

Sector Thematic

Indian IT

Demand recovery in sight

Indian IT will stage a recovery from the near-term economic shock and is currently in the resurrection phase with demand recovery in sight. Competitive advantage vs. global peers, favourable risk-reward based on multiple industry scenario analysis and resilient dynamics of core industry segments can support the recovery trajectory. Primary checks, digital playbook and high-frequency indicators also suggest 2H recovery, vendor consolidation gains and service delivery shifts. Despite recent valuation re-rating to pre-covid levels, IT sector valuations at median levels with sector skew provides opportunities.



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IT Sector

Indian IT: Demand recovery in sight

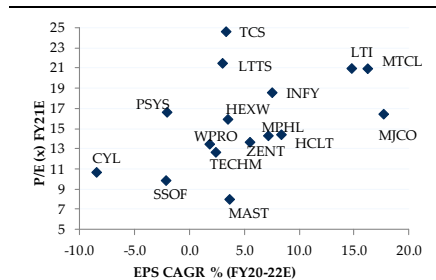
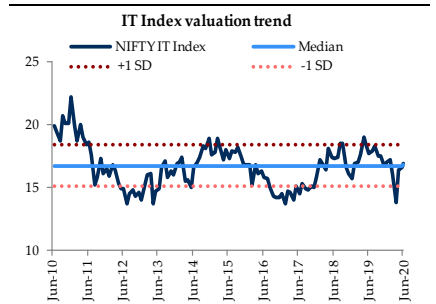
Indian IT is expected to recover 2Q-3QFY21 onwards. While the severity of the economic impact has been reasonably factored, the trajectory of recovery is uncertain. We expect the demand trajectory to rebound sharply based on our top-down industry scenario analysis, primary checks, resilient dynamics in core verticals and strong digital playbook.

Our checks with IT cos./industry experts suggest (1) Scale & end-to-end services suite (increasing partner-led deals) are strong factors for vendor consolidation gains (pricing, large deal constructs & existing customers CSAT key elements) as enterprises undertake technology portfolio rationalisation, (2) Reduction in legacy tech estate of enterprises to gather pace post-covid and higher share of F-500 customers provide resilience, (3) Accelerated automation and higher work from home are expected to impact service delivery in the long term with changes in talent practice, and (4) Higher near-term impact on account of delay/cancellation in discretionary projects, as compared to impact from pricing/volume cuts in business critical projects with overall tech budget cuts in 5-15% range.

- Market-share gains across cycles:** Indian IT (even Wipro) has delivered a consistent track record of market-share gains vs. global IT, across tech mega trends and market cycles, which reflect the strong competitive advantage (recent growth outperformance by ~700bps). Contrary to popular narrative, Indian IT's growth in the digital/cloud era (FY15-20) has outpaced global IT peers (>80% share of incremental growth within large global IT), following significant gains in the post GFC period. Portfolio depth across verticals & technologies underpins our expectations of continued outperformance.
- Favourable risk-reward:** Key observations from top-down industry scenarios analysis suggest (1) Favourable risk-reward for the sector as even a bear case implies recovery beyond FY21 and as cyclical downtrend in a structurally positive outcome has limited impact on valuations, (2) Bear case & bull case implies a rev growth variance of ~10% in FY21 (-12% YoY to +1% YoY range) and ~6% in FY22 (+6.5% YoY to +13.5% YoY range) for tier-1 IT, (3) HCLT has the least impact in bear case and highest upside in a bull case (supported by acquisitive growth), and 3) TCS and Infosys exhibit fairly similar levels of sensitivity under bear-bull case.
- Resilient dynamics of verticals & strong digital playbook:** Vertical trends suggest (1) BFSI tech spend buoyancy despite slowdown, (2) Recent recovery in US retail concurrent with tech spend priorities such as building omni-channel & in-store analytics (strong recent deal activity in HCLT/TCS), 3) Positive enterprise trends in Healthcare vertical (HCLT/Wipro higher exposure) in conjunction with tech investments in RPA.
- Maintain constructive stance:** Despite the strong valuations re-rating to pre-covid levels, 1) IT valuations are at historical avg. (-8% below +1SD), 2) Valuation skew within the sector provides opportunities, and 3) USD-INR has upside risks (revised EPS higher ~4% factoring USD-INR at 75/76 for FY21E/22E and our target valuations are revised upwards to historical avg. on better visibility). Upgrades include Wipro (ADD) and Mphasis (BUY); downgrades include L&T Tech (REDUCE) and Hexaware (REDUCE).

Top Picks: Infosys, HCL Tech, LTI, Mphasis, Sonata

Company	CMP (Rs)	RECO	TP (Rs)
TCS	2,035	REDUCE	1,930
Infosys	721	BUY	805
HCL Tech	580	BUY	670
Wipro	221	ADD	245
Tech Mahindra	559	BUY	710
LTI	1,885	ADD	2,070
Mphasis	855	BUY	1,055
Mindtree	928	ADD	985
LTTS	1,297	REDUCE	1,220
Hexaware	320	REDUCE	320
Persistent	616	REDUCE	630
Zensar	136	ADD	130
Cyient	256	REDUCE	255
Sonata	226	BUY	305
Mastek	395	BUY	535
Majesco	349	BUY	450



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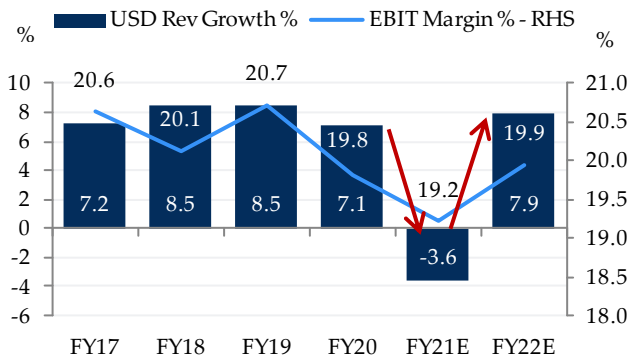
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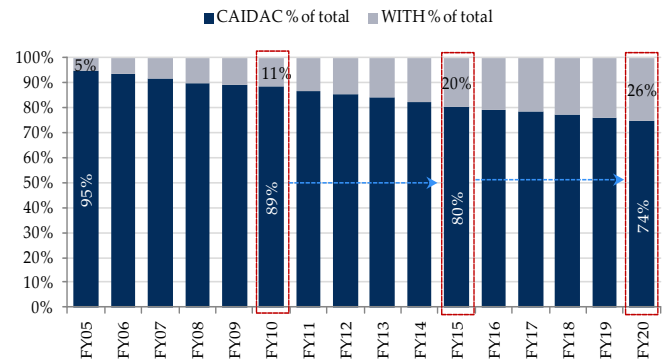
Focus Charts

Revenue and Margin Trend (IT Sector)



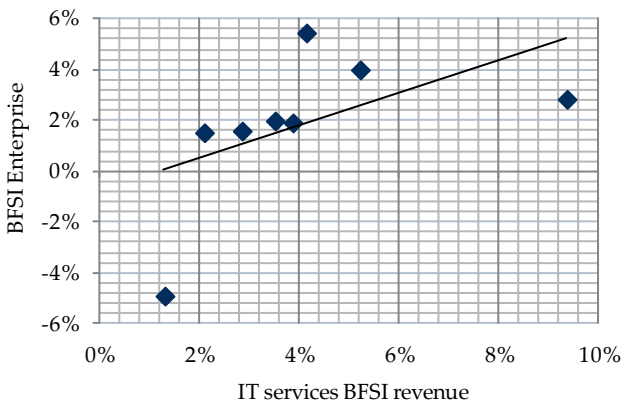
Source: Company, HSIE Research; Coverage universe aggregate

Indian IT Gained Market Share Across Cycles



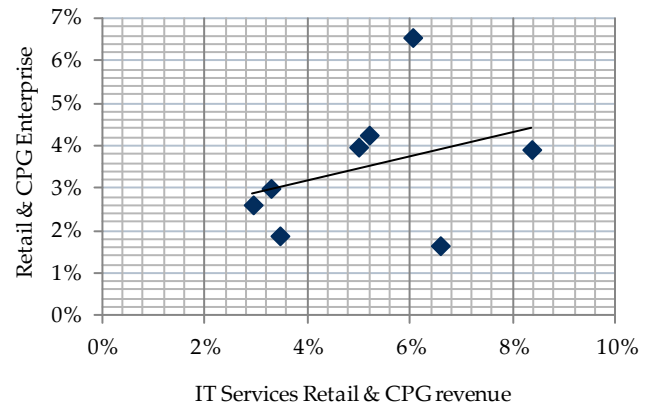
Source: Company, HSIE Research; CAIDAC denotes aggregate of Cognizant, Accenture, IBM services, DXC, Atos, Capgemini & WITH denotes TCS, INFY, HCLT, Wipro aggregate

BFSI Enterprise Revenue & IT services BFSI Revenue Growth Correlation (R2 = 0.3)



Source: Company, HSIE Research

Retail & CPG Enterprise & IT Services Retail & CPG Revenue Growth Correlation (R2 = 0.1)



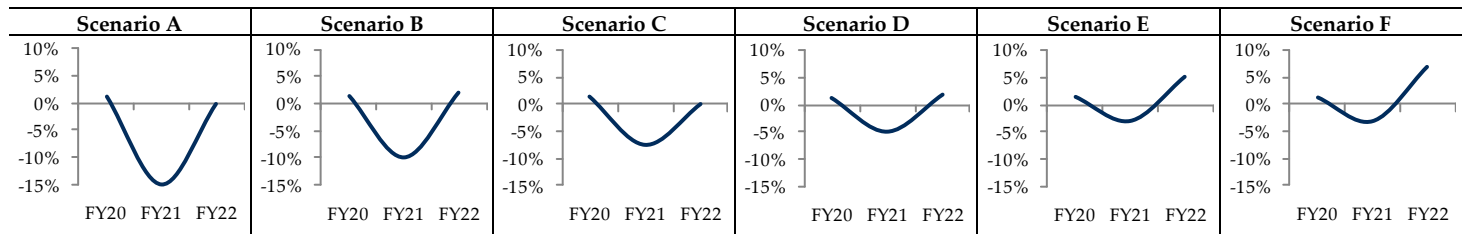
Source: Company, HSIE Research

IT companies Rankings

Parameters	TCS	INFY	HCLT	Wipro
Market share gains vs. Global majors	2	3	1	4
Health of large accounts	1	4	3	2
USD 10mn+ client adds	2	1	3	4
USD 100mn+ client adds	4	3	2	1
BFSI vertical momentum	3	2	1	4
Communication vertical momentum	1	4	2	3
Retail & CPG vertical momentum	2	3	1	4
Healthcare vertical momentum	1	2	3	4
Overall Service Portfolio	1	2	4	3
Digital Portfolio	2	1	4	3
OVERALL RANK	1	2	3	4

Source: HSIE Research; Data from Gartner, Forrester, IDC, Everest, HFS to assess overall service portfolio & digital portfolio

Sector Growth Under Various Scenarios



Source: HSIE Research

IT Sector Valuation Universe

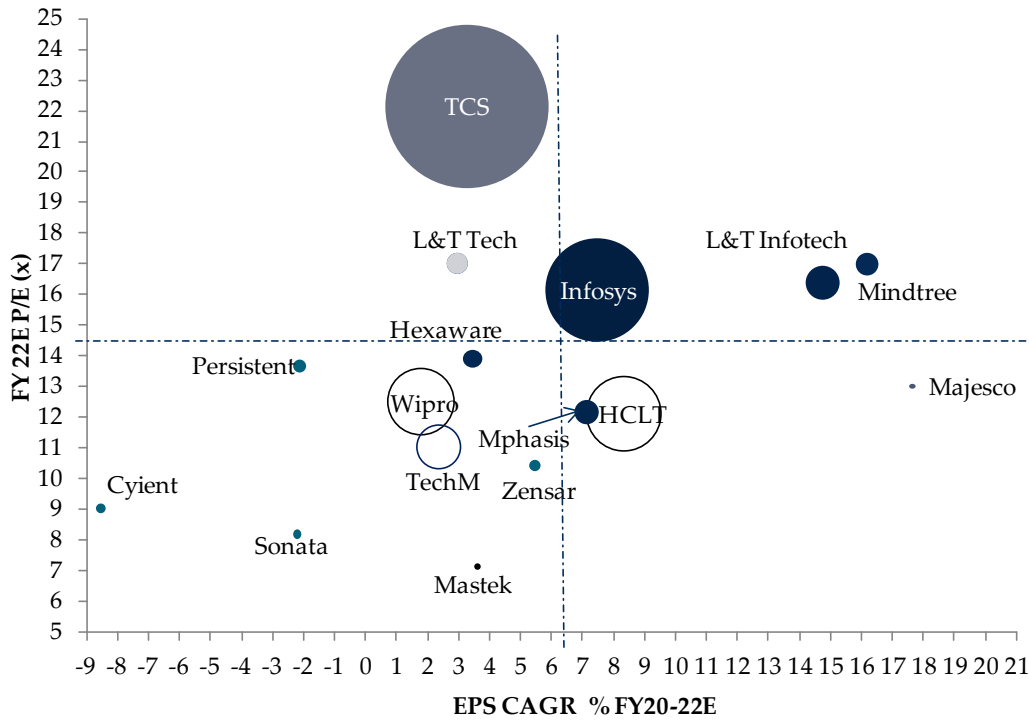
Company	MCap (Rs bn)	CMP (Rs)	TP (Rs)	RECO	EPS (Rs)				P/E (x)				RoE (%)				\$ Rev CAGR% FY20-22	EPS CAGR% FY20-22
					FY19	FY20	FY21E	FY22E	FY19	FY20	FY21E	FY22E	FY19	FY20	FY21E	FY22E		
TCS	7,637	2,035	1,930	REDUCE	83.9	86.2	82.5	91.9	24.3	23.6	24.7	22.1	36.1	37.3	36.4	39.5	0.3	3.3
Infosys	3,060	721	805	BUY	37.1	38.6	38.7	44.6	19.4	18.7	18.6	16.1	24.3	25.2	24.4	26.2	3.9	7.5
HCL Tech	1,574	580	670	BUY	37.3	40.8	40.2	47.9	15.5	14.2	14.4	12.1	26.0	23.8	19.6	20.2	4.0	8.3
Wipro	1,258	221	245	ADD	15.8	17.0	16.3	17.7	14.0	12.9	13.5	12.5	17.3	17.3	15.5	14.6	0.1	1.8
TechM	539	559	710	BUY	48.9	48.3	44.0	50.6	11.4	11.6	12.7	11.0	22.0	20.2	17.1	18.3	0.9	2.3
Tier-1 IT Median									15.5	14.2	14.4	12.5	24.3	23.8	19.6	20.2	0.9	3.3
LTI	328	1,885	2,070	ADD	87.0	87.3	89.7	115.0	21.7	21.6	21.0	16.4	34.6	29.5	26.6	28.7	10.0	14.7
Mphasis	159	855	1,055	BUY	57.6	61.3	59.7	70.4	14.8	14.0	14.3	12.2	20.0	20.6	18.5	20.4	4.4	7.1
Mindtree	153	928	985	ADD	44.1	40.5	44.2	54.6	21.1	22.9	21.0	17.0	24.9	19.5	21.8	23.8	3.3	16.2
L&T Tech	135	1,297	1,220	REDUCE	65.8	71.9	60.3	76.2	19.7	18.0	21.5	17.0	31.1	28.6	21.3	23.5	0.7	3.0
Hexaware*	95	320	320	REDUCE	19.6	21.5	20.0	23.0	16.4	14.9	16.0	13.9	26.5	24.9	20.4	20.9	6.2	3.5
Persistent	47	616	630	REDUCE	47.8	47.0	37.0	45.0	12.9	13.1	16.7	13.7	15.7	14.4	11.5	12.9	2.6	-2.1
Zensar	31	136	130	ADD	14.2	11.7	9.9	13.0	9.6	11.6	13.7	10.4	17.7	12.9	10.3	12.6	-2.4	5.5
Cyient	28	256	255	REDUCE	44.4	33.9	23.9	28.3	5.8	7.6	10.7	9.0	20.0	14.5	10.1	11.4	-7.1	-8.5
Sonata	23	226	305	BUY	23.7	28.9	22.8	27.6	9.5	7.8	9.9	8.2	34.7	41.7	33.3	35.7	-1.3	-2.2
Mastek	11	395	535	BUY	39.9	51.5	49.2	55.3	9.9	7.7	8.0	7.1	15.9	17.4	16.6	16.5	18.0	3.6
Majesco	10	349	450	BUY	18.3	19.4	21.2	26.8	19.0	18.0	16.5	13.0	8.4	7.9	8.2	9.5	6.6	17.7
Tier-2 IT AVG									14.6	14.3	15.4	12.5	22.7	21.1	18.1	19.6	3.7	5.3
Tier-2 IT Median									14.8	14.0	16.0	13.0	20.0	19.5	18.5	20.4	3.3	3.6

