

Industry  
Bloomberg  
BSE CODE

TECHNOLOGY  
MTCL IN  
532819

RATING	NEUTRAL
CMP	884
Price Target	854
Potential Upside	-3%
Rating Change	
Estimate Change	
Target Change	

STOCK INFO	
52wk Range H/L	997/653
Mkt Capital (Rs Cr)	14666
Free float (%)	26%
Avg. Vol 1M (,000)	42
No. of Shares (Crs)	16
Promoters Pledged %	0

Fig in Rs Cr

FINANCIAL	FY19	FY20E	FY21E
Net Sales	7,022	7,723	8,588
EBITDA	1,065	1,050	1,289
EBIT	900	773	996
PAT	754	619	780
EPS (Rs)	46	38	47
EPS growth (%)	32%	-18%	26%
ROE (%)	23%	18%	20%
ROCE (%)	27%	22%	25%
BV	201	215	239
P/B (X)	5	4	4
P/E (x)	21	23	19

## RESEARCH ANALYST

**NIHARIKA OJHA**

niharika@narnolia.com  
+91-22-62701230

The views expressed above accurately reflect the personal views of the authors about the subject companies and its(their) securities. The authors have not and will not receive any compensation for providing a specific recommendation or view. Narnolia Financial Advisors Ltd. does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

## Mixed quarter with strong margin uptick

### 3QFY20 Result Update

- Mind tree reported mix set of numbers in 3QFY20 result .Revenue grew 1.5%QoQ to USD275 million (in line ) while margin beat estimates and expanded ~276 bps QoQ.
- Revenue growth of 1.5%QoQ was mainly led by ramp-up of multiple deals in top accounts ( grew 13.8%QoQ) While non top account declined 1.6% QoQ impacted by furloughs (3.1% QoQ decline in overall volume).
- Ebit for the quarter came at Rs 236, a growth of 33.2%QoQ.The margin stood at 12%, a expansion of 276 bps primarily attributable by transition of project to steady phase(70bps), operational efficiency(140 bps benefit ) and favorable movement of currency(50bps).
- PAT for the quarter stood at Rs 197 crore, a growth of 45.9%QoQ, mainly led by lower ETR and margin beat .
- Digital growth was subdued during the quarter. The company reported 2.1%QoQ growth and 13.6%YoY growth for the quarter.

### Technology drove growth while other remained weak

In 3Q, the company reported strong growth in technology while other verticals remained soft due to furloughs. Technology vertical grew 5.7%QoQ While BFS remained flat (0.3% QoQ growth ) supported by growth in insurance subsegment. Retail and Travel & Hospitality dragged the overall growth by declining 3.5%/0.3%QoQ .

### Weakness in deal wins

Deal wins were soft during the quarter with order book declining 32.6% QoQ to US\$207 million. Even TCV from new wins declined 34.7% YoY and from renewals dipped 31.2% YoY. Delay in deal closure impacted the TCV growth in 3Q. The digital order book declined 9.3% QoQ to US\$127 million. Digital order book accounts for 61% of overall order book. Dip in overall order book was due to the timing issue.

### View and valuation

With a new leadership on board, Mind tree managed to report another quarter of moderate growth in 3QFY20. Revenue came in line mainly owing to recovery in top client (grew 13.8%QoQ) while weakness in other accounts offset the impact. Deal wins were soft during the quarter with Book-to-bill coming at 0.75x which is a multi quarter low owing to timing issue. But margins showed strong uptick due to better operational execution(improved ~276bps) .Going ahead , we expect mind tree will continue to post moderate growth in near term owing to recovery in order booking and improving operating metrics while strategic shift from project based deal (front-end digital) into longer term annuity deals will take longer time for broad based growth .

Post result, we have fine tuned our pat estimates by 7% /2% owing to margin beat, while revenue estimates largely remained same. Thus we continue to maintain our Neutral stance on the stock with target price of Rs 854.

### Key Risks to our rating and target

- Prolonged weakness in Retail vertical.
- Slow down in order booking.

