

August 4, 2023

Q1FY24 Result Update

Change in Estimates | Target | Reco

Change in Estimates

	Current		Previous	
	FY24E	FY25E	FY24E	FY25E
Rating	ACCUMULATE		BUY	
Target Price	935		923	
Sales (Rs. m)	15,74,737	18,58,384	15,52,133	18,50,196
% Chng.	1.5	0.4		
EBITDA (Rs. m)	8,19,106	9,57,244	8,13,290	9,63,858
% Chng.	0.7	(0.7)		
EPS (Rs.)	19.1	39.1	22.8	40.8
% Chng.	(16.2)	(4.2)		

Key Financials - Consolidated

Y/e Mar	FY22	FY23	FY24E	FY25E
Sales (Rs. bn)	1,165	1,391	1,575	1,858
EBITDA (Rs. bn)	575	713	819	957
Margin (%)	49.4	51.2	52.0	51.5
PAT (Rs. bn)	43	83	108	222
EPS (Rs.)	7.8	14.8	19.1	39.1
Gr. (%)	(107.2)	88.3	29.1	104.8
DPS (Rs.)	3.0	4.0	5.0	9.0
Yield (%)	0.3	0.4	0.6	1.0
RoE (%)	6.9	11.6	11.3	18.2
RoCE (%)	10.7	12.9	12.2	14.1
EV/Sales (x)	5.5	5.1	4.4	3.6
EV/EBITDA (x)	11.2	10.0	8.5	7.0
PE (x)	113.4	60.2	46.6	22.8
P/BV (x)	7.3	6.5	4.5	3.9

Key Data

BRTI.BO | BHARTI IN

52-W High / Low	Rs.902 / Rs.681
Sensex / Nifty	65,721 / 19,517
Market Cap	Rs.5,168bn / \$ 62,383m
Shares Outstanding	5,593m
3M Avg. Daily Value	Rs.5133.45m

Shareholding Pattern (%)

Promoter's	55.02
Foreign	21.48
Domestic Institution	19.69
Public & Others	3.81
Promoter Pledge (Rs bn)	-

Stock Performance (%)

	1M	6M	12M
Absolute	2.8	12.2	28.1
Relative	2.5	3.9	13.7

Swarnendu Bhushan

swarnendubhushan@plindia.com | 91-22-66322260

Improved subscriber mix drives performance

Quick Pointers:

- Highest ever post-paid addition of 0.83mn subscribers; Bharti's India Mobile ARPU touched Rs200 after ~10years.
- Maintained pole position in B-B segment; witnessed increased demand in data and core connectivity related solutions.

Bharti Airtel (BHARTI) reported another strong set of results with consolidated EBIDTA/NI of Rs196.0bn (+4.8%QoQ; PLe Rs188.5bn)/Rs16.1bn (-46.4%QoQ; PLe Rs21.5bn). The drop NI is on account of Foreign Exchange loss of Rs34.2bn in devaluation of Naira by ~62%. Bharti's India mobile revenues were up 4.3%QoQ and EBIDTA margins expanded to 54.8%. ARPU reached the Rs200 mark (PLe Rs196) after ~10 years owing to improved subscriber mix. Africa Revenue/EBITDA was up 2.7%/3.6%QoQ and Enterprise revenue increased by 5.6%, while EBIDTA margin contracted by 160bps QoQ. Home services (fixed line + broadband) along with DTH EBITDA increased by 6.0%/4.5% each.

We remain structurally positive on Indian telecom and BHARTI given its favorable competitive structure. Also aggressive customer focused growth plans will create a virtuous cycle of growth for Bharti, in our view. Given recent run up in stock price, we downgrade our rating to 'Accumulate' from Buy at SOTP based PT of Rs935 (Rs923 earlier) even as we marginally increase FY24/FY25 ARPU to Rs210/Rs238.

4G subscriber addition of 5.6m drives India mobile business: India mobile Q1 Revenue and EBIDTA came in at Rs203.9bn (+4.3%QoQ; PLe Rs198.1bn) and Rs111.7bn (+6.1%QoQ; PLe Rs105.2bn) resp., while margins expanded by 93bps to 54.8%. This compares well against Jio's EBIDTA growth of 3.4%QoQ and flat margin growth to 52.2%. ARPU also increased by 3.3% to reach the milestone of Rs200 compared to 1% increase to Rs181 of Jio, aided by highest ever Post-paid addition of 0.83mn (Q4FY23 0.66mn). Q1 4G net subscriber addition of 5.6mn (Jio 9.2mn) was also steady considering Jio's aggressive offers before the IPL season. However, we expect ARPU growth to be muted in near term, as players consolidate their position and roll out 5G network. We factor FY24/25E net subscriber adds at 12.2mn/12.5mn along with ARPU of Rs210/238.

