

Tata Consultancy Services

10 January 2021

Reuters: TCS.BO; Bloomberg: TCS IN

Pricey but growth surprises possible near term

TCS' 3QFY21 delivered a 9-year best, broad-based and better-than-expected 4.1% QoQ constant currency (CC) revenue growth in a seasonally weak quarter, significantly better than our estimate of 1.5% and that of consensus (~3%). Margin expansion of 40bps QoQ was a surprise (against expectation of a decline) after absorbing a 160bps hit from salary hike. YoY CC revenue growth turned positive one quarter ahead of guidance. TCS indicated double-digit growth for FY22, something that was already priced in. The question is whether it can deliver mid-teen or higher growth. A significant shift to cloud, faster conversion to revenue of deals won and market share gains drove growth. 4QFY21 is likely to be equally strong on the back of execution of two large deals won recently (Prudential/Pramerica and Postbank). Cloud related deal wins from more than 200 of its customers in 3QFY21 should also go into execution. All of the above gell well with the commentary by Accenture on compressed transformations ([Update](#)). TCS sounded confident not only about the next 15 months but also about the next 3-5 years (based on its 3-wave theory), but it did not give any specific color on strength beyond FY22. We have penciled in ~14% USD growth in FY22 and ~10% in FY23. We think there is potential for a modest upside to these numbers from the highest book/bill ratio since TCV data was made public (see Exhibit 15). While 26.2% EBIT margin is in the 26-28% aspirational band and TCS is focused on maintaining it, the company stated that it will bid aggressively in case large opportunities arise and is not wedded to this band. Over a cycle, TCS wants to get to this range but is not guiding this as a sustained number that it aspires for. The margin surprise, in our view, has come from (a) higher growth (b) higher utilisation (c) higher offshoring (d) likely higher sales of IP/IP driven services. The likely 'stronger for longer' situation is positive for multiple expansion. Post 3QFY21, we have tweaked our estimates upwards on better revenue expectation. We also raise target PE multiple from 25x (+2 SD to 5-year mean) to 26.25x (+2.5SD to 5-year mean). We think multiples can expand when all indications are for 'stronger for longer'. Will re-evaluate if we get data otherwise. We reiterate our 'Accumulate' rating. We continue to hold TCS as industry benchmark for valuation. This is driven by its: (1) Industry-leading organic growth among large companies (2) Breadth and depth in service lines, geographies and verticals (3) Ability to stitch together integrated offerings (4) Significant lead in automation skills (5) Strong and stable base of employees with contextual knowledge (6) Strong product, platform and agile delivery capabilities (7) best-in-class margins and return ratios.

Read-through for the industry is positive: We believe that TCS' 3QFY21 will have a positive rub-off on other Indian peers. We think that the upcoming results are likely to beat our current expectations ([Preview](#)). 4QFY21 is poised to be stronger than what we have modeled and a strong exit rate will ensure double-digit growth in FY22.

Horizon 2 & Horizon 3 services visibility critical to growth longevity: TCS alluded to assignments which give a glimpse of the kind of cloud native applications and business transformation work that it has been talking about, which would drive growth beyond the next 18-24 months. However, these cannot be executed unless customers' infrastructure moves to the cloud. Our industry checks indicate that customers have only made a fraction of their applications cloud native. Currently, what we see is a migration of old applications to the cloud – 'old wine in a new bottle' as one industry veteran put it to us.

BFSI cloud move yet to happen; a growth driver in the medium term: BFSI, which is a large revenue contributor to TCS (~35-40% including platforms), has not shifted in a significant way. Issues around security, redundancy and validation are apparently being discussed. This vertical has been a bit of a drag in recent years. Should the cloud shift happen, it could be a growth driver.

Accumulate

Sector: Information Technology

CMP:Rs3,121

Target Price:Rs3,157

Upside:1%

Girish Pai

 Head of Research
 girish.pai@nirmalbang.com
 +91-22-6273 8017

Key Data

Current Shares O/S (mn)	3,752.4
Mkt Cap (Rsb/US\$bn)	11710.8/159.9
52 Wk H / L (Rs)	3128/1504
Daily Vol. (3M NSE Avg.)	3,906,189

Price Performance (%)

