

May 08, 2009

UPDATE

Sector view: **Neutral**

Price (Rs): **1,916**

Target price (Rs): **1,650**

BSE-30: **12,117**

**Reality versus speculation.** We analyze the factors that could propel RIL stock about 20% higher from current levels in a hypothetical exercise and conclude that favorable announcements on new E&P discoveries hold the key. We see limited scope for positive surprises in the chemical and refining segments and, in fact, do not rule out negative surprises. Finally, better disclosures may improve sentiment and multiples; we believe the current level of disclosures leaves a lot of room for improvement.

#### Valuation 1: Rs2,300 would entail higher chemical and refining margins and gas reserves

We compute that a fair valuation of Rs2,300 for RIL stock, based on FY2011E estimates, would entail (1) significantly higher chemical margins (+16-24%), (2) very high refining margins (US\$13.8/bbl and US\$12.4/bbl for RIL and RPET refineries) and (3) additional 16 tcf of gas to be discovered over the next six years. Our SOTP-based 12-month fair valuation is Rs1,650 and fair valuation based on FY2011E estimates is Rs1,750.

#### Valuation 2: Rs2,300 would entail large new E&P discoveries, unchanged margins in others

We estimate that RIL would need to add 51 tcf of additional gas reserves over the next six years without additional contribution from other businesses to reach our fair valuation of Rs2,300 in our hypothetical exercise. It would be interesting to see if RIL can create further value from gas through forward integration into merchant power generation and city gas distribution.

#### Valuation exercise 3: Rs1,375 in downside scenario

We calculate RIL's fair valuation at Rs1,375 in our downside scenario of (1) weaker-than-assumed margins (US\$50/ton lower for major chemicals, US\$2/bbl lower for refining margins) and (2) higher-than-expected taxation (no income tax exemption for gas production). We also do not rule out lower multiples in case of lower-than-expected earnings.

#### Disclosures: Higher disclosures can boost positive sentiment and multiples

We believe the quality of disclosures is not commensurate with the size and complexity of RIL's operations. In our view, higher disclosures will be perceived as a positive by the market and result in a possible re-rating of the stock. On the other hand, continued reticence with regard to disclosures and unexplained mismatches in reported financial statements may result in investors eventually de-rating the stock.

#### Company data and valuation summary

Company data	Stock data	High	Low	Price performance	1M	3M	12M
Rating: Reduce	52-week range (Rs)	2,700	930	Absolute (%)	11.0	42.4	(28.2)
	Yield (%)		0.68	Rel. to BSE-30 (%)	(1.8)	12.1	(0.0)
<b>Current price (Rs)</b> 1,916	Priced at close of:	May 07, 2009					
	<b>Capitalization</b>			<b>Forecasts/valuation</b>	<b>2009</b>	<b>2010E</b>	<b>2012E</b>
	Market cap (Rs bn)		2,630	EPS (Rs)	103.4	127.7	175.7
	Net debt/(cash) (Rs bn)		192.2	P/E (X)	18.5	15.0	10.9
	Free float (%)		58.4	ROE (%)	15.1	15.9	19.2
	Shares outstanding (mn)		1,373	EV/EBITDA (X)	11.0	6.9	5.1

Source: Company data, Kotak Institutional Equities estimates

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Important disclosures appear at the back

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The prices in this report are based on the market close of May 7, 2009.

## VALUATION: Rs2,300 CHALLENGING WITH CURRENT FUNDAMENTALS

We examine the circumstances under which RIL stock may reach Rs2,300 (+20% higher from current levels) and conclude that (1) refining and chemical margins would need to increase substantially from current levels and/or (2) RIL would need to add significantly to gas reserves. We dismiss the former given the large global supply-demand imbalance and see the latter as plausible in the medium term. We also look at a downside scenario if chemical and refining margins disappoint and taxation exceeds our current assumptions.

### Valuation exercise 1: Several favorable developments required to justify 20% returns from current levels

Exhibit 1 compares our estimated FY2011E EBITDA of chemical and refining segments and valuation of RIL's E&P segment with the numbers required to justify a fair valuation of Rs2,300. For the purpose of this exercise, we assume a similar increase in valuation of each of the major segments, barring the value of investments and non-core assets to reach our 'revised' target price of Rs2,300. We compute a 33% higher EBITDA versus our FY2011E EBITDA for the refining and chemical segments and 33% higher valuation for the E&P segment signifying 16 tcf of additional gas reserves to justify the higher fair valuation. Exhibit 2 is our FY2011E-based SOTP of RIL.

#### Exhibit 1: EBITDA and valuation of each segment needs to be higher by about 33% to justify Rs2,300 fair valuation

Comparison of 'required' EBITDA to justify higher valuation for RIL with estimated EBITDA (Rs bn)

	Valuation base, New		Valuation base, FY2011E	
	Other	EBITDA	Other	EBITDA
<b>Chemicals</b>		<b>95</b>		<b>72</b>
<b>Refining &amp; Marketing</b>		<b>251</b>		<b>189</b>
<b>Oil and gas—producing</b>		<b>35</b>		<b>27</b>
<b>Gas—developing (DCF-based)</b>	<b>816</b>	—	<b>614</b>	—
<b>Oil—KG-DWN-98/3</b>	<b>124</b>	—	<b>94</b>	—
Investments				
Others	27	—	27	—
Loans & advances to affiliates less accounts payables to affiliates	83	—	83	—
Retailing	60	—	60	—
SEZ development	62	—	62	—

Source: Kotak Institutional Equities estimates

#### Exhibit 2: SOTP valuation of Reliance is Rs1,750 per share on FY2011E estimates

Sum-of-the-parts valuation of Reliance Industries, FY2011E basis (Rs)

	Valuation base (Rs bn)		Multiple (X)		EV	Value share
	Other	EBITDA	Multiple	EV/EBITDA	(Rs bn)	(Rs)
Chemicals		72		6.0	431	299
Refining & Marketing		189		6.0	1,133	785
Oil and gas—producing		27		5.0	133	92
Gas—developing (DCF-based) (a)	614	—	100%	—	614	426
Oil—KG-DWN-98/3 (b)	94	—	100%	—	94	65
Investments						
Others	27	—	100%	—	27	19
Loans & advances to affiliates less accounts payables to affiliates	83	—	100%	—	83	58
Retailing	60	—	80%	—	48	33
SEZ development	62	—	80%	—	50	34
<b>Total enterprise value</b>					<b>2,613</b>	<b>1,811</b>
Net debt					82	57
<b>Implied equity value</b>					<b>2,531</b>	<b>1,754</b>

Note:

(a) We value the KG D-6 and NEC-25 gas discoveries on DCF and CBM discoveries based on KG D-6's valuation.

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

(c) Net debt is for 'merged' entity.

(d) We use 1.443 bn shares post merger of RPET with RIL (excluding treasury shares) for per share computations.

Source: Kotak Institutional Equities estimates

- **Refining margins.** Exhibit 3 compares the 'required' refining margins for RIL and RPET refineries with our estimated FY2011E margins and current refining margins based on current product and crude oil prices. Such a sharp improvement in global margins would entail a swift recovery in oil demand driven by strong global GDP growth. This looks increasingly unlikely in light of current global macro-economic and financial conditions.

**Exhibit 3: Refining margins will have to improve significantly to justify 33% higher EBITDA**  
Refining margins for RIL and RPET (US\$/bbl)

	RIL	RPET
Current FY2011E refining margins estimates	11.0	9.6
'Required' refining margins to justify 24% higher EBITDA (a)	13.8	12.4
Increase in margins to justify higher EBITDA	2.8	2.8
Refining margins based on current global prices (b) (1)	7.3	7.8
<b>Change versus 'required' refining margins (a) - (b)</b>	<b>6.5</b>	<b>4.6</b>

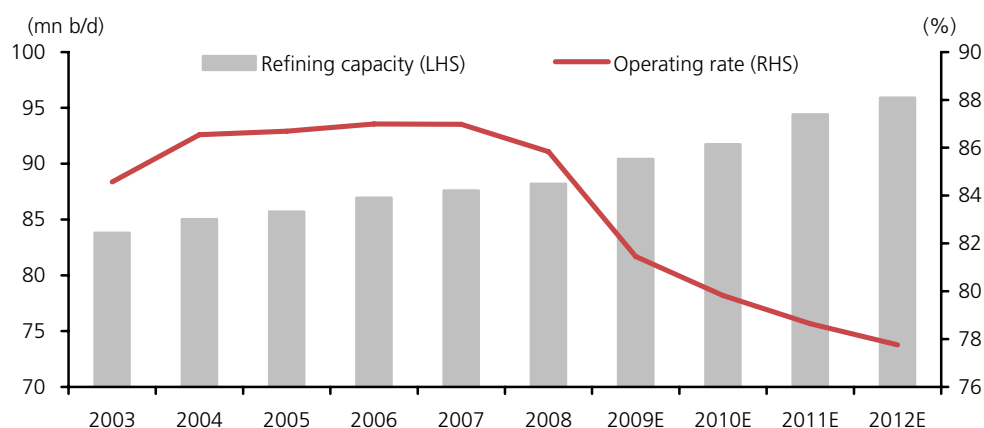
Note:

(1) Based on global product and crude prices for April 2009.

