ABN·AMRO

Friday 29 June 2007

Change of recommendation

Reliance Industries

Earnings to provide a reality check

We downgrade RIL to Sell with a target price of Rs1,300. We believe consensus valuation of its E&P assets is too aggressive. The stock also looks expensive on earnings multiples, given our cautious view on the commodity cycles and belief in rupee appreciation.

Key forecasts

	FY05A	FY06A	FY07F	FY08F	FY09F
Revenue (Rsm)	660513	812113	1053630	982038	927646
EBITDA (Rsm)	126574	144050	182100	181809▼	210725▲
Reported net profit (Rsm)	75716.4	96046.9	115113	122300▲	137078▲
Normalised net profit (Rsm)[1]	75716.4	96046.9	115113	122300	137078
Normalised EPS (Rs)	61.8	78.5	94.1	100.0▲	106.8▲
Dividend per share (Rs)	7.50	10.0	11.0▼	12.0	14.0▲
Dividend yield (%)	0.44	0.59	0.65	0.71	0.82
Normalised PE (x)	27.5	21.6	18.1	17.0▼	15.9▼
EV/EBITDA (x)	19.6	17.6	14.6	15.0	12.3
Price/book value (x)	5.18	6.60	4.29	3.48	2.54
ROIC (%)	9.74	13.0	17.5	10.6	10.3

1. Post-goodwill amortisation and pre-exceptional items
Accounting Standard: Local GAAP
Source: Company data, ABN AMRO forecasts

year to Mar, fully diluted

Limited earnings growth

We estimate RIL's EPS at Rs100-113 over FY08-10, growth of just 6% pa. Our FY10 estimates are 26% below consensus on account of our cautious view on refining/petchem margins and assumption of an appreciating rupee (Rs/US$ will average 41 in FY08, 39.35 in FY09 and 38.40 thereafter). Our FY09-10 estimates now assume oil from KG-D6 and higher prices for KG-D6 gas.

Impressive execution capability

We expect KG-D6 oil and gas production to start from 2QFY09, with oil production averaging 25,000b/d in FY09 and 50,000 b/d in FY10. On KG-D6 gas, despite the recent Mumbai High Court order, our estimates assume a settlement whereby RIL is allowed to sell to third parties until RNRL (Reliance Natural Resources Limited) and NTPC (National Thermal Power Corporation) are ready to take their share (40mmscmd) in FY11F. If the court order is enforced, EPS in FY09 and FY10 could drop by 10% and 22%, respectively. The RPL (Reliance Petroleum Limited) refinery could begin operations in 2HCY08, but we expect it to announce commercial production only from April 2009.

Cautious view on commodity cycles

We maintain our view that although regional GRMs may remain healthy relative to the historical trend, the peak in the refining margin cycle is behind us. We forecast Singapore GRM will fall to US$5/bbl in FY10, from US$6.1/bbl in FY07. Petrochemical margins should remain healthy for the next 12 months, but a sharp downturn looks inevitable to us by 2009-10 as most new Middle East projects (ex Iran) are on track. We assume KG-D6 gas pricing at around US$2.5/mmbtu for NTPC/RNRL, and US$4.5/mmbtu for others.

Downgraded to Sell, target price Rs1,300 (from Rs1,250)

Our valuation for RIL's new E&P finds is US$9.3bn (Rs311/share), substantially below consensus. While RIL's track record in E&P has been solid, we believe the market is being too aggressive in valuing prospective resources, especially given the lag between making a discovery and generating positive cash flows. Even in our bull case scenario, the stock valuation would move up to Rs1,681.

Priced at close of business 29 June 2007. Use of ▲▼ indicates that the line item has changed by at least 5%.

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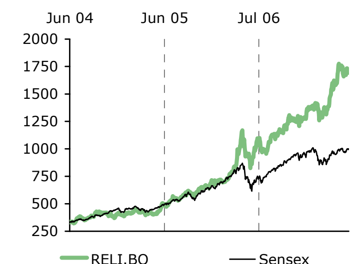
Sell (from Hold)
Absolute performance
n/a
Short term (0-60 days)
Neutral
Market relative to region

Integrated Oil & Gas
India

Price
Rs1700.00
Target price
Rs1300.00 (from Rs1250.00)
Market capitalisation
Rs2.37t (US$57.99bn)
Avg (12mth) daily turnover
Rs1376.07m (US$31.05m)

Reuters	Bloomberg
RELI.BO	RIL IN

Price performance	(1M)	(3M)	(12M)
Price (Rs)	1754.8	1356.1	1009.2
Absolute %	-3.1	25.4	68.5
Rel market %	-3.8	11.4	17.6
Rel sector %	-8.3	12.9	30.5



Stock borrowing: Moderate
Volatility (30-day): 24.16%
Volatility (6-month trend): ↑
52-week range: 1785.00-877.00
Sensex: 14504.57
BBG AP Chemicals: 257.45

Source: ABN AMRO, Bloomberg

Researched by
ABN AMRO Institutional Equities Team

www.abnamrobroking.co.in

The Basics

Key assumptions

We have substantially changed our estimates on the average Rs/US$ rate – from a constant 44 to 41 in FY08, 39.35 in FY09 and 38.4 thereafter. Our refining and petrochemical margin estimates have been tweaked. We now assume all initial gas production from KG-D6 will be sold to third parties at US$4.5/mmbtu in FY09-10 as against earlier assumption of sales to RNRL/NTPC at US$2.5/mmbtu (see the table on the next page for our detailed assumptions).

How we differ from consensus

We believe consensus uses gross shares for EPS calculation, while we use net shares (excluding treasury stock). Restating our EPS estimates using gross shares indicates we are at or above consensus in FY08-09, but 26% lower in FY10. We believe our stronger rupee forecasts provide the shorter-term upside, whereas longer term, the stronger rupee and declining refining and petrochemical margins result in the below-consensus earnings forecast.

Valuation and target price

Our target price of Rs1,300 is based on a sum-of-the-parts valuation using net shares (excluding treasury stock). We value the existing oil/refining/petrochemical businesses on an EV/EBITDA basis (4.5x, 6x, 5.5x respectively, total Rs642/share), the gas reserves and the new retail business on a DCF, and investments in IPCL at market price. We also value RIL's stake in RPL at a 20% holding company discount to the market price.

Catalysts for share price performance

- Consensus expectations on exchange rate moving in line with our forecasts;
- A weakening of refining margins over the next few months in line with our expectations;
- Greater clarity on new global petrochemical projects coming on line; and
- Any delay in the start of RPL refinery, or KG-D6 oil and gas development.

Risks to central scenario

- Rupee depreciating over the US dollar over next few months;
- Refining margins showing no decline and remaining higher yoy;
- Announcement of new discoveries;
- Any IPO plans for Reliance Retail;
- Announcement of a strategic partner in Reliance Retail or RIL's E&P operations; and
- Chevron exercising the option to hike its stake in RPL from 5% to 29%.

Versus consensus

EPS* (Rs)	ABN AMRO	Cons	% diff
2008F	87.8	81.3	8
2009F	94.3	92.2	2
2010F	100.1	134.1	-26

Source: Reuters, ABN AMRO forecasts
**consolidated earnings*

Key events

Date	Event
July 2007	1QFY08 results

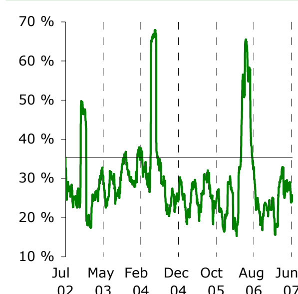
Source: Company

Forced ranking*

Company	Rec	Upside / Downside
ONGC	Buy	21%
Cairn India	Buy	-7%
HPCL	Sell	-9%
IOC	Hold	-10%
BPCL	Sell	-17%
Reliance	Sell	-23%

** by difference to target price as at time of publication. Recommendations may lie outside the structure outlined in the disclosure page*
Source: ABN AMRO forecasts

Volatility (30 day)



Source: Bloomberg

Key assumptions and sensitivities

Table 1 : RIL assumptions

Year to 31 March	2006	2007	2008F	2009F	2010F
Exchange rate year average (Rs/USD)	44.20	45.30	41.00	39.35	38.40
Year end exchange rate (Rs/USD)	44.25	43.47	40.00	38.40	38.40
Refining & Marketing					
RIL refinery crude throughput (mt)	30.47	31.70	32.34	33.00	33.00
RIL GRM (US$/bbl)	10.3	11.7	12.1	11.05	9.29
RPL crude throughput (mt)					26.10
RPL GRM US$/bbl					10.50
Singapore GRMs (Reuters)	6.5	6.1	6.0	5.5	5.0
E&P					
PMT oil production (gross) - bbls/d	32,483	38,115	38,877	41,988	41,988
PMT gas production (gross)- mmscmd	7.6	10.4	14.3	17.2	17.2
KG-D6 gas production (gross)- mmscmd				25.0	40.0
KG-D6 gas price at Kakinada (US$/mmbtu)				4.50	4.50
KG-D6 oil production (gross) - bbls/d				25,000	50,000
Crude oil (Brent) price US$/bbl	58.0	65.0	63.0	55.00	50.00
Petrochemicals					
Production key segments					
Polyester 000t (PFY, PSF, PET)	1,135	1,482	1,694	1,694	1,694
Fiber Intermediates 000t (PX, PTA, MEG)	3,156	4,072	4,551	4,551	4,551
Polymers 000t (PE, PP, PVC)	1,969	2,143	2,215	2,215	2,215
Cracker (ethylene production) 000t	840	908	967	967	967
Margins (US$/t) key products					
PP-naphtha	569	678	573	475	400
PE-naphtha	538	680	583	455	340
PX-naphtha	388	537	493	405	300
PSF	123	115	133	149	158
PFY	387	422	413	429	438

Source: Company data, ABN AMRO forecasts

Table 2 : Material changes in our assumptions

	2008F	2009F	2010F
New exchange rate	41	39.35	38.4
Old exchange rate	44	44	44
New KG D6 oil production (bbl/d)		25000	50000
Old KG D6 oil production (bbl/d)		0	0
New KG D6 gas production		25	40
Old KG D6 gas production		10*	55
New KG D6 gas price (US$/mmbtu)		4.5	4.5
Old KG D6 gas price (US$/mmbtu)			2.77

Source: ABN AMRO estimates (in DCF model but not earnings model, as commercial production was expected only from FY10)*

Table 3 : Sensitivity

Year to 31 March	2008F	2009F	2010F
EPS sensitivity for Rs1 change in exchange rate	1.0%	4.0%	4.1%
EPS sensitivity for US$1/bbl change in GRM	6.4%	5.6%	8.3%
EPS sensitivity for US$0.5/mmbtu change in gas price		3.70%	5.10%
EPS sensitivity for US$1/bbl change in oil price		3.7%	4.4%

Source: ABN AMRO estimates

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Reliance Retail **27**

Rising real estate costs and difficulty in retaining employees are key challenges for the Indian retail sector. Reliance Retail's initial ramp-up appears satisfactory and we are raising our valuation

Earnings to provide a reality check

The anticipated surge in FY10 EPS on account of RPL and KG-D6 block may not materialise due to sliding refining/petrochemical margins and a stronger rupee, making the stock look expensive on medium-term earnings multiples.

Limited earnings growth

FY10 estimates 26% below consensus

IPCL not yet merged with RIL

RIL has released its FY07 results for the parent company, and the results post-merger with IPCL are due in July/August 2007 once all the approvals for the merger are in place. Our financials are yet to adjust for the IPCL merger and continue to treat IPCL as an associate. However, we account for RIL's 75% stake in Reliance Petroleum (RPL) and hence our financials are fully consolidated.

Positive upgrade on KG-D6, but exchange rate is negative

We tweak our estimates on refining and petrochemical margins. We have adjusted our earnings forecasts to reflect our new assumptions on the average Rs/USD rate, ie 41 in FY08, 39.35 in FY09 and 38.4 thereafter. At the KG-D6 block, we now expect gas production to start in 2QFY09 (earlier assumption, December 2008) and also factor in oil production in the same time line (earlier assumption, no oil). Further, we now expect initial gas production to be sold to parties other than RNRL/NTPC at US$4.5/mmbtu (at Kakinada), whereas earlier we were estimating initial production up to 40mmscmd would be sold to RNRL/NTPC at US$2.5/mmbtu. As a result of all these, there should be material revenues from KG-D6 in FY09F, resulting in full recognition in the books. Our model earlier assumed that, in the absence of material revenues, FY09 income would be treated as trial production to optimise the seven-year income tax holiday.

For RPL, we continue to believe that while the refinery may begin operations in 2HCY08, commercial production will be announced only from April 2009 to optimise the income-tax benefit (five-year tax holiday).

