

Thursday 20 September 2007

Change of recommendation

# Cairn India

# Focusing on cash-flow potential

We expect the pipeline to be approved soon, but we factor in a delay in Rajasthan production to 3Q09. Our long-term Brent price forecast is changed to US\$60/bbl and we now value Cairn based on a cashflow multiple. Upgrading from Hold to Buy; target price of Rs203.

Key forecasts		•		•	
	FY06A	FY07F	FY08F	FY09F	FY10F
Revenue (Rsm)	387.4	9605.7	10552.4	26042.1	85138.1
EBITDA (Rsm)	-68.9	6814.0▼	7119.1▼	20732.7▼	71864.6
Reported net profit (Rsm)	-211.8	1047.2▼	2890.1▼	8716.4▼	32666.1
Normalised net profit (Rsm) <sup>1</sup>	-211.8	1047.2	2890.1	8716.4	32666.1
Normalised EPS (Rs)	-0.12	0.59▼	1.63▼	4.90▼	18.37
Dividend per share (Rs)	n/a	n/a	n/a	n/a	n/a
Dividend yield (%)	n/a	n/a	n/a	n/a	n/a
Normalised PE (x)	n/m	283.0 4	102.5▲	34.0▲	9.1
EV/EBITDA (x)	n/m	41.1	43.7	15.0	3.8
Price/book value (x)	1.00	1.00	0.99	0.96	0.87
ROIC (%)	0.00	0.80	0.82	2.91	10.6

<sup>1.</sup> Post-goodwill amortisation and pre-exceptional items Accounting Standard: Indian GAAP

Source: Company data, ABN AMRO forecasts

year to Dec, fully diluted

#### Rajasthan: short-term delays, but improving longer-term prospects

Cairn India (CIL) is yet to receive approval for the Rajasthan pipeline in the form it desires (ie, including cost recovery), but we believe this will come soon. We expect the delay in getting the approval to impact project implementation, and have reduced our estimates on Rajasthan oil production from 83kbd to 35kbd for 2009 and 165kbd to 151kbd for 2010. However, the longer-term prospects appear to have improved. Discoveries continue to be made within the Rajasthan block and the year-end reserve update should lead to upgrades in the company's current reserve estimate (2P+EOR) of 838m boe. CIL is also filing a declaration of commerciality for the three discoveries in the Northern Appraisal Area, which would allow this area to be retained for future exploration/development.

#### Oil price, exchange rate remain key valuation drivers

We have raised our 2007-09 Brent oil forecasts to US\$61-68/bbl, with the long-term Brent forecast (more relevant for CIL) being changed from US\$45/bbl to US\$60/bbl. We believe Rajasthan crude pricing will now be settled in 2008 and we have assumed pricing at an 8% discount to Brent. Our long-term Rs/USD forecast is unchanged at 38.4 and we assume CIL will pay Rs927/tonne as cess.

### Stock upgraded to Buy, target price raised from Rs134 to Rs203

Our valuation for CIL based on a DCF model of its 2P+EOR reserves (also valuing potential exploration upside in Rajasthan) is Rs163. However, as visibility of production at Rajasthan improves, we believe the market will start valuing CIL on a cash-flow multiple basis, since the attractive fiscal regime should make Rajasthan production highly cash-generative. We forecast CIL will move from net debt of US\$397m at end-2009 to net cash of US\$3.4bn by end-2012. For 2010, we forecast EBITDA of Rs71.9bn (Brent US\$60/bbl, exchange rate Rs38.4/USD), which at 6x EV/EBITDA leads to a stock price of Rs254. Discounting this for two years provides us with our current target price of Rs203.

Priced at close of business 19 September 2007. Use of  $\blacktriangle$   $\blacktriangledown$  indicates that the line item has changed by at least 5%

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# Buy (from Hold)

Absolute performance

Short term (0-60 days)

Neutral

Market relative to region

Energy India

Price

Rs166 65

Target price

Rs203.00 (from Rs134.00)

Market capitalisation

Rs296.37bn (US\$7.37bn)

Avg (12mth) daily turnover

Rs165.23m (US\$3.88m)

Reuters Bloomberg
CAIL.BO CAIR IN

Price performance	(1M)	(3M)	(12M)
Price (Rs)	138.2	138.0	n/a
Absolute %	20.6	20.8	n/a
Rel market %	4.5	5.8	n/a
Rel sector %	-5.3	1.6	n/a



Stock borrowing: Moderate
Volatility (30-day): 26.35%
Volatility (6-month trend): ↓
52-week range: 169.95-111.00

BBG AP Oil & Gas: 676.45

Source: ABN AMRO, Bloomberg

Sensex: 16322.75

Researched by

ABN AMRO Institutional Equities Team

www.abnamrobroking.co.in

# Focusing on cash-flow potential

CIL's biggest attraction is it being a pure play on the global oil price, with no subsidy-sharing risk. The recent strengthening in the oil price, if sustained, could provide substantial upside to the company's cash flow and stock price.

# Rajasthan: short-term delays, but improving longerterm prospects

# Required pipeline approval expected any day

The Indian government (GOI) has granted CIL the right of use (ROU) to acquire land to build the pipeline to evacuate crude from Rajasthan. The remaining approvals for cost-recovery status for the pipeline capex have not yet been given, but we expect this issue to be resolved soon. The cost of the pipeline (US\$790m) is proposed to be included in the overall cost of developing the Rajasthan project, and is being shared by CIL and ONGC in the ratio of 70:30.

