Reliance Petroleum Ltd.

Price Objective Change UNDERPERFORM

Equity | India | Oil Refining & Marketing
03 December 2008

PO cut 58% to Rs59 on steep refining margin cut

Merrill Lynch

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Cut PO by 58% and EPS by 17-47%; retain Underperform

We have steeply cut Singapore complex refining margins forecast for FY10-FY11E. The cut in the benchmark refining margins has meant a steep cut in refining margins of Reliance Petroleum (RPL). This has led to 17-47% cut in our RPL's FY10-FY11 estimated earnings. RPL's PO has also been cut by 58% to Rs59/share. The revised PO implies 18% potential downside from current levels. RPL is also expensive at 9.2x FY10E EPS. We retain Underperform on RPL.

FY10-FY11E EPS cut due to 15-34% cut in refining margins

We have cut Singapore complex refining margins for FY10-FY1E by 23-41% to US$4.2-5.4/bbl. We now expect global recession, Asian oil demand contraction and large refining capacity addition in FY10E. Asian refining margins have already weakened in 4Q 2008 to US$5.9/bbl. We therefore cut RPL's FY10-FY11E refining margins by 15-34% to US$8.3-10.9/bbl and EPS by 17-47%. RPL's complex refinery, which enables it to process heavier and cheaper crude, should help RPL achieve US$4.1-5.5/bbl premium to Singapore margins.

PO of Rs59/share on EV/EBITDA (7x FY10E); DCF earlier

RPL's PO has been cut from Rs142/share to Rs59/share. The PO is now based on EV/EBITDA as against on DCF earlier. Our Asia Pac refining universe is valued on EV/EBITDA basis and hence the switch. We have valued RPL at 7x FY10E EBITDA. RPL is valued at higher multiple than peers due to its higher complexity.

Risks – imposition of MAT & problems stabilizing refinery

There are some risks, which are not factored in RPL's valuation. One of them is RPL may have problems stabilizing refinery. RPL is expected to start commercial operations in April 2009. The other is imposition of minimum alternate tax (MAT) on units like RPL, which would mean 7-8% downside to FY10-FY12E earnings.

Stock Data

Price	Rs71.65
Price Objective	Rs142.00 to Rs58.64
Date Established	3-Dec-2008
Investment Opinion	C-3-7
Volatility Risk	HIGH
52-Week Range	Rs68.20-Rs259.80
Mrkt Val / Shares Out (mn)	US$6,413 / 4,500.0
Average Daily Volume	22,968,910
ML Symbol / Exchange	RPLUF / BSE
Bloomberg / Reuters	RPET IN / RPET.BO
ROE (2009E)	0%
Net Dbt to Eqty (Mar-2008A)	95.4%
Est. 5-Yr EPS / DPS Growth	NA / NA
Free Float	10.0%

– RPL – Bombay S.E. National Index

Estimates (Mar)

(Rs)	2007	2008A	2009E	2010E	2011E
Net Income (Adjusted - mn)	NA	0	0	35,024	59,304
EPS	NA	0	0	7.78	13.18
EPS Change (YoY)	NA	NA	NA	NA	69.3%
Dividend / Share	NA	0	0	1.95	3.29
Free Cash Flow / Share	NA	(11.52)	(2.60)	4.19	16.14

Valuation (Mar)

	2007	2008A	2009E	2010E	2011E
P/E	NA	NA	NA	9.21x	5.44x
Dividend Yield	NA	0%	0%	2.72%	4.60%
EV / EBITDA*	NA	NA	NA	8.11x	5.75x
Free Cash Flow Yield*	NA	-16.08%	-3.63%	5.85%	22.52%

* For full definitions of ***iQmethod*** SM measures, see page 10.

Refer to important disclosures on page 11 to 12. Analyst Certification on Page 9. Price Objective Basis/Risk on page 9.

iQprofile SM Reliance Petroleum Ltd.