Africa performance operationally steady: Q1 Africa revenues and EBIDTA were up to \$1.4bn (+2.7%QoQ) and \$682mn (+3.6%QoQ). Total subscriber addition of 3.1mn aided ARPU to increase to \$2.5 (\$2.4) expanding EBIDTA margins to 49.5% (Q4FY23 49.0%). After Central Bank of Nigeria's (CBN) announcement related to changes in Nigerian Foreign Exchange operation, Naira depreciated by ~62% against USD and loss of Rs34.2bn has been recognized in P&L. This anchored the bottom line which in turn was partly compensated by drop in NCI due to the same reason. This step is expected to create a positive impact overall creating a more stable Nigerian FX market.

Steady improvement in DTH and home services EBITDA: In Q1 the Enterprise segment revenue grew to Rs 50.5bn (+5.6%QoQ; PLe Rs49.8bn) although EBITDA only grew by 1.5% due to 160bps decrease in margins to 39.5% at Rs19.7bn (PLE Rs20.4bn). Home services revenue was at Rs11.6bn (+6.0%QoQ; PLe Rs11.4bn) and EBITDA was at Rs5.8bn (+6.0%QoQ; PLe Rs5.8bn) and margins remained flat at 50.4%. Although ARPU decreased by 1.0% to come in at Rs608 (Q4FY23: 614), subscriber base was up 6.8%QoQ at 6.5mn.

DTH EBITDA was up 4.5%QoQ to Rs4.3bn, due to increase in revenue to Rs7.4bn (+1.5%). ARPU growth remained muted to 1% to Rs154. Subscriber base was also down marginally and totaled to 15,918k.

Step up in India Mobile CAPEX: CAPEX intensity has increased drastically in the last 3 quarters. Consol CAPEX was Rs105bn (+64% YoY) led by India Mobile at Rs78.3bn (+112% YoY) in 5G rollouts to increase site coverage. Home Services and Enterprise CAPEX cooled off to Rs5.0bn and Rs6.1bn (-24.4% and -10.5%). Africa CAPEX came off from the highs of last couple of quarters to Rs11.5bn (+5.7%).

Conference Call Highlights

- Rs300 is long term ARPU target.
- 25% of DTH adds comes from Airtel Black customers.
- In the Top 150 cities, 65-70% of post-paid subscribers are on family plan and >30% are Airtel Black customers.
- More than 30% of post-paid subscribers are on Airtel Black.
- War-on-waste program has helped bring down tower CAPEX by 7%.
- Early days to judge impact of Jio Bharat phone. Airtel focuses on upgrading feature phones to smartphones as they only account for 18% of Airtel revenues.
- 30% offloads have been observed with 5G sites, installed base is 13-14%.
- ARPU increase is not just with 5G, but on aggregate level.
- Bharti has stopped 4G CAPEX, except for some rural areas. All CAPEX are towards 5G.
- 5G upgradation in sites allows up to 5x data capacity of a 4G site for the same spectrum.
- '1 world plan' for roaming has seen good response.