Pipeline to cost US\$790m, shared 70:30 between CIL and ONGC

The proposed pipeline would move south from Mangala to Viramgam (325km), connecting with Indian Oil's crude pipeline network, and then move west to the coast to Salaya (585km), linking with the refineries of Reliance Industries and Essar Oil. By 2010, when the company expects the Rajasthan fields to start producing at capacity, we estimate this pipeline will be able to access 2.3m b/d of refining capacity (total six refineries). This means Rajasthan production would account for just 7% of the crude requirement of these refineries.

Pipeline would access refining capacity of 2.3m b/d

Doubts have been expressed on the ability to transport Rajasthan crude, given its waxy nature. CIL has planned an insulated pipeline to deliver the oil to the refinery, so it can then be mixed with other crudes to ensure smooth flow. The fact that each refinery would meet only 7% of its crude requirement from Rajasthan (although capacity at the newer refineries would be higher) should enable the dilution of this crude at no extra cost to the refiner.

Rajasthan crude would be just 7% of the crude needs of each refinery

Access to domestic crude would lower the requirement for inventory relative to imported crudes. Hence, CIL should be in a better bargaining position vis-à-vis the refiners once the pipeline starts delivering crude to their doorsteps.

Figure 1: Proposed pipeline to evacuate Rajasthan crude Bhatinda 🔟 Panipat DELHI  $\mathbf{u}_{V}$ Mathura Rajasthan Mangala Viramgam Kandla Mangala to Viramgam 325 km Mundra m Jamnahai Koyali Guilarat Mangala to Salaya Pipeline Route 585 km Existing Pipelines Refinery Tankers to Coastal Refineries

Source: Company data

# We estimate capex over 2007-09 at US\$1.66bn

Management estimates the gross capex to develop the reserves in Rajasthan (block RJ-ON-90/1) at US\$2.2bn. We estimate the capex till first oil at US\$1.4bn (Mangala US\$0.9bn, Bhagyam US\$0.37bn and Aishwariya US\$0.15bn). The cost of the pipeline would need to be added, taking total capex (till first oil) to US\$2.2bn, or US\$1.55bn net to CIL (70% share). We estimate the Rajasthan capex for 2007-09 at US\$1.4bn, a total of US\$1.66bn for CIL, taking into account its other blocks.

CIL capex over 2007-09 estimated at US\$1.66bn

Table 1 : CIL capex and financing (US\$m)									
Year to 31 December	2007F	2008F	2009F	Total					
RJ-ON-90/1	189	876	294	1,359					
Ravva	27	27	26	80					
CB-OS/2	10	6	4	20					
Exploration blocks	70	70	60	200					
Total	296	979	384	1,659					

Source: Company data, ABN AMRO estimates

# Pipeline approval delay could impact production

While CIL has always maintained that Mangala production would start in 2009, we were earlier assuming the start-up date to be April 2009. With the delay in getting the required approvals, we believe some delay vis-à-vis our earlier estimate is likely and now assume commencement of production in 3Q09, with Bhagyam starting six months later and Aishwariya after another six months. Consequently, we cut our oil production estimates for Rajasthan, from 83kbd to 35kbd for 2009, and from 165kbd to 151kbd for 2010.

Rajasthan production now assumed to start in 3Q09



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Table 2 : CIL production (boe/day)

Year to 31 December	2007F	2008F	2009F	2010F	2011F	2012F
Gross production						
Mangala			30,000	105,000	105,000	105,000
Bhagyam				30,000	40,000	40,000
Aishwariya				6,000	15,000	15,000
Southern fields		3,000	5,000	10,000	10,000	6,000
RJ-ON-90/1	0	3,000	35,000	151,000	170,000	166,000
Ravva	61,064	59,651	49,739	39,429	29,572	22,179
CB-OS/2	17,432	20,698	15,998	12,595	6,332	5,492
Total	78,496	83,349	100,736	203,024	205,904	193,671
Net production						
RJ-ON-90/1	0	2,100	24,500	105,700	119,000	116,200
Ravva	13,739	13,422	11,191	8,872	6,654	4,990
CB-OS/2	6,267	6,867	4,987	3,626	1,120	784
Total	20,006	22,388	40,678	118,197	126,774	121,975

Source: Company data, ABN AMRO forecasts

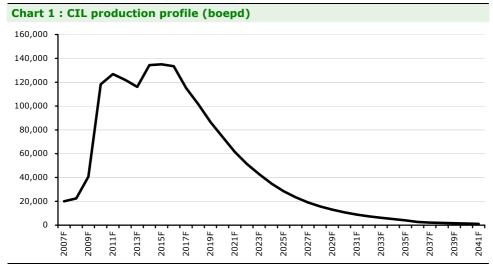
We expect production from the enhanced oil recovery (EOR) efforts to begin in 2014 and now foresee a decline in Rajasthan oil production starting 2017. Our production profile is based on the end-2006 2P+EOR reserves put out by CIL, which is 838m boe for Rajasthan, which results in a recovery factor of 38% based on gross in-place resources of 2.2bn boe. We expect the smaller southern fields (Raageshwari and Saraswati) to begin production from 2008 and have a lower recovery factor. For the MBA (Mangala, Aishwariya, Bhagyam) fields, we currently estimate the recovery factor at 43%.

