

## Information Technology Sector

7 January 2019

### Incorporating New INR estimates

Since our recent IT services sector downgrade ([Street Is Not Factoring Even A Soft Landing; We Downgrade](#)), our economist, Ms. Teresa John, has revised her estimates on the INR in her recent report ([2019 Macro Outlook - Thematic Report- Feeling The Way In A Wobbly World](#)). Incorporating those in our models, we are revising our EPS estimates lower for our coverage universe. Earlier, for INR/USD we were assuming 72/77/79.7 for FY19/FY20/FY21. Teresa has revised her estimates to 70/72/74.5 respectively. Consequent to our downward revision of our EPS estimates, our Target Prices go lower. We add Infosys to the list of 'Sells'. Upside on our only 'Accumulate', HCL Technologies, gets reduced and is only at 3% now. Other than INR estimates we have kept USD revenue estimates and Target P/E multiples constant (see Exhibit 1 and Exhibit 2). This INR/USD revision has no impact on the 3QFY19 quarterly result preview that we released recently ([December 2018 Quarter Result Preview- Not Likely To Display Seasonal Weakness, But Tougher Times Ahead](#)).

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**Exhibit 1: Changes made to our earnings estimates, target prices and ratings**

Company	CMP (Rs)	Market-cap (US\$bn)	New FY20E EPS (Rs)	New FY21E EPS (Rs)	Old FY20E EPS (Rs)	Old FY21E EPS (Rs)	New target P/E (x)	Old target P/E (x)	New rating	Old rating	New TP (Rs)	Old TP (Rs)	Change (%)
TCS	1877	103	90.6	95.3	100.8	106.8	16.5	16.5	Sell	Sell	1533	1712	(10.5)
Infosys	661	40	40.4	43.1	45.0	47.7	14.9	14.9	Sell	Accumulate	620	688	(9.9)
Wipro	324	21	22.7	23.7	25.3	26.1	11.6	11.6	Sell	Sell	268	297	(9.8)
HCL Technologies	932	18	81.3	84.6	90.4	95.2	11.6	11.6	Accumulate	Accumulate	958	1072	(10.6)
Tech Mahindra	695	8.8	53.0	53.9	58.6	58.9	9.9	9.9	Sell	Sell	525	590	(11.0)
Mindtree	815	1.9	54.3	54.7	59.8	62.6	9.9	9.9	Sell	Sell	552	631	(12.5)
Persistent Systems	577	0.66	54.8	55.4	60.8	61.4	8.3	8.3	Sell	Sell	455	504	(9.7)

Source: Nirmal Bang Institutional Equities Research, All Prices are as of end of trade on 26<sup>th</sup> December, 2018

**Exhibit 2: Assumptions on macro and companies**

	2018	2019	2020
Real US GDP growth (%)	2.75-3.25	1.5-2.5	0.0-1.5
	FY19E	FY20E	FY21E
INR/USD	70	72	74.5
	FY19E	FY20E	FY21E
<b>USD revenue growth (%)</b>			
TCS	9.5	7.8	0.0
Infosys	7.7	8.8	(0.2)
Wipro (IT services)	3.0	6.0	-3.0
HCL Technologies	8.9	11.0	2.6
Tech Mahindra	4.4	8.9	-1.8
Mindtree	17.3	8.5	-1.4
Persistent Systems	7.8	9.5	-3.5
	FY19E	FY20E	FY21E
<b>EBIT margin (INR) (%)</b>			
TCS	26.3	26.2	26.0
Infosys	23.3	22.9	23.2
Wipro	16.8	17.3	17.5
HCL Tech	19.8	19.1	19.0
Tech Mahindra	14.9	14.3	13.9
Mindtree	13.1	14.6	13.6
Persistent Systems	12.3	12.8	12.5
	FY19E	FY20E	FY21E
<b>EPS (Rs)</b>			
TCS	84.1	90.6	95.3
Infosys	37.4	40.4	43.1
Wipro	20.0	22.7	23.7
HCL Tech	74.5	81.3	84.6
Tech Mahindra	48.3	53.0	53.9
Mindtree	45.5	54.3	54.7
Persistent Systems	46.8	54.8	55.4
	FY19E	FY20E	FY21E
<b>EPS growth (%)</b>			
TCS	25.5	7.7	5.2
Infosys	15.0	8.1	6.6
Wipro	18.8	13.7	4.2
HCL Tech	18.4	9.2	4.0
Tech Mahindra	12.8	9.9	1.6
Mindtree	8.3	41.7	0.0
Persistent Systems	15.8	17.2	1.1

Source: Nirmal Bang Institutional Equities Research

**Exhibit 3: Indian IT services sector-valuations**

Year ending	TCS	Infosys	Wipro	HCL Tech	Tech Mahindra	Mindtree	Persistent
	March	March	March	March	March	March	March
CMP (prices as on 4 January)	1,877	661	324	932	681	815	577
Currency	INR	INR	INR	INR	INR	INR	INR
Market value (Rsbn)	7,186	2,873	1,602	1,264	601	135	46
(US\$m)	99,801	39,907	22,252	17,561	8,340	1,873	641
September 2019 target price	1,533	620	268	958	525	552	455
Upside/(downside)	-18%	-6%	-18%	3%	-23%	-32%	-21%
Recommendation	Sell	Sell	Sell	Accumulate	Sell	Sell	Sell
<b>FDEPS (Rs)</b>							
FY18	67.0	32.5	16.8	62.9	42.8	34.7	40.4
FY19E	84.1	37.4	20.0	74.5	48.3	45.5	46.8
FY20E	90.6	40.4	22.7	81.3	53.0	54.3	54.8
FY21E	95.3	43.1	23.7	84.6	53.9	54.7	55.4
<b>P/E (x)</b>							
FY18	28.0	20.3	19.3	14.8	15.9	23.5	14.3
FY19E	22.3	17.7	16.3	12.5	14.1	17.9	12.3
FY20E	20.7	16.4	14.3	11.5	12.8	15.0	10.5
FY21E	19.7	15.3	13.7	11.0	12.6	14.9	10.4
<b>EV/EBITDA (x)</b>							
FY18	22.0	13.7	12.9	10.2	11.9	16.7	9.3
FY19E	17.5	12.8	10.5	8.5	8.7	11.5	7.3
FY20E	16.0	11.4	9.0	7.7	7.9	9.1	5.8
FY21E	15.6	10.7	8.2	7.3	7.5	8.9	5.3
<b>EV/sales (x)</b>							
FY18	5.8	3.7	2.4	2.3	1.8	2.3	1.4
FY19E	4.9	3.3	2.1	2.0	1.6	1.8	1.2
FY20E	4.4	2.9	1.8	1.8	1.4	1.5	1.0
FY21E	4.2	2.8	1.7	1.8	1.3	1.4	0.9
<b>RoIC (%)</b>							
FY18	57.3	44.9	24.5	38.9	25.8	32.9	29.7
FY19E	67.0	47.8	28.5	36.3	34.1	46.8	41.9
FY20E	69.2	49.7	31.5	32.2	33.9	50.6	48.4
FY21E	68.2	49.2	32.1	28.7	32.4	49.1	51.2

Source: Company, Nirmal Bang Institutional Equities Research

## Summary financials

### Exhibit 4: TCS

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
Revenues (Rsbn)	1,180	1,231	1,467	1,621	1,678
YoY growth (%)	8.6	4.4	19.1	10.5	3.5
EBIT (Rsbn)	303	305	386	425	437
% of sales	25.7	24.8	26.3	26.2	26.0
PAT (Rsbn)	263	258	319	340	358
YoY growth (%)	8.6	-1.8	23.3	6.7	5.2
FDEPS (Rs)	66.7	67.0	84.1	90.6	95.3
RoE (%)	32.4	29.3	40.5	42.9	36.1
RoCE (%)	33.7	30.7	41.1	44.1	37.5
RoIC (%)	60.8	57.3	67.0	69.2	68.2
P/E (x)	28.1	28.0	22.3	20.7	19.7
P/BV (x)	8.1	8.2	10.3	8.1	6.6

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 5: Infosys

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
Revenues (Rsbn)	685	705	825	924	954
YoY growth (%)	9.7	3.0	16.9	12.0	3.3
EBIT (Rsbn)	169	171	192	211	222
EBIT (%)	24.7	24.3	23.3	22.9	23.2
Adj. PAT (Rsbn)	144	147	163	170	181
YoY growth (%)	6.4	2.3	10.8	4.3	6.6
FDEPS-adjusted (Rs)	31.2	32.5	37.4	40.4	43.1
RoE (%)	22.0	21.9	27.0	29.0	27.7
RoCE (%)	30.5	30.5	37.0	39.7	37.9
RoIC (%)	51.1	44.9	47.8	49.7	49.2
P/E (x)	20.6	19.8	17.2	15.9	14.9
P/BV (x)	4.3	4.3	5.1	4.4	3.9

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 6: Wipro

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
Revenue s(Rsbn)	550	545	591	643	645
YoY growth (%)	7.0	(1.0)	8.4	8.8	0.3
EBIT (Rsbn)	94	84	99	111	113
EBIT (%)	17.1	15.5	16.8	17.3	17.5
Adj. PAT (Rsbn)	85	80	90	102	107
YoY growth (%)	(4.6)	(5.7)	12.5	13.7	4.2
FDEPS (Rs)	17.5	16.8	20.0	22.7	23.7
RoE (%)	17.1	15.9	17.1	17.1	16.3
RoCE (%)	14.4	12.7	14.8	15.2	14.3
RoIC (%)	28.8	24.5	28.5	31.5	32.1
P/E (x)	18.6	19.3	16.2	14.3	13.7
P/BV (x)	2.8	3.0	2.6	2.3	2.1