Key Income Statement Data (Mar)	2007	2008A	2009E	2010E	2011E
(Rs Millions)					
Sales	NA	0	0	638,674	666,107
Gross Profit	NA	0	0	79,795	102,573
Sell General & Admin Expense	NA	NA	NA	(23,987)	(23,755)
Operating Profit	NA	0	0	42,216	64,960
Net Interest & Other Income	NA	0	0	(5,582)	(3,465)
Associates	NA	NA	NA	NA	NA
Pretax Income	NA	0	0	36,634	61,495
Tax (expense) / Benefit	NA	0	0	(1,609)	(2,191)
Net Income (Adjusted)	NA	0	0	35,024	59,304
Average Fully Diluted Shares Outstanding	NA	4,500	4,500	4,500	4,500
Key Cash Flow Statement Data					
Net Income	NA	0	0	35,024	59,304
Depreciation & Amortization	NA	0	0	13,592	13,857
Change in Working Capital	NA	6,351	27,000	(24,349)	2,267
Deferred Taxation Charge	NA	NA	NA	0	0
Other Adjustments, Net	NA	(12,703)	(22,383)	1,609	2,191
Cash Flow from Operations	NA	(6,351)	4,617	25,877	77,619
Capital Expenditure	NA	(45,485)	(16,320)	(7,000)	(5,000)
(Acquisition) / Disposal of Investments	NA	(22,103)	0	0	0
Other Cash Inflow / (Outflow)	NA	0	0	0	0
Cash Flow from Investing	NA	(67,587)	(16,320)	(7,000)	(5,000)
Shares Issue / (Repurchase)	NA	1	511	0	0
Cost of Dividends Paid	NA	0	0	(9,872)	(16,716)
Cash Flow from Financing	NA	73,607	14,695	(19,872)	(48,716)
Free Cash Flow	NA	(51,836)	(11,703)	18,877	72,619
Net Debt	NA	128,253	139,446	130,441	74,538
Change in Net Debt	NA	73,938	11,193	(9,005)	(55,903)
Key Balance Sheet Data					
Property, Plant & Equipment	NA	232,743	249,063	242,470	233,613
Other Non-Current Assets	NA	24,383	24,383	24,383	24,383
Trade Receivables	NA	0	0	52,494	54,749
Cash & Equivalents	NA	22	3,014	2,019	25,922
Other Current Assets	NA	16,662	10,000	37,968	38,459
Total Assets	NA	273,811	286,460	359,334	377,126
Long-Term Debt	NA	128,275	114,460	104,460	72,460
Other Non-Current Liabilities	NA	0	0	0	0
Short-Term Debt	NA	0	28,000	28,000	28,000
Other Current Liabilities	NA	11,046	9,000	66,722	73,926
Total Liabilities	NA	139,321	151,460	199,182	174,386
Total Equity	NA	134,490	135,000	160,152	202,739
Total Equity & Liabilities	NA	273,811	286,460	359,334	377,126
iQmethod* SM - Bus Performance					
Return On Capital Employed	NA	0%	0%	14.2%	20.5%
Return On Equity	NA	0%	0%	23.7%	32.7%
Operating Margin	NA	NA	NA	6.6%	9.8%
EBITDA Margin	NA	NA	NA	8.7%	11.8%
iQmethod* SM - Quality of Earnings					
Cash Realization Ratio	NA	NA	NA	0.7x	1.3x
Asset Replacement Ratio	NA	NA	NA	0.5x	0.4x
Tax Rate (Reported)	NA	NA	NA	4.4%	3.6%
Net Debt-to-Equity Ratio	NA	95.4%	103.3%	81.4%	36.8%
Interest Cover	NA	NA	NA	5.0x	10.0x
Key Metrics					

* For full definitions of *iQmethod* SM measures, see page 10.

Company Description

Reliance Petroleum, a 75%-owned subsidiary of Reliance Industries, is building a 0.58mn bpd refinery & 0.9mtpa polypropylene plant in the Jamnagar, Gujarat, Special Economic Zone. (Total cost is about US$6bn.) Scheduled to start operations in December 2008, the refinery will have a Nelson complexity index of 14 & will process crudes with an avg API gravity of 24. Diesel & gasoline will make up 75% of its output, which will be largely exported.