Table 4 : RIL - change in consolidated profit estimates

Year to 31 March	2008F	2009F	2010F
EBITDA (Rs m)			
Revised	181,809	210,725	266,719
Previous	199,709	157,811	246,927
Change	*-9%*	*34%*	*8%*
Group net profit (Rs m)			
Revised	122,300	137,078	151,556
Previous	115,490	83,748	126,301
Change	*6%*	*64%*	*20%*
EPS (Rs)			
Revised	100.0	106.8	112.8
Previous	94.4	68.5	103.3
Change	*6%*	*56%*	*9%*
EPS (based on gross shares)			
ABN AMRO current estimate	87.8	94.3	100.1
Consensus	81.3	92.2	134.9
ABN vs consensus	8%	2%	-26%

Source: Bloomberg, ABN AMRO forecasts

The assumption on KG-D6 oil production is critical since the development plan would be filed after an FPSO (floating production, storage and offloading) vessel is secured (production to start one year thereafter). If oil production is not possible in FY09, then our FY09 EPS forecast would stand reduced to Rs96.4 (down 9.4%).

KG-D6 oil delay -9.4% EPS impact

In FY08, the change in the exchange rate assumption has led to a 9% cut in our EBITDA estimate, whereas our net profit estimate has gone up 6% as we expect interest costs to decline sharply on account of the entire forex debt being marked to market (positive impact from forex debt is estimated at Rs15.7bn).

In April 2007, RIL made a preferential issue of 120m warrants to the promoter group. These warrants convert into an equal number of shares at Rs1,402/share; Rs16.82bn, representing 10% of this issue, has already been received. We assume the promoters will bring in the remaining 90% within the prescribed 18 months (ie, September 2008).

Warrants assumed to be exercised

Table 5 : RIL - consolidated earnings

Year to 31 March (Rs m)	2006	2007F	2008F	2009F	2010F
Segmental revenue					
Petrochemicals	247,516	322,982	315,503	268,205	230,508
Refining & Marketing	526,185	618,437	553,281	475,991	413,169
RPL refinery					332,894
E&P	14,452	20,245	21,858	92,054	133,793
Total	788,153	961,665	890,641	836,249	1,110,363
Segmental EBITDA					
Petrochemicals	50,435	62,328	66,484	49,068	27,604
Refining & Marketing	81,163	102,158	96,550	82,781	62,557
RPL refinery				0	62,189
E&P	12,452	17,614	18,775	78,876	114,370
Total	**144,050**	**182,100**	**181,809**	**210,725**	**266,719**
EBITDA share %					
Petrochemicals	35%	34%	37%	23%	10%
Refining & Marketing	56%	56%	53%	39%	47%
E&P	9%	10%	10%	37%	43%
Depreciation	(34,009)	(40,090)	(42,025)	(48,649)	(69,604)
Interest	(8,770)	(11,140)	(132)	(11,956)	(29,490)
Non-op income (incl share of associates)	11,123	7,963	8,490	11,668	16,639
PBT	112,394	138,833	148,142	161,788	184,264
Tax	(16,347)	(23,720)	(25,842)	(24,710)	(23,000)
Effective tax rate	*15%*	*17%*	*17%*	*15%*	*12%*
Net profit	96,047	115,113	122,300	137,078	161,264
Minority interest					(9,708)
Group profit	**96,047**	**115,113**	**122,300**	**137,078**	**151,556**
Group EPS (Rs)	**78.5**	**94.1**	**100.0**	**106.8**	**112.8**

Source: Company data, ABN AMRO forecasts

Exchange rate would materially impact earnings

Virtually all of RIL's earnings in oil/gas as well as refining/petrochemicals are denominated in US dollars. For example, while input crude oil is purchased in US dollars, almost all exports would again be in US dollars and even local prices are based on import parity prices. In fact, the connection with the exchange rate has strengthened as exports constitute nearly 68% of RIL sales (4QFY07 actual, up from 30% in FY04). Hence earnings in local currency is vulnerable to a sharp appreciation of the rupee.

RIL pricing linked to exchange rate

In our view, the only way to tackle a sustainable rupee appreciation would be to keep the debt in foreign currency. RIL has been doing precisely that and 73% of its total debt as at end-FY07 was in foreign currency. Forex debt would lower interest costs.

Further, under Indian accounting standards, the entire forex debt has to be marked to market at the end of every quarter and the resulting gain/loss has to be shown under interest expenses. This accounting norm means a sharp rupee appreciation would not hurt near-term profit, as the negative impact at the EBITDA level could be compensated by a lowering of the interest expenses. However, while the savings in interest costs is a one-time gain, the hit on EBITDA would continue.

Rupee appreciation hurts only in long term

The Rs/USD rate as at end-FY07 was 43.47, while we previously assumed the rate would remain at 44. RIL's forex debt as at end-FY07 was Rs197bn (US$4.5bn). At an exchange rate of 44, we were earlier estimating RIL's FY08 gross margin at Rs283bn (basically volumes*USD gross margins*exchange rate). To illustrate the impact of the exchange rate, assume the rate moves to 40 (ie, 10% appreciation) and remains at that level. Our gross margin estimate would drop by Rs28bn, reducing EBITDA by that extent. However, the forex debt value would also fall 10% (Rs20bn), positively impacting interest costs by that extent and leading to a net negative impact of just Rs8bn.

However, the positive impact of the forex debt is a one-time event. If the rupee then continues to remain at 40, gross margins in subsequent years would continue to be 10% lower with no further boost from a reduction in forex debt. Our new exchange rate forecasts have boosted our FY08 earnings estimates, as the change in the year-end rupee forecast (40 vs 44 earlier) is sharper than the change in the average forecast for the year (41 vs 44).

Rs1 change can impact EPS by 4%

A change in the exchange rate forecasts by Rs1 can impact EPS by around 4%, but this impact will be felt only in year two, as year one will also have the impact of the forex debt adjustment. If our earlier exchange rate forecast of 44 were maintained, our EPS estimate for FY08, FY09 and FY10 would have been higher by 0%, 14.2% and 23.4% respectively.

Table 6 : RIL- workings on impact of exchange rate

Year to 31 March	2008F	2009F	2010F
Current estimates			
Rupee dollar year average	41.00	39.35	38.40
Rupee dollar year end	40.00	38.40	38.40
EPS (Rs)	100.0	106.8	112.8
EPS sensitivity for Rs1 change	1.0%	4.0%	4.1%
EPS at our earlier assumption of 44	99.8	122.0	139.2
change vs current estimate	*-0.2%*	*14.2%*	*23.4%*
EPS if exchange remains at 41 (Rs)	96.8	109.2	125.2
change vs current estimate	*-3.1%*	*2.3%*	*11.0%*

Source: ABN AMRO forecasts

Capex plans remain aggressive

Capex has been running above our estimates

The total investments by RIL (parent, excluding RPL) in FY07 were Rs189bn, substantially above our estimate of Rs139bn. E&P capex was Rs58bn compared to our estimate of Rs44bn, while investments in Reliance Retail (Rs38.8bn) and gas pipeline deposits (Rs20bn) were higher than our respective estimates of Rs12.8bn and Rs10bn. Even for RPL, the total funds utilised as on 31 March 2007 stood at Rs189bn compared to Rs116bn projected in its April 2006 prospectus. The variation is mainly due to payments in advance under various project contracts to ensure continued efficient and speedy implementation of the project. We believe this is likely to be a common theme for all RIL projects, given its balance sheet strength.

Our capex numbers now factor in:

- The new US$3bn petrochemical complex announced in March 2007, which is due for completion in FY11.
- Development capex of US$5.2bn for KG-D6 phase 1 gas development, and phase II additional capex of US$3.64bn starting from FY10.
- Development capex for KG-D6 oil – our estimate is US$490m. The firm capex figures will be available once the development plan for oil is filed with the Indian government (GOI), which we expect in next few months.
- The refining and marketing capex includes normal maintenance expenditure on the refinery as well as capex on rollout of more retail outlets. Given our forecasts for lower oil prices, we believe RIL will add more retail outlets, taking the total to 3,000 by end-FY10 (from 1,385 at end-FY07).
- Total equity contribution of Rs100bn in Reliance Retail, in line with its announced plans to spend Rs250bn in total over the next few years.
- Rs25bn in 15-year deposit for the Rs162bn East-West gas pipeline being set up by Reliance Gas Transportation and Infrastructure Company (RGTICL); Rs20bn given till end-FY07. We have also factored in a deposit of Rs25bn in FY09/10 for the two additional pipelines proposed by RGTICL, flowing from Kakinada south to Chennai/ Bangalore and north/east to Haldia.

Additional capex could come from:

- Development capex on other discoveries (NEC-25, CBM) as the development plans on these blocks are yet to be filed with the regulator.
- Higher spending on pure exploration. While RIL does not provide a break-up of its annual E&P spending, we estimate annual spending of Rs10bn on pure exploration activities like seismic studies and exploratory drilling.

Table 7 : RIL (parent) - capex breakdown

Year to 31 March (Rs m)	2006	2007F	2008F	2009F	2010F	Total FY08-10F	US$m*
Petrochemicals	29,210	4,170	3,000	15,000	51,000	69,000	1,683
Refining & marketing	34,790	14,670	11,150	20,000	15,000	46,150	1,126
E&P	21,967	57,818	96,430	92,951	57,197	246,578	6,014
Common	8,780	13,630	10,000	10,000	10,000	30,000	732
Total capex	**94,747**	**90,288**	**120,580**	**137,951**	**133,197**	**391,728**	**9,554**
Equity investments							
Reliance Petroleum	27,000	40,500					
Reliance Retail	2,151	37,849	40,000	20,000		60,000	1,463
Gas pipeline (deposits)		20,000	5,000	15,000	10,000	30,000	732
Total investment	**123,898**	**188,637**	**165,580**	**172,951**	**143,197**	**481,728**	**11,749**
Net debt/equity %	62%	64%	50%	13%	10%		
Consolidated Net debt/equity (incl RPL) %	51%	57%	56%	24%	19%		

**converting at exchange rate of 41*
Source: Company data, ABN AMRO forecasts

Ability on make global acquisitions

RIL's balance sheet can easily absorb more capex, in our view. Gearing looks set to reduce comfortably given our assumption the promoters will exercise their warrants in FY09, bringing in total Rs168bn (US$4bn) as additional equity – 10% of this sum has already come in April 2007. We estimate net debt/equity will decline to 10% by FY10 (19% for the consolidated entity). Post 2010, it remains to be seen whether RIL conceptualises new projects to absorb this cash flow, or else returns this cash to shareholders via higher dividend payouts (which is still quite low at 12%). In our view, the latter option is unlikely and the obvious use of cash would be for a large

global acquisition, which could be in any of the operational segments – refining, petrochemicals, E&P, or even retail.

Impressive execution capabilities

Bucking the global trend in project execution

Setting global standards in project execution

If RIL manages to commission RPL refinery and the KG-D6 oil/gas development in 2008 within budgeted costs, it will be an extremely creditable achievement, in our view. RIL has been maintaining its project deadline despite a severe global crunch in the EPC market and even international oil giants have been forced to admit delays in their commissioning schedules. We now assume all three key projects – RPL refinery, KG-D6 oil and KG-D6 gas – will be commissioned by 2QFY09. Given the lead time in stabilising output from a new refinery, we assume RPL will declare commercial production only from April 2009.

KG-D6 oil development – assuming an FPSO tie up

KG-D6 oil timing will depend on ability to secure FPSO

The oil discovery in KG-D6 has been in the news for a long time, but the official confirmation on volumes was provided only in April 2007. RIL expects fast-track development of oil using an FPSO. It estimates initial production at 30,000-35,000 barrels/day (b/d) rising to 50,000b/d. There has some speculative building of FPSOs and RIL is in discussion with the concerned parties. In April 2007, RIL said that it expects to tie up the FPSO in another three months (ie, June/July 2007) and immediately file a development plan with the regulator. Oil production would then be targeted to start in 2HCY08.

The development plan would provide details on the size of reserves and capex. We assume oil production from KG-D6 will start from 2QFY09 and will average 25,000b/d in FY09 and 50,000b/d in FY10. We assume a 50,000b/d production profile for 10 years and accordingly arrive at an oil reserve estimate of 163m barrels. However, RIL's target on oil production (2HCY08) depends on being able to tie up an FPSO by June/July 2007. Inability to secure an FPSO could lead to delay in oil development, significantly impacting earnings. If oil production is not possible in FY09, then our FY09 EPS forecasts would stand reduced to Rs96.4 (down 9.4%).

