

Estimate change	↔↔
TP change	↔↔
Rating change	↔↔

Bloomberg	TECHM IN
Equity Shares (m)	919
M.Cap.(INRb)/(USDb)	1009.1 / 12.4
52-Week Range (INR)	1525 / 914
1, 6, 12 Rel. Per (%)	4/4/-30
12M Avg Val (INR M)	3479

Financials & Valuations (INR b)

Y/E Mar	2023E	2024E	2025E
Sales	536	591	647
EBIT Margin (%)	11.8	12.8	13.7
PAT	51	60	71
EPS (INR)	58.4	68.2	79.7
EPS Gr. (%)	(6.7)	16.7	16.9
BV/Sh. (INR)	321.4	340.0	361.5
Ratios			
RoE (%)	18.8	20.8	22.9
RoCE (%)	19.0	21.4	23.7
Payout (%)	75.0	75.0	75.0
Valuations			
P/E (x)	17.6	15.1	12.9
P/BV (x)	3.2	3.0	2.9
EV/EBITDA (x)	10.8	9.3	8.0
Div Yield (%)	4.2	4.9	5.8

Shareholding pattern (%)

As On	Dec-22	Sep-22	Dec-21
Promoter	35.2	35.2	35.7
DII	24.1	24.0	17.4
FII	28.0	28.2	35.4
Others	12.7	12.6	11.6

FII Includes depository receipts

CMP: INR1,036 **TP: INR1,020 (-2%)** **Neutral**

Margin focus to hinder FY24 topline growth

Await greater comfort on margins; maintain Neutral

- TECHM reported revenue of USD1.67b in 3QFY23, up 0.2% QoQ in CC terms (in line). Reported growth was 1.8% QoQ, led by Retail (+6.0 QoQ) and Technology (+3.3% QoQ). BFSI (-0.5% QoQ) and Manufacturing (flat QoQ) were soft. EBIT margin rose 60bp QoQ to 12% (vs our estimate of 11.6%).
- Q3 revenue softness was anticipated due to extended furloughs and the ongoing account pruning exercise to weed out low-margin and non-strategic accounts. Management indicated a total annualized impact of USD100-120m in FY23 from the exercise, which is now half completed. Additionally, top-5 accounts also remained soft due to internal restructuring at a key client, leading to slow ramp-ups and slow deal closure activities in Q3.
- We expect TECHM to deliver USD revenue growth of 10.6% in FY23 (including ~400bp inorganic impact) followed by ~8% growth in FY24E, which is among the weakest in our coverage universe. TECHM should see pressure in FY24 on account of sacrificing growth over margins, softness in its top accounts and a long revenue conversion cycle amid pressure on small deals.
- On the margin front, TECHM beat our estimate by 40bp QoQ and delivered EBIT margin of 12% in Q3FY23. The margin improvement was led by restructuring in low-margin assets, increased offshoring and rigorous focus on improving quality revenues. We slightly raise our FY23 margin estimate by 30bp to 11.8% due to a beat in Q3 margins. We see FY24E/FY25E margins at 12.8%/13.7%. Our margin estimates remain behind the earlier ramp-up expected by the company as we see fewer gains from operating leverage due to modest topline growth.
- We remain on the sidelines on TECHM as we feel the current valuations fairly factor in uncertainties around growth and margin. We marginally tweak our FY23/FY24/FY25 estimates. Our TP implies 15x FY24E EPS. We remain **Neutral** on the stock with TP of INR 1,020.

In-line performance, but sharp decline in headcount

- Revenue grew 0.2% QoQ CC to USD1.67b (in line; up 1.8% in USD terms).
- For 9MFY23, USD revenue grew 13% YoY, while INR EBIT and INR PAT declined 7% and 8%, respectively.
- The FCF to PAT conversion was weak at 19.9% in 3QFY23 due to a strong conversion in 2QFY23. PAT conversion for 9MFY23 was at 80%.
- Adjusted EBIT margin grew 60bp QoQ, but fell 280bp YoY, to 12% (vs estimate of 11.6%).
- Adjusted PAT rose 1% QoQ to INR13.1b, in line with our estimates.

Key highlights from the management commentary

- The macro environment remains weak; TECHM is seeing slower decision-making for projects, cuts in discretionary spending and shrinking budgets for short-term tactical deals.