Source: Company, Nirmal Bang Institutional Equities Research

## Exhibit 7: HCL Technologies

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
Revenues (Rsmn)	467,220	505,700	598,679	682,303	724,333
YoY growth (%)	50.1	8.2	18.4	14.0	6.2
EBIT (Rsmn)	94,750	99,880	118,662	130,495	137,867
EBIT (%)	20.3	19.8	19.8	19.1	19.0
Adj. PAT (Rsmn)	84,420	87,820	102,548	110,572	115,009
YoY growth (%)	49.0	4.0	16.8	7.8	4.0
FDEPS (Rs)	60.5	62.9	74.5	81.3	84.6
RoE (%)	27.4	25.0	26.2	25.5	24.4
RoCE (%)	28.9	27.1	28.0	26.4	25.3
RoIC (%)	46.2	38.9	36.3	32.2	28.7
P/E(x)	15.4	14.8	12.5	11.5	11.0
P/BV (x)	3.9	3.5	3.1	2.8	2.6

Source: Company, Nirmal Bang Institutional Equities Research

## Exhibit 8: Tech Mahindra

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
Revenues	291,408	307,730	349,351	390,395	396,580
YoY (%)	10.0	5.6	13.5	11.7	1.6
Gross profit	85,747	92,431	117,229	129,452	130,052
% of sales	29.4	30.0	33.6	33.2	32.8
EBIT	32,062	36,321	52,227	55,763	54,946
% of sales	11.0	11.8	14.9	14.3	13.9
PAT	28,136	38,001	42,860	47,086	47,825
YoY (%)	(9.7)	35.1	12.8	9.9	1.6
FDEPS	31.7	42.8	48.3	53.0	53.9
RoE (%)	18.3	21.5	21.5	21.1	18.8
RoCE (%)	17.3	17.2	22.4	21.8	19.3
RoIC (%)	26.2	25.8	34.1	33.9	32.4
P/E(x)	21.9	16.2	14.4	13.1	12.9
P/BV (x)	3.7	3.3	2.9	2.6	2.3

Source: Company, Nirmal Bang Institutional Equities Research

## Exhibit 9: Mindtree

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
Revenues (Rsmn)	52,364	54,628	69,890	77,604	79,120
YoY growth (%)	11.8	4.3	27.9	11.0	2.0
EBIT (Rsmn)	5,327	5,692	9,171	11,366	10,761
as % of sales	10.2	10.4	13.1	14.6	13.6
Adj. PAT (Rsmn)	4,159	5,701	7,487	8,928	8,991
YoY growth (%)	(29.5)	37.1	31.3	19.3	0.7
FDEPS (Rs)	25.3	34.7	45.5	54.3	54.7
RoE (%)	16.7	21.4	25.3	25.8	22.4
RoCE (%)	21.8	21.7	32.5	35.3	28.7
RoIC (%)	27.8	32.9	46.8	50.6	49.1
P/E (x)	32.7	23.7	17.9	15.0	14.9
P/BV (x)	5.2	4.9	4.2	3.6	3.1

Source: Company, Nirmal Bang Institutional Equities Research

## Exhibit 10: Persistent Systems

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
Revenues (Rsmn)	28,784	30,337	35,523	39,969	39,870
YoY growth (%)	24.5	5.4	17.1	12.5	(0.2)
EBIT (Rsmn)	3,049	3,102	4,367	5,124	4,982
% of sales	10.6	10.2	12.3	12.8	12.5
Adj. PAT (Rsmn)	3,015	3,231	3,741	4,384	4,433
YoY growth (%)	1.4	7.2	15.8	17.2	1.1
FDEPS (Rs)	37.7	40.4	46.8	54.8	55.4
RoE (%)	17.2	15.4	19.2	20.3	18.1
RoCE (%)	17.1	15.3	19.2	20.3	18.1
RoIC (%)	31.1	29.7	41.9	48.4	51.2
P/E (x)	15.3	14.3	12.3	10.5	10.4
P/BV (x)	2.4	2.2	1.9	1.8	1.6

Source: Company, Nirmal Bang Institutional Equities Research

## Change in our estimates

### Exhibit 11: TCS

	New			Old			Change (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
INR/USD	70.0	72.0	74.5	71.1	77.0	79.7	(1.5)	(6.5)	(6.5)
USD revenues (US\$mn)	20,895	22,519	22,524	20,895	22,519	22,524	-	-	-
Revenues (Rsbn)	1,467	1,621	1,678	1,490	1,734	1,795	(1.5)	(6.5)	(6.5)
EBIT (Rsbn)	386	425	437	397	476	493	(3.0)	(10.8)	(11.4)
EBIT margin (%)	26.3	26.2	26.0	26.7	27.5	27.5	-	-	-
PAT (Rsbn)	319	340	358	327	378	401	(2.7)	(10.1)	(10.7)
FDEPS (Rs)	84.1	90.6	95.3	86.5	100.8	106.8	(2.8)	(10.1)	(10.7)

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 12: Infosys

	New			Old			Change (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
INR/USD	70.1	72.0	74.5	71.1	77.0	79.7	(1.5)	(6.5)	(6.5)
USD revenues (US\$mn)	11,786	12,828	12,806	11,786	12,828	12,806	-	-	-
Revenues (Rsbn)	825	924	954	838	988	1021	(1.6)	(6.5)	(6.5)
EBIT (Rsbn)	192	211	222	197	239	248	(2.7)	(11.5)	(10.7)
EBIT margin (%)	23.3	22.9	23.2	23.5	24.2	24.3	-	-	-
PAT -adjusted (Rsbn)	163	170	181	167	189	200	(2.3)	(10.3)	(9.6)
FDEPS-adjusted (Rs)	37.4	40.4	43.1	38.3	45.0	47.7	(2.3)	(10.3)	(9.6)

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 13: Wipro

	New			Old			Change (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
INR/USD	70.1	72.0	74.5	71.2	77.0	79.7	(1.5)	(6.5)	(6.5)
USD revenues (US\$mn)	8,299	8,795	8,533	8,299	8,795	8,533	-	-	-
Revenues (Rsbn)	591	643	645	600	687	690	(1.5)	(6.4)	(6.5)
EBIT (Rsbn)	99	111	113	101	126	127	(2.1)	(12.0)	(11.0)
EBIT margin (%)	16.8	17.3	17.5	16.9	18.3	18.3	-	-	-
PAT (Rsbn)	90	102	107	92	114	118	(1.8)	(10.3)	(9.5)
FDEPS (Rs)	20.0	22.7	23.7	20.3	25.3	26.1	(1.8)	(10.3)	(9.5)

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 14: HCL Technologies

	New			Old			Change (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
INR/USD	70.1	72.0	74.5	71.2	77.0	79.7	(1.5)	(6.5)	(6.5)
USD revenues (US\$mn)	8,532	9,475	9,723	8,532	9,475	9,723	-	-	-
Revenues (Rsmn)	598,679	682,303	724,333	608,252	729,560	774,896	(1.6)	(6.5)	(6.5)
EBIT (Rsmn)	118,662	130,495	137,867	122,130	146,205	155,306	(2.8)	(10.7)	(11.2)
EBIT margin (%)	19.8	19.1	19.0	20.1	20.0	20.0	-	-	-
PAT (Rsmn)	102,548	110,572	115,009	105,285	122,982	129,468	(2.6)	(10.1)	(11.2)
FDEPS (Rs)	74.5	81.3	84.6	76.5	90.4	95.2	(2.6)	(10.1)	(11.2)

Source: Company, Nirmal Bang Institutional Equities Research

## Exhibit 15: Tech Mahindra

	New			Old			Change (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
INR/USD	70.1	72.0	74.5	71.9	77.0	79.7	(2.5)	(6.5)	(6.5)
USD revenues (US\$m)	4,979	5,422	5,324	4,989	5,422	5,324	(0.2)	-	-
Revenues (Rsmn)	349,351	390,395	396,580	359,442	417,457	424,348	(2.8)	(6.5)	(6.5)
EBIT (Rsmn)	52,227	55,763	54,946	54,608	62,236	60,861	(4.4)	(10.4)	(9.7)
EBIT margin (%)	14.9	14.3	13.9	15.2	14.9	14.3	-	-	-
PAT (Rsmn)	42,670	47,086	47,825	44,431	51,860	52,355	(4.0)	(9.2)	(8.7)
EPS (Rs)	48.3	53.0	53.9	50.3	58.4	59.0	(3.9)	(9.2)	(8.7)

Source: Company, Nirmal Bang Institutional Equities Research

## Exhibit 16: Mindtree

	New			Old			Change (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
INR/USD	70.3	72.0	74.5	71.4	77.0	79.7	(1.5)	(6.5)	(6.5)
USD revenues (US\$m)	993	1,078	1,062	993	1,078	1,062	-	-	-
Revenues (Rsmn)	69,890	77,604	79,120	70,985	82,983	84,666	(1.5)	(6.5)	(6.6)
EBIT (Rsmn)	9,171	11,366	10,761	9,432	12,724	12,300	(2.8)	(10.7)	(12.5)
EBIT margin (%)	13.1	14.6	13.6	13.3	15.3	14.5	-	-	-
PAT (Rsmn)	7,487	8,928	8,991	7,676	9,838	10,296	(2.5)	(9.2)	(12.7)
EPS (Rs)	45.5	54.3	54.7	46.7	59.8	62.6	(2.5)	(9.2)	(12.7)

Source: Company, Nirmal Bang Institutional Equities Research

## Exhibit 17: Persistent Systems

	New			Old			Change (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
INR/USD	70.1	72.0	74.5	71.2	77.0	79.7	(1.5)	(6.5)	(6.5)
USD revenues (USDmn)	507	555	535	507	555	535	-	-	-
Revenues (Rsmn)	35,523	39,969	39,870	36,092	42,739	42,669	(1.6)	(6.5)	(6.6)
EBIT (Rsmn)	4,367	5,124	4,982	4,618	5,823	5,658	(5.4)	(12.0)	(12.0)
EBIT margin (%)	12.3	12.8	12.5	12.8	13.6	13.3	-	-	-
PAT (Rsmn)	3,741	4,384	4,433	3,915	4,864	4,910	(4.5)	(9.9)	(9.7)
FDEPS (Rs)	46.8	54.8	55.4	48.9	60.8	61.4	(4.5)	(9.9)	(9.7)

