

July 2, 2021

Exhibit 1: PL Universe

Companies	Rating	CMP (Rs)	TP (Rs)
Aarti Industries	HOLD	874	814
BPCL	BUY	463	581
GAIL (India)	BUY	151	184
Gujarat Gas	UR	665	NA
HPCL	BUY	298	365
Indraprastha Gas	BUY	564	662
Indian Oil Corporation	BUY	108	135
Mahanagar Gas	BUY	1,142	1,296
NOCIL	BUY	230	251
Oil India	UR	169	NA
ONGC	BUY	118	155
Petronet LNG	BUY	223	351
Reliance Industries	UR	2,129	NA

Source: PL UR = Under Review

Top Picks

Indraprastha Gas

Oil & Gas

Apr-Jun'21 Earnings Preview

Growth bumps hit Q1 results, recovery ahead

Q1FY22 Oil &Gas sector earnings will be likely impacted by lower OMCs and CGD earnings by 52%QoQ and 16%QoQ, even though upstream will improve earnings by 9%QoQ. OMC results are also expected to get hit by lower marketing margins (delay in price changes given state elections till end April) and depreciating INR (1.2%QoQ). Upstream earnings will benefit from high crude prices (+13%QoQ). RIL's standalone earnings will likely improve by 13%QoQ given higher refining profitability. CGD earnings will likely drop 16% QoQ as Covid 19 impacted volumes (-14%QoQ), in our view.

We put ratings of Gujarat Gas, Oil India and Reliance Industries 'Under Review' post sharp rise in stock prices. We shall come out with revised target prices/ ratings at the time of 1Q results. IGL is our preferred pick being a play on post covid economic recovery and structural tailwinds in gas business.

Exhibit 2: Q1FY22 sector aggregates hit by lower marketing profits

		<u> </u>			
Total (Rs m)	Q1FY22E	Q1FY21	% chg	Q4FY21	% chg
Sales	5,051,536	2,699,106	87%	4,864,183	4%
EBITDA	457,717	288,964	58%	501,808	-9%
PAT	246,754	137,390	80%	310,805	-21%
Brent (USD/bbl)	68.4	31.6	116%	60.6	13%
USD/Rs	73.8	75.9	-3%	72.9	1%

Source: Company, PL

- RIL: RIL's standalone earnings will see improvement in refining profitability. We factor in stable refining throughput (16.5MTPA, Q4FY21 17.1MTPA) given moderate pick up in global demand. Petrochemicals earnings are likely to stay healthy albeit lower QoQ.
- Downstream: We expect OMCs to report weak Q1 knowing their lower marketing profits. Marketing margins for Q1 will likely contract as retail fuel prices were left unchanged given April 21 state elections, despite jump in crude prices. Benchmark refining margins for Q1 were at US\$2.1/bbl v/s USD1.8/bbl in Q4. Gasoline and diesel spreads have improved QoQ. With crude prices improving, we expect inventory gains of Rs86bn, from Rs156bn in Q4FY21.

Exhibit 3: OMC earnings impacted by lower marketing gains

	<u> </u>		00	·	
Total (Rs m)	Q1FY22E	Q1FY21	% chg	Q4FY21	% chg
Sales	3,468,752	1,856,610	87%	3,475,648	0%
EBITDA	144,922	137,817	5%	244,215	-41%
PAT	71,592	71,538	0%	150,004	-52%
Singapore GRM (US/bbl)	2.1	-1.0	-310%	1.8	17%

Source: Company, PL

Avishek Datta

avishekdatta@plindia.com | 91-22-66322254

Upstream: Upstream companies will see earnings at Rs54.7bn, due to higher crude oil realization. Production and sales volumes are likely to be muted. We have not factored in any subsidy burden and expect net realization of ~US\$67/bbl and domestic gas price of USD2.0/mmbtu

Exhibit 4: Upstream earnings supported by higher realisations Total (Rs m) Q1FY22E Q1FY21 Q4FY21 % chg % chg Sales 261,553 147,552 237,684 10% 77% EBITDA 132,226 61,049 117% 105,482 25% PAT 1507% 54,742 3,407 50,384 9%