Company	MCap (USD bn)	CMP USD	TP	RECO	EPS (USD)				P/E (x)				RoE (%)				\$ Rev CAGR% FY20-22	EPS CAGR% FY20-22
					FY19	FY20	FY21E	FY22E	FY19	FY20	FY21E	FY21E	FY19	FY20	FY21E	FY22E		
Accenture	133	202	NA	NR	7.4	7.6	8.1	8.7	27.4	26.6	24.9	23.1	38.6	32.8	29.5	27.0	NA	7.5
Cognizant	29	54	NA	NR	4.0	3.0	3.8	4.2	13.6	18.3	14.1	12.9	16.4	15.2	17.1	16.0	NA	19.3
Capgemini ^	17	100	NA	NR	6.8	6.3	7.4	8.5	14.7	15.9	13.4	11.8	10.8	11.2	13.1	14.0	NA	16.2
Global IT AVG									18.6	20.3	17.5	15.9	21.9	19.7	19.9	19.0	NA	14.3
Global IT Median									14.7	18.3	14.1	12.9	16.4	15.2	17.1	16.0		16.2

Source: HSIE Research, Bloomberg, *Dec YE, ^CMP, MCap and EPS in EUR terms

IT : Sector Thematic

IT Sector P/E and EPS Growth Matrix



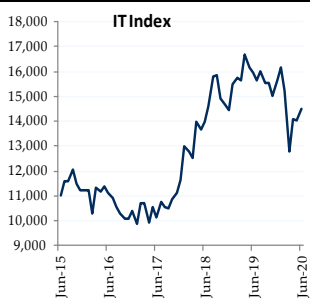
Source: HSIE Research, Note: Size of Bubble represents M-cap

Stock Performance (%)

Stocks/Index	1W	1M	3M	6M	1Y	3Y CAGR	5Y CAGR
Nifty	4.0	12.8	35.6	(12.1)	(7.5)	5.9	6.7
Nifty IT	(0.3)	2.8	26.1	(8.5)	(11.6)	12.2	5.0
TCS	(0.5)	0.7	21.9	(8.8)	(9.5)	19.1	8.7
Infosys	2.8	4.1	36.9	(2.1)	(6.3)	12.3	6.0
HCL Tech	(0.1)	9.4	39.1	1.6	7.9	9.0	3.8
Wipro	3.9	16.7	29.7	(13.1)	(26.9)	0.3	(1.7)
Tech Mahindra	4.8	5.5	14.7	(27.9)	(25.9)	13.3	0.3
L&T Infotech	0.5	5.6	45.9	7.5	11.3	33.6	NA
Mphasis	1.7	1.9	33.2	(2.8)	(8.9)	11.7	13.5
Mindtree	1.7	4.2	26.5	19.3	(4.0)	19.5	6.2
L&T Technology	(1.1)	15.6	27.5	(11.5)	(24.7)	22.5	NA
Hexaware	1.3	35.5	53.9	(2.6)	(22.7)	8.6	3.6
Tata Elxsi	0.7	13.8	61.9	3.0	2.4	3.1	8.0
Persistent	6.3	17.4	31.3	(8.1)	(6.1)	(3.8)	(3.9)
Zensar	(0.9)	56.8	93.2	(21.4)	(46.7)	(7.8)	0.1
Cyient	21.3	35.4	11.3	(39.3)	(55.1)	(21.3)	(16.1)
Sonata	(2.0)	14.3	38.0	(25.9)	(35.0)	14.3	10.3
eClerx	6.8	15.9	23.0	(19.3)	(44.9)	(31.4)	(18.8)
Intellect	17.0	72.7	132.8	(23.1)	(57.4)	6.4	6.2
HGS	10.2	26.0	50.1	7.2	4.2	7.2	6.0
Mastek	1.3	65.2	108.3	(2.4)	(16.1)	16.2	21.3
Majesco	(0.9)	24.2	87.6	(6.6)	(32.2)	11.6	5.8
Global Peers							
Accenture*	(0.9)	4.6	41.0	(3.6)	9.0	17.7	14.7
Cognizant*	(2.7)	4.7	27.5	(15.1)	(20.7)	(9.8)	(5.5)
Capgemini*	2.4	16.7	56.6	(9.4)	(1.0)	2.6	3.8

Source: Bloomberg, HSIE Research, *USD/Local currency terms

IT index up 26% in 3M period, yet down 11% in 1Y



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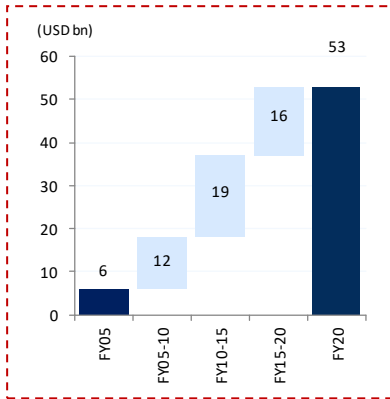
Indian IT (TCS, INFY, HCLT, Wipro) have grown from USD 6bn to USD 53bn over FY05-20, gaining share from Global IT

Industry scenario analysis & top-down sensitivity

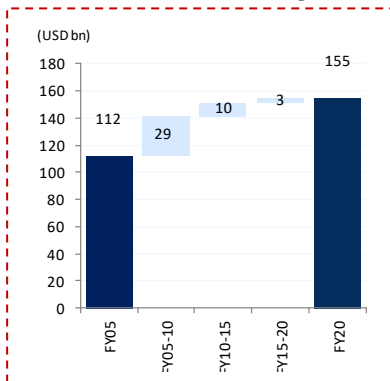
Consistent track record of market-share gains

- Indian IT has gained market-share consistently across market cycles as well as across technological mega-trends of ERP, IMS and Digital/cloud. Indian IT referred as WITH (TCS, Infosys, HCLT, Wipro aggregate) comprised 5% of the IT aggregate pool of USD 118bn in FY05 has gained to 26% of the overall pool of USD 208bn in FY20. Global IT services (referred as CAIDAC) including Cognizant, Accenture, IBM services, DXC Tech (HPE & CSC earlier), Atos and Capgemini over that period of FY05-20 have grown from USD 112bn to USD 155bn (2.2% CAGR); WITH during that period grew at 15.6% CAGR from USD 6bn to USD 53bn. Even during the recent period of FY15-20, WITH growth has outpaced CAIDAC by 700bps growing at 7.4% CAGR (3-Yr outperformance by 800bps).
- Gains in market-share reflect the competitive advantage of Indian IT vs. global peers and we reckon that the relative positioning has improved significantly. Portfolio depth across verticals & technologies and improving track record with large enterprise accounts are some factors that will support the relative outperformance.

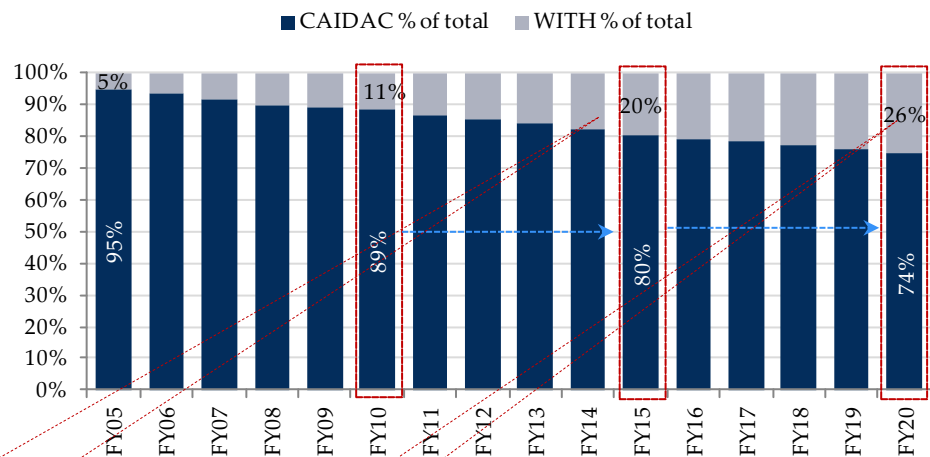
WITH Revenue Bridge



CAIDAC Revenue Bridge



Indian IT Gained Market Share from Global Peers Across Cycles



Source: Company, HSIE Research; CAIDAC denotes aggregate of Cognizant, Accenture, IBM services, DXC, Atos, Capgemini & WITH denotes TCS, INFY, HCLT, Wipro aggregate

WITH & CAIDAC Growth Rate across Cycles

Company	CAGR % FY05-10	CAGR % FY 10-15	CAGR % FY 15-20
IBM	4%	0%	-4%
Accenture	6%	7%	7%
DXC	4%	-7%	-7%
Cognizant	41%	26%	10%
Capgemini	9%	4%	3%
Atos	2%	11%	2%
Total CAIDAC	5%	1%	0%
TCS	23%	20%	7%
INFY	25%	13%	8%
HCLT	29%	17%	11%
Wipro	25%	10%	3%
Total WITH	25%	15%	7%

Source: Company, HSIE Research; CAIDAC denotes aggregate of Cognizant, Accenture, IBM services, DXC, Atos, Capgemini & WITH denotes TCS, INFY, HCLT, Wipro

Indian IT market share (Top-4) increased from 11% in FY10 to 20% in FY15 post GFC; WITH CAGR for FY10-15 stood at 15% vs. 1% for CAIDAC

Indian IT market share (Top-4) increased to 26% in FY20 despite the compression in legacy services. Growth in WITH was 7% CAGR vs. 0% for CAIDAC

Accenture and TCS Winners With Highest Market Share Gain

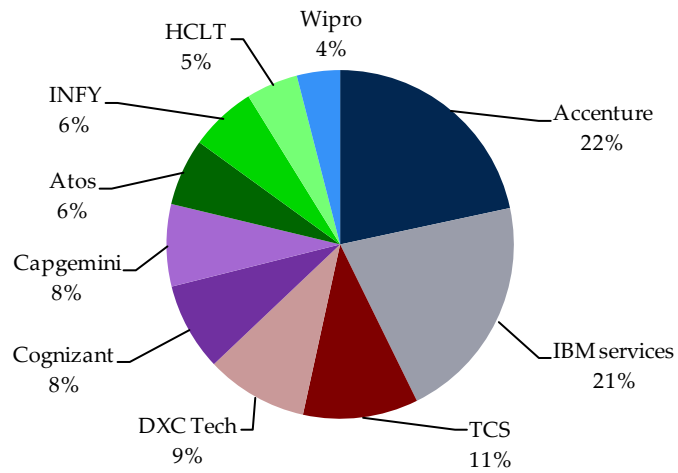
Incremental Market Share (%)	FY05-10	FY 10-15	FY 15-20
IBM	21%	0%	-57%
Accenture	15%	32%	63%
DXC	17%	-45%	-44%
Cognizant	7%	24%	34%
Capgemini	9%	8%	13%
Atos	2%	16%	8%
Total CAIDAC	71%	35%	17%
TCS	10%	31%	34%
INFY	8%	13%	21%
HCLT	5%	11%	21%
Wipro	7%	9%	6%
Total WITH	29%	65%	83%



Source: Company, HSIE Research; CAIDAC denotes aggregate of Cognizant, Accenture, IBM services, DXC, Atos, Capgemini & WITH denotes TCS, INFY, HCLT, Wipro aggregate

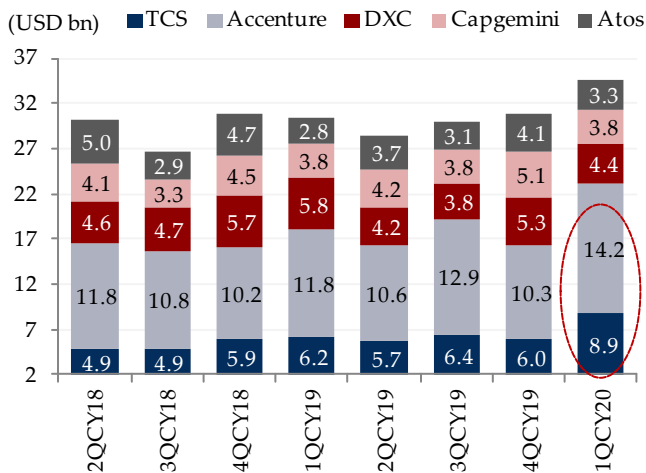
Incremental share of 'WITH' at 83% in the period FY15-20 has been the highest across cycles

Revenue market-share (USD 206bn TTM)



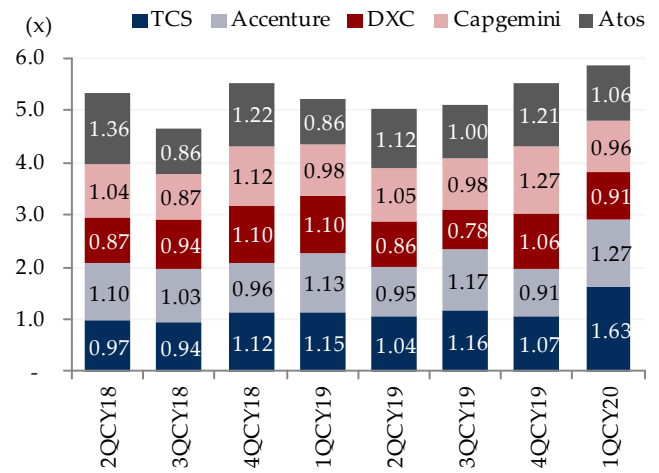
Source: Company, HSIE Research

Increasing share of deal wins: TCS/Accenture



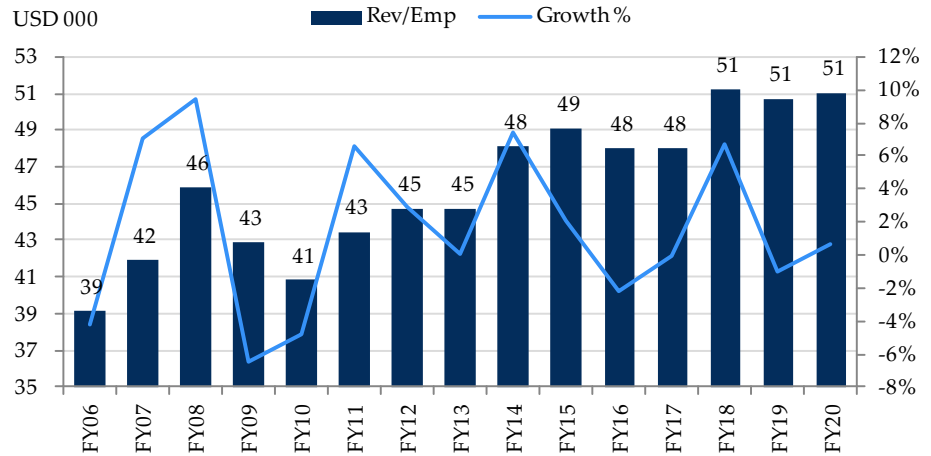
Source: Company, HSIE Research

Stronger book-to-bill: TCS highest



Source: Company, HSIE Research

'WITH' Employee Productivity Increased at CAGR of 4% Over FY10-15 But Slowed to 1% CAGR over FY15-20



