Reliance Industries Ltd.

Company Update BUY

Equity | India | Chemicals-Specialty
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Merrill Lynch

Complex refineries to stand RIL in good stead

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Complex refineries to stand RIL in good stead; retain Buy

Refining margin of Reliance Industries (RIL) has consistently been higher than the benchmark Singapore complex refining margin. Our analysis suggests that RIL's superior refining margin is mainly due to its ability to refine heavier crude than Dubai. In FY10-FY11E we expect RIL to benefit more than in the last refining downturn from its ability to refine heavier crude. Refinery of RIL's subsidiary Reliance Petroleum (RPL), which is soon expected to start, can process even heavier crude than RIL and has a superior product slate. We retain Buy on RIL.

RIL to benefit from ability to process heavier crude

RIL can process crude with average API of 28, which is akin to Arab heavy (API of 27). The average discount of Arab heavy to Dubai (on which Singapore margin is based) since FY01 is US$2.4/bbl. It was US$1/bbl until FY05 but US$5/bbl since FY06. The discount has sustained at over US$5/bbl even in the last six weeks despite the slump in oil prices. It may not sustain at US$5/bbl in FY10-FY11E but we also do not expect it to be as low as US$1/bbl seen in FY01-FY05.

Double digit margins for RPL even at 3Q FY09 prices

We estimate RPL's refining margin at US$12.9/bbl if it were to operate in 3Q FY09 vis-à-vis Singapore margin of US$7.3/bbl. RPL's premium is mainly due to its ability to refine heavier crude (API of 24). Crude with API of 24 like Oriente and Souedie are at US$9.1-10.2/bbl discount to Dubai in 3Q. RPL would not be badly hit like RIL from prevailing negative naphtha and LPG cracks as it is not likely to produce these products, in our view. It will produce more gasoline than RIL. Gasoline cracks have always been at premium to naphtha and LPG cracks. We think diesel and gasoline cracks weakening is the main risk to RPL attaining such high margins when it starts.

Estimates (Mar)

(Rs)	2007A	2008A	2009E	2010E	2011E
Net Income (Adjusted - mn)	125,476	153,244	168,534	291,512	300,353
EPS	86.34	105.44	107.12	185.28	190.90
EPS Change (YoY)	26.6%	22.1%	1.6%	73.0%	3.0%
Dividend / Share	9.91	11.00	12.00	15.00	15.00
Free Cash Flow / Share	(105.18)	(68.52)	7.36	108.70	132.88
GDR EPS (US$)	3.82	5.24	4.34	7.51	7.74
GDR Dividend / Share (US$)	0.438	0.546	0.486	0.608	0.608

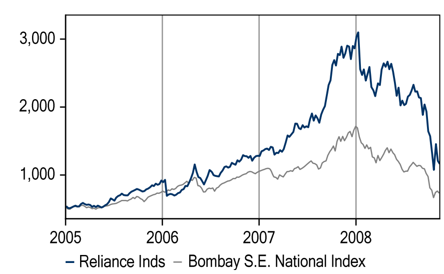
Valuation (Mar)

	2007A	2008A	2009E	2010E	2011E
P/E	13.20x	10.81x	10.64x	6.15x	5.97x
Dividend Yield	0.869%	0.965%	1.05%	1.32%	1.32%
EV / EBITDA*	11.15x	9.92x	9.06x	5.37x	5.07x
Free Cash Flow Yield*	-8.52%	-5.55%	0.646%	9.54%	11.66%

* For full definitions of *iQmethod* SM measures, see page 15.

Stock Data

Price (Common / GDR)	Rs1,140 / US$45.51
Price Objective	Rs1,927 / US$98.82
Date Established	9-Nov-2008 / 9-Nov-2008
Investment Opinion	B-1-7 / B-1-7
Volatility Risk	MEDIUM / MEDIUM
52-Week Range	Rs930.00-Rs3,298
Market Value (mn)	US$36,343
Shares Outstanding (mn)	1,573.4 / 786.7
Average Daily Volume	10,268,970
ML Symbol / Exchange	XRELF / BSE
ML Symbol / Exchange	RLNIY / LIN
Bloomberg / Reuters	RIL IN / RELI.BO
ROE (2009E)	16.8%
Net Dbt to Eqty (Mar-2008A)	52.3%
Est. 5-Yr EPS / DPS Growth	0.2% / 0.1%
Free Float	45.0%



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Refer to important disclosures on page 16 to 18. Analyst Certification on Page 14. Price Objective Basis/Risk on page 14.

iQprofile SM Reliance Industries Ltd.