Exhibit 1: Strong performance lead by India Mobile

Y/e March	Q1FY24	Q1FY23	YoY gr.	Q3FY23	QoQ gr.	FY23	FY22	YoY gr.
Revenue	374,400	328,046	14.13%	3,58,044	3.97%	13,91,448	11,65,469	19.4%
Operating Expenses								
Cost of services (Excl D&A)	135,983	128,067	6.18%	1,33,410	1.65%	5,27,465	4,72,785	11.6%
Access charges	19,972	18,698	6.81%	19,352	5.97%	76,207	67,611	12.7%
License fees, revenue share & spectrum charges	29,403	31,306	-6.08%	28,421	3.97%	1,17,517	1,10,636	6.2%
Network operations costs	74,036	66,828	10.79%	73,284	0.02%	2,85,433	2,50,205	14.1%
Employee costs	12,572	11,235	11.90%	12,353	-0.49%	48,308	44,333	9.0%
SG&A (excl amortization of intangibles-take it from schedule of operating expenses)	20,596	15,669	31.44%	19,118	3.79%	72,454	53,035	36.6%
Elimination	21,836	19,016	14.83%	20,984	12.00%	78,794	64,310	22.5%
Total Operating Expense	178,415	162,752	9.62%	1,73,512	3.06%	6,78,713	5,90,130	15.0%
EBITDA	195,985	165,294	18.57%	1,84,532	4.82%	7,12,735	5,75,339	23.9%
Depreciation and amortization	96,538	87,814	9.93%	92,977	2.64%	3,64,318	3,30,433	10.3%
Interest	56,137	40,593	38.29%	46,856	8.73%	1,92,999	1,66,083	16.2%
Other income	3,483	1,922	81.22%	2,576	22.25%	9,366	5,343	75.3%
PBT	46,793	38,809	20.57%	47,275	6.03%	1,64,784	84,167	95.8%
Tax	-3,327	11,233	-129.62%	10,756	-142.22%	42,733	41,779	2.3%
Share of profits in associates / joint ventures	5,899	1,628	262.35%	(3,684)	-1.85%	7,521	24,232	-69.0%
PAT	49,365	24,688	99.96%	26,137	16.81%	1,22,874	66,620	84.4%
PAT post minority interest	16,125	16,069	0.35%	15,882	-46.35%	83,459	26,117	219.6%

Source: Company, PL

Exhibit 2: BHARTI's SOTP

Segment	Stake	FY25E EBITDA	EV/E (x)	(Rs m)	Remarks
India mobile business	100.0%	538	9.0	4,905	
Airtel Africa	55.5%	264	4.0	578	MTN/Vodacom trade at 2.8x/4.5x EV/EBITDA
Enterprise segment	100.0%	101	8.5	875	Peer valuation
Stake in Indus tower	47.7%	148	5.0	353	Consensus estimates
DTH	100.0%	19	2.7	50	DISH TV trades at 1.6x FY25E EBITDA
Home services	100.0%	44	5.5	233	
EV				6,994	
Net debt				1,688	
Equity value (Rs bn)				5,306	
Equity value/share				935	

Source: PL

Exhibit 3: Bharti Quarterly Details

Y/e March (Rs m)	Q1FY23	Q2FY23	Q3FY23	Q4FY23	Q1FY24
India operations					
Total revenues	2,33,189	2,43,333	2,50,301	2,53,207	264,629
<i>QoQ growth</i>	3.6%	4.3%	2.9%	1.2%	4.5%
Adjusted EBITDA	1,18,817	1,26,056	1,31,540	133,888	141,430
<i>QoQ growth</i>	3.9%	6.1%	4.4%	1.8%	5.6%
<i>Margin (%)</i>	51.0%	51.8%	52.6%	52.9%	53.4%
Africa operations					
Revenues (\$mn)	1,257	1,308	1,350	1,341	1,377
<i>QoQ growth</i>	2.9%	4.0%	3.2%	-0.7%	2.7%
EBITDA (\$ mn)	614	641	663	659	682
<i>QoQ growth</i>	0.6%	4.5%	3.4%	-0.7%	3.6%
<i>Margin (%)</i>	48.8%	49.1%	49.1%	49.1%	49.5%
Subscribers (m)	131.6	134.7	138.5	140.0	143.1
ARPU (\$/mon)	2.9	3.1	3.1	113.1	119.7
India wireless					
Revenues	1,82,200	1,89,576	193,527	195,493	203,924
<i>QoQ growth</i>	3.4%	4.0%	2.1%	1.0%	4.3%
EBITDA	93,281	99,258	104,121	105,227	111,665
<i>QoQ growth</i>	5.4%	6.4%	4.9%	1.1%	6.1%
<i>Margin (%)</i>	51.2%	52.4%	53.8%	53.8%	54.8%
Subscribers EoP (m)	327.3	327.8	332.2	335.4	338.6
ARPU (Rs)	183	190	193	193	200
<i>QoQ growth</i>	2.8%	3.6%	1.9%	-0.1%	3.3%
Homes					
Revenues	9,265	9,898	10,343	10,966	11,621
<i>QoQ growth</i>	5.7%	6.8%	4.5%	6.0%	6.0%
EBITDA	4,927	4,983	5,173	5,526	5,860
<i>QoQ growth</i>	3.2%	1.1%	3.8%	6.8%	6.0%
<i>Margin (%)</i>	53.2%	50.3%	50.0%	50.4%	50.4%
Enterprise Business					
Revenues	43,656	46,646	47,779	47,850	50,545
<i>QoQ growth</i>	4.4%	6.8%	2.4%	0.1%	5.6%
EBITDA	17,011	18,293	19,050	19,680	19,979
<i>QoQ growth</i>	3.4%	7.5%	4.1%	3.3%	1.5%
<i>Margin (%)</i>	39.0%	39.2%	39.9%	41.1%	39.5%
DTH					
Revenues	7,482	7,288	7,390	7,290	7,403
EBITDA	4,779	4,352	4,132	4,081	4,264
<i>Margin (%)</i>	63.9%	59.7%	55.9%	56.0%	57.6%
DTH subs (m)	15.71	15.77	15.99	15.95	15.92
DTH ARPU (Rs)	158	155	154	153	154
Capex					
Consolidated	63,982	70,469	93,136	1,14,360	104,858
India mobile	36,945	39,107	63,793	66,471	78,290
Africa	10,880	13,500	12,077	23,943	11,503
Home services	6,604	5,886	4,966	4,280	4,995
Enterprise	6,861	8,792	7,660	15,599	6,140
DTH	2,470	3,054	4,534	3,544	3,843
SE Asia	221	130	104	523	87