Source: Company, PL

Exhibit 5: Brent prices has seen sharp rise in Q1

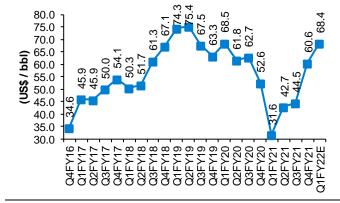
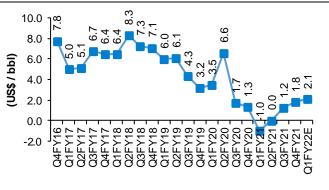


Exhibit 6: Singapore GRMs also recovered from lows



Source: Company, PL

P

Source: Company, PL

Company Name		Q1FY22E	Q1FY21	YoY gr. (%)	Q4FY21	QoQ gr. (%)	Remark
	Sales	11,283	9,048	24.7	11,431	(1.3)	
	EBITDA	2,340	1,759	33.0	2,486	(5.9)	Aarti is expected to report muted Q1 results as
Aarti Industries	Margin (%)	20.7	19.4		21.7		lockdown impacts volumes especially in the speciality chemicals segment. Pharma
	PBT	1,600	1,020	57.0	1,648	(2.9)	
	Adj. PAT	1,296	815	59.2	1,348	(3.8)	
	Sales	749,481	387,851	93.2	768,823	(2.5)	
	EBITDA	36,386	39,158	(7.1)	50,579	(28.1)	BPCL is likely to report lower earnings due to
Bharat Petroleum Corporation	Margin (%)	4.9	10.1		6.6		weak marketing margins, lower inventory
Corporation	PBT	28,886	29,262	(1.3)	52,445	(44.9)	gains.
	Adj. PAT	21,607	20,762	4.1	119,401	(81.9)	
	Sales	164,936	120,875	36.5	155,491	6.1	
	EBITDA	27,369	6,226	339.6	25,649	6.7	We expect earnings to improve due to strong
GAIL (India)	Margin (%)	16.6	5.2		16.5		petrochemicals, marketing margins and higher
	PBT	25,919	3,562	627.7	26,116	(0.8)	LPG profits.
	Adj. PAT	19,387	2,555	658.8	19,077	1.6	
	Sales	25,931	10,829	139.5	34,289	(24.4)	
	EBITDA	5,419	1,857	191.8	5,542	(2.2)	
Gujarat Gas	Margin (%)	20.9	17.2		16.2		We expect GGL profits to decline from Q4 level due to lower volumes during pandemic.
	PBT	4,539	783	479.9	4,682	(3.0)	
	Adj. PAT	3,509	587	498.3	3,499	0.3	
	Sales	623,629	377,209	65.3	748,434	(16.7)	
Hindustan	EBITDA	25,529	43,536	(41.4)	46,664	(45.3)	
Petroleum	Margin (%)	4.1	11.5		6.2		HPCL likely to report lower profits due to lower marketing earnings and inventory gains.
Corporation	PBT	19,429	37,284	(47.9)	40,685	(52.2)	manoung carnings and inventory galls.
	Adj. PAT	16,320	28,138	(42.0)	30,179	(45.9)	

