

Reliance Industries: Reaching for the Inflection Point; Three Reasons Why Reliance Should Outperform from Here

Target Price Change / Estimate Change in Bold

Ticker	Rating	CUR	11 Jul 2011 Closing Price	Target Price	TTM Rel. Perf.	EPS			P/E			Yield
						2011A	2012E	2013E	2011A	2012E	2013E	
RIL.IN	O	INR	853.30	1125.00	-43.7%	62.00	74.99	77.68	13.8	11.4	11.0	1.3%
	OLD			1250.00			71.50	78.90				
RIGD.LI	O	USD	38.18	50.63	0.0%	2.79	3.38	3.50	13.7	11.3	10.9	1.3%
	OLD			56.26			3.22	3.55				
MXAPJ			491.58			32.72	38.21	43.57	15.0	12.9	11.3	2.8%

O – Outperform, M – Market-Perform, U – Underperform, N – Not Rated

* EPS estimates are for the Fiscal years with FY2011 ending Mar 2011

Highlights

Reliance is trading at a 20% discount to its core asset value with further upside from development of its 30TCF resource base and exploration of its 200,000km² offshore acreage. Completion of the BP farm-in, a turnaround in D6 production and follow-on KG basin exploration mark three near term catalysts which we believe will start to improve sentiment and valuation.

- **We expect the Indian government to give the green light to the BP farm-in to Reliance acreage over the coming few weeks.** The arrival of BP will bring renewed focus to exploration and development offshore India. It will also help Reliance restore production at D6 through improved reservoir management techniques. Moreover, Reliance has 30TCF (5bn boe) of undeveloped resources (in D6 and NEC-25) and 200,000km² of deep water offshore acreage which is essentially unexplored. BP's deep water expertise will help accelerate monetization of this resource base and exploration opportunities.
- **D6 production to start to improve in the next quarter.** Reliance will tie-back 2 additional wells over the coming months and we expect the drilling of 3 additional wells in the second half of the year which will take the total well count to 23 (+25%). This will offset natural decline and we expect this will bring production to back over 50MMSCM/d by the end of this year.
- **The recent discovery in deep water block D9 bodes well for continued exploration in the KG basin.** RIL announced the first discovery in the west of the KG-D9 block which proves that the gas play in the northern part of D6 extends further to the south west and into the D9 block, opening up a much larger prospective area in the basin. Further exploration will take place this year
- **Reliance cash position may be more of an asset than a liability in the current environment.** While some fret over Reliance's growing cash pile, we believe in an increasingly credit constrained environment this is more of an opportunity than a liability. We expect more spending on Indian E&P and the possibility of international upstream acquisitions. With a 45% interest in the company, Mukesh Ambani remains well aligned with shareholders on the efficient deployment of capital.
- **At the current share price, investors are getting upstream growth for free.** Our core value for Reliance is INR 1,003, which is our estimate of the value of Reliance developed upstream and downstream assets plus net cash. Our value for the 30TCF of discovered but undeveloped resources and exploration acreage which has yet to be drilled is USD9bn, or INR 122 per share.

- **To account for the decline in market multiples for refining and petrochemical assets we have adjusted our target price to INR1125.** Given the decline in EV/EBITDA multiples for refining and petrochemical peers, we have reduced our target price to INR1125 from INR1250.

Investment Conclusion

We remain positive on the outlook for Reliance. While most investors would agree that Reliance is cheap, the question is has the stock bottomed out yet and what are the catalysts to get Reliance moving again? Despite the negative news flow in the first half of 2011 (CAG review, license issues), we expect a more positive second half to the year. There are three catalysts in our view. The first catalyst is the BP deal to close over the coming month which will lead to a new roadmap for exploration and development activity offshore India. Secondly, the recently announced discovery in D9 confirms that the prospective area of the D6 block is much larger than the northern part of the D6 block alone. Follow-on exploration later this year will confirm this. Finally, we expect D6 production to bottom out in 1QFY12 and start to move higher as new wells are brought on line. As production increases, so will the RIL stock price.

In our view the gas potential offshore India is enormous. Reliance has the best acreage position and over time natural gas prices will move higher making developments more viable. While some investors fret over the growing cash pile that Reliance is amassing, we feel there is no reason to assume that Mukesh Ambani (who controls 45% of the company) will deploy capital in a way that is value dilutive to shareholders. On a sum of the parts basis we believe that on the current share price, investors are getting undeveloped resources and exploration for free. While it may yet take another quarter for some of our catalysts to play out, we see little down side from here. Ultimately we believe that investors need to get ahead of the curve. We rate Reliance as outperform with a target price of INR 1,125.

Details

Reliance has had a turbulent first half of 2011. In particular, after the announcement of the BP deal in February 2011, the news flow surrounding the stock has been entirely negative. First, there were concerns regarding the under-performing KG-D6 gas field in offshore India. RIL admitted technical difficulties and hence its inability to hit previously announced gas production targets. We, however, believe that the major reason for the lower production was the lesser number of wells drilled - more details can be found in our call published on the 4th of May **Reliance Industries: E&P Fears Overblown, Outperform.**

The next storm of bad news to hit the stock was from the Petroleum ministry and the upstream regulator (Directorate General of Hydrocarbons – DGH) in India. The press statements by the DGH regarding the hiatus in drilling led to further pressure on RIL.

Over the last few weeks, the leak of the draft report submitted by the Comptroller and Auditor General (CAG) of India has put additional pressure on the RIL stock. The media has reported extensively on the allegations of the CAG that Reliance 'gold-plated' its costs for developing the KG-D6 field, and hence causing a loss to the government. While we think that industry cost inflation (up 50% since start of D6 development) and general industry cost over-runs accounts for most of the difference, some parties intend see this as a major issue. (For the sake of the Australian E&P industry we hope that the CAG auditors do not extend their enquiries overseas!)

In spite of the beating the stock has taken on account of the negative news flow, we believe that the intrinsic value of the company hasn't changed and the stock is priced at a significant discount to its intrinsic value. In this call we discuss the valuation of the company in detail. We believe there are three key catalysts for the valuation of the company to come back to its intrinsic levels:

- 1) Approval of the BP deal by the government
- 2) Turn-around in D6 production. We expect the tie back of 2 wells plus drilling of 3 additional wells to start turning round production. We believe that Phase 2 development (28 additional wells) will happen, although this may remain linked to gas price.
- 3) Further exploration in the KG basin following on from the gas discovery in D9

The re-negotiation of the price of gas from KG-D6 block, for the whole or part of the production, before FY14 is also another important catalyst though we believe it to be less likely in the short term. We believe current price levels for the core sectors will remain in force till the end of life of the current price regime, in March 2014. However, we believe we might see a re-negotiation of the gas price for the non-core sectors, though we haven't included this scenario in our valuation analysis.

How much gas is there in KG-D6?

The valuation of RIL has hinged around the valuation of the company's (and India's) largest gas reservoir – the Dhirubhai or KG-D6 block. In the addendum to the Initial Development Plan (IDP), RIL had discussed 2P reserves of 11.3tcf for the D1 and D3 fields and 2P total in-place discovered resources of 42tcf (see **Exhibit 1**). Furthermore, RIL also discussed a hydrocarbon potential of 39tcf of gas and 1.6bn bbl of oil from 25 other potential prospects. RIL mentioned in the document that the total potential of the block was estimated at around 50tcf.

Exhibit 1

In the addendum to the Initial Development Plan, RIL intimated 2P reserves of 11.3tcf in D1 & D3 fields and total discovered in-place resources of 42tcf

KG-D6 block (n tcf)	Reserves D1 & D3	In-place D1 & D3	In-place Other discoveries	In-place Total discovered
Low	4.4	5.7	6.9	12.6
Mid	11.3	18.8	23.2	42.0
High	21.0	27.2	35.4	62.6

Source: Company reports, Bernstein analysis

It is important to note here that the addendum to the IDP discussed the development plan for only 11.3tcf of gas from the D1 and D3 gas fields. The document was submitted to the Indian Government for approval in 2006 and much water has flown under the bridge since then. With the production problems being reported from KG-D6, the market has been unsure of the resource potential of the block, and there have even been doubts over the potential of the entire eastern Indian seaboard. We believe that the current problems are temporary and with the technical expertise of BP and the drilling of additional wells, we will see an uptick in production volumes.

In the latest reserves statement from RIL, total gas reserves were taken down by 2.7% (see **Exhibit 2**), the first such negative revision of gas reserves by the company, which was a cause of concern for the investment community. Niko Resources also took down its India proved reserves by 20% (see **Exhibit 3**). It is very important to note that even after the negative revisions by Niko, the total 2P gas reserves of the KG-D6 block remains at 11.2tcf, at the levels discussed in the addendum to the initial development plan (see **Exhibit 1**).