EOR production assumed from 2014

Table 3 : CIL gross reserves, m boe, end-2006

		2P		2P	2P+EOR
	In place	reserves	2P+EOR	recovery	recovery
Mangala	1,202	428	548	36%	46%
Bhagyam	468	144	200	31%	43%
Aishwariya	249	56	76	22%	31%
Southern fields	298	8	15	3%	5%
Blocks under development-Rajasthan	2,217	636	838	29%	38%
Ravva	554	95	95	17%	17%
CB-OS/2	126	14	29	11%	23%

Source: Company data



Source: Company data, ABN AMRO forecasts



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# Rajasthan: longer-term prospects seem brighter

The Rajasthan block comprises 2.2bn boe of in-place reserves in fields under development and another 1.4bn boe of in-place reserves from other fields within the same block. This year the Saraswati Crest-1 exploration well located within the development area encountered two hydrocarbon-bearing formations. In addition to the current development area, the government has awarded a six-month extension to the exploration phase of the northern appraisal area (NAA) of the Rajasthan licence – RJ-ON-90/1 – from 8 May 2007. Appraisal drilling on the discoveries made in 2006 (Kaameshwari West-2 and Kaameshwari West-3) has been completed, and Kaameshwari West-6 was declared a new discovery. A declaration of commerciality for these three discoveries is now being prepared (along with a proposed new development area) for submission to the government by November 2007 (before the current extension expires). The government's acceptance of commerciality would allow CIL to retain the NAA for further exploration and appraisal.

We believe reserve upgrades are likely by the end of 2007

CIL plans to appoint Degolyer & MacNaughton to audit its reserves and, given the progress in the current year, we believe the year-end reserve update should lead to an upgrade to end-2006 reserve estimate (2P+EOR) of 838m boe for Rajasthan.

# Oil price, exchange rate remain key valuation drivers

# Change in oil price assumptions

We have raised our 2007-09 Brent oil forecasts to US\$61-68/bbl, with the long-term Brent forecast (more relevant for CIL) being changed from US\$45/bbl to US\$60/bbl. Earlier, we had forecast Rajasthan crude being priced at a 5% discount to Brent. This assumption was based on our view that the discounts between heavy/sour and sweet/light crudes would narrow by 2010, as a higher proportion of incremental crude production planned from 2007-10 is sweet/light and as significant new conversion capacity is being added by refiners. While this view is unchanged, the uncertainty on pricing has increased due to the delay in pipeline approval. Pricing for Rajasthan crude is likely to be settled only in 2008 in our view; to reflect this uncertainty, we have raised the discount from 5% to 8%.

Brent long-term price assumption raised from US\$45/bbl to US\$60/bbl

Table 4 : Oil price forecas	ts			
Year to 31 December	2007F	2008F	2009F	2010F onwards
New Brent price (US\$/bbl)	67.5	65	61	60
Old Brent price (US\$/bbl)	62.9	55	50	45

Source: ABN AMRO forecasts

# Liquid benchmark would be preferred, in our view

As per the terms of the production-sharing contract (PSC), the pricing for Rajasthan crude would be based upon a weighted average FOB selling price per barrel of international crude oils quoted by Platts, based on a mixture and weighting of crude oils that would produce a quality similar to that produced in the Rajasthan block. One of the benchmarks being considered that closely match the Rajasthan crude quality is a 52:48 mixture between two Indonesian crudes - Duri and Widuri. We have compared the pricing of this mixture to Brent crude. The main problem is that since the Indonesian crudes are relatively illiquid, the price tends to fluctuate widely. We believe that since Rajasthan crude (at capacity) would account for 20% of Indian's total crude production, crude buyers as indeed the government would prefer to link Rajasthan crude pricing to a more liquid benchmark like Dubai or Brent, rather than to any other crude that may be more representative but not as liquid.

We believe the government will link Rajasthan crude pricing to liquid benchmarks like Brent or Dubai



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20 SEPTEMBER 2007

Chart 2 : Differentials between Brent and mix of Duri/Widuri crude

16.00
14.00
12.00
10.00
8.00
6.00
2.00
0.00
(2.00)

Sep

Oct

■ FY07

Nov

Dec

FY08

Feb

Jan

Mar

Source: Bloomberg

May

(4.00)

# Highly sensitive to crude pricing

Jun

Jul

Aua

Range FY00-FY06 = =

Since crude pricing is done in US dollars, CIL's financials are equally impacted by a change in the oil price as by the rupee/USD rate. Our forecasts assume oil prices will moderate by 2010 and that rupee will strengthen against the US dollar. However, if the current Brent price of US\$75/bbl and Rs/USD rate of 40.5 is sustained, our 2010 EPS would rise from Rs18.4 to Rs25.4.

Table 5: CIL EPS sensitivity to oil price and exchange rate 2009F 2010F 2011F 2012F Year to 31 December **Current estimates** Brent crude US\$/bbl 60 60 60 Discount for Rajasthan crude 8% 8% 8% 8% Rs/USD average exchange rate 38.4 38.4 38.4 38.4 EPS (Rs) 4.9 18.4 17.2 17.6 EPS sensitivity for US\$1/bbl change in oil price 2.5% 2.0% 2.3% 2.2% EPS sensitivity for Rs1 change in exchange rate 3.2% 3.2% 3.0% 3.1%

Source: ABN AMRO forecasts

#### Cess assumed at Rs927/tonne

For the Rajasthan crude, we continue to assume cess at Rs927/tonne, cost recoverable. CIL believes it should not be liable to pay any cess, or rather that similar to royalty, its share must be paid by ONGC. Furthermore, it believes that if it is liable to pay, the amount would be restricted to Rs900/tonne (rate applicable when the PSC was signed) plus 3% for education cess (total Rs927/tonne) and it would be cost recoverable. There is a dispute on this point, with the government believing that CIL is liable to pay to the extent of its share in development (70%). If we assume no cess, our DCF valuation would rise by 6%. Alternatively, if cess has to paid at the current level of Rs2,575/tonne, then our DCF valuation would fall by 10%.

