

Estimate change	\longleftrightarrow
TP change	1
Rating change	\leftarrow



Bloomberg	TCS IN
Equity Shares (m)	3,752
M.Cap.(INRb)/(USDb)	8271.6 / 111
52-Week Range (INR)	2302 / 1504
1, 6, 12 Rel. Per (%)	-2/11/9
12M Avg Val (INR M)	7293
Free float (%)	28.0

Financials & Valuations (INR b)

Tillalicials & Vale	10113 (1	1411 01	
Y/E Mar	2020	2021E	2022E
Sales	1,569	1,587	1,805
EBIT Margin (%)	24.6	24.5	25.3
PAT	323	315	372
EPS (INR)	86.2	83.9	99.1
EPS Gr. (%)	3.7	(2.7)	18.2
BV/Sh. (INR)	230	228	228
Ratios			
RoE (%)	36.4	36.6	43.5
RoCE (%)	31.0	31.0	36.6
Payout (%)	99.1	104.6	100.3
Valuations			
P/E (x)	25.7	26.4	22.3
P/BV (x)	9.6	9.7	9.7
EV/EBITDA (x)	18.9	18.7	16.1
Div Yield (%)	3.3	3.4	3.8

Shareholding pattern (%)

Mar-19
72.1
7.8
15.8
4.3

FII Includes depository receipts

CMP: INR2,204 TP: INR2,300 (+4%) Neutral

Miss amidst a challenging environment; Positive outlook! Deal wins and commentary on BFSI is encouraging

- For 1QFY21, TCS missed our revenue (USD) / EBIT estimate by 2%/6%. However, in our view, this is not worrying given the unprecedented damage global economies have witnessed. The management undertook the best possible efforts to optimize cost (SG&A = 12.3% of sales v/s 13.5% in 4Q) and cash conversion (OCF/PAT = 133% v/s 109% in 4Q), which provided great
- Similar to Accenture, underlying trends were resilient. However, as we highlighted in our **earlier note**, lower exposure to the Healthcare vertical (10% of revenue v/s 18% for the former), which has continued to show strong traction, partly led to higher overall revenue decline.
- Deal wins (USD6.9b ex-Phoenix deal; +21% YoY) were stronger than our expectations (USD5.5–6.0b). More importantly, continued traction in large deals, a healthy pipeline, and better resilience in BFSI are encouraging factors.
- Management believes the worst impact of COVID-19 is behind (both in terms of revenue and profitability) even as some variables such as pricing and working capital cycles warrant a close watch. We expect TCS to be a key beneficiary of the COVID-19-led increase in tech intensity across verticals.

Slight miss on estimates; not a cause for concern

- TCS' reported revenue (CC) / EBIT / PBT/ PAT declined 6.3%/2%/11%/14% YoY.
- As in the case of Accenture, the Healthcare vertical reported robust growth (~14% YoY, CC), led by work related to contact tracing applications, etc.
- The BFSI vertical (-4.9% YoY, CC) remained resilient and outperformed company-level growth. In this vertical, while the UK and Canadian markets remained soft, other geographies surpassed management expectations.
- Retail & CPG (-12.9% YoY) and Manufacturing (-7.1% YoY) were the most severely impacted verticals, weighed by sub-segments such as Travel, Discretionary Retail, etc.
- Barring continental Europe (+2.7% YoY), key geographies such as North America (-6.1% YoY) and the UK (-8.5% YoY) reported declines.
- The gross margin missed our estimates by ~160bp. This appears to be driven by sharper-than-expected negative operating leverage.
- Control on SG&A expenses (12.3% of sales v/s 13.5% in 4Q) was impressive.
- Lower other income and higher ETR also impacted reported profitability.
- Cash conversion (OCF/PAT = 133% v/s 109% in 4Q) reported impressive improvement, led by both billed and unbilled receivables.

Key highlights from management commentary

 Of the revenue decline witnessed in 1QFY21, 20% was attributable to supply-side issues, which should be resolved going forward as economies start up again.

Sudheer Guntupalli - Research analyst (Sudheer.Guntupalli@MotilalOswal.com)

Research analyst: Mohit Sharma (Mohit.Sharma@MotilalOswal.com) / Heenal Gada (Heenal.Gada@MotilalOswal.com)

comfort.