Exhibit 2

RIL Gas reserves disclosure: RIL took down its gas reserves by 2.7%

Gas, BCF	2007/8	2008/9	2009/10	2010/11
Proved, Beginning of yr	7,845	7,846	7,786	7,459
Additions	60	6	189	-
% of BOY balance	0.8%	0.1%	2.4%	0.0%
Deletion	-	-	-	(204)
% of BOY balance	0.0%	0.0%	0.0%	-2.7%
Production	(59)	(67)	(516)	(693)
% of BOY balance	-0.7%	-0.8%	-6.6%	-9.3%
Proved, End of year	7,846	7,786	7,459	6,562

Source: Company reports, Bernstein analysis

Exhibit 3

Niko Resources reserves disclosure: Niko revised total field 2P gas reserves down by 2.4tcf

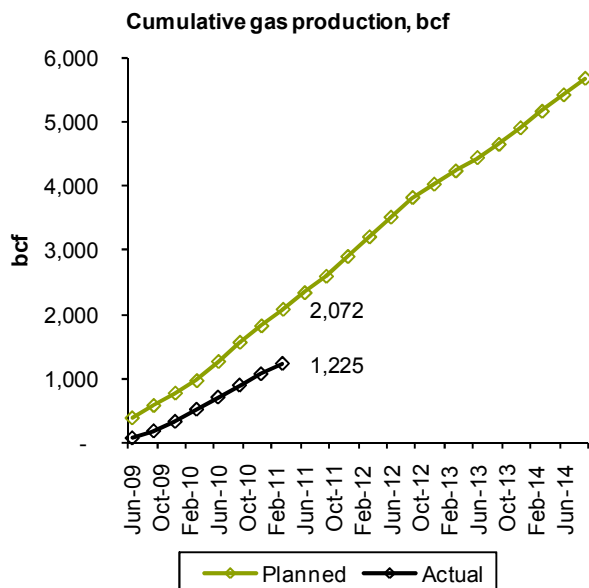
Niko Reserves Reconciliation TCF	Net Niko (10%)		D6 Block Gross	
	1P	2P	1P	2P
March 31 2010	0.94	1.31	9.43	13.08
Extension				
Revisions	-0.19	-0.24	-1.91	-2.41
Discoveries				
Acquisitions				
Dispositions				
Economic factors				
Production	-0.08	-0.08	-0.76	-0.76
March 31 2011	0.68	0.99	6.76	9.90
Add back Cumulative Production			1.30	1.30
Original Field Reserves			8.06	11.20

Source: Company reports, Bernstein analysis

The negative revisions by RIL and Niko are undoubtedly due to the technical difficulties being faced by the contractors in the KG-D6 basin. However, as we have discussed previously in our report published on the 4th of May - **Reliance Industries: E&P Fears Overblown, Outperform**, the shortfall in actual production versus plan is because of the delay in drilling (see **Exhibit 4** and **Exhibit 5**) and we are optimistic that the tie-up with BP and the drilling of additional wells will speed up the process of getting the production back to track.

Exhibit 4

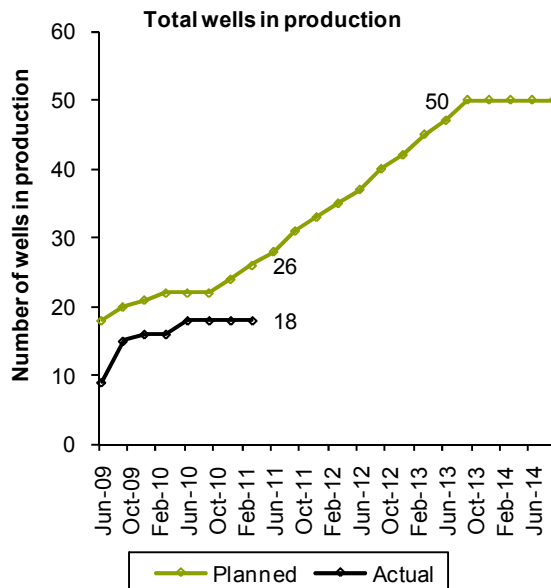
The plan was to reach cumulative gas production reaching 2.07tcf by 4QFY11 while the actual cumulative production is much lower at 1.23tcf...



Source: Company reports, Bernstein analysis

Exhibit 5

... though the number of wells drilled and put into production is much lower than planned



Source: Company reports, Bernstein analysis

What is KG-D6 Worth? Our Assumptions Driving the DCF are Conservative

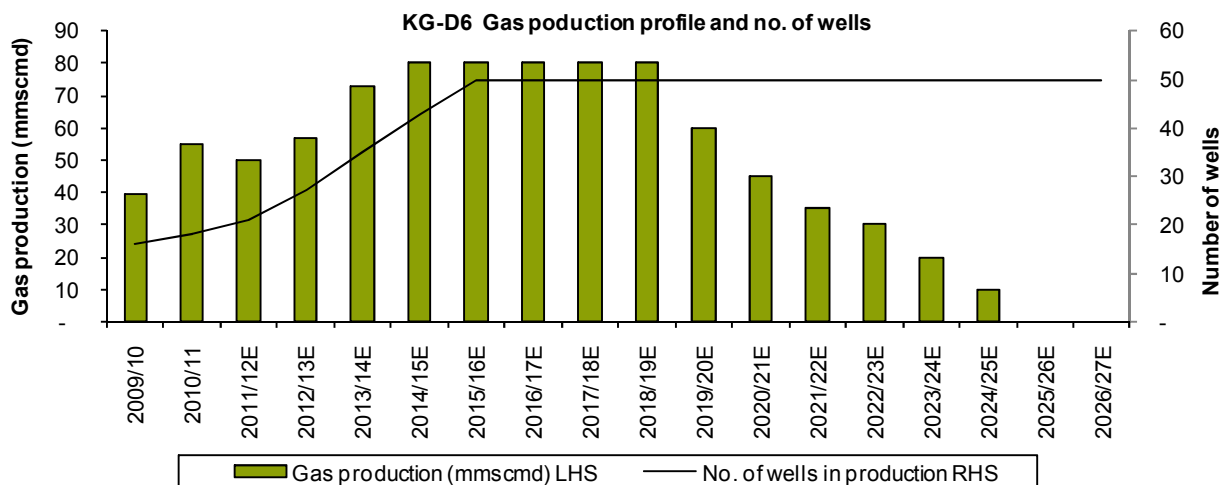
Our DCF valuation of the D1, D3 and MA fields (in the KG-D6 block), on the basis of the total reserves of 11.3tcf of gas, as disclosed in the addendum to the initial development report suggests a point forward valuation of US\$21.6bn for those fields alone.

Production assumptions:

Our assumptions for DCF valuation for the fields are reasonable, realistic and conservative. We have assumed total recoverable gas in the block of 11.3tcf as mentioned in the field development report. We expect a peak production rate of 80mmscmd which will only be achieved by FY15 (see **Exhibit 6**). We expect production in FY12 to be 9% below FY11 levels, to come in at 50mmscmd for the financial year.

Exhibit 6

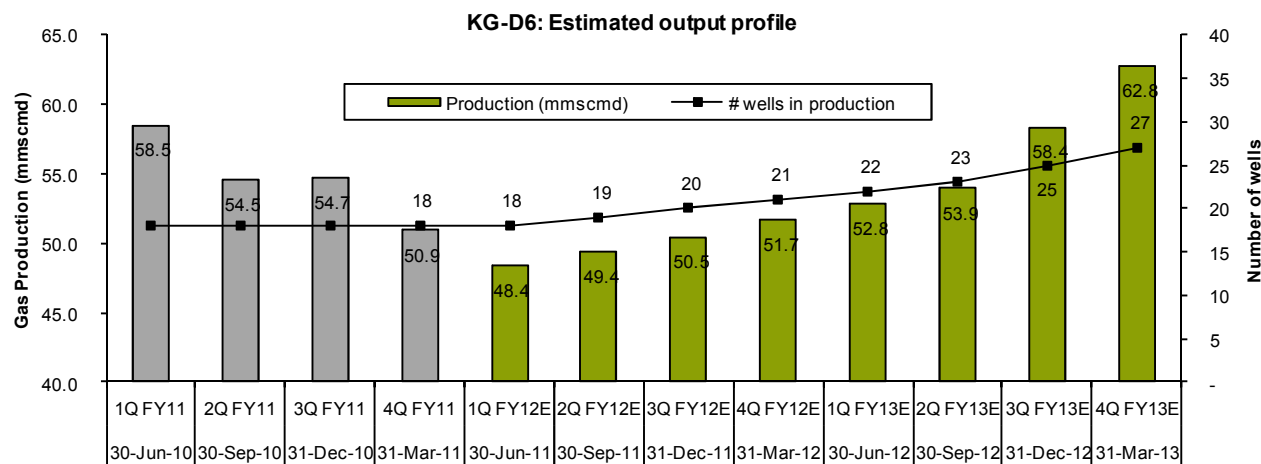
We expect production to ramp up to 80mmscmd by FY15. The total recoverable gas in this block is assumed to be 11.3tcf, as was quoted in the addendum to the initial development document



Source: Company reports, Bernstein analysis

However, we don't expect production to shoot up rapidly. In 1QFY12, we expect production to be at 48.4mmscmd, with a total of 18 wells in production and no additional wells put into production during the quarter (see **Exhibit 7**). With wells slowly coming on-line starting 2QFY12, we expect to see the bottom of the quarterly production in 1QFY12, with production rising to 49.4mmscmd by 2QFY12. We believe this will be a key catalyst for the rerating of the stock.

