

Estimate change	↔
TP change	↔
Rating change	↔

Motilal Oswal values your support in the **Asiamoney Brokers Poll 2021** for India Research, Sales, Corporate Access and Trading team. We [request your ballot](#).



Bloomberg	IDEA IN
Equity Shares (m)	28,735
M.Cap.(INRb)/(USDb)	171.6 / 2.3
52-Week Range (INR)	14 / 5
1, 6, 12 Rel. Per (%)	-41/-56/-80
12M Avg Val (INR M)	3768

Financials & Valuations (INR b)

INR Billion	FY21	FY22E	FY23E
Net Sales	420	379	431
EBITDA	169	160	198
Adj. PAT	-243	-290	-315
EBITDA Margin (%)	40.4	42.3	46.1
Adj. EPS (INR)	-8.4	-10.1	-11.0
EPS Gr. (%)	11.7	19.5	8.5
BV/Sh. (INR)	-13.3	-23.3	-34.3
Ratios			
Net D:E	-4.3	-2.7	-2.0
RoE (%)	150.5	55.1	38.0
RoCE (%)	-5.5	-6.9	-5.4
Payout (%)	0.0	0.0	0.0
Valuations			
EV/EBITDA (x)	11.2	12.7	11.4
P/E (x)	-1.1	-0.9	-0.8
P/B (x)	-0.7	-0.4	0.0
Div. Yield (%)	0.0	0.0	0.0
FCF Yield (%)	5.8	3.3	1.1

Shareholding pattern (%)

As On	Jun-21	Mar-21	Jun-20
Promoter	72.1	72.1	72.1
DII	1.3	1.1	3.6
FII	4.3	4.6	7.2
Others	22.4	22.3	17.1
FII Includes depository receipts			

CMP: INR6 TP:INR5 (-16%) Neutral

Fall in earnings continues; needs immediate liquidity support

- Adjusted EBITDA (excluding one-offs on pre Ind AS 116) stood at INR12.8b v/s INR17.1b QoQ. This was attributed to the sharp subscriber churn due to the COVID-led lockdown and fall in ARPUs.
- With EBITDA (pre-Ind AS 116) of INR38.5b in 2HFY22E, it will be challenging to invest in growing its network and service upcoming repayments of: a) INR64.7b NCDs in FY22, b) INR82b deferred spectrum payment, and c) AGR installment. A capital raise or government relief package remains critical to provide immediate liquidity support to service the ballooning net debt of INR1,907b (including AGR liabilities). We maintain our **Neutral** rating.

Adjusted EBITDA declined sharply to INR12.8b v/s INR17.1b in 4QFY21 on subscriber/ARPU weakness

- Revenue declined by 4.7% QoQ to INR91.5b (2.5% miss) on account of the slowdown in economic activity due to lockdown restrictions in most districts during the second COVID wave. ARPU/subscriber fell 2.8%/4.6% QoQ. The management attributed it to disrupted economic activity and restricted store timings.
- Reported EBITDA fell 15.9% QoQ to INR37.1b (7% miss) as network expenses grew 17% QoQ. Adjusted for INR1b one-off, pre Ind AS 116 EBITDA declined sharply to INR12.8b v/s INR17.1b in 4QFY21.
- Net loss stood at INR73.2b v/s INR70.2b in 4QFY21 (11.4% miss). Adjusted net loss (for exceptional) stood at INR74.9b, a 24% QoQ increase (14.2% above our estimate).
- VIL's overall/active subscriber loss widened to 12.4m/14m (~5%) to 255.4m. This is much greater than the 1-2m fall seen in the last two quarters, and is in line with the 11.3m decline in 1QFY21 (previous lockdown).
- Data/4G subscribers too declined, though at a slow pace, by 4m/1m after seeing a growth in the last three quarters
- ARPU, at INR104, saw a 2.8% QoQ decline.
- Capex spend in 1QFY22 fell to INR9.4b v/s INR15.4b/INR41.5b in 4Q/FY21. In comparison, Bharti India's mobile capex was ~4x at INR43.7b in 1QFY22.
- Net debt stood at INR1,906.7b, with a cash balance of a mere INR9.2b. Gross debt (excluding lease liabilities) stood at INR1,915.9b, of which deferred spectrum debt is INR1,060.1b. AGR liability stood at INR621.8b, while bank debt stood at INR234b. This has increased by INR107b since 4QFY21 due to: a) accounting of interest accrued, but not due, towards deferred spectrum liabilities and AGR, and b) recent spectrum purchases.

Highlights from the management commentary

- VIL is focusing on investments in 16 priority circles, which contribute 94% of revenue.
- Focus on high ARPU subscribers:** It aims to scale up higher ARPU subscriber programs in partnership with OEMs and NBFCs for 4G devices.

- **Tax refund:** It received INR10b in the form of tax refunds in 1QFY22. The balance receivable now stands at INR58b.
- **Tariff change:** The company increased tariffs on entry-level corporate postpaid/prepaid plans to INR299/INR79 from INR199/INR49.
- It is generating positive cash from operations to meet its repayments and capex requirements. It is engaging with investors for new funding, and is conducting parallel discussions with bondholders for refinancing.