Investment Thesis

Our PO of RPL is based on 7x FY10E EBITDA. The multiple used by us is higher than that used to value most other Asia Pac refiners. The PO does not factor in potential risks such as problems in stabilizing RPL's refinery and imposition of minimum alternate tax (MAT), which would hit EPS by 7-8pct. Also RPL's refinery is large and therefore its start up could mean refining margins remain weak for 1-2 years.

Stock Data

Price to Book Value	2.4x

Earnings and PO cut

Singapore margin cut prompts us to cut RPL margin

FY10-FY11E Singapore refining margin cut by 23-41%

The Singapore complex refining margins forecast for FY10E and FY11E has been cut by 23-41% to US$4.2-5.4/bbl from US$7.2-6.9/bbl. The cut in refining margin forecast is mainly due to expected weakness in oil demand due to global economic slowdown. Large refining capacity addition expected in 2009E should also hurt refining margins.

Table 1: Singapore refining margins cut

US$/bbl	Revised	Old	Change
Singapore complex refining margins forecast			
FY10E	4.2	7.2	-41%
FY11E	5.4	6.9	-23%

Source: DSP Merrill Lynch

Long term refining margin unchanged at US$6.75/bbl

Long term refining margin from FY12E has been kept unchanged at US$6.75/bbl.

15-34% cut in RPL's FY09-FY11E refining margin forecast

The 23-41% cut in Singapore complex refining margin forecast has prompted a cut in RPL's FY10-FY11E refining margin forecast by 15-34%.

Table 2: RPL refining margin revision

	Revised	Old	Change
FY10E	8.3	12.5	-34%
FY11E	10.9	12.8	-15%

Source: DSP Merrill Lynch

RPL's premium to Singapore margins at US$4.1-5.5/bbl

Table 3 gives RPL's FY10-FY11E refining margin build-up. We expect RPL's refining margin premium to benchmark Singapore margins to be US$4.1/bbl in FY10E and at US$5.5/bbl in FY11E.

Table 3: RPL's refining margin build-up

US$/bbl	FY10E	FY11E
Singapore refining margin	4.2	5.4
Premium to Singapore margin due to		
Premium of RIL due to ability to process heavier crude than Dubai	1.2	1.6
Premium due to ability of RPL to process even heavier crude than RIL	1.0	1.3
Premium of RPL due to superior products slate vis-à-vis RIL	1.0	1.3
Cost saving from D6 gas use in place of liquid fuels	0.8	1.4
	4.1	5.5
RPL's refining margin	8.3	10.9

Source: DSP Merrill Lynch

Drivers of RPL's premium to Singapore margins

Premium RIL should achieve to Singapore margins & RPL to RIL's margin

We have broken up the premium RPL can achieve to Singapore margins into

- **Premium of RIL's refining margin to Singapore complex margins**. RIL's refinery in its over eight years of operation has consistently achieved higher margins than Singapore complex margins. It has consistently achieved the highest refining margins among Asia Pac refiners

- **Premium we expect RPL to achieve to RIL's margins:** We expect RPL to achieve significant premium to RIL's refining margins.
- **Gain from use of gas in place of liquid fuels:** RPL plans to use cheaper gas in place of liquid fuels to generate power, steam and hydrogen. This will mean significant cost savings and boost refining margins

RPL's premium to RIL due to heavier crude and better product slate

We expect RPL to achieve significant premium to RIL's refining margins due to

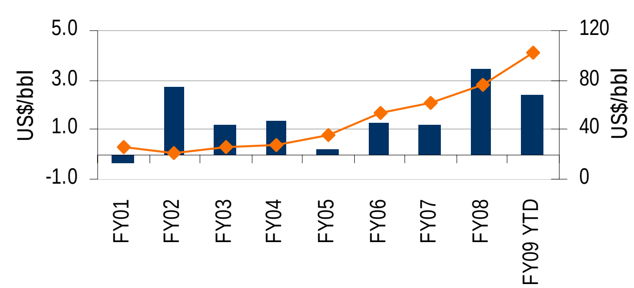
- **Ability to process heavier and cheaper crude than RIL:** RPL has ability to process crude heavier and cheaper than RIL can use. This is because RPL's refinery is more complex than RIL's. While RPL's refinery Nelson complexity is 14.0 that of RIL is 11.3.
- **Superior product slate to that of RIL:** RPL's product slate being superior to that of RIL.