- As a result, TECHM is planning to be more agile while aligning the business with client needs by reviewing on a monthly basis (previously on quarterly).
- TECHM expects the account pruning exercise (similar to 2Q or more) to continue in 4QFY23 and beyond in FY24.
- Extended furloughs, the impact from Top clients, slow decision-making and the focus on costs remain headwinds for 4QFY23.

Valuation and view

- Although its current performance remains muted, TECHM's high exposure to the Communications vertical offers a potential opportunity, as a broader 5G rollout can result in a new spending cycle in this space.
- Near-term growth remains weak and we await greater comfort on margins. We value the stock at 15x FY24E EPS. **We maintain our Neutral rating.**

Y/E March	Quarterly performance								(INR b)			
	FY22				FY23				FY22	FY23E		
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4QE	3QE	Var. (%/bp)		
Revenue (USD m)	1,384	1,473	1,534	1,608	1,633	1,638	1,668	1,697	5,998	6,636	1,641	1.6
QoQ (%)	4.1	6.4	4.1	4.9	1.5	0.3	1.8	1.7	17.4	10.6	0.2	164bp
Revenue (INR b)	102	109	115	121	127	131	137	140	446	536	135	1.8
YoY (%)	12.0	16.1	18.7	24.5	24.6	20.7	19.9	15.5	17.9	20.0	17.8	211bp
GPM (%)	31.7	31.7	30.1	29.3	28.3	27.9	28.7	29.5	30.6	28.6	28.2	49bp
SGA (%)	13.3	13.3	12.1	12.1	13.5	12.8	13.1	13.0	12.7	13.1	12.9	18bp
EBITDA	19	20	21	21	19	20	21	23	80	83	21	3.9
EBITDA Margin (%)	18.4	18.3	18.0	17.2	14.8	15.1	15.6	16.5	18.0	15.5	15.3	31bp
EBIT	15	17	17	16	14	15	16	18	65	63	16	5.2
EBIT Margin (%)	15.2	15.2	14.8	13.2	11.0	11.4	12.0	12.9	14.6	11.8	11.6	38bp
Other income	2	2	2	3	1	2	1	2	10	6	2	-33.6
ETR (%)	23.9	29.4	26.9	17.5	22.8	21.4	27.3	26.5	24.4	24.7	26.5	79bp
Adj. PAT	14	13	14	15	11	13	13	14	56	52	13	1.7
QoQ (%)	11.7	-1.1	2.2	10.0	-24.9	15.8	-1.0	10.5			-2.7	169bp
YoY (%)	39.2	25.7	4.5	24.3	-16.4	-2.2	-5.3	-4.8	22.1	-7.1	-6.9	162bp
Extra-Ordinary Item	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-0.2	0.0	0.0
Reported PAT	14	13	14	15	11	13	13	14	56	51	13	1.7
EPS (INR)	15.3	15.1	15.5	16.9	12.8	14.8	14.7	16.2	62.6	58.4	14.4	1.8

E: MOFSL estimates

Y/E March	Key performance indicators								FY22	FY23E		
	FY22				FY23							
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4QE				
Revenue (QoQ CC %)	3.9	7.2	4.7	5.4	3.5	2.9	0.2					
Margins (%)												
Gross Margin	31.7	31.7	30.1	29.3	28.3	27.9	28.7	29.5	30.6	28.6		
EBITDA margin	18.4	18.3	18.0	17.2	14.8	15.1	15.6	16.5	18.0	15.5		
EBIT Margin	15.2	15.2	14.8	13.2	11.0	11.4	12.0	12.9	14.6	11.8		
Net Margin	13.3	12.3	12.0	12.4	8.9	10.0	9.4	10.2	12.5	9.7		
Operating Metrics												
Headcount (k)	126	141	145	151	158	164	157					
Utilization excl. trainees (%)	89.0	89.0	86.0	84.0	83.0	85.0	86.0					
Attrition (%)	17.0	21.0	24.0	24.0	22.0	20.0	17.0					
Deal TCV (USD m)	815	750	704	1011	802	716	795					
Key Verticals (QoQ %)												
Communication	3.1	6.7	6.2	4.1	1.0	-1.4	2.1					
Enterprise	4.7	6.3	2.7	5.4	1.8	1.5	1.7					
Key Geographies (QoQ %)												
North America	6.8	8.9	6.5	3.6	4.2	2.8	-0.4					
Europe	6.8	1.3	2.5	8.6	-2.0	-3.6	1.4					