Source: Kotak Institutional Equities estimates

The steep increase in global refining capacity, coupled with weak global demand, will likely lead to a sharp decline in global utilization rates and weak refining margins over the next two years (see Exhibit 4). Also, the recent collapse in premium of light, sweet crude over heavy, sour crude may partly nullify RIL's competitive advantage of owning two, high-complexity refineries.

**Exhibit 4: Global refining operating rates will decline significantly**  
Global refining capacity versus operating rate, calendar year ends, 2003-2012E



Source: IEA, Kotak Institutional Equities estimates

- **Chemical margins.** Exhibit 5 compares the 'required' margins of RIL's chemicals segment with our estimated FY2011E margins and current chemical margins of RIL's key products. Current chemical margins are surprisingly strong but we doubt these will sustain in light of new chemical capacity across key products and weak demand for the same (see Exhibit 6).

**Exhibit 5: Chemical margins will have to improve significantly to justify 33% higher EBITDA**  
Chemical margins for RIL, March fiscal year-end, 2011E (US\$/ton)

	Current estimates	Required margins	Current margins (a)	Change (%)
LLDPE — naphtha	475	552	637	16
HDPE — naphtha	475	552	661	16
PP — naphtha	450	527	604	17
PVC — 1.025 x (0.235 x ethylene + 0.864 x EDC)	346	423	258	22
PX — naphtha	325	402	590	24
POY — 0.85 x PTA — 0.34 x MEG	400	411	308	3
PSF — 0.85 x PTA — 0.34 x MEG	325	336	293	4
PTA — 0.67 x PX	147	172	172	17

Note:

(a) Global chemical margins for April 2009.

Source: Kotak Institutional Equities estimates

**Exhibit 6: Expected capacity addition in key chemicals likely to exceed estimated increase in demand**  
Global capacity (thousand tons per annum) and growth for key chemicals (2003-2011E)

	2003	2004	2005	2006	2007	2008	2009E	2010E	2011E
<b>Ethylene</b>									
Capacity	111,589	112,431	116,807	122,093	129,835	138,785	149,273	158,073	167,673
Growth rate %	1.6%	0.8%	3.9%	4.5%	6.3%	6.9%	7.6%	5.9%	6.1%
<b>Propylene</b>									
Capacity	73,838	75,645	78,060	81,744	84,675	87,085	89,895	90,924	91,951
Growth rate %	3.3%	2.4%	3.2%	4.7%	3.6%	2.8%	3.2%	1.1%	1.1%
<b>Polyethylenes</b>									
Capacity	68,774	70,431	74,866	77,317	79,734	83,189	88,689	91,989	93,479
Growth rate %	2.6%	2.4%	6.3%	3.3%	3.1%	4.3%	6.6%	3.7%	1.6%
<b>Polypropylene</b>									
Capacity	40,854	42,389	44,707	47,689	48,515	52,992	55,507	57,157	60,157
Growth rate %	3.2%	3.8%	5.5%	6.7%	1.7%	9.2%	4.7%	3.0%	5.2%
<b>PVC</b>									
Capacity	33,768	35,012	37,205	37,920	38,466	39,681	40,436	40,736	42,973
Growth rate %	4.2%	3.7%	6.3%	1.9%	1.4%	3.2%	1.9%	0.7%	5.5%
<b>PTA</b>									
Capacity	29,960	31,313	32,963	36,670	41,517	43,050	47,155	52,343	56,425
Growth rate %	15.1%	4.5%	5.3%	11.2%	13.2%	3.7%	9.5%	11.0%	7.8%
<b>Polyester Fibres</b>									
Capacity	26,586	27,584	26,723	28,408	29,388	30,738	31,838	31,838	31,838
Growth rate %	4.9%	3.8%	-3.1%	6.3%	3.4%	4.6%	3.6%	0.0%	0.0%
<b>Ethylene Glycol</b>									
Capacity	15,922	16,724	17,888	18,993	20,089	21,700	24,245	27,680	29,795
Growth rate %	3.2%	5.0%	5.3%	6.2%	5.8%	8.0%	11.7%	14.2%	7.6%

Source: Kotak Institutional Equities estimates

- **E&P business.** The higher valuation of RIL's E&P segment translates into 7.5 tcf of additional gas reserves and 150 mn bbls of additional oil reserves compared to our base-case assumptions of 23 tcf of recoverable gas reserves and 450 mn bbls of recoverable oil reserves. These figures represent net reserves of RIL.

### Valuation exercise 2: E&P business has to be worth Rs1,037/share if the value of other segments remains unchanged

Exhibit 7 shows that RIL's new E&P business has to be worth Rs1,496 bn or about US\$30 bn to justify a fair value of Rs2,300 for RIL if we leave valuations of other segments unchanged. Our current fair valuation of RIL's new E&P business is based on 16 tcf of recoverable gas reserves for KG D-6 block, 4.5 tcf of recoverable reserves in NEC-25 block, 2.5 tcf of eventual gas production from CBM blocks and 0.45 bn bbls of OOIP—all data is on a net basis. We use the gas pricing formula approved by the government and the terms of the production sharing contracts (PSCs) to compute the DCF-based fair valuation of the blocks.

**Exhibit 7: Valuation of gas segment needs to be about 110% higher to justify Rs2,300 fair valuation**  
 RIL valuation: 'Required' valuation of E&P segment to justify higher valuation versus current valuation (Rs bn)

	Valuation base, New		Valuation base, FY2011E	
	Other	EBITDA	Other	EBITDA
Chemicals		72		72
Refining & Marketing		189		189
Oil and gas—producing		27		27
<b>Gas—developing (DCF-based)</b>	<b>1,298</b>	<b>—</b>	<b>614</b>	<b>—</b>
<b>Oil—KG-DWN-98/3</b>	<b>198</b>	<b>—</b>	<b>94</b>	<b>—</b>
Investments				
Others	27	—	27	—
Loans & advances to affiliates less accounts payables to affiliates	83	—	83	—
Retailing	60	—	60	—
SEZ development	62	—	62	—

Source: Kotak Institutional Equities estimates

We translate the aforementioned fair valuation of RIL's new E&P segment into 26 tcf of additional gas reserves at present or 51 tcf of additional gas reserves to be added over the next six years. The numbers are very high but plausible. Exhibit 8 gives details of prospective resources in a few of RIL's key blocks and the status of exploration in the same blocks.

**Exhibit 8: RIL has several blocks with good prospects**

Details of Reliance's E&P blocks in India

Block	NELP round	Area	RIL stake (%)	Discovery announcement	Status	Reserves/resources	Classification
KG-DWN-98/1	I	10,810	100	September 2007 (oil)			
KG-DWN-98/3	I	7,645	90	October 2002 (gas)	Gas production commenced in April 2009	13 tcf	2P recoverable reserves
KG-DWN-98/3	I	7,645	90	June 2006 (oil)	Oil production commenced in September 2008	180 mn bbls	Recoverable reserves
NEC-OSN-97/2	I	14,535	90	June 2004 (gas)	Production expected to commence in mid-FY2012	4.8 tcf	Recoverable reserves
GS-OSN-2000/1	II	8,841	90	May 2007 (gas)		< 1 tcf	Management guidance
CY-DWN-2001/2	III	14,325	100	July 2007 (oil) and October 2007 (oil)			
KG-DWN-2001/1	III	11,605	90		One well to be drilled in CY2009	45 tcf	GCA estimate with GCoS of 15%
KG-OSN-2001/1	III	1,100	100	January 2008 (gas)			
KG-OSN-2001/2	III	210	100	December 2005 (gas)			
NEC-DWN-2002/1	IV	25,565	90				
KG-DWN-2003/1	V	3,288	90	February 2008 (gas) and April 2008 (gas)	Appraisal program for two discoveries (D39 and D41) has been submitted to the DGH in February 2009	350 bcf	GCA estimate with GCoS of 15-25%
MN-DWN-2003/1	V	17,050	85		First well to be drilled in mid-CY2010		
Panna Mukta Tapti	Pre-NELP		30		Gas production being ramped upto 18 mcm/d in from 15 mcm/d in FY2008 and 10.4 mcm/d in FY2007		
SR-OS-94/1	Pre-NELP	6,860	100	Oil discovery notified to DGH			

Source: Company, Niko, Hardy Oil, Industry sources, Kotak Institutional Equities

### Valuation exercise 3: Rs1,375 possible downside scenario

Exercise 9 shows our fair valuation for RIL at Rs1,375 in our downside scenario of (1) weaker-than-assumed chemical margins (lower by US\$50/ton), (2) lower-than-expected refining margins of US\$2/bbl and (3) full taxation on gas production. We assume RIL will be in a position to sell all of its gas from the KG D-6 block at a price based on the government-approved formula. This assumes that RIL will supply gas to NTPC and RNRL also at the government-approved price and not at US\$2.34/mn BTU.