Source: Company, Nirmal Bang Institutional Equities Research



## Our estimates versus consensus estimates

### Exhibit 18: TCS

	Consensus			NBIE			NBIE/Consensus (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
Revenues (Rsbn)	1,474	1,651	1,822	1,467	1621	1678	100	98	92
EBIT (Rsbn)	390	433	476	386	425	437	99	98	92
PAT-adj. (Rsbn)	320	359	398	319	340	358	100	95	90
FDEPS-adj. (Rs)	84.4	95.1	105.3	84.1	90.6	95.3	100	95	90
EBIT margin (%)	26.4	26.2	26.1	26.3	26.2	26.0	-	-	-

Source: Bloomberg, Nirmal Bang Institutional Equities Research

### Exhibit 19: Infosys

	Consensus			NBIE			NBIE/Consensus (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
Revenues (Rsbn)	828	920	1007	825	924	954	100	100	95
EBIT (Rsbn)	198	222	244	192	211	222	97	95	91
PAT-Adj. (Rsbn)	164	183	201	163	170	181	99	93	90
FDEPS-adj. (Rs)	37.7	42.0	46.3	37.4	40.4	43.1	99	96	93
EBIT margin (%)	23.9	24.1	24.2	23.3	22.9	23.2	-	-	-

Source: Bloomberg, Nirmal Bang Institutional Equities Research

### Exhibit 20: Wipro

	Consensus			NBIE			NBIE/Consensus (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
Revenues (Rsbn)	595	644	685	591	643	645	99	100	94
EBIT (Rsbn)	96	108	116	99	111	113	104	102	97
PAT (Rsbn)	88	99	107	90	102	107	102	103	100
FDEPS (Rs)	19.6	22.0	23.6	20.0	22.7	23.7	102	103	100
EBIT margin (%)	16.1	16.8	16.9	16.8	17.3	17.5	-	-	-

Source: Bloomberg, Nirmal Bang Institutional Equities Research

### Exhibit 21: HCL Technologies

	Consensus			NBIE			NBIE/Consensus (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
Revenues (Rsbn)	602	673	733	599	682	724	100	101	99
EBIT (Rsbn)	121	134	145	119	130	138	98	97	95
PAT (Rsbn)	101	110	120	103	111	115	101	101	96
EPS (Rs)	73.7	80.2	87.3	74.5	81.3	84.6	101	101	97
EBIT margin (%)	20.1	19.9	19.7	19.8	19.1	19.0	-	-	-

Source: Bloomberg, Nirmal Bang Institutional Equities Research

### Exhibit 22: Tech Mahindra

	Consensus			NBIE			NBIE/Consensus (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
Revenues (Rsbn)	351	389	426	349	390	397	99	100	93
EBIT (Rsbn)	52.5	58.8	64.3	52	56	55	100	95	85
PAT (Rsbn)	42.6	48.3	53.5	43	47	48	101	97	89
EPS (Rs)	47.6	54.1	59.9	48.3	53.0	53.9	101	98	90
EBIT margin (%)	14.9	15.1	15.1	14.9	14.3	13.9	-	-	-

Source: Bloomberg, Nirmal Bang Institutional Equities Research

## Exhibit 23: Mindtree

	Consensus			NBIE			NBIE/Consensus (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
Revenues (Rsmn)	70,399	80,441	89,761	69,890	77,604	79,120	99.3	96.5	88.1
EBIT (Rsmn)	9,265	11,215	12,617	9,171	11,366	10,761	99.0	101.3	85.3
PAT (Rsmn)	7,648	8,908	10,096	7,487	8,928	8,991	97.9	100.2	89.1
EPS (Rs)	46.4	54.1	61.5	45.5	54.3	54.7	98.2	100.3	88.9
EBIT margin (%)	13.2	13.9	14.1	13.1	14.6	13.6	-	-	-

Source: Bloomberg, Nirmal Bang Institutional Equities Research

## Exhibit 24: Persistent Systems

	Consensus			NBIE			NBIE/Consensus (%)		
	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
Revenues (Rsmn)	34,914	39,008	43,366	35,523	39,969	39,870	102	102	92
EBIT (Rsmn)	4,318	4,990	5,753	4,367	5,124	4,982	101	103	87
PAT (Rsmn)	3,733	4,303	4,956	3,741	4,384	4,433	100	102	89
EPS (Rs)	46.3	53.1	61.51	46.8	54.8	55.4	101	103	90
EBIT margin (%)	12.4	12.8	13.3	12.3	12.8	12.5	-	-	-

Source: Bloomberg, Nirmal Bang Institutional Equities Research

## Financials -TCS

### Exhibit 25: Income statement

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
<b>Average INR/USD</b>	<b>67.1</b>	<b>64.5</b>	<b>70.0</b>	<b>72.0</b>	<b>74.5</b>
<b>Net sales (USDmn)</b>	<b>17,575</b>	<b>19,089</b>	<b>20,895</b>	<b>22,519</b>	<b>22,524</b>
<b>-Growth (%)</b>	<b>6.2</b>	<b>8.6</b>	<b>9.5</b>	<b>7.8</b>	<b>0.0</b>
Net sales	1,180	1,231	1,467	1,621	1,678
-Growth (%)	8.6	4.4	19.1	10.5	3.5
Cost of sales & services	669	713	848	943	984
Gross margin	511	518	619	678	694
% of sales	43.3	42.1	42.2	41.8	41.4
SG& A expenses	208	213	234	253	257
% of sales	17.6	17.3	15.9	15.6	15.3
<b>EBIT</b>	<b>303</b>	<b>305</b>	<b>386</b>	<b>425</b>	<b>437</b>
<b>EBIT margin (%)</b>	<b>25.7</b>	<b>24.8</b>	<b>26.3</b>	<b>26.2</b>	<b>26.0</b>
Other income (net)	42	36	37	27	38
PBT	345	341	422	451	475
-PBT margin (%)	29.3	27.7	28.8	27.8	28.3
Provision for tax	82	82	103	111	116
Effective tax rate (%)	23.6	24.1	24.3	24.5	24.5
Minority interest	1	1	1	1	1
Net profit	263	258	319	340	358
-Growth (%)	8.6	(1.8)	23.3	6.7	5.2
-Net profit margin (%)	22.3	21.0	21.7	21.0	21.3
Average shares outstanding-Basic	3,941	3,829	3,790	3,752	3,752

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 27: Balance sheet

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
Equity capital	2.0	1.9	3.7	3.7	3.7
Reserves & surplus	885	875	691	884	1,087
Net worth	887	876	695	888	1,091
Minority Interest	-	-	-	-	-
Other liabilities	21	29	30	33	34
Total loans	3	2	1	1	1
<b>Total liabilities</b>	<b>911</b>	<b>908</b>	<b>725</b>	<b>921</b>	<b>1,125</b>
Goodwill	38	39	40	40	40
Net block (incl. CWIP)	117	116	116	117	117
Investments	3	3	2	2	2
Deferred tax asset - net	28	34	34	37	38
Other non-current assets	62	76	75	79	80
Other current assets	485	427	380	386	387
Debtors	280	320	349	384	395
Cash & bank balance	36	49	56	56	56
Bank deposits	4	21	(101)	61	254
Total current assets	805	815	684	886	1,092
Total current liabilities	143	176	226	240	245
Net current assets	662	639	458	646	847
<b>Total assets</b>	<b>911</b>	<b>908</b>	<b>725</b>	<b>921</b>	<b>1,125</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 26: Cash flow

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
<b>EBIT</b>	<b>303</b>	<b>305</b>	<b>386</b>	<b>425</b>	<b>437</b>
(Inc./dec. in working capital)	6	(20)	(5)	(30)	(9)
<b>Cash flow from operations</b>	<b>309</b>	<b>285</b>	<b>380</b>	<b>394</b>	<b>427</b>
Other income	42	36	37	27	
Depreciation & amortisation	20	20	23	20	20
Financial expenses	-	-	-	-	-
Tax paid	(82)	(82)	(103)	(111)	(116)
Dividends paid	(112)	(116)	(135)	(147)	(154)
<b>Net cash from operations</b>	<b>178</b>	<b>143</b>	<b>202</b>	<b>184</b>	<b>177</b>
Capital expenditure	(19)	(19)	(23)	(21)	(21)
Net cash after capex	159	124	179	163	156
Inc./(dec.) in debt	0	(0)	(2)	-	-
(Inc./dec. in investments)	(192)	60	75	-	-
Equity issue/(share buyback)	-	(160)	(160)	-	-
<b>Cash from financial activities</b>	<b>(191)</b>	<b>(101)</b>	<b>(87)</b>	<b>-</b>	<b>-</b>
Others	5	5	(207)	(1)	37
Opening cash balance	67	40	69	(45)	117
Closing cash balance	40	69	(45)	117	310
Change in cash balance	(28)	29	(114)	162	193

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 28: Key ratios

Y/E March	FY17	FY18	FY19E	FY20E	FY21E
<b>Per Share (Rs)</b>					
EPS	66.7	67.0	84.1	90.6	95.3
FDEPS	66.7	67.0	84.1	90.6	95.3
Dividend Per Share	23.5	25.1	29.6	32.5	34.1
Dividend Yield (%)	1.3	1.3	1.6	1.7	1.8
Book Value	231.6	228.9	181.5	231.8	284.9
Dividend Payout Ratio (excl DT)	42.4	37.2	35.2	35.9	35.8
<b>Return ratios (%)</b>					
RoE	32.4	29.3	40.5	42.9	36.1
RoCE	33.7	30.7	41.1	44.1	37.5
RoIC	60.8	57.3	67.0	69.2	68.2
<b>Turnover Ratios</b>					
Asset Turnover Ratio	1.1	1.1	1.5	1.4	1.2
Debtor Days (incl. unbilled Rev)	87	95	87	86	86
Working Capital Cycle Days	64	63	55	55	55
<b>Valuation ratios (x)</b>					
P/E	28.1	28.0	22.3	20.7	19.7
P/BV	8.1	8.2	10.3	8.1	6.6
EV/EBITDA	22.1	22.0	17.5	16.0	15.6
EV/Sales	6.1	5.8	4.9	4.4	4.2
M-cap/Sales	6.1	5.8	4.9	4.4	4.3