- BFSI turned out more resilient than anticipated. Supply-side issues in this vertical were overcome by Apr'20. Some of the incremental demand is being driven by the ramp-up of IT infrastructure to support the distribution of government stimulus funds across economies.
- In Retail & CPG, while the technology spend to enable the online business channel increased considerably, recovery is expected to take longer.
- Globally, ~1% of employees are currently working from office. Management expects ~5% of employees to return to office by the end of the year.
- 32 projects were virtually ramped-up during the quarter. The company virtually on-boarded people across multiple geographies.
- Management indicated large deal wins during the quarter were very strong, allaying concerns around large deals in the current context. It further added the quarter also saw many small deals.
- Of the deal wins reported in 1Q (USD6.9b), the US geography contributed USD3.3b. The BFSI/Retail vertical contributed USD2.1b/USD0.9b. While deal closures were polarized, the pipeline is said to have a good mix of deals.
- The company hinted that the worst impact of COVID-19 was behind. It maintained its earlier outlook of flattish revenue (INR, YoY) by Dec'20. This translates to ~2% CQGR over the Sep and Dec quarters.
- While positive momentum is witnessed in Europe, management is cautiously optimistic on the situation in the US.
- As demand improves and growth revives, margins are expected to expand. It was suggested that discretionary spend would continue to be optimized.
- Collections improved in 1QFY21, which was a positive surprise. Management believes this was largely driven by a strong balance sheet support lent by governments to businesses across the world. However, it is implied that WC cycles need to be keenly observed.

Valuation and view – Key beneficiary of rising tech intensity

- TCS has a historical track record of adapting to multiple business challenges and technology change cycles. Additionally, it has consistently maintained its market leadership, best-in-class operational metrics, and high return ratios.
- While the peak of COVID-19-led uncertainty may be behind, near-term negative surprises related to demand, pricing, and collections cannot be ruled out.
- Nevertheless, TCS should be able to better navigate through these challenges (v/s the rest of the industry). Over the medium term, we expect TCS to be a key beneficiary of the COVID-19-driven increase in technology intensity across verticals.
- Rich multiples (22x FY22E EPS) leave limited upside in the stock, in our view. Accordingly, we remain NEUTRAL on the stock despite being positive on the company.

Quarterly Perf. (IFRS) (INR b) Y/E March FY20 FY21E FY20 FY21E Est. Var. 1QFY21 (% / bp) 1Q **2Q 3Q 4Q 1Q** 2QE 3QE 4QE IT Services Rev. (USD m) 5,485 5,444 5,059 22,032 20,099 5,517 5,586 5,008 5,008 5,023 5,172 -2.2 QoQ (%) 0.3 -5.0 -207bp 1.6 0.6 -2.5 -7.1 -1.0 0.0 5.4 -8.8 1.3 Overall Revenue (INR b) 382 383 390 399 399 381 381 382 1,569 1,526 393 -2.5 QoQ (%) 0.4 2.1 2.3 0.2 -4.1 -0.7 0.0 0.3 -1.6 -246bp YoY (%) 11.4 5.8 6.7 5.1 0.4 -2.3 -4.5 -4.4 7.2 -2.8 3.0 -258bp **GPM (%)** 40.5 40.8 41.4 42.0 39.4 41.4 41.2 41.0 41.2 40.7 41.0 -159bp SGA (%) 16.3 16.8 16.3 16.9 15.8 16.9 16.4 16.4 16.6 16.4 16.6 -78bp **EBITDA** 100 102 110 100 101 102 421 109 102 406 105 -4.2 **EBITDA Margin (%)** 26.7 26.3 26.2 27.3 27.5 26.2 26.9 26.7 26.8 26.6 26.6 -46bp **EBIT** 92 94 100 100 90 93 94 94 386 371 96 -5.7 EBIT Margin (%) 24.2 24.0 25.0 25.1 23.6 24.5 24.7 24.5 24.6 24.3 24.4 -81bp Other income 14 12 6 5 5 6 37 23 9 -47.9 6 6 105 106 422 105 -9.3 **PBT** 105 **106** 95 99 100 100 394 ETR (%) 23.4 23.5 23.0 23.0 25.8 25.8 25.8 25.8 23.2 25.8 23.0 282bp **PAT** 82 81 81 81 70 74 **74** 74 324 291 81 -12.6 QoQ (%) -0.3 -1.2 1.1 -0.6 -12.9 4.5 1.0 -0.5 -0.4 -1253bp