**Exhibit 9: Trough-case SOTP valuation of Reliance is Rs1,375 per share on FY2011E estimates**  
Sum-of-the-parts valuation of Reliance Industries, FY2011E basis (Rs)

	Valuation base (Rs bn)		Multiple (X)		EV (Rs bn)	Value share (Rs)
	Other	EBITDA	Multiple	EV/EBITDA		
Chemicals		53		6.0	318	220
Refining & Marketing		144		6.0	862	597
Oil and gas—producing		27		5.0	133	92
Gas—developing (DCF-based) (a)	559	—	100%	—	559	387
Oil—KG-DWN-98/3 (b)	94	—	100%	—	94	65
Investments						
Others	27	—	100%	—	27	19
Loans & advances to affiliates less accounts payables to affiliates	83	—	100%	—	83	58
Retailing	60	—	80%	—	48	33
SEZ development	62	—	80%	—	50	34
<b>Total enterprise value</b>					<b>2,174</b>	<b>1,506</b>
Net debt					201	139
<b>Implied equity value</b>					<b>1,973</b>	<b>1,367</b>

Note:

- (a) We reduce chemical margins by US\$50/ton versus our base-case margins.
- (b) We reduce refining margin by US\$2/bbl versus our base-case assumption.
- (c) We value the KG D-6 gas find on DCF and offshore Orissa (NEC-25) and CBM discoveries based on KG D-6's valuation.
- (d) 180 mn bbls of recoverable reserves based on gross OOIP of 0.5 bn bbls.
- (e) Net debt reflects is for consolidated entity.
- (f) We use 1.443 bn shares post merger of RPET with RIL (excluding treasury shares) for per share computations.

Source: Kotak Institutional Equities estimates

We compute RIL's fair valuation at Rs1,200 in case it has to (1) supply 40 mcm/d of gas at US\$2.34/mn BTU to NTPC (12 mcm/d) and RNRL (28 mcm/d) for 17 years and (2) compensate the government for loss of royalty, income tax and profit petroleum from sale of gas at a lower price.

Finally, we do not rule out lower multiples under a scenario of lower earnings, especially if the market finds the quality of RIL's disclosures inadequate. We discuss the latter in more detail in the next section.

## DISCLOSURES: HIGHER DISCLOSURES MAY HELP CLOSE THE GAP

We believe higher disclosures from RIL on operating and financial parameters and more conservative accounting policies will improve investment sentiment for RIL stock and may result in higher multiples and valuation. Improved disclosures and adequate explanations by the management could help bridge the gap between reported financials and our expectations.

### Better disclosures can only help

We list below the kind of disclosures that would give us and the Street more comfort in computing estimates and valuations. We have used a few examples to highlight the need for higher disclosures. Our intention is not to stress on the observed discrepancies but on the requisite disclosures that can address the same. We would clarify that RIL does provide the mandatory disclosures as required by Indian regulations.

#### ► Operating data

- **Sales and raw material volumes of key products, raw materials.** We believe more information on the same is critical to understand RIL's quarterly results. This critical piece of information could address some of the observed discrepancies in RIL's quarterly results. We discuss two specific examples below—we have observed several such unexpected movements in revenues and costs over the past several quarters.
- a) **Unexpectedly steep decline in operating costs of chemical segment in 4QFY09.** We note that operating costs of the petrochemical segment declined 27% qoq despite a 19% increase in the price of naphtha, the major raw material for RIL's chemicals segment. We can attribute this to (1) lower sales volumes (and hence lower RM costs) and/or (2) lower RM prices. We rule out the latter in light of observed increase in RM costs. However, a likely lower sharp decline in sales volumes (the other reason for lower operating costs) does not reconcile with a 4% qoq increase in EBIT given a sharp decline in chemical margins qoq and a modest increase in prices qoq. Exhibit 10 shows the difference between our computed costs and reported costs.

**Exhibit 10: Movement in operating costs in chemical and refining segment baffling**  
Segment-wise breakdown of financial results, March fiscal year-ends (Rs mn)

	4QFY09	3QFY09	4QFY08	Change (%)		2009	2008	Change (%)
				qoq	yoy			
<b>Revenues</b>								
Petrochemicals	97,240	126,230	141,190	(23)	(31)	527,670	530,000	(0)
Refining	216,310	217,400	286,860	(1)	(25)	1,123,510	1,007,430	12
Oil & gas	7,360	10,310	8,280	(29)	(11)	34,890	27,020	29
<b>Operating costs</b>								
Petrochemicals	80,020	109,660	126,530	(27)	(37)	459,120	458,870	0
Refining	196,780	198,590	258,470	(1)	(24)	1,027,030	904,110	14
Oil & gas	2,630	4,260	3,810	(38)	(31)	12,630	11,990	5
<b>EBIT</b>								
Petrochemicals	17,220	16,570	14,660	4	17	68,550	71,130	(4)
Refining	19,530	18,810	28,390	4	(31)	96,480	103,320	(7)
Oil & gas	4,730	6,050	4,470	(22)	6	22,260	15,030	48
<b>Key data</b>								
Exchange rate (Rs/US\$)	49.8	48.8	39.8	2	25	45.8	40.3	14
<b>Chemical segment</b>								
Average naphtha price (US\$/ton)	383	323	826	19	(54)	663	721	(8)
Naphtha consumption (mn tons)	1.9	1.9	1.9	—	0	7.5	7.4	0
<b>Change in naphtha costs (Rs mn)</b>				<b>6,185</b>	<b>(25,473)</b>			<b>10,932</b>
<b>Reported change in operating costs (Rs mn)</b>				<b>(29,640)</b>	<b>(46,510)</b>			<b>250</b>
<b>Refining segment</b>								
Dated Brent crude price (US\$/bbl)	43	75	93	(42)	(53)	89	79	13
Crude throughput (mn tons)	7.8	7.9	8.1	(1)	(4)	32	32	1
<b>Change in crude costs (Rs mn)</b>				<b>(87,834)</b>	<b>(95,847)</b>			<b>217,566</b>
<b>Reported change in operating costs (Rs mn)</b>				<b>(1,810)</b>	<b>(61,690)</b>			<b>122,920</b>

Source: Company, Kotak Institutional Equities estimates



- b) Surprisingly flat operating costs qoq in the refining segment in 4QFY09. We find it hard to reconcile a steep increase in crude oil prices (about 42% qoq based on Dated Brent prices) with flat operating costs and flat crude throughput (7.8 mn in 4QFY09 tons versus 7.9 mn tons in 3QFY09). The same holds for full-year costs.

► Financial data

- **Hedging-related gains or losses.** Historically, we have had difficulty reconciling RIL's reported margins with observed trends in benchmark refining margins and those reported by other refining companies (see Exhibit 11). We can attribute this to hedging-related gains or losses although the company does not disclose the same. A press release of the company dated January 9, 2009 had attributed RIL's consistently superior performance to hedging practices. We believe disclosures of hedging-related gains or losses would be useful to understand RIL's underlying refining margins and reconcile these with observed benchmark margins and reported margins of other refining companies.