## 3QFY20 Results

### Mixed quarter

Fig in Rs Cr

FINANCIALS	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	YoY %	QoQ%	FY18	FY19	YoY %
Net Sales	1,787	1,839	1,834	1,914	1,965	10.0%	2.7%	5462.8	7021.5	28.5%
Other Income	(20)	29	22	20	35	-274.0%	76.6%	190	89	-53.0%
Employee Exp	1,114	1,150	1,253	1,265	1,254	12.5%	-0.9%	3,564	4,421	24.0%
Other Expenses	390	409	397	401	406	4.1%	1.0%	1,158	1,536	32.6%
EBITDA	283	280	184	248	306	8.1%	23.4%	705	741	5.1%
Depreciation	41	43	67	71	70	70.5%	-1.1%	172	164	-4.3%
EBIT	242	238	117	178	236	-2.4%	33.2%	569	900	58.2%
Interest	-	-	13	14	13		-3.6%	17	3	-82.8%
PBT	222	267	126	183	258	16.0%	40.6%	742	987	32.9%
Tax	31	68	34	48	61	95.8%	25.8%	172	233	35.1%
PAT	191	198	93	135	197	3.0%	45.9%	570	754	32.3%

## Concall Highlights

- **Revenue performance:** The company fees revenue increased 1.1%QoQ , Volume declined by 3.1%QoQ and price realization increased by 4.6%QoQ , this resulting in 1.5%QoQ revenue growth in 3Q .Volume dropped mainly due to furloughs and holidays .Realization increased is mainly due to some incremental revenue generated with some projects moving from transition to steady state. Contractual price for the quarter remain stable.
- **Margin for 3Q:** The company's EBITDA margin is at 15.6% as compared to 13% in 2Q.An increase of 260bps can be attributed to 1)70bps from projects moving from transition to steady state 2) 140 bps benefit from operational efficiency 3) 50 bps from favorable movement of currency .Utilization excluding is at 78% vs. 79% in 2Q.Utilization including trainee is at 75.9% vs. 77% in last quarter.
- **Weakness in Deal wins:** The company contract signing for the quarter was at USD207 million, out of which renewals were USD128million and new contracts were USD79million .Contracts to be executed within 1 year is USD174million and greater than 1 year are USD33million .The company is seeing decision making getting deferred which impacted 3Q deal wins but remains confident to get more closures in 4Q.
- **Focus on annuity based deals:** Historically, the company's portfolio was more tilted toward project-based deals with shorter sales cycles. Focus is now changing toward more annuity based deals.
- **Jump in fixed price contracts:** The Company saw an increase in fixed price contracts to 58.7% during the quarter. This was on account of higher annuity component in the top account. Going forward, this will continue increasing but more gradually.
- **Margin outlook:** The company feels current margin level is sustainable .The company will continue to improve margin in QoQ in coming quarters with levers in operation excellence and SG&A (working to drop the % of SG&A).
- **Others Highlights of the quarter**
  - The current portfolios of the company continue to show great momentum.
  - Vertical performance: Hi- tech and media grew 5.8%, BFSI grew marginally by 0.5%
  - Geographies: US grew 2%, RoW grew 1.5% and Europe declined by 2.4%.
  - Digital business: the company in this business grew 2.5%QoQ and 13.5%YoY.Among other service lines, ADM and product engineering grew 10.1%QoQ / 10.7%YoY.IMS grew3.3%QOq/16.6%YoY.The company sees portfolio to continue to grow going forward.
  - Continued client focus and rationalization of key account have started resulting positive results and is reflecting in the client metrics .For the quarter, the company have 350 active customer, with addition of 7 new customers in 3Q.Top 10 client grew 7.5%QoQ.
  - Attrition during the quarter stood at 17.2%in LTM basis.
- **Clientele details:** Top customer contribution to overall revenues was at 23.1% in the quarter and witnessed growth of 13.9% QoQ. Top 6- 10 customers dipped 2.6% QoQ while top 2-5 customers grew 4.8% QoQ. The company has cut some of its tail clients. This has led to a dip in overall clients from 343 to 320. Further, in line with the company's strategy to improve client mining, the company has added one client in the US\$25 million bucket.
- **Employee update:** With net hiring of 294 in Q3, employee strength was at 21,561. Utilisation (ex-trainees) declined 100 bps QoQ to 78% led by furloughs.