Table 8 : RIL - EPS sensitivity to KG-D6 oil

Year to 31 March	2009F	2010F
Current estimates		
KG-D6 oil production (gross) - bbls/d	25,000	50,000
Crude oil (Brent) price US$/bbl	55.00	50.00
EPS (Rs)	106.8	112.8
EPS sensitivity for US$1/bbl change in oil price	3.70%	4.40%
EPS sensitivity for 10% change in output	0.94%	1.50%

Source: ABN AMRO forecasts

KG-D6 gas – supply assumed from 2QFY09

While officially RIL has maintained that gas production would start from 2HFY09, company president (oil and gas) PMS Prasad has been quoted frequently stating that production would start from July 2008 (*Business Standard,* 20 March 2007). Our estimates now assume that gas production will start from 2QFY09 and would average at 25mmscmd in FY09 and 40mmscmd in FY10.

Assuming settlement of dispute with NTPC/RNRL

Genesis of the dispute

Earlier agreements promised gas to NTPC/RNRL

In May 2004, RIL won a bid to supply 12mmscmd gas to NTPC's power plants at Kawas and Gandhar (total 2,600MW). The subsequent gas contract is yet to be signed and is currently under litigation. In December 2005, as part of the de-merger of RIL, a new company called Reliance Natural Resources (RNRL) was formed (now controlled by the Anil Dhirubhai Ambani group) with whom RIL has signed a gas supply master agreement. The broad terms of this agreement (which is also under litigation) are as follows:

- RIL will supply 28mmscmd of gas to RNRL or its affiliate on the east-west gas pipeline after considering gas already committed to NTPC (ie, 12mmscmd for 17 years). If the NTPC contract does not go through, the NTPC volume will revert to RNRL.
- The gas price would be US$2.47/mmbtu at Kakinada (scope for partial escalation in line with US CPI) and the transportation tariff would be US$0.72/mmbtu (these were the pricing terms for NTPC as well).
- RNRL would have the option to purchase more gas, but at market prices.

The fate of both these contracts is uncertain at this point. News reports from financial dailies, including *The Economic Times* (dated 18 July 2006), indicate the dispute between NTPC and RIL relates to the extent of liability on the take-or-pay contract, rather than on the actual gas price.

Free market gas pricing still being debated

RIL has sought price bids for its gas....

RIL has said it intends to begin gas production next year and has started its marketing efforts. The Indian government's current policy states that gas prices should be determined based on competitive bidding, since it would get significant revenue in the form of royalty, profit petroleum and income tax, based on gas revenues. RIL is reported (*Economic Times,* 9 June 2007) to have sought bids from 10 companies (five power, five fertiliser) and press reports indicate they have bid anywhere in the region of US$4.3-4.7/mmbtu (landfall point at Kakinada). These bid prices would be valid only up to 31 March 2012. Press reports have also indicated the RIL price formula is linked to crude prices (Brent), with a floor of US$25/bbl and ceiling of US$65/bbl.

We estimate the current unmet demand in the country at around 34mmscmd (see our report, *Oil Check, India: step on the gas*, 23 March 2007). This represents customers who have existing plants that cannot operate at full capacity purely due to non-availability of gas. Consequently, these are the best potential customers for RIL's gas, and we believe the price quotes given above are from such customers.

....but is facing opposition from consumer industries

Subsequent to disclosure of RIL bids, there have been protests from both the power and fertiliser ministries that these prices are too high. Their contention has been that these sectors are regulated and therefore the companies actually do not bear the cost of input. It is borne by the customers in the case of power, and the government (through the subsidy mechanism) in the case of fertiliser. The government in the state of Andhra Pradesh (where RIL gas will land) has been particularly vocal in asking for preferential supply of gas at lower prices. The petroleum ministry is of the view that under NELP, it cannot set gas prices and only has to ensure that prices are set based on competitive bids. Heavy private sector investment is needed in E&P, and government interference in gas pricing could discourage this investment. Keeping in view the contentious nature of the dispute, the government is reported to have asked a committee of secretaries to look into this issue (*Business Line,* 26 June 2007).

Recent high court decision spells uncertainty

High court has ruled in favour of RNRL

In order to ensure gas supplies from RIL, RNRL filed a suit in the Mumbai High Court, which gave its interim judgement on 21 June 2007. The judgement states that gas from KG-D6 cannot be sold to third parties for the next eight years. The text of the judgement explains how the initial gas production of up to 81.6mmscmd is to be sold under the current agreement between RIL and RNRL.

The priority of gas supply would be as follows:

(a) First priority to NTPC for 12mmscmd as per NTPC agreement subject to (b) below.

(b) If RIL and NTPC are unable to execute the agreement, RNRL would have the option to purchase NTPC volumes.

(c) The next priority will be to RNRL for 28mmscmd, which could increase to 40mmscmd as indicated in (b) above. These would be base quantities available at favourable pricing (described below).

(d) For gas production in excess of 40mmscmd, 60% would be retained by RIL and RNRL would have an option for balance 40% (option volumes). Option volumes would be sold at market-determined prices.

(e) After the initial production of 40mmscmd, gas volume of up to 25mmscmd would be reserved for RIL for captive consumption. This 25mmscmd would be set off against the 60% entitlement of RIL explained in (d) above.

(f) If there is further gas available, RNRL would be entitled to an additional 16.67mmscmd (if RIL is to get 25mmscmd for 60% share, RNRL's 40% share would be 16.67mmsmcd).

(g) RNRL would have the option to buy 40% of the gas over and above 81.6mmscmd. This issue looks to be the subject matter of another application, which is to be heard on 5 July 2007.

Thus, there is clear identified distribution for the first 81.6mmscmd of gas production. The High Court has compared this with RIL's current projected gas production from KG-D6. Since this profile provides for a maximum production of 80mmscmd in the first eight years, the judgement bars sale of gas to third parties (ie, other than NTPC, RNRL and RIL internal consumption) for the first eight years.

Pricing for base volumes is critical, as option volumes are at market price

RNRL base volume pricing looks very attractive

From RIL's point of view, only the base-volume pricing is critical to earnings as this is at very low levels. The option volumes are at market prices, and hence do not affect earnings. The RIL contract with RNRL specifically gives a gas pricing formula, which to our understanding is the same as that for NTPC. Under this formula, the gas price (split between commodity price and marketing margin) would be US$2.47/mmbtu in 2004. 15% of the price is linked to US inflation (base is the US CPI of 185.2 for September 2003). US CPI has been increasing at 3.2% per annum for the last three years. Assuming this rate continues, the gas price would work out to US$2.56/mmbtu in FY11, rising 0.5% (15% of 3.2%) thereafter.

NTPC/RNRL may not be ready to take their gas

NTPC/RNRL plants not yet ready

The added uncertainty in this situation is that NTPC/RNRL may not be in a position to buy gas from next year. Gas supplies to NTPC/RNRL were for new power projects, and in the absence of any firm gas supply agreement, both parties have not been able to implement these projects. In our view, it would take a minimum of 18-24

months to get a gas-based power plant up, provided all other issues such as land acquisition and basic infrastructure are resolved. While NTPC would be in a position to take 12mmscmd for its existing units, we think it is unlikely to do so, given the RIL winning bid was specifically for new plants at Kawas and Gandhar. Assuming these disputes are settled over the next six months and RIL agrees to supply NTPC/RNRL, the earliest they will be able to absorb would be FY11, whereas gas production can start in FY09 itself. Also note the NTPC agreement calls for supply for 17 years (life of the power plant), whereas RIL's current gas production profile based on 2P reserve estimate of 11.3tcf is only for 11 years.

Judgement could impact pipeline financing and tariffs/gas realisations

Pipeline volumes and tariff would depend on whether judgement is sustained

The upfront investment required for gas development is often not appreciated. While capex on KG-D6 upstream development (US$5.2bn in phase I, US$3.6bn in phase II) is known, we believe RIL will have to make significant initial investments in pipelines as well, given the lack of infrastructure in the country. RGTICL is currently building the east-west pipeline at a cost of Rs162bn (US$4bn), and two more pipelines are planned, which could cost an equivalent amount. RIL expects these pipelines to be funded externally, with minimal contributions from its end (long-term deposits of 15% of the project cost). However, for external investors to put up the cash, they need visibility on pipeline transportation volumes. The recent High Court judgement reduces this visibility.

Second, the cost of gas for the customer is the price at the landfall point (Kakinada) plus the transportation tariff; the lower the transportation tariff, the higher the ability to raise the landfall price, and vice versa. Transportation tariff in turn would depend on volumes transported. We estimate that for the east-west pipeline, the tariff could work out to US$0.70/mmbtu if the sustainable volume level is 80mmscmd. If this level cannot be achieved, then the pipeline tariff may need to be raised, which could impact gas realisations.

We have assumed some settlement in national interest

The High Court judgement brings in significant uncertainty since NTPC/RNRL may not be able to take gas from FY09. We believe RIL could absorb about 15mmscmd for its existing plants, although these numbers could go up once its plans to set up Special Economic Zones (SEZs) and city gas distribution (CGD) networks make progress. RIL has indicated it has potential to quickly ramp up its gas production to 80mmscmd, which could wipe out the current unmet gas demand in the country.

Thus, if the judgement were to be strictly implemented, RIL would need to produce only for internal consumption (15mmscmd), despite existing customers being able and willing to consume an additional 30mmscmd. Consequently, there have been press reports that the government itself may approach the Supreme Court to allow RIL to sell gas to third parties (RIL has officially not commented on this issue).

Some sort of settlement looks inevitable, in our view. On the one hand, we cannot ignore the possibility that 40mmscmd of gas production may need to be sold at a price close to US$2.5/mmbtu, given the agreements with NTPC/RNRL and the High Court judgement. On the other hand, assuming RIL cannot sell to third parties, being forced to curb its gas production looks like an extreme scenario.

Hence, our base case assumes the following settlement:

We assume that 40mmmscmd will be allocated to RNRL/NTPC at close to US$2.5/mmbtu

- RIL agrees to sell 12mmscmd of gas to NTPC and 28mmscmd to RNRL for 17 years. These would be sold at prices initially quoted for the NTPC tender, ie slightly above US$2.5/mmbtu at Kakinada. No marketing margins will be allowed (see further discussion below). RNRL gives up its option for any further gas

supplies from RIL. The government also agrees to use the above gas price for the purpose of working out its share of fiscal levies.

- RIL is free to sell the balance of its gas production to third parties, or for internal consumption, at full market prices. Such sales to parties other than NTPC/RNRL will not exceed 40mmscmd, given RIL's current maximum projected production level of 80mmsmcd.
- NTPC and RNRL would be able to take their contracted volumes only from FY11, hence RIL would be free to sell to third parties (up to 40mmscmd) in FY09 and FY10.

Free market gas pricing assumed at US$4-4.5/mmbtu

We have been cautious on gas pricing, as the projected gas volume from KG-D6 (80mmscmd) is well in excess of our estimate of the current unmet demand (34mmscmd). Hence, new plants would have to be built to absorb the additional gas. We see a large part of the incremental gas demand coming from the power sector, which has an alternative fuel – coal. Domestic coal is by far the cheapest source of power, but there are environmental issues and constraints on availability. Hence, we believe gas would need to compete with imported coal. Our analysis (in *Oil Check, India: step on the gas*, 23 March 2007) indicated the maximum price that can be charged to run a power plant would be US$4.0/mmbtu at Kakinada. Our estimate for the long-term free-market price was slightly lower at US$3.5/mmbtu.

Free market price of US$4-4.5/mmbtu

We raise our free-market gas price assumptions due to the latest uncertainty in gas volumes. We now believe gas price of US$4.5/mmbtu is achievable till FY12, since we are assuming that volumes available at this price will not be more than 40mmscmd. This assumes there is no interference from the government on pricing. Post FY12, we assume this price will decline marginally to US$4/mmbtu. The gas price for FY12 onwards depends on the extent to which new gas discoveries are made over FY08-12.

Government can use market price, if contract price is lower

Under the production sharing contract (PSC) applicable to NELP blocks (like KG-D6), the operator is freed to sell gas within India, but through open competitive bidding. The government earlier rejected the contract price between RIL and RNRL on the basis that it was not an arm's length transaction between non-affiliated companies. Press reports say the RIL-RNRL contract would therefore not be valid.

Govt levies can be on market price, even if contract price is lower

We believe the government's direction to arrive at gas prices via competitive bidding is only for the calculation of fiscal levies, and that an operator can theoretically sell its gas to third parties at any price. However, if the government finds the contract price too low, it can force the operator to make fiscal payments (royalty and profit petroleum) based on the higher market price. Even the Mumbai High Court in its earlier judgement in the RIL/RNRL case said the valuation of gas is only for the purpose of calculating royalty and profit petroleum.