**Exhibit 11: RIL's reported margins have been at variance to the trend of refining margins reported by other refiners**  
Reported refining margins Indian refiners, March fiscal year-ends, 2007-09 (US\$/bbl)

	1QFY07	2QFY07	3QFY07	4QFY07	1QFY08	2QFY08	3QFY08	4QFY08	1QFY09	2QFY09	3QFY09	4QFY09
BPCL	5.0	(0.3)	3.1	5.6	7.1	3.4	5.4	6.8	12.8	3.2	(0.3)	
CPCL	6.6	4.2	2.7	6.4	8.8	6.8	8.8	9.6	15.9	1.7	(18.0)	
HPCL	8.3	2.6	2.5	4.2	8.4	4.2	6.4	7.4	16.5	(4.7)	(3.1)	
IOCL	6.7	(0.3)	4.5	5.7	10.7	6.0	10.4	8.8	16.8	(4.6)	(2.7)	
MRPL	6.6	2.8	2.3	8.6	8.1	6.3	7.7	6.7	18.0	2.3	(2.8)	
Reliance Industries	12.4	9.1	11.7	13.0	15.4	13.6	15.4	15.5	15.7	13.4	10.0	9.9
Singapore margins as computed by IEA (a)	4.9	1.5	1.0	3.1	4.7	2.5	3.5	3.0	5.5	1.8	1.9	0.9
<b>Premium over reported Singapore margins</b>	<b>7.5</b>	<b>7.6</b>	<b>10.7</b>	<b>9.9</b>	<b>10.7</b>	<b>11.1</b>	<b>11.9</b>	<b>12.5</b>	<b>10.2</b>	<b>11.6</b>	<b>8.1</b>	<b>9.0</b>

Note:

(a) Singapore hydrocracking margins over Dubai and do not reflect any adventitious gains/losses or inventory losses.

Source: Company, Kotak Institutional Equities estimates

- **Disclosures on extraordinary items.** In particular, we would highlight adventitious gains or losses (arising from steep changes in prices over two reporting periods) and inventory losses that influence companies' reported earnings dramatically. We have not observed the volatility seen in the financials of several refining companies in RIL's reported numbers (see Exhibit 12).

**Exhibit 12: RIL's reported EBIT has shown less volatility versus global peers' financials**  
EBIT for global refiners, calendar year-ends, 2007-09YTD (mn)

	Currency	1QCY07	2QCY07	3QCY07	4QCY07	1QCY08	2QCY08	3QCY08	4QCY08	1QCY09
<b>India</b>										
CPCL	Rs	3,358	5,277	3,672	3,509	6,144	11,050	(1,171)	(18,650)	NA
MRPL	Rs	4,905	5,248	3,552	4,532	3,360	12,903	509	(4,474)	NA
RIL	Rs	22,770	25,580	23,210	26,140	28,390	30,400	27,740	18,810	19,530
<b>International majors</b>										
BP	US\$	804	2,742	371	(1,296)	1,249	539	1,972	416	1,090
Chevron (a)	US\$	1,623	1,298	377	204	252	(734)	1,831	2,080	823
ExxonMobil (a)	US\$	1,912	3,393	2,001	2,267	1,166	1,558	3,013	2,414	1,133
<b>Europe</b>										
Cepsa	EUR	145	166	132	90	18	17	180	197	104
Neste Oil	EUR	117	267	167	151	197	272	15	(301)	106
OMV	US\$	39	127	115	(174)	68	315	(88)	178	NA
PKN	PLN	133	1,034	637	291	343	1,516	431	(1,762)	NA
<b>US</b>										
Frontier Oil	US\$	115	374	194	62	74	82	104	(143)	NA
Sunoco (a)	US\$	83	512	202	44	(97)	32	496	285	NA
Tesoro Petroleum	US\$	197	738	113	(42)	(144)	36	466	246	NA
Valero	US\$	1,765	3,193	1,168	884	472	1,158	1,535	1,162	NA
<b>Japan</b>										
AOC Holdings	JPY	4,523	7,087	4,933	(932)	2,866	11,935	(534)	(48,684)	NA
Cosmo	JPY	22,470	20,806	22,668	26,204	14,118	44,809	21,059	(171,575)	NA
Idemitsu	JPY	(5,230)	(5,158)	7,327	(8,307)	13,981	(11,054)	36,516	35,974	NA
Nippon Oil	JPY	29,604	79,254	63,469	80,783	40,456	101,626	(15,175)	(443,079)	NA
Showa Shell	JPY	8,665	29,499	20,967	29,682	16,613	55,668	37,823	(122,387)	(70,021)
Tonen General	JPY	22,519	3,924	28,372	(47,752)	62,743	(65,064)	48,102	75,961	NA

Note:

(a) Reported profit after tax for refining segment.

Source: Company, Kotak Institutional Equities

- **Details of loans, interest rates and repayment schedules.** RIL used to provide this information earlier but has stopped doing so since FY2004. We believe this is important given the large amount of foreign currency loans on RIL's books. The latter's principal amount fluctuates with rupee-foreign currency exchange rate and makes the computation of interest expense and total loans difficult in the absence of adequate details of loans.
- **Breakdown of capex by various segments.** In our view, this would help analysts and investors model RIL's capex and DD&A better. This has become more important given RIL's aggressive E&P plans; E&P results in both depreciation and depletion costs and RIL does not give the breakdown between fixed assets and producing properties (discussed below). RIL has stopped disclosing the breakdown of capex by segments since 1QFY09.
- **Breakdown of gross block into fixed assets and gross producing properties.** In our view, this is critical to accurately model depletion. We note that depletion will become an increasingly larger cost item as RIL scales up the production of oil and gas from its various blocks. RIL has recently commenced production of gas from its KG D-6 block; gas production will scale up rapidly over the next two years.
- **Basis of transactions with related parties.** Disclosures about the basis of transactions with related parties would clarify their nature to the investment community. We note that RIL makes large payments to group companies for the use of certain services. Exhibit 13 gives details of the same.

**Exhibit 13: RIL has large transactions with private companies of the major shareholder**  
Reliance Industries' related-party transactions, March fiscal year-ends, 2007-08 (Rs bn)

	2007	2008
<b>Payments made</b>		
Reliance Utilities and Power Limited	3	3
Reliance Ports and Terminals Limited	11	13
Others	1	1
<b>Total payments</b>	<b>16</b>	<b>18</b>
<b>Loans and advances given</b>		
Reliance Utilities and Power Limited	—	2
Reliance Gas Transportation Infrastructure Limited	20	—
Others	2	1
<b>Total loans and advances given</b>	<b>22</b>	<b>3</b>
<b>Loans and advances balances</b>		
Reliance Gas Transportation Infrastructure Limited	20	20
Reliance Ports and Terminals Limited	11	11
Reliance Utilities & Power Limited	2	2
Others	2	2
<b>Total loans and advances</b>	<b>34</b>	<b>35</b>

Source: Company, Kotak Institutional Equities

- **Basis for computation of income taxation.** We believe RIL can share more details on its income tax computation, especially given its low historical taxation. In our view, any increase in the effective tax rate would not be taken well by the market, which appears to believe that RIL will enjoy low taxation rates in perpetuity. Most investors and analysts rely on the EV/EBITDA multiple to value RIL's various business segments; however, a higher tax should implicitly translate into a lower EV/EBITDA multiple.

RIL has historically enjoyed low taxation (both cash and effective) due to various tax exemptions and accelerated depreciation from large capex (low cash tax rate). Exhibit 14 gives details of RIL's pre-tax profits, cash tax, deferred taxation liabilities/assets, cash tax rate and effective rate. We are unable to explain the basis for RIL's upfront taxation forecasts—for example, it provided deferred taxation of the same amount of Rs2.25 bn for all the four quarters.

**Exhibit 14: RIL has historically enjoyed low taxation due to slew of exemptions**  
Reported profits and taxation of RIL, March fiscal year-ends, 2007-09 (Rs mn)

	1QFY07	2QFY07	3QFY07	4QFY07	1QFY08	2QFY08	3QFY08	4QFY08	1QFY09	2QFY09	3QFY09	4QFY09
Pre-tax profit	30,080	36,790	37,200	37,770	44,500	45,630	46,080	46,560	49,020	49,240	42,250	46,260
Current taxation	3,560	4,190	4,370	4,220	5,170	5,270	5,270	5,440	5,670	5,770	4,990	4,850
Deferred taxation	2,050	2,600	2,020	2,010	3,030	1,990	1,990	1,990	2,250	2,250	2,250	2,250
Cash tax rate (%)	11.8	11.4	11.7	11.2	11.6	11.5	11.4	11.7	11.6	11.7	11.8	10.5
Effective tax rate (%)	18.7	18.5	17.2	16.5	18.4	15.9	15.8	16.0	16.2	16.3	17.1	15.3

Source: Company, Kotak Institutional Equities

Exhibit 15 shows how disclosures of RIL have changed over the past 2-3 years.