## Revenues by Business Segments

### BARING TECHNOLOGY , FURLOUGH IMPACTED MOST VERTICALS

VERTICALS (USD MN)	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	QoQ%	YoY%
Retail	94	97	99	104	104	108	114	5.9%	15.5%
BFSI	54	55	55	57	57	59	59	0.1%	7.4%
Technology	56	53	56	58	59	59	57	-3.6%	1.0%
Travel & Hospitality	38	41	42	43	44	46	46	-0.3%	8.7%

## Revenues by Client Geography

### SOFT GROWTH SEEN ACROSS GEOGRAPHIES

GEOGRAPHY (USD MN)	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	QoQ%	YoY%
Americas	176	181	185	193	195	200	205	2.8%	11.2%
Europe	49	46	47	48	47	48	47	-1.9%	-0.6%
India	7	8	9	10	11	11	11	-3.3%	21.5%
ROW	10	11	11	11	12	12	12	-0.7%	14.6%

## Deal wins

### WEAKNESS IN DEAL WINS

DEALS (USD MN)	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	QoQ%	YoY%
Digital TCV	139	139	136	126	137	140	127	-9.3%	-6.6%
Non-digital TCV	167	167	120	116	187	167	80	-52.1%	-33.3%
<b>Total TCV</b>	<b>306</b>	<b>306</b>	<b>256</b>	<b>242</b>	<b>324</b>	<b>307</b>	<b>207</b>	<b>-32.6%</b>	<b>-19.1%</b>
Renewals	255	222	184	158	248	186	128	-31.2%	-30.4%
New order	51	49	72	84	76	121	79	-34.7%	9.7%
<b>Total TCV</b>	<b>306</b>	<b>271</b>	<b>256</b>	<b>242</b>	<b>324</b>	<b>307</b>	<b>207</b>	<b>-32.6%</b>	<b>-19.1%</b>

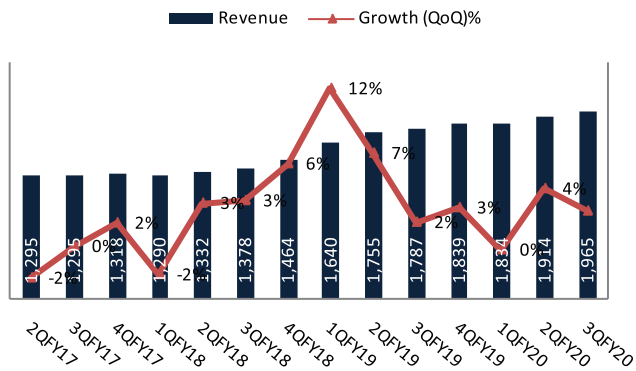
## Revenue by services

### SLOW GROWTH IN DIGITAL REVENUE

SERVICES (USD MN)	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	QoQ%	YoY%
Interactive	52	51	56	59	63	64	61	-4.9%	10.4%
Data Science and Engineering s	25	26	27	29	28	30	33	11.7%	21.4%
Cloud Services	7	9	9	8	9	8	10	21.9%	9.4%
Others	0	1	1	1	1	1	1	1.5%	9.4%
<b>Digital</b>	<b>84</b>	<b>87</b>	<b>93</b>	<b>97</b>	<b>100</b>	<b>103</b>	<b>105</b>	<b>2.1%</b>	<b>13.5%</b>
Test Engineering	46	47	48	48	48	51	49	-3.9%	1.9%
Package Solutions	23	20	21	21	20	19	18	-5.7%	-14.3%
IMS	56	57	59	61	63	67	69	2.8%	16.4%
ADM and Product Engineering	33	36	31	35	33	32	35	10.2%	11.1%

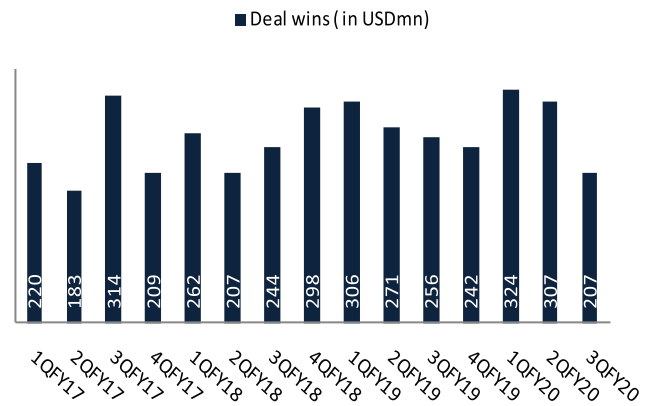
## Exhibit: Revenue trend

Robust growth in top account offset the ex top accounts impact .