	1 M	6 M	1 Yr
TCS	12.1	40.4	41.0
Nifty Index	6.2	33.2	17.1

Source: Bloomberg

Y/E Mar (Rsmn)	3QFY20	2QFY21	3QFY21	YoY(%)	QoQ (%)	3QFY21E	Deviation (%)
Net Sales (USD mn)	5,586	5,424	5,702	2.1	5.1	5,549	2.8
Net Sales	3,98,540	4,01,350	4,20,150	5.4	4.7	4,09,006	2.7
Software Expenses	2,33,690	2,37,150	2,45,270	5.0	3.4	2,43,102	0.9
% of Sales	58.6	59.1	58.4			59.4	
Gross Margin	1,64,850	1,64,200	1,74,880	6.1	6.5	1,65,904	5.4
% of Sales	41.4	40.9	41.6			40.6	
Operating Expenses	65,110	59,050	63,040	(3.2)	6.8	61,126	3.1
% of Sales	16.3	14.7	15.0			14.9	
EBIT	99,740	1,05,150	1,11,840	12.1	6.4	1,04,778	6.7
EBIT Margin (%)	25.0	26.2	26.6			25.6	
Other Income	5,950	7,400	5,080	(14.6)	(31.4)	8,415	(39.6)
PBT	1,05,690	1,12,550	1,16,920	10.6	3.9	1,13,193	3.3
Provision for Tax	24,260	27,930	29,650	22.2	6.2	26,600	11.5
Effective Tax Rate	23.0	24.8	25.4			23.5	
Minority share in Profit / Loss	250	290	260	4.0	(10.3)	290	(10.3)
PAT (Reported)	81,180	84,330	87,010	7.2	3.2	86,303	0.8
NPM (%)	20.4	21.0	20.7			21.1	

Source: Company, Nirmal Bang Institutional Equities Research; Note: Excludes the one-off provisioning for Epic Systems in 2QFY21 in the EBITDA line

Exhibit 1: Key financials

Y/E March (Rsbn)	FY19	FY20	FY21E	FY22E	FY23E
Revenue (Rsbn)	1,465	1,569	1,637	1,898	2,138
YoY Growth %	19.0	7.2	4.3	16.0	12.6
EBIT (Rsbn)	375	386	419	488	566
% of sales	25.6	24.6	25.6	25.7	26.5
PAT (Rsbn)	315	323	331	384	445
YoY Growth %	21.9	2.8	2.3	16.2	15.7
FDEPS (Rs)	83.1	86.2	88.5	103.9	120.3
ROE (%)	35.0	36.6	37.5	40.8	44.0
ROCE (%)	35.7	35.1	36.0	39.1	42.3
Pre Tax ROIC (%)	61.8	55.5	55.7	60.8	65.2
P/E (x)	37.6	36.2	35.3	30.0	26.0
P/BV (x)	13.0	14.1	13.0	12.3	11.1

Source: Company, Nirmal Bang Institutional Equities Research. Note: Excludes the one-off provisioning for Epic Systems

Exhibit 2: Change in our estimates

Change in estimates	New			Old			Change (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
INR/USD	74.2	75.2	76.8	74.2	75.2	76.8	(0.0)	-	-
USD Revenue (USD mn)	22,087	25,240	27,852	21,702	24,423	26,887	1.8	3.3	3.6
Revenue (Rsbn)	1,637	1,898	2,138	1,609	1,837	2,064	1.7	3.3	3.6
EBIT (Rsbn)	419	488	566	405	482	547	3.4	1.3	3.4
EBIT Margin (%)	25.6	25.7	26.5	25.2	26.2	26.5			
PAT (Rsbn)	331	384	445	326	392	444	1.6	(1.8)	0.2
FDEPS (Rs)	88.5	103.9	120.3	87.1	105.9	120.0	1.6	(1.8)	0.2

Source: Company, Nirmal Bang Institutional Equities Research. Note: Excludes the one-off provisioning for Epic Systems

Our view on the Indian IT services sector: In our sector updates of 6th September 2020 ([Rising monetary and digital tides lifting most boats](#)), 28th September 2020 ([Medium term commentary turning more positive](#)) and 28 December 2020 ([Looks stronger near term; Raising target prices](#)), we upgraded our view to 'neutral' on the sector from a 'cautious' one held for the last many years on the back of both higher earnings and higher target PE multiples. The earnings uplift (~2x of the growth seen in FY15-FY20 timeframe) is coming from an expectation of 400-600bps pick-up in organic revenue growth over FY21-FY23 against the one seen in the FY15-FY20 timeframe (6-8% organic USD terms) along with an improvement in margins. The revenue acceleration is coming from increased overall spending on IT, increased spending on Digital by clients and a move towards greater outsourcing (driven by lack of internal talent), and which in our view will likely be compressed in a shorter period of time than was expected in the past. The demand uplift is more widespread than seen in the past and is a 'rising-tide-lifting-most-boats' kind of situation. Reasons for change in customer behavior, in our view are: (1) Strong need for digital transformation, not only to structurally cut costs, but also to deliver contact-less consumer and employee experiences, driven by the nature of the pandemic. Based on the commentary from customers, software companies and IT services vendors, we believe that digital demand has been pulled forward from the future. (2) quick and unprecedented 'whatever-it-takes' monetary and fiscal actions in the US and Europe that likely eliminated tail risks to economic recovery and reduced risk aversion among corporates. While customer P&Ls and cash flows saw pain, credit market conditions significantly eased up with investment grade and junk bond yields more than halving from their pandemic peak as the US Federal Reserve stepped into the credit markets directly. Corporate America binged on cheap debt. These monetary conditions could last, we believe, for at least 12-24 months if not longer. The changed view on margins has been driven by business model changes that the pandemic has induced, which we think are structurally positive. These involve higher offshoring, lower subcontractor cost, structurally lower travel and marketing costs. Also, we see accelerated employee pyramid reshaping that could control cost increases. We see WFH/WFA expanding the talent pool in a material way in the long term, leading to lesser pressure on talent costs.