Source: Company, HSIE Research, WITH denotes TCS, INFY, HCLT, Wipro

Incremental Headcount Addition At Higher Productivity

Headcount Growth	CAGR % FY05-10	CAGR % FY 10-15	CAGR % FY 15-20
TCS	29%	15%	7%
INFY	25%	9%	7%
HCLT	22%	9%	8%
Wipro	21%	8%	5%
WITH	25%	11%	7%

Revenue Growth	CAGR % FY05-10	CAGR % FY 10-15	CAGR % FY 15-20
TCS	23%	20%	7%
INFY	25%	13%	8%
HCLT	29%	17%	11%
Wipro	25%	10%	3%
WITH	25%	15%	7%

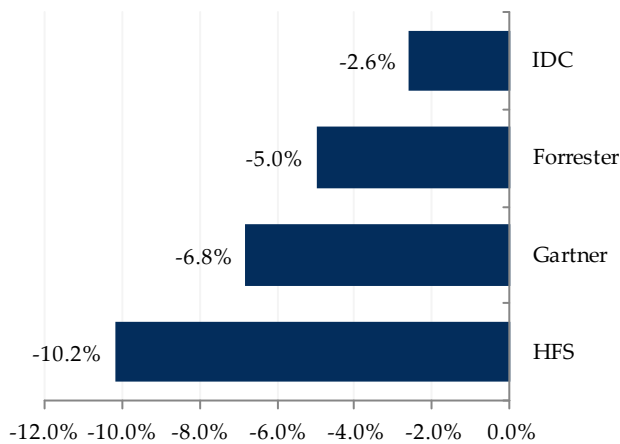
Incremental Revenue Productivity	FY05-10	FY10-15	FY15-20
TCS	35,619	57,243	51,068
INFY	41,689	62,621	61,390
HCLT	48,004	84,756	83,994
Wipro	44,287	53,667	29,679
WITH	40,782	61,029	56,190

Source: Company, HSIE Research, WITH denotes TCS, INFY, HCLT, Wipro aggregate

The shape of demand curve

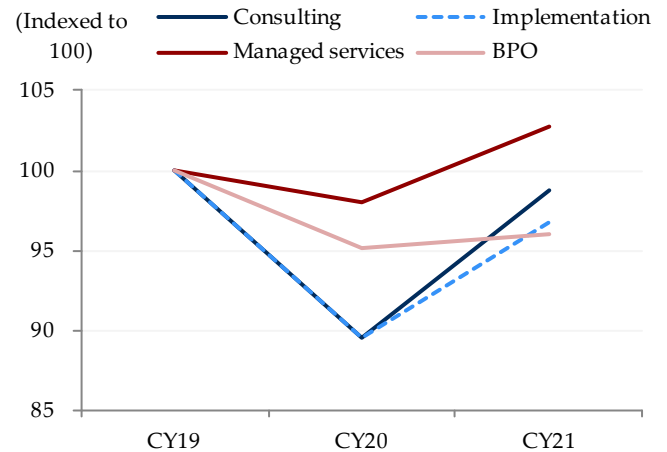
Leading global tech research & advisory firms have estimated IT services to decline in the range of 2-10% for CY20 and subsequent recovery in CY21 (barring HFS' estimates). Based on various growth/(decline) scenarios across verticals/industries, we have arrived at 6 scenarios for the sector (2 each in bear, base, bull case) that entail 1) Decline of 15% and 10% under bear-case scenarios, 2) Decline of 7.5% and 5% under base-case scenarios, and 3) decline of 3% under bull-case scenarios.

Global IT services growth/ (decline) forecast (CY20)



Source: IDC, Forrester, Gartner, HFS, HSIE Research

IT services trend by segment: Recovery estimated in CY21E



Source: Gartner, HSIE Research; CY19 indexed to 100

Scenario Analysis

We have done top-down scenario analysis with the hypothesis that Indian IT (represented by WITH) will continue to gain share vs. global peers (represented by CAIDAC). The top-down approach is based on similar market-share trends as per the past 1/2 years and the scenario analysis factors 6 industry growth scenarios (2 each under bear, base, bull case) to arrive at company growth rate & its sensitivity.

Key observations include 1) Bear case & bull case scenario implies a revenue growth rate variance of ~10% in FY21 (-12% YoY to +1% YoY range) and ~6% in FY22 (+6.5% YoY to +13.5% YoY range) for tier-1 IT, 2) HCLT has the least impact in bear case and highest upside in a bull case (partly impacted by acquisitive growth), 3) TCS and Infosys exhibit fairly similar levels of sensitivity under bear-bull case, and 4) Favourable risk-reward for the sector as cyclical downtrend in a structurally positive outcome has limited impact on valuations (bear-case scenario impacts DCF-based valuations upto ~4-5%).

Vertical growth/ (decline) assumptions

	CY19 % of revenue	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F
Financial services & Insurance	26%	-20.0%	-12.5%	-10.0%	-5.0%	-3.0%	-2.0%
Resources & Services	20%	-20.0%	-15.0%	-12.5%	-10.0%	-7.5%	-10.0%
Telecom, Media & Tech	17%	-10.0%	-5.0%	-3.0%	-1.0%	0.0%	2.0%
Public sector & defense	16%	-5.0%	-3.0%	0.0%	0.0%	0.0%	1.0%
Manufacturing	15%	-20.0%	-15.0%	-12.5%	-10.0%	-5.0%	-7.5%
Healthcare & Life sciences	6%	-5.0%	-3.0%	0.0%	0.0%	1.0%	2.0%
Aggregate	100%	-15.0%	-10.0%	-7.5%	-5.0%	-3.0%	-3.0%

Source: Gartner, HSIE Research

Revenue impact under multiple industry growth scenarios

(USD bn) Scenarios	TCS		INFY		HCLT		Wipro		Industry (CAIDAC+WITH) Growth %	
	FY21E	FY22	FY21E	FY22	FY21E	FY22	FY21E	FY22E	FY21E	FY22E
A Bear Case scenario 1: Industry decline of 15% in FY21 and flat in FY22 Growth (%)	18.8	20.0	11.4	12.2	9.6	10.4	7.1	7.2	-15.0%	0.0%
B Bear Case scenario 2: Industry decline of 10% in FY21 and +2% in FY22 Growth (%)	19.9	21.6	12.1	13.1	10.2	11.2	7.5	7.8	-10.0%	2.0%
C Base Case scenario 1: Industry decline of 7.5% in FY21 and flat in FY22 Growth (%)	20.4	21.8	12.4	13.2	10.5	11.3	7.7	7.8	-7.5%	0.0%
D Base Case scenario 2: Industry decline of 5% in FY21 and +2% in FY22 Growth (%)	21.0	22.8	12.7	13.9	10.7	11.8	7.9	8.2	-5.0%	2.0%
E Bull Case scenario 1: Industry decline of 3% in FY21 and +5% in FY22 Growth (%)	21.4	24.0	13.0	14.6	11.0	12.4	8.1	8.6	-3.0%	5.0%
F Bull Case scenario 2: Industry decline of 3% in FY21 and +7% in FY22 Growth (%)	21.4	24.5	13.0	14.9	11.0	12.6	8.1	8.8	-3.0%	7.0%

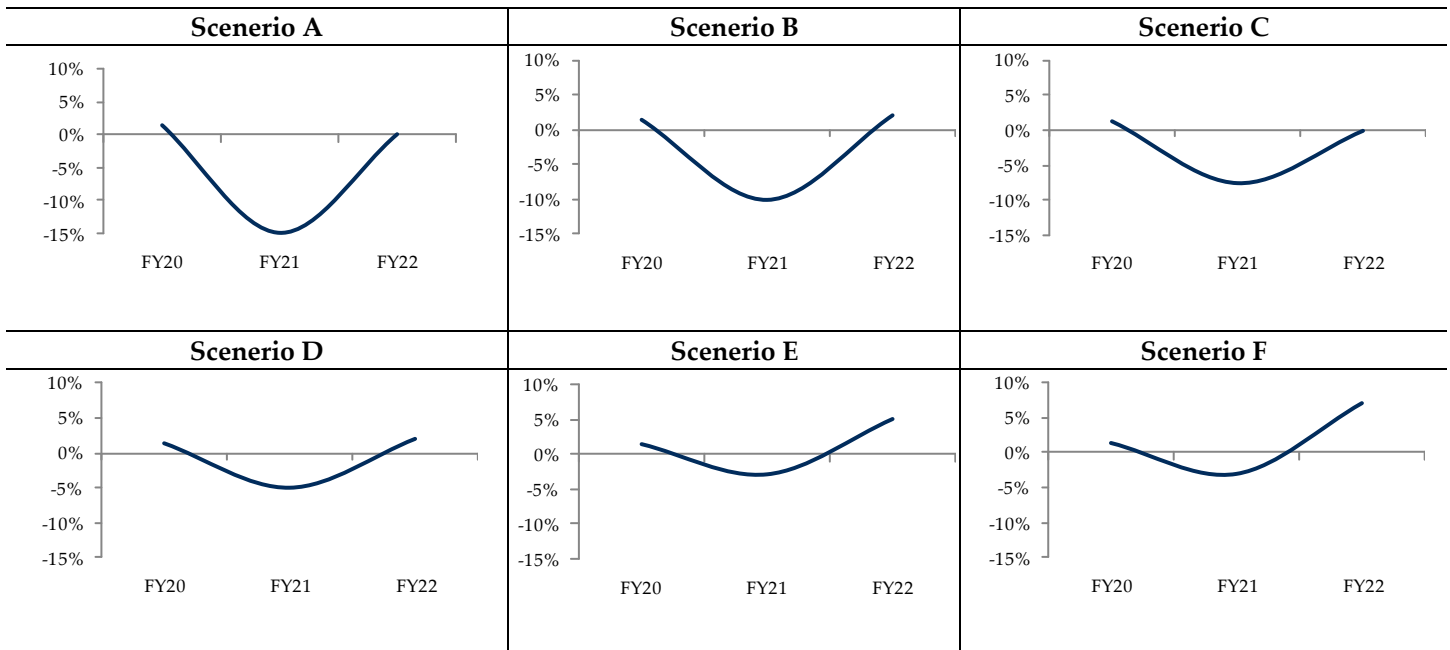
Source: HSIE Research

Deviation of HSIE revenue estimate (FY22E) under multiple industry growth scenarios

	TCS	INFY	HCLT	Wipro
Scenario A	-9.5%	-11.7%	-4.4%	-12.9%
Scenario B	-2.3%	-4.7%	3.2%	-6.0%
Scenario C	-1.5%	-3.9%	4.0%	-5.2%
Scenario D	3.1%	0.6%	8.9%	-0.7%
Scenario E	8.4%	5.8%	14.5%	4.3%
Scenario F	10.5%	7.8%	16.7%	6.3%

Source: HSIE Research, Growth percentage represent Scenario derived/HSIE estimates revenue estimate

Sector Growth under Various Scenarios



Source: HSIE Research; Sector represented by aggregate of Accenture, Cognizant, DXC, IBM services, Capgemini, Atos, TCS, INFY, HCLT, Wipro

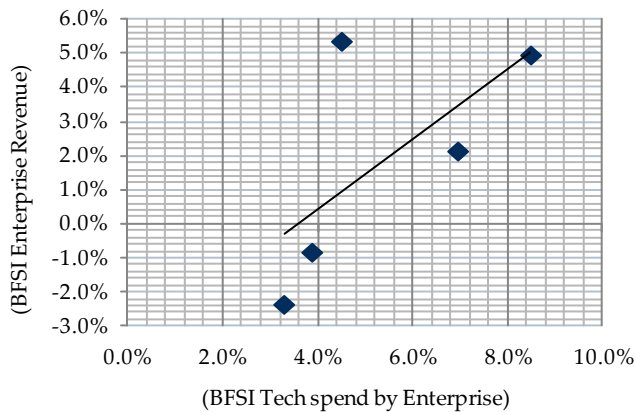
Vertical trends provide diverse opportunities

BFSI tech spend buoyancy despite slowdown

BFSI, Healthcare and E&U verticals have higher correlation with Enterprise performance, while Retail & Telecom verticals have lower correlation

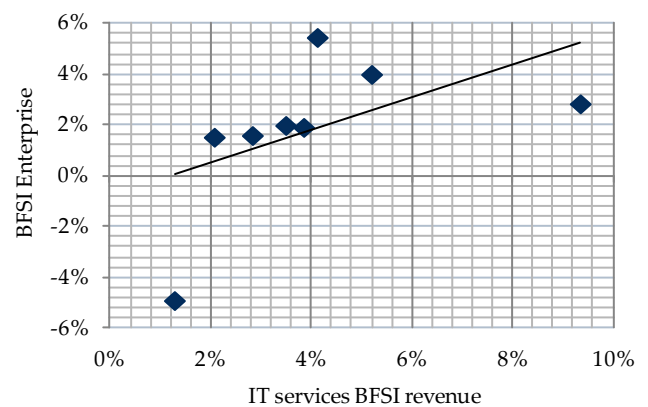
IT sector BFSI portfolio has been resilient supported by buoyancy in tech spend, despite slowdown/decline in enterprise revenue. Despite enterprise revenue growth decelerating to 0.9% YoY TTM basis as compared to 2.6% YoY earlier, IT sector BFSI revenue continues to grow at >250bps premium. Key trends that continue to drive BFSI tech spend are 1) Investments to build strong digital channels/platforms, 2) Decommissioning of legacy applications and deployment of BOTs/automation, 3) Continued in-sourcing with growth in tech spend of large BFSI ahead of the IT services revenue from BFSI vertical, 4) Infrastructure modernisation with shift to hybrid cloud model, and 5) Investments in RegTech and Security. The recent stimulus measures have further improved the liquidity situation at large banks which is likely to support the near-term demand for tech spend.

