Income	m	-2	0	0	0
Short Term Debt	m	205	7,000	22,000	20,000	Associates	m	0	0	0	0
Long Term Debt	m	4,917	4,917	4,917	4,917	Exceptionals	m	0	0	0	0
Provisions	m	2,782	2,782	2,782	2,782	Forex Gains / Losses	m	0	0	0	0
Other Liabilities	m	37,923	37,923	37,923	37,923	Other Pre-Tax Income	m	0	0	0	0
Total Liabilities	m	49,096	56,775	81,114	90,211	Pre-Tax Profit	m	-292	5,116	6,228	23,964
Shareholders' Funds	m	293,016	298,132	304,360	326,457	Tax Expense	m	0	0	0	-1,867
Minority Interests	m	0	0	0	0	Net Profit	m	-292	5,116	6,228	22,097
Other	m	0	0	0	0	Minority Interests	m	0	0	0	0
Total S/H Equity	m	293,016	298,132	304,360	326,457	Reported Earnings	m	-292	5,116	6,228	22,097
Total Liab & S/H Funds	m	342,112	354,907	385,474	416,668	Adjusted Earnings	m	-292	5,116	6,228	22,097
						EPS (rep)		-0.17	2.90	3.53	12.52
						EPS (adj)		-0.17	2.90	3.53	12.52
						EPS Growth (adj)	%	nmf	nmf	21.7	254.8
						PE (rep)	x	nmf	75.2	61.8	17.4
						PE (adj)	x	nmf	75.2	61.8	17.4
						Total DPS		0.00	0.00	0.00	0.00
						Total Div Yield	%	0.0	0.0	0.0	0.0
						Weighted Average Shares	m	1,765	1,765	1,765	1,765
						Period End Shares	m	1,765	1,765	1,765	1,765
Profit and Loss Ratios					Cashflow Analysis						
		2006A	2007E	2008E	2009E		2006A	2007E	2008E	2009E	
Revenue Growth	%	nmf	21,616.3	23.5	217.9	EBITDA	m	-291	5,417	6,726	25,594
EBITDA Growth	%	nmf	nmf	24.1	280.6	Tax Paid	m	0	0	0	-1,867
EBIT Growth	%	nmf	nmf	21.7	284.8	Chgs in Working Cap	m	0	0	0	0
Gross Profit Margin	%	100.0	98.6	98.6	98.0	Net Interest Paid	m	-2	0	0	0
EBITDA Margin	%	-491.9	42.2	42.5	50.8	Other	m	0	0	0	0
EBIT Margin	%	-491.9	39.9	39.3	47.6	Operating Cashflow	m	-292	5,417	6,726	23,727
Net Profit Margin	%	-494.8	39.9	39.3	43.9	Acquisitions	m	-4	0	0	0
Payout Ratio	%	nmf	0.0	0.0	0.0	Capex	m	-20,984	-22,444	-18,006	-18,016
EV/EBITDA	x	-1,191.5	63.9	51.5	13.5	Asset Sales	m	0	0	0	0
EV/EBIT	x	-1,191.5	67.7	55.6	14.4	Other	m	0	0	0	0
Balance Sheet Ratios						Investing Cashflow	m	-20,988	-22,444	-18,006	-18,016
ROE	%	-0.1	1.7	2.1	7.0	Dividend (Ordinary)	m	0	0	0	0
ROA	%	-0.1	1.5	1.7	6.0	Equity Raised	m	17,998	0	0	0
ROIC	%	nmf	2.2	2.3	8.0	Debt Movements	m	5,122	6,795	15,000	-2,000
Net Debt/Equity	%	-19.2	-11.0	-9.3	-7.2	Other	m	0	0	0	0
Interest Cover	x	-169.5	nmf	nmf	nmf	Financing Cashflow	m	23,120	6,795	15,000	-2,000
Price/Book	x	1.3	1.3	1.3	1.2	Net Chg in Cash/Debt	m	15,337	-16,722	10,583	-6,658
Book Value per Share		166.0	168.9	172.4	184.9						

All figures in INR unless noted.