**Exhibit 15: Disclosures of RIL have changed significantly over the years**  
RIL disclosure in its quarterly and annual results

	4QFY09	3QFY09	2QFY09	1QFY09	4QFY08	3QFY08	2QFY08	1QFY08	4QFY07	3QFY07	2QFY07	1QFY07
No. of pages of press release	16	12	11	10	39	32	27	29	26	27	18	12
<b>Financials</b>												
Cash flow	X	X	X	X	X	X	X	X	X	X	X	X
Interest capitalized	✓	X	X	X	✓	✓	✓	✓	✓	✓	X	X
Revaluation of assets	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Price and volume impact on revenues	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X
Overall capital expenditure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Segment-wise capital expenditure	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
Profits as per US GAAP	X	X	X	X	X	X	X	X	X	✓	✓	✓
Weighted average cost of debt	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
<b>Balance sheet details</b>												
Outstanding debt	✓	X	X	X	✓	✓	✓	✓	✓	✓	✓	X
Proportion of foreign debt in total debt	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
Average maturity of debt	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
Cash and cash equivalents	✓	✓	X	X	✓	✓	✓	✓	✓	✓	X	X
<b>Segment information</b>												
<b>Petrochemical</b>												
Production volumes of polymer, polyester and intermediates	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Production volumes of individual products (LAB, butadiene etc.)	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
Domestic polymer and polyester demand growth	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Price and volume impact on revenues	X	✓	X	X	✓	✓	✓	✓	✓	✓	X	X
Market share	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
<b>Refining</b>												
Price and volume impact on revenues	✓	X	X	✓	X	X	X	X	X	✓	X	X
Refinery product sales by user	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
Export volumes	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Domestic demand for petroleum products	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
Global benchmark margins	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Light-heavy differential	✓	✓	✓	X	X	✓	X	✓	✓	X	✓	✓
Light-heavy crude mix	X	X	X	X	X	X	X	X	X	✓	✓	✓
<b>Upstream</b>												
Production volumes	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Information on CBM blocks	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
New discoveries	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Information on rigs	X	X	X	✓	✓	✓	✓	✓	✓	X	✓	X
<b>New initiatives</b>												
Retail—No of stores opened	X	X	✓	✓	✓	✓	✓	✓	✓	✓	NA	NA
RPL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X
SEZ	X	X	X	X	X	X	X	X	X	X	X	X

Source: Company, Kotak Institutional Equities

### More conservative accounting policies

We find some accounting policies of RIL aggressive. We believe a change in RIL's accounting policies in favor of more conventional standards would enable a more credible comparison of valuations with peers and also preclude any sudden negative surprises.

- **Accounting for E&P segment.** RIL uses the Full Cost Method (FCM) of accounting versus the more common Successful Efforts (SE) Method followed by almost all global E&P companies. Under FCM, RIL treats all costs associated with exploration and development of the company under one unit (company) and amortizes the same over production from all blocks. This can depress DD&A costs in the initial years until start of initial production and inflate DD&A costs after commencement of production. Since RIL does not give the breakdown of its capex (exploration and development costs by blocks, breakdown of gross/net block into gross/net fixed assets and gross/net producing properties or E&P overall costs), it is difficult to compute DD&A costs accurately. Under SE, a company writes off any costs associated with survey and dry wells. This makes it more practical to identify costs by blocks and compute DD&A more accurately.
- **Interest capitalization.** We find RIL's interest capitalization practice aggressive as can be seen from our computation of interest capitalization for FY2009 (see Exhibit 16). RIL capitalized interest of Rs25.3 bn in FY2009, which suggests that the entire capex for FY2009 has been funded by debt rather than a more conservative project ratio suggested by the capitalization ratio of RIL's balance sheet (29% as of end-FY2008).

**Exhibit 16: Interest capitalized during the year implies the projects are fully debt financed**  
Computation of capitalized interest, March fiscal year-ends (Rs mn)

Capital WIP as on March 31, 2008	230,058
Capital expenditure in FY2009 excluding interest capitalized	223,750
Total capital expenditure assuming full capitalization to gross block	453,808
Interest rate (%)	8.0
Implied capitalized interest assuming 100% debt financing	27,355
Implied capitalized interest 50% debt financing	13,677
Implied capitalized interest 29% debt financing (a)	7,933
<b>Reported interest capitalized</b>	<b>25,320</b>

Note:

(a) Based on debt/capitalization ratio for FY2008.

Source: Kotak Institutional Equities estimates

- **Continuous revaluation of assets.** We have long been unable to explain RIL's practice of revaluing assets (see Exhibit 17), which increases its fixed assets and book value. However, most investors and analysts adjust for revalued assets while computing RIL's book value for computation of P/B ratio. RIL adjusts the additional depreciation charge arising from revaluation of assets against reserves.

**Exhibit 17: We have been unable to explain RIL's practice of revaluing its assets**  
Revaluation amount and additional depreciation charge, March fiscal year-ends, 1999-2009 (Rs bn)

	<b>Revaluation amount</b>	<b>Additional depreciation due to revaluation</b>
1999		7.3
2000		3.7
2001		2.4
2002		1.7
2003		1.2
2004		0.8
2005		0.6
2006	225	14.5
2007		20.0
2008		17.8
2009	129	19.9

Note:

(a) The company adjusts additional depreciation charge arising from revaluation of fixed assets against reserves.

Source: Company, Kotak Institutional Equities

For example, RIL has revalued fixed assets of Gandhar and Nagothane and credited the revaluation amount of Rs129 bn to its revaluation reserve. It has adjusted the additional depreciation charge of Rs19.9 bn arising from revaluation of fixed assets against reserves. This has no impact on the company's P&L account (books of accounts). However, we would appreciate clarity on whether this practice has any implications for the computation of RIL's taxable income (books of taxation).

## FINANCIALS: STRONG GROWTH IN EARNINGS UNLESS MARGINS DISAPPOINT

We model RIL's consolidated EPS (with RPET) to grow strongly to Rs218 in FY2012E from Rs103 in FY2009. Two factors will drive earnings and compensate for likely lower contribution from the chemicals business and extant refinery to RIL's overall earnings: (1) a steep increase in gas production volumes from RIL's KG D-6 block and (2) refined products volumes from RPET's recently-commissioned refinery (in RPET currently but about to be merged into RIL).

### Key assumptions and financial models

We discuss the key assumptions behind our earnings model below.

- **Chemical margins.** Exhibit 18 gives our key assumptions for the chemical segment. We model a steep decline in margins for FY2010E versus FY2009 margins and further decline in FY2011E. We assume a small recovery in FY2012E margins.

Exhibit 18: We model chemical margins to remain subdued in FY2010-12E

Key chemical prices and margins assumptions, March fiscal year-ends, 2004-12E (US\$/ton)

	2004	2005	2006	2007	2008	2009	2010E	2011E	2012E
<b>Chemical prices</b>									
LDPE	740	1,150	1,130	1,360	1,600	1,400	1,100	1,150	1,250
LLDPE	700	990	1,125	1,350	1,575	1,330	1,000	1,050	1,150
HDPE	700	970	1,100	1,340	1,500	1,275	1,000	1,050	1,150
Polypropylene (PP)	750	1,000	1,170	1,350	1,470	1,300	975	1,025	1,125
PVC	680	910	825	890	1,100	925	700	750	850
PFY	1,210	1,300	1,350	1,400	1,550	1,485	1,175	1,275	1,325
PSF	1,050	1,175	1,265	1,360	1,475	1,320	1,100	1,200	1,250
Paraxylene	585	780	900	1,225	1,200	1,085	850	900	900
<b>Chemical margins</b>									
<b>LLDPE — naphtha</b>	<b>450</b>	<b>600</b>	<b>655</b>	<b>820</b>	<b>850</b>	<b>655</b>	<b>525</b>	<b>475</b>	<b>550</b>
HDPE — naphtha	450	580	630	810	775	600	525	475	550
<b>PP — naphtha</b>	<b>500</b>	<b>610</b>	<b>700</b>	<b>820</b>	<b>745</b>	<b>625</b>	<b>500</b>	<b>450</b>	<b>525</b>
PVC — 1.025 x (0.235 x ethylene + 0.864 x EDC)	258	218	264	247	396	401	306	346	446
<b>POY — naphtha</b>	<b>960</b>	<b>910</b>	<b>880</b>	<b>870</b>	<b>825</b>	<b>810</b>	<b>700</b>	<b>700</b>	<b>725</b>
PSF — naphtha	800	785	795	830	750	645	625	625	650
<b>PX — naphtha</b>	<b>335</b>	<b>390</b>	<b>430</b>	<b>695</b>	<b>475</b>	<b>410</b>	<b>375</b>	<b>325</b>	<b>300</b>
POY — 0.85 x PTA — 0.34 x MEG	462	334	353	329	364	496	380	400	450
<b>PSF — 0.85 x PTA — 0.34 x MEG</b>	<b>302</b>	<b>209</b>	<b>268</b>	<b>289</b>	<b>289</b>	<b>331</b>	<b>305</b>	<b>325</b>	<b>375</b>
PTA — 0.67 x PX	208	237	222	89	121	133	106	147	147

Source: Kotak Institutional Equities estimates

- **Refining margins.** We model refining margins for FY2010E, FY2011E and FY2012E at US\$9.5/bbl, US\$11/bbl and US\$12.4/bbl for RIL's refinery versus US\$12.2/bbl in FY2009. The recovery in FY2011E and FY2012E primarily reflects the use of gas for internal heating, which results in savings on fuel and power costs. Exhibit 19 gives the key assumptions for the refining segment and the two refineries separately.