-13.5

18.7

-8.6

19.5

-8.6

19.7

-8.5

19.6

2.2

86.2

-10.3

77.5

-1.1 -1243bp

21.4 -12.6

Key Performance Indicators

10.7

21.7

1.7

21.4

0.3

21.6

-1.1

21.5

YoY (%)

EPS (INR)

Y/E March		FY20				FY21E			FY20	FY21E
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE		
Revenue (QoQ CC %)	2.5	1.6	0.3	-1.4	-6.7				7.1	7.1
Costs (% of revenue)										
COGS	59.5	59.2	58.6	58.0	60.6	58.6	58.8	59.0	58.8	59.3
SGA	16.3	16.8	16.3	16.9	15.8	16.9	16.4	16.4	16.6	16.4
Depreciation	2.1	2.2	2.3	2.4	2.5	2.2	2.2	2.2	2.2	2.3
Margins										
Gross Margin	40.5	40.8	41.4	42.0	39.4	41.4	41.2	41.0	41.2	40.7
EBITDA margin	26.3	26.2	27.3	27.5	26.2	26.7	26.9	26.7	26.8	26.6
EBIT Margin	24.2	24.0	25.0	25.1	23.6	24.5	24.7	24.5	24.6	24.3
Net Margin	21.3	20.6	20.4	20.1	18.3	19.2	19.4	19.3	20.6	19.1
Operating metrics										
Headcount (k)	437	451	447	448	444				448	
Attrition (%)	11.5	11.6	12.2	12.1	11.1				12.1	
Deal Win TCV (USD b)	5.7	6.4	6	8.9	6.9				27	
Key Verticals (YoY CC %)										
BFSI	9.2	8.0	5.3	-1.3	-4.9				5.2	
Retail	7.9	4.8	5.1	4.2	-12.9				5.5	
Key Geographies (YoY CC %)										
North America	7.7	5.3	4.1	0.2	-6.1				4.3	
UK	16.0	13.3	7.5	5.4	-8.5				10.4	
Continental Europe	15.0	16.0	15.9	11.9	2.7				14.6	

MOTILAL OSWAL

Key highlights from management commentary

- Of the revenue decline witnessed in 1QFY21, 20% was attributable to supplyside issues, which should be resolved going forward as economies start up again.
- BFSI turned out more resilient than anticipated. Supply-side issues in this vertical were overcome by Apr'20. Some of the incremental demand is being driven by the ramp-up of IT infrastructure to support the distribution of government stimulus funds across economies.
- In Retail & CPG, while the technology spend to enable the online business channel increased considerably, recovery is expected to take longer.
- Globally, ~1% of employees are currently working from office. Management expects ~5% of employees to return to office by the end of the year.
- 32 projects were virtually ramped-up during the quarter. The company virtually on-boarded people across multiple geographies.
- Management indicated large deal wins during the quarter were very strong, allaying concerns around large deals in the current context. It further added the quarter also saw many small deals.
- Of the deal wins reported in 1Q (USD6.9b), the US geography contributed USD3.3b. The BFSI/Retail vertical contributed USD2.1b/USD0.9b. While deal closures were polarized, the pipeline is said to have a good mix of deals.
- The company hinted that the worst impact of COVID-19 was behind. It maintained its earlier outlook of flattish revenue (INR, YoY) by Dec'20. This translates to ~2% CQGR over the Sep and Dec quarters.
- While positive momentum is witnessed in Europe, management is cautiously optimistic on the situation in the US.
- As demand improves and growth revives, margins are expected to expand. It was suggested that discretionary spend would continue to be optimized.
- Collections improved in 1QFY21, which was a positive surprise. Management believes this was largely driven by a strong balance sheet support lent by governments to businesses across the world. However, it is implied that WC cycles need to be keenly observed.

Slight miss on estimates; not a cause for concern

- TCS' reported revenue (CC) / EBIT / PBT/ PAT declined 6.3%/2%/11%/14% YoY.
- As in the case of Accenture, the Healthcare vertical reported robust growth (~14% YoY, CC), led by work related to contact tracing applications, etc.
- The BFSI vertical (-4.9% YoY, CC) remained resilient and outperformed company-level growth. In this vertical, while the UK and Canadian markets remained soft, other geographies surpassed management expectations.
- Retail & CPG (-12.9% YoY) and Manufacturing (-7.1% YoY) were the most severely impacted verticals, weighed by sub-segments such as Travel, Discretionary Retail, etc.
- Barring continental Europe (+2.7% YoY), key geographies such as North America (-6.1% YoY) and the UK (-8.5% YoY) reported declines.
- The gross margin missed our estimates by ~160bp. This appears to be driven by sharper-than-expected negative operating leverage.
- Control on SG&A expenses (12.3% of sales v/s 13.5% in 4Q) was impressive.
- Lower other income and higher ETR also impacted reported profitability.