Valuation and view

- The fall in subscribers and subsequently revenue is disproportionately hurting EBITDA due to the high fixed cost nature of the business, with inflationary cost increases. This is making any tariff hike too difficult to fill the gap of cash requirements.
- VIL's weak liquidity position may force it to rationalize network investments, as is evident from reducing capex intensity and intensifying subscriber churn.
- The management said it is in discussion with potential investors for the stated INR250b fund raise, but the timeline remains unclear.
- A capital raise or government relief package remains critical to provide immediate liquidity support to service the ballooning net debt of INR1,907b (including AGR liabilities).
- With EBITDA (pre-Ind AS 116) of INR38.5b in 2HFY22E, it will be challenging to invest in growing its network and service upcoming repayments of: a) INR64.7b NCDs in FY22, b) INR82b deferred spectrum payment, and c) AGR installment.
- The only silver lining, as the management indicated, is the recovery in its subscriber base post the lifting of the lockdown in Jun'21.
- The significant amount of cash required to service its debt, leaves limited upside opportunity for equity holders, despite the high operating leverage opportunity from any source of ARPU increase. The current low EBITDA would make it a challenge to service debt without external fund infusion. Assuming 9x EV/EBITDA, with INR1,907b net debt (excluding lease liability and AGR debt), it leaves limited opportunity for equity shareholders. We maintain our **Neutral** rating.

Consolidated quarterly earnings model (INR m)												
Y/E March	FY21				FY22				FY21	FY22E	FY22E	Var. (%)
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE				
Revenue	1,06,593	1,07,912	1,08,941	96,076	91,523	92,015	95,633	99,409	4,19,522	3,78,580	93,878	-2.5
YoY Change (%)	-5.4	-0.5	-1.8	-18.3	-14.1	-14.7	-12.2	3.5	-6.7	-9.8	-15.3	
Total Expenditure	65,609	66,388	66,079	51,989	54,446	53,955	54,408	55,531	2,50,065	2,18,340	54,012	0.8
EBITDA	40,984	41,524	42,862	44,087	37,077	38,060	41,225	43,878	1,69,457	1,60,240	39,866	-7.0
YoY Change (%)	12.3	24.1	25.3	0.7	-9.5	-8.3	-3.8	-0.5	13.6	-5.4	-2.7	250
Depreciation	59,757	60,286	58,241	58,101	60,098	60,447	60,903	60,946	2,36,385	2,42,394	58,221	3.2
Share in Profits from Associates	889	857	570	-2	5	5	5	5	2,314	21	-2	-345.1
Net Finance Costs	37,486	46,609	47,480	46,664	51,949	51,949	51,949	51,949	1,78,239	2,07,796	47,532	9.3
PBT before EO expense	-55,370	-64,514	-62,289	-60,680	-74,965	-74,331	-71,622	-69,011	-2,42,853	-2,89,929	-65,888	13.8
Extra-Ord. expense	1,99,232	7,671	-16,965	9,743	-1,779	0	0	0	1,99,681	-1,779	0	NM
PBT	-2,54,602	-72,185	-45,324	-70,423	-73,186	-74,331	-71,622	-69,011	-4,42,534	-2,88,150	-65,888	11.1
Tax	-2	-3	-3	-195	5	5	5	5	-203	20	-212	-102.4
Rate (%)	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	-102
Reported PAT	-2,54,600	-72,182	-45,321	-70,228	-73,191	-74,336	-71,626	-69,016	-4,42,331	-2,88,170	-65,677	11.4
Adj. PAT	-55,368	-64,511	-62,286	-60,485	-74,970	-74,336	-71,626	-69,016	-2,42,650	-2,89,949	-65,677	14.2
YoY Change (%)	30.8	4.3	7.3	9.9	35.4	15.2	15.0	14.1	11.7	19.5	18.6	

E: MOFSL estimates

Key performance indicators

Y/E March	FY21				FY22				FY21	FY22E	1Q FY22E
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE			
Blended ARPU (INR)	114	119	121	107	105	107	111	116	125	110	
Subscriber Base (m)	280	272	270	268	255	256	257	258	268	258	267
Data Subscribers (m)	136	138	138	140	136	147	159	171	140	171	151
Data usage/subscriber (MB)	10956	10591	10878	11666	13278	12862	13505	14180	10861	12941	12249
EBITDA Margin (%)	38.4	38.5	39.3	45.9	40.5	41.4	43.1	44.1	40.4	42.3	42.5
EBIT Margin (%)	-17.6	-17.4	-14.1	-14.6	-25.2	-24.3	-20.6	-17.2	-16.0	-21.7	-19.6
Adj. PAT Margin (%)	-51.9	-59.8	-57.2	-63.0	-81.9	-80.8	-74.9	-69.4	-57.8	-76.6	-70.0

E: MOFSL estimates

Exhibit 1: VIL's ARPU hike requirement (INR b)

(Amount in INR b)	Without funding	With funding
	FY22	FY22
Capex	40	40
Cash Interest	25	25
Bank debt repayment	60	60
Deferred spectrum liability	165	165
AGR payment/year (20 years)	66	66
Total EBITDA requirement	357	107
EBITDA (pre Ind AS 116)	88	88
Incremental EBITDA required	269	19
Incremental revenue required	413	29
ARPU (INR)	111	111
Subscribers (m)	271	271
ARPU hike required (INR)	127	9
New ARPU (INR)	238	120
Increase in ARPU required (%)	114%	8%
Funding		250

Source: MOFSL, Company

Exhibit 2: Debt and cash flow reconciliation (INR m)

Cash flow reconciliation (INR m)	1QFY22
EBITDA (as per Ind AS 116)	13,777
Capex	9,400
Net interest paid	4,377
Bank debt (excl. govt.)	2,34,000
Interest cost annualized	7.5%