Highlights from the management commentary

Demand and industry outlook

- TECHM posted a muted revenue growth of 0.2% QoQ in CC terms in 3QFY23 due to the impact of furloughs.
- RoW saw strong growth as the Middle East continued to perform well. The company is seeing good opportunities there, especially in Digital. The US and Europe have a higher risk of a macro slowdown compared to other regions.
- The deal pipeline remains strong. TECHM saw net new deal wins of USD795m (TCV) in 3QFY23, with a large deal in Americas in Telecom.
- There is no change in the average deal size. Clients remain cautious and are taking longer time to sign new deals.
- The macro environment remains weak; TECHM is seeing slower decision-making for projects, cuts in discretionary spending and shrinking budgets for short-term tactical deals.
- As a result, TECHM is planning to be more agile while aligning the business with client needs by reviewing on a monthly basis (previously on quarterly).
- Customer experience in the BPS business had a record quarter and was ahead of the industry in 3QFY23 (seasonally strong). The outlook for BPO remains strong.
- The Communications vertical continues to benefit from 5G. There are good opportunities. There is a change in the delivery model, and the company expects to see good cost take-out deals in 6-7 months. Retail, Manufacturing and BFSI continue to do well, while there is softness in Hi-Tech.
- TECHM expects the account pruning exercise (similar to 2Q or more) to continue in 4QFY23 and beyond in FY24.
- The performance of Top-5 accounts remained muted due to internal restructuring initiatives for some clients. This should bottom out in 4QFY23 before growing in FY24.
- It is witnessing extended furloughs in few markets, which have been extended to Jan'23.
- Extended furloughs, the impact from Top clients, slow decision-making and the focus on costs remain headwinds for 4QFY23.
- Despite near-term weakness, the medium to long-term demand for Communications remains strong, with deals expected to come back in 2-3 quarters and good vendor consolidation opportunities.

Margin performance

- Margin expanded by 60bp in 3QFY23. Utilization, discontinuing of the low-margin business, and favorable forex aided margin during the quarter, partially offset by higher SG&A expenses.
- Margin levers include normalizing sub-contractor expenses, offshoring, divesting non-strategic assets, automation and delivery optimization, along with realizing synergies from portfolio companies.
- The management sees a good utilization buffer. Sub-contractor expenses and offshoring have good headroom to improve margins.

Others

- DSO remained flat at 98 days in 3QFY23.
- Cash and investments stood at USD780m in 3QFY23.
- The FCF to PAT conversion was muted at 19.9% due to higher conversion in 2Q at 159%. For 9MFY23, the conversion stood at ~80%.

Exhibit 1: Retail led the growth in 3QFY23

Verticals	Contribution to revenue (%)	Growth (QoQ %)
Comm., Media, and Ent.	39.8	2.1
Manufacturing	15.7	-0.1
Technology	10.3	3.9
BFSI	15.9	-0.7
Retail, Transport, and Logistics	8.5	6.9
Others	9.8	1.8

Exhibit 2: Americas remained soft in 3QFY23

Geographies	Contribution to revenue (%)	Growth (QoQ %)
Americas	49.7	-0.4
Europe	24.4	1.4
Rest of the World	25.9	6.8

Valuation and view

- Although its current performance remains muted, TECHM's high exposure to the Communications vertical offers a potential opportunity, as a broader 5G rollout can result in a new spending cycle in this space.
- Near-term growth remains weak, and we await greater comfort on margins. We value the stock at 15x FY24E EPS. **We maintain our Neutral rating.**

Exhibit 3: Revisions to our estimates

	Revised estimate			Earlier estimate			Change		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
USD:INR	80.6	82.5	82.5	80.7	82.8	82.8	-0.1%	-0.4%	-0.4%
Revenue (USD m)	6,636	7,169	7,847	6,600	7,158	7,760	0.5%	0.2%	1.1%
Growth (%)	10.6	8.0	9.4	10.0	8.4	8.4	60bps	-40bps	100bps
EBIT margin (%)	11.8	12.8	13.7	11.6	12.6	13.5	30bps	20bps	30bps
PAT (INR b)	52	60	71	51	61	70	1.4%	-0.3%	1.3%
EPS	58.4	68.2	79.7	57.6	68.4	78.6	1.5%	-0.2%	1.4%