BFSI Enterprise Revenue Growth and Tech Spend correlation ($R^2 = 0.4$)



Source: Company, HSIE Research

BFSI Enterprise Revenue and IT services BFSI Revenue Growth correlation ($R^2 = 0.3$)



Source: Company, HSIE Research

BFSI Vertical Growth & BFSI Enterprise Growth Trend

Tier-1	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20
TCS	5.3%	5.3%	6.9%	7.8%	7.5%	5.1%	5.0%	-3.0%
INFY	2.9%	4.1%	7.4%	5.9%	9.3%	8.9%	5.2%	3.5%
HCLT	4.4%	0.1%	-2.7%	-5.7%	-1.4%	5.1%	15.5%	11.4%
Wipro	15.2%	12.7%	15.1%	12.8%	8.7%	4.6%	0.7%	-3.6%
TechM	1.6%	-1.1%	5.1%	2.7%	-4.1%	1.8%	5.7%	19.3%
Accenture	19.6%	7.2%	-1.1%	-2.3%	-1.5%	1.6%	3.3%	1.6%
Cognizant	4.5%	2.6%	1.7%	-1.7%	0.3%	1.9%	1.2%	1.0%
Tier-2								
LTI	28.1%	21.1%	19.5%	10.8%	4.0%	5.9%	10.1%	13.1%
Mphasis	8.4%	6.0%	3.8%	5.6%	6.8%	10.1%	14.2%	11.1%
Mindtree	7.2%	8.2%	2.8%	11.5%	5.8%	6.3%	7.6%	-0.4%
Hexaware	9.0%	8.8%	6.8%	3.5%	4.2%	11.8%	2.7%	5.7%
Zensar	35.3%	28.6%	35.6%	28.9%	18.6%	38.6%	21.2%	23.5%
NIIT Tech	23.9%	22.2%	21.0%	12.9%	9.0%	21.2%	14.7%	17.3%
BFSI enterprise revenue (YoY %)								
JP Morgan	7.9%	6.6%	6.8%	4.4%	3.9%	7.6%	8.5%	-3.0%
Bank of America	-1.1%	4.6%	10.9%	0.4%	1.7%	-0.2%	-1.2%	-1.4%
Citigroup	1.7%	0.5%	-2.2%	5.8%	1.8%	-2.2%	13.3%	4.0%
Wells Fargo	-3.1%	0.4%	-4.9%	-1.5%	0.1%	0.3%	-5.3%	-18.0%
Morgan Stanley	11.6%	7.3%	-10.0%	-7.1%	-3.5%	1.6%	27.0%	-8.3%
Charles Schwab	16.7%	19.1%	19.0%	13.6%	7.8%	5.1%	-2.4%	-3.9%
BFSI enterprise Aggregate (YoY %)	2.8%	4.0%	2.0%	1.5%	1.6%	1.9%	5.5%	-4.9%
Tier-1 IT BFSI aggregate (YoY %)	9.4%	5.2%	3.5%	2.1%	2.8%	3.9%	4.1%	1.3%

Source: Company, HSIE Research

BFSI Tech Spend Growth: Tech spend continues to grow ~500bps higher

Growth in Tech spend (YoY %)	CY16	CY17	CY18	CY19	1QCY20
JP Morgan	10.5%	12.7%	14.1%	11.6%	9.1%
Bank of America	0.4%	-6.2%	0.6%	2.0%	3.9%
Wells Fargo	4.4%	3.9%	9.3%	13.1%	0.0%
Citigroup	1.8%	3.1%	4.1%	-1.6%	0.2%
Morgan Stanley	1.1%	0.2%	12.6%	8.8%	5.8%
UBS	-4.8%	-3.6%	-10.6%	-18.9%	-13.3%
Goldman Sachs	0.4%	10.9%	14.0%	14.1%	12.2%
Capital One Financial	10.8%	0.7%	7.1%	2.4%	-0.3%
Discover Financials	-2.9%	-7.1%	11.1%	16.9%	15.2%
Citizens Financial	7.4%	2.3%	4.7%	10.8%	6.4%
Synchrony Financial	13.8%	10.4%	14.2%	13.8%	8.8%
Banco Santander	-2.8%	16.9%	28.8%	32.3%	-12.8%
First Republic Bank	28.6%	36.6%	15.8%	12.8%	6.0%
State Street Bank	8.1%	5.6%	13.5%	10.6%	6.4%
Charles Schwab	10.2%	14.6%	12.8%	7.3%	7.1%
Northern Trust	2.8%	12.1%	11.1%	5.1%	9.4%
Agg Tech spend growth (YoY %)	3.9%	4.5%	8.5%	7.0%	3.3%
Agg BFSI Enterprise Rev growth (YoY %)	-0.8%	5.4%	5.0%	2.2%	-2.3%

Source: Company, HSIE Research

Recent BFSI Deal Activity

IT vendor	Client	Service
HCLT	Bank (Europe)	Infrastructure Services
HCLT	Bank (US)	Digital Transformation
HCLT	Bank - wealth management (US)	Digital Services
HCLT	BFSI (US)	Cognitive automation
HCLT	Bank (US)	UX, Salesforce, Cloud
HCLT	Bank (Europe)	Strategic integration platform
HCLT	Insurance (US)	Cyber security
HCLT	Bank (Europe)	IT Operations and Security (BigFix)
HCLT	Bank (Europe)	DRYiCE iAutomate
Infosys	ABN AMRO	Cloud & DevOps
LTI	Standard Chartered Bank	Temenos T24 implementation
LTI	Bank (US)	Cloud migration
LTI	P&C Insurer	Cloud Platforms
LTI	NA	AMS
Mindtree	Insurance (US)	Digital Transformation
Persistent	Ascensus	Core IT modernisation and data migration
TCS	ABN AMRO	Core systems transformation
TCS	Insurtech	Cloud & Infrastructure
TCS	Investment management	Mobile and web channel development
TCS	Financial services (US)	Cloud-based financial management application
TCS	Financial services (US)	Digital ERP
TCS	Financial services (UK)	Agile & DevOps
TCS	Investment Bank	Agile Transformation
TCS	Research & advisory	CPQ Solutions
TCS	Investment Management Copmany (Canada)	Engineering services
TCS	Horizon Blue Cross Blue Shield (US)	Engineering and Transformation services
TCS	Investment Bank (US)	Cognitive Automation
TCS	Investment Bank (US)	Analytics, Digital Transformation
TechM	Insurance (Australia)	Infrastructure, Security and Digital Services
TechM	Insurance (India)	Modernisation of IT application system

Source: Company, HSIE Research

Wells Fargo and Citi's tech spend growth has been flat YoY, while JPM and BofA had strongest growth in tech spend

Large Tech vendors

JPM	BofA
Cognizant	TCS
TCS	HCLT
Mphasis	
Wells Fargo	Citi
Capgemini	TCS
Cognizant	Wipro
Infosys	Infosys
Persistent	LTI

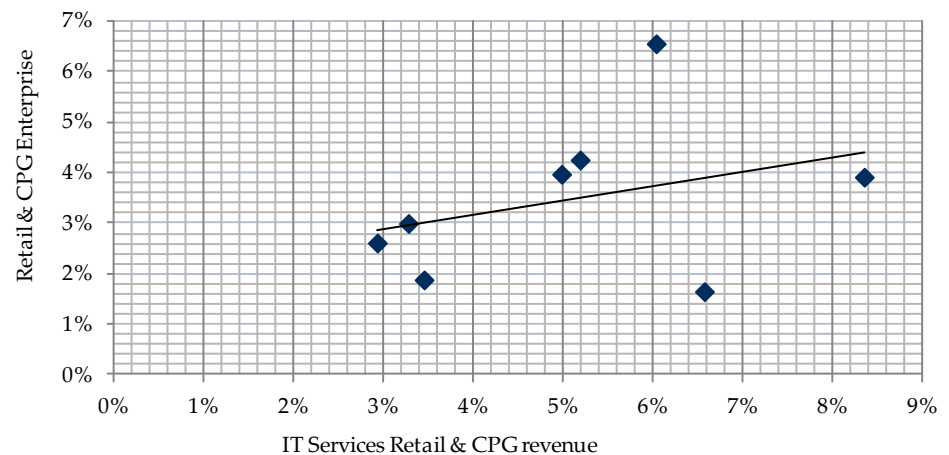
BFSI deals in March quarter posted a 30% increase QoQ with 116 deals. This accounted for the largest share of deals in ITO, as per Everest Group

US Retail rebounds in May

IT sector Retail & CPG revenue growth has converged to enterprise growth, as compared to >150bps growth premium historically. Many large retailers such as Walmart, Best Buy and Target have suspended their annual guidance on macroeconomic uncertainty. US retail is expected to rebound in CY21 following a 10% decline in CY20 with growth expected at 1.7% CAGR over CY19-24E, as per eMarketer data. Key tech spend priorities of retailers include building a strong omni-channel spanning across in-store analytics, online channel with superior CX as well as building stronger inventory & supply chain management. TCS and HCLT have reported strong recent deal activity in the vertical.

Best Buy and Kohl's are the worst impacted, key vendors are Accenture and Wipro; Walgreens, Home Depot and Nike are the least impacted and key vendors include TCS, Mindtree, Persistent & Wipro

Retail & CPG enterprise & IT services Retail & CPG Revenue Growth Correlation (R² = 0.1)



Source: Company, HSIE Research

Retail & CPG vertical growth and Retail & CPG enterprise growth trends

Tier-1 IT	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20
TCS	5.9%	6.6%	1.8%	-1.3%	5.8%	1.7%	4.3%	2.9%
INFY	8.9%	12.7%	9.5%	8.9%	5.5%	-0.6%	1.3%	1.8%
HCLT	4.4%	17.0%	17.7%	16.4%	20.1%	7.8%	16.7%	13.9%
Wipro	-7.4%	-5.3%	-5.0%	-4.4%	-0.5%	2.0%	2.4%	2.2%
TechM	29.1%	27.8%	12.3%	4.7%	7.5%	17.2%	16.5%	0.8%
Tier-2 IT	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20
LTI	32.1%	37.6%	36.2%	34.9%	35.9%	24.9%	20.1%	22.4%
Mindtree	23.0%	10.8%	12.3%	9.3%	5.4%	9.6%	1.1%	-2.6%
Zensar	7.4%	-8.6%	-9.9%	-6.7%	-11.9%	-15.6%	-33.6%	-36.5%
Sonata	20.4%	7.3%	5.1%	25.6%	31.3%	15.9%	23.5%	5.8%

Retail & CPG enterprise - Revenue (YoY %)	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20
Walmart	3.8%	1.4%	1.9%	1.0%	1.8%	2.5%	2.1%	8.6%
Walgreen Boots	14.0%	10.9%	9.9%	4.6%	0.7%	1.5%	1.6%	3.7%
Home Depot	8.4%	5.1%	10.9%	5.7%	1.2%	3.5%	-2.7%	7.1%
Nike	12.8%	9.7%	9.6%	7.0%	4.0%	7.2%	10.2%	5.1%
Best Buy	6.8%	4.9%	2.9%	-3.7%	4.7%	4.1%	58.5%	-42.2%
GAP Inc	10.0%	7.5%	6.5%	-3.2%	-2.0%	-2.0%	-2.2%	1.1%
Kohl's	4.0%	1.3%	-3.3%	-2.9%	-3.1%	-0.1%	0.1%	-40.6%
Levi Strauss	16.7%	9.9%	8.6%	6.8%	5.4%	3.8%	-1.5%	5.0%
Retail & CPG Enterprise - Agg (YoY %)	6.6%	3.9%	4.3%	1.9%	1.7%	2.6%	4.0%	3.0%
IT Retail & CPG Agg (YoY %)	6.0%	8.4%	5.2%	3.4%	6.6%	2.9%	5.0%	3.3%

Source: Company, HSIE Research

Recent Retail & CPG Deal activity

IT vendor	Client	Service
HCLT	Fonterra Co-operative	IT Infra services transformation
HCLT	Retail (Australia)	Agile & Devops
HCLT	Retail (US)	Radar-based tech
TCS	Coop	S/4 HANA, Automation
TCS	Walgreen Boots Alliance	AMS, IMS, Security (USD 1.5bn 10-yr TCV)
TCS	Retail (Germany)	ADM, analytics and mobility platforms
TCS	Sainsbury's	Cognitive automation
TCS	Retail (Europe)	Cloud Platforms
Zensar	Aptos	Next-gen services

Source: Company, HSIE Research

Recovery in US Retail in May

	April QoQ %	May QoQ %	April YoY %	May YoY %
US Monthly Retail Sales	-14.7%	17.7%	-19.9%	-6.1%
- Furniture & Home furnishing stores	-48.4%	89.7%	-58.7%	-21.5%
- Electronics & Appliances stores	-43.2%	50.5%	-53.1%	-29.9%
- F&B stores	-12.8%	2.0%	12.4%	14.5%
- General merchandise stores	-13.6%	6.0%	0.0%	-5.9%
- Clothing & clothing accessories stores	-75.2%	188.0%	-87.3%	-63.4%

Source: US Census Bureau, HSIE Research

Revenue-Mix by Verticals

Verticals	TCS	Infosys	HCLT	Wipro	TechM	LTI
BFSI	29.7%	31.3%	21.1%	30.4%	15.3%	44.4%
Retail & CPG	15.4%	15.5%	10.2%	16.8%	7.3%	11.2%
Hi-Tech	8.7%	7.9%	16.2%	12.8%	7.4%	11.0%
Communication & Media	7.2%	13.0%	8.3%	5.5%	40.8%	NA
Manufacturing	10.1%	10.1%	20.7%	8.2%	17.7%	18.0%
Healthcare	8.8%	6.4%	12.5%	13.5%	NA	NA
E&U	NA	12.9%	11.1%	12.8%	NA	11.4%
Travel & Transportation	NA	NA	NA	NA	NA	NA

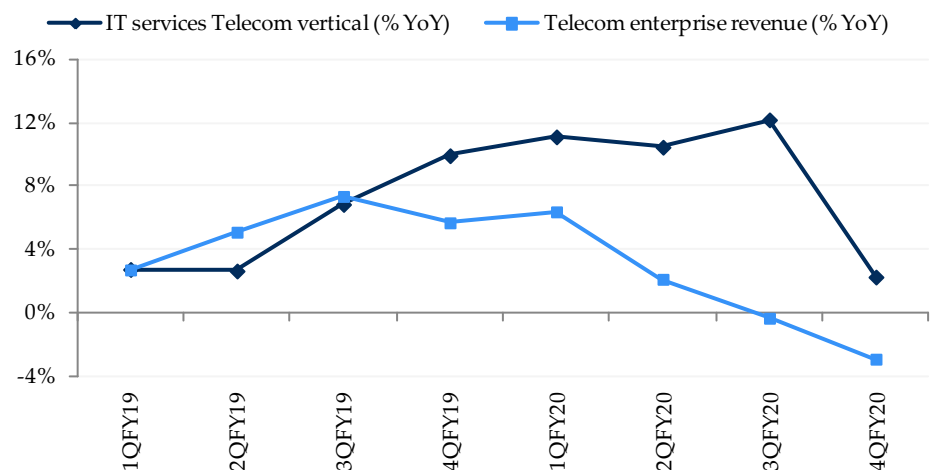
Verticals	Mphasis	Mindtree	Hexaware	LTTTS	Cyient	Zensar
BFSI	57.1%	20.5%	44.8%	NA	NA	29.0%
Retail & CPG	NA	20.3%	17.5%	NA	NA	14.5%
Hi-Tech	15.0%	43.0%	NA	NA	NA	41.8%
Communication & Media	NA	NA	NA	18.7%	25.4%	NA
Manufacturing	NA	NA	NA	35.4%	41.4%	12.2%
Healthcare	NA	NA	12.1%	10.3%	2.5%	NA
E&U	NA	NA	NA	NA	11.6%	NA
Travel & Transportation	NA	16.2%	9.9%	35.7%	11.4%	NA

Source: Company, HSIE Research; NA also implies data not disclosed separately

Stronger enterprise trends in Healthcare vertical: HCLT & Wipro have higher exposure

There is upside risk to growth in the Healthcare vertical, based on historical growth premium in IT services over enterprise growth and the recent uptick in enterprise growth (life-sciences & medical devices IT services is expected to grow at 9% CAGR over CY25, as per Everest Group). HCLT & Wipro have higher exposure to the vertical with some key accounts such as J&J, Merck, Abbott and Becton Dickinson. For the telecom vertical, 5G & network modernisation continues to be the biggest opportunity and TechM holds pole position in that segment. 5G uptake is expected to be faster than 4G supported by 25% CAGR in data traffic per smartphone, as per Ericsson Mobility report. E&U vertical challenges appear more structural and IT sector revenue from E&U vertical is expected to post steep declines following the enterprise trend. Crack in crude prices, lower demand for O&G and lower rig count (~70% lower YTD) reflect the weakness in the sector. Wipro, Infosys, HCLT and LTI have highest exposure to the vertical with key clients including BP, Chevron.