Source: Company, Nirmal Bang Institutional Equities Research

## Financials - Infosys

### Exhibit 29: Income statement

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
<b>Average INR/USD</b>	<b>67.1</b>	<b>64.5</b>	<b>70.1</b>	<b>72.0</b>	<b>74.5</b>
<b>Net Sales (USD mn)</b>	<b>10,206</b>	<b>10,941</b>	<b>11,786</b>	<b>12,828</b>	<b>12,806</b>
<b>-Growth (%)</b>	<b>7.4</b>	<b>7.2</b>	<b>7.7</b>	<b>8.8</b>	<b>(0.2)</b>
Net Sales	685	705	825	924	954
-Growth (%)	9.7	3.0	16.9	12.0	3.3
Direct Costs	433	451	531	593	614
Gross Margin	252	254	294	331	340
% of sales	36.8	36.0	35.6	35.8	35.6
SG& A	83	82	102	119	118
% of sales	12.2	11.7	12.4	12.9	12.4
<b>EBIT</b>	<b>169</b>	<b>171</b>	<b>192</b>	<b>211</b>	<b>222</b>
<b>% of sales</b>	<b>24.7</b>	<b>24.3</b>	<b>23.3</b>	<b>22.9</b>	<b>23.2</b>
Other income (net)	31	32	31	21	26
PBT	200	204	222	233	248
-PBT margin (%)	29.1	28.9	27.0	25.2	26.0
Provision for tax	56	57	60	63	67
Effective tax rate (%)	28.1	28.0	26.8	27.0	27.0
<b>Net profit (adjusted)</b>	<b>144</b>	<b>147</b>	<b>163</b>	<b>170</b>	<b>181</b>
-Growth (%)	6.4	2.3	10.8	4.3	6.6
-Net profit margin (%)	21.0	20.8	19.7	18.4	19.0
Shares Outstanding (Basic)	4,594	4,347	4,347	4,194	4,194

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 31: Balance sheet

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
Equity capital	11.4	10.9	21.8	21.0	21.0
Reserves & surplus	678	638	532	598	667
Net worth	690	649	554	619	688
Deferred tax liability	2	5	5	5	5
Other liabilities	2	3	4	4	4
Total loans					
<b>Total liabilities</b>	<b>693</b>	<b>658</b>	<b>562</b>	<b>627</b>	<b>697</b>
Goodwill	37	22	25	25	25
Other intangible assets	8	2	4	4	4
Net block	117	121	129	143	159
Investments	164	122	127	127	127
Deferred tax asset - net	5	13	14	14	14
Other non-current assets	65	82	81	89	89
Unbilled revenue	36	43	54	60	60
Derivative financial instrument	3	0	0	0	0
Other current assets	49	64	55	62	62
Income tax assets-current	-	-	-	-	-
Debtors	123	131	152	172	171
Cash & bank balance	226	198	80	108	163
Total current assets	437	436	342	402	456
Total current liabilities	140	141	159	177	177
Net current assets	297	295	182	225	280
<b>Total assets</b>	<b>693</b>	<b>658</b>	<b>562</b>	<b>627</b>	<b>697</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 30: Cash flow

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
EBIT	169	171	192	211	222
(Inc./dec. in working capital)	(19)	(46)	(5)	(23)	1
Cash flow from operations	150	126	187	188	223
Other Income	31	32	31	21	26
Depreciation & amortisation	17	19	20	24	25
Financial expenses	0	0	0	0	0
Tax paid	(56)	(57)	(60)	(63)	(67)
Dividends paid	(143)	(179)	(90)	(104)	(111)
<b>Net cash from operations</b>	<b>(1)</b>	<b>(59)</b>	<b>88</b>	<b>66</b>	<b>95</b>
Capital expenditure	(26)	(3)	(32)	(38)	(40)
Net cash after capex	(26)	(63)	56	28	55
Inc./(dec.) in debt	-	-	-	-	-
(Inc./dec. in investments)	(145)	43	(6)	0	0
Share issue/(share buyback)		(130)	(104)	0	0
Cash from financial activities	(145)	(87)	(110)	0	0
Others	71	122	(65)	(1)	
Opening cash balance	327	226	198	80	108
Closing cash balance	226	198	80	107	163
Change in cash balance	(101)	(28)	(119)	27	55

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 32: Key ratios

Y/E March	FY17	FY18	FY19E	FY20E	FY21E
<b>Per Share (Rs)</b>					
EPS-adjusted	31.2	32.5	37.4	40.5	43.1
FDEPS-adjusted	31.2	32.5	37.4	40.4	43.1
Dividend per share	25.8	33.5	17.1	20.6	22.0
Dividend yield (%)	4.0	5.2	2.7	3.2	3.4
Book value	150	149	127	147	164
Dividend payout ratio (incl. DT)	99.3	122.1	55.0	61.5	61.5
<b>Return ratios (%)</b>					
RoE	22.0	21.9	27.0	29.0	27.7
RoCE	30.5	30.5	37.0	39.7	37.9
RoIC	51.1	44.9	47.8	49.7	49.2
<b>Turnover ratios</b>					
Asset turnover	0.8	0.9	1.1	1.1	1.1
Debtor days (incl. unbilled rev.)	84	89	90	90	87
Working capital cycle days	37	49	45	46	44
<b>Valuation ratios (x)</b>					
P/E	20.6	19.8	17.2	15.9	14.9
P/BV	4.3	4.3	5.1	4.4	3.9
EV/EBITDA	13.8	13.7	12.8	11.4	10.7
EV/Sales	3.8	3.7	3.3	2.9	2.8
M-cap/Sales	4.1	4.0	3.4	3.0	2.9

Source: Company, Nirmal Bang Institutional Equities Research

## Financials -Wipro

### Exhibit 33: Income statement

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
<b>Average INR/USD</b>	<b>68.6</b>	<b>65.3</b>	<b>70.1</b>	<b>72.0</b>	<b>74.5</b>
<b>Net Sales (USDmn)</b>	<b>7,704</b>	<b>8,060</b>	<b>8,299</b>	<b>8,795</b>	<b>8,533</b>
<b>-Growth (%)</b>	<b>4.9</b>	<b>4.6</b>	<b>3.0</b>	<b>6.0</b>	<b>-3.0</b>
Net Sales - Overall	550	545	591	643	645
<b>-Growth (%)</b>	<b>7.0</b>	<b>-1.0</b>	<b>8.4</b>	<b>8.8</b>	<b>0.3</b>
Cost of Sales & Services	392	386	412	445	444
<b>% of sales</b>	<b>71.1</b>	<b>70.8</b>	<b>69.8</b>	<b>69.2</b>	<b>68.8</b>
<b>Gross profit</b>	<b>159</b>	<b>159</b>	<b>178</b>	<b>198</b>	<b>201</b>
<b>% of sales</b>	<b>28.9</b>	<b>29.2</b>	<b>30.2</b>	<b>30.8</b>	<b>31.2</b>
<b>SG&amp; A</b>	<b>73</b>	<b>76</b>	<b>84</b>	<b>87</b>	<b>89</b>
<b>% of sales</b>	<b>13.2</b>	<b>14.0</b>	<b>14.2</b>	<b>13.5</b>	<b>13.7</b>
<b>EBIT</b>	<b>94</b>	<b>84</b>	<b>99</b>	<b>111</b>	<b>113</b>
<b>% of sales</b>	<b>17.1</b>	<b>15.5</b>	<b>16.8</b>	<b>17.3</b>	<b>17.5</b>
Interest expenses	5	6	6	6	6
Other income (net)	22	24	22	26	30
PBT	110	102	115	131	137
<b>-PBT margin (%)</b>	<b>20.1</b>	<b>18.8</b>	<b>19.5</b>	<b>20.4</b>	<b>21.2</b>
Provision for tax	25	22	25	29	30
<b>Effective tax rate (%)</b>	<b>22.8</b>	<b>21.8</b>	<b>22.0</b>	<b>22.0</b>	<b>22.0</b>
Minority Interest	0.2	0.0	(0.4)	(0.1)	(0.1)
<b>Net profit</b>	<b>85</b>	<b>80</b>	<b>90</b>	<b>102</b>	<b>107</b>
<b>-Growth (%)</b>	<b>(4.6)</b>	<b>(5.7)</b>	<b>12.5</b>	<b>13.7</b>	<b>4.2</b>
<b>-Net profit margin (%)</b>	<b>15.4</b>	<b>14.7</b>	<b>15.2</b>	<b>15.9</b>	<b>16.6</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 35: Balance sheet

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
Equity capital	5	9	9	9	9
Reserves & surplus	518	476	562	618	671
Net worth	523	485	571	627	680
Deferred tax liability, net	4	(4)	(6)	(6)	(6)
Other liabilities	15	13	14	14	14
Total loans	20	45	52	52	52
<b>Total liabilities</b>	<b>561</b>	<b>540</b>	<b>631</b>	<b>687</b>	<b>741</b>
Goodwill	126	118	128	128	128
Other intangible assets	16	18	18	18	18
Net block	70	64	69	67	63
Investments	299	258	258	258	258
Other non-current assets	29	34	40	40	40
Unbilled revenue	45	42	30	33	31
Inventories	4	3	4	4	4
Other current assets	50	65	65	70	67
Debtors	99	105	116	126	121
Cash & bank balance	53	45	104	155	216
Total current assets	251	262	319	387	439
Total current liabilities	230	214	201	211	206
Net current assets	21	48	118	176	233
<b>Total assets</b>	<b>561</b>	<b>540</b>	<b>631</b>	<b>687</b>	<b>741</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 34: Cash flow