**Exhibit 19: We model refining margins to improve in FY2011E due to use of gas for internal consumption**  
Major assumptions of refinery division, March fiscal year-ends, 2004-2012E (US\$/bbl)

	2004	2005	2006	2007	2008	2009	2010E	2011E	2012E
Rupee-dollar exchange rate	46.0	45.0	44.3	45.3	40.3	45.8	50.8	50.5	48.5
<b>RIL refinery</b>									
Import tariff on crude (%)	10.0	10.2	5.1	5.1	1.4	1.1	0.7	0.7	0.7
Refinery yield (per bbl of crude throughput)	36	46	62	75	97	105	65	67	69
Cost of inputs (per bbl of crude throughput)	28	34	50	63	82	92	55	56	57
Landed cost of inputs	31	38	52						
<b>Net refining margin</b>	<b>5.0</b>	<b>8.4</b>	<b>9.8</b>	<b>11.8</b>	<b>15.0</b>	<b>12.2</b>	<b>9.5</b>	<b>11.0</b>	<b>12.4</b>
<b>Crude throughput (mn tons)</b>	<b>30</b>	<b>32</b>	<b>31</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>
Fuel and loss-own fuel used (%)	7.6	7.6	7.6	8.0	8.0	8.0	8.0	4.0	2.6
Fuel & loss equivalent-gas used (%)						—	—	4.0	5.4
Cost of natural gas used (US\$/mn BTU)						5.3	5.1	5.1	5.1
<b>Domestic sales of gasoline and diesel (mn tons)</b>	<b>5.7</b>	<b>4.0</b>	<b>3.7</b>	<b>2.4</b>	<b>1.3</b>		<b>3.3</b>	<b>3.5</b>	<b>3.5</b>
Exports of gasoline and diesel (mn tons)	7.6	10.2	10.0	12.3	14.1	16.6	13.0	13.4	13.7
<b>Marketing volumes of auto fuels (mn tons)</b>		<b>0.8</b>	<b>3.3</b>	<b>1.9</b>	<b>0.8</b>	—	<b>3.3</b>	<b>3.5</b>	<b>3.5</b>
Marketing margin of auto fuels (Rs/ton)		1,647	700	(1,190)	(1,633)		1,515	1,529	1,529
<b>RPET refinery</b>									
Refinery yield (US\$/bbl)						48	57	59	61
Cost of crude (US\$/bbl)						42	48	50	50
Landed cost of crude (US\$/bbl)						42	48	50	50
<b>Net refining margin (US\$/bbl)</b>						<b>5.7</b>	<b>8.3</b>	<b>9.6</b>	<b>10.8</b>
<b>Crude throughput (mn tons)</b>						<b>4</b>	<b>26</b>	<b>29</b>	<b>29</b>
Fuel and loss (mn tons)						0.3	2.1	1.2	0.8
Production of main products (mn tons)						3.3	23.9	27.8	28.2
Fuel and loss-own fuel used (%)						8.0	8.0	4.0	2.6
Fuel & loss equivalent-gas used (%)						—	—	4.0	5.4
Cost of natural gas (US\$/mn BTU)						5.3	5.3	5.3	5.3

Source: Kotak Institutional Equities estimates

- **E&P.** We model KG D-6 gas production from D1, D3 and MA-1 fields to increase to 80 mcm/d in FY2011E and 88 mcm/d in FY2012E versus 45 mcm/d in FY2010E. Exhibit 20 gives key assumptions of RIL's E&P segment broken down by major blocks and by oil and gas.

**Exhibit 20: Gas volume will increase sharply in FY2010-12E**  
Key upstream assumptions, March fiscal year-ends, 2004-12E

	2004	2005	2006	2007	2008	2009E	2010E	2011E	2012E
<b>Volumes (net to RIL)</b>									
<b>Crude oil (b/d)</b>									
Panna, Mukta	7,063	7,660	8,698	10,961	12,852	11,321	13,600	13,600	13,600
Yemen (Block-9)			625	1,375	1,125	1,159	1,250	1,250	1,250
KG-DWN-98/3						2,340	36,000	36,000	36,000
<b>Total crude (b/d)</b>	<b>7,063</b>	<b>7,660</b>	<b>9,323</b>	<b>12,336</b>	<b>13,977</b>	<b>14,819</b>	<b>50,850</b>	<b>50,850</b>	<b>50,850</b>
<b>Natural gas (mcm/d)</b>									
Panna, Mukta & Tapti	2	3	2	3	4	5	5	5	5
KG basin							41	72	79
NEC-25									18
<b>Total gas (mcm/d)</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>46</b>	<b>77</b>	<b>103</b>
<b>Price</b>									
<b>Crude oil (US\$/bbl)</b>									
Panna, Mukta	29	40	58	65	79	83	55	65	70
Yemen (Block-9)	29	40	58	65	79	83	55	65	70
KG-DWN-98/3						78	50	60	65
<b>Natural gas (US\$/mn BTU)</b>									
Panna, Mukta & Tapti	3.1	3.1	4.0	4.8	4.9	5.7	6.0	6.0	6.0
KG basin							4.0	4.2	4.2
NEC-25									4.5

Source: Kotak Institutional Equities estimates

- **Taxation.** We model the effective tax rate for the consolidated entity at 14.6%, 15.5% and 17% for FY2010E, FY2011E and FY2012E. We assume that RIL's gas business will get the benefits of Section 80 IB and will enjoy a seven-year income tax exemption as is the case for crude oil currently. In case the benefit is not available, we compute RIL's FY2010E, FY2011E and FY2012E EPS at Rs119, Rs161 and Rs201, lower by 7%, 9% and 8%.
- **Exchange rate.** We model the US Dollar-rupee exchange rate at Rs50.75/US\$, Rs50.5/US\$ and Rs48.5/US\$ for FY2010E, FY2011E and FY2012E. Exhibit 21 gives sensitivity of RIL's earnings to various parameters including exchange rate.

**Exhibit 21: Reliance's earnings have high leverage to refining margins**  
Sensitivity of RIL's standalone (without RPET) earnings to key variables

	Fiscal 2010E			Fiscal 2011E			Fiscal 2012E		
	Downside	Base case	Upside	Downside	Base case	Upside	Downside	Base case	Upside
<b>Rupee-dollar exchange rate</b>									
Rupee-dollar exchange rate	49.8	50.8	51.8	49.5	50.5	51.5	47.5	48.5	49.5
Net profits (Rs mn)	169,544	174,555	179,565	226,798	232,934	239,069	280,457	287,581	294,706
EPS (Rs)	107.8	110.9	114.1	144.1	148.0	151.9	178.2	182.8	187.3
<b>% upside/(downside)</b>	<b>(2.9)</b>		<b>2.9</b>	<b>(2.6)</b>		<b>2.6</b>	<b>(2.5)</b>		<b>2.5</b>
<b>Chemical prices</b>									
Change in prices (%)	(5.0)		5.0	(5.0)		5.0	(5.0)		5.0
Net profits (Rs mn)	169,964	174,555	179,146	228,812	232,934	237,055	283,135	287,581	292,027
EPS (Rs)	108.0	110.9	113.9	145.4	148.0	150.7	180.0	182.8	185.6
<b>% upside/(downside)</b>	<b>(2.6)</b>		<b>2.6</b>	<b>(1.8)</b>		<b>1.8</b>	<b>(1.5)</b>		<b>1.5</b>
<b>Refining margins (US\$/bbl)</b>									
Margins (US\$/bbl)	8.5	9.5	10.5	10.0	11.0	12.0	11.4	12.4	13.4
Net profits (Rs mn)	166,627	174,555	182,476	225,076	232,934	240,789	280,058	287,581	295,105
EPS (Rs)	105.9	110.9	116.0	143.1	148.0	153.0	178.0	182.8	187.6
<b>% upside/(downside)</b>	<b>(4.5)</b>		<b>4.5</b>	<b>(3.4)</b>		<b>3.4</b>	<b>(2.6)</b>		<b>2.6</b>

Source: Kotak Institutional Equities estimates

Exhibits 22 to 24 are our consolidated profit, cash flow and balance sheet models for RIL. We clarify that we have not yet merged RPET with RIL as the two companies operate as separate entities currently and may report as separate entities for another 1-2 quarters. However, we consolidate RPET's financials with those of RIL.