Key Income Statement Data (Mar)	2007A	2008A	2009E	2010E	2011E
(Rs Millions)					
Sales	1,137,701	1,371,467	1,538,349	2,331,672	2,468,677
Gross Profit	347,532	373,835	405,814	646,615	678,625
Sell General & Admin Expense	(141,526)	(142,389)	(152,303)	(219,116)	(226,082)
Operating Profit	157,011	181,404	202,637	341,889	361,911
Net Interest & Other Income	(5,814)	1,369	(88)	(178)	4,666
Associates	NA	NA	NA	NA	NA
Pretax Income	151,198	182,773	202,549	341,711	366,576
Tax (expense) / Benefit	(25,723)	(29,511)	(34,015)	(30,797)	(46,915)
Net Income (Adjusted)	125,476	153,244	168,534	291,512	300,353
Average Fully Diluted Shares Outstanding	1,453	1,453	1,573	1,573	1,573
Key Cash Flow Statement Data					
Net Income (Reported)	125,476	153,244	168,534	291,512	300,353
Depreciation & Amortization	48,995	50,042	50,874	85,610	90,632
Change in Working Capital	(42,218)	(108,528)	36,028	(53,078)	(15,165)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	15,469	50,067	9,982	25,562	28,691
Cash Flow from Operations	147,722	144,824	265,417	349,606	404,512
Capital Expenditure	(300,591)	(244,405)	(253,838)	(178,586)	(195,440)
(Acquisition) / Disposal of Investments	13,988	(42,548)	(13,381)	0	(5,000)
Other Cash Inflow / (Outflow)	NA	NA	NA	NA	NA
Cash Flow from Investing	(286,603)	(286,953)	(267,219)	(178,586)	(200,440)
Shares Issue / (Repurchase)	59,248	(181)	168,240	0	0
Cost of Dividends Paid	(30,247)	(2,764)	(17,016)	(21,529)	(26,911)
Cash Flow from Financing	132,088	167,500	57,684	(171,529)	(98,911)
Free Cash Flow	(152,870)	(99,580)	11,579	171,020	209,072
Net Debt	317,144	462,219	312,798	163,307	(13,854)
Change in Net Debt	109,881	145,075	(149,422)	(149,491)	(177,161)
Key Balance Sheet Data					
Property, Plant & Equipment	911,669	1,127,466	1,330,430	1,423,406	1,528,213
Other Non-Current Assets	52,680	95,229	108,610	108,610	113,610
Trade Receivables	38,314	60,683	68,067	136,839	143,716
Cash & Equivalents	19,370	44,742	100,623	100,114	205,275
Other Current Assets	273,475	409,464	412,695	400,488	431,265
Total Assets	1,295,508	1,737,583	2,020,425	2,169,456	2,422,079
Long-Term Debt	252,288	390,744	306,561	181,561	134,561
Other Non-Current Liabilities	69,905	77,983	87,965	94,124	103,507
Short-Term Debt	84,227	116,217	106,860	81,860	56,860
Other Current Liabilities	202,516	268,667	319,822	328,692	351,182
Total Liabilities	608,936	853,611	821,208	686,237	646,110
Total Equity	686,572	883,972	1,199,216	1,483,219	1,775,970
Total Equity & Liabilities	1,295,508	1,737,583	2,020,425	2,169,456	2,422,079
iQmethod* SM - Bus Performance					
Return On Capital Employed	14.4%	12.2%	11.0%	17.7%	16.4%
Return On Equity	22.6%	20.5%	16.8%	22.6%	19.3%
Operating Margin	13.8%	13.2%	13.2%	14.7%	14.7%
EBITDA Margin	18.1%	16.9%	16.5%	18.3%	18.3%
iQmethod* SM - Quality of Earnings					
Cash Realization Ratio	1.2x	0.9x	1.6x	1.2x	1.3x
Asset Replacement Ratio	6.1x	4.9x	5.0x	2.1x	2.2x
Tax Rate (Reported)	17.0%	16.1%	16.8%	9.0%	12.8%
Net Debt-to-Equity Ratio	46.2%	52.3%	26.1%	11.0%	-0.8%
Interest Cover	12.7x	16.7x	16.3x	26.1x	31.9x
Key Metrics					

* For full definitions of *iQmethod* SM measures, see page 15.

Company Description

India's largest petchem and second largest refining company, Reliance, owns a 660kbpd refinery. Along with RPL, its total refining capacity would be 1.2mbpd by 2009. It also has a 900ktpa cracker, 1mtpa polyester, 1.9mtpa polymer and over 3mtpa of fibre intermediate capacities. Refining contributes 55% to revenues with petchem contributing 43%. The company has discovered gas with initial inplace reserves of over 40tcf on the East Coast.

Investment Thesis

Share price drivers are (1) Very strong earnings growth in FY10E, (2) large reserve accretion potential, and (3) upside to valuation on diversification into organized retail (valued at Rs102/share) and SEZ (not valued). RIL's 2P reserves and resources of 4.7bn boe are from exploration of just 5pct of its Indian acreage. It is embarking on a US$4bn exploration program of its highly prospective acreage. We believe positive news flow by way of more discoveries and reserve accretion will continue.

Stock Data

Shares / GDR	2.00
Price to Book Value	1.5x

Refining margin analysis

RIL's refining margin vis-à-vis benchmarks

Benchmarks are Singapore margin as per ML and Reuters

RIL uses Reuters' estimate of Singapore margin in all presentations

The benchmarks against, which we evaluate the refining margin of RIL is the Singapore complex refining margin. Singapore complex refining margins are calculated by various sources. Merrill Lynch calculates Singapore complex refining margin. Singapore complex refining margins are also available on Reuters. RIL in all its presentations uses Reuters' estimate of Singapore margins.

Benchmark margins based on different product slate

ML assumed product slate superior to Reuters assumed product slate

The ML assumed product slate is superior to that assumed by Reuters. This is because high value products like gasoline, diesel and jet fuel are 75% of ML assumed product slate as against 67% as per Reuters' assumed product slate.

Table 1: Product slate on which Reuters and Singapore margins based

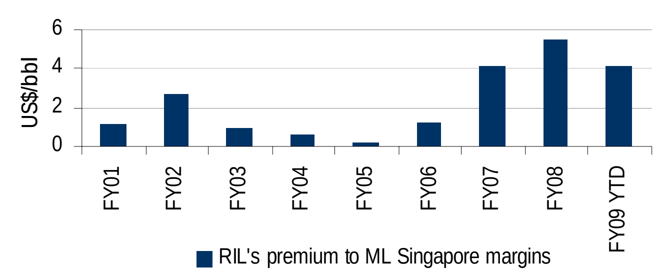
	Product slate	
	Reuters	ML
Gasoline	32%	35%
Jet/Kerosene	19%	15%
Diesel	16%	25%
Fuel oil	23%	25%
LPG	3%	0%
MTBE/ Naphtha	7%	0%
	100%	100%

Source: RPL prospectus, Merrill Lynch

Both Reuters and ML assume Dubai crude to calculate Singapore margins

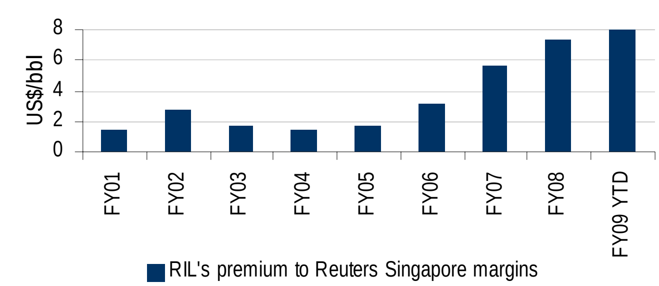
Both Reuters and ML calculate Singapore refining margin assuming use of Dubai crude.