Y/E March (Rsbn)	FY17	FY18	FY19E	FY20E	FY21E
EBIT	94	84	99	111	113
(Inc./dec. in working capital)	4	(17)	15	(7)	3
Cash flow from operations	97	67	114	104	116
Other income	22	24	22	26	30
Depreciation & amortisation	17	17	17	20	22
Financial expenses	(5)	(6)	(6)	(6)	(6)
Tax paid	(25)	(22)	(25)	(29)	(30)
Dividends paid	(30)	(5)	(5)	(46)	(53)
<b>Net cash from operations</b>	<b>76</b>	<b>74</b>	<b>117</b>	<b>69</b>	<b>79</b>
Capital expenditure	(12)	24	(16)	(18)	(18)
Net cash after capex	64	98	102	51	60
Inc./dec. in debt	17	(4)	(23)	0	0
(Inc./dec. in investments)	(90)	42	0	0	0
Equity issue/(buyback)	(25)	(110)	0	0	0
<b>Cash from financial activities</b>	<b>(98)</b>	<b>(72)</b>	<b>(23)</b>	<b>0</b>	<b>0</b>
Others	(12)	(34)	(19)		
Opening cash balance	99	53	45	104	155
Closing cash balance	53	45	105	155	216
Change in cash balance	(46)	(8)	60	51	60

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 36: Key ratios

Y/E March	FY17	FY18	FY19E	FY20E	FY21E
<b>Per Share (Rs)</b>					
EPS	17.5	16.8	20.0	22.7	23.7
FDEPS	17.5	16.8	20.0	22.7	23.7
Dividend Per Share	6.1	1.2	1.0	10.2	11.9
Dividend Yield (%)	1.9	0.4	0.3	3.2	3.7
Book Value	116	108	127	139	151
Dividend Payout Ratio	35.0	6.7	5.0	45.0	50.0
<b>Return ratios (%)</b>					
RoE	17.1	15.9	17.1	17.1	16.3
RoCE	14.4	12.7	14.8	15.2	14.3
RoIC	28.8	24.5	28.5	31.5	32.1
<b>Turnover Ratios</b>					
Asset Turnover Ratio	0.7	0.7	0.7	0.7	0.7
Debtor Days (incl. unbilled Rev)	95	99	90	90	86
Working Capital Cycle Days	56	68	53	53	51
<b>Valuation ratios (x)</b>					
P/E	18.6	19.3	16.2	14.3	13.7
P/BV	2.8	3.0	2.6	2.3	2.1
EV/EBITDA	11.3	12.9	10.5	9.0	8.2
EV/Sales	2.3	2.4	2.1	1.8	1.7
M-cap/Sales	2.7	2.7	2.5	2.3	2.3

Source: Company, Nirmal Bang Institutional Equities Research

## Financials – HCL Technologies

### Exhibit 37: Income statement

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
<b>Average INR/USD</b>	<b>67.0</b>	<b>64.5</b>	<b>70.1</b>	<b>72.0</b>	<b>74.5</b>
<b>Net Sales (USDmn)</b>	<b>6,975</b>	<b>7,838</b>	<b>8,532</b>	<b>9,475</b>	<b>9,723</b>
<b>YoY Growth (%)</b>	<b>48.5</b>	<b>12.4</b>	<b>8.9</b>	<b>11.0</b>	<b>2.6</b>
<b>INR Net Sales</b>	<b>467,220</b>	<b>505,700</b>	<b>598,679</b>	<b>682,303</b>	<b>724,333</b>
<b>YoY Growth (%)</b>	<b>50.1</b>	<b>8.2</b>	<b>18.4</b>	<b>14.0</b>	<b>6.2</b>
Cost of Sales & Services	308,890	332,370	387,476	443,735	465,916
<b>Gross Margin</b>	<b>158,330</b>	<b>173,330</b>	<b>211,203</b>	<b>238,568</b>	<b>258,417</b>
% of sales	33.9	34.3	35.3	35.0	35.7
<b>SG&amp;A</b>	<b>55,240</b>	<b>58,930</b>	<b>70,452</b>	<b>78,522</b>	<b>83,991</b>
% of sales	11.8	11.7	11.8	11.5	11.6
<b>EBITDA</b>	<b>103,090</b>	<b>114,400</b>	<b>140,752</b>	<b>160,046</b>	<b>174,426</b>
% of sales	22.1	22.6	23.5	23.5	24.1
Depreciation and Amortization	8,340	14,520	22,089	29,551	36,559
Dep. and Amortization (as % of sales)	1.8	2.9	3.7	4.3	5.0
<b>EBIT</b>	<b>94,750</b>	<b>99,880</b>	<b>118,662</b>	<b>130,495</b>	<b>137,867</b>
% of sales	<b>20.3</b>	<b>19.8</b>	<b>19.8</b>	<b>19.1</b>	<b>19.0</b>
Other income(net)(incl. forex gain/loss)	9,190	11,110	11,062	9,592	7,841
PBT	103,940	110,990	129,724	140,087	145,708
Provision for tax	19,520	23,170	27,176	29,515	30,699
Effective tax rate (%)	18.8	20.9	20.9	21.1	21.1
Minority Interest	0	0	0	0	0
<b>Net profit</b>	<b>84,420</b>	<b>87,820</b>	<b>102,548</b>	<b>110,572</b>	<b>115,009</b>
-Growth (%)	49.0	4.0	16.8	7.8	4.0
-Net profit margin (%)	18.1	17.4	17.1	16.2	15.9

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 39: Balance sheet

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
Equity capital	1,400	1,392	1,356	1,356	1,356
Reserves & surplus	333,504	366,776	412,127	450,798	487,370
<b>Net worth</b>	<b>334,904</b>	<b>368,168</b>	<b>413,483</b>	<b>452,154</b>	<b>488,726</b>
Other liabilities	12,525	12,669	19,569	22,302	23,181
Total loans	5,417	4,371	30,720	51,720	51,720
<b>Total liabilities</b>	<b>352,846</b>	<b>385,208</b>	<b>463,772</b>	<b>526,176</b>	<b>563,627</b>
Intangible assets	114,260	144,057	0	0	0
Net block	46,810	51,847	240,408	301,896	373,144
Investments	1,466	5,222	20,330	20,330	20,330
Other non-current assets	37,119	37,675	45,196	51,509	53,540
Debtors	108,026	122,575	143,380	163,407	169,850
Cash & bank balance	13,165	16,939	15,820	15,820	15,820
Other current assets	143,485	106,036	117,082	108,203	71,254
Total current assets	264,676	245,550	276,282	287,429	256,924
Total current liabilities	111,477	99,143	118,445	134,988	140,311
Net current assets	153,199	146,407	157,837	152,441	116,613
<b>Total assets</b>	<b>352,854</b>	<b>385,208</b>	<b>463,772</b>	<b>526,176</b>	<b>563,627</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 38: Cash flow

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
<b>EBIT</b>	<b>94,750</b>	<b>99,880</b>	<b>118,662</b>	<b>130,495</b>	<b>137,867</b>
(Inc.)/Dec. in Working Capital	9,864	(22,249)	(12,151)	(8,489)	(2,731)
<b>Cash flow from Operations</b>	<b>104,614</b>	<b>77,631</b>	<b>106,511</b>	<b>122,006</b>	<b>135,136</b>
Other Income	9,190	11,110	11,062	9,592	7,841
Depreciation & Amortisation	8,340	14,520	22,089	29,551	36,559
Tax Paid	(19,520)	(23,170)	(27,176)	(29,515)	(30,699)
Dividends Paid	(40,819)	(21,952)	(24,840)	(71,901)	(78,437)
<b>Net Cash from Operations</b>	<b>61,804</b>	<b>58,139</b>	<b>87,647</b>	<b>59,733</b>	<b>70,399</b>
Capital Expenditure	(49,985)	(49,354)	(66,594)	(91,039)	(107,807)
Net Cash after Capex	11,819	8,785	21,053	(31,306)	(37,408)
Inc./(dec.) in Debt	(4,315)	(1,046)	26,349	21,000	0
(Inc.)/Dec. in Investments	(613)	28,503	(23,027)	7,573	36,528
Equity Issue/(Buyback)	0	(35,002)	(40,000)	0	0
Cash from Financial Activities	(4,928)	(7,545)	(36,678)	28,573	36,528
Others	(1,020)	2,534	14,506	2,733	879
Opening cash balance	7,293	13,165	16,939	15,820	15,820
Closing cash balance	13,165	16,939	15,820	15,820	15,820
Change in cash balance	5,872	3,774	(1,119)	(0)	(0)

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 40: Key ratios

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
<b>Per Share (Rs)</b>					
EPS	59.8	62.7	74.7	81.5	84.8
FDEPS	60.5	62.9	74.5	81.3	84.6
Dividend Per Share	24.0	13.0	15.0	44.0	48.0
Dividend Yield (%)	2.6	1.4	1.6	4.7	5.2
Book Value	237	263	301	333	360
Dividend Payout Ratio (excl DDT)	40.1	21%	20.1	54.0	56.6
<b>Return ratios (%)</b>					
RoE	27.4	25.0	26.2	25.5	24.4
RoCE	28.9	27.1	28.0	26.4	25.3
RoIC	46.2	38.9	36.3	32.2	28.7
<b>Turnover Ratios</b>					
Asset Turnover Ratio	1.0	1.0	1.0	1.0	1.0
Debtor Days (incl. unbilled Rev)	84	88	87	87	86
Working Capital Cycle Days	21	35	37	37	36
<b>Valuation ratios (x)</b>					
P/E	15.4	14.8	12.5	11.5	11.0
P/BV	3.9	3.5	3.1	2.8	2.6
EV/EBITDA	11.1	10.2	8.5	7.7	7.3
EV/Sales	2.4	2.3	2.0	1.8	1.8
M-cap/Sales	2.7	2.5	2.1	1.9	1.7