Crude RPL can use is cheaper than crude RIL can use by US$1.5-2.3/bbl

RPL can process crude with average API of 24. Crude with API of 24 is heavier than Dubai (API of 31-32), on which Singapore margin is based. It is also heavier than crude with average API of 28, which RIL can use.

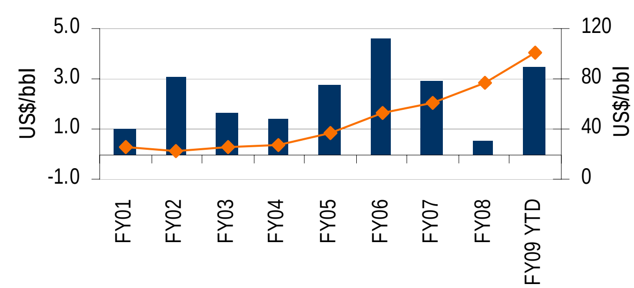
Crude such as Oriente (Ecuador) and Souedie (Syria) have API of 24. Arab heavy crude has average API of 27, which is similar to crude RIL, can process. Oriente has on an average traded at US$4.3/bbl discount to Dubai crude since FY01 while Souedie has traded at average discount of US$5.1/bbl to Dubai. Arab Heavy has traded at average discount of US$2.8/bbl to Dubai crude since FY01. Thus Oriente and Souedie crude, which RPL can use, have traded at average discount of US$1.5-2.3/bbl to Arab heavy crude, which RIL can use.

Chart 1: Oriente-Arab heavy crude spread



Source: DSP Merrill Lynch. Bloomberg

Chart 2: Souedie-Arab heavy crude spread



Source: DSP Merrill Lynch. Bloomberg

Crude RPL can use is currently at US$4-6/bbl discount to crude RIL can use

Oriente and Souedie crude are currently trading at US$10.4-12.3/bbl discount to Dubai crude. Arab Heavy crude is trading at US$6.4/bbl discount to Dubai crude. Thus Oriente and Souedie crude are trading at US$4.0-5.9/bbl discount to Arab heavy crude currently.

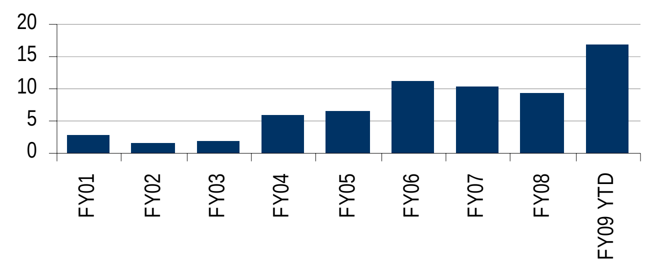
RPL to produce more higher priced gasoline instead of LPG and naphtha

RPL will produce far more gasoline and alkylates (gasoline additives) than RIL instead of LPG and naphtha. 38% of RPL's product slate is gasoline and alkylates. Gasoline is just 11% of RIL's product slate but another 30% of RIL's product late is LPG and naphtha, which RPL will not produce. Gasoline prices have always been higher than LPG and naphtha prices. This makes RPL's product slate superior to RIL's product slate.

Gasoline's premium to LPG and naphtha US$7-19/bbl on an average

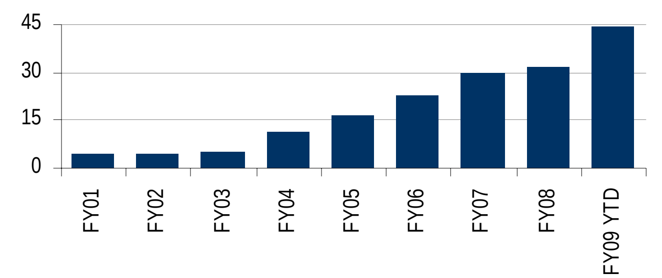
As can be seen from Chart 3 and Chart 4 gasoline cracks have consistently been at premium to naphtha and LPG cracks. The average premium of gasoline cracks to naphtha cracks since FY01 is US$7.4/bbl and it is US$18.9/bbl to LPG cracks.