Chart 1: RIL's premium to ML Singapore complex margins



Source: Company, DSP Merrill Lynch

Chart 2: RIL's premium to Reuters Singapore complex margins



Source: Company, Reuters, DSP Merrill Lynch

RIL's refining margins at premium to both benchmarks

Average premium to ML margin US$2.0/bbl; US$3.1/bbl to Reuters'

RIL has consistently achieved higher refining margin than Singapore refining margin both as per ML and Reuters since it started operations in FY01. Comparison of RIL's refining margins and Singapore margins as per ML and Reuters reveals that

- RIL's refining margins have been at an average premium of US$2.0/bbl to ML's Singapore complex refining margins during FY01-FY08. RIL's average refining margin during this period is US$7.9/bbl vis-à-vis ML's Singapore refining margin of US$5.8/bbl

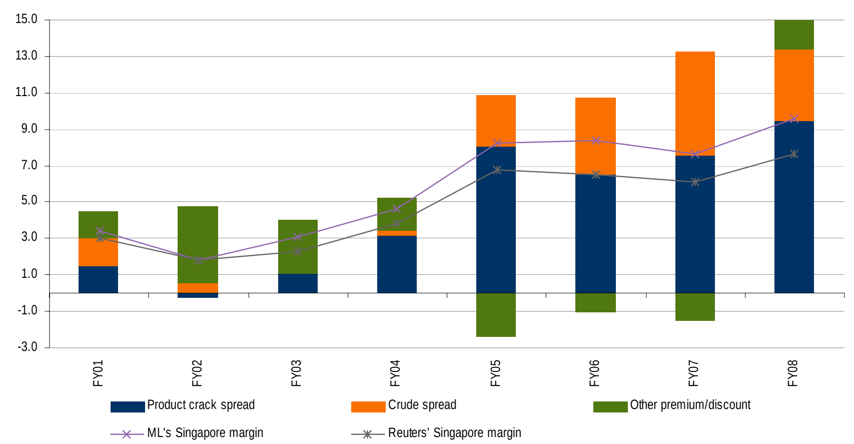
- RIL's refining margins have been at an average premium of US$3.1/bbl to Reuters' Singapore complex refining margins during FY01-FY08. RIL's average refining margin during this period is US$7.9/bbl vis-à-vis Reuters' Singapore refining margin of US$4.7/bbl

- ML's Singapore complex refining margins have been at US$1.1/bbl average premium to Reuters' Singapore complex refining margins during FY01-FY08

Premium to benchmarks due to ability to use heavier oil

RIL has been consistently able to achieve higher refining margin than Singapore complex margins based both on ML and Reuters' product slate. Our analysis suggests that this premium is due to its ability to refine heavier crude than Dubai, which is also consequently cheaper.

Chart 3: Break-up RIL's refining margin into product crack spread, crude spread and other premium/discount and comparison with ML's and Reuters' Singapore refining margin



Source: Company, Reuters, Bloomberg, DSP Merrill Lynch

Table 2: Break-up of RIL's FY01-FY08 refining margin

US$/bbl	FY01-FY08
RIL's average	
Product crack spread (Dubai)	4.6
Arab heavy-Dubai spread	2.4
Other premium	0.9
RIL's refining margin	7.9

Source: DSP Merrill Lynch

Break-up of refining margin into product, crude spread & others

In Chart 3, we have broken down RIL's refining margin in FY01-FY08 into

- Product crack spreads based on Dubai crude, which is calculated by applying to RIL's product slate the crack spread of various products in it

- Crude spread, which is spread between Arab heavy crude and Dubai crude

- Premium or discount of RIL's actual refining margin to sum of product crack and crude spread. This premium or discount could be due to inventory gain or loss.

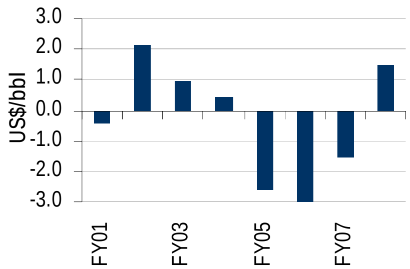
The break-up of RIL's average refining margin of US$7.9/bbl in FY01-FY08 would be as follows

- Average product crack spread based on Dubai is US$4.6/bbl

- Average crude spread between Arab heavy and Dubai crude is US$2.4/bbl

- Other premium/discount average is US$0.9/bbl.

Chart 4: RIL's refining margin excluding crude spread vis-à-vis ML Singapore margin



Source: Company, DSP Merrill Lynch

RIL's refining margin excluding crude spread lower than ML margins

RIL's average FY01-FY08 refining margin if we exclude the crude spread would be US$5.5/bbl. RIL's average margin excluding crude spread is lower than average ML Singapore complex refining margin of US$5.8/bbl. In four of the eight years RIL's margin excluding crude spread is lower than ML Singapore complex refining margin.