Source: Company, PL

Financials

Income Statement (Rs m)

Y/e Mar	FY22	FY23	FY24E	FY25E
Net Revenues	11,65,469	13,91,448	15,74,737	18,58,384
YoY gr. (%)	15.8	19.4	13.2	18.0
Cost of Goods Sold	-	-	-	-
Gross Profit	11,65,469	13,91,448	15,74,737	18,58,384
Margin (%)	100.0	100.0	100.0	100.0
Employee Cost	44,333	48,308	54,584	68,760
Other Expenses	64,310	78,794	87,344	87,344
EBITDA	5,75,339	7,12,735	8,19,106	9,57,244
YoY gr. (%)	543.8	23.9	14.9	16.9
Margin (%)	49.4	51.2	52.0	51.5
Depreciation and Amortization	3,30,433	3,64,318	4,16,470	4,28,970
EBIT	2,44,906	3,48,417	4,02,636	5,28,274
Margin (%)	21.0	25.0	25.6	28.4
Net Interest	1,66,083	1,92,999	1,95,481	2,21,162
Other Income	5,343	9,366	-	-
Profit Before Tax	84,167	1,64,784	2,07,154	3,07,112
Margin (%)	7.2	11.8	13.2	16.5
Total Tax	41,779	42,733	50,724	70,960
Effective tax rate (%)	49.6	25.9	24.5	23.1
Profit after tax	42,388	1,22,051	1,56,430	2,36,151
Minority interest	40,503	39,415	39,415	43,286
Share Profit from Associate	-	-	-	-
Adjusted PAT	43,103	83,459	1,08,277	2,21,721
YoY gr. (%)	(107.2)	93.6	29.7	104.8
Margin (%)	3.7	6.0	6.9	11.9
Extra Ord. Income / (Exp)	-	-	-	-
Reported PAT	43,103	83,459	1,08,277	2,21,721
YoY gr. (%)	(107.2)	93.6	29.7	104.8
Margin (%)	3.7	6.0	6.9	11.9
Other Comprehensive Income	-	-	-	-
Total Comprehensive Income	43,103	83,459	1,08,277	2,21,721
Equity Shares O/s (m)	5,492	5,647	5,673	5,673
EPS (Rs)	7.8	14.8	19.1	39.1

Source: Company Data, PL Research

Balance Sheet Abstract (Rs m)

