INDIA

Cairn India

9 January 2007

CAIR IN		Underperform
Stock price as of	Rs	160.00
12-month target	Rs	130.00
Upside/downside	%	-19.0
Valuation	Rs	145.00
- Sum of Parts		
GICS sector		energy
Market cap	Rs m	287,728
Market cap	US$m	6,512
Number shares on issue	m	1,798

Investment fundamentals

Year end 31 Mar		2008E	2009E	2010E	2011E
Total revenue	m	11,974	34,910	69,439	79,004
EBIT	m	-1,339	12,103	25,866	22,886
EBIT Growth	%	nmf	nmf	113.7	-11.5
Recurring profit	m	-5,530	7,392	22,035	20,455
Adjusted profit	m	-5,530	6,801	20,273	18,818
EPS adj	Rs	-3.07	3.78	11.27	10.46
EPS adj growth	%	nmf	nmf	198.1	-7.2
PE adj	x	nmf	42.3	14.2	15.3
ROA	%	-0.4	3.6	7.6	6.7
ROE	%	-2.0	2.4	6.9	6.0
EV/EBITDA	x	115.9	16.3	8.7	9.2
Price/book	x	1.0	1.0	1.0	0.9

Peer valuations

Oil reserves	Reserves (boe)	Enterprise value (US$bn)	EV/Reserves (US$/boe)
Cairn India#	527	6.1	11.7
ONGC	6,338	42	6.6
ONGC*	6,338	25	4.0
RIL	3,402	2.9	0.9

#At the IPO sale price
*Based on our target price

Source: Macquarie Research, January 2007

Analysts

Jal Irani
91 22 6653 3040 jal.irani@macquarie.com
Amit Mishra
91 22 6653 3051 amit.mishra@macquarie.com

Valuation is key

Event

- Cairn India, which completed its US$1.9bn initial public offering (IPO) last month, will list on the NSE today. It has the second-largest oil reserves in India. However, the overhang from crude evacuation uncertainties and the cess burden still exists. We initiate coverage with an Underperform rating and a target price of Rs130 per share.

Impact

- **Marketability discount and high lifting cost.** We believe crude oil from Cairn's Rajasthan blocks is viscous in nature, which increases its propensity to solidify at lower temperatures. Cairn intends to use hot water injection techniques for exploration, which will increase operating costs for these fields. We estimate that the crude will fetch a price discount of ~10% over WTI.
- **Crude transportation plans uncertain.** The company plans to transport crude oil via a long pipeline to ports in the Mundra–Kandla area, and then via heated tanker to the MRPL refinery at Mangalore. Cairn's development plan assumes MRPL will develop the pipeline and related infrastructure to transport the crude oil and condensate. We think there is a risk that the pipeline may not be ready in time for production.
- **Disputed tax burden (cess) a potential drain.** According to the company prospectus, the government has asked Cairn India to pay a cess (ranging between US$2.8–8.1/bbl) for its fields in Rajasthan, even though the PSC states that ONGC (ONGC IN, Rs910, UP, TP: Rs550) has to bear even Cairn's share of the burden. Cairn has disputed the matter. We estimate an NPV impact of Rs3–11/share if Cairn bears the burden.

Price catalyst

- 12-month price target: Rs130.00 based on a Sum of Parts methodology.
- Catalyst: New finds, upward revision of reserves, tax (cess) incidence.

Action and recommendation

- **We attribute a sum-of-parts value** (DCF valuations for Rajasthan and Ravva fields and relative valuation for other fields) of Rs145/share or US$10.5/boe. We have assigned a premium of Rs18 per share (~12% of equity value) to Cairn's strong track record in striking oil.
- **We initiate coverage with an Underperform rating.** The initial sale price of Rs160per share implies an EV/reserve multiple of US$11.6/boe, compared to ONGC's US$6.6/boe, Reliance Industries' (RIL IN, Rs1,277, Outperform, TP: Rs1,415) US$0.9/boe and the global peer average of US$12.6/boe. Our target price of Rs130 per share (~10% discount to the NPV value) provides 19% downside from the IPO price.
- **Reliance presents greater value.** Neither ONGC nor Reliance is strictly comparable, as ONGC's cashflows are significantly constrained by the subsidy and excess tax (cess) burdens, while Reliance's reserves are predominantly gas. But the difference in valuation is significant, especially for Reliance's oil and gas business at US$0.9/boe and ONGC at US$6.6/boe.