Source: Macquarie Research, March 2008

INDIA

Reliance Industries

5 March 2008

RIL IN **Outperform**

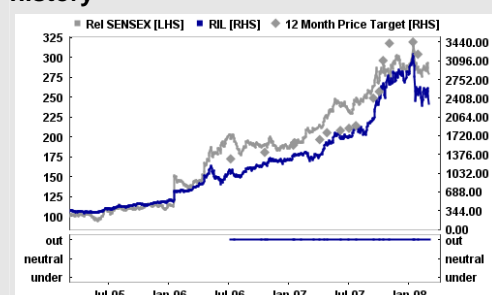
Stock price as of 04 Mar 08	Rs	2,243.20
12-month target	Rs	3,110.00
Upside/downside	%	+38.6
Valuation	Rs	3,110.00
- Sum of Parts		

GICS sector		energy
Market cap	Rs bn	3,261
30-day avg turnover	US\$m	220.5
Market cap	US\$m	81,681
Number shares on issue	m	1,454

Investment fundamentals

Year end 31 Mar		2007A	2008E	2009E	2010E
Total revenue	bn	1,137.7	1,422.1	1,819.7	2,817.2
EBITDA	bn	201.3	241.1	301.4	400.0
EBITDA growth	%	40.3	19.8	25.0	32.7
EBIT	bn	152.3	179.4	221.6	309.9
EBIT Growth	%	40.3	17.8	23.5	39.8
Reported profit	bn	120.7	187.5	171.7	248.8
Adjusted profit	bn	120.7	139.5	171.7	248.8
EPS rep	Rs	83.09	122.67	109.16	158.14
EPS adj	Rs	83.09	91.30	109.16	158.14
EPS adj growth	%	21.9	9.9	19.6	44.9
PE adj	x	27.0	24.6	20.5	14.2
Total DPS	Rs	14.85	17.18	19.01	27.27
Total div yield	%	0.7	0.8	0.8	1.2
ROE	%	22.0	17.4	16.3	19.5
EV/EBITDA	x	17.4	15.6	12.5	9.4
Net debt/equity	%	47.3	22.8	18.7	0.6
Price/book	x	5.1	3.7	3.1	2.5

RIL IN rel SENSEX performance, & rec history



Source: Datastream, Macquarie Research, March 2008 (all figures in INR unless noted)

Analyst

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Unaffected by crude gains

Event

- Macquarie oil & gas sector head, David Johnson, upgraded the crude oil forecast by 7–19% for 2008–11 and long-term forecast from US\$73/bbl to US\$78/bbl. David maintained his forecast for the refining margins. We have cut RIL's target price by 3.3% to Rs3,110 primarily to account for last month's downgrade of reserve estimates by Hardy Oil (HDY LN, Not Rated).

Impact

- Currency and inflation are the new drivers.** Despite the short-term outlook for a seasonal drop in demand, the medium-term outlook for an increasing risk of a recession and lower oil demand, crude prices have stayed above US\$90/bbl. The key reasons in David's view are:
 - ⇒ The political unrest in Nigeria and Northern Iraq and the perceived threat to supplies are main price drivers. More recently, concerns that OPEC may lower output from March have contributed to firmer oil prices.
 - ⇒ The world may be pricing oil in Euro terms and any US\$ weakness translates into a rise in US\$/bbl crude prices. There are signs that oil may now have assumed the mantle of the world's hedge against inflation.
- Reliance Industries: reserve revision led target price cut.** We believe the impact of crude oil price increase on RIL will be small, given that oil (vs gas, refining and petrochemicals) contributes to a small portion of its business. We are cutting our target price by 3.3% to factor in the lower reserve estimates announced by Hardy for KG-D9 and KG-D3 blocks. We have revised the value of RIL's equity holdings inline with current market prices.
- Volumes drive two times earnings growth.** We expect RIL's earnings to grow two times in the next five years given strong volume growth across businesses (refinery: 88%, petrochemicals: 94% and 22x upstream) despite the margin squeeze. We believe there is a huge upside potential from E&P given RIL's large portfolio of prospective blocks and its outstanding success rate.

Earnings revision

- We upgrade RIL's FY09E and FY10E earnings by 1.9% and 1.8% on the back of the US\$13.1/bbl and US\$12.6/bbl upgrade in crude price, respectively.

Price catalyst

- 12-month price target: Rs3,110.00 is based on a Sum of the Parts methodology.
- Catalyst: New oil and gas finds and improved clarity on organised retail.