Source: MOFSL, Company

Story in charts

Exhibit 4: Decent deal wins in 3QFY23



Exhibit 5: Revenue was flat QoQ CC in 3QFY23

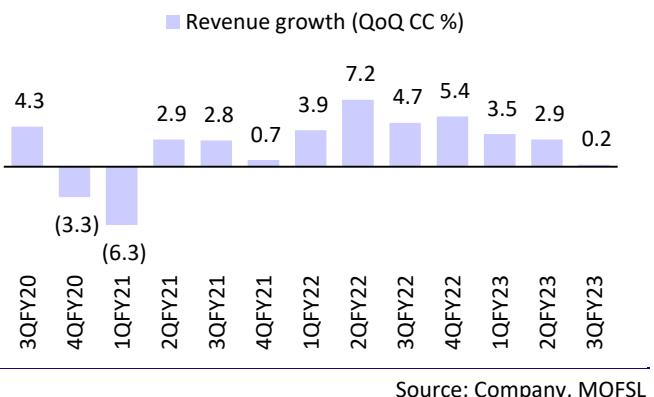


Exhibit 6: EBIT margin saw marginal improvement in 3QFY23

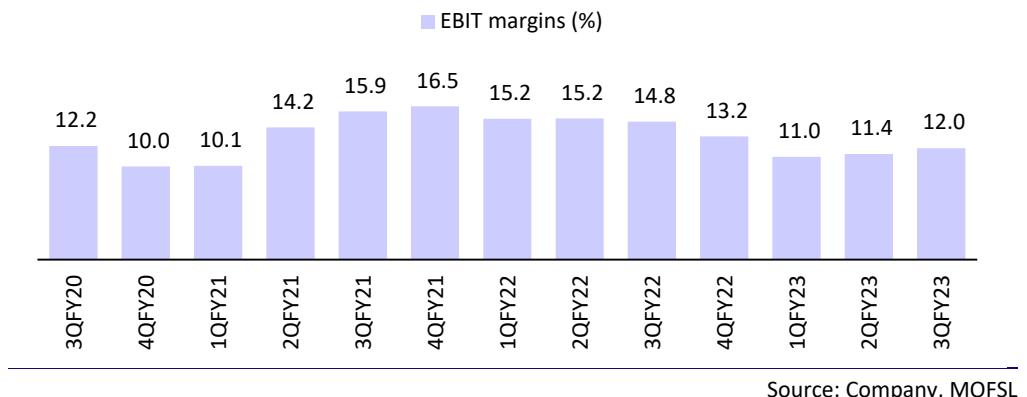


Exhibit 7: Utilization improves by 100bp in 3QFY23

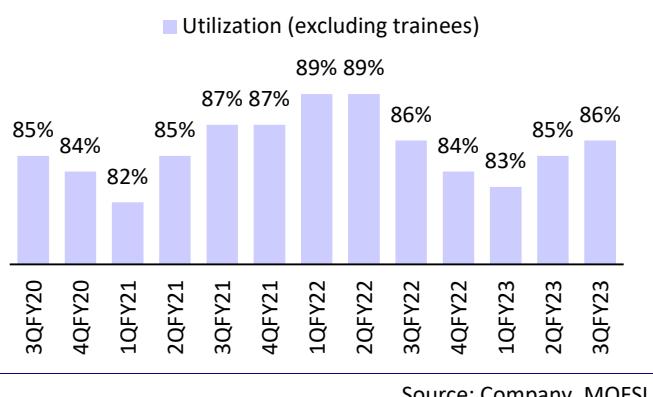


Exhibit 8: Headcount declines meaningfully in 3QFY23

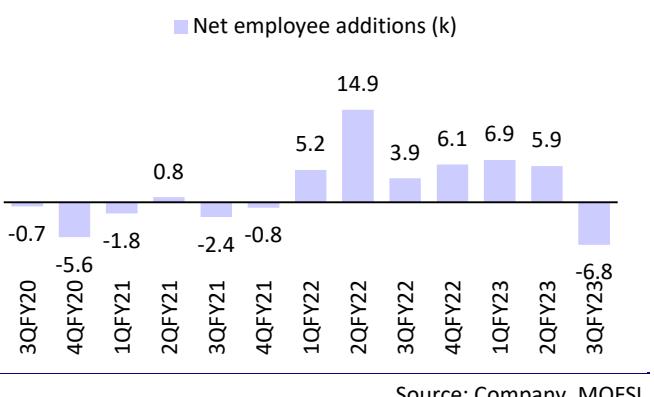


Exhibit 9: Operating metrics

	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23	2QFY23	3QFY23
Revenue by Geography (%)									
Americas	46.8	45.5	46.7	47.8	48.9	48.3	49.6	50.8	49.7
Europe	26.4	26.5	27.2	25.9	25.5	26.4	25.5	24.5	24.4
Rest of the World	26.8	28.0	26.1	26.3	25.6	25.3	24.9	24.7	25.9
Client Metrics									
No. of active clients	997	1,007	1,058	1,123	1,191	1,224	1,262	1,279	1,262
As a percentage of repeat business	94.0	92.0	96.0	93.0	92.0	87.0	98.0	95.0	98.0
Number of clients (USD m)									
Over USD1m	454	451	466	488	502	524	549	562	549
Over USD5m	162	169	168	169	173	174	176	184	176
Over USD10m	83	85	86	90	96	97	104	108	104
Over USD20m	50	50	51	50	50	54	60	63	60
Over USD50m	21	21	22	22	22	23	23	23	23
Client concentration (%)									
Top five Clients	22.0	22.0	22.0	22.0	23.0	22.0	21.0	19.0	18.0
Top six to 10	9.0	9.0	9.0	9.0	8.0	9.0	9.0	9.0	9.0
Top 11-20	11.0	12.0	12.0	12.0	11.0	12.0	11.0	12.0	13.0
Headcount									
Software professionals	68,734	68,427	69,877	76,800	81,115	85,830	88,030	86,776	84,874
BPO	46,832	46,125	49,668	57,058	56,297	57,315	61,392	68,388	63,568