Given that CIL and the government have different interpretations of the same PSC, we believe this issue is likely to be resolved through arbitration. A worrying factor in this regard is the delay in starting production from the southern fields in Rajasthan. This small level of production could precipitate the issue and give CIL the opportunity to take it to arbitration. In turn, delay in production from the southern fields would increase the risk of this issue remaining unresolved before Mangala starts producing in 2009.

DCF valuation rises by 6% if no cess has to be paid



# Rajasthan production level also a key earnings driver

We estimate that for every 10% change in the level of crude oil production at Rajasthan would impact 2009-12F EPS by 10-12%. The potential for divergence visà-vis our estimates is highest in the initial years of production (2009 and 2010) as CIL brings all its Rajasthan fields into production.

Table 6 : EPS sensitivity to Rajasthan crude production								
Year to 31 December	2009F	2010F	2011F	2012F				
Current forecasts								
Rajasthan gross oil production (b/d)	35,000	151,000	170,000	166,000				
EPS (Rs)	4.9	18.4	17.2	17.6				
EPS sensitivity for 10% change in production	11.0%	10.0%	12.0%	11.0%				

Source: ABN AMRO forecasts

# Stock upgraded to Buy, target price Rs203

## Cut in near-term earnings

We expect a big leap in CIL's earnings and cash flow once the Rajasthan asset starts full production in 2010. However, we have significantly lowered our EPS forecasts for the next three years, driven by the likely ESOP charge in 2008-09 and the downgrade to Rajasthan production volumes for 2009F. In 2Q07, there was an accounting loss due to forex fluctuation as the US dollar-deposits kept for Rajasthan development needed to be valued lower due to the rupee appreciation. Since tax is calculated at the entity level and not on a consolidated basis, the forex loss could not be offset against profits for tax calculations.

ESOP charges, forex loss and delay in production bring down 2007-09F EPS estimates

Table 7 : Change in EPS estimates							
Year to 31 December	2007F	2008F	2009F				
Revised	0.6	1.6	4.9				
Previous	2.3	2.1	16.6				
Change	-74%	-23%	-70%				

Source: ABN AMRO forecasts

# DCF value is Rs163

We have constructed a DCF model of CIL's existing 2P+EOR reserves of 618m boe, which results in a valuation of Rs122/share based on a long-term Brent oil price of US\$60/bbl, a Rs/USD rate of 38.4 and a WACC of 10%. This valuation works out to US\$9.2/boe for the Rajasthan assets. CIL's Rajasthan block outside the current development area has in-place oil of 1.34bn boe comprising various discoveries like Guda, Vijaya, Vandana, Mangala (Barmer Hill) and Aishwariya (Barmer Hill). We have assumed that roughly 180m boe of reserves (13% recovery factor) could accrete from these fields, and we value these potential reserves based on our valuation of the existing reserves in Rajasthan (US\$9.2/boe). The individual sizes of the new discoveries may be small, but we believe it will be economically viable to develop even the smaller finds once the infrastructure for oil evacuation is created for the MBA fields.

Our DCF value is based on 2P+EOR reserves of 618m boe and potential exploration upside of 167m boe

86% of our valuation for CIL is based on the Rajasthan block. The main assumptions relating to the Rajasthan development are as follows:

- Production profile as outlined in Table 2 and Chart 2 earlier;
- US\$2.2bn capex over the total gross life of field development, which includes
   US\$1.4bn capex till first oil. The cost of pipeline (US\$0.79bn) would need to be
   added, taking total capex to US\$2.2bn till first oil, or US\$1.55bn net to Cairn;

- A realised oil price which is at a 8% discount to Brent;
- Lifting cost of US\$4.2/bbl (including the pipeline operating cost) for normal production and US\$10/bbl for production of EOR reserves;
- No payment of royalty (CIL's share is paid by ONGC);
- A cess payment of Rs927/tonne, cost recoverable;
- A seven-year tax holiday during which CIL would be liable to pay the minimum alternate tax (MAT), currently 10.5%;
- Profit sharing with the government as indicated in Table 8; and
- A discount rate of 10%.

Table 8: Petroleum profit sharing for RJ-ON-90/1 block

Investment multiple achieved	Government share of profit oil	
1-1.5	20%	
1.5-2	30%	
2-2.5	40%	
>2.5	50%	

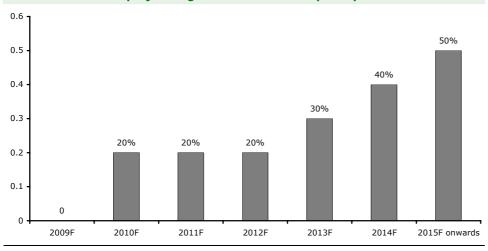
Source: Company data

Table 9: Breakdown of DCF valuation

		Gross oil	Gross	Net				
	Working	in place	recoverable	recoverable	% of Oil	Value	Value	Value per
	interest	mm boe	mm boe	mm boe		US\$m	US\$/boe	Share (Rs)
Rajasthan block	70%	2,217	838	585	100%	5,362	9.2	115
Ravva	22.5%	554	95	21	85%	186	8.7	4
CB-OS/2	40%	126	29	12	37%	141	12.1	3
Sub total		2,897	960	618		5,689	9.2	122
Exploration upside in Rajasthan	70%	1,337	180	126	100%	1,155	9.2	25
Proceeds from IPO retained						600		14
Exploration upside in KG-DWN-98/2	10%	580	406	41		69	1.7	2
Total Market Cap		4,814	1,546	785		7,512		163

Source: ABN AMRO forecasts

Chart 3: Year-wise projected government share of profit petroleum



Source: ABN AMRO forecasts

Our DCF valuation is sensitive to the assumption on the exchange rate and the oil price. If the current Brent price of US\$75/bbl is sustained with an exchange rate of 41, then our DCF valuation would rise to Rs216.