Exhibit 7
We expect gas production to bottom out at 48.4mmscmd in 1QFY12



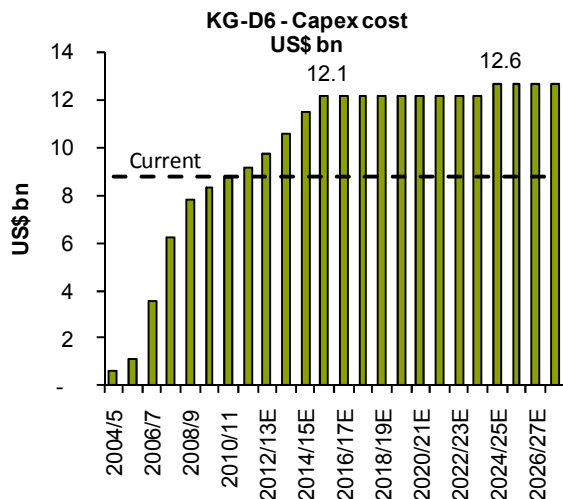
Source: Company reports, Bernstein analysis

Capital Expenditure and price assumptions:

We expect further capital expenditure of US\$4bn in these fields (see **Exhibit 8**) which also includes a field abandonment cost of US\$500m at the end of life of the field. Our gas price assumptions are also quite reasonable, with a price of \$4.2/mmbtu including royalty till March 2014. We have assumed an increase in the price of gas to US\$6.3/mmbtu in FY15 reaching US\$6.5/mmbtu in FY16 and increasing at a CAGR of 2.5% after that (see **Exhibit 9**).

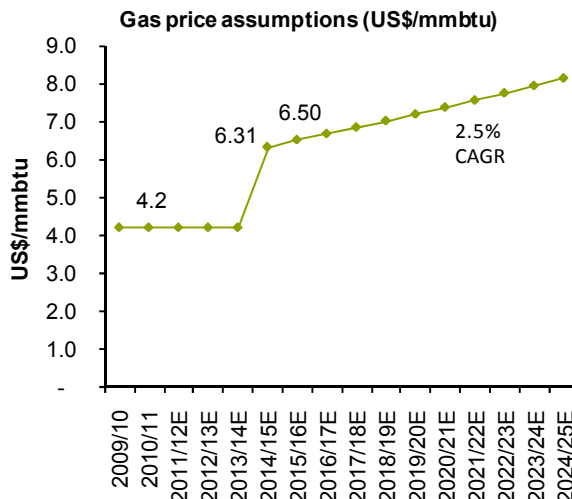
As according to the PSC, we have assumed a royalty rate of 5% for the first 7 years and 10% afterwards. We have also considered a tax holiday for the first 7 years of production as mentioned in the PSC. Our numbers incorporate a maximum cost recovery of 90% of net revenues (gross revenues – royalty) as well as the profit sharing formula based on investment multiple incorporated in the PSC. We have used a discount rate of 10% to calculate the NPV and the full-cycle field value.

Exhibit 8
We expect another US\$4bn in Capex on these fields...



Source: Company reports, Bernstein analysis

Exhibit 9
... and our gas price assumptions are also reasonable with the price increasing to \$6.3/mmbtu in FY15



Source: Company reports, Bernstein analysis

Asia-Pacific Oil & Gas

Exhibit 10

KG-D6 cash flow model with oil and gas output only from the D1, D3 and MA fields in the KG-D6 block

KG-D6 Cash Flow	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11	2011/12E	2012/13E	2013/14E	2014/15E	2015/16E
	31-Mar-05	31-Mar-06	31-Mar-07	31-Mar-08	31-Mar-09	31-Mar-10	31-Mar-11	31-Mar-12	31-Mar-13	31-Mar-14	31-Mar-15	31-Mar-16
Gas Field economics												
Gas price USD per mmbtu						4.2	4.2	4.2	4.2	4.2	6.31	6.50
Oil price USD per bbl					83.4	69.9	85.3	112.2	114.0	123.8	135.4	145.4
Production - Gas (mmscfd)					-	39.4	54.7	50.0	57.0	73.1	80.0	80.0
Production - Oil (mbd)					2.6	10.6	22.6	24.8	27.4	23.2	17.4	10.4
Gas Revenues (US\$M)					-	2,135.4	2,959.8	2,713.1	3,083.4	3,955.3	6,509.4	6,721.1
Oil Revenues (US\$M)					79.9	271.4	704.8	1,019.9	1,139.7	1,050.8	861.7	555.1
Gross revenues (US\$M)					79.9	2,406.8	3,664.7	3,733.0	4,223.2	5,006.1	7,371.1	7,276.2
Royalty (US\$M)					4.0	120.3	183.2	186.7	211.2	250.3	368.6	363.8
Net revenues (US\$M)					75.9	2,286.4	3,481.4	3,546.4	4,012.0	4,755.8	7,002.6	6,912.4
Operating expenses					3.4	455.9	603.8	581.1	654.1	801.5	871.5	881.2
Capital costs (US\$M)	594.0	522.0	2,446.0	2,650.0	1,611.0	490.0	444.6	352.7	623.5	852.0	873.3	671.4
Operating cash flow	(594.0)	(522.0)	(2,446.0)	(2,650.0)	(1,538.5)	1,340.5	2,433.0	2,612.6	2,734.4	3,102.2	5,257.7	5,359.8
Cost petroleum (US\$M)					68.3	2,057.8	3,133.3	3,191.8	3,581.0	1,653.6	1,744.9	1,552.6
Profit petroleum (US\$M)					7.6	228.6	348.1	354.6	431.0	3,102.2	5,257.7	5,359.8
Govt share of profit petroleum (US\$M)					0.8	22.9	34.8	35.5	43.1	310.2	525.8	857.6
Contractor share: Profit petroleum (US\$M)					6.8	205.8	313.3	319.2	387.9	2,792.0	4,731.9	4,502.3
Income Tax (US\$M)					-	-	-	-	-	-	-	-
Net Cash Flow (US\$M)	(594.0)	(522.0)	(2,446.0)	(2,650.0)	(1,535.9)	1,773.5	3,002.1	3,158.2	3,345.5	3,593.5	5,603.4	5,383.4
Discounted Cash Flow (US\$M)								2,871.1	2,764.8	2,699.8	3,827.2	3,342.7
Capex calculations												
Cumulative capex incurred	594.0	1,116.0	3,562.0	6,212.0	7,823.0	8,313.0	8,757.6	9,110.3	9,733.8	10,585.8	11,459.2	12,130.6
Reimbursement for capex					-	64.88	1,601.90	2,529.46	2,610.70	2,926.85	852.05	671.39
Cumulative reimbursement for capex					-	64.9	1,666.8	4,196.2	6,806.9	9,733.8	11,459.2	12,130.6
Capex remaining to be expensed				6,212.0	7,758.1	6,646.2	4,561.4	2,303.4	-	-	-	-
Calculation of Investment Multiple												
Net Income of contractor (for IM Calc)					71.7	1,807.7	2,842.8	2,929.9	3,314.8	3,644.0	5,605.3	5,173.6
Cumulative net Income of contractor					71.7	1,879.4	4,722.2	7,652.1	10,966.8	14,610.9	20,216.2	25,389.8
Cumulative Investment made I	594.0	1,116.0	3,562.0	6,212.0	7,823.0	8,313.0	8,757.6	9,110.3	9,733.8	10,585.8	11,459.2	12,130.6
Investment multiple					0.0	0.2	0.5	0.8	1.1	1.4	1.8	2.1
Govt share: Profit petroleum (%)					10%	10%	10%	10%	10%	10%	10%	16%
Contractor share: Profit petroleum (%)					90%	90%	90%	90%	90%	90%	90%	84%

Source: Company reports, Bernstein analysis

Asia-Pacific Oil & Gas

Exhibit 11

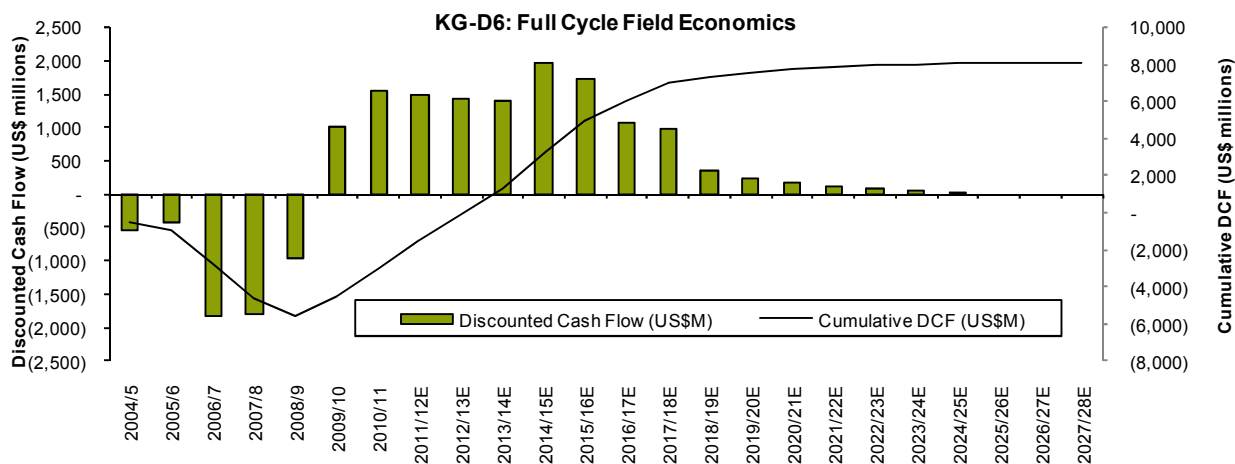
KG-D6 cash flow model with only oil and gas output from D1, D3 and MA fields in the KG-D6 block