This principle is widely prevalent in the Indian property market, where the state government has independent minimum valuations for all residential/commercial properties. Given the widespread use of cash in property transactions, the seller could insist that the agreement value of the property (which is paid by cheque) is, say, 60% of the actual transaction price (rest being paid in cash). Since the buyer pays stamp duty based on the agreement value (60% of true value), the state loses out on revenue. Hence under current laws, if the agreement value is below the minimum value specified by the government, the stamp duty is paid on the minimum value and not the agreement value.

Will marketing margins be allowed?

An interesting aspect of RIL's gas pricing formula is the inclusion of 'marketing and risk management charges' in the price payable by the customer. The pricing formula for sale to NTPC/RNRL pegs this margin at US$0.12/mmbtu – the commodity price is US$2.34/mmbtu, taking the total price to US$2.47/mmbtu, excluding transportation charges and sales tax. News reports suggest the free-market price for RIL's recent gas discoveries also includes a marketing margin component.

For customers, the marketing margin makes no difference, as they would consider the total price and then decide whether it is affordable. The inclusion of marketing margins in gas price has implications for profit petroleum calculations, and hence the valuation of gas for RIL. Marketing margins accrue to RIL alone and are not included when calculating the government's share in profit petroleum. For example, in case of NTPC/RNRL, the gas price used for calculating royalty and profit petroleum would be US$2.34/mmbtu, whereas RIL would get the additional US$0.12/mmbtu.

We assume marketing margins not allowed…

Our base case assumes the government will not allow this marketing margin and that the margin will be merged with the commodity price. To demonstrate the case for such a margin, RIL would have to show that gas marketing would involve significant additional costs, a difficult proposition given the current gas shortage in the country. Earlier demands by GAIL for marketing margins on domestic gas supplies from ONGC have been rejected by the government.

…but they can add Rs5.2bn to PBT

For an annual production of 80mmscmd, a marketing margin of US$0.12/mmbtu can add US$126m (Rs5.2bn at Rs41/USD) to EBITDA and pre-tax profits.

Implications for earnings

We have earlier argued that a very high peak government profit share (85%) caps the potential valuation of this block, and assuming substantial high production or high gas prices does not exponentially raise the DCF value of this block. However, in this reasoning, we may have missed a critical point, which is that the impact of this block on near-term earnings (FY09/10F) is going to be very substantial due to the absence of government profit share and very low income tax.

If court judgement enforced, downside to EPS: FY09F 10%, FY10F 22%

In this context, the importance of the recent judgement cannot be over-emphasised. If the judgement is enforced, then RIL gas output in FY09/10 may be restricted only to 15mmscmd (internal consumption). This would cause our EPS for FY09 to drop to Rs95.9 (down 10.2%) and for FY10 to Rs88.5 (down 21.5%). On the other hand, if there are no constraints, RIL's gas output in FY10 could reach 80mmscmd, causing FY10F EPS to rise to Rs151.8 (up 34.6%), assuming the average gas price remains at US$4.5/mmbtu.

Table 9 : RIL - EPS sensitivity to KG-D6 gas

Year to 31 March	2009F	2010F
Current estimates		
KG-D6 gas production (gross)- mmscmd	25.0	40.0
KG-D6 gas price at Kakinada (US$/mmbtu)	4.50	4.50
EPS (Rs)	106.8	112.8
EPS sensitivity for US$0.5/mmbtu change in gas price	3.70%	5.10%
EPS sensitivity for 10% change in output	2.60%	3.50%

Source: ABN AMRO forecasts

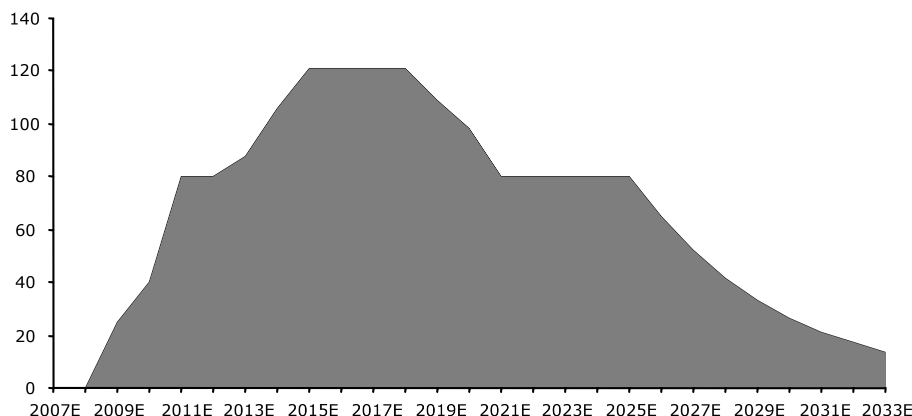
We estimate DCF value for KG-D6 block at US$7.5bn

Our reserve and capex figures are maintained, pricing has changed

We maintain our estimates on KG-D6 gas reserves (23 tcf) and capex (for details see, *Reliance Industries – Emerging businesses driving value*, dated 14 February 2007). For FY09, we raise our production estimate from 10mmscmd to 25mmscmd as

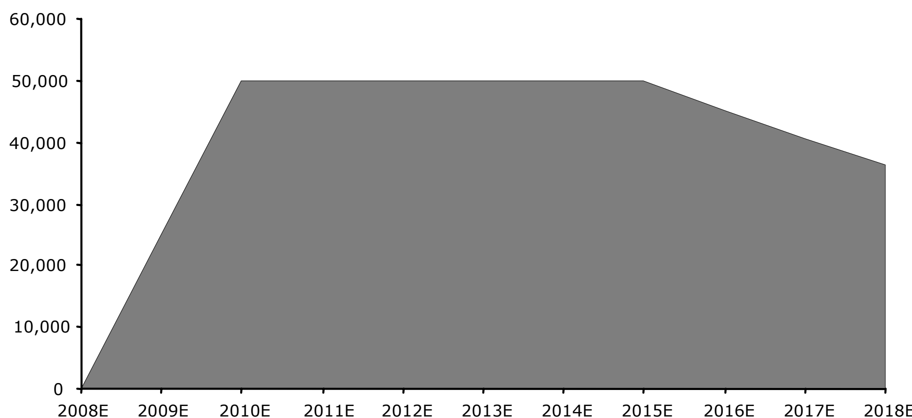
production is now assumed to start in 2QFY09. However, we cut our FY10 estimate from 55mmscmd to 40mmscmd in line with our assumption on settlement of the gas dispute. From FY11, we maintain our earlier estimate of 80mmscmd production plateau for 17 years, briefly increasing to a high of 120mmscmd and then declining to below 80mmscmd after 17 years. Also, as mentioned earlier, for non-NTPC/RNRL supplies, we now assume a gas price at Kakinada of US$4.5/mmbtu for FY09-12 and US$4/mmbtu thereafter.

Chart 1 : KG-D6 gas production profile (mmscmd)



Source: ABN AMRO estimates

Chart 2 : KG-D6 oil production profile (bbl/d)



Source: ABN AMRO estimates

KG-D6 oil now assumed from FY09

With RIL officially declaring that oil production would also begin from 2HCY08, our model now incorporates a valuation for KG-D6 oil. The oil reserve figures have not been disclosed; we assume the declared initial production level of 50,000b/d will be maintained for the next six years, declining marginally for the next three years and resulting in a derived reserve base of 163m barrels based on a 10-year production profile. Since the oil/gas would come from one block, oil revenues would also impact the government's profit share in the entire block, and we see no point in valuing the oil separately on boe or other basis. We hope to have greater clarity on reserves, capex and operating costs once RIL files the development plan in the next month or so.

KG-D6 gas valued at Rs208/share; oil addition takes this to Rs250/share

Based on the above assumptions, we value RIL's 90% stake in the KG-D6 block at Rs306bn (US$7.5bn at Rs41/US dollar) or US$1.93/boe. A 1% change in the discount rate impacts our DCF valuation by 8%. Our valuation for the KG-D6 gas works out to Rs208/share. Adding the oil reserves, this rises to Rs250/share.

Table 10 : DCF valuation of KG-D6 block

Basic assumptions for 100% stake

- Recoverable gas reserves to be 23tcf
- Total capex US$13.3bn. Phase I capex (till FY09) to be US$5.2bn, phase II (FY10-12) US$3.6bn, phase III (FY13-15) US$3.5bn, subsequent maintenance capex US$100m pa
- Production over 25 years starting in July 2008, with plateau of 80mmscmd over 17 years and peak production of 120mmscmd
- 40mmscmd gas supply to RNRL/NTPC from FY11 as per contract price (US$2.56/mmbtu)
- Balance gas supply at US$4.5/mmbtu (at Kakinada) from FY09-12 and at US$4/mmbtu thereafter
- Lifting cost US$0.4/mmbtu for gas
- Recoverable oil reserves at 163m bbls, production at 25,000b/d in FY09 and 50,000b/d for the next six years
- Capex of US$3/bbl and lifting costs of US$5/bbl for oil
- Average Rs/US$ at 41 in FY08, 39.35 in FY09 and 38.40 thereafter
- Royalty on gas sales at 5% for the initial 7 years and 10% thereafter
- Income tax holiday for seven years starting from FY09, but subject to MAT (11.5%) on book profit
- Discount rate 10%

Resulting valuation for RIL stake (90%)

DCF value (Rs bn)	306
DCF value (US$ m)	7,463
Value per boe (US$)	1.93

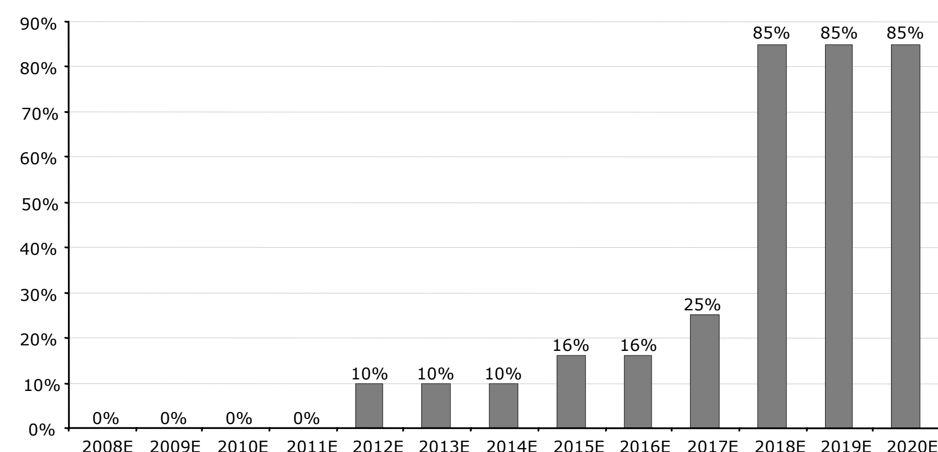
Source: ABN AMRO estimates

Table 11 : Government profit share in KG-D6 block

Investment multiple	Government profit share
0.0-1.5	10%
1.5-2.0	16%
2.0-2.5	28%
>2.5	85%

Source: Niko Resources

Chart 3 : Estimate of government profit sharing in KG-D6



Source: ABN AMRO estimates

Lower valuation if the government takes higher gas price for fiscal levies

If government insists on getting its dues based on market price, DCF value could drop to Rs171/share

As said earlier, under the settlement scheme, we assume RIL will commit to supply 40mmscmd at around US$2.5/mmbtu to NTPC/RNRL and the government will accept this price for the purpose of its fiscal levies. An extreme case would be that RIL is forced to sell these volumes at the price as per court directions. The government, on the other hand, insists on getting its fiscal levies based on the market price (US$4-4.5/mmbtu). It can do so only for RNRL volumes, as NTPC volumes were supplied pursuant to an international tender. In this unlikely scenario, our DCF value for the KG-D6 block would drop to Rs233bn (100% value), or Rs171/share.

Is our DCF value too low?

Our sub US$2/boe valuation for the KG-D6 block may look very low, given the market perception that oil/gas assets trade at US$12-18/boe. We highlight a few issues in this regard.

- Most of the transaction multiples mentioned above are based on proved reserves, whereas our valuation considers total recoverable reserves (23tcf). KG-D6 proved plus probable reserves are given at 11.3tcf, but the exact proved number is not disclosed. In case of proved reserves, generally the bulk of the capex is already spent, which significantly impacts valuation (explained below). Further, an acquirer may be paying a high multiple based on proved reserves, but may be assuming that total recoverable reserves are much higher than proved reserves, thereby reducing the per barrel cost.
- Valuation for oil would be substantially higher than that for gas. Our KG-D6 valuation contains total 4.3bn boe, of which 96% is gas.
- Valuation would be higher in markets that allow free pricing for oil and gas. Note the maximum gas price talked about for the KG-D6 gas is around US$4.5/mmbtu, whereas market prices in the US/UK are currently around US$6.5-7/mmbtu
- Lastly, the fiscal system plays the biggest role in determining value. Assets in say Russia would have substantially lower per-barrel valuations compared to the US.