Sales and support	6,335	6,502	6,718	7,335	7,655	8,028	8,613	8,748	8,626
Total	1,21,901	1,21,054	1,26,263	1,41,193	1,45,067	1,51,173	1,58,035	1,63,912	1,57,068
IT Attrition (LTM %)	12	13	17	21	24	24	22	20	17
IT Utilization (%)	87	87	88	87	84	83	83	85	86
IT Utilization (excluding trainees)	87	87	89	89	86	84	83	85	86
DSO including unbilled	95	92	93	92	101	97	101	98	98
Borrowings (USD m)	262.0	232.0	218.0	206.0	210.0	209.0	220.0	207.0	212.0
Cash and Cash Equivalent (USD m)	1,625.0	1,781.0	1,818.0	1,626.0	1,346.0	1,140.7	1,114.0	947.0	780.0
Capital Expenditure (USD m)	16.0	20.0	22.0	23.0	26.0	46.0	20.0	19.0	31.0

Source: Company, MOFSL

Financials and valuations

Income Statement								(INR b)
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Sales	308	347	369	379	446	536	591	647
Change (%)	5.6	12.9	6.1	2.7	17.9	20.0	10.4	9.4
COGS	215	234	260	259	310	382	418	452
SGA expenses	45	50	52	52	57	70	76	83
Total Expenses	261	284	311	310	366	453	494	535
EBITDA	47	63	57	68	80	83	97	112
As a percentage of Net Sales	15.3	18.2	15.5	18.1	18.0	15.5	16.4	17.3
Depreciation	11	11	14	15	15	20	21	23
Other Income	12	3	10	6	10	6	8	8
PBT	49	55	53	60	75	70	83	97
Tax	11	13	12	15	18	17	22	26
Rate (%)	22.4	22.6	22.0	25.3	24.4	24.7	26.5	26.5
PAT	38	43	41	45	56	52	61	72
Minority interest	0	0	-1	-1	1	1	1	1
Share from associates	0	0	0	0	0	0	0	0
PAT before EO	38	43	43	46	56	52	60	71
Change (%)	33.9	13.1	-1.1	7.2	22.1	-7.1	16.7	16.9
Extraordinary Items (EO)	0	0	-2	-1	0	0	0	0
Reported PAT	38	43	40	44	56	51	60	71
Change (%)	33.9	13.1	-6.2	9.8	25.7	-7.5	17.3	16.9