Exhibit 7: Q1FY22 Result Preview

Oil & Gas

Company Name		Q1FY22E	Q1FY21	YoY gr. (%)	Q4FY21	QoQ gr. (%)	Remark
	Sales	12,694	6,386	98.8	17,081	(25.7)	
	EBITDA	4,321	834	417.8	5,605	(22.9)	
Indraprastha Gas	Margin (%)	34.0	13.1		32.8		We expect IGL profits to come off from Q4 levels due to lower volumes during pandemic.
	PBT	3,786	435	769.7	5,165	(26.7)	levels due to lower volumes during paraemic.
	Adj. PAT	2,832	318	789.7	3,863	(26.7)	
	Sales	1,361,186	623,966	118.2	1,237,140	10.0	
	EBITDA	83,007	55,123	50.6	146,972	(43.5)	
Indian Oil Corporation	Margin (%)	6.1	8.8		11.9		IOCL likely to report weak results due to lower marketing earnings and inventory gains.
	PBT	45,007	26,286	71.2	109,511	(58.9)	marketing carnings and inventory gains.
	Adj. PAT	33,665	19,108	76.2	87,812	(61.7)	
	Sales	5,926	2,618	126.4	7,177	(17.4)	
	EBITDA	2,447	800	206.0	3,162	(22.6)	
Mahanagar Gas	Margin (%)	41.3	30.6		44.1		We expect MGL profits to come off from Q4 levels due to lower volumes during pandemic.
	PBT	2,167	607	257.0	2,866	(24.4)	
	Adj. PAT	1,621	452	258.3	2,128	(23.8)	
	Sales	3,000	1,065	181.7	3,220	(6.8)	
	EBITDA	555	75	642.0	503	10.3	
NOCIL	Margin (%)	18.5	7.0		15.6		We expect earnings to be strong led by higher margins from price hikes taken.
	PBT	502	91	453.5	426	17.9	
	Adj. PAT	375	118	219.3	360	4.2	
	Sales	29,570	17,439	69.6	25,795	14.6	
	EBITDA	9,558	1,972	384.7	4,247	125.1	We expect healthy earnings growth for the
Oil India	Margin (%)	32.3	11.3		16.5		company due to higher crude oil prices.
	PBT	5,558	-1,585	(450.6)	12,103	(54.1)	Volume growth to be muted.
	Adj. PAT	4,141	-1,552	(366.7)	9,877	(58.1)	
	Sales	231,984	130,113	78.3	211,889	9.5	
Oil & Natural Gas	EBITDA	122,668	59,077	107.6	101,235	21.2	We expect healthy earnings growth due to
Corporation	Margin (%)	52.9	45.4		47.8		higher crude oil prices. Volume growth likely to
	PBT	76,668	9,035	748.6	63,144		be muted.
	Adj. PAT	50,601	4,960	920.2	67,339	(24.9)	
	Sales	82,495	48,836	68.9	75,753	8.9	
	EBITDA	12,358	9,099	35.8	10,911	13.3	We expect earnings to be impacted by high
Petronet LNG	Margin (%)	15.0	18.6		14.4		LNG prices even though the 5% tariff escalation is implemented.
	PBT	10,088	6,966	44.8	8,561	17.8	
	Adj. PAT	7,761	5,202	49.2	6,234	24.5	
	Sales	1,027,394	504,460	103.7	859,770	19.5	
	EBITDA	129,154	71,280	81.2	101,930	26.7	Earnings to improve QoQ due to improved
Reliance Industries	Margin (%)	12.6	14.1		11.9		petrochemicals profitability and recovery in refining earnings.
	PBT	110,154	43,850	151.2	74,070	48.7	
	Adj. PAT	85,810	97,530	(12.0)	76,170	12.7	

Source: Company, PL

Exhibit 8: Q4FY21 Result Snapshot

(Do. mm)		Sales			EBITDA			PBT			Adj. PAT	
(Rs mn)	Q4FY21	YoY gr.	QoQ gr.	Q4FY21	YoY gr.	QoQ gr.	Q4FY21	YoY gr.	QoQ gr.	Q4FY21	YoY gr.	QoQ gr.
ARTO IN	11,431	12.1%	0.0%	2,486	17.6%	-7.7%	1,648	23.9%	-16.8%	1,348	25.9%	-16.3%
BPCL IN	768,823	11.4%	15.2%	50,579	-917.3%	17.5%	52,445	-630.8%	14.6%	119,401	-438.9%	329.9%
GAIL IN	155,491	-12.4%	0.6%	25,649	3.6%	33.6%	26,116	6.4%	39.8%	19,077	-32.2%	28.3%
GUJGA IN	34,289	28.6%	21.2%	5,542	29.9%	-9.8%	4,682	44.9%	-10.6%	3,499	42.3%	-10.8%
HPCL IN	748,434	13.1%	9.0%	46,664	-760.4%	41.3%	40,685	-384.2%	28.8%	30,179	NA	28.2%
IGL IN	17,081	10.0%	18.1%	5,605	48.8%	11.9%	5,165	52.0%	15.2%	3,863	52.5%	15.4%
IOCL IN	1,237,140	4.5%	16.3%	146,972	6827.1%	52.7%	109,511	-575.0%	40.5%	87,812	-269.3%	78.6%
MAHGL IN	7,177	4.5%	7.7%	3,162	29.7%	-0.2%	2,866	27.5%	-1.6%	2,128	27.7%	-2.1%
NOCIL IN	3,220	51.4%	17.3%	503	37.0%	36.4%	426	38.8%	44.5%	360	60.9%	63.1%
OINL IN	25,795	-0.4%	21.3%	4,247	-138.6%	-552.7%	12,103	-345.6%	-619.9%	9,877	6.7%	-18.1%
ONGC IN	211,889	-1.2%	24.5%	101,235	17.9%	21.3%	63,144	527.0%	123.8%	67,339	-318.0%	388.6%
PLNG IN	75,753	-11.6%	3.4%	10,911	56.4%	-18.3%	8,561	76.1%	-27.0%	6,234	73.6%	-29.0%
RIL IN	859,770	11.7%	27.6%	101,930	-10.1%	17.3%	74,070	-12.3%	6.5%	76,170	195.2%	-12.9%