Company profile

Leading private player in the Indian crude oil and natural gas industry

Cairn India is a newly incorporated company and has been promoted by Cairn Energy PLC, a crude oil and natural gas E&P company. At the completion of the reorganisation, Cairn India has acquired the subsidiaries which hold all of the ownership and operated interests in Cairn Energy PLC's Indian crude oil and natural gas development and production assets, and the majority of its Indian crude oil and natural gas exploration assets (Figures 1, 3 and 14).

Fig 1 Cairn India: summary of interests in E&P assets

Block	Interest	Partners	Operator
Production & Development			
Block PKGM-1	22.5%	ONGC (40%), Ravva Oil and others (37.5%)	Cairn India
Block CB/OS-2	40.0%	ONGC (50%), Tata Petrodyne Limited (10%)	Cairn India
Block RJ-ON-90/1	70.0%	ONGC (30%)	Cairn India
Exploration			
CB-ONN-2001/1	30.0%	ONGC (70%)	ONGC
CB-ONN-2002/1	30.0%	ONGC (70%)	ONGC
KG-DWN-98/2	10.0%	ONGC (90%)	ONGC
GV-ONN-97/1	15.0%	ONGC (40%), IOC (30%), Cairn Energy (15%)	ONGC
GV-ONN-2002/1	50.0%	Cairn Energy Group (50%)	Cairn India
GV-ONN-2003/1	24.0%	ONGC (51%), Cairn Energy Group (25%)	Cairn India
GS-OSN-2003/1	49.0%	ONGC (51%)	ONGC
KG-ONN-2003/1	49.0%	ONGC (51%)	Cairn India
VN-ONN-2003/1	49.0%	ONGC (51%)	Cairn India
RJ-ONN-2003/1	30.0%	ONGC (36%), ENI India Limited (34%)	ENI India Ltd

Source: Company Data, Macquarie Research, January 2007

Cairn Energy PLC has a long and proven oil and gas exploration expertise in India, having made 29 hydrocarbon discoveries since 1994.

- In 2004, Cairn made the largest onshore crude oil discovery in India since 1985 when it discovered the Mangala field in Rajasthan. Since then, Cairn has made 17 additional discoveries in the Rajasthan block and continues to undertake exploration work.
- The total gross 2P reserves attributable to fields in production or under development in which Cairn India has interests are stated to be 754mmboe. Its net working interest in these 2P reserves is stated to be 472mmboe (Figure 2). In addition to 2P reserves, the gross contingent resources attributable to these fields are stated to be 414mmboe (Figure 3).
- However, we believe the reserves estimates for Ravva fields are underestimated by Cairn India. Hence we estimate higher net 2P reserves of 77mmboe and contingent resources of 28mmboe.
- In the Rajasthan block, the total gross 2P reserves attributable to fields in development in which Cairn India has interests are stated to be 632mmboe. Its net working interest in this 2P reserve is stated to be 442mmboe.
- We have estimated the 1P and 2P reserves for the Ravva, Rajasthan, CB/OS-2 and KD-DWN-98/2 fields at the 20% and 60% probabilities of contingent reserves converting to 1P and 2P reserves. We estimate the 1P reserves for Cairn to be 527mmboe and 2P reserves to be 646mmboe (Figure 2).

Fig 2 Cairn India: estimated 1P and 2P reserves

Fields	1P Reserves	2P Reserves
Ravva Fields	72	77
Rajasthan Fields	438	550
Other Fields	17	19
Total	**527**	**646**

Source: Company data, Macquarie Research, January 2007

Fig 3 Cairn India: stated details of resources

	Gross 2P Reserves Initially in place	Cairn's share of in place reserves	Gross Proved Reserves	Working Interest 1P Reserves	Gross Proved plus Probable Reserves	Net Working Interest 2P Reserves	Gross Contingent Resources
Rajasthan Block							
Mangala	1202	843	225	157	428	300	120
Bhagyam	468	328	0	0	140	98	56
Aishwariya	249	173	0	0	56	39	20
Total "MBA: Fields	***1919***	**1344**	***225***	***157***	***624***	***437***	***196***
Raj Block Small Fields	298	186	4	3	8	5	7
Raj Block Other Fields	1443	433	0	0	0	0	54
Rajasthan Block Total	**3660**	**1963**	**229**	**160**	**632**	**442**	**257**
Ravva Fields	506	115	83	19	106	24	0
CB/OS-2 Fields	126	47	11	4	16	6	14
KG-DWN-98/2	302	30	0	0	0	0	143
Total	**4594**	**2155**	**323**	**183**	**754**	**472**	**414**