Action and recommendation

- Reliance Industries is our top sector pick.** Reliance Industries has planned a staggering capex of more than US\$20bn over the next five years, which is likely to double earnings in five years. In addition, we believe investments in high growth businesses, like E&P and retail, will lead to a consistent rise in ROE.

Fig 1 Summary of Reliance Industries' net profit changes

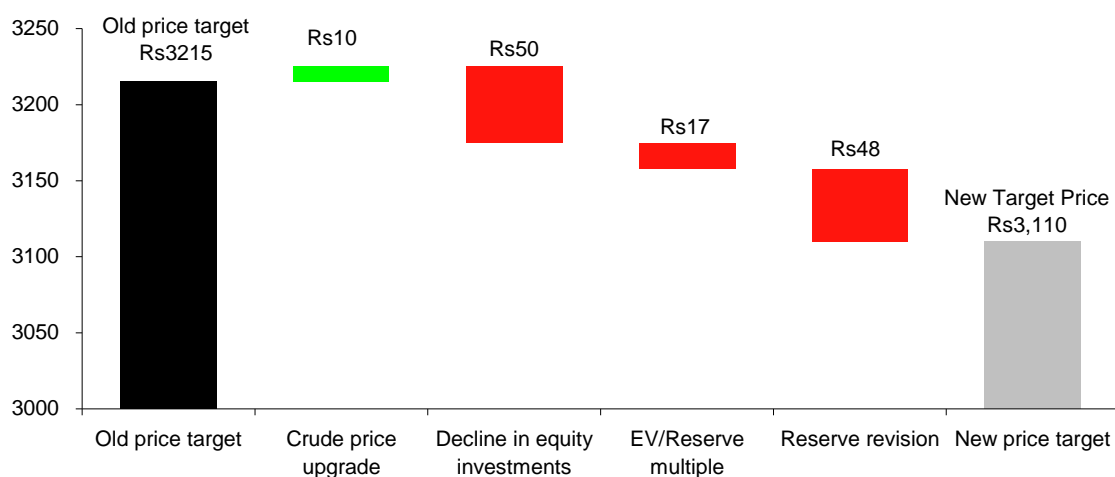
	FY08E	FY09E	FY10E	FY11E
Old	139,198	168,538	244,470	261,667
New	139,466	171,741	248,801	263,317
% change	0.2%	1.9%	1.8%	0.6%

Source: Macquarie Research, March 2008

Fig 2 Reliance Industries: Segment-wise sum of the parts valuation

	Contribution to value of RIL (Rs mn)	Contribution to value of RIL (Rs/ share)	Basis for valuation
Core current business			
Refining and Petrochemicals business*	2,041,991	1,298	DCF based valuation
IPCL Petrochemicals Business	109,422	70	DCF based valuation
Auto-fuel retailing	141,237	90	DCF based valuation
E&P business (KG basin gas)	330,753	210	DCF based valuation
E&P business (KG basin oil)	95,472	61	
Contribution from main business segments	2,718,875	1,728	
Other assets and investments			
Value of 70% stake in Reliance Petroleum	517,338	329	Valuation at mkt price
Treasury stock (14% of equity capital)	504,611	321	Valuation at mkt price
Contribution from assets and investments	1,021,949	650	
Option value: Projects in gestation period			
CBM-Sohagpur and NEC 25 Gas	289,776	184	Using EV/ boe
Other E&P (D9, D3 and GS-01)	110,897	70	Using EV/ boe
Organised retail venture	259,047	165	DCF based valuation
2 m tpa Ethylene cracker	492,209	313	DCF based valuation
Total value per share	4,522,808	3,110	

Source: Macquarie Research, March 2008

Fig 3 Summary of key factors contributing to the changes in our target price

Source: Macquarie Research, January 2008

Reliance Industries Ltd (RIL IN, Outperform, Target price: Rs3,110.00)