KG-D6 Cash Flow	2016/17E 31-Mar-17	2017/18E 31-Mar-18	2018/19E 31-Mar-19	2019/20E 31-Mar-20	2020/21E 31-Mar-21	2021/22E 31-Mar-22	2022/23E 31-Mar-23	2023/24E 31-Mar-24	2024/25E 31-Mar-25	2025/26E 31-Mar-26	2026/27E 31-Mar-27
Gas Field economics											
Gas price USD per mmbtu	6.66	6.83	7.00	7.17	7.35	7.54	7.73	7.92	8.12	8.32	8.53
Oil price USD per bbl	149.0	152.7	156.6	160.5	164.5	168.6	172.8	177.1	181.6	186.1	190.8
Production - Gas (mmscfd)	80.0	80.0	80.0	60.0	45.0	35.0	30.0	20.0	10.0	-	-
Production - Oil (mbd)	5.0	4.0	2.0	2.0	-	-	-	-	-	-	-
Gas Revenues (US\$M)	6,870.3	7,042.0	7,218.1	5,564.1	4,265.7	3,400.7	2,987.8	2,047.2	1,046.3	-	-
Oil Revenues (US\$M)	272.0	223.0	114.3	117.5	-	-	-	-	-	-	-
Gross revenues (US\$M)	7,142.2	7,265.1	7,332.4	5,681.6	4,265.7	3,400.7	2,987.8	2,047.2	1,046.3	-	-
Royalty (US\$M)	714.2	726.5	733.2	568.2	426.6	340.1	298.8	204.7	104.6	-	-
Net revenues (US\$M)	6,428.0	6,538.5	6,599.2	5,113.4	3,839.2	3,060.7	2,689.0	1,842.5	941.7	-	-
Operating expenses	889.2	906.5	922.6	611.8	466.4	371.8	326.7	223.9	114.4	-	-
Capital costs (US\$M)	-	-	-	-	-	-	-	-	500.0	-	-
Operating cash flow	5,538.8	5,632.0	5,676.5	4,501.6	3,372.7	2,688.8	2,362.3	1,618.7	327.3	-	-
Cost petroleum (US\$M)	889.2	906.5	922.6	611.8	466.4	371.8	326.7	223.9	614.4	-	-
Profit petroleum (US\$M)	5,538.8	5,632.0	5,676.5	4,501.6	3,372.7	2,688.8	2,362.3	1,618.7	327.3	-	-
Govt share of profit petroleum	1,550.9	1,577.0	4,825.1	3,826.3	2,866.8	2,285.5	2,008.0	1,375.9	278.2	-	-
Contractor share: Profit petrole	3,988.0	4,055.0	851.5	675.2	505.9	403.3	354.3	242.8	49.1	-	-
Income Tax (US\$M)	1,196.4	1,216.5	255.4	202.6	151.8	121.0	106.3	72.8	14.7	-	-
Net Cash Flow (US\$M)	3,680.8	3,745.1	1,518.6	1,084.5	820.6	654.2	574.7	393.8	148.8	-	-
Discounted Cash Flow (US\$M)	2,077.7	1,921.8	708.5	459.9	316.4	229.3	183.1	114.1	39.2	-	-
Capex calculations											
Cumulative capex incurred	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,630.6	12,630.6	12,630.6
Reimbursement for capex	-	-	-	-	-	-	-	-	500.00	-	-
Cumulative reimbursement for	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,630.6	12,630.6	12,630.6
Capex remaining to be expens	-	-	-	-	-	-	-	-	-	-	-
Calculation of Investment Multiple											
Net Income of contractor (for II	3,988.0	4,055.0	851.5	675.2	505.9	403.3	354.3	242.8	549.1	-	-
Cumulative net Income of cont	29,377.7	33,432.8	34,284.3	34,959.5	35,465.4	35,868.7	36,223.1	36,465.9	37,015.0	37,015.0	37,015.0
Cumulative Investment made t	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,130.6	12,630.6	12,630.6	12,630.6
Investment multiple	2.4	2.8	2.8	2.9	2.9	3.0	3.0	3.0	2.9	2.9	2.9
Govt share: Profit petroleum (%)	28%	28%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Contractor share: Profit petrole	72%	72%	15%	15%	15%	15%	15%	15%	15%	15%	15%

Source: Company reports, Bernstein analysis

Our DCF analysis suggests that the full cycle value to the contractor is worth US\$8 million (see **Exhibit 12**) with nearly all the value to the contractor accruing between 2009/10 and 2017/18 due to the design of the PSC. The full cycle value per boe for the development is US\$4.2 per boe, which is quite reasonable by international standards.

Exhibit 12
Our DCF analysis suggests a full-cycle field value of US\$8bn



Source: Company reports, Bernstein analysis

Using our reasonable assumptions for the DCF, we estimate remaining NPV of US\$21.6bn to the operator (RIL+Niko), of which RIL's 90% share is worth US\$19.4bn (see **Exhibit 13**). We have assumed a total capex of US\$12.6bn, or F&D costs of US\$6.5/bbl. The government share of the NPV is US\$14.3bn (see **Exhibit 14**). This means that the government take of the total field value is nearly 2/3rd, which is a reasonable distribution of the field economic value.

Exhibit 13
The remaining NPV of the block is US\$21.56bn of which RIL's 90% share is worth US\$19.4bn

DCF Valuation	
Discount rate	10%
Total field DCF value, US\$M	21,556
RIL share, US\$M	19,400
Full cycle Field value, US\$M	8,030
Full-cycle field value US\$/boe	4.2

Source: Company reports, Bernstein analysis

Exhibit 14
The total government take from the block is US\$14.3bn

Government share NPV	
Royalty	2,835
Profit petroleum share	9,769
Tax	1,664
Total govt. take NPV	14,268

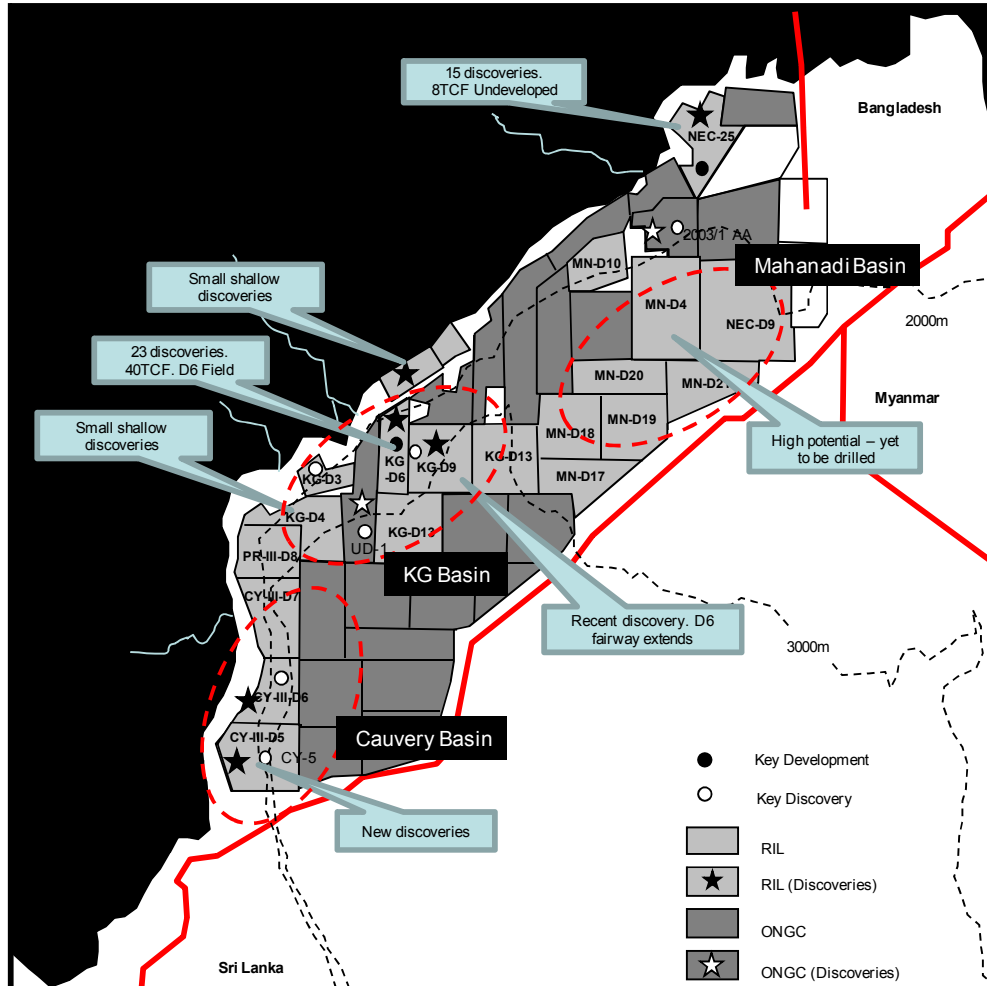
Source: Company reports, Bernstein analysis

What is the RIL's exploration upside for RIL?