Source: MOFSL, Company

Exhibit 3: Debt break-up

Net debt classification	1QFY22
Spectrum debt	1,060
Market debt	234
Total debt	1,294
Cash and equivalents	9
Net Debt excluding AGR	1,285
AGR dues	622
Net debt including AGR	1,907

Source: MOFSL, Company

Exhibit 4: Debt principal/interest repayment for FY22

	Principal amount	Previous due date		Next due date		FY22		Total
		Principal	Interest	Principal	Interest	Principal	Interest	
Unsecured 7.57% NCDs	15,000	N.A	14 th Dec'20	13 th Dec'21	13 th Dec'21	15,000	1135.5	16,136
Unsecured 7.77% NCDs	10,000	N.A	4 th Jan'21	4th Jan'22	4th Jan'22	10,000	777	10,777
Unsecured 7.77% NCDs	5,000	N.A	18 th Jan'21	17 th Jan'22	17 th Jan'22	5,000	388.5	5,389
Unsecured 8.04% NCDs	20,000	N.A	27 th Jan'21	27 th Jan'22	27 th Jan'22	20,000	1608	21,608
Unsecured 8.03% NCDs	5,000	N.A	1st Feb'21	31 st Jan'22	31 st Jan'22	5,000	401.5	5,402
Unsecured 8.03% NCDs	5,000	N.A	15 th Feb'21	14 th Feb'22	14 th Feb'22	5,000	401.5	5,402
Unsecured 10.90% NCDs	15,000	N.A	3 rd Sep'20	2 nd Sep'23	3rd Sep'21			
Deferred spectrum payment				9 th Apr'22		82,117		
Total						60,000	4,712	64,712

Operating performance

- Gross additions turned negative at -3.46m after remaining positive in 3Q and 4QFY21. Churn increased to 3.5% v/s 3% in 4QFY21. The management attributed this to COVID-related lockdowns.
- Growth in Data traffic was strong (13.2% QoQ) at 5.5b GB. MOUs fell 2.4% QoQ to 641 minutes. Data usage/subscriber stood at 13.3GB, up 13.8% QoQ.
- VIL recognized an exceptional gain of INR1.8b towards gain on sale of property and integration costs.

Management commentary**Capex and network investments**

- VIL added ~6,400 4G FDD sites primarily through the re-farming of 2G/3G spectrum to expand its 4G coverage and capacity.
- VIL's overall broadband site count declined to 447,114, v/s 452,650 in 4QFY21 as it continued to actively shutdown 3G sites.
- Till date, VIL has deployed ~63,000 TDD sites in addition to the deployment of ~13,800 Massive MIMO sites and ~12,800 small cells.
- It launched an integrated IoT platform under Vi Business, which offers end-to-end IoT solutions, a first in the market. This is a strategic step towards making Vi Business an IoT ecosystem integrator for Indian enterprises, positions VIL as an ecosystem play, and drives its transformation from a Telco to Techco.

Cost saving initiatives

- After achieving targeted merger opex synergies of INR84b, VIL aims to achieve INR40b in annualized cost savings by CY21. It has already achieved ~70% of the targeted annualized savings on a run-rate basis in 1QFY22.

Fundraise

- Vodafone paid USD200m (INR15.3b) as contingent liability towards AGR in Apr'20:
 - The Vodafone group infused USD200m (INR15.3b) in VIL under terms of the contingent liability mechanism towards its AGR liability.
 - The total exposure of the Vodafone group towards VIL by way of the contingent liability mechanism stood at INR84b. The net balance stands at INR69b.

Indus stake sale

- VIL relinquished its 11.13% stake in Indus for INR37.6b in Nov'19.

- Of this, INR24b will be adjusted towards rental prepayments (at 6% interest accrual), so the net amount received will be INR14b.
- Bharti Infratel has sought security of one-year forward payments in the form of: a) security deposit by VIL (i.e. INR24b), b) pledge of Vodafone's stake in Bharti Infratel, and c) corporate guarantees by Vodafone.
- Prior to this, it had raised: a) INR250b through a rights issue in Apr'19, and also b) INR135b in Feb'18 through ABG/Vodafone (promoter) equity infusion and a QIP just ahead of the merger.

Fundraise details in the last couple of years and pending money to be received

- In FY22, VIL repaid a principal of INR60b, including interest of INR64.7b.
- Against this, operating cash flow would be ~INR70b in FY22. It has deferred its upcoming spectrum payment.
- The board in Sep'20 approved a fund raising plan of up to INR250,000m, but is yet to complete the same.

Total amount received in the last two years is INR29b.

- Of this, INR15b has been infused by Vodafone towards contingent liability payment. (This is not an equity infusion, but a liability compensation, so there is no incremental stake).
- And INR14b through the Indus stake sale.

Auditors raise concerns over VIL's ability to remain an ongoing concern

- The group has classified long-term debt of INR79,944m (net of the waiver received) from non-current borrowings to current maturities for not meeting specified financial ratios and certain covenant clauses under various financial agreements as of 30th Jun'21.
- As a result of the earlier ratings downgrade, certain lenders had asked for higher interest rates and additional margin money/security against existing facilities.
- Subsequent to the quarter ending, there has been a further rating downgrade by Care to 'Care B-: Under Credit watch with Negative Implications'.
- The group has also written to DoT for deferment of the spectrum payment installment of INR82,117m payable as of 9th Apr'22.
- The company needs to provide additional bank guarantees of INR9.8b to avail an additional one-year moratorium on spectrum installments of INR64.4b.
- The Supreme Court dismissed the company's application for modification in the calculation of AGR dues on 23rd Jul'21. The company has filed a review petition on 10th Aug'21.