Profit & Loss					Profit & Loss						
		2003A	2004A	2005A	2006A		2007A	2008E	2009E	2010E	
Revenue	m	459101	520253	665977	830248	Revenue	m	1,137,701	1,422,058	1,819,680	2,817,183
Gross Profit	m	118974	144218	168638	221503	Gross Profit	m	286,914	321,219	425,897	584,227
Cost of Goods Sold	m	340127	376035	497339	608745	Cost of Goods Sold	m	850,787	1,100,839	1,393,783	2,232,956
EBITDA	m	83831	98438	127966	143487	EBITDA	m	201,279	241,094	301,372	400,021
Depreciation	m	28375	32508	37274	34949	Depreciation	m	48,995	61,689	79,757	90,111
Amortisation of Goodwill	m	0	0	0	0	Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0	Other Amortisation	m	0	0	0	0
EBIT	m	55456	65929	90692	108537	EBIT	m	152,284	179,406	221,615	309,910
Net Interest Income	m	-10386	-9197	-11048	-4426	Net Interest Income	m	-9,488	-15,674	-24,624	-26,428
Associates	m	798	581	0	4747	Associates	m	-28	1,344	1,344	1,344
Exceptionals	m	0	0	306	-995	Exceptionals	m	0	48,000	0	0
Forex Gains / Losses	m	0	0	0	0	Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	2865	5788	11305	2380	Other Pre-Tax Income	m	3,702	6,272	8,103	10,296
Pre-Tax Profit	m	48734	63101	91255	110243	Pre-Tax Profit	m	146,470	219,348	206,438	295,121
Tax Expense	m	-8701	-11411	-14972	-16295	Tax Expense	m	-25,723	-32,945	-33,983	-34,165
Net Profit	m	40033	51690	76282	93948	Net Profit	m	120,747	186,403	172,456	260,956
Minority Interests	m	0	0	0	0	Minority Interests	m	1	1,063	-715	-12,156
Reported Earnings	m	40033	51690	76282	93948	Reported Earnings	m	120,748	187,466	171,741	248,801
Adjusted Earnings	m	40033	51690	75976	94943	Adjusted Earnings	m	120,748	139,466	171,741	248,801
EPS (rep)		28.68	37.03	54.72	67.44	EPS (rep)		83.09	122.67	109.16	158.14
EPS (adj)		28.68	37.03	54.50	68.15	EPS (adj)		83.09	91.30	109.16	158.14
EPS Growth yoy (adj)	%	26.06	29.12	47.17	25.05	EPS Growth (adj)	%	21.9	9.9	19.6	44.9
						PE (rep)	x	27.0	18.3	20.5	14.2
						PE (adj)	x	27.0	24.6	20.5	14.2
Total DPS	%	5.00	5.00	8.59	11.42	Total DPS		14.85	17.18	19.01	27.27
Total Div Yield	%	0.3	0.3	0.5	0.7	Total Div Yield	%	0.7	0.8	0.8	1.2
Weighted Average Shares	%	1396	1396	1394	1393	Weighted Average Shares	m	1,453	1,528	1,573	1,573
Period End Shares	%	1396	1396	1393	1393	Period End Shares	m	1,453	1,573	1,573	1,573

Profit and Loss Ratios					Cashflow Analysis						
		2007A	2008E	2009E	2010E		2007A	2008E	2009E	2010E	
Revenue Growth	%	37.0	25.0	28.0	54.8	EBITDA	m	201,279	241,094	301,372	400,021
EBITDA Growth	%	40.3	19.8	25.0	32.7	Tax Paid	m	-25,723	-32,945	-33,983	-34,165
EBIT Growth	%	40.3	17.8	23.5	39.8	Chgs in Working Cap	m	-56,040	-19,826	-30,143	-74,128
Gross Profit Margin	%	25.2	22.6	23.4	20.7	Net Interest Paid	m	-9,488	-15,674	-24,624	-26,428
EBITDA Margin	%	17.7	17.0	16.6	14.2	Other	m	40,477	-13,148	6,062	-9,939
EBIT Margin	%	13.4	12.6	12.2	11.0	Operating Cashflow	m	150,504	159,502	218,685	255,360
Net Profit Margin	%	10.6	13.1	9.5	9.3	Acquisitions	m	18,378	-17,330	0	0
Payout Ratio	%	17.9	18.8	17.4	17.2	Capex	m	-362,169	-261,721	-184,474	-65,768
EV/EBITDA	x	17.4	15.6	12.5	9.4	Asset Sales	m	0	0	0	0
EV/EBIT	x	23.0	20.9	16.9	12.1	Other	m	3,702	6,272	8,103	10,296
Balance Sheet Ratios						Investing Cashflow	m	-340,089	-272,779	-176,371	-55,472
ROE	%	22.0	17.4	16.3	19.5	Dividend (Ordinary)	m	-21,580	-26,248	-29,908	-42,904
ROA	%	13.9	10.9	10.3	12.9	Equity Raised	m	601	1,200	0	0
ROIC	%	18.7	15.4	15.2	19.9	Debt Movements	m	103,087	372,445	39,774	-21,973
Net Debt/Equity	%	47.3	22.8	18.7	0.6	Other	m	87,257	224,352	29,732	90,207
Interest Cover	x	16.1	11.4	9.0	11.7	Financing Cashflow	m	169,365	571,749	39,598	25,330
Price/Book	x	5.1	3.7	3.1	2.5	Net Chg in Cash/Debt	m	-20,220	506,473	81,912	225,218
Book Value per Share		437.4	613.6	722.9	901.2						