Source: Company Data, Macquarie Research, January 2007

Lifting cost and pricing uncertainty

Marketability discount and high lifting cost

Crude oil at the Northern Fields is characterised by its viscous nature in the reservoir and its propensity to solidify at certain temperatures. To extract this waxy crude oil, the company intends to use hot water injection as the recovery technique at these fields. This technique hasn't been used in this large scale by any other company globally. It is likely to increase the operating costs for production for these fields. In addition, we believe the waxy nature of crude is likely to fetch a discount of 10% over WTI.

Crude transportation plans uncertain

As per the current plan, crude oil from Rajasthan fields will be transported via an approximately 500km long pipeline to the northwestern coast of India where there are port facilities in the Mundra–Kandla area. It will then travel via heated tanker to the MRPL refinery at Mangalore and potentially to other Indian refineries.

The production sharing contract (PSC) for the Rajasthan block specifies that Cairn is obliged to sell 100% of the crude oil from this block to the Government of India (GoI) or its nominee, Mangalore Refinery and Petrochemicals Limited (MRPL), and the GoI is obliged to buy the crude oil.

Cairn's development plan for the Mangala field assumes that MRPL would develop a pipeline and related infrastructure to transport the crude oil and condensate from the Mangala field. However, MRPL has provided limited information regarding the status of its pipeline studies until now.

Disputed tax burden (cess) a potential drain

Cairn has a 70% stake in its fields in Rajasthan, which comprise of three large fields: Mangala, Bhagyam and Aishwariya, in addition to a few small fields.

According to the company prospectus, the government has asked Cairn India to pay a cess (ranging between US$2.8–8.1/bbl) for its stake in the Rajasthan fields, even though the production sharing contract states that ONGC has to bear even Cairn's share of the burden. Cairn has disputed the matter. We estimate an NPV impact of Rs3–11/share if Cairn bears the burden.

Valuation at high end of range

We have followed two different methodologies for valuing Cairn India:

1) Sum of parts valuation, and

2) EV/reserves multiples.

1) Sum of parts valuation – Rs145/share

We have valued the Rajasthan fields, Ravva fields, CB/OS-2 and KG-DWN-98/2 separately. We estimate the aggregate value of the fields at Rs257bn, or Rs145 per share (Figure 4).

Fig 4 Cairn India: sum-of-parts valuation snapshot

Oil reserves	Pessimistic scenario	Base scenario	Optimistic scenario	Valuation Methodology
Ravva Fields	11	12	13	DCF
Rajasthan Fields	101	109	122	DCF
Other Fields	3	4	5	EV/Reserve
Management Premium	13	19	20	
Total	128	144	160	DCF
Market Value	225,500	253,780	282,476	
Probability	15%	60%	25%	
Share Price		145		
Net Market Value (Rs bn)		256,712		
Add: Debt		27,000		
Enterprise Value		283,712		
EV/Reserves		**10.5**		

Source: Company data, Macquarie Research, January 2007

Our estimate of value also attributes a premium of Rs18 per share (~12% of share price) to management's significant track record of successfully finding oil.

Fig 5 Cairn Energy deserves a management premium for significant finding success

	No. of discoveries						
Company	Oil	Gas	Relinquished	Total	Commerciality Approved	Development plan approved	Under preparation/ evaluation of commerciality/ Development plan
Cairn Energy	**19**	**4**	**1**	**22**	**9**	**8**	**13**
Reliance Industries	3	20	0	23	9	2	14
ONGC	0	3	0	3	0	0	3
GSPC	4	1	0	5	0	0	5
Essar Oil	1	0	0	1	1	0	0
Focus Energy	0	1	0	1	0	0	1
British Gas	1	0	0	1	0	0	1
Niko Resources	0	2	0	2	2	2	0

Source: Directorate of Hydrocarbons, Macquarie Research, January 2007

Rajasthan fields

Using a DCF methodology, we have valued the Rajasthan fields (which include Mangala, Bhagyam, Aishwariya and other fields in the Rajasthan block) to be Rs113 per share. Key assumptions are as follows:

- We have used three scenarios by varying the percentage of contingent reserves that are converted to proved reserves. In addition, our optimistic case valuation assumes that Cairn will not bear the cess on production from this field.
- We have used the production projections of DeGolyer and MacNaughton (given in the prospectus) to calculate the cashflow. We have assumed a discount of 10% over the WTI crude estimates to factor the lower realisations from waxy crude at the Rajasthan fields.