Exhibit 5: Valuation based on FY23E pre Ind AS 116

	Methodology	Driver	Multiple (x)	Fair value (INR b)	Value/share (INR)
Consolidated EBITDA	FY23E EV/EBITDA	198	9	1,795	62
Less: Net debt			.	1,637	57
Total Value (FY21)				157	5
Shares o/s (b)				28.7	
CMP (INR)					6
Upside (%)					-16

Source: MOFSL, Company



Highlights from the management commentary

Key takeaways

- VIL is focusing on investments in 16 priority circles, which contribute 94% of revenue.
- **Focus on high ARPU subscribers:** The management aims to scale up higher ARPU subscriber programs in partnership with OEMs and NBFCs for 4G devices.
- **Tax refund:** It received INR10b in the form of tax refunds in 1QFY22. The balance receivable now stands at INR58b.
- **Tariff change:** The company increased tariffs on entry-level corporate postpaid/prepaid plans to INR299/INR79 from INR199/INR49.
- It is generating positive cash from operations to meet its repayments and capex requirements. It is engaging with investors for new funding, and is conducting parallel discussions with bondholders for refinancing.

Network and investment

- **Focused investment:** VIL is focusing on investments in 16 priority circles, which contribute 94% of revenue, to ensure a superior customer experience and to utilize its capex effectively.
- **Spectrum re-farming:** VIL is focusing on re-farming its 3G network to 4G. The company closed over 12,500 3G sites and added ~6,400 4G FTD sites in 1QFY22.
- **Focus on 4G sites:** Broadband site count stood at 4,47,144 v/s 4,52,650 in 4QFY21 due to the shutdown of the 3G sites, while 4G site additions continue.
- **4G reach:** Its 4G network now covers over one billion Indians as of 30th Jun'21.
- **5G readiness:**
 - While the company is in the middle of its 4G capex cycle, it's deploying 5G ready equipment across its radio and core segments. Most of the equipment used in 4G technology is 5G ready, with very minimal incremental capex required.
 - It is successfully deploying 5G ready technologies like Maximo, VSR, and Cloudification of core.
 - Its 5G trials are progressing well. It is setting up dedicated networks to test various use cases for verification by DoT.
 - The management expects spectrum costs for 5G to fall going forward.
- **Pact with CISCO:** It has partnered with CISCO to design and build a cost-effective architecture in emerging market opportunities of 4G, 5G, and Cloud IoT.

Market initiatives:

- **New template launched:** It unveiled VI hero unlimited plan to improve its 4G subscriber base and address increasing data usage. The plan offers: a) weekend data rollover, b) free night time data (12am to 6am), and c) double data.
- **Focus on high ARPU subscribers:** The management aims to scale up higher ARPU subscriber programs in partnership with OEMs and NBFCs for 4G devices.
- **Tariff changes:** VIL undertook the following tariff changes in the past couple of months:
 - Launched a 30-60 day validity plan with no daily limit in lower data bundles.
 - Increased entry-level corporate postpaid tariff to INR299 from INR199.
 - Increased entry-level prepaid tariff to INR79 from INR49 in most circles.
 - Recently rolled out several postpaid family plans.

Financial highlights:

- **Revenue** fell 4.7% QoQ due to: a) slowdown in economic activity, and b) customer additions being affected due to the lockdown.

- **One-off expenses:** EBITDA in 1QFY22 included one-offs of INR1b towards network financial expenses and employee cost.
- **Net debt and cash:** Net debt stood at INR1,906b, with the cash balance standing at a mere INR9.2b.
- **Cost savings:** VIL plans to achieve INR40b in annualized cost savings by CY21. It has already achieved ~70% of its target at the end of Jun'21.
- **Incremental debt:** The sequential rise in debt can be attributed to:
 - INR60b towards interest due but not accrued being recognized in 1QFY22.
 - INR11b towards interest accrued on spectrum related to the auction in Mar'21.
 - INR37b towards interest due but not accrued.
- **Tax refund:** It received INR10b in the form of tax refunds in 1QFY22. The balance receivable now stands at INR58b.

Business services:

- Business services continue to remain a key focus area for growth.
- **Telco to Techco:** Its new range of offerings includes VI integrated IoT, VI Cloud firewall services, and VI business plus.
- **Offerings for SMEs:** Offerings like the auto receptionist and lead management continue to help SMEs automate and enhance their customer experience.
- **Cloud service protection:** It has enhanced its Cloud security portfolio with the launch of the VI Cloud firewall.

Digital revenue streams

- VIL aims to engage in partnerships with content providers to provide new and engaging content through its platform VI movies.
- It recently launched music streaming service is available to prepaid and post subscribers.

Outlook

- **Recovery:** A recovery in subscriber base is being seen since Jun'21 after being impacted in May'21. It is seeing a MoM recovery from Aug'21.
- **Fundraise:** The company is in active discussion with potential investors.
- **Floor pricing/tariff update:** The management remains optimistic on its floor pricing decision, and expects to see action on this front in the next few weeks.
- **Bond repayment (due between Dec'21 and Feb'22):** It is generating positive cash from operations to meet its repayments and capex requirements. It is engaging with investors for new funding, and is conducting parallel discussions with bondholders for refinancing.
- **Capex:** It has incurred a capex of INR9.4b in 1QFY22. Capex for FY22 is expected to remain at levels similar to the last two quarters. Higher investment in expanding coverage will depend on the closure of new funding.