Table 10: DCF sensitivity to oil price and exchange rate, Rs/share

		Brent price (US\$/bbl)							
RS/USD	50	55	60	65	70	75			
37.0	130	145	155	169	181	193			
38.4	135	151	163	176	189	202			
41.0	145	161	172	189	202	216			
42.0	150	165	177	194	207	222			
44.0	157	173	186	204	218	232			

Source: ABN AMRO estimates

Table 11: DCF sensitivity to oil price and WACC, Rs/share

		Brent price (US\$/bbl)							
WACC	50	55	60	65	70	75			
8%	154	171	185	200	214	230			
9%	144	161	173	188	201	215			
10%	135	151	163	176	189	202			
11%	127	142	153	166	177	190			
12%	120	133	144	156	167	179			

Source: ABN AMRO estimates

# Cash-flow valuation to provide upside

It is possible to value E&P companies on a cash flow basis once a company changes from being a high-risk exploration play to a more steady-state producing entity. The market is likely to look at cash flow multiples when there is a high visibility of cash flows (ie, the company is generating or is close to generating those cash flows) and the company is demonstrating its ability to maintain or grow its reserve base, which is being eroded by annual production.

By 2009, CIL should offer visibility on its production and cash flows, while exploration and EOR findings over the next two years should also provide some clarity on the sustainability of such production and cash flows. We expect the market to progressively value CIL on a cash-flow basis over the next 12 months. This valuation measure is particularly relevant to CIL as the attractive fiscal regime is likely to make Rajasthan production highly cash-generative.

Over the next 12 months, we expect the market to progressively value CIL on a cash-flow multiple

To illustrate, in 2010, when we expect CIL to achieve its first full year of production in Rajasthan, the EBITDA (US\$1.9bn) that we expect based on an achieved oil price of US\$55.2 (Brent less 8%) would enable the company to repay all its loans and move from a net debt to a net cash position. We forecast that CIL will move from a net debt level of US\$397m as at end-2009F to a net cash level of US\$3.4bn by end-2012F.

CIL could repay its entire debt based on full year of production in 2010



Year to 31 December (Rs m)	2007F	2008F	2009F	2010F	2011F	2012F
Gross sales	16,301	18,332	31,921	91,679	98,455	94,832
Less: profit petroleum	(6,695)	(7,780)	(5,879)	(6,541)	(18,870)	(17,764)
Net sales	9,606	10,552	26,042	85,138	79,585	77,068
Royalty	346	330	272	215	162	121
Cess	525	636	1,623	5,402	5,944	5,743
Production costs	961	1,178	2,157	6,773	7,340	7,089
SG&A	959	915	883	883	883	883
ESOPs charge		373	373			
Total operating expenses	2,792	3,433	5,309	13,274	14,329	13,836
EBITDA	6,814	7,119	20,733	71,865	65,256	63,233
Margin %	71%	67%	80%	84%	82%	82%
DD&A and exploration write offs	3,571	3,197	5,023	12,878	11,471	10,258
Finance costs incl forex losses	1,559	15	1,519	3,363	3,028	2,358
Other income	1,317	1,163	1,101	1,685	2,909	4,359
Profit before tax	3,002	5,070	15,292	57,309	53,667	54,975
Tax	1,954	2,180	6,576	24,643	23,077	23,639
Profit after tax	1,047	2,890	8,716	32,666	30,590	31,336
EPS (Rs)	0.6	1.6	4.9	18.4	17.2	17.6

14,831

15,524

(20,208)

Year end net debt/(cash)
Source: ABN AMRO forecasts

Given the high level of cash generation, CIL's 2010F EV/EBITDA multiple (assuming share price at Rs166) looks very attractive at 3.8x (this multiple would fall to 2.8x if the current Brent level of US\$75/bbl is achieved in 2010). Regional peers currently trade at over 7x 2009F EV/EBITDA (see Table15) and we believe CIL could achieve a 2010F EV/EBITDA multiple of 6x, given that we see prospects of high cash generation in 2011/12. A 6x multiple would lead to a share price of Rs254 in 2009, which, when discounted for two years, equals our current target price of Rs203.

(16,626)

Our cash-flow multiplebased target price is now Rs203

(74,062)

(130,097)

10

Table 13 : CIL cash flow multiples						
Year to 31 December (Rs m)	2007F	2008F	2009F	2010F	2011F	2012F
Net debt/(cash) (Rs m)	(16,626)	14,831	15,524	(20,208)	(74,062)	(130,097)
Enterprise value, share price <b>Rs166</b> (Rs m)	278,588	310,046	310,738	275,006	221,153	165,118
EV/EBITDA	40.9	43.6	15.0	3.8	3.4	2.6

Source: ABN AMRO forecasts

Table 14 : CIL 2010 EV/EBITDA sensitivity										
Brent oil in 2010 (US\$/bbl)	60	65	70	75						
EBITDA US\$m	1871	2021	2170	2319						
EV/EBITDA multiple	3.8	3.3	3.1	2.8						