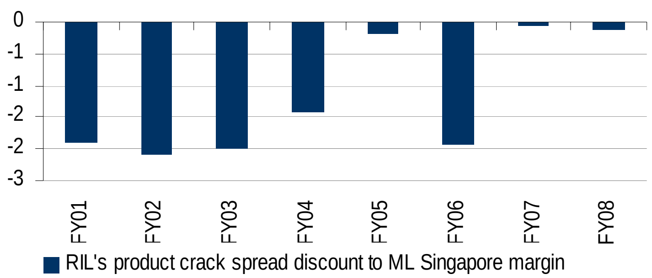
RIL's margin without crude spread higher than Reuters; not consistently

RIL's average margin excluding crude spread of US$5.5/bbl in FY01-FY08 is higher than average Reuters' Singapore complex refining margin of US$4.7/bbl. However RIL's refining margin excluding crude spread is not higher than Reuters' Singapore refining margin in all years. In three of the eight years RIL's margin excluding crude spread is lower than even Reuters' Singapore complex refining margin.

RIL's product crack spread consistently lower than ML Singapore margins

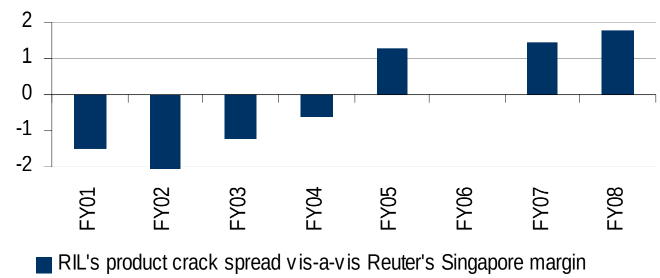
RIL's product crack spread is akin to RIL refining margin based on Dubai crude. It has consistently been lower than ML Singapore refining margin (see Chart 5). During FY01-FY08 on an average RIL's product crack spread is US$1.2/bbl lower than average ML Singapore refining margins.

Chart 5: RIL's product crack spread discount to ML Singapore margin



Source: Company, DSP Merrill Lynch

Chart 6: RIL's product crack spread discount to Reuters Singapore margin



Source: Company, Reuters, DSP Merrill Lynch

RIL's product crack spread consistently lower than ML Singapore margins

Average RIL product crack spread is also US$0.1/bbl lower than average Reuters Singapore refining margins. In four out of the last eight years RIL's product spread is lower than Reuters' Singapore margins (Chart 6).

Table 3: Comparison of RIL's product slate with one used by ML to calculate Singapore margins

	Product slate		
	RIL	ML	Difference
Gasoline	11%	35%	-24%
Jet/Kerosene	8%	15%	-7%
Diesel	40%	25%	15%
Fuel oil/petroleum coke	9%	25%	-16%
LPG	8%	0%	8%
MTBE/ Naphtha	23%	0%	23%
	100%	100%	

Source: RPL prospectus, Merrill Lynch

High value products 60% of RIL, 75% of ML & 67% of Reuters' slate

RIL's product crack spread is on an average US$0.1-1.2/bbl lower than Reuters' and ML's Singapore complex refining margin. This is because high value products like gasoline, diesel and jet fuel are 60% of RIL's product slate as against

- 67% of product slate used by Reuters for calculating Singapore margins
- 75% of product slate used by ML for calculating Singapore margins.

Table 4: Comparison of RIL's product slate with one used by Reuters to calculate Singapore margins

	Product slate		
	RIL	Reuters	Difference
Gasoline	11%	32%	-21%
Jet/Kerosene	8%	19%	-11%
Diesel	40%	16%	24%
Fuel oil/petroleum coke	9%	23%	-14%
LPG	8%	3%	5%
MTBE/ Naphtha	23%	7%	16%
	100%	100%	

Source: RPL prospectus, Merrill Lynch

Crude spread boosted RIL margin on average by US$2.4/bbl

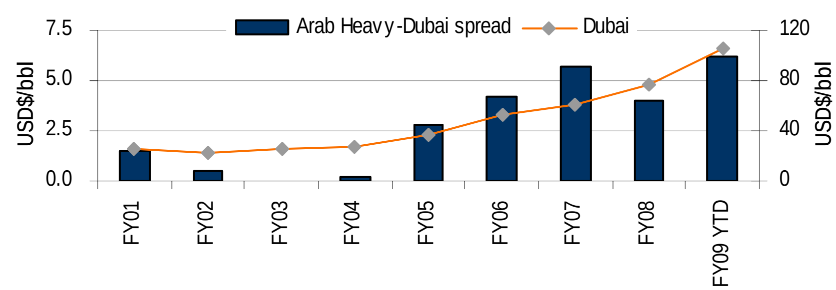
RIL can use Arab heavy crude (API 27), which is cheaper than Dubai

RIL's existing refinery can process crude with average 28 API. Arab Heavy crude has average API of 27 while Dubai crude has average API of 31-32. On an average, Arab Heavy crude has been US$2.4/bbl cheaper than Dubai crude during FY01-FY08.

Arab heavy's average discount to Dubai US$5/bbl since FY06

Dubai crude's average annual premium to Arab heavy is US$4.2-6.2/bbl during FY06-FY09 Y-t-d, when Dubai price was over US$50/bbl. The average premium during this period is US$5/bbl

Chart 7: Arab Heavy-Dubai crude spread and Dubai price trend



Source: DSP Merrill Lynch

Arab heavy's average discount to Dubai US$1/bbl in FY01-FY05

Dubai crude's average annual premium to Arab heavy is US$0-2.8/bbl during FY01-FY05, when Dubai price was US$25-34/bbl. The average premium during this period was just US$1/bbl.

RIL contends it uses a mixture of ultra-heavy and light crude

RIL contends that it does not really use Arab heavy crude entirely. It uses a mixture of ultra heavy crude with API of 16-20 and light crude with API of 39-42 so as to use crude mix with an average API of 28. It contends that the discount on ultra heavy crude is more than the premium on light crude. Data does bear this contention out. Thus, by using this crude sourcing strategy RIL may be able to achieve higher crude spread vis-à-vis Dubai crude than Arab Heavy-Dubai spread.