Chart 3: Gasoline crack spread premium to naphtha crack spread



Source: DSP Merrill Lynch

Chart 4: Gasoline crack spread premium to LPG crack spread

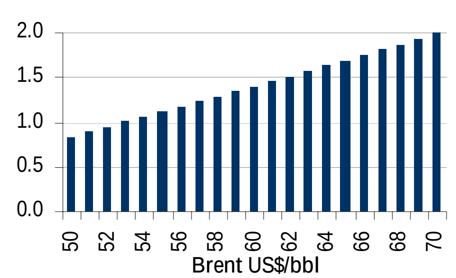


Source: DSP Merrill Lynch

RPL also gain from use of gas in place of liquid fuels

RPL plans to use gas produced by RIL from its KG D6 block in the refinery to replace liquid fuels. Liquid fuels are used in the refinery to generate power, steam and hydrogen. Gas is cheaper than liquid fuels used, which will result in cost savings and boost refining margins. We estimate increase to RPL's refining margin from use of gas would be US$0.84/bbl when oil is at US$50/bbl and US$2/bbl when oil is at US$70/bbl.

Chart 5: Upside to RPL's refining margin from use of gas at Brent price of US$50-70/bbl



Source: DSP Merrill Lynch

RPL's refining margins on 4Q 2008 prices at US$13/bbl

Product cracks of US$5.4/bbl and crude spread of US$7.7/bbl

At prevailing Dubai crude based product cracks in 4Q 2008, RPL's product slate would yield weighted average cracks of US$5.4/bbl. The spread between Oriente crude RPL can use and Dubai crude is US$7.7/bbl after assuming extra freight of US$1.5/bbl to get Oriente from Ecuador to India.

RPL's margin even on last week's prices work out to US$11.3/bbl

RPL's refining margin even based on last week's product cracks and crude spread is US$11.3/bbl while weighted average product cracks after US$1/bbl crude spread adjusted for extra freight are US$10.3/bbl.

RPL's strong margins due to strong crude spread and high diesel spread

RPL's strong margins even on 4Q 2008 and last week's prices is likely due to

- **Wide crude spread even at current prices:** Spread between Oriente crude and Dubai crude being US$7.7-10.3/bbl even after factoring extra freight of US$3.3/bbl. Despite plunge in Dubai crude price to US$47/bbl, the Oriente-Dubai spread continues to be wide

- **Strong diesel cracks:** Singapore complex refining margin is US$5.9/bbl in 4Q 2008 and US$1.7/bbl last week. However, diesel cracks continue to be strong at US$16.6/bbl in 4Q 2008 and US$15.2/bbl last week. Diesel is RPL's single largest product accounting for 44% of its product slate

- **RPL not producing products with negative cracks like naphtha and LPG:** RPL is not likely to produce any naphtha and LPG and cracks of both these products are very weak. Naphtha cracks are negative at US$19.3/bbl in 4Q 2008 and US$15.8/bbl last week. LPG cracks are also negative at US$18.8/bbl in 4Q 2008 and US$17.5/bbl last week.

Risk is refining margins weaken further after RPL starts

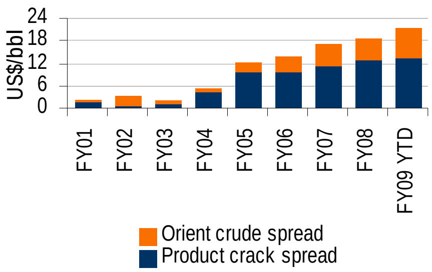
Diesel and gasoline cracks may weaken from 4Q 2008 levels

RPL may not actually be able to achieve US$11-13/bbl of refining margins when it starts commercial operation as expected in April 2009. Diesel cracks may weaken once RPL starts. Even gasoline cracks are already weak. We cannot rule out any further weakening. This is because RPL's capacity is so large that it could add 1% to global diesel and gasoline supply when at full capacity. The crude spread could also contract as demand from RPL for these heavy crude arise.