Source: ABN AMRO forecasts

Table 15 : Peer group valuation											
Company	Bloomberg	Stock price		PER		EV/EBITDA					
	code	19-Sep-07	2007F	2008F	2009F	2007F	2008F	2009F			
Cairn India	CAIR IN	167	283.0	102.5	34.0	41.1	43.7	15.0			
Santos	STO AU	14.2	15.2	22.5	37.0	6.2	7.6	9.2			
Oil Search	OSH AU	4.34	29.5	29.1	35.1	8.2	9.0	11.6			
ONGC	ONGC IN	902	9.3	9.5	10.3	4.1	4.1	4.2			
CNOOC*	883 HK	11.98	16.4	18.3	16.6	9.4	9.8	8.9			
Petrochina*	857 HK	11.96	15.1	13.7	13.4	8.3	7.7	7.4			
PTTEP*	PTTEP TB	132	15.5	15.5	13.0	6.7	6.7	5.4			
Average excl CIL		16.8	18.1	20.9	7.2	7.5	7.8				

Source: ABN AMRO forecasts \*Bloomberg IBES estimates



CAIRN INDIA 20 SEPTEMBER 2007

# The takeover premium upside

CIL is poised to book substantial proved reserves and show quantum growth in production, in our view, attributes which would be attractive for any large global oil company. Consequently, we believe the takeover speculation relating to CIL in the media will continue, which could provide additional upside to investors. We believe any potential takeover will be in the form of purchase of Cairn Energy's 69% stake in CIL, at a substantial premium to the market price, which would trigger an open offer to minority shareholders at the same price, as per the Indian takeover code.

CIL would be a tempting takeover candidate for a large oil company, in our view

# Risks to price target

The key risks to our DCF-based valuation and target price are:

- Unfavourable pricing for Rajasthan crude;
- Changes in oil/gas reserve estimates;
- Delays in production and resolution of the pipeline issue;
- Unfavourable resolution of the cess dispute; and
- Changes in oil price and exchange rate.



CAIRN INDIA

20 SEPTEMBER 2007

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# CAIRN INDIA: KEY FINANCIAL DATA

Income statement					
Rsm	FY06A	FY07F	FY08F	FY09F	FY10F
Revenue	387.4	9605.7	10552.4	26042.1	85138.15
Cost of sales	-82.0	-1832.5	-2144.7	-4053.1	-12390.40
Operating costs	-374.3	-959.1	-1288.5	-1256.3	-883.2
EBITDA	-68.9	6814.0	7119.1	20732.7	71864.6
DDA & Impairment (ex gw)	-120.7	-3570.7	-3196.7	-5022.7	-12877.8
EBITA	-189.6	3243.3	3922.4	15710.0	58986.7
Goodwill (amort/impaired)	n/a	63.2	579.2	-484.1	-2879.6
EBIT	-189.6	3243.3	3922.4	15710.0	58986.7
Net interest	59.5	-241.6	1147.9	-418.0	-1677.9
Associates (pre-tax)	n/a	n/a	n/a	n/a	n/a
Forex gain / (loss)	n/a	0.00	0.00	0.00	0.0
Exceptionals (pre-tax)	n/a	0.00	0.00	0.00	0.0
Other pre-tax items	0.00	0.00	0.00	0.00	0.0
Reported PTP	-130.2	3001.7	5070.3	15292.0	57308.9
Taxation	-56.4	-1954.5	-2180.2	-6575.6	-24642.8
Minority interests	-25.2	0.00	0.00	0.00	0.0
Exceptionals (post-tax)	n/a	n/a	n/a	n/a	n/a
Other post-tax items	0.00	0.00	0.00	0.00	0.0
Reported net profit	-211.8	1047.2	2890.1	8716.4	32666.1
Normalised Items Excl. GW	0.00	0.00	0.00	0.00	0.0
Normalised net profit	-211.8	1047.2	2890.1	8716.4	32666.1

Source: Company data, ABN AMRO forecasts

year to Dec

Balance sheet					
Rsm	FY06A	FY07F	FY08F	FY09F	FY10F
Cash & market secs (1)	61143.1	25766.4	21352.0	29112.3	64844.0
Other current assets	6470.3	5328.9	5922.0	11308.9	33476.5
Tangible fixed assets	19962.4	28842.2	64694.5	74529.9	69977.9
Intang assets (incl gw)	254115	254115	254115	254115	254115
Oth non-curr assets	4.16	4.16	4.16	4.17	4.18
Total assets	341695	314057	346088	369070	422418
Short term debt (2)	n/a	n/a	n/a	n/a	n/a
Trade & oth current liab	39715.8	3233.7	3310.7	3781.2	5837.0
Long term debt (3)	4916.9	9140.4	36183.4	44635.9	44635.9
Oth non-current liab	4258.2	5735.4	7383.2	12353.1	30978.5
Total liabilities	48890.9	18109.5	46877.3	60770.3	81451.4
Total equity (incl min)	292804	295947	299211	308300	340966
Total liab & sh equity	341695	314057	346088	369070	422418
Net debt (2+3-1)	-56226	-16626	14831.4	15523.7	-20208.1