MOTILAL OSWAL

■ Cash conversion (OCF/PAT = 133% v/s 109% in 4Q) reported impressive improvement, led by both billed and unbilled receivables.

Exhibit 1: Barring Europe, other geographies reported revenue decline

Geographies	Cont. To Rev. (%)	YoY CC Gr. (%)
North America	51.4	-6.1
Latin America	1.7	0.2
UK	15	-8.5
Continental Europe	15.6	2.7
India	4.3	-27.6
Asia Pacific	9.8	-3.2
MEA	1.9	-11.7

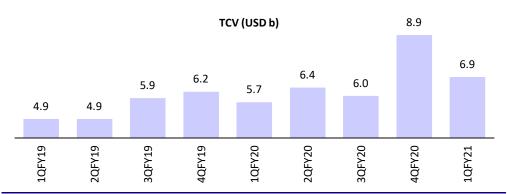
Source: Company, MOFSL

Exhibit 2: Across verticals, Healthcare reported strong growth, similar to Accenture

Services	Cont. To Rev. (%)	YoY CC Gr. (%)
BFSI	31.3	-4.9
Retail & CPG	14	-12.9
Communications & Media	7.1	-3.6
Manufacturing	9.7	-7.1
Life Sciences & Healthcare	9.6	13.8
Technology & Services	9.1	-4.0
Regional markets & Others	19.2	-12.5

Source: Company, MOFSL

Exhibit 3: Deal wins (ex-Phoenix) during the quarter were robust despite COVID-19



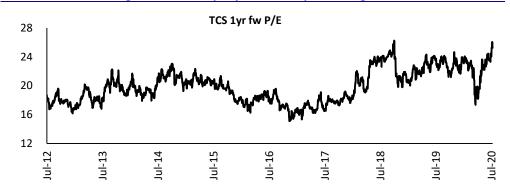
Source: Company, MOFSL

MOTILAL OSWAL

Valuation view – Key beneficiary of rising tech intensity

- TCS has a historical track record of adapting to multiple business challenges and technology change cycles. Additionally, it has consistently maintained its market leadership, best-in-class operational metrics, and high return ratios.
- While the peak of COVID-19-led uncertainty may be behind, near-term negative surprises related to demand, pricing, and collections cannot be ruled out.
- Nevertheless, TCS should be able to better navigate through these challenges (v/s the rest of the industry). Over the medium term, we expect TCS to be a key beneficiary of the COVID-19-driven increase in technology intensity across verticals.
- Rich multiples (22x FY22E EPS) leave limited upside in the stock, in our view. Accordingly, we remain NEUTRAL on the stock despite being positive on the company.

Exhibit 4: Over the long term, the company's P/E multiples averaged to ~19x



Source: Bloomberg, MOFSL

Exhibit 5: Revision in our estimates

	Revised		Earlie	r	Change		
	FY21E	FY22E	FY21E	FY22E	FY21E	FY22E	
INR/USD	75.9	77.0	76.0	77.0	-0.1%	0.0%	
USD Revenue - m	20,904	23,441	20,547	22,594	1.7%	3.7%	
Growth (%)	(5.1)	12.1	(6.7)	10.0	160bps	220bps	
EBIT margin - Overall (%)	24.5	25.3	24.5	25.3	-10bps	0bps	
PAT (INR B)	315	372	320	367	-1.7%	1.3%	
EPS	83.9	99.1	85.3	97.9	-1.7%	1.3%	