Y/e Mar	FY22	FY23	FY24E	FY25E
Non-Current Assets				
Gross Block	22,53,815	26,64,649	29,14,649	31,64,649
Tangibles	22,53,815	26,64,649	29,14,649	31,64,649
Intangibles	-	-	-	-
Acc: Dep / Amortization	13,48,090	17,12,408	20,03,873	23,07,838
Tangibles	13,48,090	17,12,408	20,03,873	23,07,838
Intangibles	-	-	-	-
Net fixed assets	9,05,725	9,52,241	9,10,776	8,56,811
Tangibles	9,05,725	9,52,241	9,10,776	8,56,811
Intangibles	-	-	-	-
Capital Work In Progress	3,64,672	6,56,759	6,73,203	6,90,141
Goodwill	12,12,822	12,75,231	16,37,555	15,19,440
Non-Current Investments	3,24,771	6,93,272	7,09,335	7,25,940
Net Deferred tax assets	1,74,762	1,68,757	1,77,195	1,86,055
Other Non-Current Assets	1,09,041	1,24,297	1,31,532	1,39,230
Current Assets				
Investments	8,614	47,045	49,397	51,867
Inventories	3,750	2,576	4,850	5,901
Trade receivables	40,562	39,815	56,087	66,189
Cash & Bank Balance	1,34,943	1,34,186	4,33,961	9,00,244
Other Current Assets	1,17,152	1,29,243	1,42,167	1,56,384
Total Assets	36,36,560	44,66,332	51,92,158	55,89,754
Equity				
Equity Share Capital	27,950	28,366	29,873	29,873
Other Equity	6,37,593	7,47,263	11,03,323	12,73,985
Total Network	6,65,543	7,75,629	11,33,195	13,03,857
Non-Current Liabilities				
Long Term borrowings	14,25,912	20,23,981	21,36,709	23,43,085
Provisions	4,639	4,744	4,981	5,230
Other non current liabilities	1,537	4,552	4,780	5,019
Current Liabilities				
ST Debt / Current of LT Debt	2,70,867	2,36,222	2,77,404	2,97,127
Trade payables	2,92,741	3,28,946	2,84,335	3,12,768
Other current liabilities	5,76,652	6,54,470	7,08,697	7,86,909
Total Equity & Liabilities	36,36,560	44,66,332	50,34,752	55,89,754

Source: Company Data, PL Research

Cash Flow (Rs m)

Y/e Mar	FY22	FY23	FY24E	FY25E
PBT	1,08,399	1,72,305	2,32,580	3,35,966
Add. Depreciation	3,30,433	3,64,318	4,16,470	4,28,970
Add. Interest	1,66,083	1,92,999	1,95,481	2,21,162
Less Financial Other Income	5,343	9,366	-	-
Add. Other	-	-	-	-
Op. profit before WC changes	6,04,914	7,29,622	8,44,531	9,86,099
Net Changes-WC	10,420	4,13,867	1,33,977	2,33,681
Direct tax	(41,779)	(42,733)	(50,724)	(70,960)
Net cash from Op. activities	5,73,555	11,00,756	9,27,784	11,48,820
Capital expenditures	(5,88,674)	(11,29,700)	(7,67,089)	(2,87,411)
Interest / Dividend Income	-	-	-	-
Others	54,709	(9,656)	(19,458)	(20,670)
Net Cash from Inv. activities	(5,33,965)	(11,39,356)	(7,86,547)	(3,08,081)
Issue of share cap. / premium	-	-	-	-
Debt changes	31,246	3,26,303	93,435	1,59,575
Dividend paid	(16,476)	(22,587)	(28,366)	(51,059)
Interest paid	(1,66,083)	(1,92,999)	(1,95,481)	(2,21,162)
Others	-	-	-	-
Net cash from Fin. activities	(1,51,313)	1,10,717	(1,30,413)	(1,12,646)
Net change in cash	(1,11,722)	72,117	10,824	7,28,093
Free Cash Flow	1,53,304	3,98,407	5,29,580	7,49,986

Source: Company Data, PL Research

Quarterly Financials (Rs m)

Y/e Mar	Q2FY23	Q3FY23	Q4FY23	Q1FY24
Net Revenue	3,45,268	3,58,044	3,60,090	3,74,400
YoY gr. (%)	21.9	19.9	14.3	14.1
Raw Material Expenses	-	-	-	-
Gross Profit	3,45,268	3,58,044	3,60,090	3,74,400
Margin (%)	100.0	100.0	100.0	100.0
EBITDA	1,75,938	1,84,532	1,86,971	1,95,985
YoY gr. (%)	27.4	25.5	16.6	18.6
Margin (%)	51.0	51.5	51.9	52.3
Depreciation / Depletion	71,271	72,097	72,954	65,792
EBIT	86,470	91,555	92,912	99,447
Margin (%)	25.0	25.6	25.8	26.6
Net Interest	49,403	46,856	51,631	56,137
Other Income	2,019	2,576	2,849	3,483
Profit before Tax	39,086	47,275	44,130	46,793
Margin (%)	11.3	13.2	12.3	12.5
Total Tax	12,864	10,756	7,880	3,327
Effective tax rate (%)	32.9	22.8	17.9	7.1
Profit after Tax	26,222	36,519	36,250	43,466
Minority interest	8,337	10,255	12,204	(923)
Share Profit from Associates	3,567	(3,684)	6,010	5,899
Adjusted PAT	21,448	15,881	30,054	16,123
YoY gr. (%)	393.5	96.8	172.7	0.4
Margin (%)	6.2	4.4	8.3	4.3
Extra Ord. Income / (Exp)	4	1	2	2
Reported PAT	21,452	15,882	30,056	16,125
YoY gr. (%)	393.7	96.9	172.8	0.3
Margin (%)	6.2	4.4	8.3	4.3
Other Comprehensive Income	-	-	-	-
Total Comprehensive Income	21,452	15,882	30,056	16,125
Avg. Shares O/s (m)	-	-	-	-
EPS (Rs)	-	-	-	-