In the pre-NELP and NELP rounds of bidding, RIL has won 32 blocks spread across 8 basins and is the second largest holder of NELP blocks by area after ONGC. So far, RIL has made 51 discoveries in the its offshore blocks with most of the discoveries coming in the KG-D6 and NEC-25 fields (see **Exhibit 15**, **Exhibit 16** and **Exhibit 17**).

Exhibit 15

Though KG-D6 has been the most prolific block until now, the gas play extends farther and most of the potential hydrocarbon resources in the basin are yet to be discovered and exploited



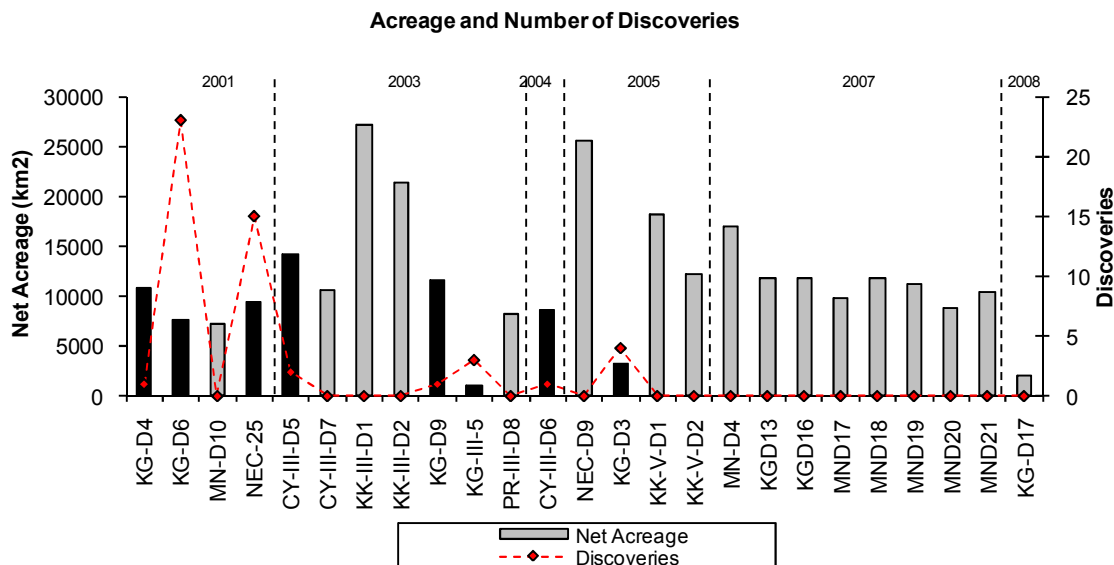
Source: Company reports, Bernstein analysis

Exhibit 16
Summary of discoveries by block

Block	Abbrev	Sector	Interest (%)	Issue Date	Deep/Shall	Gross (km ²)	Basin	Discoveries
KG-DWN-98/1	KG-D4	Andhra Pradesh Offshore	100	Jun-00	Deep	10810	KG Basin	1
KG-DWN-98/3	KG-D6	Andhra Pradesh Offshore	90	Jun-00	Deep	7645	KG Basin	23
MN-DWN-98/2	MN-D10	Orissa Offshore	100	Jun-00	Deep	7195	Mahanadi	0
NEC-OSN-97/2	NEC-25	Orissa Offshore	90	Jun-00	Shall	9461	Mahanadi	15
CY-DWN-2001/2	CY-III-D5	Tamil Nadu Offshore	100	Feb-03	Deep	14325	Cauvrey	2
CY-PR-DWN-2001/4	CY-III-D7	Tamil Nadu Offshore	100	Feb-03	Deep	10590	Cauvrey Basin	0
KK-DWN-2003	KK-III-D1	Kerala & Karnataka Offshore	100	Feb-03	Deep	27315	Kerela Konkan	0
KK-DWN-2003	KK-III-D2	Kerala & Karnataka Offshore	100	Feb-03	Deep	21515	Kerela Konkan	0
KG-DWN-2001/1	KG-D9	Andhra Pradesh Offshore	90	Feb-03	Deep	11605	KG Basin	1
KG-OSN-2001/1	KG-III-5	Andhra Pradesh Offshore	100	Feb-03	Shall	1100	KG Basin	3
PR-DWN-2001/1	PR-III-D8	Andhra Pradesh Offshore	90	Feb-03	Deep	8255	KG Basin	0
CY-PR-DWN-2001/3	CY-III-D6	Tamil Nadu Offshore	100	Apr-03	Deep	8600	Cauvrey	1
NEC-DWN-2002/1	NEC-D9	Orissa Offshore	90	Feb-04	Deep	25565	Mahanadi	0
KG-DWN-2003/1	KG-D3	Andhra Pradesh Offshore	90	Jul-05	Deep	3288	KG Basin	4
KK-DWN-2003/1	KK-V-D1	Kerala & Karnataka Offshore	100	Jul-05	Deep	18245	Kerela Konkan	0
KK-DWN-2003/2	KK-V-D2	Kerala & Karnataka Offshore	100	Jul-05	Deep	12285	Kerela Konkan	0
MN-DWN-2003/1	MN-D4	Orissa Offshore	85	Jul-05	Deep	17050	Mahanadi	0
KG-DWN-2004/4	KGD13	Andhra Pradesh Offshore	100	Feb-07	Deep	11904	Mahanadi	0
KG-DWN-2004/7	KGD16	Andhra Pradesh Offshore	100	Feb-07	Deep	11856	KG Basin	0
MN-DWN-2004/1	MND17	Orissa Offshore	100	Feb-07	Deep	9885	Mahanadi	0
MN-DWN-2004/2	MND18	Orissa Offshore	100	Feb-07	Deep	11813	Mahanadi	0
MN-DWN-2004/3	MND19	Orissa Offshore	100	Feb-07	Deep	11316	Mahanadi	0
MN-DWN-2004/4	MND20	Orissa Offshore	100	Feb-07	Deep	8822	Mahanadi	0
MN-DWN-2004/5	MND21	Orissa Offshore	100	Feb-07	Deep	10454	Mahanadi	0
KG-DWN-2005/2	KG-D17	Andhra Pradesh Offshore	70	Dec-08	Deep	1949	KG Basin	0

Source: Company reports, Bernstein analysis

Exhibit 17
Summary of discoveries by block



Source: Company reports, Bernstein analysis

It is important to note that exploration activity hasn't really started in most blocks and most exploration activity has been confined mostly to the Krishna-Godavari (KG) basin. So, it is no surprise that 32 out of a total of 50 discoveries have been located in the KG basin (see **Exhibit 18**).

Exhibit 18

Till date most the discoveries have been concentrated in the KG basin

<i>Basin</i>	#	#	TCF	TCF	TCF	TCF
<i>Krishna-Godavari</i>	Discoveries	Developed	GIIP	3P	2P	1P
KG-D6	23	2	40	18	11	7
KG-D3	4	0	1	0	0	0
KG-D9	1	0	3	0	0	0
KG-III-5	3	0	2	0	0	0
KG-D4	1	0	0	0	0	0
<i>Mahanadi</i>	Discoveries	Developed	GIIP	3P	2P	1P
NEC-25	15	0	9	0	0	0
<i>Cauvery</i>	Discoveries	Developed	GIIP	3P	2P	1P
CY-III-D5	2	0	2	0	0	0
CY-III-D6	1	0	0	0	0	0
Total	50	2	57	18	11	7

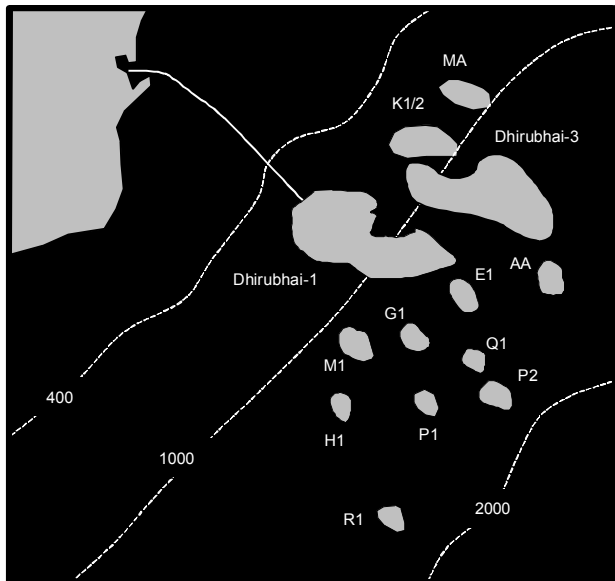
15 blocks yet to be developed

Source: Company reports, Bernstein analysis

How much is further exploration on KG-D6 worth?

As discussed above, our DCF for the current plan for the KG-D6 block, extracting only 11.3tcf of gas, and thereby only the D1 and D3 fields for gas and the MA field for crude, is worth a current NPV of US\$21.6bn. However, the KG-D6 block is much more than just the D1, D3 and MA fields (see **Exhibit 19**).