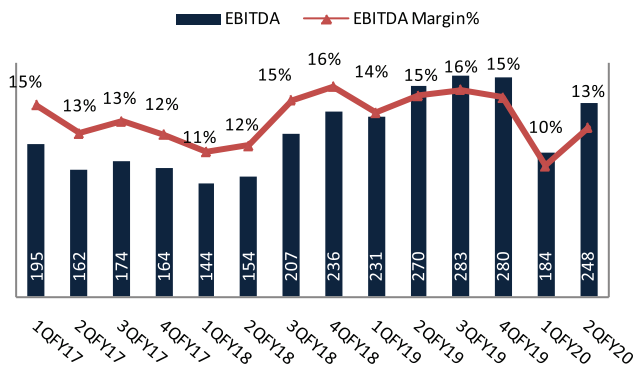
## Exhibit: Deal wins

Book-to-bill at 0.75x , multi quarter low owing to timing issue



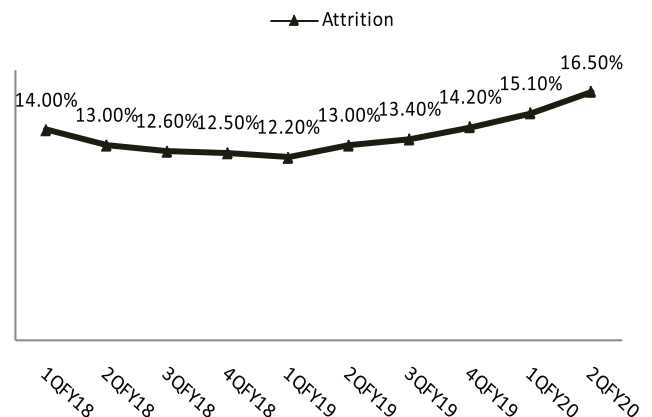
## Exhibit: Margin Trend

Margin expansion due to better operational execution and tightness in overall cost



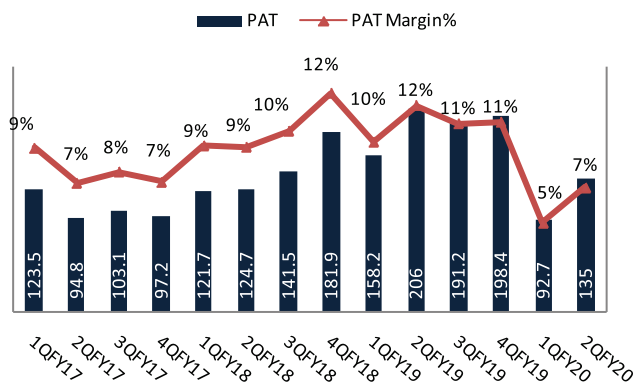
## Exhibit: Attrition trend

Attrition at all-time high.



## Exhibit: PAT Trend

Higher Pat growth in 3Q led by lower ETR and margin beat .



## Operational Details

INDUSTRY REVENUE (%)	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20
Technology	37.6%	38.9%	39.3%	39.3%	39.6%	39.4%	39.8%	41.5%
BFSI	22.5%	22.3%	22.4%	21.7%	21.8%	21.6%	21.6%	21.3%
Retail,CPG & Mfg	24.0%	23.1%	21.7%	22.3%	22.2%	22.2%	21.7%	20.6%
Travel & Hospitality	15.9%	15.8%	16.7%	16.7%	16.4%	16.8%	16.9%	16.6%