Exhibit 22: Consolidated profit model of RIL, March fiscal year-ends, 2004-2012E (Rs mn)

	2004	2005	2006	2007	2008	2009	2010E	2011E	2012E
<b>Net sales</b>	<b>510,715</b>	<b>656,223</b>	<b>809,113</b>	<b>1,114,927</b>	<b>1,334,430</b>	<b>1,499,690</b>	<b>1,837,944</b>	<b>2,049,778</b>	<b>2,104,441</b>
Inc/(dec) in stock	(6,054)	(5,244)	21,312	6,546	(18,672)	—	—	—	—
Raw materials	(331,802)	(444,622)	(574,119)	(793,449)	(910,071)	(1,047,185)	(1,317,976)	(1,402,684)	(1,361,084)
Finished goods	(22,183)	(23,566)	(25,161)	(18,213)	(60,077)	(101,540)	—	—	—
Royalty on gas/crude oil	(722)	(943)	(1,316)	(2,121)	(2,592)	(3,410)	(10,508)	(15,489)	(18,567)
Employee costs	(8,048)	(8,464)	(9,785)	(20,941)	(21,193)	(23,740)	(27,799)	(29,745)	(31,827)
Other costs	(50,759)	(49,565)	(80,053)	(88,287)	(88,769)	(87,595)	(123,211)	(148,336)	(164,114)
<b>EBITDA</b>	<b>91,148</b>	<b>123,820</b>	<b>139,991</b>	<b>198,462</b>	<b>233,056</b>	<b>236,220</b>	<b>358,450</b>	<b>453,524</b>	<b>528,849</b>
Other income	11,381	14,498	6,829	4,783	8,953	20,570	34,626	36,277	43,225
Interest	(14,347)	(14,687)	(8,770)	(11,889)	(10,774)	(17,450)	(50,937)	(36,907)	(14,965)
Depreciation	(32,470)	(37,235)	(34,009)	(48,152)	(48,471)	(51,498)	(88,498)	(95,925)	(101,977)
Depletion	—	—	—	—	—	(222)	(5,444)	(8,024)	(12,787)
<b>Pretax profits</b>	<b>55,711</b>	<b>86,397</b>	<b>104,041</b>	<b>143,205</b>	<b>182,764</b>	<b>187,620</b>	<b>248,197</b>	<b>348,945</b>	<b>442,345</b>
Extraordinaries	7,300	4,290	3,000	2,000	47,335	(3,700)	—	—	—
Current taxation	(3,510)	(7,050)	(9,307)	(16,574)	(26,520)	(21,290)	(28,920)	(59,748)	(86,283)
Deferred taxation	(7,900)	(7,920)	(7,040)	(9,196)	(8,999)	(9,000)	(7,334)	5,652	10,884
Minority interest	—	—	—	—	—	(249)	(11,075)	(18,339)	(23,508)
<b>Net profits</b>	<b>51,601</b>	<b>75,717</b>	<b>90,693</b>	<b>119,434</b>	<b>194,580</b>	<b>153,381</b>	<b>200,869</b>	<b>276,510</b>	<b>343,438</b>
<b>Adjusted profits</b>	<b>45,623</b>	<b>72,135</b>	<b>88,152</b>	<b>117,789</b>	<b>152,605</b>	<b>156,472</b>	<b>200,869</b>	<b>276,510</b>	<b>343,438</b>
<b>Shares outstanding (mn)</b>									
Yearend	1,396	1,393	1,393	1,453	1,453	1,573	1,573	1,573	1,573
Primary	1,396	1,395	1,393	1,453	1,453	1,513	1,573	1,573	1,573
Fully diluted	1,396	1,395	1,393	1,453	1,453	1,513	1,573	1,573	1,573
<b>EPS (Rs)</b>									
Primary	33	52	63	81	105	103	128	176	218
<b>Fully diluted</b>	<b>33</b>	<b>52</b>	<b>63</b>	<b>81</b>	<b>105</b>	<b>103</b>	<b>128</b>	<b>176</b>	<b>218</b>
<b>Cash flow per share (Rs)</b>									
Primary	60	77	86	113	124	111	173	223	268
<b>Fully diluted</b>	<b>60</b>	<b>77</b>	<b>86</b>	<b>113</b>	<b>124</b>	<b>111</b>	<b>173</b>	<b>223</b>	<b>268</b>
<b>Growth (%)</b>									
Net income	32	58	22	34	30	3	28	38	24
<b>EPS</b>	<b>32</b>	<b>58</b>	<b>22</b>	<b>28</b>	<b>30</b>	<b>(2)</b>	<b>23</b>	<b>38</b>	<b>24</b>
Discretionary cash flow/share	24	29	12	32	10	(10)	55	29	20
Effective tax rate (%)	18.1	16.5	15.3	17.7	15.4	16.5	14.6	15.5	17.0

Source: Kotak Institutional Equities estimates

Exhibit 23: Consolidated cash flow model of RIL, March fiscal year-ends, 2004-2012E (Rs mn)

	2004	2005	2006	2007	2008	2009	2010E	2011E	2012E
<b>Operating</b>									
Profit before tax	63,011	90,687	107,041	145,205	230,101	187,620	248,197	348,945	442,345
DD&A	33,314	37,846	34,009	48,152	48,471	51,720	93,942	103,949	114,764
Taxes	(3,050)	(5,110)	(9,415)	(19,199)	(24,876)	(21,290)	(28,920)	(59,748)	(86,283)
Interest expenses	14,347	14,687	8,770	11,889	10,774	17,450	50,937	36,907	14,965
Interest paid	(14,210)	(19,009)	(15,684)	(17,346)	(24,593)	(42,770)	(57,598)	(42,442)	(21,584)
Other income	(9,866)	(12,305)	(5,439)	(5,542)	(11,983)	(20,570)	(34,626)	(36,277)	(43,225)
Extraordinaries	(246)	207	237	1,127	(47,178)	(3,700)	—	—	—
Working capital (a)	20,265	46,875	(32,188)	(13,075)	(31,071)	(30,973)	(84,670)	(13,894)	(5,801)
<b>Total operating</b>	<b>103,566</b>	<b>153,877</b>	<b>87,332</b>	<b>151,211</b>	<b>149,646</b>	<b>137,487</b>	<b>187,262</b>	<b>337,440</b>	<b>415,180</b>
<b>Operating, excl. working capital (b)</b>	<b>83,301</b>	<b>107,002</b>	<b>119,520</b>	<b>164,285</b>	<b>180,718</b>	<b>168,460</b>	<b>271,932</b>	<b>351,334</b>	<b>420,981</b>
<b>Investing</b>									
Capital expenditure (c)	(43,191)	(52,440)	(94,273)	(247,274)	(239,691)	(238,171)	(76,054)	(74,544)	(83,430)
Investment in group companies (d)	(74,481)	(11,566)	(2,782)	(126,849)	(47,098)	(12,000)	—	—	—
Other investments net	3,011	(18,792)	(28,423)	26,956	13,105	—	—	—	—
Loans (to)/from companies	3,040	(17,834)	(1,160)	(5,867)	(44,960)	—	—	—	—
Asset sales	88	15,977	170	297	146	—	—	—	—
Interest/dividends received (e)	5,902	3,032	5,159	4,143	6,132	20,570	34,626	36,277	43,225
<b>Total investing</b>	<b>(105,631)</b>	<b>(81,623)</b>	<b>(121,309)</b>	<b>(348,595)</b>	<b>(312,366)</b>	<b>(229,601)</b>	<b>(41,427)</b>	<b>(38,267)</b>	<b>(40,205)</b>
<b>Financing</b>									
Share issuance	3	(1,495)	5	106,109	16,826	151,416	—	—	—
Loans (net)	10,671	(28,645)	31,198	107,231	170,268	177,090	(101,707)	(232,218)	(193,996)
Dividends (f)	(7,838)	(8,268)	(11,853)	(33,786)	—	(22,512)	(36,257)	(42,689)	(66,447)
Others	—	—	—	(485)	—	—	—	—	—
<b>Total financing</b>	<b>2,835</b>	<b>(38,408)</b>	<b>19,350</b>	<b>179,070</b>	<b>187,093</b>	<b>305,995</b>	<b>(137,964)</b>	<b>(274,907)</b>	<b>(260,443)</b>
<b>Net change in cash</b>	<b>770</b>	<b>33,846</b>	<b>(14,626)</b>	<b>(18,314)</b>	<b>24,374</b>	<b>213,881</b>	<b>7,871</b>	<b>24,267</b>	<b>114,533</b>
Opening cash	1,472	2,242	36,087	36,762	18,449	42,822	256,703	264,574	288,840
<b>Closing cash</b>	<b>2,242</b>	<b>36,087</b>	<b>21,461</b>	<b>18,449</b>	<b>42,822</b>	<b>256,703</b>	<b>264,574</b>	<b>288,840</b>	<b>403,373</b>
Gross cash flow (b)	83,301	107,002	119,520	164,285	180,718	168,460	271,932	351,334	420,981
<b>Free cash flow (b)+(a)+(c)+(d)+(e)</b>	<b>(2,153)</b>	<b>56,276</b>	<b>(34,146)</b>	<b>(197,681)</b>	<b>(162,865)</b>	<b>(92,114)</b>	<b>145,835</b>	<b>299,174</b>	<b>374,976</b>
Excess cash flow (b)+(a)+(c)+(d)+(e)+(f)	(9,992)	48,008	(45,999)	(231,467)	(162,865)	(114,626)	109,578	256,485	308,529