Other highlights

- **Change in directors:** Mr. Kumar Mangalam Birla stepped down as Non-Executive Director and Non-Executive Chairman. Mr. Himanshu Kapania was appointed in his place. Mr. Sushil Agarwal has been appointed as an Additional Director.
- **AGR case:** The company recently filed a review petition against the SC's judgment on rejection of AGR recalculation.

Exhibit 6: Consolidated performance (INR m)

Consolidated P&L (INR m)	1QFY21	4QFY21	1QFY22	YoY	QoQ	1QFY22E	Var. (%)
Revenue	1,06,593	96,076	91,523	-14.1	-4.7	93,878	-2.5
Operating expenses	65,609	51,989	54,446	-17.0	4.7	54,012	0.8
EBITDA	40,984	44,087	37,077	-9.5	-15.9	39,866	-7.0
EBITDA margin (%)	38.4	45.9	40.5	206bp	-538bp	42.5	-195bp
EBITDA (pre Ind AS 116)	18,400	21,687	13,777	-25.1	-36.5	17,466	-21.1
EBITDA margin (%) (pre Ind AS 116)	17.3	22.6	15.1	-221bp	-752bp	18.6	-355bp
Depreciation and amortization	59,757	58,101	60,098	0.6	3.4	58,221	3.2
EBIT	-18,773	-14,014	-23,021	22.6	64.3	-18,354	25.4
EBIT margin (%)	-17.6	-14.6	-25.2	-754bp	-1057bp	-19.6	29bp
Net Finance Costs	37,486	46,664	51,949	38.6	11.3	47,532	9.3
Share of Associates	889	-2	5	-99.4	-350.0	-2	-345.1
Profit before Tax	-55,370	-60,680	-74,965	35.4	NM	-65,888	13.8
Exceptional item (gain)/loss	1,99,232	9,743	-1,779	NM	NM	0	NM
Tax	-2	-195	5	-350.0	NM	-212	-102.4
Tax rate (%)	0.0	0.3	0.0	-1bp	-33bp	0.3	-102bp
Profit after Tax	-2,54,600	-70,228	-73,191	-71.3	NM	-65,677	11.4
Adj. Profit after Tax	-55,368	-60,485	-74,970	35.4	NM	-65,677	14.2

Source: MOFSL, Company

Exhibit 7: Key operating metrics

	1QFY21	4QFY21	1QFY22	YoY	QoQ
Subscriber Base (m)	279.8	267.8	255.4	-8.7%	-4.6%
VLR Subscribers (m)	273.0	255.7	241.7	-11.5%	-5.5%
Net VLR Subscribers (m)	-20.7	-0.9	-14	-32.4%	1455.6%
Pre-paid Subscribers (%)	92.3%	92.2%	92.1%	-0.2%	-0.1%
Blended ARPU (INR)	114	107	104	-8.8%	-2.8%
Voice metrics					
MOU (minutes/subscriber/month)	678	657	641	-5.5%	-2.4%
ARPM (INR)	0.17	0.16	0.16	-2.7%	0.4%
Blended churn	2.00%	3.0%	3.5%	75.0%	16.7%
Data metrics					
Data subscribers (m)	135.7	139.9	136.1	0.3%	-2.7%
As a percentage of overall subscriber	48.5%	52.2%	53.3%	9.9%	2.0%
Broadband subscribers (m)	116.4	123.6	121.4	4.3%	-1.8%
4G subscribers	104.6	113.9	112.9	7.9%	-0.9%
Total Data traffic (m GB)	4,523	4,856	5,497	21.5%	13.2%
Total Data traffic (m MB)	45,22,721	48,56,000	54,97,000	21.5%	13.2%
Data usage/subscriber (MB)	10,956	11,666	13,278	21.2%	13.8%
Tower details					
Total Unique Towers (EoP)	1,81,229	1,80,484	1,80,674	-0.3%	0.1%
Total Unique Broadband Towers (EoP)	1,62,551	1,65,409	1,66,241	2.3%	0.5%
Total Broadband sites (3G+4G)	4,46,131	4,52,650	4,47,114	0.2%	-1.2%