Source: Company, Nirmal Bang Institutional Equities Research

**Financials –Tech Mahindra**
**Exhibit 41: Income statement**

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
<b>Average INR/USD</b>	<b>67.0</b>	<b>64.5</b>	<b>70.1</b>	<b>72.0</b>	<b>74.5</b>
<b>Net Sales (US\$mn)</b>	<b>4,351</b>	<b>4,771</b>	<b>4,979</b>	<b>5,422</b>	<b>5,324</b>
<b>-Growth (%)</b>	<b>7.8</b>	<b>9.6</b>	<b>4.4</b>	<b>8.9</b>	<b>(1.8)</b>
Net Sales	291,408	307,730	349,351	390,395	396,580
-Growth (%)	10.0	5.6	13.5	11.7	1.6
Cost of Sales & Services	205,661	215,299	232,122	260,943	266,528
Gross Profit	85,747	92,431	117,229	129,452	130,052
% of sales	29.4	30.0	33.6	33.2	32.8
SG& A	43,904	45,261	53,165	61,787	63,006
% of sales	15.1	14.7	15.2	15.8	15.9
EBITDA	41,843	47,170	64,064	67,665	67,046
% of sales	14.4	15.3	18.3	17.3	16.9
Depreciation	9,781	10,849	11,837	11,902	12,100
% of sales	3.4	3.5	3.4	3.0	3.1
<b>EBIT</b>	<b>32,062</b>	<b>36,321</b>	<b>52,227</b>	<b>55,763</b>	<b>54,946</b>
<b>% of sales</b>	<b>11.0</b>	<b>11.8</b>	<b>14.9</b>	<b>14.3</b>	<b>13.9</b>
Interest expenses	1,286	1,624	1,418	1,246	975
Other income (net)	7,776	14,093	6,340	8,293	9,819
PBT	38,552	48,790	57,148	62,810	63,790
-PBT margin (%)	13.2	15.9	16.4	16.1	16.1
Provision for tax	10,021	10,925	13,959	15,388	15,629
Effective tax rate (%)	26.0	22.4	24.4	24.5	24.5
Minority Interest	389	(136)	268	336	336
Net profit	28,119	38,001	42,670	47,086	47,825
-Growth (%)	(9.8)	35.1	12.3	10.3	1.6
-Net profit margin (%)	9.6	12.3	12.2	12.1	12.1

Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 43: Balance sheet**

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
Equity capital	4,388	4,417	4,422	4,422	4,422
Reserves & surplus	159,984	184,011	203,638	234,244	265,330
Net worth	164,372	188,428	208,060	238,666	269,752
Minority Interest	4,641	5,091	5,249	5,249	5,249
Other liabilities	18,905	18,246	18,270	18,270	18,270
Total loans	8,818	13,440	10,429	8,429	6,429
<b>Total liabilities</b>	<b>196,736</b>	<b>225,205</b>	<b>242,008</b>	<b>270,614</b>	<b>299,700</b>
Goodwill	26,279	27,727	29,828	29,828	29,828
Net block (incl. CWIP)	42,051	50,896	50,702	54,799	58,699
Investments	6,802	15,116	14,832	14,832	14,832
Deferred tax asset - net	2,674	5,766	8,025	8,025	8,025
Other non-current assets	19,594	23,797	27,896	31,042	30,720
Other current assets	21,571	19,623	23,804	26,489	26,214
Debtors	53,377	64,979	76,897	80,536	79,700
Loans & Advances	33,608	30,917	33,271	37,024	36,640
Cash & bank balance	54,098	64,892	66,375	87,864	113,823
Inventory	611	659	845	845	845
Total current assets	163,265	181,070	201,193	232,758	257,222
Total current liabilities	63,929	79,167	90,467	100,670	99,625
Net current assets	99,336	101,903	110,726	132,088	157,596
<b>Total assets</b>	<b>196,736</b>	<b>225,205</b>	<b>242,008</b>	<b>270,614</b>	<b>299,700</b>

Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 42: Cash flow**

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
EBIT	32,062	36,321	52,227	55,763	54,946
(Inc./dec. in working capital)	(9,120)	8,227	(7,339)	127	450
Cash flow from operations	22,942	44,548	44,887	55,890	55,396
Other income	7,776	14,093	6,340	8,293	9,819
Depreciation & amortisation	9,781	10,849	11,837	11,902	12,100
Financial expenses	(1,286)	(1,624)	(1,418)	(1,246)	(975)
Tax paid	(10,021)	(10,925)	(13,959)	(15,388)	(15,629)
Dividends paid	(13,047)	(9,048)	(14,835)	(18,001)	(19,776)
<b>Net cash from operations</b>	<b>16,145</b>	<b>47,893</b>	<b>32,852</b>	<b>41,449</b>	<b>40,936</b>
Capital expenditure	(19,449)	(21,142)	(11,643)	(16,000)	(16,000)
Net cash after capex	(3,304)	26,751	21,209	25,449	24,936
Inc./dec. in debt	(145)	3,963	(2,987)	(2,000)	(2,000)
(Inc./dec. in investments)	18,498	(15,609)	(6,074)	(3,146)	322
Equity issue/(buyback)	(451)	29	5	-	-
<b>Cash from financial activities</b>	<b>17,903</b>	<b>(11,617)</b>	<b>(9,056)</b>	<b>(5,146)</b>	<b>(1,678)</b>
Others	(638)	(4,340)	(10,670)	1,185	2,701
Opening cash	40,138	54,098	64,892	66,375	87,864
Closing cash	54,098	64,892	66,376	87,864	113,823
Change in cash	13,961	10,794	1,484	21,488	25,959

Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 44: Key ratios**

Y/E March	FY17	FY18	FY19E	FY20E	FY21E
<b>Per Share (Rs)</b>					
FDEPS	31.7	42.8	48.3	53.0	53.9
Dividend Per Share	8.6	14.0	17.0	18.7	19.0
Dividend Yield (%)	1.2	2.0	2.4	2.7	2.7
Book Value	186	214	236	271	306
Dividend Payout Ratio (%. Incl DDT)	32.2	39.0	42.2	42.0	42.0
<b>Return ratios (%)</b>					
RoE	18.3	21.5	21.5	21.1	18.8
RoCE	17.3	17.2	22.4	21.8	19.3
RoIC	26.2	25.8	34.1	33.9	32.4
<b>Turnover Ratios</b>					
Asset Turnover Ratio	1.1	1.0	1.1	1.1	1.0
Debtor Days (incl. unbilled Rev)	67	77	80	75	73
Working Capital Cycle Days	57	44	46	41	40
<b>Valuation ratios (x)</b>					
P/E	21.9	16.2	14.4	13.1	12.9
P/BV	3.7	3.3	2.9	2.6	2.3
EV/EBITDA	13.6	11.9	8.7	7.9	7.5
EV/Sales	1.9	1.8	1.6	1.4	1.3
M-cap/Sales	2.1	2.0	1.8	1.6	1.5

Source: Company, Nirmal Bang Institutional Equities Research

**Financials - Mindtree**
**Exhibit 45: Income statement**

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
<b>Average INR/USD</b>	<b>67.2</b>	<b>64.5</b>	<b>70.3</b>	<b>72.0</b>	<b>74.5</b>
<b>Net Sales (USDmn)</b>	<b>780</b>	<b>847</b>	<b>993</b>	<b>1,078</b>	<b>1,062</b>
<b>YoY Growth (%)</b>	<b>9.1</b>	<b>8.6</b>	<b>17.3</b>	<b>8.5</b>	<b>(1.4)</b>
Net Sales	52,364	54,628	69,890	77,604	79,120
YoY Growth (%)	11.8	4.3	27.9	11.0	2.0
Employee benefits expense	34,058	35,641	44,711	49,791	51,545
% of sales	65.0	65.2	64.0	64.2	65.1
Gross Margin	18306	18987	25180	27813	27576
% of sales	35.0	34.8	36.0	35.8	34.9
Other expenses	11,121	11,583	14,384	14,745	15,033
% of sales	21.2	21.2	20.6	19.0	19.0
EBITDA	7,185	7,404	10,796	13,068	12,543
<b>% of sales</b>	<b>13.7</b>	<b>13.6</b>	<b>15.4</b>	<b>16.8</b>	<b>15.9</b>
Depreciation & Amortisation	1,858	1,712	1,624	1,702	1,781
EBIT	5,327	5,692	9,171	11,366	10,761
<b>% of sales</b>	<b>10.2</b>	<b>10.4</b>	<b>13.1</b>	<b>14.6</b>	<b>13.6</b>
Interest expenses	191	169	66	74	74
Other income (net)	413	1,900	1,173	1,023	1,714
PBT	5,549	7,423	10,279	12,315	12,402
-PBT margin (%)	10.6	13.6	14.7	15.9	15.7
Provision for tax	1,390	1,722	2,792	3,387	3,410
Effective tax rate (%)	25.0	23.2	27.2	27.5	27.5
Net profit	4,159	5,701	7,487	8,928	8,991
-Growth (%)	(29.5)	37.1	31.3	19.3	0.7
-Net profit margin (%)	7.9	10.4	10.7	11.5	11.4

Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 47: Balance sheet**

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
Equity capital	1,680	1,639	1,642	1,642	1,642
Reserves & surplus	24,095	25,779	30,161	35,731	41,364
Net worth	25,775	27,418	31,803	37,373	43,006
Other liabilities	301	85	87	87	87
Total loans	13	9	5	5	5
<b>Total liabilities</b>	<b>26,089</b>	<b>27,512</b>	<b>31,895</b>	<b>37,465</b>	<b>43,098</b>
Net block	5,932	5,121	4,465	3,362	2,181
Goodwill	4,470	4,539	4,732	4,732	4,732
Investments	5,927	7,264	7,224	11,224	15,224
Deferred tax asset - net	624	318	405	405	405
Other non-current assets	2,202	2,298	2,311	2,311	2,311
Unbilled revenue	1,885	2,791	3,332	3,751	3,686
Other current assets	1,386	1,590	1,547	1,741	1,711
Debtors	8,962	10,155	13,361	15,044	14,782
Cash & bank balance	2,508	3,289	2,426	3,598	6,646
Total current assets	14,741	17,825	20,666	24,134	26,824
Total current liabilities	7,807	9,853	7,908	8,703	8,579
Net current assets	6,934	7,972	12,758	15,431	18,245
<b>Total assets</b>	<b>26,089</b>	<b>27,512</b>	<b>31,895</b>	<b>37,465</b>	<b>43,098</b>

Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 46: Cash flow**

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
EBIT	5,327	5,692	9,171	11,366	10,761
(Inc./dec. in working capital)	1,781	(257)	(5,649)	(1,500)	234
<b>Cash flow from operations</b>	<b>7,108</b>	<b>5,435</b>	<b>3,522</b>	<b>9,865</b>	<b>10,995</b>
Other income	413	1,900	1,173	1,023	1,714
Depreciation & amortisation	1,858	1,712	1,624	1,702	1,781
Financial expenses	(191)	(169)	(66)	(74)	(74)
Tax paid	(1,390)	(1,722)	(2,792)	(3,387)	(3,410)
Dividends paid	(1,934)	(2,188)	(2,371)	(3,358)	(3,358)
<b>Net cash from operations</b>	<b>5,864</b>	<b>4,968</b>	<b>1,091</b>	<b>5,772</b>	<b>7,648</b>
Capital expenditure	371	629	1,117	1,000	1,000
<b>Net cash after capex</b>	<b>5,493</b>	<b>4,339</b>	<b>(26)</b>	<b>4,772</b>	<b>6,648</b>
Inc./(dec.) in debt	(532)	(220)	(2)	-	-
(Inc./dec. in investments)	(4,097)	(1,127)	(60)	(4,000)	(4,000)
Equity issue/(buyback)	2	(41)	3	-	-
<b>Cash from financial activities</b>	<b>(4,627)</b>	<b>(1,388)</b>	<b>(59)</b>	<b>(4,000)</b>	<b>(4,000)</b>
Others	(690)	(2,170)	(778)	400	400
Opening cash	2,332	2,508	3,289	2,426	3,598
Closing cash	2,508	3,289	2,426	3,598	6,646
Change in cash	176	781	(863)	1,172	3,048

Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 48: Key ratios**

Y/E March	FY17	FY18	FY19E	FY20E	FY21E
<b>Per Share (Rs)</b>					
EPS	25.4	34.8	45.7	54.5	54.8
FDEPS	25.3	34.7	45.5	54.3	54.7
Dividend Per Share	9.8	11.1	12.0	17.0	17.0
Book Value	157	167	193	227	262
Dividend Payout Ratio (incl DDT)	47	38	32	38	37
<b>Return ratios (%)</b>					
RoE	16.7	21.4	25.3	25.8	22.4
RoCE	21.8	21.7	32.5	35.3	28.7
RoIC	27.8	32.9	46.8	50.6	49.1
<b>Turnover Ratios</b>					
Asset Turnover Ratio	1.5	1.5	1.8	1.7	1.5
Debtor Days (incl. unbilled Rev)	76	86	87	88	85
Working Capital Cycle Days	37	30	39	52	54
<b>Valuation ratios (x)</b>					
P/E	32.7	23.7	17.9	15.0	14.9
P/BV	5.2	4.9	4.2	3.6	3.1
EV/EBITDA	17.5	16.7	11.5	9.1	8.9
EV/Sales	2.4	2.3	1.8	1.5	1.4
M-cap/Sales	2.6	2.5	1.9	1.7	1.7
Dividend Yield (%)	1.2	1.4	1.5	2.1	2.1

Source: Company, Nirmal Bang Institutional Equities Research



## Financials – Persistent Systems

### Exhibit 49: Income statement

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
<b>Average INR/USD</b>	<b>67.1</b>	<b>64.5</b>	<b>70.1</b>	<b>72.0</b>	<b>74.5</b>
<b>Net Sales (USDmn)</b>	<b>429</b>	<b>471</b>	<b>507</b>	<b>555</b>	<b>535</b>
<b>YoY Growth (%)</b>	<b>22.0</b>	<b>9.7</b>	<b>7.8</b>	<b>9.5</b>	<b>(3.5)</b>
Net Sales	28,784	30,337	35,523	39,969	39,870
YoY Growth (%)	24.5	5.4	17.1	12.5	(0.2)
Cost of Sales & Services	18,518	19,704	22,999	26,045	25,891
% of sales	64.3	65.0	64.7	65.2	64.9
Gross Margin	10,266	10,633	12,523	13,924	13,979
% of sales	35.7	35.0	35.3	34.8	35.1
SG&A	5,727	5,946	6,540	6,843	6,944
% of sales	19.9	19.6	18.4	17.1	17.4
<b>EBITDA</b>	<b>4,539</b>	<b>4,687</b>	<b>5,983</b>	<b>7,081</b>	<b>7,034</b>
% of sales	15.8	15.4	16.8	17.7	17.6
Depreciation	1,490	1,585	1,616	1,957	2,053
<b>EBIT</b>	<b>3,049</b>	<b>3,102</b>	<b>4,367</b>	<b>5,124</b>	<b>4,982</b>
<b>% of sales</b>	<b>10.6%</b>	<b>10.2%</b>	<b>12.3%</b>	<b>12.8%</b>	<b>12.5%</b>
Other income (net)	958	1,190	947	1,187	1,400
PBT	4,007	4,292	5,314	6,311	6,382
-PBT margin (%)	13.9	14.1	15.0	15.8	16.0
Provision for tax	992	1,062	1,573	1,927	1,948
Effective tax rate (%)	24.8	24.7	29.6	30.5	30.5
<b>Net profit</b>	<b>3,015</b>	<b>3,231</b>	<b>3,741</b>	<b>4,384</b>	<b>4,433</b>
-Growth (%)	1.4	7.2	15.8	17.2	1.1
-Net profit margin (%)	10.5	10.6	10.5	11.0	11.1

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 51: Balance sheet

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
Equity capital	800	800	800	800	800
Reserves & surplus	18,193	20,472	23,297	25,568	27,864
Net worth	18,993	21,272	24,097	26,368	28,664
Deferred tax liability	111	-	-	-	-
Other liabilities	166	160	197	197	197
Total loans	22	17	18	18	18
<b>Total liabilities</b>	<b>19,291</b>	<b>21,448</b>	<b>24,312</b>	<b>26,583</b>	<b>28,880</b>
Goodwill	76	77	85	85	85
Net block (incl. CWIP)	5,573	5,097	4,586	3,591	2,540
Investments	6,839	8,797	10,843	10,843	10,843
Deferred tax asset	306	372	647	647	647
Other non-current assets	994	129	104	104	104
Other current assets	3,411	4,585	5,632	6,277	5,961
Debtors	4,754	4,847	5,836	6,526	6,188
Cash & bank balance	1,510	2,414	2,508	5,139	8,798
Total current assets	9,675	11,846	13,976	17,942	20,947
Total current liabilities	4,173	4,870	5,929	6,629	6,286
Net current assets	5,502	6,976	8,047	11,313	14,661
<b>Total assets</b>	<b>19,291</b>	<b>21,448</b>	<b>24,312</b>	<b>26,583</b>	<b>28,880</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 50: Cash flow

Y/E March (Rsmn)	FY17	FY18	FY19E	FY20E	FY21E
EBIT	3,049	3,102	4,367	5,124	4,982
(Inc./dec. in working capital)	(1,762)	(570)	(977)	(634)	311
Cash flow from operations	1,287	2,532	3,390	4,490	5,292
Other income	958	1,190	947	1,187	1,400
Depreciation & amortisation	1,490	1,585	1,616	1,957	2,053
Tax paid	(992)	(1,062)	(1,573)	(1,927)	(1,948)
Dividends paid	(761)	(800)	(718)	(2,113)	(2,137)
<b>Net cash from operations</b>	<b>1,982</b>	<b>3,445</b>	<b>3,663</b>	<b>3,594</b>	<b>4,660</b>
Capital expenditure	1,650	1,027	1,105	962	1,001
Net cash after capex	332	2,419	2,557	2,631	3,658
Inc./(dec.) in debt	127	(136)	2	-	-
(Inc./dec. in investments)	135	(1,145)	(2,259)	-	-
Equity issue/(buyback)	-	-	-	-	-
Cash from financial activities	261	(1,280)	(2,257)	-	-
Others	(515)	(234)	(206)	-	-
Opening cash balance	1,432	1,510	2,414	2,508	5,139
Closing cash balance	1,510	2,414	2,508	5,139	8,798
Change in cash balance	77	904	94	2,631	3,658

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 52: Key ratios

Y/E March	FY17	FY18	FY19E	FY20E	FY21E
<b>Per Share (Rs)</b>					
EPS	37.7	40.4	46.8	54.8	55.4
FDEPS	37.7	40.4	46.8	54.8	55.4
Dividend Per Share	9.0	10.0	7.4	21.9	22.2
Book Value	237	266	301	330	358
Dividend Payout Ratio (%)	25	25	19	48	48
<b>Return ratios (%)</b>					
RoE	17.2	15.4	19.2	20.3	18.1
RoCE	17.1	15.3	19.2	20.3	18.1
RoIC	31.1	29.7	41.9	48.4	51.2
<b>Turnover Ratios</b>					
Asset Turnover Ratio	1.5	1.4	1.5	1.5	1.4
Debtor Days (incl. unbilled Rev)	60	58	60	60	57
Working Capital Cycle Days	39	51	52	53	55
<b>Valuation ratios (x)</b>					
P/E	15.3	14.3	12.3	10.5	10.4
P/BV	2.4	2.2	1.9	1.8	1.6
EV/EBITDA	9.8	9.3	7.3	5.8	5.3
EV/Sales	1.6	1.4	1.2	1.0	0.9
M-cap/Sales	1.6	1.5	1.3	1.2	1.2
Dividend Yield (%)	1.6%	1.7%	1.3%	3.8%	3.8%