RPL's refining margin on FY01-FY08 prices at US$1.9-18.7/bbl

We have calculated RPL's refining margins based on product cracks and Oriente-Dubai spread from FY01 to y-t-d FY09. The range is US$1.9/bbl in FY03 to US$18.7/bbl in FY08 and US$21.3/bbl y-t-d in FY09.

Chart 6: RPL's refining margin at product cracks and crude spread in FY01 to y-t-d FY09



Source: DSP Merrill Lynch

Weaker rupee assumed

Rupee assumed Rs45-46 (Rs42-43 earlier) in FY10-FY12E

Rupee currently at Rs50.3 vis-à-vis US dollar

We have assumed a weaker rupee vis-à-vis US dollar than we were assuming earlier in FY10-FY12E. We were earlier assuming exchange rate to be Rs42-43 but are now assuming it to be Rs45-46 (see Table 4). The rupee could be weaker than we have assumed given that it is currently at over Rs50.

Table 4: RPL's revised exchange rate

INR/US$	Revised	Old	Change
RPL's exchange rate forecast			
FY10E	46.0	43.0	7%
FY11E	45.0	42.0	7%
FY12E	45.0	42.0	7%

Source: DSP Merrill Lynch

FY10-11E earnings cut by 17-47%

Cut in refining margins main reason for earnings cut

We have cut RPL's FY10-FY11E earnings forecast by 17-47%. The earnings cut is due to reduction in our RPL's refining margin estimates, which is in-line with the cut in Singapore refining margins forecast.

Table 5: RPL earnings revision

Rs/share	FY10E	FY11E	FY12E
Revised	7.8	13.2	17.7
Old	14.7	15.8	16.3
Change	-47%	-17%	9%

Source: DSP Merrill Lynch

FY12E earnings raised by 9% on weaker rupee

Refining margins assumption unchanged

Long term refining margins from FY12E are kept unchanged. However, we have assumed a weaker rupee. FY12E earnings therefore are raised by 9%.

FY10-FY11E earnings cut due to RPL's refining margin cut

Weaker rupee assumption limited earnings cut

RPL's FY10-11E earnings cut would have been steeper at 22-53% if a weaker rupee was not assumed. Weaker rupee assumption has meant 5-6% boost to FY10-FY11E earnings. It has meant actual earnings decline is 17-47%.

Table 6: Break-up of RPL's earnings cut for FY10-12E

Rs/share	FY10E	FY11E	FY12E
Earlier EPS forecast	14.7	15.8	16.3
Less: Hit from cut in refining margins forecast	7.7	3.4	0.0
EPS forecast if only refining margins were cut	6.9	12.3	16.3
Add: Gain from assuming weaker rupee	0.8	0.8	1.4
Revised EPS forecast	7.8	13.2	17.7
EPS decline due to refining margins cut	-53%	-22%	0%
EPS rise due to weaker rupee	6%	5%	9%
Net change in EPS	-47%	-17%	9%

Source: DSP Merrill Lynch

PO cut by 58% to Rs59/share from Rs142

Earlier PO based on DCF valuation using WACC at 11.2%

We are now basing RPL's fair value and price objective on EV/EBITDA basis as against on DCF basis. Our DCF based valuation of RPL was Rs142/share. It was based on long term refining margin of US$12.3/bbl.

RPL valued on 7x FY10E EBITDA; peers valued at lower multiples

Our entire refining universe in Asian Pac is valued on EV/EBITDA basis. We are therefore valuing RPL also on FY10E EBITDA using a multiple of 7.0x. Most of the other Asia Pac refiners are valued at lower multiple than 7.0x. The high multiple used for RPL is due to its superior and more complex refinery than peers

RPL's fair value on 7x FY10E EBITDA works out Rs59/share

RPL's fair value based on 7x FY10E EBITDA works out to Rs59/share. RPL's fair value would have been Rs112/share if it was based on FY10E EBITDA before the cut in RPL's refining margins.

Table 7: RPL's EV/EBITDA based valuation

Rsmn	FY10E
Refining EBITDA	55,808
EBITDA Multiple	7.0
Enterprise value	390,659
Less: Net debt	126,794
Equity value (Rs mn)	263,865
Equity value (Rs/share)	59

Source: DSP Merrill Lynch

RPL also expensive at 9.2x FY10E EPS

RPL is currently trading at 9.2x FY10E EPS. At this multiple it is one of the most expensive commodity stocks in India.