Source: Company, PL

Q4FY21 Management Commentary

Company	Commentary
ARTO IN	ARTO has announced capex of Rs50bn over FY22-24E, as they set up capacities to capture new chemistries which will aid import substitution. Company plans to target pharma and agrochemicals for 60% of incremental revenues, while 40% will be for discretionary space.
BPCL IN	Management has clarified that they have no intention to exit IGL/PLNG stake and they are working with government to avoid need for open offer or paring down of stake in these companies. This removes an overhang on IGL/PLNG. For FY21, NRL/BORL PAT was at Rs30.5bn/-760mn and GRMs were at \$37.23/bbl (including excise benefits) and \$6.2/bbl.
GAIL IN	Urja Ganga gas pipeline volume demand will be 11-12mscmd over next one year. Management expects transmission volumes to grow at 6-8%CAGR. Company has already tied in 80% of US cargoes for FY22 and 50% for FY23E.
GUJGA IN	The company plans to add 200 CNG stations each for FY22/23E. Downstream demand traction remains strong and will drive industrial volume growth.
HPCL IN	HPCL opened 2,158 new retail outlets for FY21; total 18,634. Company expects Mumbai refinery expansion to be commissioned in Q2FY22 and Vizag expansion by FY23E.
IGL IN	Schools/ IT firms account for 15% of CNG demand and rising vaccination will aid volume rampup. Margins are likely to sustain at Rs8/scm.
IOCL IN	IOCL opened 3,000 new retail outlets in FY21 and total outlet population was at 32,060. Capex for FY21 was at Rs270bn and will be at Rs285bn for FY22E.
MAHGL IN	Volumes for May21 was down 25% from Q4 levels due to pandemic restrictions. Discussions with OMCs continue over commission.
NOCIL IN	Healthy demand in domestic and export markets drive growth. Volume traction healthy in replacement and OEM market. Another round of price hike in April 21 to pass on higher RM prices.
OINL IN	Acquisition of NRL stake is value accretive and the refiner is on track to expand capacity to 9MTPA by FY25E. Revised capex is likely to be Rs280bn and will be funded in 70:30 D/E.
ONGC IN	Domestic gas prices are to be revised up 50% in Oct 21. Project timeline remain uncertain in the pandemic.
PLNG IN	PLNG has lined up capex of Rs187bn over next five years to set up 1,000 LNG stations, 100 CBG plants along with setting up of tanks.
RIL IN	Gas volumes to ramp to 18mmscmd in near term as new fields are brought into production. QoQ improvement in Oil to Chemicals segment was due to stable demand and improvement in fuels, polymer and polyester margin due to supply disruptions, which will likely continue.