Source: MOFSL

Operating metrics

	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20	1QFY21
Verticals (%)									
BFSI	31.1	31.2	30.8	30.9	30.8	31	30.4	29.7	31.3
Retail & CPG	15.4	15.4	15.5	15.1	15.0	14.8	15.2	15.4	14
Communication & Media	7.1	6.8	6.9	6.8	6.9	7.0	7.0	7.2	7.1
Manufacturing	10.2	9.8	9.8	9.6	9.8	9.8	10.0	10.1	9.7
Life Sciences & Healthcare	7.3	7.5	7.6	7.7	7.9	8.1	8.3	8.8	9.6
Technology & Services	9.0	8.9	8.7	8.6	8.8	8.7	8.4	8.7	9.1
Regional markets & Others	19.9	20.4	20.7	21.3	20.8	20.6	20.7	20.1	19.2
Geographies (%)									
North America	51	51.1	51.2	50.7	50.6	50.6	50.1	50.3	51.4
Latin America	1.9	2.0	2.0	2.0	1.8	1.9	1.9	1.8	1.7
UK	15.5	15.6	15.5	15.9	15.8	15.6	15.9	16.0	15.3
Continental Europe	14.0	14.0	14.1	14.1	14.3	14.6	14.9	15.2	15.6
India	5.8	5.6	5.7	5.8	6.0	5.7	5.7	5.5	4.3
Asia Pacific	9.6	9.6	9.4	9.5	9.4	9.4	9.3	9.3	9.8
MEA	2.2	2.1	2.1	2.0	2.1	2.2	2.2	1.9	1.9
QoQ growth (%)									
BFSI		3.6	(0.6)	3.1	1.3	1.2	(0.7)	(4.8)	(2.1)
Retail & CPG		3.2	1.3	0.1	1.0	(0.8)	4.0	(1.3)	(15.5)
Communication & Media		(1.1)	2.2	1.3	3.1	2.0	1.3	0.2	(8.4)
Manufacturing		(0.8)	0.7	0.7	3.7	0.6	3.3	(1.6)	(10.8)
Life Sciences & Healthcare		6.1	2.0	4.2	4.3	3.1	3.8	3.3	1.4
Technology & Services		2.1	(1.6)	1.6	4.0	(0.6)	(2.2)	0.9	(2.8)
Regional markets & Others		5.8	2.2	5.8	(0.8)	(0.4)	1.7	(5.4)	(11.2)
North America	3.2	3.4	0.9	1.8	1.4	0.6	0.3	(2.2)	(5.0)
Latin America	(3.5)	8.7	0.7	2.8	(8.5)	6.2	1.3	(7.7)	(12.2)
UK	3.6	3.9	0.0	5.5	1.0	(0.7)	3.2	(1.9)	(11.1)
Continental Europe	0.2	3.2	1.4	2.8	3.1	2.7	3.3	(0.6)	(4.6)
India	(5.0)	(0.3)	2.5	4.6	5.1	(4.4)	1.3	(6.0)	(27.3)
Asia Pacific	0.5	3.2	(1.4)	3.9	0.6	0.6	0.2	(2.5)	(2.1)
MEA	(10.6)	(1.4)	0.7	(2.1)	6.7	5.4	1.3	(15.8)	(7.1)
Total Employees (k)	401	411	418	424	437	451	447	448	444
Net Additions (k)	6	10	7	6	12	14	-4	2	-5
Attrition (LTM %)	10.9	10.9	11.2	11.3	11.5	11.6	12.2	12.1	11.1

Financials and valuations

Income statement								(INR b)
Y/E March	2015	2016	2017	2018	2019	2020	2021E	2022E
Sales	946	1,086	1,180	1,231	1,465	1,569	1,587	1,805
Change (%)	15.7	14.8	8.6	4.4	19.0	7.2	1.1	13.7
Cost of Services	545	609	669	713	852	923	940	1,058
SG&A Expenses	174	190	208	213	239	260	259	291
EBITDA	247	307	323	325	395	421	425	496
% of Net Sales	26.1	28.2	27.4	26.4	27.0	26.8	26.8	27.5
Depreciation	19	19	20	20	21	35	36	40
EBIT	228	288	303	305	375	386	388	456
% of Net Sales	24.1	26.5	25.7	24.8	25.6	24.6	24.5	25.3
Other Income	31	31	42	36	43	37	26	33
PBT	259	318	345	341	417	422	414	488
Tax	61	75	82	82	100	98	98	115
Rate (%)	23.5	23.6	23.6	24.1	24.0	23.2	23.6	23.5
PAT	199	243	264	259	317	324	316	374
Extraordinary gains/loss	0	0	0	0	0	0	0	0
Adjusted PAT	199	243	264	259	317	324	316	374
Minority Interest	2	1	1	1	1	1	2	2
Reported PAT	196	242	263	258	317	323	315	372
Change (%)	2.8	23.2	8.6	-1.8	22.6	2.2	-2.7	18.2