Source: MOFSL, Company

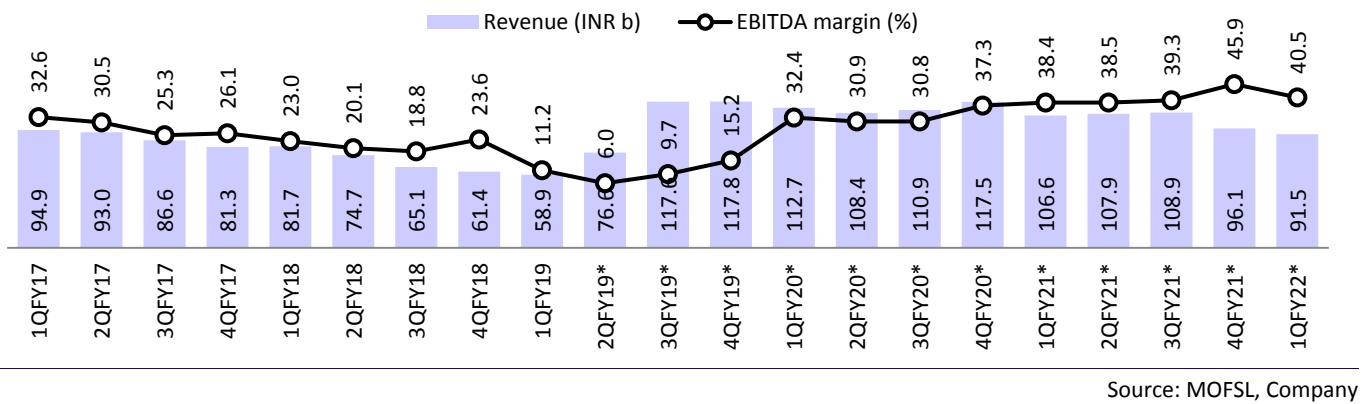
Exhibit 8: Summary of estimate change

	FY22E	FY23E
Revenue (INR b)		
Old	398	458
Actual/New	379	431
Change (%)	-4.9	-5.9
EBITDA (INR b)		
Old	178	221
Actual/New	160	198
Change (%)	-9.8	-10.4
EBITDA margin (%)		
Old	44.6	48.4
Actual/New	42.3	46.1
Change (bp)	-230bp	-230bp
Net Profit (INR b)		
Old	-247	-232
Actual/New	-288	-315
Change (%)	-16.9	-35.9
Adj. EPS (INR)		
Old	-8.6	-8.1
Actual/New	-10.1	-11.0
Change (%)	-17.6	-35.9
ARPU (INR)		
Old	111	127
Actual/New	110	125
Change (%)	-0.4	-1.9
Subscribers (m)		
Old	271	277
Actual/New	258	264
Change (%)	-4.8	-4.7
MoU (minutes)		
Old	671	701
Actual/New	638	677
Change (%)	-4.9	-3.4
Data usage/subscriber (mb)		
Old	13,164	16,001
Actual/New	12,941	16,001
Change (%)	-1.7	0.0
Mobile RPM (INR)		
Old	0.17	0.18
Actual/New	0.17	0.18
Change (%)	4.7	1.5
Data ARMB (INR)		
Old	0.00	0.00
Actual/New	0.00	0.00
Change (%)	7.3	44.3
Data revenue (INR b)		
Old	-92	-14
Actual/New	-92	-19
Change (%)	-0.6	30.0

Source: Company, MOFSL

Story in charts

Exhibit 9: Consolidated revenue fell 5% QoQ; consolidated EBITDA margin at 40.5% (INR b, %)



Source: MOFSL, Company

Exhibit 10: ARPU declines by 3% QoQ to INR104

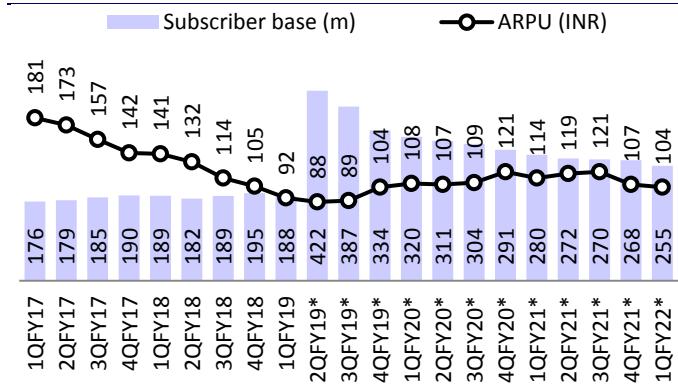


Exhibit 11: Monthly churn at 3.5%

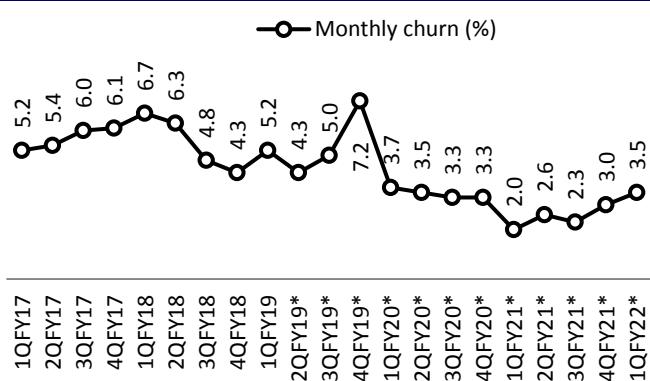


Exhibit 12: Voice traffic declines by 4.9% QoQ

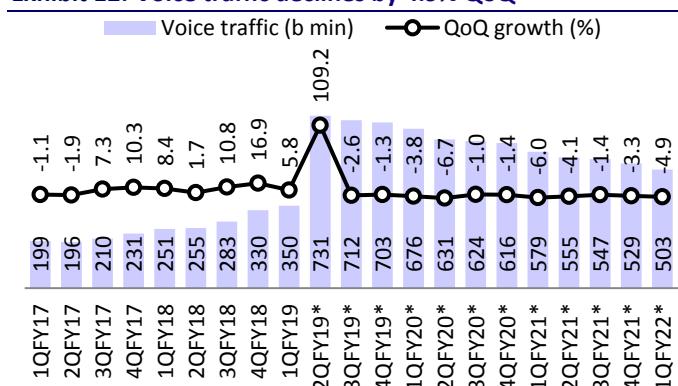
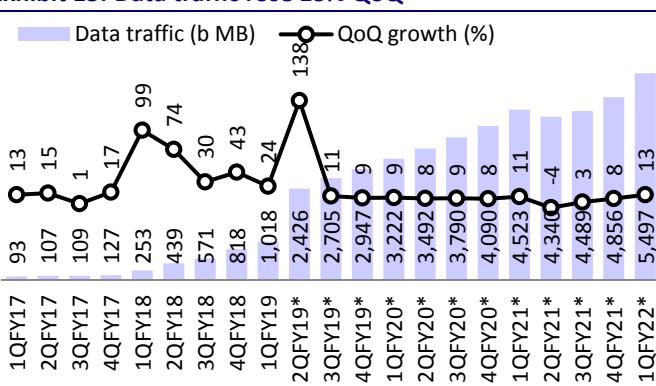