- We have assumed the operating expense per barrel to be US$1.5, which is higher than the operating expense in the Ravva fields of US$0.95/bbl. We expect the higher operating costs because of the higher viscosity of crude in the Rajasthan fields which will require advanced technologies for oil recovery.

Fig 6 Cairn India: DCF valuation summary for Rajasthan fields

Rajasthan oil reserves	Pessimistic scenario	Base case	Optimistic scenario
Initial proved reserves (mn bbl)	398	398	398
Incremental reserves (mn bbl)	0.0	38.6	57.8
Total reserves (mn bbl)	398	436	456
DCF value per share (Rs)	**101**	**109**	**122**
Probability of occurrence	15%	45%	40%
Value of Rajasthan fields per Cairn share (Rs)		**113**	
Proved Reserves		**438**	
EV/ reserves (US$/bbl)		**10.1**	

Source: Company Data, Macquarie Research, January 2007

Ravva fields

- Using a DCF methodology, we have valued the Ravva fields at Rs12 per share (Figure 7). We have valued the Ravva fields under three scenarios by varying the percentage of contingent reserves being converted to proved reserves.
- We have used the production projections of DeGolyer and MacNaughton (given in the prospectus) to calculate the cashflow. We have assumed the operating expense per barrel to be equal to the existing rate of US$0.95, which is the lowest among global peers.

Fig 7 Cairn India: DCF valuation summary for Ravva fields

Ravva oil reserves	Pessimistic scenario	Base case	Optimistic scenario
Initial proved reserves (mn bbl)	66	66	66
Incremental reserves (mn bbl)	0.0	18.5	27.8
Total reserves (mn bbl)	66	85	94
DCF value per share (Rs)	**11**	**12**	**13**
Probability of occurrence	15%	60%	25%
Value of Ravva operations per Cairn share (Rs)		**12**	
Reserves		**72**	
EV/ reserves (US$/bbl)		**6.7**	

Source: Company Data, Macquarie Research, January 2007

Other fields

- We have valued the other fields (CB/OS-2 fields and KG-DWN-98/2) using an EV/reserve multiple of US$10/boe. The CB/OS-2 field is in the production stage and Cairn's share in the field is 30%. The value of CB/OS-2 comes to Rs2 per share at the recovery rate of 50%.
- The KG-DWN-98/2 field is in the developmental stage and Cairn India has a 10% stake. The value of this field comes to Re1 per share assuming three years to production and a recovery rate of 50%.

Fig 8 Cairn India: other fields valuation

	EV/ reserves			
	ONGC	**US$8/bbl**	**US$10/bbl**	**Global average**
EV/reserves (US$/bbl)	6.6	8.0	10.0	12.5
Impact on Enterprise value (Rs bn)	5	6	8	9
WACC (%)	10.0	10.0	10.0	10.0
Present value of impact on EV (Rs bn)	4.1	5.3	6.7	8.3
Impact on EV/share (Rs)	**2**	**3**	**4**	**5**

Source: Company Data, Macquarie Research, January 2007

2) EV/reserves based valuation

- We have estimated the value of the company on the basis of our estimated proved resources. We have estimated that Cairn India's share of 1P reserves across the Rajasthan, Ravva, CB/OS-2 and KG-DWN-98/2 fields is 527mmboe (Figure 2).
- We have calculated the market value of the company at three multiples – US$6.6/boe (~ONGC), US$9.0/boe and US$12.5/boe (global peer average) – to be Rs93, Rs124 and Rs171 per share respectively (Figure 9).
- We have added a management premium of Rs18/share.

Fig 9 Cairn India: multiple (EV/reserves) based valuations snapshot

Oil reserves	ONGC - US$6.6/boe	US$9/boe	Global Avg US$12.5/bbl
Ravva Fields (EV/Share)	12	16	23
Rajasthan Fields (EV/Share)	75	102	140
Other Fields (EV/Share)	3	4	5
Management Premium	20	20	20
Less: Net Debt (per Share)	15	15	15
Share Price	93	124	171

Source: Company Data, Macquarie Research, January 2007

Initial sale price implied valuation

Cairn India has completed an initial public offering of 3,288m shares at the lower end of offer price range of Rs160–190. Three companies had acquired stake in Cairn India in the pre-IPO placement, and of these, Petronas (Petroleum Nasional Berhad) has acquired a 10% stake. Pre-IPO private placement, which initially was done at a price of Rs176, also was finally completed at Rs160 per share.