Source: Company, Nirmal Bang Institutional Equities Research

**Rating track -TCS**

Date	Rating	Market price (Rs)	Target price (Rs)
13 April 2015	Sell	2,619	2,314
17 April 2015	Sell	2,574	2,325
10 July 2015	Sell	2,529	2,173
9 September 2015	Sell	2,540	2,173
5 October 2015	Sell	2,641	2,217
14 October 2015	Sell	2,599	2,248
8 January 2016	Under Review	2,398	-
13 January 2016	Under Review	2,327	-
14 March 2016	Sell	2,360	2,055
20 April 2016	Sell	2,520	2,089
15 July 2016	Sell	2,521	2,075
14 September 2016	Sell	2,359	2,041
14 October 2016	Sell	2,329	2,073
10 January 2017	Sell	2,304	1,952
13 January 2017	Sell	2,344	1,956
14 February 2017	Sell	2,414	1,983
21 February 2017	Sell	2,502	1,983
2 March 2017	Sell	2,477	1,983
19 April 2017	Sell	2,309	1,996
21 June 2017	Sell	2,443	1,923
14 July 2017	Sell	2,446	1,930
28 September 2017	Sell	2,475	1,908
13 October 2017	Sell	2,548	1,913
26 December 2017	Under Review	2,647	-
12 January 2018	Under Review	2,792	-
17 March 2018	Accumulate	2,829	3,155
20 April 2018	Accumulate	3,191	3,176
26 June 2018*	Accumulate	1,818	1,812
11 July 2018	Accumulate	1,876	1,862
5 October 2018	Accumulate	2,063	2,145
12 October 2018	Accumulate	1,980	2,120
27 December 2018	Sell	1,892	1,712
7 January 2019	Sell	1,877	1,533

\* Post 1:1 bonus share issue

**Rating track - Infosys**

Date	Rating	Market price (Rs)	Target price (Rs)
27 April 2015	Sell	1,995	1,823
4 June 2015	Sell	2,032	1,823
22 July 2015**	Accumulate	1,116	1,189
7 September 2015	Accumulate	1,074	1,189
14 September 2015	Accumulate	1,091	1,189
13 October 2015	Accumulate	1,122	1,194
8 January 2016	Under Review	1,063	-
14 January 2016	Under Review	1,133	-
14 March 2016	Sell	1,141	1,002
15 April 2016	Sell	1,173	1,010
9 June 2016	Sell	1,238	1,010
18 July 2016	Sell	1,072	988
29 August 2016	Sell	1,020	970
17 October 2016	Sell	1,027	964
10 January 2017	Sell	970	920
16 January 2017	Sell	975	910
14 February 2017	Sell	985	926
15 April 2017	Sell	931	887
15 May 2017	Sell	964	887
21 June 2017	Sell	944	844
17 July 2017	Sell	972	846
21 August 2017	Sell	923	794
28 August 2017	Sell	912	836
11 September 2017	Sell	884	836
28 September 2017	Sell	906	833
25 October 2017	Sell	924	873
26 December 2017	Under Review	1,039	-
15 January 2018	Under Review	1,079	-
17 March 2018	Accumulate	1,170	1,154
14 April 2018	Accumulate	1,171	1,157
24 April 2018	Accumulate	1,188	1,157
3 July 2018	Accumulate	1,307	1,314
14 July 2018	Accumulate	1,317	1,328
5 October 2018**	Accumulate	711	752
17 October 2018	Accumulate	695	756
27 December 2018	Accumulate	644	688
7 January 2019	Sell	661	620

\*\* Post 1:1 bonus issue of equity shares

## Rating track - Wipro

Date	Rating	Market price (Rs)	Target price (Rs)
13 April 2015	Sell	618	576
22 April 2015	Sell	588	546
24 July 2015	Sell	588	548
30 September 2015	Sell	587	546
23 October 2015	Sell	578	544
8 January 2016	Under Review	556	-
19 January 2016	Under Review	549	-
14 March 2016	Sell	540	498
21 April 2016	Sell	601	489
20 July 2016	Sell	549	478
24 October 2016	Sell	499	436
10 January 2017	Sell	472	410
27 January 2017	Sell	474	413
14 February 2017	Sell	474	427
26 April 2017	Sell	495	437
21 June 2017*	Sell	254	197
21 July 2017	Sell	269	235
28 September 2017	Sell	290	228
18 October 2017	Sell	290	244
26 December 2017	Under Review	302	-
22 January 2018	Under Review	329	-
17 March 2018	Accumulate	296	302
26 April 2018	Accumulate	287	303
3 July 2018	Buy	262	335
23 July 2018	Buy	282	323
5 October 2018	Buy	325	377
17 October 2018	Buy	309	364
27 December 2018	Sell	326	297
7 January 2019	Sell	324	268

\* Post 1:1 bonus share issue

## Rating track - HCL Technologies

Date	Rating	Market price (Rs)	Target price (Rs)
13 April 2015	Accumulate	959	1,013
22 April 2015	Accumulate	895	1,014
4 August 2015	Accumulate	938	1,008
1 October 2015	Accumulate	982	991
5 October 2015	Accumulate	859	991
20 October 2015	Buy	859	989
8 January 2016	Under Review	828	-
20 January 2016	Under Review	841	-
14 March 2016	Sell	824	737
29 April 2016	Sell	799	719
4 August 2016	Sell	826	745
24 October 2016	Sell	832	718
10 January 2017	Sell	838	712
25 January 2017	Sell	849	718
14 February 2017	Sell	827	740
12 May 2017	Sell	839	743
21 June 2017	Sell	854	713
28 July 2017	Sell	899	764
28 September 2017	Sell	874	744
26 October 2017	Sell	903	763
26 December 2017	Under Review	887	-
22 January 2018	Under Review	958	-
17 March 2018	Accumulate	968	1,048
16 April 2018	Accumulate	991	1,048
3 May 2018	Accumulate	1,001	1,041
3 July 2018	Buy	926	1,131
30 July 2018	Buy	963	1,172
5 October 2018	Buy	1,081	1,281
24 October 2018	Buy	952	1,277
11 December 2018	Buy	942	1,329
27 December 2018	Accumulate	942	1,072
7 January 2019	Accumulate	932	958

**Rating track – Tech Mahindra**

Date	Rating	Market price (Rs)	Target price (Rs)
13 April 2015	Sell	660	593
28 May 2015	Sell	549	511
19 June 2015	Sell	541	470
28 July 2015	Sell	520	470
28 September 2015	Sell	567	474
4 November 2015	Sell	557	472
15 December 2015	Sell	543	471
8 January 2016	Under Review	522	-
2 February 2016	Under Review	497	-
14 March 2016	Sell	459	395
25 May 2016	Sell	480	409
21 June 2016	Sell	544	421
3 August 2016	Sell	499	400
28 October 2016	Sell	414	385
10 January 2017	Sell	473	368
31 January 2017	Sell	472	383
14 February 2017	Sell	500	388
7 March 2017	Sell	501	408
29 May 2017	Sell	429	403
21 June 2017	Sell	395	367
1 August 2017	Sell	385	360
28 September 2017	Sell	447	358
2 November 2017	Sell	478	387
11 December 2017	Sell	496	426
26 December 2017	Under Review	493	-
30 January 2018	Under Review	605	-
17 March 2018	Accumulate	635	608
28 May 2018	Accumulate	703	721
3 July 2018	Accumulate	655	716
31 July 2018	Accumulate	658	718
5 October 2018	Buy	721	845
31 October 2018	Accumulate	685	731
27 November 2018	Accumulate	695	731
27 December 2018	Sell	695	590
7 January 2019	Sell	681	525

## Rating track - Mindtree

Date	Rating	Market price (Rs)	Target price (Rs)
7 June 2017	Sell	547	424
21 June 2017	Sell	519	382
20 July 2017	Sell	506	382
22 August 2017	Sell	461	382
28 September 2017	Sell	471	396
26 October 2017	Sell	507	426
26 December 2017	Under Review	600	-
18 January 2018	Under Review	622	-
17 March 2018	Sell	812	574
26 October 2017	Sell	867	-
26 December 2017	Under Review	600	-
18 January 2018	Under Review	622	-
17 March 2018	Sell	812	574
19 April 2018	Sell	867	577
3 July 2018	Sell	986	716
19 July 2018	Sell	1,062	803
4 September 2018	Sell	1,100	803
5 October 2018	Sell	1,057	986
19 October 2018	Sell	978	778
27 December 2018	Sell	855	631
7 January 2019	Sell	815	552

## Rating track - Persistent Systems

Date	Rating	Market price (Rs)	Target price (Rs)
21 September 2015	Sell	685	562
27 October 2015	Sell	669	553
7 December 2015	Sell	663	544
8 January 2016	Under Review	630	-
27 January 2016	Under Review	609	-
14 March 2016	Sell	599	522
22 March 2016	Sell	741	555
26 April 2016	Sell	719	558
22 June 2016	Sell	697	558
26 July 2016	Sell	665	562
26 October 2016	Sell	660	573
19 December 2016	Sell	613	573
10 January 2017	Sell	636	557
24 January 2017	Sell	612	548
14 February 2017	Sell	624	574
27 April 2017	Sell	568	534
21 June 2017	Sell	681	516
24 July 2017	Sell	659	526
28 September 2017	Sell	651	540
17 October 2017	Sell	663	566
04 December 2017	Sell	654	566
26 December 2017	Under Review	650	-
30 January 2018	Under Review	788	-
17 March 2018	Sell	816	698
25 April 2018	Accumulate	726	717
3 July 2018	Accumulate	811	847
31 July 2018	Accumulate	828	867
5 October 2018	Buy	718	909
23 October 2018	Accumulate	560	622
12 December 2018	Accumulate	611	622
27 December 2018	Sell	630	504
7 January 2019	Sell	577	455



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SELL < -5%

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