Balance Sheet								(INR b)
Y/E March	2015	2016	2017	2018	2019	2020	2021E	2022E
Net Worth	575	732	883	872	916	862	855	854
Minority Interest & Others	27	24	25	33	34	97	98	99
Loans	4	2	3	2	1	0	0	0
Capital Employed	605	758	911	908	950	960	953	953
Net Block	116	118	117	116	117	199	192	182
Intangibles	39	39	38	39	40	41	42	42
Other LT assets	80	85	81	84	75	79	75	75
Curr. Assets	515	669	817	845	938	910	918	966
Debtors	243	281	280	320	364	412	386	429
Cash & Bank Balance	250	367	509	499	495	350	351	332
Other Current Assets	22	22	28	26	79	149	180	205
Current Liab. & Prov	144	154	143	176	221	271	274	311
Net Current Assets	370	515	674	669	718	640	644	655
Application of Funds	605	758	911	908	950	960	953	953

Financials and valuations

Ratios								
Y/E March	2015	2016	2017	2018	2019	2020	2021E	2022E
Basic (INR)								
EPS	51.3	63.2	68.7	67.4	83.1	86.2	83.9	99.1
Cash EPS	56.2	68.2	73.8	72.7	88.9	95.6	93.5	109.7
Book Value	150.1	191.1	230.6	227.8	241.5	229.8	227.8	227.5
DPS	79.0	60.0	23.5	25.0	32.0	73.0	75.0	85.0
Payout %	180.1	111.0	40.0	43.4	45.0	99.1	104.6	100.3
Valuation (x)								
P/E	43.1	35.0	32.2	32.8	26.6	25.7	26.4	22.3
Cash P/E	39.4	32.5	30.0	30.4	24.9	23.1	23.7	20.2
EV/EBITDA	33.3	26.4	24.7	24.5	20.0	18.9	18.7	16.1
EV/Sales	8.7	7.5	6.8	6.5	5.4	5.1	5.0	4.4
Price/Book Value	14.7	11.6	9.6	9.7	9.2	9.6	9.7	9.7
Dividend Yield (%)	3.6	2.7	1.1	1.1	1.4	3.3	3.4	3.8
Profitability Ratios (%)								
RoE	34.8	37.1	32.6	29.4	35.4	36.4	36.6	43.5
RoCE	29.4	32.3	27.8	25.5	30.7	31.0	31.0	36.6
RoIC	49.6	59.0	58.4	57.2	66.0	55.7	49.0	57.0
Turnover Ratios								
Debtors (Days)	94	94	87	95	91	96	89	87
Fixed Asset Turnover (x)	8.2	9.2	10.0	10.6	12.6	7.9	8.3	9.9
Cash Flow Statement								(INR b)
	2015	2016	2017	2018	2019	2020	2021E	2022E
Y/E March	261						425	
CF from Operations		315	323	325	395	421		496
Cash for Working Capital	7	-48	-16	-5	-53	-67	-3	-30
Net Operating CF	194	191	225	238	242	256	323	351
Net Purchase of FA	-29	-20	-40	-18	-21	-31	-26	-29
Free Cash Flow	164	171	185	220	221	225	298	322
Net Purchase of Invest.	15	-32	4	-3	9	-4	4	0
Net Cash from Invest.	-17	-52	-36	-23	-14	-123	-25	-29
Proc. from equity issues	0	0	0	0	0	0	0	0
Proceeds from LTB/STB	0	-1	1	8	-2	61	-1	0
Others	-2	1	36	-121	-90	-19	33	33
Dividend Payments	-171	-95	-105	-112	-141	-320	-329	-373
	-173	-95	-68	-226	-232	-279	-297	-341
Cash Flow from Fin.				40	-3	-146	4	40
Cash Flow from Fin. Net Cash Flow	4	44	121	-10	-3	-146	1	-19
	4 15	44 19	367	509	499	495	350	351
Net Cash Flow						-		

NOTES

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.nseindia.com, www.nseindia.com, www.nseindia.com, www.nseindia.com, www.nseindia.com, <a href="www.nseindia.com, www.nseindia.com, <a href="www.nseindia.com, www.nseindia.com, <a href="www.nseindia.com, www.nseindia.com, <a href="www.nseindia.com, www.nseindia.com, www.nseindia.com

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

MOTILAL OSWAL TCS

- 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 guaranty, 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 alternations 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: INA000007100; 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.