Fig 10 Cairn India: pre-IPO private placement implied valuation

Price (Rs)	160
No. of Shares	1765.3
Amt Paid (Rs bn)	282.4
Total shares	1765.3
Percentage Stake	100.0
Implied Market Value (Rs bn)	282.4
Implied Market Value (US$ bn)	6.3
IPO Amount (US$ bn)	1.2
Debt (post issue) (US$ bn)	0.6
Enterprise Valuation (US$ bn)	6.9
Less: Market Premium (US$ bn)	0.7
Implied EV/Reserves	11.7

Source: Company Data, Macquarie Research, January 2007

Fig 11 EV/reserve for global oil and gas peers

	EV (US$mn)	Reserves (mmboe)	EV/ Reserves (US$)
Royal Dutch Shell	226,868	11,239	20.2
Exxon Mobil	403,026	21,642	18.6
Anadarko Petroleum	45,061	2,449	18.4
Total	181,716	10,591	17.2
CNOOC	36,236	2,361	15.3
Amerada Hess	16,725	1,093	15.3
BP	226,912	17,616	12.9
Petrochina	234,861	19,557	12.0
Apache Corp	25,080	2,117	11.8
Petrobras	111,125	11,820	9.4
ODA Rosneft	109,558	11,813	9.3
ONGC	41,850	6,338	6.6
Lukoil	78,812	19,747	4.0
Average			**12.6**

Source: Company Data, Bloomberg, Macquarie Research, January 2007

Reliance presents greater value

Neither ONGC nor Reliance is strictly comparable. ONGC's cashflows are significantly constrained by subsidy burden and high taxes (cess), and in addition it has a near-zero track record of finding oil or gas. Reliance's reserves are predominantly gas, which typically generate lower price realisation. But the difference in valuations is significant, especially for Reliance's oil and gas business at US$0.9/boe and ONGC at US$6.6/boe.

Fig 12 Indian E&P companies' comparative valuations

Oil reserves	Reserves (boe)	Enterprise Value (US$ bn)	EV/Reserves (US$/boe)	Basis of Valuation
Cairn India	527	6.1	11.7	Initial sale price
ONGC	6,338	42	6.6	Current Market Price
ONGC	6,338	25	4.0	At our target price
Reliance Industries	3,402	2.9	0.9	Based on our DCF estimate

Source: Company Data, Macquarie Research, January 2007

Appendix 1: Key valuation assumptions

Fig 13 Key assumptions for valuations

	FY06	FY07E	FY08E	FY09E	FY10E	FY11E	FY12E	FY13E
Crude Oil realisation for Rajasthan Fields (US$/bbl)*	64.6	59.8	57.1	51.2	46.8	47.2	47.2	47.2
Crude Oil realisation for Ravva Fields (US$/bbl)^	71.8	66.4	63.4	56.9	52.0	52.4	52.4	52.4
Production schedule for Rajasthan Fields (bbl)	0.0	0.0	2.0	36.0	96.0	111.0	112.0	108.0
Production schedule for Ravva Fields (bbl)	11.3	11.3	10.9	10.6	10.3	10.0	9.7	9.4
Exchange rate (INR/US$)	45	45	43	42	40	40	40	40

*Discount to WTI

^Premium to Minas-Tapis light crude oil benchmark

Source: Macquarie Research, January 2007

Fig 14 Cairn India: DCF valuation of the firm

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
USD/INR	47	45	44	45	45	43	42	40	40	40	40	40
Proved reserves in mn bbl	464	460	456	452	448	443	426	512	468	423	380	342
Cash Flow From Operations	67	89	84	110	101	124	573	1,112	1,111	1,118	1,079	1,114
Capex US$m	6	8	10	64	275	274	273	34	34	33	33	33
Net Cash Inflow (US$m)	61	81	74	46	(174)	(150)	301	1,078	1,077	1,085	1,045	1,081
PV of cash flows (US$m)	82	98	82	46	(158)	(124)	224	730	661	604	528	495
PV of cash flows (Rs m)	3,858	4,449	3,556	2,074	(7,097)	(5,356)	9,332	29,407	26,456	24,166	21,126	19,820
											Terminal Value	**17717**