Source: Kotak Institutional Equities estimates

Exhibit 24: Consolidated balance sheet model of RIL, March fiscal year-ends, 2004-2012E (Rs mn)

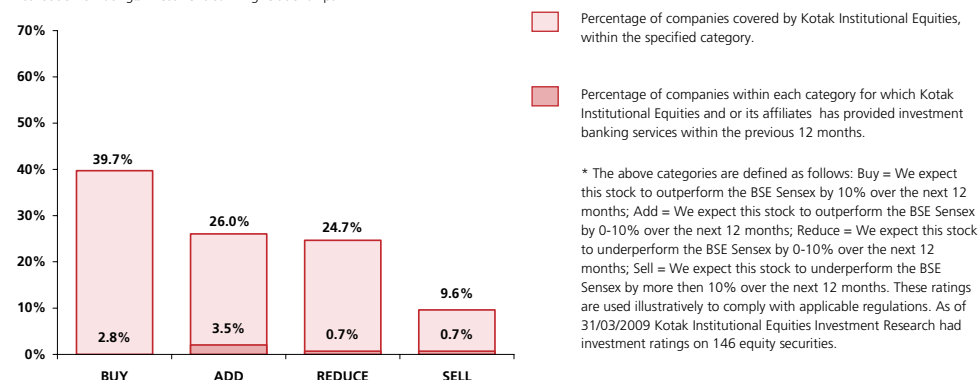
	2004	2005	2006	2007	2008	2009E	2010E	2011E	2012E
<b>Equity</b>									
Share capital-equity	13,960	13,931	13,932	14,534	14,534	15,734	15,734	15,734	15,734
Share capital-preference	—	—	—	—	—	—	—	—	—
Reserves and surplus	366,263	426,448	433,753	695,629	888,251	1,169,376	1,338,347	1,577,661	1,865,283
Extraordinary adjustments	(35,698)	(36,346)	(17,142)	(37,125)	(54,932)	(54,932)	(54,932)	(54,932)	(54,932)
<b>Total equity</b>	<b>344,525</b>	<b>404,033</b>	<b>430,543</b>	<b>673,037</b>	<b>847,853</b>	<b>1,130,178</b>	<b>1,299,150</b>	<b>1,538,463</b>	<b>1,826,085</b>
Deferred taxation liability	34,748	42,668	49,708	69,820	78,725	87,725	95,059	89,407	78,523
Minority interest	—	—	—	33,622	33,622	33,832	40,547	53,394	66,271
<b>Liabilities</b>									
Secured loans	150,837	105,155	113,882	190,420	254,958	254,922	231,022	148,804	82,477
Unsecured loans	58,610	82,691	104,774	142,507	238,114	455,424	377,138	222,356	90,861
<b>Total borrowings</b>	<b>209,447</b>	<b>187,846</b>	<b>218,656</b>	<b>332,927</b>	<b>493,072</b>	<b>710,346</b>	<b>608,160</b>	<b>371,160</b>	<b>173,338</b>
Current liabilities	122,855	171,315	164,545	192,305	251,427	301,513	257,122	269,201	262,289
<b>Total capital</b>	<b>711,574</b>	<b>805,863</b>	<b>863,452</b>	<b>1,301,712</b>	<b>1,704,700</b>	<b>2,263,594</b>	<b>2,300,038</b>	<b>2,321,625</b>	<b>2,406,506</b>
<b>Assets</b>									
Cash	2,242	36,087	21,461	18,449	42,822	256,703	264,574	288,840	403,373
Current assets	218,159	248,438	224,283	286,566	402,721	483,779	524,058	550,031	548,920
Gross block	512,550	515,669	814,112	961,493	1,008,939	1,144,898	1,604,319	1,612,572	1,622,865
Less: accumulated depreciation	217,137	248,728	292,534	358,861	423,852	475,350	563,847	659,773	761,750
Net fixed assets	295,413	266,941	521,578	602,632	585,087	669,548	1,040,472	952,799	861,115
Gross producing properties	22,479	35,589	35,589	35,589	35,589	50,589	100,589	100,589	156,821
Less: accumulated depletion	—	—	—	—	—	222	5,667	13,691	26,478
Net producing properties	22,479	35,589	35,589	35,589	35,589	50,367	94,922	86,898	130,344
Capital work-in-progress	33,568	48,293	69,578	261,182	460,962	613,678	186,493	253,537	273,234
<b>Total fixed assets</b>	<b>351,460</b>	<b>350,823</b>	<b>626,745</b>	<b>899,403</b>	<b>1,081,638</b>	<b>1,333,592</b>	<b>1,321,887</b>	<b>1,293,234</b>	<b>1,264,693</b>
Investments	139,714	170,515	(9,038)	97,294	177,519	189,519	189,519	189,519	189,519
Deferred expenditure	—	—	—	—	—	—	—	—	—
<b>Total assets</b>	<b>711,574</b>	<b>805,863</b>	<b>863,452</b>	<b>1,301,712</b>	<b>1,704,700</b>	<b>2,263,594</b>	<b>2,300,038</b>	<b>2,321,625</b>	<b>2,406,506</b>
<b>Ratios (%)</b>									
Debt/equity	55.2	42.1	45.5	44.8	53.2	58.3	43.6	22.8	9.1
Debt/capitalization	35.6	29.6	31.3	30.9	34.7	36.8	30.4	18.6	8.3
Net debt/equity	54.6	34.0	41.1	42.3	48.6	37.2	24.6	5.1	(12.1)
Net debt/capitalization	35.2	23.9	28.2	29.2	31.7	23.5	17.2	4.1	(11.1)
<b>ROAE</b>	<b>12.7</b>	<b>17.6</b>	<b>19.9</b>	<b>20.3</b>	<b>18.9</b>	<b>15.0</b>	<b>15.8</b>	<b>18.8</b>	<b>19.8</b>
<b>ROACE</b>	<b>9.7</b>	<b>13.0</b>	<b>13.8</b>	<b>13.9</b>	<b>12.7</b>	<b>9.9</b>	<b>12.6</b>	<b>15.9</b>	<b>18.1</b>
<b>Adjusted ROACE</b>	<b>7.3</b>	<b>7.4</b>	<b>9.5</b>	<b>15.0</b>	<b>14.5</b>	<b>11.5</b>	<b>14.9</b>	<b>19.2</b>	<b>22.9</b>

Source: Kotak Institutional Equities estimates

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Distribution of ratings/investment banking relationships



Source: Kotak Institutional Equities

As of March 31, 2009

**Analyst coverage**

Sanjeev Prasad, the lead analyst in this report, also covers the following companies

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Hindustan Petroleum	HPCL.BO
Indian Oil Corp.	IOC.BO
Oil & Natural Gas Corporation	ONGC.BO
Petronet LNG	PLNG.BO
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Source: Kotak Institutional Equities Research

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