Chart 8: Crude which RIL's refinery can and has processed

Flexibility in Crude Sourcing

- Processed more than 60 crude varieties, with API ranging from 16-51
- Refinery processes 660 kbpsd crude with average 28 API
- Sourced in a combination of spot and medium to long term contracts
- Diversified crude sourcing strategy

Crude	API Range	Region
Light Crudes	33 - 51	Middle East
Medium Crudes	22 - 33	Middle East
Heavy Crudes	< 22	West Africa / Latin America / ME

Source: Company

Crude spread likely to remain higher than in FY01-FY05

Arab heavy-Dubai spread sustained above US$5/bbl despite oil price fall

The Arab heavy-Dubai spread averaged just US$1/bl in FY01-FY05 when Dubai crude price averaged US$27.4/bbl. The spread has averaged US$5/bbl when Dubai crude price averaged US$71.2/bbl. Dubai crude price has declined to US$54/bbl in November 2008 but the Arab heavy-Dubai spread has sustained at over US$5/bbl.

Table 5: Dubai crude price and Arab heavy-Dubai crude spread

US$/bbl	Dubai price	Arab Heavy-Dubai spread
FY01-FY05	27.4	1.0
FY06-FY09 Y-t-d	71.1	5.0
4Q 2008 y-t-d	63.6	5.2
November 2008 y-t-d	53.9	5.7

Source: Bloomberg

Higher oil prices than in FY01-FY05 to translate into higher spreads

We expect Arab heavy-Dubai spread to be higher than FY01-FY05 level of US$1/bbl if Dubai price sustains at a level higher than FY01-FY05 average level of US$27.4/bbl. We do not expect oil prices to decline to below US$30/bbl. In the next 1-2 years RIL may thus enjoy higher crude spread than in FY01-FY05.

Crude spread may not sustain at US$5/bbl line in last four years

Arab heavy-Dubai crude spread has sustained at over US$5/bbl despite the steep oil price decline. However it may not sustain at these high levels in the next 1-2 years. In the past whenever OPEC has cut crude output like it has now, light-heavy crude spread has shrunk. We believe this is due to the fact that OPEC countries cut output of cheaper heavier crude, which means supply of heavier crude declines at the margin. Lighter crude supply remains unchanged.

Thus we expect Arab heavy-Dubai spread to be higher than the average of US$1/bbl seen in FY01-FDY05 but we do not expect it to sustain at US$5/bbl like in the last four years. It is likely to settle somewhere in between.

RIL's refining margin outlook not good in 3Q FY09

Hit from negative naphtha crack spreads; crude spread still strong

RIL's refining margin based on product cracks and crude spread to date in 3Q FY09 works out to US$5/bbl (see Table 6). RIL's weighted average product cracks work out to nil, hit most by naphtha cracks being minus US$22.6/bbl. LPG cracks being negative and gasoline cracks being just US$4.5/bbl will also hurt RIL. Arab heavy-Dubai crude spreads, however, continues to be healthy at US$5.2/bbl, which RIL will benefit from.

Table 6: RIL's 3Q FY09 refining margins based on product and crack spread

US$/bbl	RIL's product slate	Cracks-3Q FY09 YTD	RIL's product cracks
Diesel	40%	16.2	6.5
Gasoline	11%	4.5	0.5
Jet/ Kerosene	8%	22.8	1.9
Alkylates	0%	6.6	0.0
LPG	8%	-19.0	-1.5
Naphtha	13%	-22.6	-2.8
Propylene	3%	2.9	0.1
Reformate	8%	-5.8	-0.5
Petroleum coke	9%	-45.8	-4.2
Weighted average product spread	100%		-0.1
Premium of Dubai to Arab heavy			5.2
RIL's refining margins based on product and crack spread			5.0

Source: Company, Merrill Lynch

RIL refining margin may be higher than US$5/bbl in 3Q

Changing product slate, transfer pricing to petrochemicals

We will not be surprised if RIL reports higher refining margins than indicated by product cracks and crude spread in Table 6. RIL may be able to achieve higher margins than US$5/bbl in 3Q FY09E as

- RIL may change its product slate to produce less naphtha and derivatives and more gasoline in 3Q. This would improve weighted average product cracks for RIL as gasoline cracks are US$27.1/bbl higher than naphtha cracks. Shutdown of some of RIL's petrochemical plants announced in October 2008 may have been influenced by the need to change product slate. Another factor influencing decision is destocking by consumers, which has hit petrochemical product demand.

- Margins of most petrochemical products are at healthy levels thanks to the steep decline in feedstock naphtha price. RIL has a large petrochemical business but the feedstock demand can be entirely met by its refinery. Transfer pricing between the two businesses may favor the refinery so as to boost refining margins and depress petrochemical margins

- It may have under-reported refining margins in 1H FY09. RIL's refining margin on the basis of product cracks and crude spread works out to US$17.6/bbl in 1H FY09 while RIL actually reported US$14.5/bbl in 1H.

Outlook for RPL better than RIL

RPL's product slate superior to that of RIL, ML and Reuters

RPL's product crack spread if it operated in FY01-FY08 at US$6.4/bbl

RPL's product slate is superior to that of RIL and also superior to the one used by ML and Reuters to calculate Singapore refining margins. RPL's superior product slate would have ensured product crack spread of US$6.4/bbl in FY01-FY08 even if it used Dubai crude. This is higher than RIL's average product crack spread as well as ML and Reuters' Singapore refining margins in FY01-FY08 (see Table 7).