Balance Sheet								(INR b)
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Share Capital	4	4	4	4	4	4	4	4
Reserves	184	198	214	244	264	278	295	314
Net Worth	188	203	218	249	269	283	299	318
Minority Interest	5	5	4	4	5	5	5	5
Loans	17	14	24	17	16	16	16	16
Other long-term liabilities	12	9	28	28	36	43	47	50
Amount pending invest.	12	12	12	12	12	12	12	12
Capital Employed	235	243	287	309	338	359	379	402
Applications								
Assets	79	73	89	91	149	141	137	134
Investments	15	12	2	6	4	4	4	4
Other non-current assets	30	33	50	47	50	60	66	73
Curr. Assets	181	216	232	253	245	283	314	344
Debtors	65	70	76	65	75	90	100	110
Cash and Bank Balance	20	20	30	27	38	30	27	27
Investments	75	98	57	98	46	71	96	121
Other Current Assets	22	28	68	63	86	92	90	86
Current Liab. and Prov.	70	91	87	88	111	131	142	154
Net Current Assets	111	124	145	165	134	153	171	190
Application of Funds	235	243	287	309	338	359	379	402

Financials and valuations

Ratios								
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Basic (INR)								
EPS	43.0	48.5	48.7	52.1	63.2	58.8	68.6	80.2
Diluted EPS	42.7	47.7	48.3	51.7	62.6	58.4	68.2	79.7
Cash EPS	54.8	60.3	62.3	66.7	79.7	80.4	92.3	106.0
Book Value	213.4	228.7	249.9	284.4	305.2	321.4	340.0	361.5
DPS	14.0	14.0	15.0	45.0	45.0	43.8	51.2	59.8
Payout (%)	32.8	29.3	31.0	87.1	71.9	75.0	75.0	75.0
Valuation (x)								
P/E ratio	24.1	21.4	21.3	19.9	16.4	17.6	15.1	12.9
Cash P/E ratio	18.9	17.2	16.6	15.5	13.0	12.9	11.2	9.8
EV/EBITDA ratio	19.3	14.4	15.7	13.1	11.1	10.8	9.3	8.0
EV/Sales ratio	3.0	2.6	2.4	2.4	2.0	1.7	1.5	1.4
Price/Book Value	4.9	4.5	4.1	3.6	3.4	3.2	3.0	2.9
Dividend Yield (%)	1.4	1.4	1.4	4.3	4.3	4.2	4.9	5.8
Profitability Ratios (%)								
RoE	21.5	22.0	20.2	19.5	21.5	18.8	20.8	22.9
RoCE	17.2	22.8	17.3	19.3	21.0	19.0	21.4	23.7
Turnover Ratios								
Debtors (Days)	77	73	75	62	61	61	62	62
Fixed Asset Turnover (x)	3.9	4.7	4.1	4.1	3.0	3.8	4.3	4.8
Leverage Ratio								
Debt/Equity Ratio (x)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0

Cash Flow Statement (INR b)								
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
CF from Operations	43	55	49	65	67	72	83	95
Change in Working Capital	-8	-11	-5	16	-14	-5	1	3
Net Operating CF	36	44	44	81	53	67	84	98
Net Purchase of FA	-8	-8	-8	-6	-8	-11	-17	-21
Free Cash Flow	28	37	35	75	45	56	68	77
Net Purchase of Invest.	-26	-13	19	-49	13	-25	-25	-25
Net Cash from Invest.	-34	-21	10	-55	5	-36	-42	-46
Inc./Dec.) in Equity	0	0	0	1	1	0	0	0
Proceeds from LTB/STB	6	-6	-20	-13	-8	0	0	0
Dividend Payments	-9	-17	-25	-18	-40	-39	-45	-53
Cash Flow from Fin.	-3	-23	-45	-30	-47	-39	-45	-53
Other adjustments	0	0	1	0	0	0	0	0
Net Cash Flow	0	1	10	-3	11	-8	-2	0
Opening Cash Balance	20	20	20	30	27	38	30	27
Add: Net Cash	0	1	10	-3	11	-8	-2	0
Closing Cash Balance	20	20	30	27	38	30	27	27

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 be 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, Depository participant services & distribution of various financial products. 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 CCR 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 at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- 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.
- 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.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

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 recommedatory 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 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 Patel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022-3980

4263; www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-71881085.

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL: IN-DP-16-2015; NSDL: IN-DP-NSDL-152-2000; Research Analyst: INH000000412. AMFI: ARN.: 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products. Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrivances@motilaloswal.com.