SERVICE OFFERING (%)	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20
Interactive	21.7%	20.7%	22.1%	22.5%	23.9%	23.8%	22.3%
Data Science and Engineering s	10.3%	10.5%	10.9%	10.9%	10.5%	11.0%	12.1%
Cloud Services	2.8%	3.6%	3.6%	3.1%	3.3%	3.0%	3.6%
Others	0.1%	0.4%	0.2%	0.5%	0.3%	0.2%	0.2%
Digital	34.9%	35.2%	36.8%	37.0%	38.0%	38.0%	38.2%
Test Engineering	18.9%	18.9%	19.0%	18.4%	18.2%	18.7%	17.7%
Package Solutions	9.5%	8.2%	8.3%	8.0%	7.4%	7.0%	6.5%
IMS	23.0%	23.3%	23.4%	23.4%	23.8%	24.6%	24.9%
ADM and Product Engineering	13.7%	14.4%	12.5%	13.2%	12.6%	11.7%	12.7%

REVENUE BY GEOGRAPHY	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20
US	71.0%	72.7%	73.6%	73.4%	73.6%	73.7%	73.7%	74.6%
Europe	21.1%	20.1%	18.7%	18.7%	18.5%	17.8%	17.6%	17.0%
India	3.2%	3.1%	3.3%	3.6%	3.7%	4.1%	4.2%	4.0%
Rest of the World	4.7%	4.2%	4.4%	4.2%	4.2%	4.4%	4.5%	4.4%

REVENUE BY PROJECT TYP	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20
Fixed Cost , Fixed Monthly	56.8%	56.4%	56.1%	56.0%	55.9%	55.3%	55.9%	58.7%
Time & Materials	43.2%	43.6%	43.9%	44.0%	44.1%	44.7%	44.1%	41.3%

REVENUE MIX	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20
Onsite	58.9%	58.9%	58.9%	58.5%	N/A	N/A	N/A	N/A
Offshore	41.1%	41.1%	41.1%	41.5%	N/A	N/A	N/A	N/A

UTILIZATION	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20
Including Trainees	73.8%	75.4%	74.5%	74.6%	75.3%	77.2%	77.0%	75.9%
Excluding Trainees	75.2%	76.3%	76.5%	76.4%	77.1%	77.9%	79.0%	78.0%

## Operational Details

CLIENT CONTRIBUTION TO REVENUE	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20
Top Client	17.8%	19.4%	20.2%	20.0%	19.8%	20.1%	20.6%	23.1%
Top 5 Clients	32.0%	32.3%	33.8%	33.8%	33.2%	33.6%	33.2%	36.1%
Top 10 Clients	43.7%	43.5%	44.8%	44.1%	42.9%	43.0%	43.1%	45.6%

TOTAL CONTRACT VALUE	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20
Renewals	256	255	222	184	158	248	186	128
New	42	51	49	72	84	76	121	79
<b>Total</b>	<b>298</b>	<b>306</b>	<b>271</b>	<b>256</b>	<b>242</b>	<b>324</b>	<b>307</b>	<b>207</b>
Expiring within 1 year	237	259	198	212	218	271	239	174
Expiring > 1 year	61	47	73	44	23	53	68	33

CLIENT DETAILS	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20
Number of Active clients	338	339	341	340	349	346	343	320
New Clients Added	23	24	18	23	15	12	14	7
\$1 mn clients	118	117	111	116	120	122	130	134
\$5 mn clients	38	39	44	44	45	46	47	47
\$10 mn clients	17	19	21	21	23	23	21	22
\$25 mn clients	4	4	4	4	4	4	4	5
\$50 mn clients	1	1	1	1	1	1	1	1
\$100 mn clients	1	1	1	1	1	1	1	1