Table 7: RPL's product crack spread at premium to Singapore margins

US$/bbl	FY01-FY08
RPL's product crack spread	6.4
ML's product crack spread	5.8
Reuters' product crack spread	4.7
RIL's product crack spread	4.6
Premium of RPL's product crack spread over	
ML's product crack spread	0.5
Reuters' product crack spread	1.6
RIL's product crack spread	1.7

Source: DSP Merrill Lynch

Table 8: Comparison of RPL's product slate with one used by ML to calculate Singapore margins

	Product slate		
	RPL	ML	Difference
Gasoline	30%	35%	-5%
Alkylates	8%	0%	8%
Jet/Kerosene	4%	15%	-11%
Diesel	44%	25%	19%
Petroleum coke	9%	0%	9%
Fuel oil	0%	25%	-25%
LPG	0%	0%	0%
Propylene	3%	0%	3%
Sulfur	2%	0%	2%
	100%	100%	

Source: RPL prospectus, Merrill Lynch

Value added products 86% of RPL's slate; 60-75% of RIL, ML & Reuters'

RPL's product slate is superior as high value products like gasoline, diesel, Jet fuel and alkylates (additives to gasoline sold at a premium) constitute 86% of its product slate as against

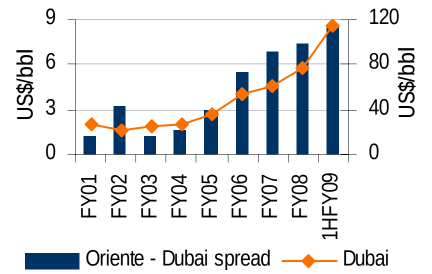
- 67% of product slate used by Reuters for calculating Singapore margins
- 75% of product slate used by ML for calculating Singapore margins
- 60% of RIL's product slate.

Table 9: Comparison of RPL's product slate with one used by Reuters to calculate Singapore margins

	Product slate		
	RPL	Reuters	Difference
Gasoline	30%	32%	-2%
Alkylates	8%	0%	8%
Jet/Kerosene	4%	19%	-15%
Diesel	44%	16%	28%
Petroleum coke	9%	0%	9%
Fuel oil	0%	23%	-23%
LPG	0%	3%	-3%
Naphtha derivatives	3%	7%	-4%
Sulfur	2%	0%	2%
	100%	100%	

Source: RPL prospectus, Merrill Lynch

Chart 9: Oriente-Dubai crude spread



Source: Bloomberg; DSP Merrill Lynch

RPL can process even heavier crude than RIL

RPL can process crude with average API of 24; Dubai API of 31-32

RPL can process crude with average API of 24. This means that it can process crude which is heavier than

- Dubai crude on which ML as well as Reuters' Singapore complex margins are based. Dubai crude has API of 31-32
- Crude with average API of 28, which RIL can process. Crude RIL can process is similar to Arab heavy, which has API of 27.

Oriente crude from Ecuador and Souedie from Syria have API of 24

The following crudes have API of 24

- Oriente from Ecuador
- Souedie from Syria
- Leona and T-J medium from Venezuela.

Thus RPL can use these crudes. It may use some of these crudes and also a blend of heavier and lighter crude.

Oriente & Souedie at US$8.5-9.1/bbl discount to Dubai y-t-d in FY09

Oriente crude is at US$8.5/bbl discount to Dubai crude y-t-d in FY09 and at US$9.2/bbl discount to Dubai y-t-d in 3Q FY09. Souedie crude from Syria is at US$9.1/bbl discount to Dubai crude y-t-d in FY09 and at US$10.2/bbl discount to Dubai y-t-d in 3Q FY09.

Oriente & Souedie at US$4.1-4.9/bbl discount to Dubai in FY01-FY09

Average discount of Oriente crude to Dubai crude in FY01-FY09 y-t-d is US$4.1/bbl. Average discount in FY01-FY05 was US$2.1/bbl while that since FY06 is US$7.1/bbl. Average discount of Oriente crude to Dubai crude in FY01-FY09 y-t-d is US$4.9/bbl.

Table 10: RPL's 3Q FY09 refining margins based on product and crack spread

US$/bbl	RPL's product slate	Cracks-3Q FY09 YTD	RPL's product cracks
Diesel	44%	16.2	7.1
Gasoline	30%	4.5	1.4
Jet/ Kerosene	4%	22.8	0.9
Alkylates	8%	6.6	0.5
LPG	0%	-19.0	0.0
Naphtha	0%	-22.6	0.0
Propylene	3%	2.9	0.1
Reformate	0%	-5.8	0.0
Petroleum coke	9%	-45.8	-4.0
Sulfur	2%	-45.8	-0.8
Weighted average product spread	100%		5.2
Discount of Orient crude to Dubai adjusted for freight			7.7
RPL's refining margins based on product and crack spread			12.9

Source: Company, Merrill Lynch

US$12.9/bbl margins for RPL on 3Q FY09 product cracks

High crude spread as well as weighted average product cracks

RPL's refining margin based on product cracks and crude spread to date in 3Q FY09 works out to a very healthy US$12.9/bbl (see Table 10). RPL's weighted average product cracks work out to US$5.2/bbl. Its crude spread, which is discount of Oriente crude to Dubai crude works out to US$7.7/bbl. Actually Oriente crude is at US$9.2/bbl discount to Dubai but we have assumed additional crude freight of US$1.5/bbl so as to yield net benefit of US$7.7/bbl to RPL.

Why RPL's 3Q refining margin would be higher than RIL's

Superior product slate and ability to process heavier crude

As discussed RPL's 3Q FY09 refining margin based on product cracks and crude spread works out to US$12.9/bbl. This is far higher than US$5/bbl expected for RIL in 3Q FY09. RPL could have achieved far higher refining margin in 3Q FY09 than RIL can, in our view, due to

- RPL's superior product slate, which is mainly due to RPL producing far more gasoline and alkylates than RIL at the expense of naphtha and LPG. This would have meant US$5.3/bbl premium for RPL over RIL
- RPL's ability to process heavier crude than RIL. RIL's crude spread to Dubai in 3Q, which is based on Arab heavy crude, works out to US$5.2/bbl. RPL's crude spread based on Oriente crude is US$7.7/bbl. Thus ability to process heavier crude would mean US$2.5/bbl premium of RPL over RIL

Gasoline and alkylates 38% of RPL's slate vis-à-vis 11% of RIL's

Gasoline and alkylates are likely to be 38% of RPL's product slate as against 11% of RIL's product slate. Thus RPL looks set to produce far more gasoline than RIL.