Growth Trend of Telecom Enterprises & Telecom Vertical of IT Services Vendors



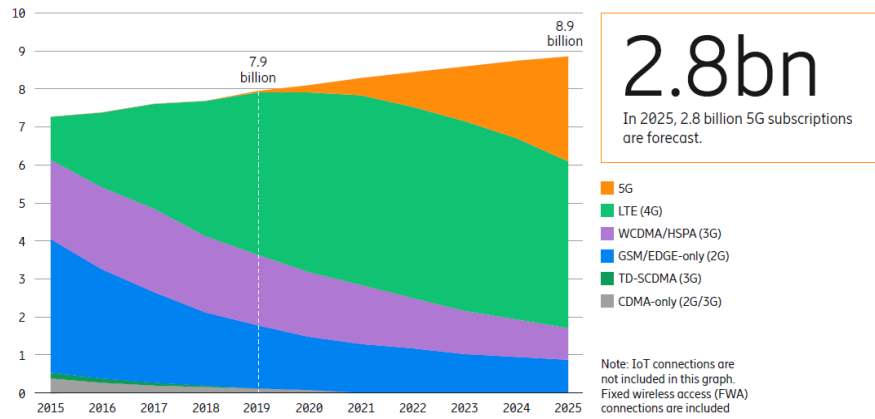
Source: Company, HSIE Research

Tier-1 IT Telecom Vertical Growth & Telecom Enterprise Growth Trends

Tier-1 IT	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20
TCS	10.0%	5.4%	6.6%	4.0%	5.5%	8.9%	7.9%	6.8%
INFY	7.7%	5.9%	3.7%	14.1%	20.1%	17.0%	18.6%	0.6%
HCLT	0.8%	-2.0%	37.7%	29.9%	26.1%	31.6%	13.0%	7.8%
Wipro	4.9%	6.1%	7.2%	11.0%	4.5%	3.9%	10.9%	3.6%
TechM	-5.8%	-1.9%	0.1%	4.6%	8.1%	4.6%	11.2%	-2.4%
Telecom Enterprise Revenue Growth (YoY %)	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20
Cisco	5.9%	7.7%	4.7%	4.0%	4.5%	0.7%	-3.5%	-7.5%
Comcast	2.1%	5.0%	26.1%	17.8%	23.6%	21.2%	2.0%	-0.9%
AT&T	-2.1%	15.3%	15.2%	17.8%	15.3%	-2.5%	-2.4%	-4.6%
Verizon	5.4%	2.8%	1.0%	1.1%	-0.4%	0.9%	1.4%	-1.6%
Deutsche Telekom	-2.8%	4.7%	5.7%	8.7%	7.1%	4.8%	5.4%	2.3%
Vodafone	-2.1%	-2.6%	-3.9%	-4.4%	-2.3%	3.1%	6.8%	4.3%
Telefonica	-6.3%	-8.3%	-1.9%	-1.7%	0.0%	1.7%	-4.0%	-5.1%
Enterprise Agg (YoY %)	2.7%	5.1%	7.4%	5.7%	6.4%	2.1%	-0.3%	-2.9%
IT Services Agg (YoY %)	2.7%	2.6%	6.8%	9.9%	11.1%	10.5%	12.2%	2.3%

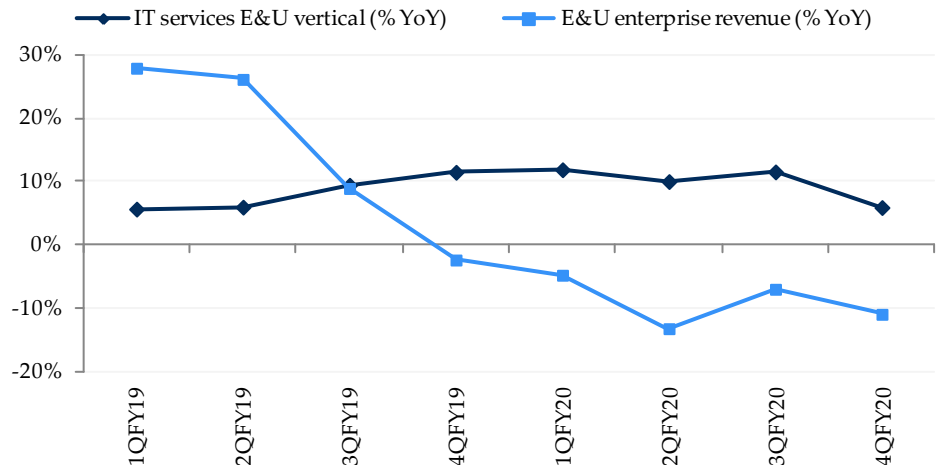
Source: Company, HSIE Research

Mobile Subscriptions by Technology: 5G Opportunity



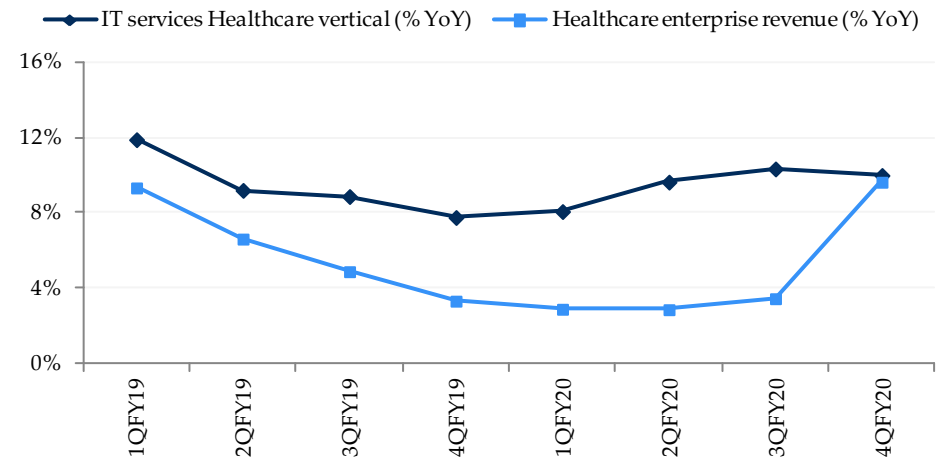
Source: Ericsson Mobility report

Growth Trend of E&U enterprises & E&U vertical of IT Services Vendors: structural challenges can impact Wipro, INFY, HCLT & LTI



Source: Company, HSIE Research

Upside Risk to Growth in IT Services Revenue from Healthcare Vertical: HCLT & Wipro can benefit disproportionately



Source: Company, HSIE Research

50% of US healthcare providers are expected to invest in RPA in the next 3 years as compared to 5% currently, which will support cost optimisation and streamline operations, as per Gartner

Recent Healthcare & Life-sciences Deal Activity

IT vendor	Client	Service
HCLT	Healthcare (US)	Digital Services
HCLT	Life-sciences (US)	Data Warehouse & Cloud
HCLT	Life-sciences (US)	Cloud services, automation
Infosys	Reckitt Benckiser	Infrastructure and Application operations
Persistent	Healthcare	Salesforce
Persistent	NA	SaaS solution
Persistent	NA	Salesforce
Persistent	Mount Sinai Health System	Artificial Intelligence
Persistent	Biopharma	Salesforce
TCS	Pharma	Integration Services
TCS	Pharma (UK)	Agile
TCS	Biopharma (US)	Digital Transformation
TechM	Pharma (Swiss)	Agile Development
Wipro	Healthcare (US)	AI Automation & Analytics
Zensar	Vyair Medical	Enterprise Application

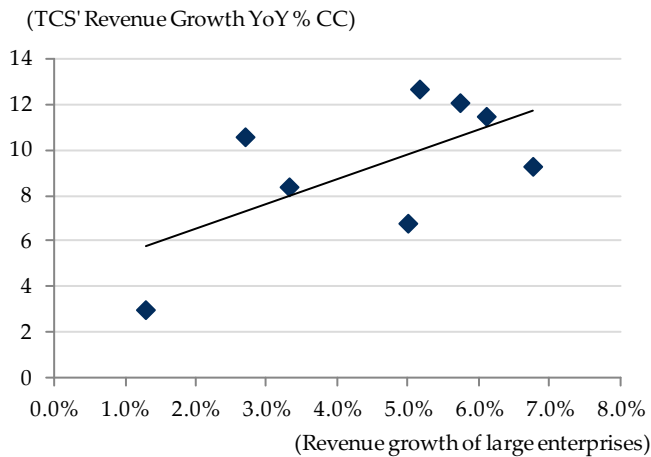
Source: Company, HSIE Research

Within Healthcare, J&J, Merck, Abbott have performed well in the recent quarter, while Pfizer has underperformed. Key vendors include TCS, Infosys, HCLT, Mphasis, LTI

Large accounts metrics & Digital indicators

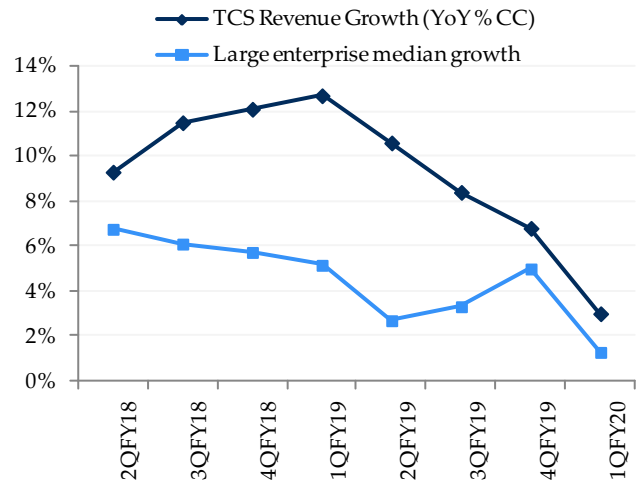
Key observations from large enterprise performance suggest that 1) Infosys is more susceptible to growth slowdown as compared to TCS, 2) TCS is most suited to benefit from vendor consolidation within tier-1 IT and least susceptible to growth decline, 3) Client mining success in mid-sized accounts is fairly similar between TCS and Infosys (Wipro lags in this), and 4) TCS also has the strongest correlation with its large enterprise accounts growth, as compared to peers. Based on our framework of multiple demand indicators as well as services catalogue/digital prowess, we rank tier-1 IT in the order of TCS > Infosys > HCLT > Wipro.

TCS' Revenue Growth & Large Accounts Revenue Correlation



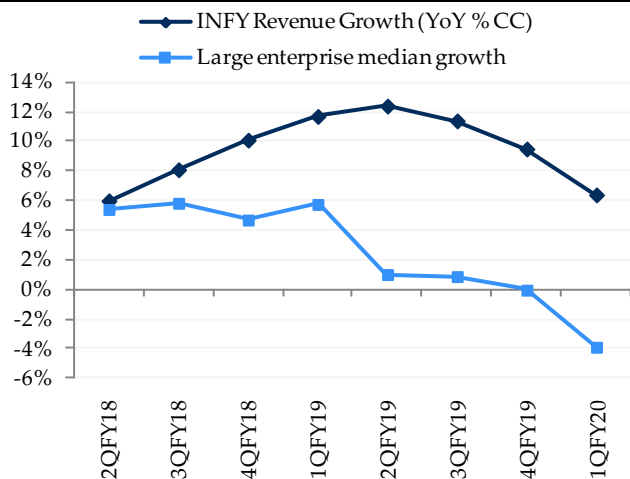
Source: Company, HSIE Research

TCS Revenue Growth and Large Accounts Median Revenue Trend



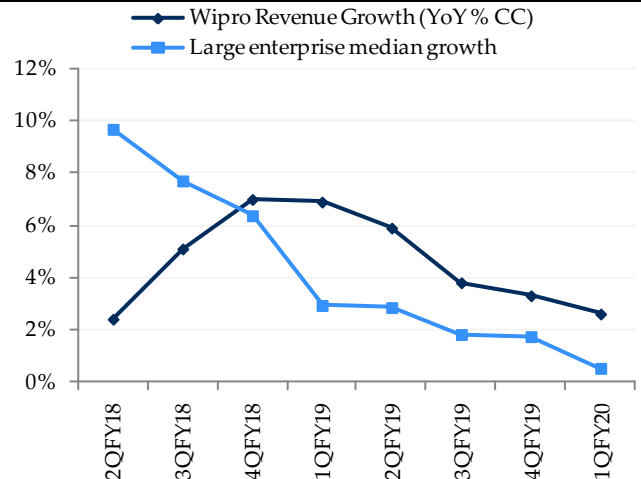
Source: Company, HSIE Research; FY implies CY period

Infosys Revenue Growth and Large Accounts Median Revenue Trend



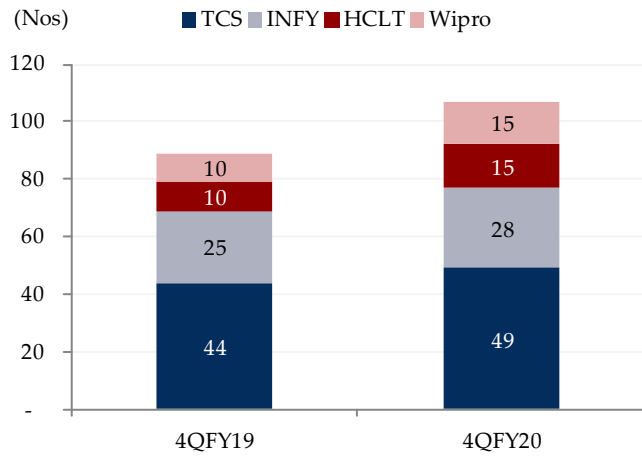
Source: Company, HSIE Research; FY implies CY period

Wipro Revenue Growth and Large Accounts Median Revenue Trend



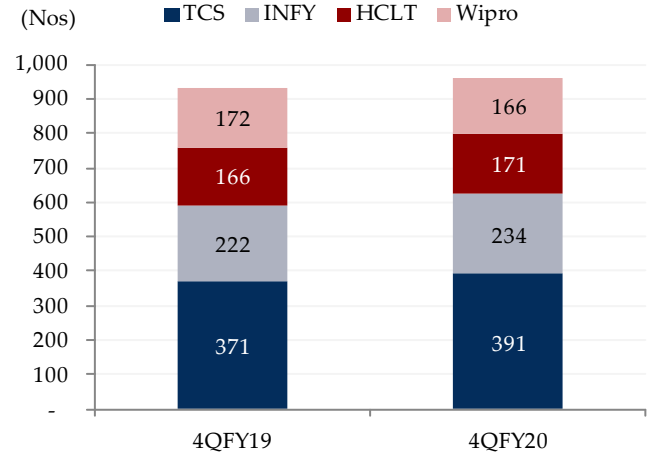
Source: Company, HSIE Research; FY implies CY period

USD 100mn+ Clients Growth



Source: Company, HSIE Research

USD 10mn+ Clients Growth



Source: Company, HSIE Research

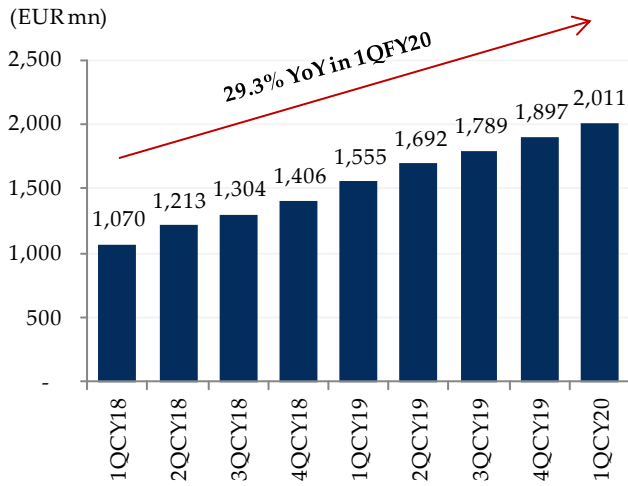
IT companies Rankings

	TCS	INFY	HCLT	Wipro
Market share gains vs. Global majors	2	3	1	4
Health of large accounts	1	4	3	2
USD 10mn+ client adds	2	1	3	4
USD 100mn+ client adds	4	3	2	1
BFSI vertical momentum	3	2	1	4
Communication vertical momentum	1	4	2	3
Retail & CPG vertical momentum	2	3	1	4
Healthcare vertical momentum	1	2	3	4
Overall Service Portfolio	1	2	4	3
Digital Portfolio	2	1	4	3
OVERALL RANK	1	2	3	4

Source: HSIE Research; Data from Gartner, Forrester, IDC, Everest, HFS to assess service portfolio & digital portfolio