## Financial Details

### Balance Sheet

Fig in Rs Cr

Y/E March	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E
Share Capital	42	84	168	168	164	164	164	164
Reserves	1,599	1,929	2,247	2,409	2,578	3,142	3,369	3,758
<b>Networth</b>	<b>1,641</b>	<b>2,012</b>	<b>2,415</b>	<b>2,577</b>	<b>2,741</b>	<b>3,306</b>	<b>3,534</b>	<b>3,922</b>
Debt	3	2	43	99	301	1	1	1
Other Non Current Liab	17	33	86	30	9	17	17	17
<b>Total Capital Employed</b>	<b>1,660</b>	<b>2,049</b>	<b>2,544</b>	<b>2,706</b>	<b>3,051</b>	<b>3,324</b>	<b>3,552</b>	<b>3,940</b>
Net Fixed Assets (incl CWIP)	393	591	704	594	512	523	455	394
Non Current Investments	18	1	6	6	6	120	120	220
Other Non Cur Asst	613	802	1,443	1,324	1,228	1,292	1,223	1,162
<b>Non Current Assets</b>	<b>631</b>	<b>802</b>	<b>1,450</b>	<b>1,330</b>	<b>1,233</b>	<b>1,412</b>	<b>1,343</b>	<b>1,382</b>
Debtors	600	696	973	896	1,016	1,336	1,469	1,634
Cash & Bank	118	376	233	251	328	256	218	327
Other Curr Assets	173	162	115	103	129	227	249	277
Current investments	516	534	227	587	721	684	920	1,040
Other financial assets	61	84	280	224	310	265	266	268
<b>Curr Assets</b>	<b>1,469</b>	<b>1,853</b>	<b>1,827</b>	<b>2,061</b>	<b>2,503</b>	<b>2,767</b>	<b>3,123</b>	<b>3,546</b>
Creditors	8	54	189	165	171	213	234	261
Provisions	157	206	129	111	122	140	154	171
Other Curr Liab	274	347	105	113	180	243	268	298
Current tax liabilities	-	-	35	32	32	75	75	75
Other financial liabilities	-	-	275	264	181	184	184	184
<b>Curr Assets</b>	<b>439</b>	<b>606</b>	<b>733</b>	<b>684</b>	<b>686</b>	<b>855</b>	<b>915</b>	<b>988</b>
<b>Net Curr Assets</b>	<b>1,029</b>	<b>1,246</b>	<b>1,095</b>	<b>1,377</b>	<b>1,817</b>	<b>1,912</b>	<b>2,208</b>	<b>2,558</b>
<b>Total Assets</b>	<b>2,099</b>	<b>2,655</b>	<b>3,277</b>	<b>3,391</b>	<b>3,736</b>	<b>4,179</b>	<b>4,466</b>	<b>4,928</b>

### Income Statement

Fig in Rs Cr

Y/E March	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E
<b>Revenue from Operation</b>	<b>3032</b>	<b>3562</b>	<b>4673</b>	<b>5236</b>	<b>5463</b>	<b>7022</b>	<b>7723</b>	<b>8588</b>
Change (%)	28%	17%	31%	12%	4%	29%	10%	11%
<b>EBITDA</b>	<b>610</b>	<b>709</b>	<b>821</b>	<b>705</b>	<b>741</b>	<b>1,065</b>	<b>1,050</b>	<b>1,289</b>
Change (%)	35%	16%	16%	-14%	5%	44%	-1%	23%
Margin (%)	20%	20%	18%	13%	14%	15%	14%	15%
Depr & Amor.	81	102	166	186	172	164	277	293
<b>EBIT</b>	<b>529</b>	<b>607</b>	<b>655</b>	<b>519</b>	<b>569</b>	<b>900</b>	<b>773</b>	<b>996</b>
Int. & other fin. Cost	0	0	16	19	17	3	53	53
Other Income	50	84	84	55	190	89	107	97
<b>EBT</b>	<b>578</b>	<b>691</b>	<b>723</b>	<b>555</b>	<b>742</b>	<b>987</b>	<b>826</b>	<b>1,039</b>
Exp Item	-	-	-	-	-	-	-	-
Tax	128	155	171	136	172	233	208	260
Minority Int & P/L share of Ass.	-	-	-	-	-	-	-	-
<b>Reported PAT</b>	<b>451</b>	<b>536</b>	<b>553</b>	<b>419</b>	<b>570</b>	<b>754</b>	<b>619</b>	<b>780</b>
<b>Adjusted PAT</b>	<b>451</b>	<b>536</b>	<b>553</b>	<b>419</b>	<b>570</b>	<b>754</b>	<b>619</b>	<b>780</b>
Change (%)	33%	19%	3%	-24%	36%	32%	-18%	26%
Margin(%)	15%	15%	12%	8%	10%	11%	8%	9%