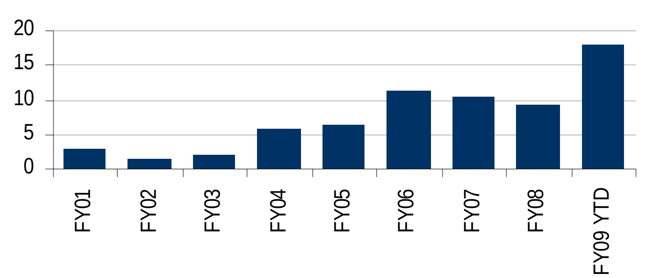
Naphtha and derivatives 3% of RPL's slate vis-à-vis 31% of RIL's

Naphtha, its derivatives and LPG are likely to be 3% of RPL's product slate vis-à-vis 31% of RIL's product slate. RIL's refinery is a refinery designed to produce large petrochemical feedstock to feed its petrochemical business. RPL's refinery will produce no petrochemical feedstock except propylene to feed its polypropylene capacity.

Gasoline cracks at US$24-27/bbl premium to naphtha and LPG cracks

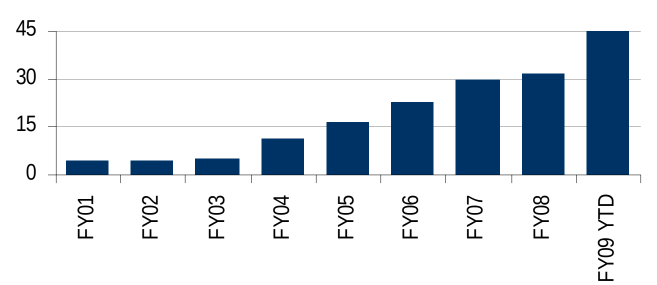
Gasoline cracks are at US$27.1/bbl premium to naphtha cracks and US$23.5/bbl premium to LPG cracks in 3Q FY09. Thus significantly higher gasoline cracks than naphtha and LPG cracks is the main advantage RPL would enjoy over RIL.

Chart 10: Trend in premium of gasoline cracks over naphtha cracks



Source: DSP Merrill Lynch

Chart 11: Trend in premium of gasoline cracks over LPG cracks



Source: Bloomberg, DSP Merrill Lynch

Risk to strong refining margins for RPL

Weakening of gasoline and diesel cracks due to RPL's large capacity

When RPL's refinery is actually commissioned it could make lower margins than US$12.9/bbl calculated by us for it based on 3Q product cracks and crude spread. The main risk to RPL's refining margins in our view would be its large size and the fact that it would add 1% to global gasoline and diesel supply. Thus gasoline and diesel cracks may weaken from 3Q FY09 levels after RPL starts commercial operations. Discount of crude RPL uses to Dubai crude also may be lower than in 3Q FY09 due to demand from RPL.

Retain Buy on RIL

Takeaway of refining margin analysis

The main takeaway of our refining margin analysis of RIL and its refining subsidiary RPL are

- **RIL's margin higher than benchmark due to ability to process heavier crude:** RIL has consistently attained higher refining margin than benchmark ML and Reuters Singapore complex refining margins. This is mainly due to its ability to process heavier crude rather than its product slate being superior to RIL's. Benchmark Singapore margin is calculated based on Dubai crude.

- **Discount of Arab heavy crude RIL can use to Dubai crude likely to be higher than in last refining downturn:** RIL can use crude with average API of 28, which is similar to Arab heavy crude. In FY01-FY05, when Dubai crude averaged US$27.4/bbl, Arab heavy crude was at average discount of US$1/bbl to Dubai crude. Its premium to Dubai crude has been US$5/bbl since FY06, when oil price has been much higher. Even after the decline in Dubai price to US$53/bbl in 3Q FY09, the Arab heavy discount to Dubai has remained over US$5/bbl, which portends well for RIL. The premium may not sustain at US$5/bbl in the next 1-2 years but we expect it to be much higher than US$1/bbl in FY01-FY05. One of the reasons for our view is that we do not expect Dubai price to be below US$30/bbl like in FY01-FY05

- **RIL's refining margins badly hit by negative naphtha crack spread in 3Q FY09 but weak naphtha spread appear unsustainable:** At prevailing product crack spreads and crude spread in 3Q FY09, we estimate RIL's refining margin would work out to just US$5/bbl. RIL would be hit by negative crack spread of US$22.6/bbl on naphtha and US$19/bbl on LPG. The only silver lining for RIL is that Arab heavy-Dubai crude spread is still high at US$5.2/bbl. We however believe that the prevailing weak naphtha crack spreads are not sustainable. The steep decline in oil and petrochemical prices has resulted in destocking, which has hit petrochemical and consequently naphtha demand. Once destocking is over naphtha cracks should recover.

- **RPL's refining margin would have been a healthy US$12.9/bbl if it were to operate in 3Q FY09:** Refining margin of RIL's subsidiary RPL would have been healthy at US$12.9/bbl if it were to operate in 3Q FY09. Its healthy refining margins would have been attributable to its not producing any naphtha and LPG, crack spreads of which are negative. It will produce more gasoline at expense of naphtha and LPG and gasoline cracks are US$24-27/bbl higher than naphtha and LPG cracks in 3Q. When RPL actually starts commercial operations in April 2009 as expected its refining margins may be lower than US$12.9/bbl. This may occur as gasoline and diesel cracks may weaken from 3Q FY09 levels after RPL starts commercial operations. RPL is expected to add 1% to global gasoline and diesel supply.