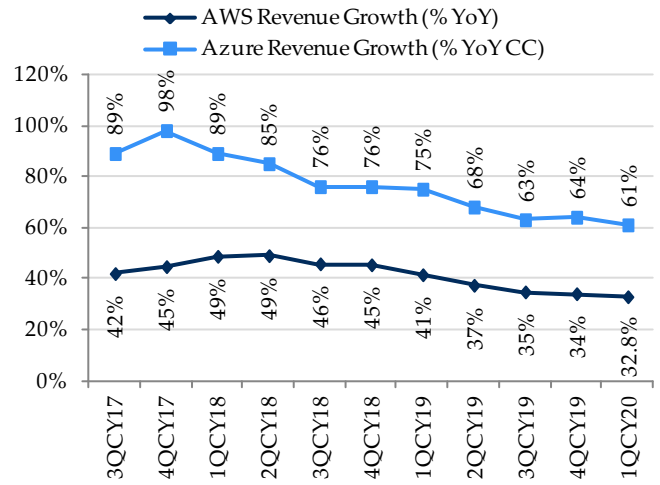
Digital indicators are robust

SAP Cloud Revenue: Consistent Growth



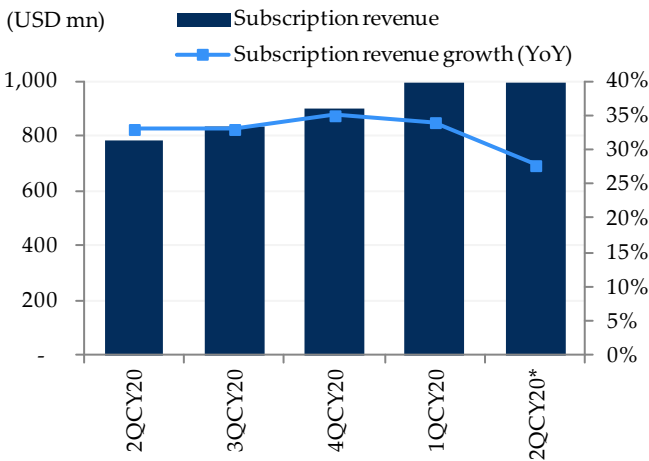
Source: Company, HSIE Research

AWS & Azure Growth Trend



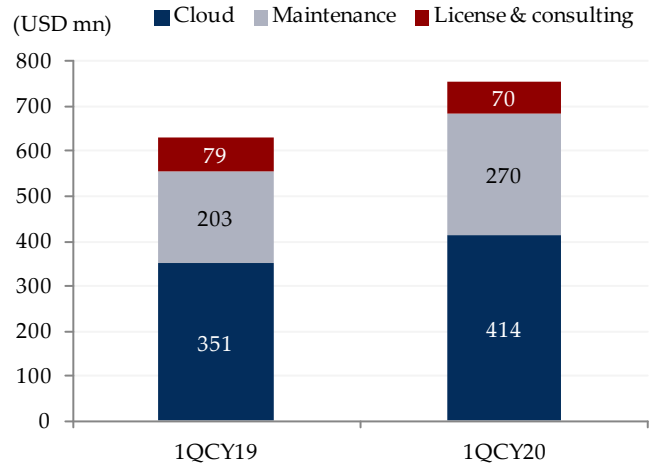
Source: Company, HSIE Research

Robust Growth in ServiceNow Subscription Revenue



Source: Company, HSIE Research; * guidance

Pegasystems Backlog Growth Strong



Source: Company, HSIE Research

High frequency indicators (macro) recovering

Recovery in Visa Transactions Processed

YoY %	Apr-20	May-20	Quarter-to-Date
U.S. Payments Volume	-18%	-5%	-11%
Credit	-30%	-21%	-25%
Debit	-5%	12%	4%
Processed Transactions	-24%	-12%	-18%
Cross-Border Volume Excluding Intra-Europe Transactions	-51%	-45%	-48%
Cross-Border Volume Including Intra-Europe Transactions	-43%	-35%	-39%

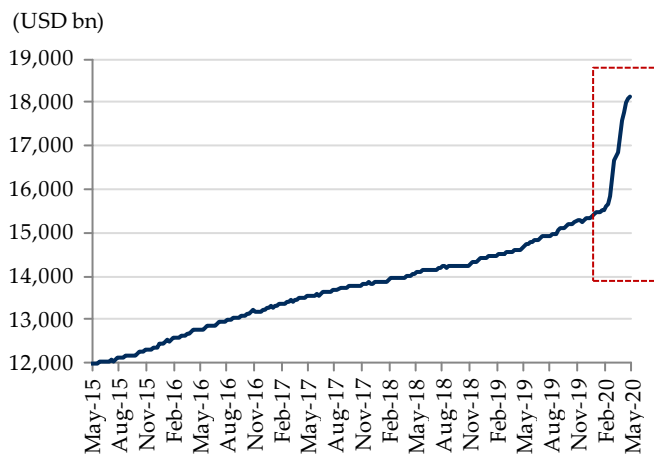
Source: Company, HSIE Research

Recovery in MasterCard Transactions Processed

YoY %	WE Apr 07	WE Apr 14	WE Apr 21	WE Apr 28	WE May 07
Switched Volume	-25%	-30%	-20%	-17%	-12%
United States	-22%	-26%	-15%	-12%	-6%
Worldwide ex- US	-28%	-33%	-25%	-22%	-19%
Switched transactions	-24%	-24%	-20%	-16%	-12%
Cross-border volume	-48%	-55%	-49%	-49%	-43%

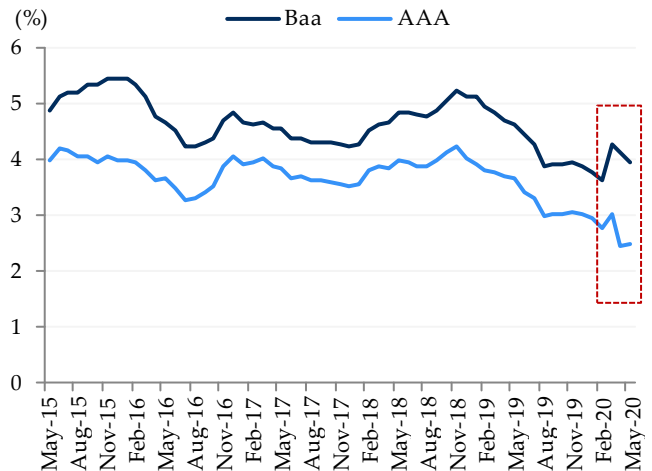
Source: Company, HSIE Research

Increasing liquidity: US Money Supply (M2)



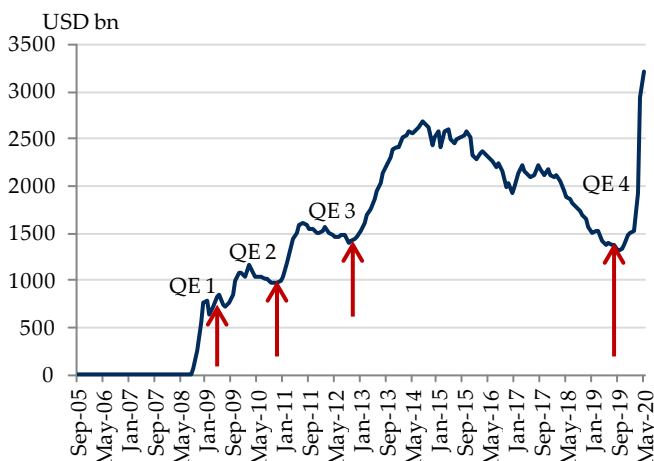
Source: FRED, HSIE Research

US Corporate Bond Yield Trend



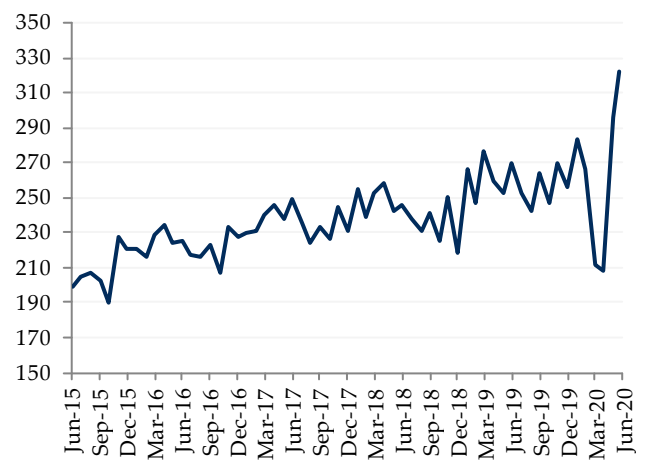
Source: FRED, Moody's, HSIE Research

Excess Bank Reserve: Increased post recent stimulus



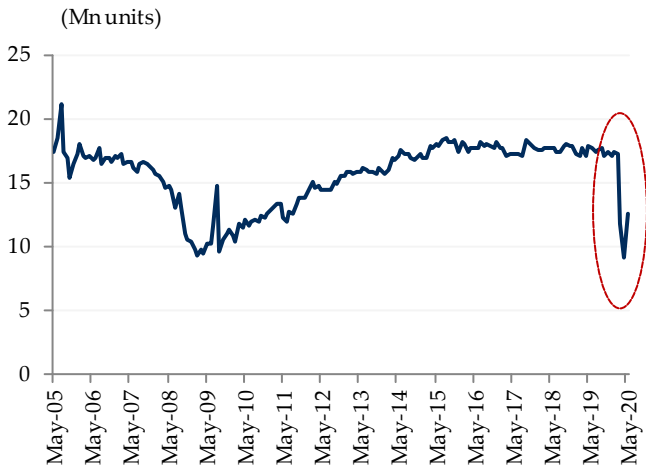
Source: FRED, HSIE Research

US Mortgage Purchase Index: 12-yr High Led by Falling Mortgage Rates



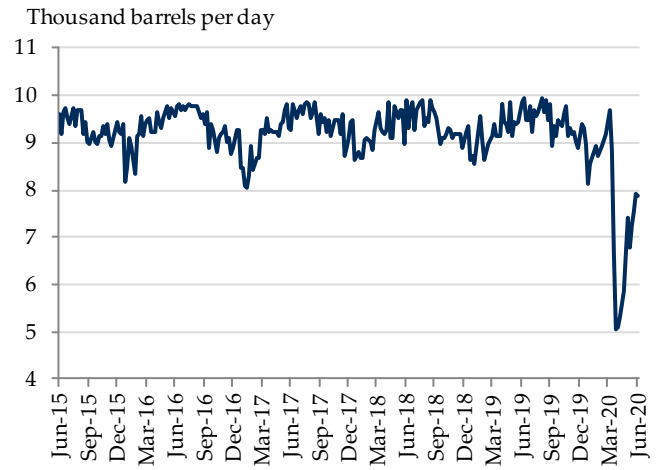
Source: Bloomberg, HSIE Research; Index indicates new mortgages purchases taken for initial home purchase

US Auto Monthly Sales (annualised) Trend



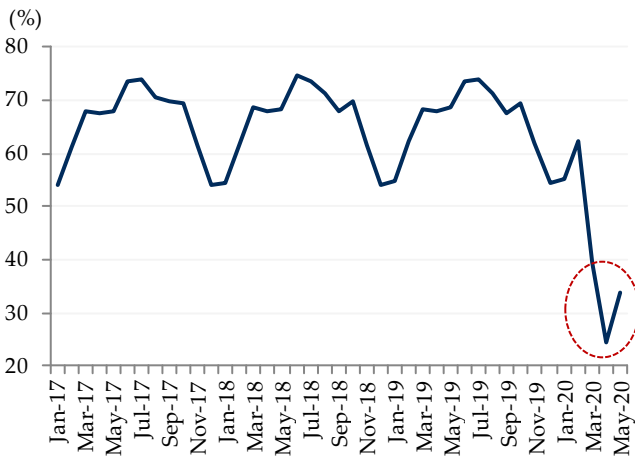
Source: Bloomberg, HSIE Research

Finished Motor Gasoline: Significant Improvement



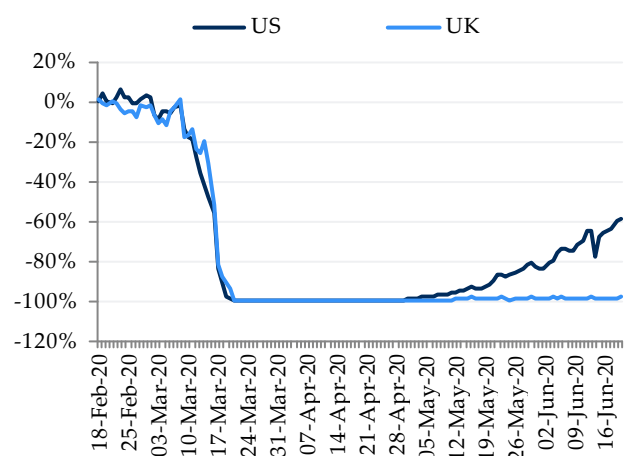
Source: DOE, HSIE Research

US Hotel Occupancy Is Improving Gradually



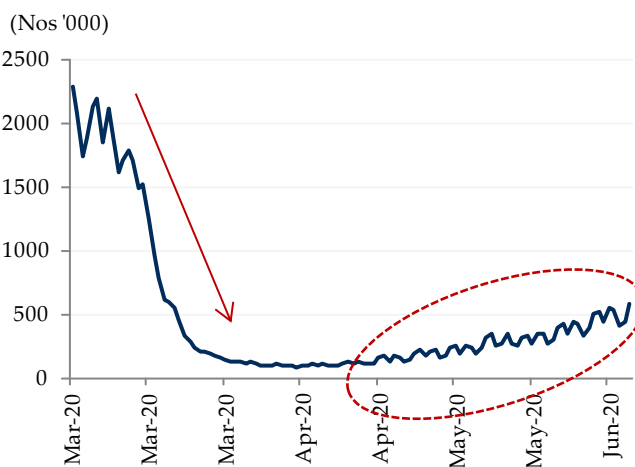
Source: Statista, HSIE Research

Restaurant Activity Recovering In US



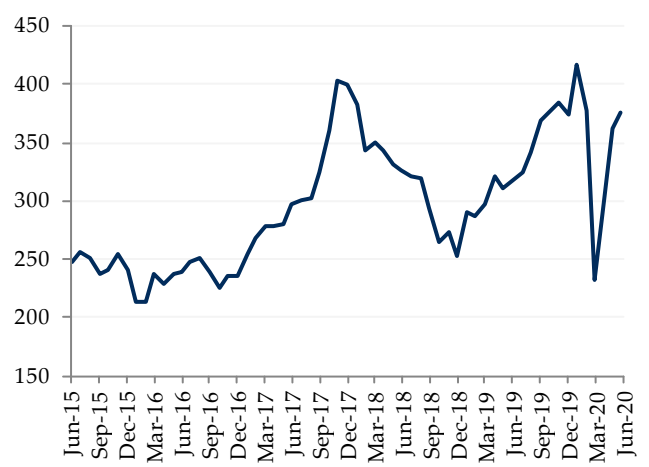
Source: OpenTable, HSIE Research

US Airline Travelers Improving, but gradual



Source: TSA, HSIE Research

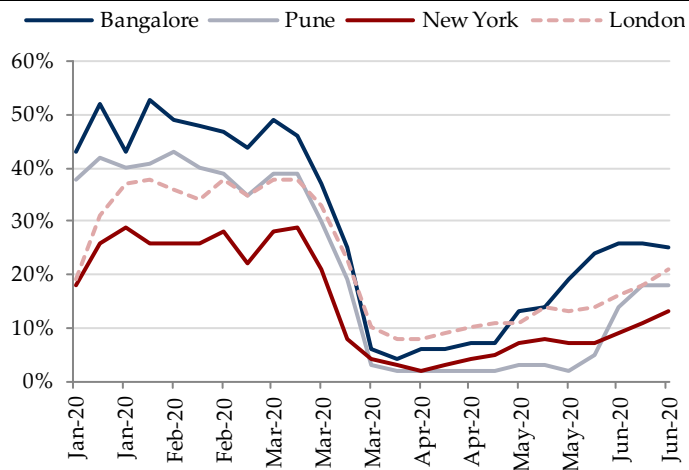
Bloomberg Home Builders Index: Improved sharply and now back to Pre Covid Levels



Source: Bloomberg, HSIE Research, Home Builders Index measures the health of the US housing market