Balance Sheet					
		2007A	2008E	2009E	2010E
Cash	m	19,370	483,385	531,445	718,211
Receivables	m	38,314	77,719	96,015	144,524
Inventories	m	124,563	159,679	169,476	206,170
Investments	m	52,680	93,452	128,452	163,452
Fixed Assets	m	894,961	1,075,767	1,188,636	1,176,655
Intangibles	m	0	0	0	0
Other Assets	m	148,912	137,900	141,223	144,728
Total Assets	m	1,278,800	2,027,903	2,255,247	2,553,740
Payables	m	176,908	194,713	196,120	210,634
Short Term Debt	m	84,227	55,215	56,716	76,716
Long Term Debt	m	252,288	653,746	692,018	650,046
Provisions	m	20,664	43,217	43,217	43,217
Other Liabilities	m	74,850	91,396	104,845	118,146
Total Liabilities	m	608,936	1,038,286	1,092,917	1,098,759
Shareholders' Funds	m	682,190	1,011,869	1,183,868	1,464,363
Minority Interests	m	34,220	24,250	24,965	37,120
Other	m	-46,548	-46,502	-46,502	-46,502
Total S/H Equity	m	669,863	989,617	1,162,331	1,454,982
Total Liab & S/H Funds	m	1,278,799	2,027,903	2,255,247	2,553,740

All figures in INR unless noted.

Source: Macquarie Research, March 2008

Important disclosures:

<p>Recommendation definitions</p> <p>Macquarie - Australia/New Zealand Outperform – return >5% in excess of benchmark return (>2.5% in excess for listed property trusts) Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts) Underperform – return >5% below benchmark return (>2.5% below for listed property trusts)</p> <p>Macquarie - Asia Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%</p> <p>Macquarie First South - South Africa Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%</p> <p>Macquarie - Canada Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return</p> <p>Macquarie - USA Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return</p> <p>Recommendations – 12 months</p> <p>Note: Quant recommendations may differ from Fundamental Analyst recommendations</p>	<p>Volatility index definition*</p> <p>This is calculated from the volatility of historic price movements.</p> <p>Very high–highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.</p> <p>High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.</p> <p>Medium – stock should be expected to move up or down at least 30–40% in a year.</p> <p>Low–medium – stock should be expected to move up or down at least 25–30% in a year.</p> <p>Low – stock should be expected to move up or down at least 15–25% in a year.</p> <p>* Applicable to Australian/NZ stocks only</p>	<p>Financial definitions</p> <p>All "Adjusted" data items have had the following adjustments made: Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests</p> <p>EPS = adjusted net profit / epowa* ROA = adjusted ebit / average total assets ROA Banks/Insurance = adjusted net profit / average total assets ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares</p> <p>All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).</p>
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Recommendation proportions – For quarter ending 31 December 2007

	AU/NZ	Asia	RSA	USA	CA
Outperform	46.39%	67.98%	73.08%	47.06%	70.00%
Neutral	41.24%	16.78%	21.15%	41.18%	26.92%
Underperform	12.37%	15.24%	5.77%	11.76%	3.08%

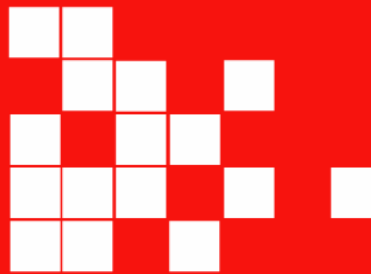
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