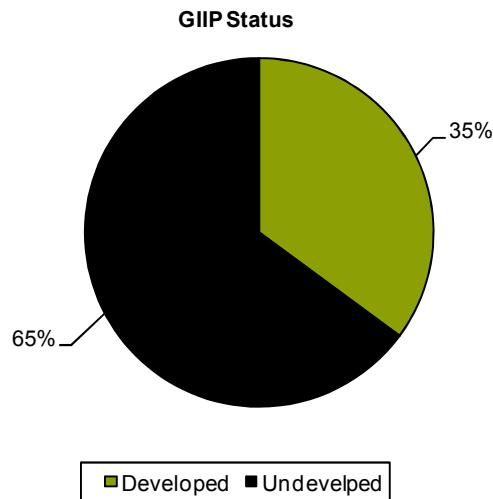
Exhibit 19
KG-D6 Deepwater Block



55 deep water wells drilled
27 exploration successes, 40TCF in place

Source: Bernstein analysis

Exhibit 20
... and even in KG-D6, only about 1/3rd of the block has been developed



Source: Bernstein analysis

Over 55 deep water wells have been drilled in this block with a discovered resource base estimated to be 40TCF of which nearly 1/3rd has been developed as part of Dhirubhai (see **Exhibit 20**). In its addendum to the initial field development, RIL has given an estimate of a Gas-in-place estimated much more than that of just the D1 and D3 fields (see **Exhibit 21**). This includes in-place estimate of 23.2tcf in other discovered fields and an in-place estimate of 39tcf for other fields in the block. It is likely that the total resource potential is at least 80TCF in this basin alone.

Exhibit 21
The potential of the KG-D6 block is more than just D1, D3 and MA

Block	Field(s)	Reserves (2P, tcf)	In Place (tcf)	Full-cycle field value, \$m	Full-cycle gas field value, \$/boe
KG-D6	D1&D3 + MA	11.3	18.8	8,030	4.2
KG-D6	Other discovered		23.2		
KG-D6	Other potential		39.0		

Source: Company reports, Bernstein analysis

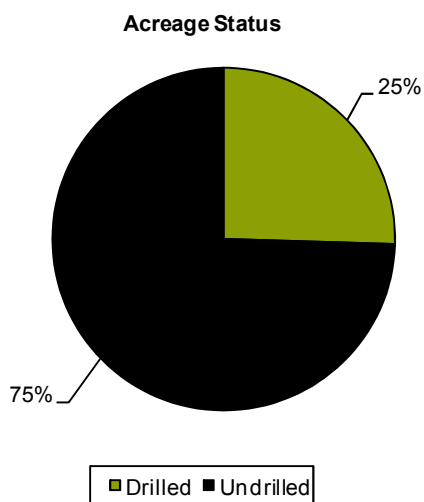
With significant exploration upside still remaining in the KG-D6 block itself, the question is how much is the exploration upside in that block, not to speak of the total exploration upside that RIL has in all the blocks it has licensed.

What about the other blocks?

Of the deep water blocks acquired, around one-fourth has been drilled (see **Exhibit 17** and **Exhibit 22**). Out of a total deep water area of 300,000km² under license, RIL have drilled on deepwater blocks which constitute 43,563km² or only 15% of the total deep water area, or 25% excluding the Kerala-Konkan basin which has very low prospectivity. However, the initial signs for the other blocks are promising.

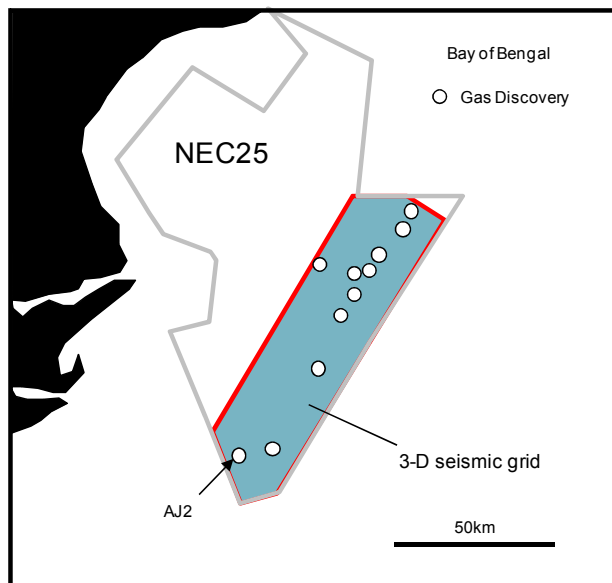
NEC-25 is a key block in the Mahanadi basin. So far there have been 15 wells drilled and gas in place has been estimated at over 8TCF (see **Exhibit 23**).

Exhibit 22
Only 1/4th of RIL's acreage has been drilled...



Source: Company reports, Bernstein analysis

Exhibit 23
NEC-25 Block



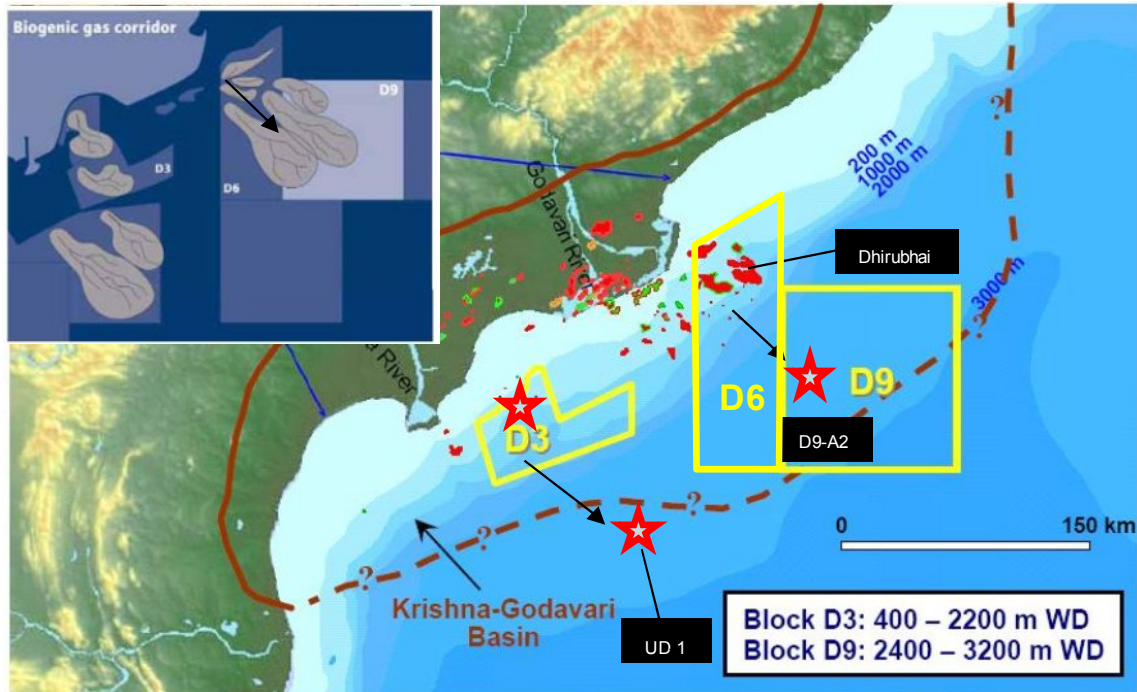
NEC 25: 15 Exploration Success
8.3TCF of Gas in Place

Source: Company reports, Bernstein analysis

Hardy, the minority partner of RIL in KG-D9, recently announced the first gas find in the block. This is very interesting as it extends the Miocene play far into the D-9 frontier and increases the prospectivity of the entire area (see **Exhibit 24**).

Exhibit 24

The gas find in D9 block is significant as it extends the gas play from Dhirubhai further to the southeast



Source: Company reports, Bernstein analysis

Including resource estimates for the Mahanadi basin of 100TCF (largely based on the potential of the eagerly anticipated MN-D4 block) and the Cauvery basin to the south where hydrocarbons have been discovered in CY-D5, the total hydrocarbon potential of the India's east coast is likely to be at least 200TCF.

Other blocks which contain discoveries are CY-D5 (2TCF resources), KG-V-D3 which have a number of gas discoveries. MN-D4 remains of significant interest to investors given the potential for discoveries within the block.

What is the Worth of RIL's Petrochemicals business?

RIL is a major player in the global petrochemicals segment with the business generated INR 93bn of EBIT (~US\$2bn) in 2010-11, or nearly 37% of the total company EBIT. We have tried to value the petrochemical business using an EV/EBITDA multiple for peers. RIL's Petchem peers had an EV/EBITDA multiple of 6.7 on 2011 earnings and 6.2 on 2012 earnings (see **Exhibit 25**).