WACC Calculations		
Risk-free rate (%)	7.5	10-year government bond yield
Market risk premium (%)	7.0	
Total market return (%)	14.5	
Beta (x)	1.03	Taking ONGC's Beta as proxy
Cost of equity (%)	**14.7**	
Gross cost of debt (%)	8.0	
Tax rate (%)	33.6	Marginal tax rate
Net cost of debt (%)	**5.3**	
Debt/capital ratio (%)	48.0	
WACC (%)	**10.2%**	
DCF calculation		
WACC (%)	10.2	
PV of FCF to 2015 (Rs mn)	134,972	
Terminal Value	304,085	
PV of Terminal Value	139,346	
Value of other fields	6643	
Enterprise Value	280,960	10.85 US$/boe
Less: Debt	27,180	
Est Value of Equity	253,780	
NPV per CAIRN share (Rs)	144	

Source: Company data, Macquarie Research, January 2007

Cairn India (CAIR IN, Underperform, Target price: Rs130.00)

Quarterly Results		3Q/07E	4Q/07E	1Q/08E	2Q/08E
Revenue	**m**	**719**	**719**	**2,993**	**2,993**
Gross Profit	**m**	**708**	**708**	**2,941**	**2,941**
Cost of Goods Sold	m	11	11	53	53
EBITDA	**m**	**114**	**114**	**621**	**621**
Depreciation	m	230	230	955	955
Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0
EBIT	**m**	**-116**	**-116**	**-335**	**-335**
Net Interest Income	m	-207	-207	-1,048	-1,048
Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	0	0	0	0
Pre-Tax Profit	**m**	**-323**	**-323**	**-1,382**	**-1,382**
Tax Expense	m	0	0	0	0
Net Profit	**m**	**-323**	**-323**	**-1,382**	**-1,382**
Minority Interests	m	0	0	0	0
Reported Earnings	**m**	**-323**	**-323**	**-1,382**	**-1,382**
Adjusted Earnings	**m**	**-323**	**-323**	**-1,382**	**-1,382**
EPS (rep)		-0.18	-0.18	-0.77	-0.77
EPS (adj)		-0.18	-0.18	-0.77	-0.77
EPS Growth yoy (adj)	%	nmf	nmf	-328.5	-328.5
EBITDA Margin	%	15.8	15.8	20.7	20.7
EBIT Margin	%	-16.1	-16.1	-11.2	-11.2
Earnings Split	%	25.0	25.0	25.0	25.0
Revenue Growth	%	nmf	nmf	316.2	316.2
EBIT Growth	%	nmf	nmf	-189.3	-189.3

Profit & Loss		2007E	2008E	2009E	2010E
Revenue	**m**	**2,877**	**11,974**	**34,910**	**69,439**
Gross Profit	**m**	**2,833**	**11,762**	**33,937**	**67,178**
Cost of Goods Sold	m	44	211	973	2,262
EBITDA	**m**	**455**	**2,483**	**17,674**	**33,253**
Depreciation	m	918	3,821	5,571	7,387
Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0
EBIT	**m**	**-463**	**-1,339**	**12,103**	**25,866**
Net Interest Income	m	-828	-4,191	-4,711	-3,831
Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	0	0	0	0
Pre-Tax Profit	**m**	**-1,291**	**-5,530**	**7,392**	**22,035**
Tax Expense	m	0	0	-591	-1,763
Net Profit	**m**	**-1,291**	**-5,530**	**6,801**	**20,273**
Minority Interests	m	0	0	0	0
Reported Earnings	**m**	**-1,291**	**-5,530**	**6,801**	**20,273**
Adjusted Earnings	**m**	**-1,291**	**-5,530**	**6,801**	**20,273**
EPS (rep)		-0.72	-3.07	3.78	11.27
EPS (adj)		-0.72	-3.07	3.78	11.27
EPS Growth (adj)	%	nmf	-328.5	nmf	198.1
PE (rep)	x	nmf	nmf	42.3	14.2
PE (adj)	x	nmf	nmf	42.3	14.2
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	1,798	1,798	1,798	1,798
Period End Shares	m	1,798	1,798	1,798	1,798