Exhibit 9: Valuation Summary

Company Names	010	2 Detine	CMP	ТР	MCap		Sales (Rs bn)		E	BITDA	(Rs bn)			PAT (F	Rs bn)			EPS (Rs)			RoE	(%)			PE (x)	
Company Names	5/0	C Rating	(Rs)	(Rs)	(Rs bn)	FY20	FY21E	FY22E	FY23E	FY20	FY21E	FY22E	FY23E	FY20	FY21E	FY22E	FY23E	FY20	FY21E	FY22E	FY23E	FY20	FY21E I	Y22E	FY23E	FY20	FY21E I	Y22E F	-Y23E
Aarti Industries	S	HOLD	874	814	152.3	39.9	43.2	61.5	70.4	9.3	9.3	20.1	16.3	5.2	5.1	13.3	9.5	15.0	14.7	38.1	27.1	19.2	16.3	33.1	18.8	58.2	59.3	23.0	32.2
BPCL	S	BUY	463	581	968.5	2,845.7	2,301.6	2,719.7	3,224.1	83.5	213.0	133.4	169.2	36.7	120.5	88.3	121.4	18.6	57.6	42.2	58.0	9.7	26.8	15.4	18.9	24.8	8.0	11.0	8.0
GAIL (India)	S	BUY	151	184	682.4	718.7	567.3	745.2	1,037.7	83.7	64.5	89.7	115.5	65.2	47.7	63.3	81.9	14.5	10.6	14.0	18.2	14.8	10.5	13.0	15.4	10.5	14.3	10.8	8.3
Gujarat Gas	S	UR	665	NA	457.9	103.0	98.5	105.6	138.5	16.3	20.9	24.2	28.9	11.9	12.8	15.6	19.7	17.3	18.5	22.6	28.7	43.6	32.8	29.0	27.1	38.4	35.9	29.4	23.2
HPCL	S	BUY	298	365	432.7	2,687.7	2,330.0	2,472.2	2,774.4	51.2	159.3	117.8	129.7	38.5	106.6	60.1	67.1	25.2	73.4	41.4	46.2	13.5	32.7	15.6	15.5	11.8	4.1	7.2	6.4
Indraprastha Gas	S	BUY	564	662	394.6	64.9	49.4	62.2	74.0	15.2	14.8	20.5	23.7	11.4	10.1	13.6	15.3	16.2	14.4	19.4	21.8	24.7	18.4	21.2	20.2	34.7	39.2	29.0	25.8
Indian Oil Corporation	S	BUY	108	135	995.7	4,843.6	3,639.5	5,084.7	5,618.4	164.0	405.9	339.9	354.5	67.0	193.7	160.1	163.6	7.3	21.1	17.4	17.8	6.4	18.7	13.6	12.8	14.9	5.1	6.2	6.1
Mahanagar Gas	S	BUY	1,142	1,296	112.8	29.7	21.5	26.6	33.0	10.5	9.3	11.5	14.7	7.9	6.2	7.9	10.1	80.3	62.7	79.9	102.6	29.7	20.0	22.5	24.5	14.2	18.2	14.3	11.1
NOCIL	S	BUY	230	251	38.3	8.5	9.2	12.7	17.9	1.8	1.3	2.2	3.5	1.3	0.9	1.4	2.4	7.9	5.2	8.6	14.3	11.2	7.1	10.7	16.1	29.1	44.3	26.8	16.1
Oil India	S	UR	169	NA	183.5	121.3	86.2	133.2	148.8	25.9	12.7	38.9	44.0	25.8	21.9	26.3	29.3	23.8	20.2	24.2	27.0	9.9	8.7	9.8	10.3	7.1	8.4	7.0	6.3
ONGC	S	BUY	118	155	1,490.1	4,250.0	3,605.7	4,301.8	4,738.8	611.7	566.0	732.6	780.5	205.9	243.6	313.4	309.3	16.4	19.4	24.9	24.6	9.7	10.0	10.9	10.1	7.2	6.1	4.8	4.8
Petronet LNG	S	BUY	223	351	335.1	354.5	260.2	311.0	364.9	39.9	24.9	45.5	54.9	27.7	7.4	29.2	37.3	18.5	4.9	19.5	24.9	28.4	6.8	24.7	29.5	12.1	45.2	11.5	9.0
Reliance Industries	S	UR	2,129	NA	13,721.7	3,359.8	2,456.7	3,626.7	4,090.6	518.5	335.0	537.3	630.0	351.5	276.4	390.0	502.5	55.4	42.9	60.5	78.0	8.5	6.1	7.6	8.9	38.4	49.6	35.2	27.3