## Financial Details

### Key Ratios

Y/E March	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E
ROE	27%	27%	23%	16%	21%	23%	18%	20%
ROCE	32%	30%	26%	19%	19%	27%	22%	25%
Asset Turnover	1	1	1	1	1	1	2	2
Current Ratio	3	3	2.5	3.0	3.6	3.2	3.4	3.6
Debtor Days	72	71	76	62	68	69	69	69
Book Value Per Share	394	240	144	153	167	201	215	239
Payable Days	1	5	15	12	11	11	11	11
Earnings Per Share	108	64	33	25	35	46	38	47
P/E	12	20	20	18	21	21	23	19
Price / Book Value	3	5	5	3	4	5	4	4
EV/EBITDA	9	15	13	11	16	14	14	11
EV/Sales	2	3	2	1	2	2	2	2

### Cash Flow Statement

Fig in Rs Cr

Y/E March	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E
PBT	578	691	553	419	570	754	619	780
(inc)/Dec in Working Capital	-177	3	-252	122	-83	-236	-98	-221
Non Cash Op Exp	50	59	314	290	241	338	277	293
Int Paid (+)	0	0	0	0	0	0	0	0
Tax Paid	-130	-154	-194	-177	-163	-226	0	0
others	0	0	0	0	0	0	0	0
<b>CF from Op. Activities</b>	<b>322</b>	<b>598</b>	<b>421</b>	<b>654</b>	<b>564</b>	<b>631</b>	<b>798</b>	<b>852</b>
(inc)/Dec in FA & CWIP	-152	-200	-158	-87	-102	-175	-209	-232
Free Cashflow	170	399	263	566	462	456	589	620
(Pur)/Sale of Inv	1050	1025	1339	989	1377	1786	0	0
others	-1426	-1435	-1923	-1530	-1679	-2154	-654	-583
<b>CF from Inv. Activities</b>	<b>-224</b>	<b>-210</b>	<b>-426</b>	<b>-453</b>	<b>-200</b>	<b>-193</b>	<b>-445</b>	<b>-351</b>
inc/(dec) in NW	6	7	2	1	0	0	0	0
inc/(dec) in Debt	-25	0	41	55	196	-300	0	0
Int. Paid	-1	0	0	0	-5	-4	0	0
Div Paid (inc tax)	-92	-144	-215	-193	-214	-218	-391	-391
others	0	0	0	0	0	0	0	0
<b>CF from Fin. Activities</b>	<b>-111</b>	<b>-138</b>	<b>-172</b>	<b>-138</b>	<b>-288</b>	<b>-522</b>	<b>-391</b>	<b>-391</b>
<b>Inc(Dec) in Cash</b>	<b>-14</b>	<b>251</b>	<b>-176</b>	<b>63</b>	<b>77</b>	<b>-85</b>	<b>-38</b>	<b>110</b>
Add: Opening Balance	132	125	370	188	251	341	256	218
<b>Closing Balance</b>	<b>118</b>	<b>376</b>	<b>194</b>	<b>251</b>	<b>328</b>	<b>256</b>	<b>218</b>	<b>327</b>



Narnolia Financial Advisors Ltd. is a SEBI registered Research Analyst having SEBI Registration No. INH300006500. The Company/Analyst (s) does/do not have any holding in the stocks discussed but these stocks may have been recommended to clients in the past. Clients of Narnolia Financial Advisors Ltd. may be holding aforesaid stocks.

The stocks recommended are based on our analysis which is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed.