Exhibit 25

The average EV/EBITDA multiple for RIL's petrochemical peers is 6.2 on 2012 earnings

Petrochemicals	2011	2012	2013	2014
BASF	6.2	5.6	5.5	5.5
LyondellBasell	4.8	4.6	4.0	3.8
DOW	7.3	6.6	5.9	5.2
Du Pont	9.0	7.7	7.1	6.9
Sabic	7.0	6.5	6.3	6.4
Mitsubishi Chem	6.8	6.8	6.3	6.0
Akzo Nobel	6.1	5.6	5.2	5.1
Avg Petrochem	6.7	6.2	5.7	5.6

Source: Company reports, Bloomberg, Bernstein analysis

We expect RIL to earn an EBITDA of INR 133.8bn in FY13 and an EBIT of INR 98.9bn for the year (see **Exhibit 26**). We believe RIL deserves a higher EV/EBITDA multiple because of its leadership positions in niche petrochemical segments, presence and access to the fast growing markets in Asia and hence a faster growth profile. However, in the interest of being conservative we have used an EV/EBITDA multiple of 6.5. We have used FY2013 earnings which was the closest we can get to calendar year 2012. We have assumed an EV/EBITDA multiple of 6.5x to value the division, whereby we get a value of INR 869.8bn or INR 265.7 per share (see **Exhibit 27**). It makes ~INR41 impact on valuation per share for every 1x decrease in the multiple, so for a 6x multiple, the business will be valued at INR 245 per share.

Exhibit 26

We expect an EBITDA of INR 133.8bn in FY13...

RIL Petrochem INR bn	Financial Year			
	2010/11	2011/12E	2012/13E	2013/14E
Revenues	631.6	631.1	640.8	685.7
EBITDA (e)	114.1	118.0	133.8	148.2
EBIT	93.1	96.3	98.9	105.9

Source: Company reports, Bernstein analysis

Exhibit 27

... and applying a multiple of 6.5x, we arrive at a value for the division of INR 265.7 per share

RIL Petrochem INR bn	EV/EBITDA multiple			
	6.0x	6.5x	7.0x	8.0x
FY13E EBITDA	133.8			
Valuation	802.9	869.8	936.7	1,070.5
INR per share	245.3	265.7	286.2	327.1

Source: Company reports, Bernstein analysis

How much is the Refining business worth?

RIL owns one the largest and most complex refineries in the world and generates nearly 37% of its total EBIT, or INR 92bn from this division, nearly the same as the Petrochemical business. We have tried to value this business using the same methodology as the Petrochemical business, using an EV/EBITDA multiple. RIL's peers had a multiple of 8 on 2011 EBITDA and 6.9 on 2012 EBITDA (see **Exhibit 28**). However, the average for RIL's Indian peers is actually higher at 9.7 on 2012 earnings.

Exhibit 28

The average EV/EBITDA multiple for RIL's refining peers is 6.9 on 2012 earnings

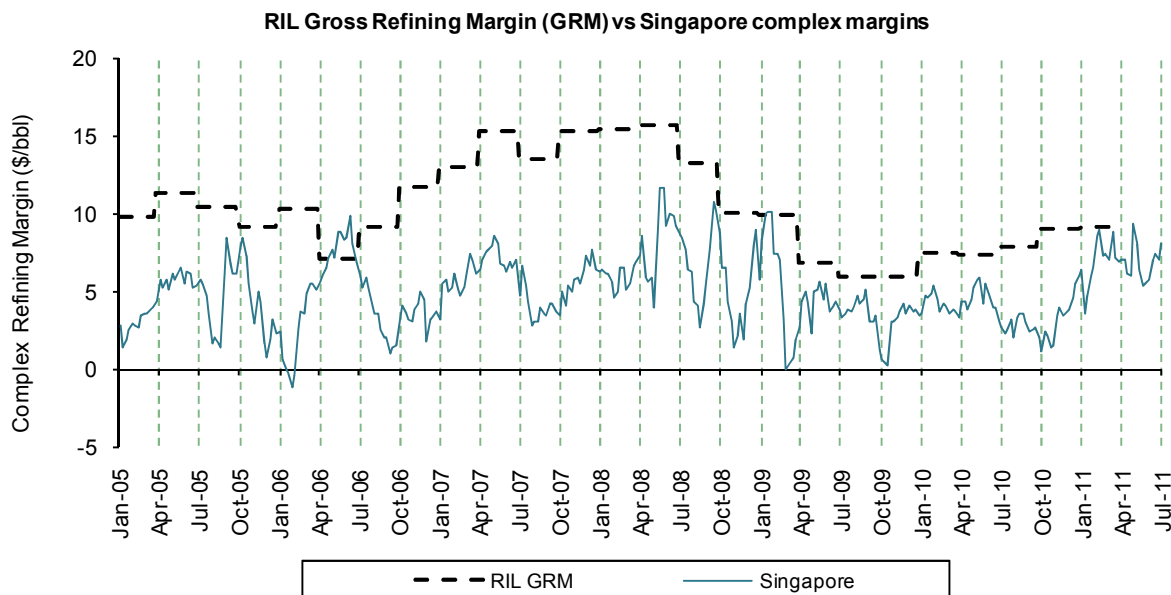
Refiners	2011	2012	2013	2014
JX Holdings	7.2	6.4	6.6	6.3
SK Innovation	6.0	5.6	5.2	4.5
Formosa Petrochem	12.5	11.7	11.2	10.2
Sinopec	5.2	4.8	4.6	4.5
Valero	3.5	3.3	3.2	3.5
Tesoro	3.5	3.6	3.9	5.2
Frontier	3.7	4.2	4.5	
Saras	4.9	4.2	3.9	4.2
Neste	7.1	5.8	5.2	4.9
GALP	15.9	11.4	10.4	10.1
IOCL	9.0	8.2	7.7	6.9
HPCL	12.9	10.8	9.0	8.3
BPCL	12.9	10.1	9.0	7.4
Average Refiners	8.0	6.9	6.5	6.3

Source: Bloomberg, Company reports, Bernstein analysis

RIL's refining business is much superior to peers, with its business maintaining a consistent, though varying, margin advantage with respect to the Singapore Complex (see **Exhibit 29**). The complexity of its refineries, which is the highest in the world, and its geographical location has allowed it to process heavier crudes and exploit the pricing differential between the US and Europe.

Exhibit 29

RIL has maintained a margin advantage with respect to the Singapore Complex



Source: Bloomberg, Company reports, Bernstein analysis

We believe RIL's refining business deserves a higher multiple, but we have valued it with a EV/EBITDA multiple of 7x, in the interests of being conservative. It has to be noted that this is lower than the multiple afforded to its Indian peers, and hence extremely conservative from a regional valuation perspective. We value RIL's refining business at INR 1,221bn, or INR 373 per share (see **Exhibit 30** and **Exhibit 31**)

Exhibit 30

We expect an EBITDA of INR 174.5bn in FY13...

RIL Refining INR bn	Financial Year			
	2010/11	2011/12E	2012/13E	2013/14E
Revenues	2,154.3	2,758.7	2,797.0	3,028.3
EBITDA (e)	129.4	169.7	174.5	190.8
EBIT	91.7	129.7	130.9	143.8

Source: Company reports, Bernstein analysis

Exhibit 31

... and using a multiple of 7x EV/EBITDA, we arrive at a value of INR 373.1 per share for the division

RIL Refining INR bn	EV/EBITDA multiple			
	6x	7x	8x	9x
FY13E EBITDA		174.5		
Valuation	1,046.7	1,221.2	1,395.6	1,570.1
INR per share	319.8	373.1	426.4	479.7

Source: Company reports, Bernstein analysis

How much is RIL Worth?

Using our base case estimates and ascribing a value of US\$21bn to the KG-D6 field and an exploration upside of US\$9bn, we arrive at a value of INR 1,125 per share for RIL (see **Exhibit 32**). Since we have taken the oil and gas production from only a part of the KG-D6 block (D1, D3 and MA fields), the value of \$21bn for the block is quite conservative. We have assumed a modest valuation of INR 2.4bn for the D6 satellite fields and haven't considered at all the valuation of other potential in-place resources of nearly 40tcf (see **Exhibit 21**).

The valuation of the fields in partnership with BP has been calculated from the BP valuation of the deal. Conservatively, this assumes that BP doesn't make any profit on this deal. To account for this, we have considered an exploration upside of US\$9bn, which is quite conservative given the total estimated in-place resources of 80tcf of gas in the KG-D6 block alone and the potential prospectivity of the other blocks. Hence, we believe that our base case valuation for RIL is quite conservative.

Exhibit 32

Base case: We arrive at a price of INR 1,125 per share using our base case estimates

RIL SOTP	Base case				Explanation
	% Equity	USD \$m	INR bn	INR/share	
Refinery		27,479	1,221.2	373.1	7.0x EV/EBITDA
Petrochemicals		19,572	869.8	265.7	6.5x EV/EBITDA
Other businesses		1,201	53.4	16.3	7.0x EV/EBITDA
Fields (ptnship with BP)		27,315	1,213.9	370.9	Derived from BP valuation
KG-D6 (Dhirubhai)	90%	18,900	839.9	256.6	of US\$ 9.0bn for 30% Stake
D6 Satellites	100%	2,400	106.7	32.6	Doesn't account for potential in-place
NEC-25	90%	1,890	84.0	25.7	Very conservative valuation
KG-D3	90%	1,350	60.0	18.3	
MN-D4	85%	1,275	56.7	17.3	Doesn't account for potential in-place
Others	100%	1,500	66.7	20.4	
Other fields		3,931	174.7	53.4	
PMT	30%	1,575	70.0	21.4	
US Shale Gas		2,356	104.7	32.0	
Cash cost		942	41.9	12.8	
Drilling carry		1,414	62.9	19.2	
Net cash		(5,627)	(250.0)	(76.4)	
Debt		(15,166)	(674.0)	(205.9)	
Cash and cash eqv.		9,540	423.9	129.5	
Core value		73,872	3,283	1,003	
Exploration upside		9,000	400.0	122.2	Very conservative given total estimates of in-place resources
Total value		82,872	3,682.8	1,125	

Source: Company reports, Bernstein analysis

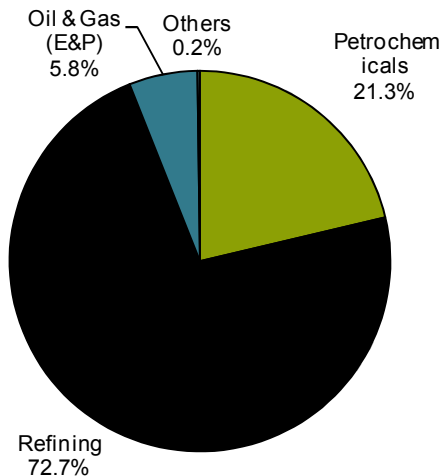
The Conglomerate Discount: Is RIL a Conglomerate?