Source: Company, PL

S=Standalone / C=Consolidated / UR = Under Review

Exhibit 10: Change in Estimates

	Rating		Та	wat Duia				Sale	es					PA	Т			EPS					
	Rat	ung	Tar	get Pric	9		FY22			FY23			FY22			FY23			FY22			FY23	
	С	Р	С	Р	% Chng.	С	Р	% Chng.	C	Р	% Chng.	С	Р	% Chng.	C	Р	% Chng.	С	Ρ	% Chng.	С	Р	% Chng.
Aarti Industries	HOLD	HOLD	814	814	0.0%	61,548	61,548	0.0%	70,360	70,360	0.0%	13,262	13,262	0.0%	9,453	9,453	0.0%	38.1	76.1	-50.0%	27.1	54.3	-50.0%
BPCL	BUY	BUY	581	581	0.0%	27,19,685	27,19,685	0.0%	32,24,139	32,24,139	0.0%	88,276	88,276	0.0%	1,21,409	1,21,409	0.0%	42.2	42.2	0.0%	58.0	58.0	0.0%
GAIL (India)	BUY	BUY	184	184	0.0%	7,45,232	7,45,232	0.0%	10,37,745	10,37,745	0.0%	63,304	63,304	0.0%	81,897	81,897	0.0%	14.0	14.0	0.0%	18.2	18.2	0.0%
Gujarat Gas	UR	BUY	NA	666	NA	1,05,629	1,05,629	0.0%	1,38,491	1,38,491	0.0%	15,573	15,573	0.0%	19,725	19,725	0.0%	22.6	22.6	0.0%	28.7	28.7	0.0%
HPCL	BUY	BUY	365	404	-9.7%	24,72,228	24,72,228	0.0%	27,74,385	27,74,385	0.0%	60,127	60,127	0.0%	67,128	67,128	0.0%	41.4	41.4	0.0%	46.2	46.2	0.0%
Indraprastha Gas	BUY	BUY	662	662	0.0%	62,158	62,158	0.0%	74,023	74,023	0.0%	13,596	13,596	0.0%	15,277	15,277	0.0%	19.4	19.4	0.0%	21.8	21.8	0.0%
Indian Oil Corporation	BUY	BUY	135	135	0.0%	50,84,653	50,84,653	0.0%	56,18,392	56,18,392	0.0%	1,60,108	1,60,108	0.0%	1,63,639	1,63,639	0.0%	17.4	17.4	0.0%	17.8	17.8	0.0%
Mahanagar Gas	BUY	BUY	1,296	1,296	0.0%	26,571	26,571	0.0%	33,008	33,008	0.0%	7,891	7,891	0.0%	10,134	10,134	0.0%	79.9	79.9	0.0%	102.6	102.6	0.0%
NOCIL	BUY	BUY	251	251	0.0%	12,749	12,749	0.0%	17,900	17,900	0.0%	1,427	1,427	0.0%	2,374	2,374	0.0%	8.6	8.6	0.0%	14.3	14.3	0.0%
Oil India	UR	UR	-	NA	NA	1,33,219	1,08,400	22.9%	1,48,811	1,24,303	19.7%	26,269	9,759	169.2%	29,262	12,359	136.8%	24.2	9.0	169.2%	27.0	11.4	136.8%
ONGC	BUY	BUY	155	155	0.0%	43,01,776	43,01,776	0.0%	47,38,764	47,38,764	0.0%	3,13,363	3,13,363	0.0%	3,09,291	3,09,291	0.0%	24.9	24.9	0.0%	24.6	24.6	0.0%
Petronet LNG	BUY	BUY	351	351	0.0%	3,11,015	3,11,015	0.0%	3,64,931	3,64,931	0.0%	29,201	29,201	0.0%	37,314	37,314	0.0%	19.5	19.5	0.0%	24.9	24.9	0.0%
Reliance Industries	UR	BUY	NA	2,256	NA	36,26,668	34,47,484	5.2%	40,90,552	39,09,392	4.6%	3,90,037	3,99,307	-2.3%	5,02,479	5,13,737	-2.2%	60.5	62.0	-2.3%	78.0	79.7	-2.2%

Source: Company, PL

C=Current / P=Previous / UR=Under Review

Oil & Gas

Analyst Coverage Universe

Sr. No.	Company Name	Rating	TP (Rs)	Share Price (Rs)
1	Aarti Industries	Hold	1,628	1,666
2	Bharat Petroleum Corporation	BUY	581	472
3	GAIL (India)	BUY	184	164
4	Gujarat Gas	BUY	666	540
5	Hindustan Petroleum Corporation	BUY	404	276
6	Indian Oil Corporation	BUY	135	105
7	Indraprastha Gas	BUY	662	513
8	Mahanagar Gas	BUY	1,296	1,139
9	NOCIL	BUY	251	209
10	Oil & Natural Gas Corporation	BUY	155	122
11	Oil India	UR	-	122
12	Petronet LNG	BUY	351	228
13	Reliance Industries	BUY	2,256	1,995

PL's Recommendation Nomenclature

Buy Accumulate Hold Reduce Sell	::	> 15% 5% to 15% +5% to -5% -5% to -15% < -15%
Sell Not Rated (NR) Under Review (UR)	:	< -15% No specific call on the stock Rating likely to change shortly

ANALYST CERTIFICATION

(Indian Clients)

We/I Mr. Avishek Datta- MBA Research Analysts, authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

(US Clients)

The research analysts, with respect to each issuer and its securities covered by them in this research report, certify that: All of the views expressed in this research report accurately reflect his or her or their personal views about all of the issuers and their securities; and No part of his or her or their compensation was, is or will be directly related to the specific recommendation or views expressed in this research report.