Longer production plateau lowers the DCF value

Looking more in detail, there are two aspects to the lower DCF valuation for KG-D6. First, we are assuming a production plateau of 17 years. Typically, any E&P operator would prefer to produce as fast as possible and quickly recover the initial investment. So if we were to work out a DCF model based on RIL's public statements, assuming reserves of 11.3tcf, capex of US$8.8bn and bulk of reserves produced in just 10 years, then the value works out to US$3.5/boe at a gas price of US$4.5/mmbtu; the longer the production profile, the lower the value will be. The reason we are assuming a 17-year profile is because of the NTPC contract. Even without the NTPC contract, RIL's production of 80mmscmd cannot be absorbed without somebody investing in a new plant. Such an investor cannot fund the project without assured gas availability over the life of the plant. If the production level was say just 40mmscmd, then a shorter production profile could be assumed, resulting in a better valuation.

Per barrel valuation will rise closer to production date

The second aspect of valuation has to do with the stage in the capex cycle. Our valuation is after assuming the gas development capex, which has just started. Assuming the reserve level remains unchanged, the DCF value after each year-end would keep rising as only forward capex and cash flows would be considered. The per-barrel valuation would peak by the end of FY10F, when the bulk of capex would be over but most of the reserves would be yet to be produced.

Table 12 : RIL - evolution of KG-D6 valuation

Year end 31 March	2007F	2008F	2009F	2010F
DCF value of KG-D6 block (Rs bn)	340	467	541	545
Value of RIL's stake (Rs bn)	306	421	487	491
Per share value (Rs)	250	344	398	401
Balance reserves m boe	4298	4298	4231	4120
Value US$/boe	1.93	2.76	3.33	3.45

Source: ABN AMRO forecasts

RPL – FY10 first year of commercial operations

RPL FY10 capacity utlisation assumed at 90%

As per the RPL prospectus issued in April 2006, the new 580,000 b/d refinery would be mechanically complete by August 2008 and would start full commercial operations by December 2008. In all subsequent presentations, RIL has maintained its completion date as December 2008. However, we believe the consensus now expects

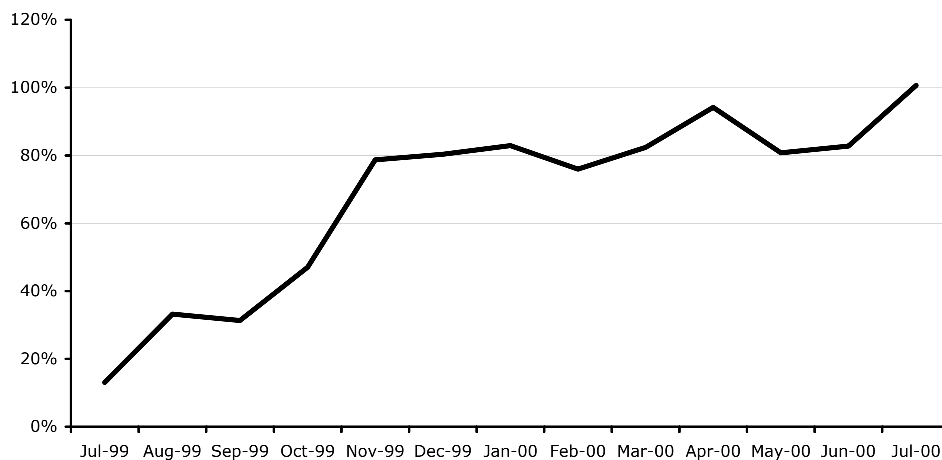
the refinery to start operating much earlier, and more importantly, at a high capacity utilisation. We assume RPL will operate at close to capacity only for two or three months at best in FY09. Consequently, we assume it will announce commercial production and revenue/profit accounting only from April 2009 to optimise the income-tax benefit (five-year income-tax holiday). For FY10, capacity utilisation is estimated at 90%.

Past experience (even for RIL) indicates that it takes time to reach full capacity for new refinery

In our view, once a refinery is ready for commissioning, it takes time for the all secondary processing units to be fully operational. It is not possible for the refinery to start operating at 100% capacity from day one. Hence we see a significant gap between mechanical completion and achieving of 100% capacity utilisation. Since 1998, four new greenfield refineries have started operations in India – IOC Panipat, RIL's existing refinery, NRL and the Essar refinery. Given its location in Assam, NRL has had issues on crude availability right from day one, which still persist. The Essar Oil refinery commissioned only its basic distillation units in November 2006, thereby operating only at around 6mtpa. The balance secondary processing units are to be commissioned in 2QFY08 and the company expects the refinery to start operating at its full capacity of 11mt from October 2007.

Hence a proper historical trend for capacity utilisation of a new refinery is available only for RIL's existing refinery and IOC Panipat. The RIL refinery started operations in July 1999, declared commercial production from April 2000 (first quarterly results were for April-June 2000) and achieved 100% utilisation by July 2000 (overall 95% utilisation in FY01).

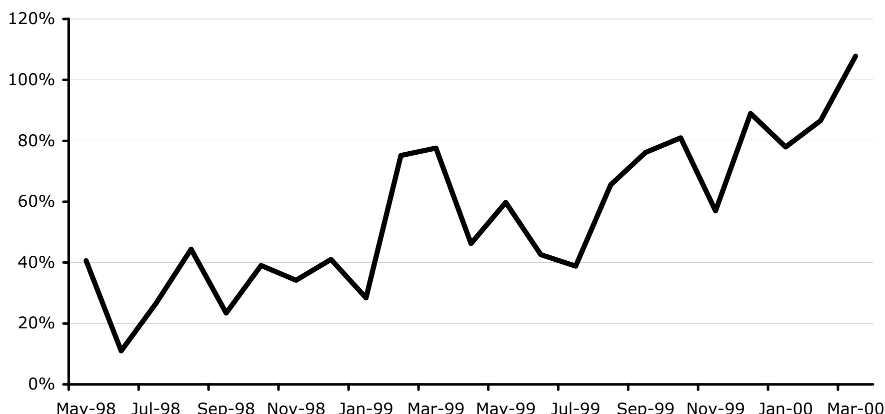
Chart 4 : RIL - initial 27mt refinery capacity utilisation post completion



Source: Company data

The IOC Panipat refinery started operations in May 1998 and achieved 100% capacity utilisation only by March 2000. Capacity utilisation averaged 40% in FY1999, 68% in FY00 and 95% in FY01.

Chart 5 : IOC Panipat - capacity utilisation post completion



Source: Indian Oil

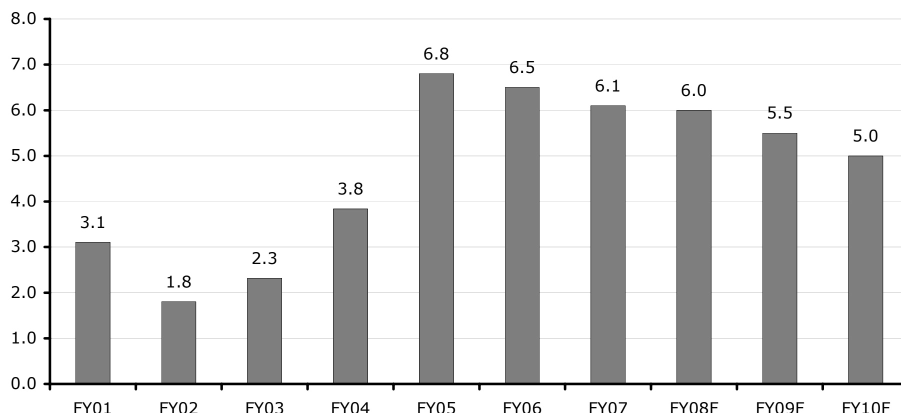
Cautious view on commodity cycles

GRMs – remaining high, but a declining trend

Expect Singapore GRM at US$5/bbl by FY10

We maintain our view that although regional GRMs may remain healthy relative to the historical trend, the peak in the refining margin cycle is behind us. In fact, despite the perception of tightness in refining capacity, Singapore (Reuters) Complex GRMs have been declining – from US$6.8/bbl in FY05 to US$6.5/bbl in FY06 and further to US$6.1 in FY07. We see margins declining further to US$5/bbl by FY10. During FY05-07, while annual margins (based on Dubai crude) for diesel and jet fuel have been rising, those for LPG, fuel oil and naphtha have declined, whereas gasoline margins have been marginally higher.

Chart 6 : Singapore (Reuters) complex annual GRMs, US$/bbl



Source: Reuters, ABN AMRO forecasts

Expect differentials between heavy/sour and sweet/light crude to decline

RIL's reported GRMs have significantly outperformed the regional benchmark, with the premium rising to US$7.8/bbl in 3QFY07. We believe such premiums will diminish by FY10 due to lower differentials between sweet/light and heavy/sour crude. Demand for light products is rising and environmental standards are set to get tighter, factors which can cause high differentials. However, on the negative side, the near-term new crude production is light/sweet, virtually every new refinery is highly complex and we believe the impact of upgrade in complexity of existing units (which is very difficult to measure) is always underestimated. Middle East producers like Saudi Arabia are also trying to keep the discounts for heavy/sour crude in check, with some success. Their

spare capacity is rising, and this capacity can be substantially heavy/sour, resulting in lower supplies flooding the market.

Table 13 : Differentials between sweet/light and heavy/sour crude

US$/bbl	1QCY06	2QCY06	3QCY06	4QCY06	1QCY07	2QCY07*
Brent-Dubai	4.13	5.25	4.09	2.39	2.65	3.86
Arab Light-Arab Heavy	4.57	4.94	6.21	5.84	5.49	5.05

**to date*
Source: Bloomberg

US$1/bbl change in GRM impacts EPS by 6-8%

In FY10, we project RIL's GRM at US$9.3/bbl, a US$4.3/bbl premium to Singapore margins. We put the core premium at just US$3/bbl (the rest being on account of domestic marketing margins on auto fuels), which we estimate to be the level prevalent in FY06. RPL's margin is projected to be much higher at US$10.5/bbl, a premium of US$5.5/bbl. We estimate a US$1/bbl change in GRM will impact RIL's EPS by 6.4% in FY08F, 5.6% in FY09F and 8.3% in FY10F.

Table 14 : RIL - earnings sensitivity to GRMs

Year to 31 March	2008F	2009F	2010F
Current estimates			
Singapore GRMs (Reuters), US$/bbl	6.0	5.5	5.0
RIL GRM, US$/bbl	12.1	11.05	9.29
RPL GRM, US$/bbl			10.50
EPS, Rs	100.0	106.8	112.8
EPS sensitivity for US$1/bbl change in GRM	6.4%	5.6%	8.3%

Source: ABN AMRO forecasts

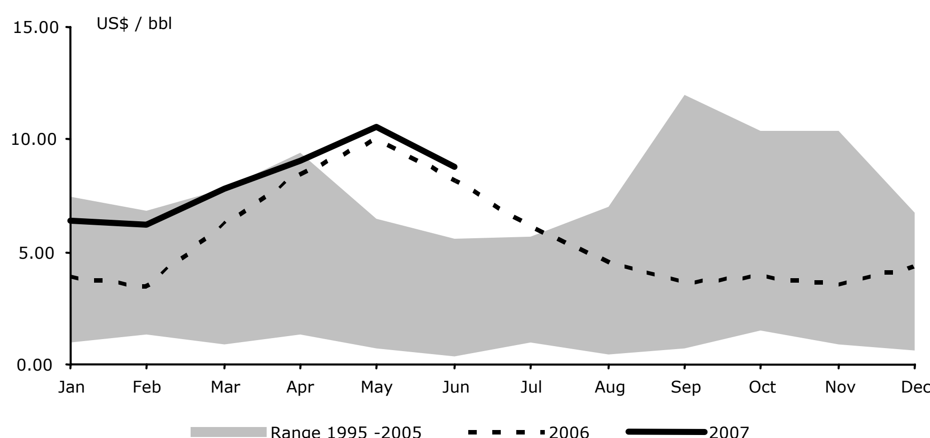
All new refineries being significantly complex, their realised GRMs are likely to be significantly higher than the benchmark. We estimate RPL's ROE in FY10 will be 25%. The same refinery, even if it costs 50% more, would still produce an ROE of 15%.