Exhibit 13: Data traffic rose 13% QoQ



Financials and valuations

Consolidated Income Statement								(INR m)
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Total Income from Operations	3,59,494	3,55,758	2,82,789	3,70,925	4,49,575	4,19,522	3,78,580	4,30,623
Change (%)	13.9	-1.0	-20.5	31.2	21.2	-6.7	-9.8	13.7
Total Expenditure	2,39,818	2,52,995	2,22,314	3,30,495	3,00,450	2,50,065	2,18,340	2,32,290
As a percentage of Sales	66.7	71.1	78.6	89.1	66.8	59.6	57.7	53.9
EBITDA	1,19,676	1,02,763	60,475	40,430	1,49,125	1,69,457	1,60,240	1,98,333
Margin (%)	33.3	28.9	21.4	10.9	33.2	40.4	42.3	46.1
Depreciation	62,561	78,272	84,091	1,45,356	2,43,564	2,36,385	2,42,394	2,56,445
EBIT	57,115	24,491	-23,616	-1,04,926	-94,439	-66,928	-82,154	-58,112
Int. and Finance Charges	18,831	37,342	44,600	87,317	1,43,527	1,78,239	2,07,796	2,56,614
PBT bef. EO Exp.	38,284	-12,851	-68,216	-1,92,243	-2,37,966	-2,45,167	-2,89,950	-3,14,725
Share of profits of associates	4,217	4,218	3,224	1,968	3,553	2,314	21	22
EO Items	0	0	0	-8,521	3,83,557	1,99,681	-1,779	0
PBT after EO Exp.	42,501	-8,633	-64,992	-1,81,754	-6,17,970	-4,42,534	-2,88,150	-3,14,703
Total Tax	15,220	-4,636	-23,310	-35,715	1,20,811	-203	20	0
Tax Rate (%)	35.8	53.7	35.9	19.7	-19.5	0.0	0.0	0.0
Minority Interest	0	0	0	0	0	0	0	0
Reported PAT	27,281	-3,997	-41,682	-1,46,039	-7,38,781	-4,42,331	-2,88,170	-3,14,703
Adjusted PAT	24,574	-3,997	-41,682	-1,61,482	-2,17,269	-2,42,650	-2,89,949	-3,14,703
Change (%)	-14.6	-114.7	942.8	250.4	34.5	11.7	19.5	8.5
Margin (%)	7.6	-1.1	-14.7	-43.5	-48.3	-57.8	-76.6	-73.1

Consolidated Balance Sheet								(INR m)
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Equity Share Capital	36,005	36,053	43,593	87,356	2,87,354	2,87,354	2,87,354	2,87,354
Total Reserves	1,99,501	2,11,269	2,29,031	5,08,992	-2,27,555	-6,69,634	-9,57,804	-12,72,507
Net Worth	2,35,506	2,47,322	2,72,624	5,96,348	59,799	-3,82,280	-6,70,450	-9,85,153
Total Loans	4,05,413	5,50,545	5,79,851	10,85,236	11,05,883	16,59,627	17,90,088	20,11,594
Deferred Tax Liabilities	19,539	13,218	-11,393	-1,02,914	18	-1	-1	-1
Capital Employed	6,60,458	8,11,085	8,41,082	15,78,670	11,65,700	12,77,346	11,19,637	10,26,441
Gross Block	7,13,532	9,06,838	10,20,216	21,46,679	24,70,643	25,23,567	26,30,886	27,80,886
Less: Accum. Deprn.	61,692	1,39,267	2,23,358	3,68,714	6,12,278	8,48,663	10,91,058	13,47,503
Net Fixed Assets	6,51,840	7,67,571	7,96,858	17,77,965	18,58,365	16,74,904	15,39,828	14,33,384
Goodwill on Consolidation	61	61	61	36	0	0	0	0
Capital WIP	60,397	75,351	35,853	51,030	11,381	6,059	6,059	6,059
Total Investments	34,709	63,783	72,905	82,386	19,792	41	41	41
Curr. Assets, Loans, and Adv.	54,247	59,912	66,069	2,82,193	3,79,638	3,53,779	3,32,432	3,45,979
Inventory	1,065	588	367	42	25	6	14	16
Account Receivables	11,424	13,139	8,874	33,000	30,943	25,070	11,311	12,867
Cash and Bank Balance	7,691	827	291	9,908	26,630	22,165	13,019	2,282
Loans and Advances	34,067	45,358	56,537	2,39,243	3,22,040	3,06,538	3,08,088	3,30,814
Curr. Liability and Prov.	1,40,798	1,55,592	1,30,664	6,14,940	11,03,476	7,57,437	7,58,723	7,59,020
Account Payables	1,36,418	1,51,551	1,27,333	6,11,094	10,99,562	7,56,563	7,56,563	7,56,563
Provisions	4,380	4,041	3,331	3,846	3,914	874	2,160	2,457
Net Current Assets	-86,550	-95,681	-64,595	-3,32,747	-7,23,838	-4,03,658	-4,26,292	-4,13,043
Appl. of Funds	6,60,458	8,11,085	8,41,082	15,78,670	11,65,700	12,77,346	11,19,637	10,26,441