DISCLAIMER

Indian Clients

Prabhudas Lilladher Pvt. Ltd, Mumbai, India (hereinafter referred to as "PL") is engaged in the business of Stock Broking, Portfolio Manager, Depository Participant and distribution for third party financial products. PL is a subsidiary of Prabhudas Lilladher Advisory Services Pvt Ltd. which has its various subsidiaries engaged in business of commodity broking, investment banking, financial services (margin funding) and distribution of third party financial/other products, details in respect of which are available at www.plindia.com.

This document has been prepared by the Research Division of PL and is meant for use by the recipient only as information and is not for circulation. This document is not to be reported or copied or made available to others without prior permission of PL. It should not be considered or taken as an offer to sell or a solicitation to buy or sell any security.

The information contained in this report has been obtained from sources that are considered to be reliable. However, PL has not independently verified the accuracy or completeness of the same. Neither PL nor any of its affiliates, its directors or its employees accepts any responsibility of whatsoever nature for the information, statements and opinion given, made available or expressed herein or for any omission therein.

Recipients of this report should be aware that past performance is not necessarily a guide to future performance and value of investments can go down as well. The suitability or otherwise of any investments will depend upon the recipient's particular circumstances and, in case of doubt, advice should be sought from an independent expert/advisor.

Either PL or its affiliates or its directors or its employees or its representatives or its clients or their relatives may have position(s), make market, act as principal or engage in transactions of securities of companies referred to in this report and they may have used the research material prior to publication.

PL may from time to time solicit or perform investment banking or other services for any company mentioned in this document.

PL is in the process of applying for certificate of registration as Research Analyst under Securities and Exchange Board of India (Research Analysts) Regulations, 2014

PL submits that no material disciplinary action has been taken on us by any Regulatory Authority impacting Equity Research Analysis activities.

PL or its research analysts or its associates or his relatives do not have any financial interest in the subject company.

PL or its research analysts or its associates or his relatives do not have actual/beneficial ownership of one per cent or more securities of the subject company at the end of the month immediately preceding the date of publication of the research report.

PL or its research analysts or its associates or his relatives do not have any material conflict of interest at the time of publication of the research report.

PL or its associates might have received compensation from the subject company in the past twelve months.

PL or its associates might have managed or co-managed public offering of securities for the subject company in the past twelve months or mandated by the subject company for any other assignment in the past twelve months.

PL or its associates might have received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months.

PL or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months

PL or its associates might have received any compensation or other benefits from the subject company or third party in connection with the research report.

PL encourages independence in research report preparation and strives to minimize conflict in preparation of research report. PL or its analysts did not receive any compensation or other benefits from the subject Company or third party in connection with the preparation of the research report. PL or its Research Analysts do not have any material conflict of interest at the time of publication of this report.

It is confirmed that Mr. Avishek Datta- MBA Research Analysts of this report have not received any compensation from the companies mentioned in the report in the preceding twelve months

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

The Research analysts for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

The research analysts for this report has not served as an officer, director or employee of the subject company PL or its research analysts have not engaged in market making activity for the subject company

Our sales people, traders, and other professionals or affiliates may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest.

PL and its associates, their directors and employees may (a) from time to time, have a long or short position in, and buy or sell the securities of the subject company or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company or act as an advisor or lender/borrower to the subject company or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

US Clients

This research report is a product of Prabhudas Lilladher Pvt. Ltd., which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to statisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by Prabhudas Lilladher Pvt. Ltd. only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, Prabhudas Lilladher Pvt. Ltd. has entered into an agreement with a U.S. registered broker-dealer, Marco Polo Securities Inc. ("Marco Polo").

Transactions in securities discussed in this research report should be effected through Marco Polo or another U.S. registered broker dealer.

Prabhudas Lilladher Pvt. Ltd.

3rd Floor, Sadhana House, 570, P. B. Marg, Worli, Mumbai-400 018, India | Tel: (91 22) 6632 2222 Fax: (91 22) 6632 2209 www.plindia.com