Retain Underperform on RPL

Several risks in RPL

We see the following potential risks in RPL some of which are factored in to earnings and valuation while some are not

- Further weakening of refining margins after RPL start-up. RPL's capacity is large enough to add 1% to global diesel and gasoline supply at full capacity
- There is a risk that minimum alternate tax (MAT) may be imposed on units in special economic zones (SEZ) like RPL. If done it will mean RPL will have to pay tax at 11% despite the 5-year tax holiday. This will mean downside of 7-8% to RPL's FY10-FY12E EPS
- Problems in stabilizing refinery. Track record of the Reliance group in implementing and commissioning projects is impeccable but problems can never be ruled out

PO of Rs59/share implies 18% potential downside

Closing share price on December 2 at Rs71.65

RPL's estimated fair value of Rs59/share, which is also our PO, implies potential downside of 18% at current share price of Rs71.65. We retain Underperform on RPL.

Price objective basis & risk

RPL (RPLUF)

Our PO of Rs59 is calculated on EV/EBITDA basis. It is based on 7x FY10E EBITDA. The EV/EBITDA multiple used to value RPL is higher than that of Asia Pac peers. RPL is a very complex refinery with Nelson complexity of 14.0. We expect it to achieve even higher refining margins than refinery of parent Reliance Industries (RIL), which has a Nelson complexity of 11.3. RIL has over the last eight years consistently reported the highest refining margins among Asia Pac refiners. At the PO of Rs59, RPL is trading at 7.6x FY10E EPS. Upside risks: (1) Stronger-than-expected refining margins, and (2) RPL implementing new projects which have the potential to add substantial value. Downside risks: (1) Weaker-than-expected refining margins for RPL, and (2) problems stabilizing the refinery and therefore utilization rates being lower than assumed.

Analyst Certification

I, Vidyadhar Ginde, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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APR - Energy Coverage Cluster

Investment rating	Company	ML ticker	Bloomberg symbol	Analyst
BUY				
	Cairn India	XCANF	CAIR IN	Vidyadhar Ginde
	China BlueChem	CBLUF	3983 HK	Timothy Bush
	CNOOC Ltd.	CEO	CEO US	Bin Guan
	CNOOC Ltd.	CEOHF	883 HK	Bin Guan
	COS Limited	CHOLF	2883 HK	Bin Guan
	Hindustan Petro.	XHTPF	HPCL IN	Vidyadhar Ginde

APR - Energy Coverage Cluster

Investment rating	Company	ML ticker	Bloomberg symbol	Analyst
	IOC	IOCOF	IOCL IN	Vidyadhar Ginde
	ONGC	ONGCF	ONGC IN	Vidyadhar Ginde
	Reliance Inds	XRELF	RIL IN	Vidyadhar Ginde
	Reliance Inds -G	RLNIY	RIGD LI	Vidyadhar Ginde
	Sinofert HLDG	SNFRF	297 HK	Timothy Bush
	SK Energy Co Ltd	XVERF	096770 KS	Sonia Song
	SK Holdings	SKCXF	003600 KS	Sonia Song
NEUTRAL				
	Aban Offshore L	XBWTF	ABAN IN	Vidyadhar Ginde
	BPCL	XBPCF	BPCL IN	Vidyadhar Ginde
	Gushan Environmental Energy	GU	GU US	Bin Guan
	Shell Refining	SRMMF	SHELL MK	Sonia Song
UNDERPERFORM				
	Formosa Chems	XFUMF	1326 TT	Sonia Song
	Formosa Petro	FPTCF	6505 TT	Sonia Song
	Formosa Plastics	FSAPF	1301 TT	Sonia Song
	GS Holdings Corp	GSHDF	078930 KS	Duke Suttikulpanich
	Hanwha Chem Corp	HAYCF	009830 KS	Stephan Han
	Honam Petrochem	HBBHF	011170 KS	Stephan Han
	LG Chem Ltd	LGCLF	051910 KS	Stephan Han
	Nan Ya Plastics	NNYPF	1303 TT	Sonia Song
	Petrochina	PCCYF	857 HK	Bin Guan
	Petrochina - A	PTR	PTR US	Bin Guan
	Petronet LNG Ltd	POLNF	PLNG IN	Vidyadhar Ginde
	RPL	RPLUF	RPET IN	Vidyadhar Ginde
	Sinopec	SNPMF	386 HK	Bin Guan
	Sinopec - A	SNP	SNP US	Bin Guan
	S-Oil Corp	SOOCF	010950 KS	Duke Suttikulpanich
	SPC	SPCJF	SPC SP	Duke Suttikulpanich