E: MOFSL estimates

Financials and valuations

Ratios

Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Basic (INR)								
EPS	6.8	-1.1	-9.6	-18.5	-7.6	-8.4	-10.1	-11.0
Cash EPS	24.2	20.6	9.7	-1.8	0.9	-0.2	-1.7	-2.0
BV/Share	65.4	68.6	62.5	68.3	2.1	-13.3	-23.3	-34.3
DPS	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Payout (%)	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valuation (x)								
P/E	0.9	-5.4	-0.6	-0.3	-0.8	-0.7	-0.6	-0.5
Cash P/E	0.2	0.3	0.6	-3.2	6.5	-27.4	-3.6	-2.9
P/BV	0.1	0.1	0.1	0.1	2.9	-0.4	-0.3	-0.2
EV/Sales	1.2	1.6	2.1	3.0	2.8	4.3	5.1	5.1
EV/EBITDA	3.2	4.9	8.8	25.8	8.3	10.7	12.2	11.0
Dividend Yield (%)	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Return Ratios (%)								
RoE	10.6	-1.7	-16.0	-37.2	-66.2	150.5	55.1	38.0
RoCE	6.4	1.6	-1.8	-6.7	-7.9	-5.5	-6.9	-5.4
RoIC	8.2	1.8	-2.2	-7.8	-8.9	-5.7	-7.0	-5.5
Working Capital Ratios								
Fixed Asset Turnover (x)	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.2
Asset Turnover (x)	0.5	0.4	0.3	0.2	0.4	0.3	0.3	0.4
Inventory (Days)	1	1	0	0	0	0	0	0
Debtor (Days)	12	13	11	32	25	22	11	11
Leverage Ratio (x)								
Current Ratio	0.4	0.4	0.5	0.5	0.3	0.5	0.4	0.5
Interest Coverage Ratio	3.0	0.7	-0.5	-1.2	-0.7	-0.4	-0.4	-0.2
Net Debt/Equity	1.5	2.0	1.9	1.7	17.7	-4.3	-2.7	-2.0

Consolidated Cash Flow Statement

Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
(INR m)								
OP/(Loss) before Tax	42,501	-8,632	-41,682	-1,81,754	-6,17,970	-4,42,534	-2,88,170	-3,14,703
Depreciation	62,561	78,272	84,091	1,45,356	2,43,564	2,36,385	2,42,394	2,56,445
Interest and Finance Charges	20,685	39,736	44,600	88,114	1,43,662	1,78,345	2,07,796	2,56,614
Direct Taxes Paid	-8,611	-6,808	0	2,795	24,064	7,903	0	0
(Inc.)/Dec. in WC	-3,980	6,960	-23,102	28,030	-92,455	-14,445	13,488	-23,986
CF from Operations	1,13,155	1,09,527	63,907	82,541	-2,99,135	-34,346	1,75,508	1,74,370
Others	-3,669	-4,154	-10,583	-29,063	3,72,410	1,90,743	0	0
CF from Operations incl. EO	1,09,486	1,05,373	53,324	53,478	73,275	1,56,397	1,75,508	1,74,370
(Inc.)/Dec. in FA	-1,29,118	-1,26,319	-73,880	-75,860	-78,011	-45,315	-1,07,319	-1,50,000
Free Cash Flow	-19,632	-20,946	-20,556	-22,382	-4,736	1,11,082	68,190	24,370
(Pur.)/Sale of Investments	1,03,909	-33,472	-9,122	-3,731	65,423	42,424	0	0
Others	1,318	4,234	-9,715	5,803	-15,310	13,642	0	0
CF from Investments	-23,890	-1,55,557	-92,717	-73,788	-27,898	10,751	-1,07,319	-1,50,000
Issue of Shares	175	-4,453	67,497	0	2,49,164	0	0	0
Inc./(Dec.) in Debt	-86,485	84,297	29,306	21,299	-80,826	-43,503	1,30,461	2,21,507
Interest Paid	-4,393	-32,800	-44,600	-50,711	-1,52,585	-28,256	-2,07,796	-2,56,614
Dividend Paid	-2,598	-2,599	0	0	0	0	0	0
Others	0	1	-12,954	56,989	-65,019	-95,555	0	0
CF from Fin. Activity	-93,301	44,445	39,249	27,577	-49,266	-1,67,314	-77,335	-35,107
Inc./Dec. in Cash	-7,705	-5,738	-144	7,267	-3,889	-166	-9,146	-10,737
Opening Balance	13,879	6,174	435	291	7,558	3,669	22,165	13,019
Closing Balance	6,174	435	291	7,558	3,669	22,165	13,019	2,282
Other Balances	1,517	392	0	2,350	22,961	0	0	0
Total Balance	7,691	827	291	9,908	26,630	22,165	13,019	2,282

E: MOFSL estimates

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations). Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd.. (PIMPL). MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://onlinereports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (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 company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL , including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co.Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company
- received compensation/other benefits from the subject company in the past 12 months
- other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 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 company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no warranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alterations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 71934200/ 022-71934263; Website www.motilaloswal.com; CIN no.: L67190MH2005PLC153397. Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai- 400 064. Tel No: 022 7188 1000.

Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA0000007100; Insurance Corporate Agent: CA0579; PMS: INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs, Insurance Products and IPOs. Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Research & Advisory services is backed by proper research. Please read the Risk Disclosure Document prescribed by the Stock Exchanges carefully before investing. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.: 022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.