GRMs volatile, high-margin months usually followed by steep declines

Overall GRMs have exhibited very high volatility on a monthly basis, and while they are very high currently, the average for the current quarter (US$9.5/bbl to date) would only be marginally higher yoy (US$8.9/bbl in 1QFY07). We believe one needs to see the annual average, as inventory stocking and de-stocking tends to increase margin volatility. As past margin trends show, periods of very high margins (for example, US$8.9/bbl in 1QFY07) result in increased capacity utilisation and additional supplies from simple refiners, leading to subsequent prolonged weakness (average GRM for 2Q/3QFY07 worked out to just US$4.3/bbl, hardly a sign of tight refining capacity). This was particularly evident in the US gasoline market last year, when record margins in 1QFY07 were followed by a collapse in the subsequent quarters.

We believe GRMs will decline over next few months, in line with last year's trend. The main event that can cause us to go wrong is significant hurricanes in the US. Our assumption is for a benign hurricane season as in 2006. However, margins could spike considerably if the hurricane events of September 2005 are repeated.

Chart 7 : Singapore (Reuters) Complex GRM US$/bbl monthly trend



Source: Reuters

Petrochemical downturn looking inevitable by 2009-10

Expecting substantial declines in petchem margins by 2009-10

We continue to believe global ethylene demand-supply will remain healthy into 1H08, but deteriorate subsequently. Margins in polymer products and aromatics (PX) over the last three years have been virtually double the level in FY01-03. We see margins coming off slightly in FY08, with substantial declines in FY09/10. We believe most new Middle East projects (ex Iran) are on track for a start up in 2H08-2009, and hence a sharp downturn over FY09-10 looks inevitable. We remain relatively positive on polyester on account of slowdown of new capacity in China and capacity rationalisation in Korea/Taiwan.

If margins for PP, PE, PX and PTA do not decline in FY08 and remain at FY07 levels, then our FY08 EBITDA and EPS estimate would rise by 5.7% and 6.9% respectively.

Table 15 : Key petrochemical product margin assumptions

Year to 31 March (US$/tonne)	2001	2002	2003	2004	2005	2006	2007	2008F	2009F	2010F
PP-naphtha	324	309	386	428	595	569	691	573	475	400
PE-naphtha	394	362	319	379	577	538	693	583	455	340
PX-naphtha	177	177	222	291	416	388	537	493	405	300
PSF	152	111	141	151	93	123	115	133	149	158
PFY	408	410	404	431	409	387	422	413	429	438
PTA-PX	274	207	228	200	245	193	164	140	137	128

Source:CMAI, ABN AMRO forecasts

RIL's petrochemical gross margins would be affected by regional US dollar margins (shown above), exchange rate movements and volumes. RIL's expansions in select products like polyester, PX, PTA and PP have been completed in phases over FY07. Hence while volumes should rise yoy in FY08, we expect them to be flat in FY09/10. Overall, we expect gross margins to rise in FY08 and decline in subsequent years.

Table 16 : RIL- breakdown of petrochemical gross margins

Year to 31 March (Rs m)	2006	2007	2008F	2009F	2010F
Polyester (PSF, PFY, PET)	6,213	8,753	15,149	17,035	17,490
Polyester intermediates (PTA/MEG)	26,871	24,073	24,759	21,875	18,784
Polyester intermediates (PX)	6,926	20,280	19,040	14,025	7,392
Polymers (PVC, PE, PP)	15,831	7,162	18,837	18,366	16,139
Cracker	31,483	54,644	42,411	33,019	25,027
Total petrochemicals	**87,325**	**114,912**	**120,194**	**104,320**	**84,831**

Source: Company data, ABN AMRO forecasts

Downgraded to Sell, target price Rs1,300

Our E&P valuation is below consensus

Consensus E&P valuation double our estimate

RIL has a solid track-record in E&P, but we find consensus valuations of its E&P assets too aggressive (Rs600-700/share, vs our estimate of Rs311/share). Our valuation for the KG-D6 block would also be lower than consensus, but most of the difference is because the street is also valuing prospective resources in RIL's other blocks. We believe incorporating management estimates of prospective resources is very aggressive, especially given the long time-frame involved in converting initial discoveries into free cash flow.

Factoring in prospective resources is risky

The consensus view appears to be that RIL's E&P valuation will inevitably continue to rise. Hence the move to value prospective resources or build in exploration upsides. In our view, this is a risky proposition and valuation would then tend to be extremely subjective – how can one decide whether an appropriate exploration upside is 20% of current NAV or 40%? The exploration business is risky and past experience has shown that the only way to prove reserves is by drilling enough wells. A 3D seismic might show a very attractive proposition but still result in a dry hole.

Low visibility of cash flow should lower valuation

The second issue is obviously time value and visibility of earnings and cash flow. While the high oil/gas prices have improved valuations, they have also resulted in a tight EPC market, especially for deepwater development. This results in problems in rig availability pushing back schedules for exploration as well as development (hence lower cash flow visibility). In any case, there could be a long gestation period between initial discovery and monetisation of reserves.

For example, the KG-D6 discovery was announced in October 2002, while production is set to start from July 2008. If our current valuation for KG-D6 is US$1.93/boe, then the valuation in 2002 should have been around 40% lower, assuming a 10% discount rate. In fact, given the tight EPC market especially for deepwater development, there is potential for development schedules (and hence cash flow visibility) to be pushed back.

We have used RIL estimates for reserves and considered some upside

Our valuation considers the reserves figures provided by RIL, and we have included an upside wherever we find adequate visibility like in KG-D6. We have not considered any reserves where the estimates on resources have been made by the companies themselves without drilling any wells (like block D9), or without any confirmation by independent consultants. RIL too has been very cautious in its public statements on reserves and likewise we have been cautious in assuming reserve valuations. RIL's estimate on proved reserves is currently 1,241m boe whereas our valuation uses a reserve estimate of 4,941m boe.

RIL currently not expensing its dry wells

As of March 2007, RIL had drilled 48 exploratory wells, of which 30 have met with successful discoveries. While the upside from successful wells gets recognised in the reserve numbers, the downside of the dry holes in terms of exploration write-offs is not known. RIL currently follows the full cost method of E&P accounting and all costs incurred in the E&P (including cost of surveys, seismic, dry wells) are capitalised considering the country as a cost centre. RIL does not disclose the financial impact of dry wells. In our view, RIL will move to the more conservative 'successful efforts' method of accounting once KG-D6 block starts producing, as the high revenues from this block could then absorb the exploration write-offs. Then the past cost of all dry holes is likely to be adjusted against its reserves.

We have already detailed the basis of our valuation of the KG-D6 block. We value the other two discoveries (NEC-25 and CBM blocks) based on the valuation of the KG-D6 block (gas only, US$1.7/bbl), assuming the entire production is sold at US$4.5/bbl.

Table 17 : RIL - valuation of E&P blocks

Blocks	In place, gross tcf	RIL stake	In place, net tcf	Recoverable tcf	Recoverable m boe	Valuation US$/boe	Valuation US$ m	Valuation per RIL share (Rs)
KG D6-gas		90%		20.7	3,726			
KG D6-oil		90%			147			
KG-D6 total					3,873	1.93	7,463	250
NEC 25	3.7	90%	3.3	2.3	420	1.7	713	24
CBM	5.2	100%	5.2	3.6	649	1.7	1,103	37
Total				**26.6**	**4,941**		**9,279**	**311**

Source: Company data, ABN AMRO forecasts

Current status of RIL's E&P assets

KG-DWN-98/3 (KG-D6), RIL stake 90% - RIL's official gas reserve estimate is 11.3tcf (2P) to develop the Dhirubhai 1 and 3 discoveries, and oil reserves have not yet been disclosed. Niko Resources, which holds the remaining 10% stake, in its last resource update in 2006 provided an independent study conducted by Gaffney Cline and Associates. This study placed the in-place gas reserves at 6.9tcf (1P), 23tcf (2P) and 35tcf (3P). Niko recently said the best is yet to come in D6 and the oil recovery rate from the block could be close to 100%. While submitting the development plan for the block, RIL stated the estimated potential for the entire block is around 50tcf, and that there would be scope to raise gas production to 120mmscmd. There is also a mention of oil reserves of 1.6bn barrels.

MN-DWN-2003/1 (D4), RIL stake 85% - CEO of Niko Resources, which holds the remaining 15% stake, said at an energy conference in March 2007 that "we like NEC-25 and D6, but we still consider our D4 prospect the best thing Niko could possibly have. It will either be worth nothing to the company or we will be talking about this for the rest of the time…". The 2D seismic data shows the D4 block contains five deepwater channels (fan complexes), compared to just one in the KG-D6 block. The 3D seismic has been extended from 1,800sq km to 4,000sq km. RIL at the analyst meet in April 2007 said the first well will be drilled in late 2008.

NEC-OSN-97/2 (NEC 25), RIL stake 90% - RIL has made six consecutive commercial discoveries in this block and expects to finalise the development plans shortly. RIL's last estimate of in-place gas was 2.3tcf. Niko Resources, which holds the other 10%, in its last resource update in 2006 provided an independent study conducted by Gaffney Cline and Associates. This study put the in-place gas reserves at 1.8tcf (1P), 3.7tcf (2P) and 8.2tcf (3P).

GS-OSN-2000/1 (GS01), RIL stake 90% - Hardy Oil, which holds the other 10%, disclosed that RIL's estimate of prospective resources (oil/gas) is 48m boe (gross). This estimate was made before a gas discovery in March 2007. However, RIL at its analyst meeting in April 2007 said the discovery was relatively small with reserves likely to be less than 1tcf (uneconomical at this point).

KG-DWN-2001/1 (D9), RIL stake 90% - Hardy Oil, which holds 10%, said its internal estimate on prospective resources (all gas) is 5.6bn boe or 31tcf. There is a commitment to drill four wells, of which at least one is planned for 2HCY07 and 1-2 wells in 2HCY08.

KG-DWN -2003/1 (D3), RIL stake 90% - Hardy Oil, which holds the other 10%, said its internal estimate on prospective resources (all gas) is 695m boe or 4tcf. The first exploration well is to be drilled in 4QCY08.

KG-OSN – 2001/1 (KG III 5), RIL stake 100% - Gas discovery notified to DGH.

KG-OSN-2001/2 (KG III 6), RIL stake 100% - After the initial oil discovery, subsequent work has been unsuccessful, and RIL is re-evaluating its plans.

CBM blocks, 100% stake – RIL has disclosed that in-place gas is 5.1tcf. It expects to submit the development plan in 2QFY08 and start commercial production by 2010 (revised from earlier estimate of 2009).

SR-OS-94/1 (SR-01), RIL stake 100% - Some gas has been discovered, but the volume cannot justify commercial development as of now.

Target price raised from Rs1,250 to Rs1,300

The change in our target price is on account of a lower valuation of the existing business (due to a stronger rupee and higher-than-expected debt), which has been partly offset by a higher valuation for the rest of RIL's businesses.

Core business valuation has dropped from Rs758 to Rs642/share

We continue to value the separate streams of current earnings – petrochemicals, refining and oil/gas – on EV/EBITDA multiples (5.5x, 6x and 4.5x, respectively). As explained earlier, our EBITDA estimates for FY08 have been lowered on account of rupee appreciation (41 vs 44 earlier). Given our view that margins for refining and petrochemicals will drop in FY09/10, FY08 should essentially see peak margins, and consequently we believe our multiples are fairly aggressive.

Our valuation for the E&P assets has risen from Rs214/share to Rs311/share. Around Rs42/share of this increase is because we now assume KG-D6 oil reserves of 163m barrels, and the rest is due to higher gas price realisation and early commencement of KG-D6 gas production.

Our valuation for Reliance Retail based on DCF has risen marginally, from Rs82/share to Rs94/share. Please refer to Appendix for details.

We have valued RIL's stake in RPL at a 20% discount to the market price, while the stake in IPCL (which will be merged soon) has been valued at market.

Table 18 : RIL valuation

Sector	Base	Multiple	Valuation (Rsm)	US$m*	New Rs/share	Old Rs/share	Change
Existing business valuation on FY08F EV/EBITDA							
Petrochemical at 5.5x	66,484	5.5	365,662	8,919	299	330	(31)
Refining at 6x	96,550	6.0	579,300	14,129	474	528	(54)
Oil& gas at 4.5x	18,775	4.5	84,488	2,061	69	69	0
Less: net debt (FY08F)			(243,917)	(5,949)	(199)	(169)	(30)
Sub total			**785,533**	**19,159**	**642**	**758**	**(116)**
KG-D6 oil/gas on DCF	3,873	1.93	306,000	7,463	250	165	85
NEC-25, CBM gas based on KG-D6 gas valuation	1,068	2	74,473	1,816	61	49	12
Valuation of Reliance Retail on DCF			115,435	2,815	94	82	12
Valuation of RPL at 20% discount to market price	3375	80	270,000	6,585	221	166	55
IPCL equity - market price	140.499	310	43,555	1,062	36	30	6
Target price			**1,594,996**	**38,902**	**1,304**	**1,250**	**54**

*Source: ABN AMRO forecasts; *at an exchange rate of 41*

Bull case scenarios

Bull case valuation rises to Rs1,681

While upside possibilities could be far-reaching, given RIL's wide business mix, we highlight some scenarios that we believe are plausible, especially over the next 12 months.