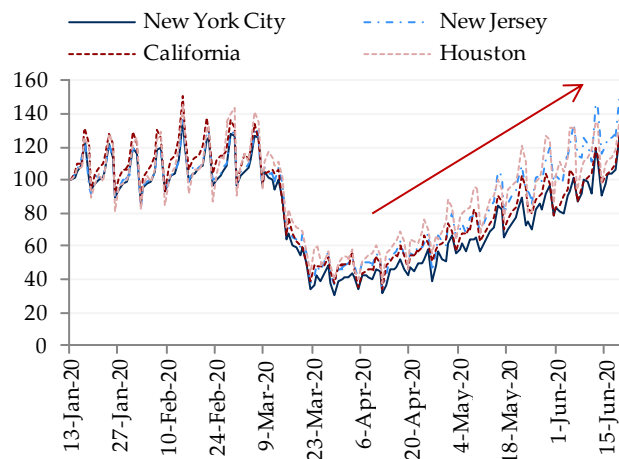
IT : Sector Thematic

Weekly Traffic Congestion Levels In Core Demand/Supply Locations



Source: TomTom, HSIE Research

Mobility Tracker For Major US Cities/States



Source: Apple Data, HSIE Research

Top Apps Worldwide by Downloads: Increased Usage of Collaboration & Virtual Meeting Tools

S.No	Jan-20	Feb-20	Mar-20	Apr-20	May-20
1	TikTok	TikTok	TikTok	ZOOM	TikTok
2	WhatsApp	WhatsApp	WhatsApp	TikTok	ZOOM
3	Facebook	Facebook	ZOOM	Facebook	WhatsApp
4	Instagram	Instagram	Facebook	WhatsApp	Facebook
5	Messenger	Messenger	Messenger	Instagram	Messenger
6	Likee	Likee	Instagram	Messenger	Instagram
7	SHAREit	SHAREit	SHAREit	Aarogya Setu	Google Meet
8	TikTok Wall Picture	Snapchat	Netflix	Google Meet	Aarogya Setu
9	Snapchat	Youtube	Snapchat	Netflix	Youtube
10	Youtube	Helo	Google Classroom	Microsoft Teams	Snapchat

Source: SensorTower, HSIE Research

Change in Estimates

Company	Revenue USD mn (New)		Change %		EBIT % (New)		Change (bps)		EPS (Rs) New		Change (%)	
	FY21E	FY22E	FY21E	FY22E	FY21E	FY22E	FY21E	FY22E	FY21E	FY22E	FY21E	FY22E
TCS	20,694	22,153	0.0%	0.0%	24.2	24.9	41	35	82.5	91.9	4.6%	4.1%
Infosys	12,519	13,787	0.0%	0.0%	20.7	21.2	20	(7)	38.7	44.6	5.6%	5.4%
HCL Tech	9,919	10,741	0.0%	0.0%	18.9	19.8	10	(15)	40.2	47.9	3.7%	2.0%
Wipro	7,896	8,267	0.0%	0.0%	16.2	16.4	41	31	16.3	17.7	4.4%	4.1%
TechM	4,937	5,271	0.0%	0.0%	11.2	12.3	11	31	44.0	50.6	3.9%	5.4%
LTI	1,606	1,846	0.0%	0.0%	15.6	17.1	(14)	0	89.7	115.0	4.2%	2.1%
Mphasis	1,241	1,350	0.0%	0.0%	15.3	16.3	46	22	59.7	70.4	3.8%	2.4%
Mindtree	1,055	1,161	-4.7%	-4.5%	12.0	13.0	55	29	44.2	54.6	1.1%	(0.9%)
L&T Tech	715	798	-5.0%	-4.9%	14.5	16.0	(98)	(44)	60.3	76.2	(8.8%)	(5.1%)
Hexaware*	820	894	0.0%	0.0%	11.3	12.6	(36)	(44)	20.0	23.0	1.4%	0.3%
Persistent	489	528	0.0%	0.0%	7.9	8.9	(10)	1	37.0	45.0	(0.4%)	2.6%
Zensar	518	562	0.0%	0.0%	8.1	9.4	33	30	9.9	13.0	6.0%	6.1%
Cyient	500	539	0.0%	0.0%	8.0	9.0	11	17	23.9	28.3	3.0%	5.8%
Sonata	160	176	0.0%	0.0%	7.9	8.7	49	35	22.8	27.6	6.9%	4.6%
Mastek	194	210	0.0%	0.0%	13.6	13.8	84	72	49.2	55.3	9.8%	7.1%
Majesco	150	166	0.0%	0.0%	8.8	10.3	25	28	21.2	26.8	5.5%	5.5%

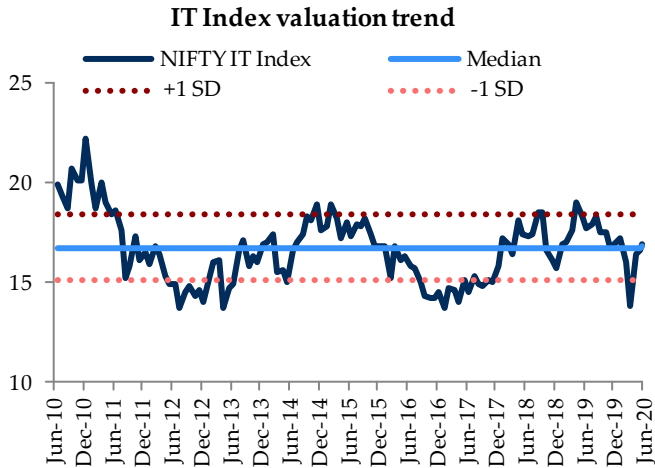
Source: HSIE Research, *Dec YE

Company	USD Rev Growth		CMP Rs	Rating OLD	Rating NEW	TP OLD (Rs)	TP NEW (Rs)	Upside from CMP %	Multiple OLD (x)	Multiple NEW (x)	5Y Avg 1Y Fwd P/E	10Y Avg 1Y Fwd P/E
	FY21E	FY22E										
TCS	-6.1%	7.0%	2,035	REDUCE	REDUCE	1,680	1,930	-5%	19	21	20	20
Infosys	-2.0%	10.1%	721	BUY	BUY	680	805	12%	16	18	17	17
HCL Tech	-0.2%	8.3%	580	BUY	BUY	565	670	15%	12	14	14	14
Wipro	-4.4%	4.7%	221	REDUCE	ADD	185	245	11%	11	14	15	15
TechM	-4.7%	6.8%	559	BUY	BUY	625	710	27%	13	14	14	13
LTI	5.4%	15.0%	1,885	ADD	ADD	1,800	2,070	10%	16	18	16	NM
Mphasis	0.1%	8.8%	855	ADD	BUY	825	1,055	23%	12	15	14	13
Mindtree	-3.1%	10.0%	928	ADD	ADD	830	985	6%	15	18	18	15
L&T Tech	-9.1%	11.6%	1,297	ADD	REDUCE	1,125	1,220	-6%	14	16	19	NM
Hexaware*	3.4%	9.0%	320	ADD	REDUCE	300	320	0%	13	14	16	14
Persistent	-2.5%	8.1%	616	REDUCE	REDUCE	525	630	2%	12	14	14	13
Zensar	-12.1%	8.4%	136	ADD	ADD	98	130	-4%	8	10	13	9
Cyient	-20.0%	7.8%	256	REDUCE	REDUCE	240	255	0%	9	9	13	12
Sonata	-11.6%	10.1%	226	BUY	BUY	240	305	35%	9	11	11	8
Mastek	28.8%	8.1%	395	BUY	BUY	400	535	35%	8	10	11	NM
Majesco	2.5%	10.9%	349	BUY	BUY	375	450	29%	1 EV/Rev	1.3 EV/Rev	1	NM

Source: HSIE Research, *Dec YE

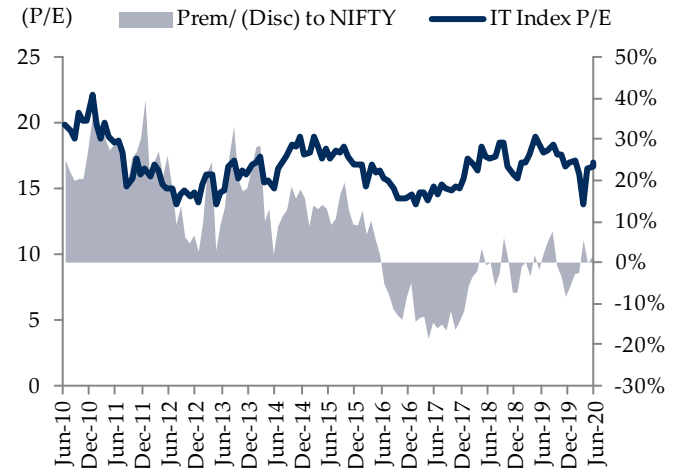
Valuation Charts

NIFTY IT Index Valuation Trend (P/E 1-yr fwd)



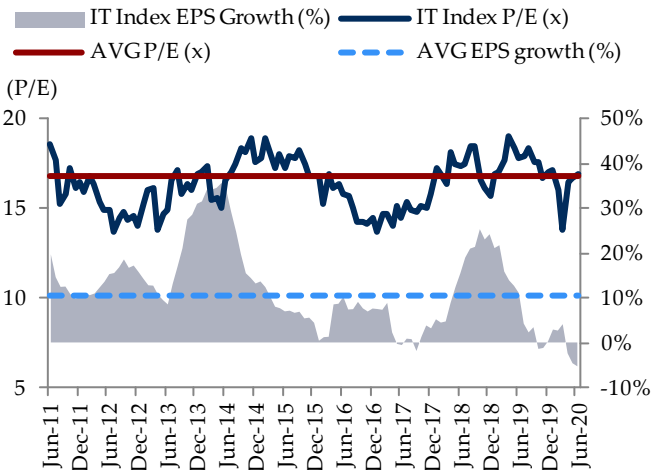
Source: Bloomberg, HSIE Research

IT Index Valuation Trend vs NIFTY



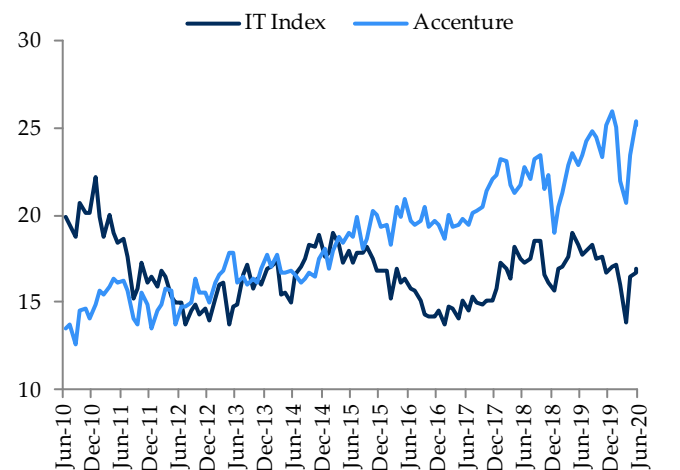
Source: Bloomberg, HSIE Research

IT Index Valuation and Earnings Growth Trend



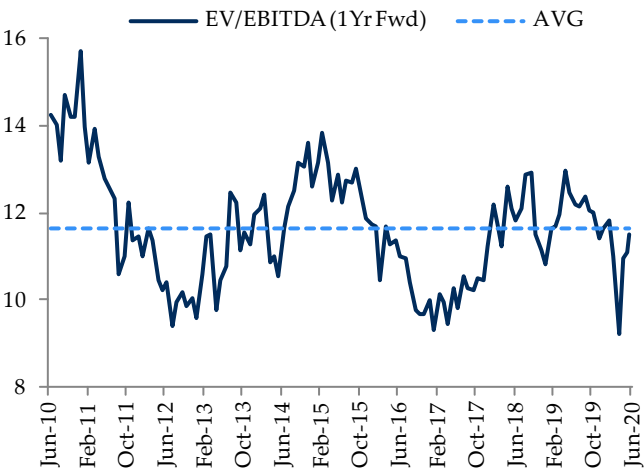
Source: Bloomberg, HSIE Research

Indian IT Valuations Trend vs. Accenture (P/E 1-yr fwd)