Source: Company Data, PL Research

Key Financial Metrics

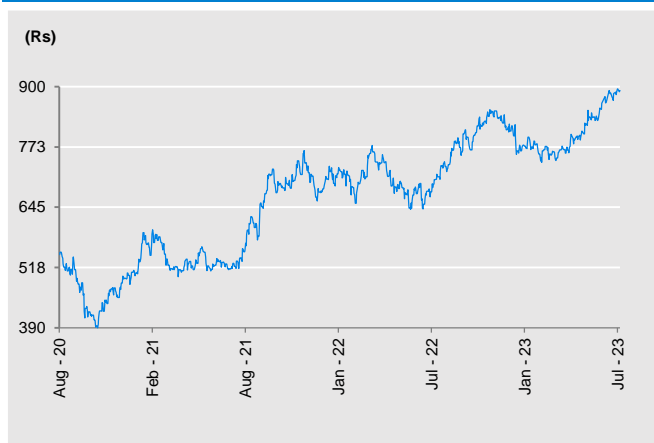
Y/e Mar	FY22	FY23	FY24E	FY25E
Per Share(Rs)				
EPS	7.8	14.8	19.1	39.1
CEPS	68.0	79.3	92.5	114.7
BVPS	121.2	137.4	199.7	229.8
FCF	27.9	70.6	93.3	132.2
DPS	3.0	4.0	5.0	9.0
Return Ratio(%)				
RoCE	10.7	12.9	12.2	14.1
ROIC	7.0	8.1	8.6	11.4
RoE	6.9	11.6	11.3	18.2
Balance Sheet				
Net Debt : Equity (x)	2.3	2.7	1.7	1.3
Net Working Capital (Days)	(137)	(138)	(109)	(98)
Valuation(x)				
PER	113.4	60.2	46.6	22.8
P/B	7.3	6.5	4.5	3.9
P/CEPS	13.1	11.2	9.6	7.8
EV/EBITDA	11.2	10.0	8.5	7.0
EV/Sales	5.5	5.1	4.4	3.6
Dividend Yield (%)	0.3	0.4	0.6	1.0

Source: Company Data, PL Research

Key Operating Metrics

Y/e Mar	FY22	FY23	FY24E	FY25E
Subscribers (mn)	326	335	348	351
ARPU (Rs/mon)	163	192	210	225
USD/INR	74	80	81	82

Source: Company Data, PL Research

Price Chart
Recommendation History


No.	Date	Rating	TP (Rs.)	Share Price (Rs.)
1	06-Jul-23	BUY	923	870
2	17-May-23	BUY	874	792
3	06-Apr-23	BUY	977	763
4	08-Feb-23	BUY	1,008	775
5	03-Jan-23	BUY	1,039	818
6	01-Nov-22	BUY	1,058	836
7	06-Oct-22	BUY	1,032	809
8	04-Oct-22	BUY	1,032	803
9	05-Sep-22	BUY	1,032	740

Analyst Coverage Universe

Sr. No.	Company Name	Rating	TP (Rs)	Share Price (Rs)
1	Gujarat Gas	Accumulate	516	455
2	Hindustan Petroleum Corporation	Hold	264	276
3	NOCIL	Hold	230	228

PL's Recommendation Nomenclature (Absolute Performance)

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

ANALYST CERTIFICATION

(Indian Clients)

We/I, Mr. Swarnendu Bhushan- IIT, MBA Finance 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 a registered with SEBI under the SEBI (Research Analysts) Regulation, 2014 and having registration number INH000000271.

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. Swarnendu Bhushan- IIT, MBA Finance 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 satisfy 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