- If the exchange rate remains at 41, and RIL earns better margins – GRM of US$1/bbl more and margins in PE, PP, PX, PTA in FY08 remaining at FY07 levels – EBITDA, and hence valuation of the core business would improve.
- Chevron hiking its stake in RPL from 5% to 29% (the permissible limit as per the agreement) at around the current price of Rs110/share would effectively create that floor for the RPL stock price, improving the value of RIL's stake accordingly.
- If the Supreme Court decides the RIL/RNRL agreement is invalid, then RIL would be free to sell all of its gas at the free market price. This would increase our DCF valuation by Rs60/share. As stated earlier, due to the profit-sharing mechanism, the impact of any change in volume/ pricing is very high on FY09/10F earnings, but the overall DCF impact is muted.
- RIL, while disclosing the development plan for KG-D6 oil, announces that total oil reserves are around 400m barrels higher than our estimates.

Table 19 : Potential upside scenarios to our target price, Rs

Current target price	**1,300**
Factors which could add to target price	
Rupee goes back to 44, higher valuation for existing business	100
Chevron acquires additional RPL stake at Rs110/share	83
RIL sells all gas from KG-D6 at market price	60
Total recoverable oil reserves in KG-D6 increases by 400m barrels	134
Potential stock valuation	**1,681**

Source: ABN AMRO estimates

Potential Retail IPO could provide bigger upside

The RPL experience has gone a long way in getting the market excited about RIL's new businesses. By launching a new refinery as a separate company, getting Chevron to hold a 5% stake (with an option to raise it to 29%) and listing the stock (now trading at nearly 4x book, 6x cost price to RIL), RIL's own market capitalisation has received a boost, although the RPL refinery project is due for completion only next year.

We believe there is potential to create similar gains in market capitalisation by listing the retail business (perhaps hiving off the minority stake to an international player) or even the E&P business. Ultimately, the upside would depend on whether the IPO can generate a valuation in excess of what is being factored into the RIL share price.

Stock looks technically strong

Promoters have bought off institutional shareholders ...

Our Sell recommendation is based on a fundamental analysis of RIL's business, taking into consideration our view on the commodity cycles and exchange rate. However, we do note that most investors are underweight the stock, which could prevent any significant underperformance. Historically, RIL has been a key holding for foreign institutional investors (FII), resulting in a significant FII/GDR holding. Over the last two years, this foreign holding has declined very significantly – from around 30.1% in March 2005 to 23.1% in March 2007. During this period, the holding by promoters (excluding treasury stock) and private corporate bodies has gone up from 34.6% to 38.8% and from 1.6% to 4.3% respectively, effectively absorbing the entire drop in foreign holding.

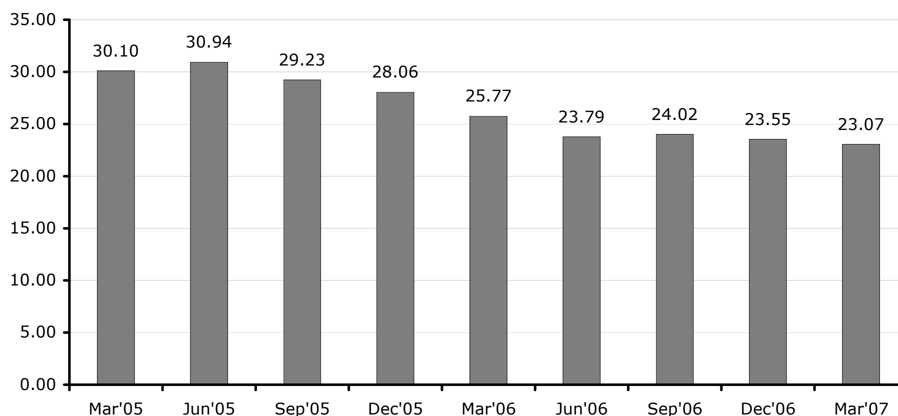
... and are still raising their stake

The promoters are clearly bullish on their company and have backed their conviction with capital. In addition to the increase in their holding, they have taken up warrants by which they will put in US$4bn in RIL at Rs1,402/share and have also started an ESOP scheme, granting stock to their employees at Rs1,284/share.

While FII holding has declined since March 2005, the stock has rallied, rising by 300% and outperforming the Sensex by 180%. Consequently, we believe investors are heavily underweight the stock, which could reinforce the past trend of outperformance.

Institutions hence are underweight the stock; difficult for stock to underperform, in our view

Chart 8 : RIL foreign institutional holding (FII+GDR) %



Source: Mumbai Stock Exchange

Reliance Retail

Rising real estate costs and difficulty in retaining employees are key challenges for the Indian retail sector. Reliance Retail's initial ramp-up appears satisfactory and we are raising our valuation to Rs94/RIL share.

Testing times for Indian organised retail

Real estate prices are driving up rentals

Indian organised retail is in a peculiar state. All organised retailers are eyeing the same catchment areas, driving up real-estate prices in those pockets. While rentals in metros are as high as Rs175 per sq ft per month, average rentals of organised retailers (as per quarterly results) appear to be inching towards the Rs50 mark (an increase of 15-20% over the past 12 months). In the near term, we expect rentals due for renegotiation and new rentals to rise above the current level by at least 10%.

12% service tax will also hurt

Over and above this, the recent Union budget proposes a 12% service tax on rentals. While retailers like Shoppers' Stop and Pantaloon claim there would be further negotiations, with this levy likely to be shared between developers and retailers, we believe otherwise and expect prime properties to cost significantly more in FY08-09.

Employee costs also rising

Employee retention is becoming increasingly difficult as new entrants start ramping up. For instance, recent quarters have seen Pantaloon's employee costs grow 100-150%, which is at a significant premium of about 70% to sales growth. Given the current expansion phase for organised retailing and despite the mismatch due to sales lagging initial start-up costs, we believe employee costs will continue to rise faster than sales going forward, causing pressures on operating margins.

Mall-delivery timelines have been shifted back a surprising 18 months, according to leading retailers like Shoppers' Stop and PRIL. We believe this is true given the opening of only one department store by Shoppers' Stop in FY07.

Severe competition in top 7 cities

Our analysis of the mall-retail space in India shows that 90% of the current stock of retail space is concentrated in the seven leading cities in India. We estimate new retail space of about 117m sq ft will come up over the next two years, which will take the concentration in these cities down to 70%, which is also relatively very high, in our view. As such, in the event that mall deliveries happen on time, we believe new entrants in the arena will create an environment of intense competition in the top seven retail locations in India. We believe penetration rates in the top seven cities are substantially higher than the rest of India, and these are likely to rise dramatically along with new mall deliveries, creating a tough competitive environment. Same-store growth for leading retailers, which has dropped to single digits, is probably an early indicator of the same.

Reliance Retail – Initial ramp-up satisfactory

We recently surveyed a total of more than 500 customers at five Reliance Fresh stores in Chennai (detailed survey methodology and results appear in our 11 May note: *Testing Times*).

The main objective of our survey was to study the initial response of Reliance Retail customers and to get an idea about the early stages of market-share movement. In an effort to better understand Reliance Retail's supply-chain management, we visited the company's central processing centre (CPC) at Puzhal, around 35km from the

heart of Chennai. Finally, we also conducted interviews with franchisee development managers (FDMs), store staff and also the staff at the CPCs.

Based on our survey outputs and the actual rollout of Reliance Retail over the past 6-9 months, we have made certain changes to our assumptions for the valuation of this business. The key changes being:

1. Increase in average annual realisation per sq ft to Rs10,000 – Reliance Fresh stores (which range in size from 2,000 to 4,000 sq ft) register an average daily footfall of 600-800 customers on weekdays and 1,200-1,400 during weekends, say FDMs. The average ticket size falls in the range of Rs100-150. By our back-of-the-envelope calculations, this would translate into average annual store revenue of Rs30m-40m (Rs10,000-12,000 per sq ft)

2. Increase in investment to Rs40bn in the initial year, as indicated by Reliance management - primarily towards supply chain capex, in our view, as the area under operation is just around 350,000sq ft as of May 2007.

3. Reduction of the retail area ramp-up to 6% (vs 7.5% earlier) of the intended 130m sq ft in the initial two years. We also assume the retail area mix will remain concentrated on the small-store format (around 90% of the total area). That said, we believe implementation success will also be higher for Reliance as it is likely to face less risk of execution delays caused by mall developers.

Valuation raised from Rs82 to Rs94/RIL share

We revise our valuation for Reliance Retail to Rs94/share, from Rs82/share. We maintain our cost of equity assumption at 13% and the normal case valuation parameters of 8.5% OPM, 80% execution success and 3% long-term growth rate.

Table 20 : Reliance Retail P&L summary (Rs m)

	2007E	2008E	2009E	2010E	2011E	2012E
Sales	**3,000**	**50,098**	**252,748**	**654,532**	**1,176,673**	**1,514,768**
EBITDA margin	7%	7%	7%	8%	8%	9%
EBITDA	195	3,457	18,451	50,399	95,311	128,755
Less: Depreciation	-5,075	-8,000	-10,899	-15,549	-21,250	-21,250
Less: Interest on debt	0	-340	-1,519	-3,720	-4,561	0
PBT	-4,880	-4,883	6,032	31,130	69,500	107,505
Tax rate	30%	30%	30%	30%	30%	30%
Net profit	**-4,880**	**-4,883**	**4,222**	**21,791**	**48,650**	**75,254**
Working capital (days)	60	60	60	60	60	60
Working Capital	-500	-8,350	-42,125	-109,089	-196,112	-252,461
Less: W Cap change	-500	-7,850	-33,775	-66,964	-87,023	-56,349
Add: depreciation	5,075	8,000	10,899	15,549	21,250	21,250
Less: capex	-50,750	-29,250	-28,993	-46,500	-57,007	0
FCFF	**-51,055**	**-33,983**	**-47,646**	**-76,124**	**-74,131**	**40,155**
Add: debt raised	0	4,250	18,993	46,500	57,007	0
FCFE	-51,055	-29,733	-28,653	-29,624	-17,124	40,155
Terminal value						413,592
Cash flow	**-51,055**	**-29,733**	**-28,653**	**-29,624**	**-17,124**	**453,746**
Discounted cash flow	-51,055	-26,312	-22,440	-20,531	-10,502	246,275
NPV	115,435					
Number of shares	1,223					
Per share value of Reliance Retail	**94**					
Terminal value as a % of total NPV	194%					

Source: ABN AMRO estimates

Table 21 : Sensitivity to EBITDA margin and execution success

	Target EBITDA margin					
Execution success	**7.5%**	**8.0%**	**8.5%**	**9.0%**	**9.50%**	**10.0%**
50%	3	21	40	58	76	94
60%	14	36	58	80	102	124
70%	25	50	76	102	127	153
80%	36	65	94	124	153	182
90%	47	80	113	146	179	211
100%	58	94	131	168	204	241

Source: ABN AMRO estimates

DISCLAIMER APPENDIX

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RELIANCE INDUSTRIES: KEY FINANCIAL DATA

Income statement

Rsm	FY05A	FY06A	FY07F	FY08F	FY09F
Revenue	660513	812113	1053630	982038	927646
Cost of sales	-488503	-587544	-803816	-742304	-648493
Operating costs	-45436	-80520	-67714	-57925	-68428
EBITDA	**126574**	**144050**	**182100**	**181809**	**210725**
DDA & Impairment (ex gw)	-37235	-34009	-40090	-42025	-48649
EBITA	**89339.2**	**110041**	**142010**	**139784**	**162076**
Goodwill (amort/impaired)	n/a	n/a	n/a	n/a	n/a
EBIT	**89339.2**	**110041**	**142010**	**139784**	**162076**
Net interest	-14687	-8770.4	-11140	-132.2	-11956
Associates (pre-tax)	n/a	5353.4	6033.0	4576.8	3605.9
Forex gain / (loss)	n/a	n/a	n/a	n/a	n/a
Exceptionals (pre-tax)	n/a	n/a	n/a	n/a	n/a
Other pre-tax items	16033.8	5769.8	1930.0	3913.5	8062.4
Reported PTP	**90686.4**	**112394**	**138833**	**148142**	**161788**
Taxation	-14970	-16347	-23720	-25842	-24710
Minority interests	n/a	n/a	n/a	n/a	0.00
Exceptionals (post-tax)	n/a	n/a	n/a	n/a	n/a
Other post-tax items	0.00	0.01	0.00	0.00	0.00
Reported net profit	**75716.4**	**96046.9**	**115113**	**122300**	**137078**
Normalised Items Excl. GW	0.00	0.00	0.00	0.00	0.00
Normalised net profit	**75716.4**	**96046.9**	**115113**	**122300**	**137078**