Disclosures: Narnolia Financial Advisors Ltd. (NFAL) (Formerly Microsec Capital Ltd.) is a SEBI Registered Research Analyst having registration no. INH300006500. NFAL is engaged in the business of providing Stock Broking, Depository Participant, Merchant Banking, Portfolio Management & distribution of various financial products. Details of associate entities of NFAL is available on the website at [www.narnolia.com](http://www.narnolia.com)

No penalties have been levied on NFAL by any Regulatory/Statutory authority. NFAL, its associates, Research Analyst or their relative may have financial interest in the subject company. NFAL and/or its associates and/or Research Analyst may have 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. NFAL 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 NFAL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report. Research Analyst may have served as director/officer, etc. in the subject company in the last 12 month period. NFAL and/or its associates may have received compensation from the subject company in the past 12 months. In the last 12 months period ending on the last day of the month immediately preceding the date of publication of this research report, NFAL or any of its associates may have: a) managed or co-managed public offering of securities from subject company of this research report, b) received compensation for investment banking or merchant banking or brokerage services from subject company of this research report, c) received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report. d) Subject Company may have been a client of NFAL or its associates during 12 months preceding the date of distribution of the research report. NFAL and its associates have not received any compensation or other benefits from the Subject Company or third party in connection with the research report. NFAL and / or its affiliates may do and seek to do business including Investment Banking with companies covered in the research reports. As a result, the recipients of this report should be aware that NFAL 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. Research Analyst's views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of NFAL or its associates maintains arm's length distance with Research Team as all the activities are segregated from NFAL research activity and therefore it can have an independent view with regards to subject company for which Research Team have expressed their views.

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.

#### Disclosure of Interest Statement-

Analyst's ownership of the stocks mentioned in the Report	NIL
---	-----

A graph of daily closing prices of securities is available at [www.nseindia.com](http://www.nseindia.com), [www.bseindia.com](http://www.bseindia.com).

Correspondence Office Address: Arch Waterfront, 5th Floor, Block GP, Saltlake, Sector 5, Kolkata 700 091; Tel No.: 033-40541700; [www.narnolia.com](http://www.narnolia.com).

Registered Office Address: Marble Arch, Office 201, 2nd Floor, 236B, AJC Bose Road, Kolkata 700 020; Tel No.: 033-4050 1500; [www.narnolia.com](http://www.narnolia.com)

Compliance Officer: Manish Kr Agarwal, Email Id: [mkagarwal@narnolia.com](mailto:mkagarwal@narnolia.com), Contact No.:033-40541700.

Registration details of Company: Narnolia Financial Advisors Ltd. (NFAL): SEBI Stock Broker Registration: INZ000166737 (NSE/BSE/MSEI); NSDL/CDSL: IN-DP-380-2018; Research Analyst: INH300006500, Merchant Banking: (Registration No.: INM000010791), PMS: (Registration No.: INP000002304), AMFI Registered Mutual Fund distributor: ARN 3087

Registration Details of Group entities: G. Raj & Company Consultants Ltd (G RAJ)-BSE Broker INZ260010731; NSDL DP: IN-DP-NSDL-371-2014 || Narnolia Commerce Limited (Formerly Microsec Commerce Ltd.)-MCX/NCDEX Commodities Broker: INZ000051636 || NarnoliaVelox Advisory Ltd.- SEBI Registered PMS: INP000005109 || Eastwind Capital Advisors Pvt Ltd. (EASTWIND)-SEBI Registered Investment Adviser: INA300005439 || Narnolia Insurance Brokers Limited (Formerly Microsec Insurance Brokers Ltd.)-IRDA Licensed Direct Insurance Broker (Life & Non-Life) Certificate No. 134, License No. DB046/02 || Narnolia Securities Ltd. (NSL)-AMFI Registered Mutual Fund distributor: ARN 20558, PFRDA NPS POP: 27092018 || Narnolia Capital Advisors Pvt. Ltd. - RBI Registered NBFC:B.05.02568.

#### Disclaimer:

This report has been prepared by Narnolia Financial Advisors Ltd. (NFAL) and is meant for sole use by the recipient and not for public 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 NFAL. 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. 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. 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. 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 his/her/its own advisors to determine the merits and risks of such an investment. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. NFAL will not treat recipients as customers by virtue of their receiving this report. Neither the Company, nor 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 or lost opportunities that may arise from or in connection with the use of the information/report. The person accessing this information specifically agrees to exempt NFAL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold NFAL or any of its affiliates or employees responsible for any such misuse and further agrees to hold NFAL 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.

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 NFAL & its group companies to registration or licensing requirements within such jurisdictions.