Source: Company data, ABN AMRO forecasts

year ended Dec

Cash flow statement					
Rsm	FY06A	FY07F	FY08F	FY09F	FY10F
EBITDA	-68.9	6814.0	7119.1	20732.7	71864.6
Change in working capital	n/a	-35341	-516.1	-4916.4	-20111.8
Net interest (pd) / rec	n/a	-241.6	1147.9	-418.0	-1677.9
Taxes paid	n/a	-1954.5	-2180.2	-6575.6	-24642.8
Other oper cash items	n/a	1477.2	2021.0	5343.0	n/a
Cash flow from ops (1)	-68.9	-29246	7591.7	14165.8	18625.4
Capex (2)	0.00	-12450	-39049	-14858	44057.5
Disposals/(acquisitions)	0.00	0.00	0.00	0.00	-8325.8
Other investing cash flow	n/a	0.00	0.00	0.00	0.0
Cash flow from invest (3)	0.00	-12450	-39049	-14858	0.0
Incr / (decr) in equity	n/a	2095.9	0.00	0.00	-8325.8
Incr / (decr) in debt	n/a	4223.5	27043.0	8452.5	0.0
Ordinary dividend paid	n/a	0.00	0.00	0.00	0.0
Preferred dividends (4)	n/a	n/a	n/a	n/a	0.0
Other financing cash flow	n/a	n/a	n/a	n/a	n/a
Cash flow from fin (5)	0.00	6319.4	27043.0	8452.5	n/a
Forex & disc ops (6)	n/a	0.00	0.00	0.00	0.0
Inc/(decr) cash (1+3+5+6)	-68.9	-35377	-4414.4	7760.3	0.0
Equity FCF (1+2+4)	-68.9	-41696	-31457	-692.3	35731.7

Lines in bold can be derived from the immediately preceding lines. Source: Company data, ABN AMRO forecasts

year to Dec



# **CAIRN INDIA: PERFORMANCE AND VALUATION**

Standard ratios	Standard ratios Cairn			ia	Oil & Natural Gas C			s Corp			Relia	nce Indus	e Industries	
Performance	FY06A	FY07F	FY08F	FY09F	FY10F	FY08F	FY09F	FY10F		F	Y07F	FY08F	FY09F	
Sales growth (%)	n/a	2379.7	9.86	146.8	226.9	-0.54	-7.74	-5.82			29.7	-6.79	-5.54	
EBITDA growth (%)	n/a	n/a	4.48	191.2	246.6	18.0	-2.76	-7.55			26.4	-0.16	15.9	
EBIT growth (%)	n/a	n/a	20.9	300.5	275.5	28.8	-4.93	-11.7			29.1	-1.57	15.9	
Normalised EPS growth (%)	n/a	n/a	176.0	201.6	274.8	19.3	-1.77	-7.44			19.9	6.24	6.84	
EBITDA margin (%)	-17.8	70.9	67.5	79.6	84.4	43.0	45.4	44.5			17.3	18.5	22.7	
EBIT margin (%)	-49.0	33.8	37.2	60.3	69.3	30.4	31.3	29.3			13.5	14.2	17.5	
Net profit margin (%)	-54.7	10.9	27.4	33.5	38.4	21.4	22.8	22.4			10.9	12.5	14.8	
Return on avg assets (%)	0.00	0.36	0.67	2.51	8.50	21.1	18.1	14.9			13.0	10.0	9.84	
Return on avg equity (%)	0.00	0.36	0.97	2.87	10.06	28.6	24.0	19.6			28.8	22.6	18.8	
ROIC (%)	0.00	0.80	0.82	2.91	10.60	31.9	27.3	22.3			17.5	10.6	10.3	
ROIC - WACC (%)	0.00	0.00	0.00	0.00	0.00	21.8	17.2	6.75			7.34	0.43	0.06	
				year	r to Dec		year to Mar					yea	ar to Mar	
Valuation														
EV/sales (x)	619.9	29.1	29.5	12.0	3.2	1.78	1.84	1.88			3.15	3.44	3.50	
EV/EBITDA (x)	n/m	41.1	43.7	15.0	3.8	4.14	4.07	4.21			18.3	18.6	15.4	
EV/EBITDA @ tgt price (x)	n/m	50.5	52.8	18.2	4.7	5.42	5.38	5.64			11.6	11.9	9.63	
EV/EBIT (x)	n/m	86.3	79.3	19.9	4.7	5.87	5.89	6.39			23.4	24.2	20.0	
EV/invested capital (x)	1.02	1.00	0.99	0.96	0.86	2.54	2.25	2.00			3.81	3.22	2.75	
Price/book value (x)	1.00	1.00	0.99	0.96	0.87	2.46	2.14	1.90			5.49	4.44	3.25	
Equity FCF yield (%)	-0.02	-14.1	-10.6	-0.23	0.12	7.94	8.36	7.36			-4.45	-0.30	1.51	
Normalised PE (x)	n/m	283.0	102.5	34.0	9.1	9.34	9.51	10.3			23.1	21.7	20.3	
Norm PE @tgt price (x)	n/m	344.7	124.9	41.4	11.1	11.9	12.1	13.1			13.8	13.0	12.2	
Dividend yield (%)	n/a	n/a	n/a	n/a	n/a	3.77	3.77	3.44			0.51	0.55	0.64	
				year	r to Dec		yea	r to Mar				yea	ar to Mar	
Per share data	FY06A	FY07F	FY08F	FY09F	FY10F	Solvency			FY06A	FY07F	FY08	F FY09F	FY10F	
Tot adj dil sh, ave (m)	1765.3	1778.4	1778.4	1778.4	1778.4	Net debt to eq	uity (%)		-19.2	-5.62	4.9	6 5.04	-5.93	
Reported EPS (INR)	-0.12	0.59	1.63	4.90	18.37	Net debt to tot	ass (%)		-16.5	-5.29	4.2	9 4.21	-4.78	
Normalised EPS (INR)	-0.12	0.59	1.63	4.90	18.37	Net debt to EB	Net debt to EBITDA		815.7	-2.44	2.0	8 0.75	-0.28	
Dividend per share (INR)	n/a	n/a	n/a	n/a	n/a	Current ratio (	x)		1.70	9.62	8.2	4 10.7	16.8	
Equity FCF per share (INR)	-0.04	-23.4	-17.7	-0.39	20.09	Operating CF i	nt cov (x	)	0.00	-111.9	-7.5	1 50.6	41.9	
Book value per sh (INR)	165.9	166.4	168.2	173.4	191.7	Dividend cover	r (x)		0.00	0.00	0.0	0.00	0.00	
				year	r to Dec							yea	ar to Dec	