Source: Company data, ABN AMRO forecasts ***year to Mar***

Balance sheet

Rsm	FY05A	FY06A	FY07F	FY08F	FY09F
Cash & market secs (1)	71180.5	53934.7	28072.6	24358.5	179916
Other current assets	171399	178936	242795	240692	223444
Tangible fixed assets	349158	433718	647547	784731	887034
Intang assets (incl gw)	n/a	n/a	n/a	n/a	n/a
Oth non-curr assets	212459	89186.4	188216	231759	265789
Total assets	**804197**	**755775**	**1106630**	**1281540**	**1556182**
Short term debt (2)	8981.5	53498.5	17892.1	19681.3	21649.4
Trade & oth current liab	132840	125690	165686	165657	148670
Long term debt (3)	178864	165158	305989	356094	375892
Oth non-current liab	81143.9	88622.0	98967.6	108487	119223
Total liabilities	**401829**	**432968**	**588535**	**649919**	**665435**
Total equity (incl min)	402368	322807	518095	631621	890747
Total liab & sh equity	**804197**	**755775**	**1106630**	**1281540**	**1556182**
Net debt (2+3-1)	116665	164721	295809	351417	217626

Source: Company data, ABN AMRO forecasts ***year ended Mar***

Cash flow statement

Rsm	FY05A	FY06A	FY07F	FY08F	FY09F
EBITDA	126574	144050	182100	181809	210725
Change in working capital	23997.8	-14305	-22027	4415.4	5775.6
Net interest (pd) / rec	-14687	-8770.4	-11140	-132.2	-11956
Taxes paid	-7050.0	-9307.2	-15210	-18663	-19489
Other oper cash items	16033.8	5769.8	1930.0	3913.5	8062.3
Cash flow from ops (1)	**144869**	**117437**	**135653**	**171342**	**193118**
Capex (2)	-37244	-99532	-253919	-179210	-150951
Disposals/(acquisitions)	0.00	0.00	0.00	0.00	0.00
Other investing cash flow	-4186.8	128626	-98350	-45000	-35000
Cash flow from invest (3)	**-41431**	**29094.0**	**-352268**	**-224210**	**-185951**
Incr / (decr) in equity	-3600.8	1.60	0.00	16824.0	151416
Incr / (decr) in debt	-21601	30810.5	105225	51894.1	21766.4
Ordinary dividend paid	-11959	-15890	-17485	-19565	-24791
Preferred dividends (4)	0.00	0.00	0.00	0.00	0.00
Other financing cash flow	-0.98	-191195	-0.65	0.00	0.00
Cash flow from fin (5)	**-37161**	**-176272**	**87739.5**	**49153.3**	**148391**
Forex & disc ops (6)	n/a	n/a	n/a	n/a	n/a
Inc/(decr) cash (1+3+5+6)	**66277.2**	**-29741**	**-128876**	**-3714.1**	**155557**
Equity FCF (1+2+4)	107625	17905.1	-118266	-7867.4	42166.3

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

RELIANCE INDUSTRIES: PERFORMANCE AND VALUATION

Standard ratios

Performance	Reliance FY05A	FY06A	FY07F	FY08F	FY09F	Oil & Natural Gas Corp FY07F	FY08F	FY09F	Royal Dutch Shell FY07F	FY08F	FY09F
Sales growth (%)	27.5	23.0	29.7	-6.79	-5.54	22.0	-2.40	-14.8	-4.17	-12.7	-9.09
EBITDA growth (%)	32.1	13.8	26.4	-0.16	15.9	24.1	10.5	-16.7	-1.14	-0.12	-0.28
EBIT growth (%)	41.0	23.2	29.1	-1.57	15.9	26.9	12.8	-24.3	-3.49	-3.94	-3.12
Normalised EPS growth (%)	46.8	27.1	19.9	6.24	6.84	28.6	6.13	-20.0	4.44	-8.16	-1.15
EBITDA margin (%)	19.2	17.7	17.3	18.5	22.7	38.6	43.7	42.7	16.1	18.4	20.2
EBIT margin (%)	13.5	13.5	13.5	14.2	17.5	26.8	31.0	27.6	11.7	12.9	13.7
Net profit margin (%)	11.5	11.8	10.9	12.5	14.8	20.0	21.8	20.4	8.24	8.54	9.13
Return on avg assets (%)	9.89	12.6	13.0	10.0	9.84	22.8	21.4	15.4	10.6	9.31	8.68
Return on avg equity (%)	20.3	26.8	28.8	22.6	18.8	32.0	28.7	20.0	22.9	19.3	17.4
ROIC (%)	9.74	13.0	17.5	10.6	10.3	32.5	32.2	22.4	25.3	23.2	21.2
ROIC - WACC (%)	-0.34	2.80	7.34	0.43	0.06	22.4	22.2	12.3	17.9	15.8	13.8
					year to Mar			*year to Mar*			*year to Dec*
Valuation											
EV/sales (x)	3.76	3.12	2.53	2.77	2.79	1.83	1.79	2.01	0.94	1.07	1.18
EV/EBITDA (x)	19.6	17.6	14.6	15.0	12.3	4.74	4.10	4.70	5.85	5.85	5.85
EV/EBITDA @ tgt price (x)	15.2	13.7	11.6	11.9	9.63	5.83	5.08	5.89	6.53	6.53	6.54
EV/EBIT (x)	27.8	23.0	18.8	19.5	16.0	6.81	5.77	7.29	8.04	8.36	8.61
EV/invested capital (x)	4.43	4.72	3.06	2.59	2.19	2.93	2.57	2.35	1.94	1.83	1.74
Price/book value (x)	5.18	6.60	4.29	3.48	2.54	2.89	2.45	2.19	2.20	2.01	1.84
Equity FCF yield (%)	5.17	0.86	-5.69	-0.38	1.93	6.85	8.51	7.36	5.29	6.27	6.61
Normalised PE (x)	27.5	21.6	18.1	17.0	15.9	9.83	9.26	11.6	10.0	10.9	11.0
Norm PE @tgt price (x)	21.0	16.6	13.8	13.0	12.2	11.9	11.2	14.1	11.2	12.2	12.4
Dividend yield (%)	0.44	0.59	0.65	0.71	0.82	3.97	3.97	3.31	3.59	3.64	3.67
					year to Mar			*year to Mar*			*year to Dec*

Per share data	FY05A	FY06A	FY07F	FY08F	FY09F
Tot adj dil sh, ave (m)	1225.3	1223.1	1223.1	1223.1	1283.1
Reported EPS (INR)	61.8	78.5	94.1	100.0	106.8
Normalised EPS (INR)	61.8	78.5	94.1	100.0	106.8
Dividend per share (INR)	7.50	10.0	11.0	12.0	14.0
Equity FCF per share (INR)	87.8	14.6	-96.7	-6.43	32.9
Book value per sh (INR)	328.4	257.5	396.1	488.9	668.0
					year to Mar

Solvency	FY05A	FY06A	FY07F	FY08F	FY09F
Net debt to equity (%)	29.0	51.0	57.1	55.6	24.4
Net debt to tot ass (%)	14.5	21.8	26.7	27.4	14.0
Net debt to EBITDA	0.92	1.14	1.62	1.93	1.03
Current ratio (x)	1.71	1.30	1.48	1.43	2.37
Operating CF int cov (x)	11.3	15.5	14.5	1438.6	18.8
Dividend cover (x)	6.33	6.04	6.58	6.25	5.53
					year to Mar

Priced as follows: RELI.BO - Rs1700.00; ONGC.BO - Rs906.35; RDSa.L - £20.05
Source: Company data, ABN AMRO forecasts

RELIANCE INDUSTRIES: VALUATION METHODOLOGY

We value RIL using a sum-of-the-parts methodology. We value the existing oil/refining/petrochemical business on EV/EBITDA basis (4.5x, 6x and 5.5x respectively, on FY08F EBITDA, total Rs642/share) and the gas reserves and the new retail business on DCF using a discount rate of 10%. For KG-D6 block, we assume gas reserves at 23tcf and oil reserves at 163m barrels. We value investments in IPCL at market price and RIL's stake in RPL at a 20% discount to the market price. Our target price is based on net shares outstanding (total shares less treasury stock).

Table 22 : RIL valuation

Sector	Base	Multiple	Valuation (Rsm)	US$m	New Rs/share	Old Rs/share	Change
Existing business valuation on FY08F EV/EBITDA							
Petrochemical at 5.5x	66,484	5.5	365,662	8,919	299	330	(31)
Refining at 6x	96,550	6.0	579,300	14,129	474	528	(54)
Oil& gas at 4.5x	18,775	4.5	84,488	2,061	69	69	0
Less: net debt (FY08F)			(243,917)	(5,949)	(199)	(169)	(30)
Sub total			**785,533**	**19,159**	**642**	**758**	**(116)**
KG-D6 oil/gas on DCF	3,873	1.93	306,000	7,463	250	165	85
NEC-25, CBM gas based on KG-D6 gas valuation	1,068	2	74,473	1,816	61	49	12
Valuation of Reliance Retail on DCF			115,435	2,815	94	82	12
Valuation of RPL at 20% discount to market price	3375	80	270,000	6,585	221	166	55
IPCL equity - market price	140.499	310	43,555	1,062	36	30	6
Target price			**1,594,996**	**38,902**	**1,304**	**1,250**	**54**

Source: ABN AMRO

Reliance Industries

Company description — Sell

Reliance is India's largest private sector enterprise and has emerged as the first and only private-sector company from India to feature in the 2004 Fortune Global 500 list. It is controlled by the Mukesh Ambani family and its interests span petrochemicals, refining and E&P. Its key success factors include vertical integration, world-scale production facilities and globally competitive capital as well as operating costs. In petrochemicals, it is one of the largest producers in the world, ranking No 1 in POY/PSF, No 4 in PX, No 5 in MEG, No 6 in PTA and No 7 in PP. It is building another refinery at Jamnagar, which will make it the single-largest refinery at any single location. RIL has also recently made a foray into organised retailing.

Price relative to country

Strategic analysis — Average SWOT company score: 4

Strengths — 4
India's dominant petrochemical producer and largest single-location petroleum refiner. Also, the largest private-sector upstream producer which has recently found a world-class gas reserve. Ability to execute world-scale projects in budgeted costs and time scale.

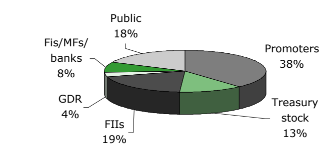
Weaknesses — 3
Limited upstream integration (eg, oil/gas reserves) as of now. Government-controlled oil-product prices for petrol, diesel, LPG and kerosene do not let it fully exploit its marketing network.

Opportunities — 4
Ability to build global-scale refining operations to benefit from tightness in global supply. Potential to substantially expand E&P operations via domestic exploration/production and the acquisition of global E&P opportunities.

Threats — 3
A significant downturn in regional refining/aromatic margins could put pressure on earnings. Significant rupee appreciation would strain profitability. It may face a gas supply glut as it begins its own gas production in December 2008.

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

Shareholding pattern Mar-07



Source: BSE

Market data

Headquarters
Maker Chambers IV, Nariman Point, Mumbai.

Website
www.ril.com

Shares in issue
1393.5m

Freefloat
53%

Majority shareholders
Mukesh Ambani family 38.8%

India

Country view — Neutral

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.

Country rel to Asia Pacific

Competitive position — Average competitive score: 4+

Supplier power — 4+
Moderate. Crude oil is the key raw material and is freely available in international markets. RIL has additional flexibility to source any type of crude.

Barriers to entry — 3-
High capital intensity and ever-increasing economies of scale are key barriers. IOC, however, has plans to enter the petrochemical arena.

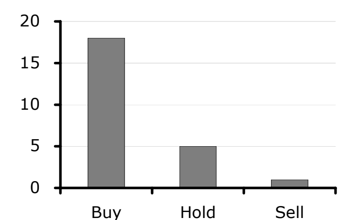
Customer power — 4-
Customer power seems weak. User industries are usually small and very fragmented. However, RIL's gas customers may have some bargaining power as it will have a huge quantity of gas to market.

Substitute products — 3+
Outside Reliance's product portfolio, cotton is the key substitute. However, the cotton output is highly constrained. For its gas production likely to come in December 2008, coal is a key substitute.

Rivalry — 4+
Reliance holds dominant market share in petrochem, although IOC, the new entrant, is likely to be a key threat in the future. In fuel retailing, PSUs are constrained by LPG/kerosene losses.

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

Broker recommendations



Source: Bloomberg