Profit and Loss Ratios		2007E	2008E	2009E	2010E
Revenue Growth	%	nmf	316.2	191.6	98.9
EBITDA Growth	%	nmf	445.2	611.9	88.2
EBIT Growth	%	nmf	-189.3	nmf	113.7
Gross Profit Margin	%	98.5	98.2	97.2	96.7
EBITDA Margin	%	15.8	20.7	50.6	47.9
EBIT Margin	%	-16.1	-11.2	34.7	37.2
Net Profit Margin	%	-44.9	-46.2	19.5	29.2
Payout Ratio	%	nmf	nmf	0.0	0.0
EV/EBITDA	x	588.1	107.9	15.2	8.1
EV/EBIT	x	-578.6	-200.0	22.1	10.4
Balance Sheet Ratios					
ROE	%	-0.5	-2.0	2.4	6.8
ROA	%	-0.1	-0.4	3.5	7.5
ROIC	%	nmf	-0.5	4.0	8.4
Net Debt/Equity	%	-5.7	-0.7	-0.6	-9.1
Interest Cover	x	-0.6	-0.3	2.6	6.8
Price/Book	x	1.0	1.0	1.0	0.9
Book Value per Share		158.3	155.2	159.0	170.2

Cashflow Analysis		2007E	2008E	2009E	2010E
EBITDA	**m**	**455**	**2,483**	**17,674**	**33,253**
Tax Paid	m	0	0	-591	-1,763
Chgs in Working Cap	m	0	0	0	0
Net Interest Paid	m	-828	-4,191	-4,711	-3,831
Other	m	0	0	0	0
Operating Cashflow	**m**	**-372**	**-1,708**	**12,372**	**27,660**
Acquisitions	m	0	0	0	0
Capex	m	-5,501	-12,483	-12,417	-1,665
Asset Sales	m	0	0	0	0
Other	m	0	0	0	0
Investing Cashflow	**m**	**-5,501**	**-12,483**	**-12,417**	**-1,665**
Dividend (Ordinary)	m	0	0	0	0
Equity Raised	m	0	0	0	0
Debt Movements	m	7,000	15,000	-2,000	-20,000
Other	m	0	0	0	0
Financing Cashflow	**m**	**7,000**	**15,000**	**-2,000**	**-20,000**
Net Chg in Cash/Debt	**m**	**-722**	**809**	**-2,045**	**5,994**

Balance Sheet		2007E	2008E	2009E	2010E
Cash	m	60,965	61,774	59,729	65,724
Receivables	m	0	0	0	0
Inventories	m	0	0	0	0
Investments	m	0	0	0	0
Fixed Assets	m	66,941	75,602	82,448	76,726
Intangibles	m	0	0	0	0
Other Assets	m	201,570	201,570	201,570	201,570
Total Assets	**m**	**329,476**	**338,947**	**343,748**	**344,020**
Payables	m	0	0	0	0
Short Term Debt	m	7,000	22,000	20,000	0
Long Term Debt	m	37,885	37,885	37,885	37,885
Provisions	m	0	0	0	0
Other Liabilities	m	0	0	0	0
Total Liabilities	**m**	**44,885**	**59,885**	**57,885**	**37,885**
Shareholders' Funds	m	284,592	279,062	285,863	306,136
Minority Interests	m	0	0	0	0
Other	m	0	0	0	0
Total S/H Equity	**m**	**284,592**	**279,062**	**285,863**	**306,136**
Total Liab & S/H Funds	**m**	**329,476**	**338,947**	**343,748**	**344,020**

All figures in INR unless noted.
Source: Macquarie Research, January 2007

Important disclosures:

Recommendation definitions

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)

Macquarie Asia
Outperform – expected return >+10%
Neutral – expected return from -10% to +10%
Underperform – expected return <-10%

Macquarie First South Securities (South Africa)
Outperform – return > 5% in excess of benchmark return
Neutral – return within 5% of benchmark return
Underperform – return >5% below benchmark return

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Recommendation proportions

	AU/NZ	Asia	RSA
Outperform	43.12%	58.91%	42.20%
Neutral	44.98%	22.92%	46.80%
Underperform	11.90%	18.17%	11.00%

For quarter ending 31 December 2006

Volatility index definition*

This is calculated from the volatility of historic price movements.

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.