iQmethod SM Measures Definitions

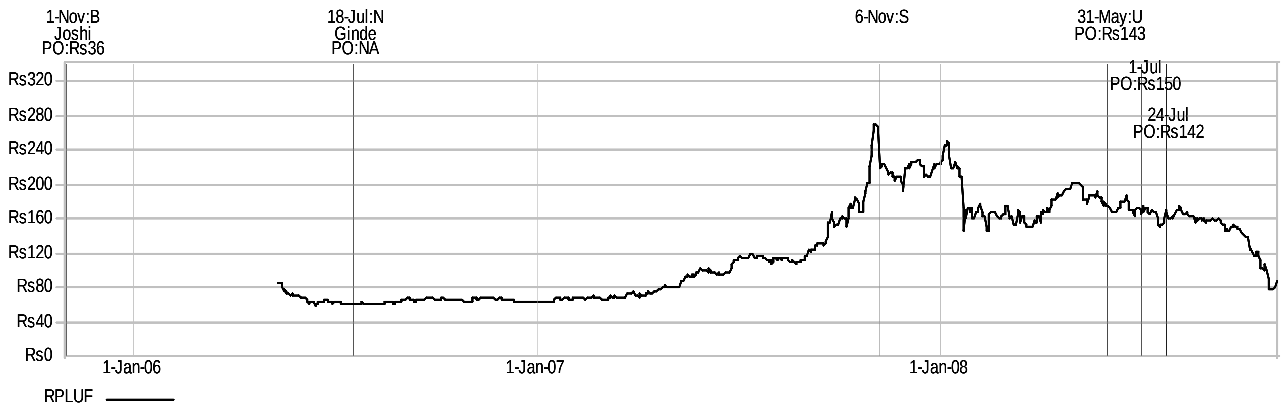
Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) * (1 - Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5-Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations – Total Capex	N/A
Quality of Earnings		
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt, Less Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit		
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap. = Current Share Price * Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price * Current Shares + Minority Equity + Net Debt + Other LT Liabilities	Sales
EV / EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

iQmethod SM is the set of Merrill Lynch standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

iQdatabase ® is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by Merrill Lynch.

Important Disclosures

RPLUF Price Chart



B : Buy, N : Neutral, S : Sell, U : Underperform, PO : Price objective, NA : No longer valid

Prior to May 31, 2008, the investment opinion system included Buy, Neutral and Sell. As of May 31, 2008, the investment opinion system includes Buy, Neutral and Underperform. Dark Grey shading indicates that a security is restricted with the opinion suspended. Light grey shading indicates that a security is under review with the opinion withdrawn. The current investment opinion key is contained at the end of the report. Chart is current as of October 31, 2008 or such later date as indicated.

Investment Rating Distribution: Energy Group (as of 01 Oct 2008)

Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent
Buy	170	63.43%	Buy	57	37.25%
Neutral	50	18.66%	Neutral	12	30.00%
Sell	48	17.91%	Sell	9	22.50%

Investment Rating Distribution: Global Group (as of 01 Oct 2008)

Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent
Buy	1647	45.31%	Buy	429	28.83%
Neutral	858	23.60%	Neutral	240	31.41%
Sell	1130	31.09%	Sell	227	22.02%

* Companies in respect of which MLPF&S or an affiliate has received compensation for investment banking services within the past 12 months. For purposes of this distribution, a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster*
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

* Ratings dispersions may vary from time to time where Merrill Lynch Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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