Priced as follows: CAIL.BO - Rs166.65; ONGC.BO - Rs901.50; RELI.BO - Rs2172.90 Source: Company data, ABN AMRO forecasts

# **CAIRN INDIA: VALUATION METHODOLOGY**

As visibility of production at Rajasthan improves, we believe the market will start valuing CIL on a cash-flow multiple basis. Regional peers currently trade at over 7x EV/EBITDA multiple for 2009 and we believe CIL can achieve a 2010F EV/EBITDA multiple of 6x, given the prospects of high cash generation in 2011/12. A multiple of 6x would lead to a share price of Rs254 in 2009F, which, discounted for two years, equals our current target price of Rs203.

Table 16 : Peer group valuation										
Company	Bloomberg	Stock price		PER		EV/EBITDA				
	code	19-Sep-07	2007F	2008F	2009F	2007F	2008F	2009F		
Cairn India	CAIR IN	167	283.0	102.5	34.0	41.1	43.7	15.0		
Santos	STO AU	14.2	15.2	22.5	37.0	6.2	7.6	9.2		
Oil Search	OSH AU	4.34	29.5	29.1	35.1	8.2	9.0	11.6		
ONGC	ONGC IN	902	9.3	9.5	10.3	4.1	4.1	4.2		
CNOOC*	883 HK	11.98	16.4	18.3	16.6	9.4	9.8	8.9		
Petrochina*	857 HK	11.96	15.1	13.7	13.4	8.3	7.7	7.4		
PTTEP*	PTTEP TB	132	15.5	15.5	13.0	6.7	6.7	5.4		
Average excl CIL		16.8	18.1 20.9 7.2 7.5 7			7.8				

Source: ABN AMRO forecasts, \*Bloomberg IBES estimates



# Cairn India

#### **Company description**

Buy Price relative to country

Cairn India Limited was formed to hold Cairn Energy Plc's Indian assets. These assets include 12 exploration blocks, two producing properties (CB-OS/2 and Ravva field) and one Rajasthan block (RJ-ON-90/1) under development. The Rajasthan block is the biggest oil discovery in India in 22 years. It holds 3.6bn boe in place with estimated recoverable 2P+EOR reserves of 836m boe of oil. Management expects production from this block to begin in 2009 with a plateau production level of 150,000bbl/d from its three main fields (Mangala, Bhagyam and Aishwariya). Cairn Energy Plc holds a 69% share in the company, Petronas 10% and the balance is held by the public.



#### Strategic analysis

#### **Average SWOT company score:**

#### Cairn major shareholders

#### Strengths

World class and huge resource base, fiscal incentives in India, experienced management, proven development and operational expertise, exploration expertise in India.

4

Not much experience in directly dealing with the Indian government. Most of its new blocks are situated outside proven oil districts.

Opportunities

Scoring range is 1-5 (high score is good)

It has 12 more exploration blocks. Any discovery in these blocks would provide upside to our valuation. Also, any improvement in the recovery rate is likely to improve earnings.

**Threats** 

Uncertainty on cess, poor pricing on crude and delay in production schedule, inability to use EOR

successfully and uncertain government policies.

Sun City, Sector 54 Gurgaon 122 002

> www.cairnindia.com Shares in issue

Source: Company data

3rd & 4th Floors, Orchid Plaza

Market data

Headquarters

1778.4m

Freefloat

Website

MF/FI/

**Majority shareholders** 

Cairn Energy Plc (69%)

#### India

**Country view Neutral Country rel to Asia Pacific** 

The ABN AMRO Indian PMI suggests the economy is still powering ahead despite the global headwinds, thanks to its domestically-oriented economic structure. Moreover inflationary pressure has eased with the recent rate hikes by the RBI. At the sector level, we still like autos (commercial vehicles), software and construction-related stocks as infrastructure spending should be a growth driver in FY08.

The country view is set in consultation with the relevant company analyst but is the ultimate responsibility of the Strategy Team.



#### **Competitive position**

#### Average competitive score:

#### **Broker recommendations**

Hold

Sell

#### Supplier power

India imports 70% of its oil consumption. Imports are a direct competition to its domestic production. Domestic crude pricing would be determined by international crude pricing.

#### Barriers to entry

2-

10

8

6

4

2 0

High capital cost, requirement of technical expertise and high-risk nature of the business. With NELP rounds, more international players get a chance to enter the industry.

#### Customer power

2+

Cairn must sell its production to a government-appointed nominee (MRPL). In the absence of crude offtake by MRPL, Cairn has the right to sell it to other Indian players only.

#### Substitute products

Coal, especially in power plant applications, is more cost-effective than both oil and gas, but only at the pithead.

ONGC is the only other major producer of oil. But Cairn will also have to compete with gas, which should be available in abundance from 2009F. Also, new discoveries by others can increase competition.

Source: Bloomberg

Buv

Scoring range 1-5 (high score is good) Plus = getting better Minus = getting worse