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.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low–medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.
* Applicable to Australian/NZ stocks only

Financial definitions

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

EPS = adjusted net profit / efpowa*
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

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

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Research

Automobiles/Auto Parts

Kurt Sanger (Japan, Asia)	(813) 3512 7859
Peter So (China)	(852) 2823 3586
Liny Halim (Indonesia)	(6221) 515 7343
Toshisuke Hayami (Japan)	(813) 3512 7873
Eunsook Kwak (Korea)	(822) 3705 8644
Francis Eng (Malaysia)	(603) 2059 8986

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Ismael Pili (Asia, Singapore)	(65) 6231 2840
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Christina Fok (China)	(852) 2823 3584
Chris Esson (Hong Kong)	(852) 2823 3567
Seshadri Sen (India)	(9122) 6653 3053
Liny Halim (Indonesia)	(6221) 515 7343
Hideyasu Ban (Japan)	(813) 3512 7858
Kentaro Kogi (Japan)	(813) 3512 7865
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Kitti Nathisuwan (Thailand)	(662) 694 7724

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Xiaopo Wei (China)	(852) 2823 4741
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Kitti Nathisuwan (Thailand)	(662) 694 7724

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Takashi Sakai (Japan)	(813) 3512 7884
Francis Eng (Malaysia)	(603) 2059 8986
Gilbert Lopez (Philippines)	(632) 857 0898
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Daniel Chang (Taiwan)	(8862) 2734 7516
Dominic Grant (Taiwan)	(8862) 2734 7528
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Nicholas Teo (Taiwan)	(8862) 2734 7523
Warren Lau (Taiwan)	(852) 2823 3592

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Prem Jearajasingam (Malaysia)	(603) 2059 8989
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Dominic Grant (Taiwan)	(8862) 2734 7528
Richard Moe (Thailand)	(662) 694 7753

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Eunsook Kwak (Korea)	(822) 3705 8644

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Prem Jearajasingam (Malaysia)	(603) 2059 8989

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Jim Lennon	(4420) 7065 2014
Adam Rowley	(4420) 7065 2013
Bonnie Liu	(4420) 7065 2014
Henry Liu	(4420) 7065 2014

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Liz Dinh (Asia)	(852) 2823 4762
Brent Borger (Japan)	(813) 3512 7852

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Roland Randall (Asean)	(852) 2823 3572
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Richard Gibbs (Australia)	(612) 8232 3935
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Viking Kwok (Asia)	(852) 2823 4735
George Platt (Australia)	(612) 8232 6539

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Desh Peramunetilleke (Asia)	(852) 2823 3564
Jake Lynch (China)	(852) 2823 3583
Jal Irani (India)	(9122) 6653 3040
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Eugene Ha (Korea)	(822) 3705 8643
Uday Jayaram (Malaysia)	(603) 2059 8988
Gilbert Lopez (Philippines)	(632) 857 0898
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Ulrike Pollak-Tsutsumi (Frankfurt)	(49) 69 7593 8747
Daniel Fust (Geneva)	(41) 22 818 7710
Thomas Renz (Geneva)	(41) 22 818 7712
Ajay Bhatia (India)	(9122) 6653 3200
Stuart Smythe (India)	(9122) 6653 3200
Eugene Ha (Korea)	(822) 3705 8643
K.Y. Nam (Korea)	(822) 3705 8607
Derek Wilson (London)(N Asia)	(44) 20 7065 5856
Julien Roux (London)	(44) 20 7065 5887
Lena Yong (Malaysia)	(603) 2059 8888
Ismael Pili (Philippines)	(65) 6231 2840
Greg Norton-Kidd (New York)	(1 212) 231 2527
Luke Sullivan (New York)	(1 212) 231 2507

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Giles Heyring (Singapore)	(65) 6231 2888
Mark Duncan (Taiwan)	(8862) 2734 7510
Angus Kent (Thailand)	(662) 694 7601
Dominic Henderson (Tokyo)	(813) 3512 7820
Nick Cant (Tokyo)	(813) 3512 7821
Charles Nelson (UK/Europe)	(44) 20 7065 2032
Rob Fabbro (UK/Europe)	(44) 20 7065 2031

Sales Trading

Anthony Wilson (Asia)	(852) 2823 3511
Mona Lee (Hong Kong)	(852) 2823 3519
Stuart Goddard (Europe)	(44) 20 7065 2033
Vijay Gussain (India)	(9122) 6653 3205
Howard Yoon (Korea)	(822) 3705 8601

Sales Trading cont'd

Robert Risman (New York)	(1 212) 231 2555
Isaac Huang (Taiwan)	(8862) 2734 7582
Kenichi Ohtaka (Tokyo)	(813) 3512 7830

Index Sales

Margaret Hartmann	(612) 8232 9834

Alternative Strategies

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Derivatives - Vipul Shah	(852) 2823 3523
Futures - Tim Smith	(852) 2823 4637
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