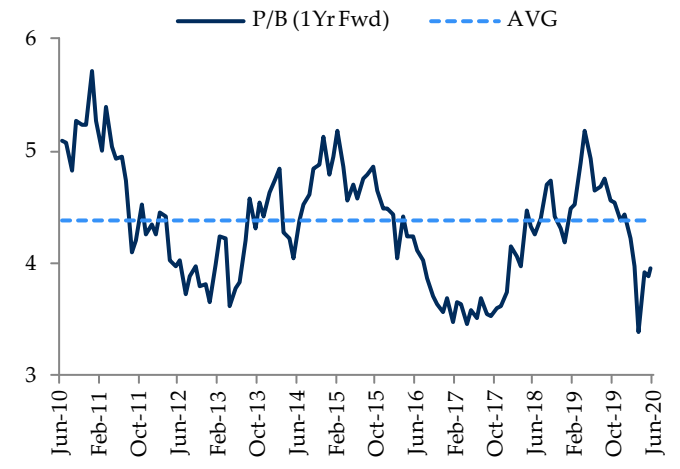
Source: Bloomberg, HSIE Research

IT Sector EV/EBITDA (x) Trend



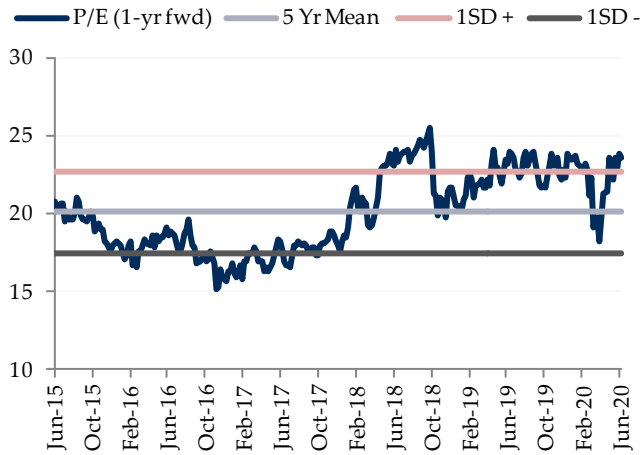
Source: Bloomberg, HSIE Research

IT Sector P/B (x) Trend



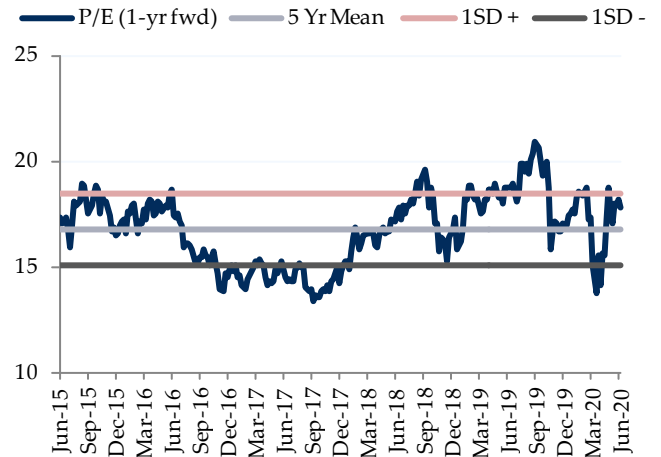
Source: Bloomberg, HSIE Research

TCS P/E (1-yr fwd) Trend



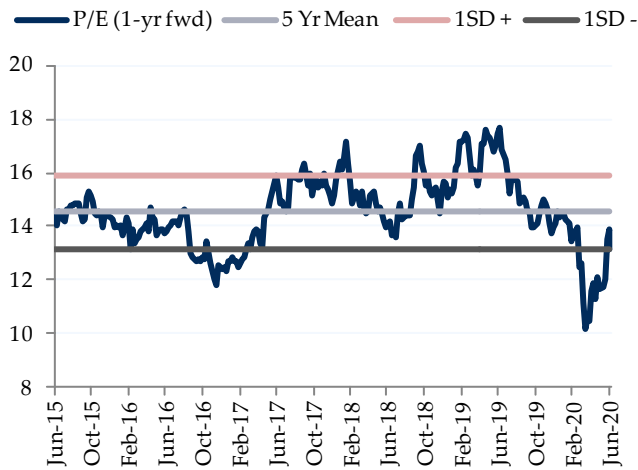
Source: Bloomberg, HSIE Research

Infosys P/E (1-yr fwd) Trend



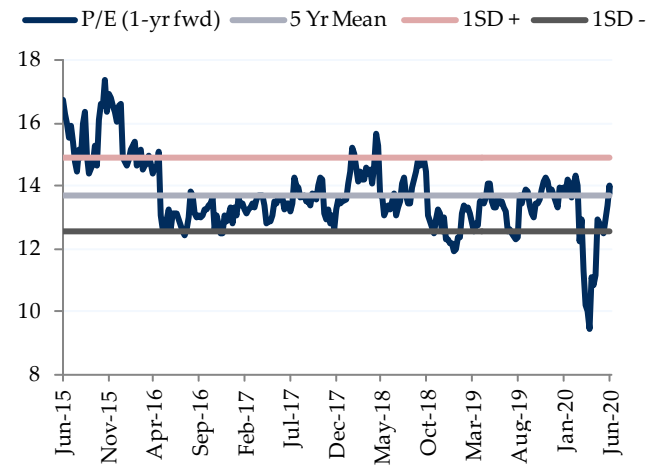
Source: Bloomberg, HSIE Research

Wipro P/E (1-yr fwd) Trend



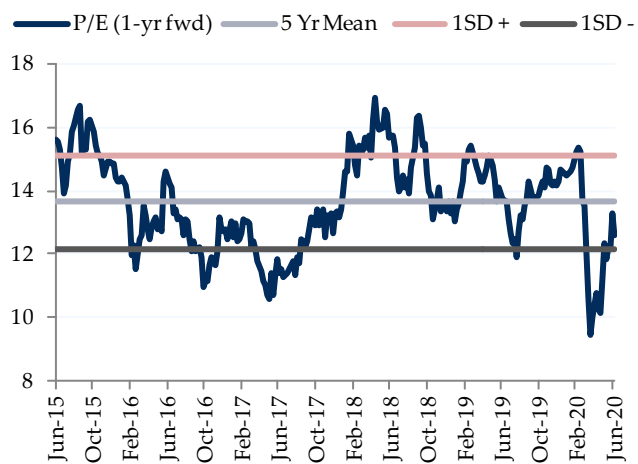
Source: Bloomberg, HSIE Research

HCL Tech P/E (1-yr fwd) Trend



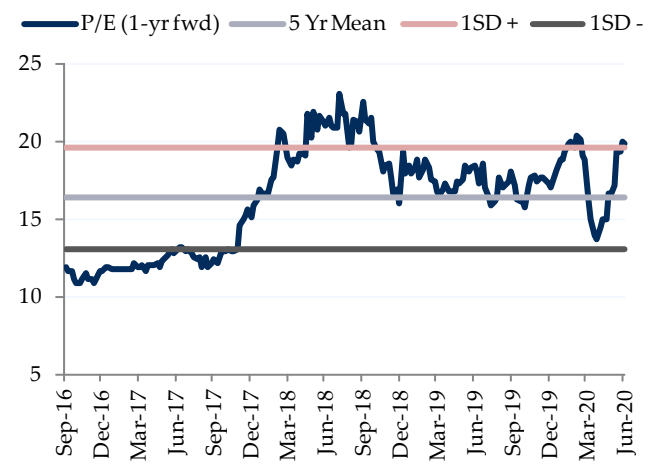
Source: Bloomberg, HSIE Research

Tech Mahindra P/E (1-yr fwd) Trend



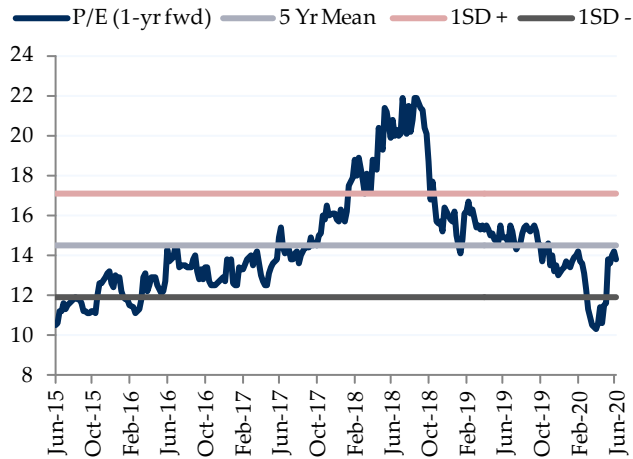
Source: Bloomberg, HSIE Research

L&T Infotech P/E (1-yr fwd) Trend



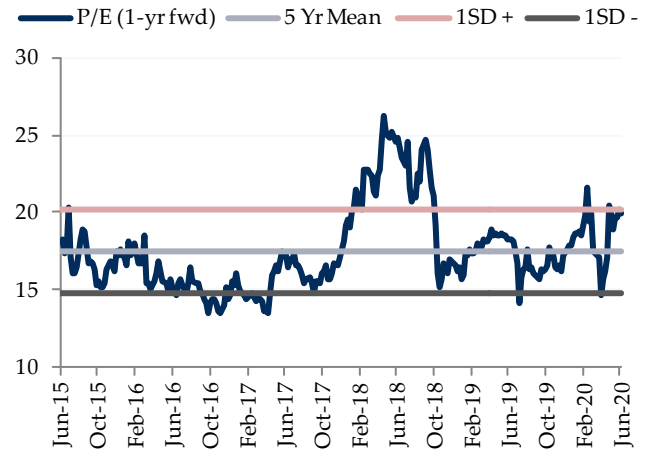
Source: Bloomberg, HSIE Research

Mphasis P/E (1-yr fwd) Trend



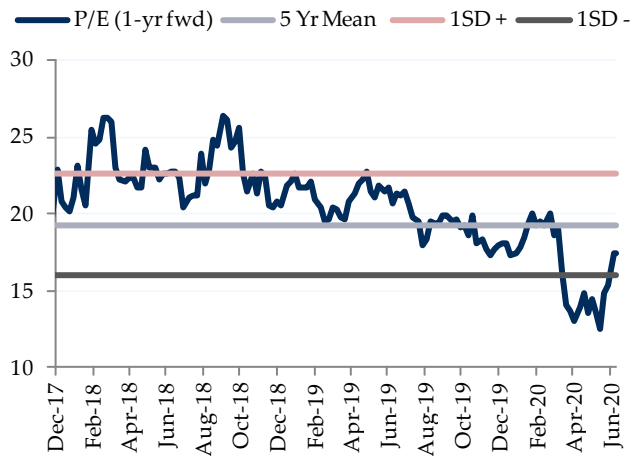
Source: Bloomberg, HSIE Research

Mindtree P/E (1-yr fwd) Trend



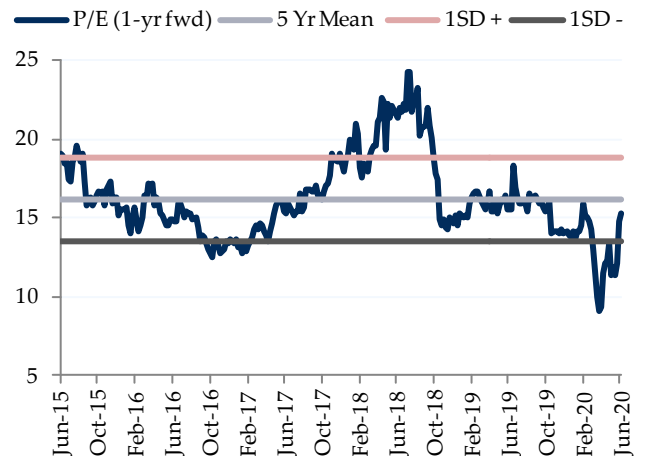
Source: Bloomberg, HSIE Research

L&T Technology P/E (1-yr fwd) Trend



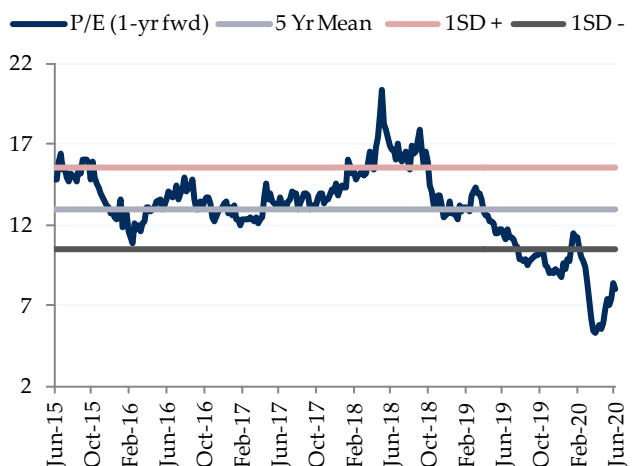
Source: Bloomberg, HSIE Research

Hexaware P/E (1-yr fwd) Trend



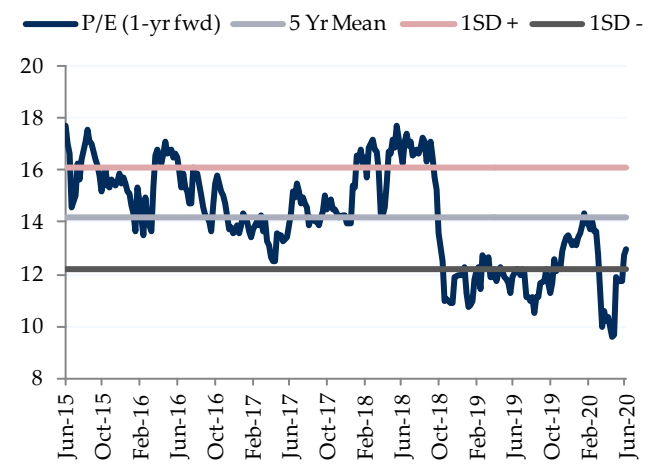
Source: Bloomberg, HSIE Research

Cyient P/E (1-yr fwd) Trend



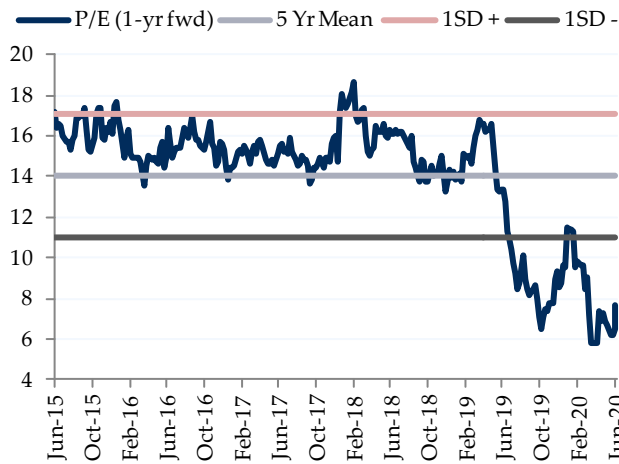
Source: Bloomberg, HSIE Research

Persistent P/E (1-yr fwd) Trend



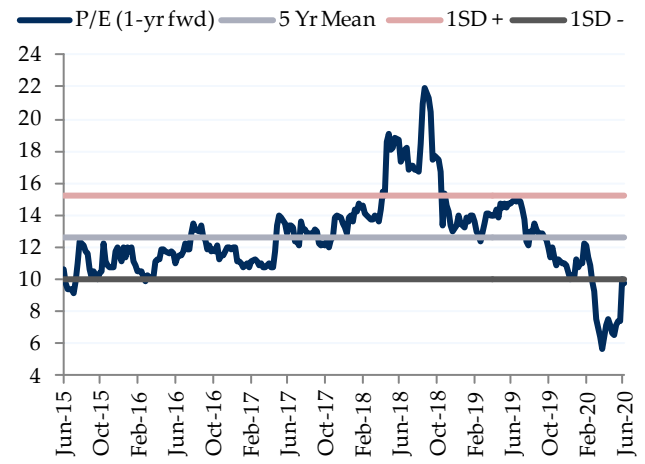
Source: Bloomberg, HSIE Research

eClerx P/E (1-yr fwd) Trend



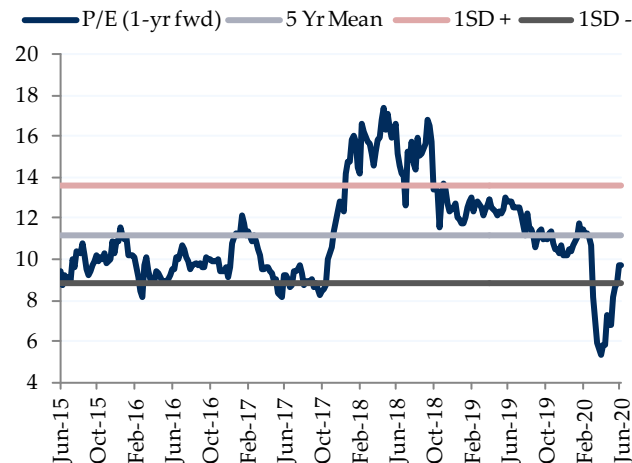
Source: Bloomberg, HSIE Research

Zensar P/E (1-yr fwd) Trend



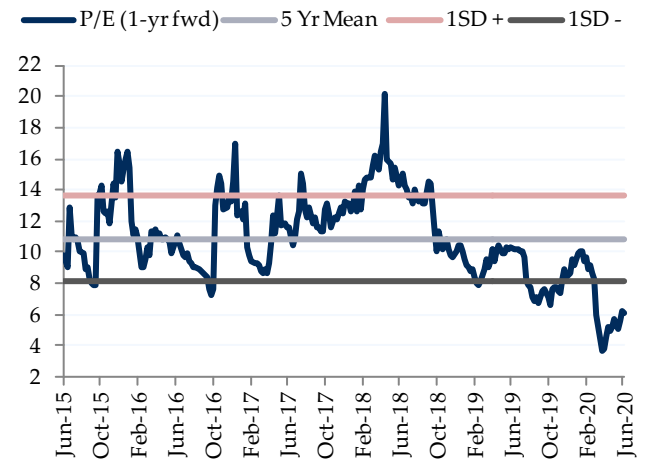
Source: Bloomberg, HSIE Research

Sonata P/E (1-yr fwd) Trend



Source: Bloomberg, HSIE Research

Mastek P/E (1-yr fwd) Trend



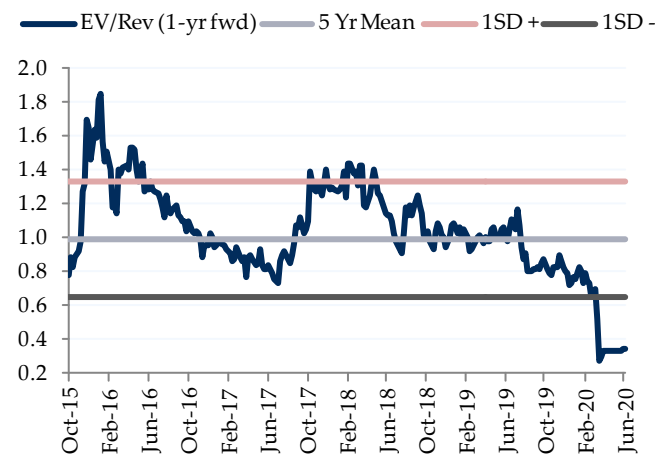
Source: Bloomberg, HSIE Research

Intellect EV/Revenue (1-yr fwd) Trend



Source: Bloomberg, HSIE Research

Majesco EV/Revenue (1-yr fwd) Trend



Source: Bloomberg, HSIE Research

Rating Criteria

BUY: >+15% return potential
 ADD: +5% to +15% return potential
 REDUCE: -10% to +5% return potential
 SELL: > 10% Downside return potential

Disclosure:

We, **Apurva Prasad, MBA, Amit Chandra, MBA & Vinesh Vala, MBA** authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. HSL has no material adverse disciplinary history as on the date of publication of this report. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

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