With the huge discount of RIL's stock to its calculated intrinsic value and even a discount to a pessimistic case valuation, a lot of discussion in recent times has centered on RIL as a conglomerate, and hence deserving of the conglomerate discount of 15-20%. But is RIL a conglomerate?

The overwhelmingly vast majority of the RIL business is from oil & gas related businesses. The 'Others' segment might comprise a large share of the media space in the discussion on RIL, but its contribution to the business P&L remains exceedingly low. The 'Others' segment comprises of only 0.2% of the revenues of the company and 0.1% of the EBIT (see **Exhibit 33** and **Exhibit 34**). However much talk there might be in the media about investments in telecommunications or retail, the non-oil & gas segment remains, and will remain in our opinion, a very small component of RIL. The best way to look and analyze RIL is to see it as a vertically integrated oil and gas play.

Exhibit 33
 'Others' segment comprises 0.2% of total company revenues...

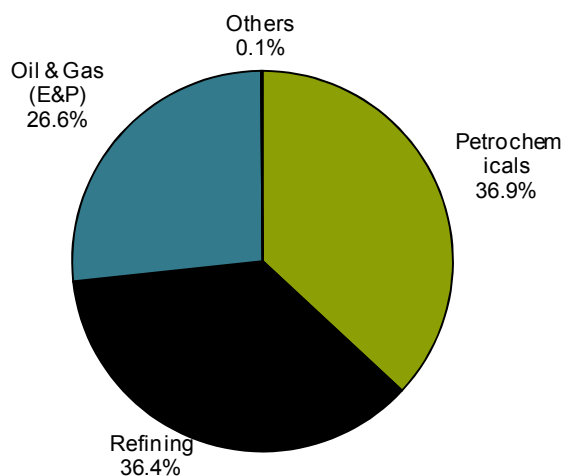
RIL: Divisional Revenue Distribution, 2010-11



Source: Company reports, Bernstein analysis

Exhibit 34
 ... and even a lesser proportion of the company EBIT

RIL: Divisional EBIT Distribution, 2010-11



Source: Company reports, Bernstein analysis

What about cash? Will the company invest the cash flow to the benefit of shareholders?

Another point of worry among analysts in recent times has been the ability of RIL to manage the cash flow its business is generating, including of course, the payout of up to US\$9bn on the consummation of the BP deal. BP has already paid US\$2bn as a deposit and with the payment of the remaining US\$5.2bn, we expect RIL cash balance to rise to INR 562bn by end of FY12 (see Exhibit 35)

Exhibit 35
 We expect RIL to acquire a cash balance of INR 562bn by end of FY12

RIL: Cash Balance	INR bn
FY11 (End of Period)	301.4
FY12	
Operating cash flow	366.8
Capex	(345.7)
BP payment (balance of \$5.2bn)	234.0
Other Investing Cash Flow	35.3
Dividends	(29.4)
FY12 (End of Period)	562.3

Source: Company reports, Bernstein analysis

We believe there are 3 reasons why, given all the uncertainties in the investment world, the market should not worry about this

1) In a fast growing country with a significant need for investment and a high cost of capital, having excess cash is a nice worry to have. Currently there is not, and in the medium term will not be, any dearth of

investment opportunities in RIL's chosen oil & gas industry. Given our estimate of the gas resources in the Indian Eastern Offshore region, we believe there will be no dearth of rich investment opportunities in this space.

2) Simultaneously, if the aforesaid cash is in the hands of one of the best project management companies in the world, we would be less worried. In the past, RIL has effectively executed setting up one of the world's largest and most complex refineries in record time. It has successfully set up an E&P business from scratch, though it probably needs some technical help from BP in managing it. It has also managed to grow vertically in the petrochemical segment to become one of the global giants in the sector. The Chairman, Mukesh Ambani, has also had the experience of setting up one of the most complex telecommunications projects in the world, before the split of the Reliance group. So project management experience is definitely not lacking and the track record of RIL proves it.

3) Excess cash in the hands of the management can be a big problem because of the agency issue. The best use of cash for management might not be the best use for shareholders and this is where the misalignment of incentives between the shareholders and management comes into play. But is RIL exposed to this? The Chairman and Managing Director, Mukesh Ambani owns nearly 45% of the group, and as far as it is possible, the objectives of the shareholders and management can be said to be perfectly aligned.

Disclosure Appendix

Valuation Methodology

We value RIL using a sum of the parts methodology (see **Exhibit 36**) at INR 1,125.

Exhibit 36

We value RIL at INR 1,125 per share

RIL SOTP	Base case			
	% Equity	USD \$m	INR bn	INR/share
Refinery		27,479	1,221.2	373.1
Petrochemicals		19,572	869.8	265.7
Other businesses		1,201	53.4	16.3
Fields (ptnship with BP)		27,315	1,213.9	370.9
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D6 Satellites	100%	2,400	106.7	32.6
NEC-25	90%	1,890	84.0	25.7
KG-D3	90%	1,350	60.0	18.3
MN-D4	85%	1,275	56.7	17.3
Others	100%	1,500	66.7	20.4
Other fields		3,931	174.7	53.4
PMT	30%	1,575	70.0	21.4
US Shale Gas		2,356	104.7	32.0
Cash cost		942	41.9	12.8
Drilling carry		1,414	62.9	19.2
Net cash		(5,627)	(250.0)	(76.4)
Debt		(15,166)	(674.0)	(205.9)
Cash and cash eqv.		9,540	423.9	129.5
Core value		73,872	3,283	1,003
Exploration upside		9,000	400.0	122.2
Total value		82,872	3,682.8	1,125

Source: Company reports, Bernstein analysis

Risks

Risks to our Reliance price target include further operational complications at the Dhirubhai field which result in a significantly lower than expected production output. Sustained weakness in refining and petrochemical margins could be a further downside risk if economic recovery is slower than expected and demand growth remains weak.

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Outperform: Stock will outpace the market index by more than 15 pp in the year ahead.

Market-Perform: Stock will perform in line with the market index to within +/-15 pp in the year ahead.

Underperform: Stock will trail the performance of the market index by more than 15 pp in the year ahead.

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12-Month Rating History as of 07/11/2011

Ticker Rating Changes

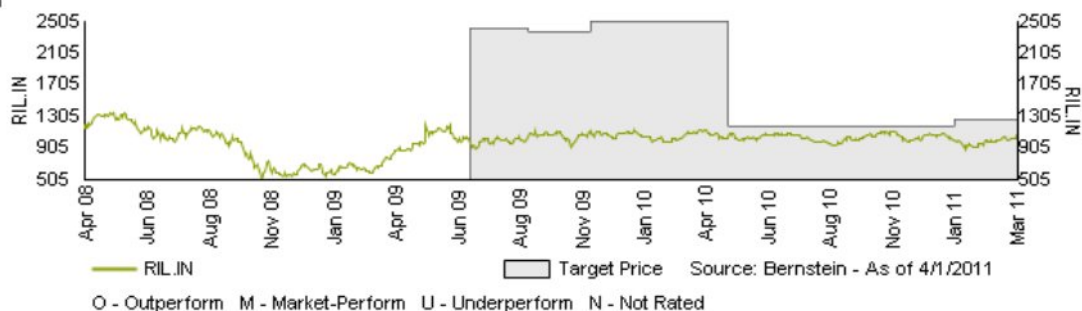
RIGD.LI M (RC) 04/27/10
 RIL.IN O (RC) 01/19/11 M (RC) 04/27/10

Rating Guide: O - Outperform, M - Market-Perform, U - Underperform, N - Not Rated
 Rating Actions: IC - Initiated Coverage, DC - Dropped Coverage, RC - Rating Change

RIL.IN / Reliance Industries Ltd

Date	Rating	Target(INR)
06/29/09	O(IC)	2400.00
09/04/09	O	2360.00
11/17/09	O	2500.00
04/27/10	M	1160.00
01/19/11	O	1250.00

IC - Initiated Coverage



RIGD.LI / Reliance Industries Ltd

Date	Rating	Target(USD)
12/18/09	O(IC)	53.40
04/27/10	M	50.50

IC - Initiated Coverage



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