Strong FY10E earnings outlook for RIL intact

KG D6 oil, gas and RPL main driver of earnings

We expect RIL's FY10E earnings to rise by 72% YoY in the base case. KG D6 oil and gas production, which will be 0.6m bpdoe at peak, and 0.58m bpd RPL refinery are expected to be the main earnings drivers. These projects should boost earnings despite our assumption of decline in refining and petrochemical margins. There could be downside to base case growth of 72% YoY due to oil price and refining margins being lower than assumed. However, there could be upside risk from rupee being weaker than Rs43 vis-à-vis US dollar (over Rs49 now). All factors considered we expect at least 40-50% YoY earnings growth in FY10E. We retain our Buy on RIL given the strong growth prospects in FY10E and beyond FY10E, too.

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Price objective basis & risk
Reliance Inds (XRELF / RLNIY)

Our PO of Rs1,927 (GDR US$98.82) is based on a sum of parts valuation. The value of the refining and petrochemical business has been calculated on an EV/EBITDA basis using multiple of 7-8x on FY10E EBITDA. The value of its investment in Reliance Petroleum (RPL) is calculated by applying the EV/EBITDA based value of RPL (multiple of 6x FY10E EBITDA) to RIL's holding in RPL. Oil and gas reserves and resources, as well as its retail business, are valued on a DCF basis using WACC of 11.8%. Refining and marketing, including investment in RPL, is 32pct of PO, E&P valuation (Rs909) 47pct, petrochemicals 16pct and organized retail 5pct. RIL offers strong EPS CAGR during FY08E-10E,which is far higher than peers, in our view. It is the cheapest among its peer group on a PEG basis. Risks are (1) Decline in refining and petrochemical margins being steeper than expected, (2) Lower than expected oil price. (3) huge disappointments on the E&P front as we have valued exploration upside of Rs181/share, (4) failure in the retail business, and (5) changes in government policies (eg, withdrawal of the tax holiday) which may have a direct impact on the business, cash flow and profit.

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APR - Energy Coverage Cluster

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	China BlueChem	CBLUF	3983 HK	Bin Guan
	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
	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	Bin Guan
	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

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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

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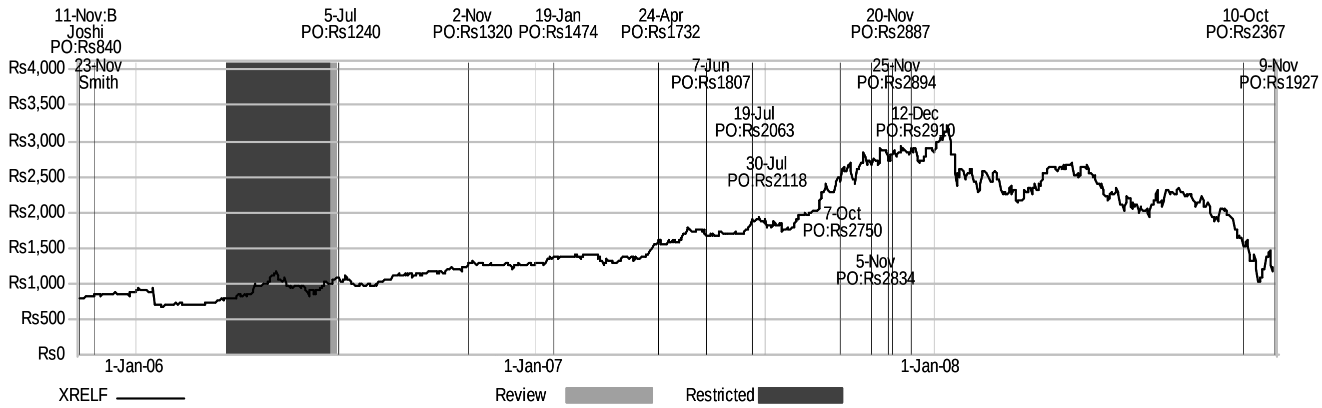
XRELF Price Chart



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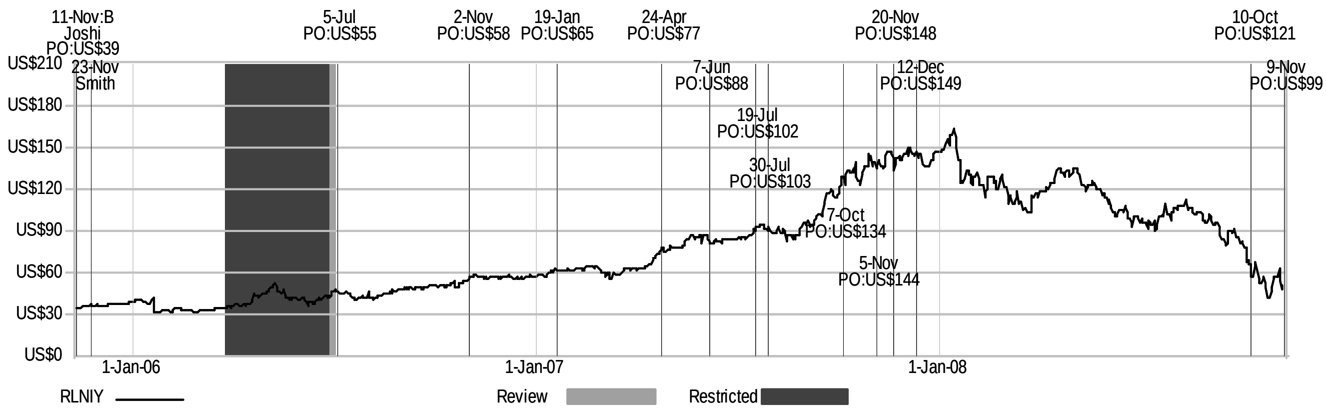
RLNIY Price Chart



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Buy	41	45.56%	Buy	10	28.57%
Neutral	23	25.56%	Neutral	4	21.05%
Sell	26	28.89%	Sell	3	12.50%

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

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

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