Higher PE multiples are driven by (1) an upward shift in the revenue and earnings growth trajectory (2) lower interest rates globally and domestically (3) valuation exuberance (irrational!?) in the enterprise

technology space in the US and (4) constrained domestic investment choices. While there could be a growth spike in FY22 after a modest dip in FY21 (lower than anticipated), we see organic revenue growth in FY23 being only a tad lower than that of FY22. We are yet to take a concrete view on a 'stronger for longer' (beyond FY23) situation.

Why not a sell: (1) We see earnings acceleration over FY21-FY23 due to faster revenue growth and a higher margin trajectory. (2) Current exuberance (irrational!?) in enterprise tech valuations in the US likely rubbing off on Indian IT services. (3) a situation where double-digit revenue growth could stretch beyond FY23. (4) lower for longer interest rates globally could keep PE multiples elevated.

Why not a buy: (1) PE multiples are already at 10–12-year highs and partly reflect the turnaround in fundamentals over FY21-FY23. (2) Adverse impact on US corporate profits in 2021 and beyond (leading to cut back in spending) due to higher taxation if new US President Joe Biden is able to push them through. (3) Likely slower organic growth in the medium term as spends are pulled forward. Growth could settle into mid-single digit territory in USD terms beyond a point in time. (4) A likely deflation in enterprise tech valuations in the US.

Valuation and stock calls: TCS continues to be our sector benchmark as it has the strongest position in the industry. With enterprise tech sector in the US going through a bout of exuberance currently, an overshoot on the upside is not entirely ruled out. We back our higher PE multiples with (1) expectation of earnings acceleration over FY21-FY23 against FY17-FY20 on revenue expansion (2) lower for longer interest rates globally and likely in India too that could keep PE multiples elevated (3) potential for good return of capital to investors due to strong cash flows. We have benchmarked all other coverage companies with respect to TCS. While historically we have not liked mid-tier IT companies due to their significant client, geographic and vertical concentration risks and weaker capabilities, we believe they could be beneficiaries in the next 24 months of robust demand. We believe vendor consolidation risks are lower due to this. We also think that some of them are undergoing a structural change for the better under new managements, which could set them up for better growth, margins and PE multiples.

Exhibit 3: Vertical-based USD QoQ and YoY revenue growth in 3QFY21

Verticals	Contribution to Revenue (%)	Growth-QoQ(%)	Growth-YoY(%)
BFSI	31.3	3.1	5.1
Manufacturing	9.6	7.4	(2.0)
Communication and Media	6.6	6.7	(3.8)
Life Science and Healthcare	9.8	5.1	20.5
Retail and CPG	14.5	4.4	(2.6)
Technology and Services	8.6	1.6	4.5
Regional Market & Others	19.6	9.0	(3.3)
Total	100.00	5.1	2.1

*Retail and CPG includes Travel and Hospitality because of reclassification and hence does not reflect the actual growth
 Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 4: Geography- based USD QoQ and YoY revenue growth in 3QFY21

Geography	Contribution to Revenue (%)	Growth-QoQ(%)	Growth-YoY(%)
North America	49.1	3.4	0.0
Latin America	1.7	5.1	(8.7)
UK	15.7	6.5	0.8
Europe	16.2	4.5	11.0
India	5.6	17.7	0.3
APAC	9.7	5.1	6.5
MEA	2.0	10.7	(7.2)
Total	100.0	5.1	2.1

Source: Company, Nirmal Bang Institutional Equities Research

3QFY21 analyst call highlights

- Revenue and margins beat estimates despite 3Q being a seasonally weak quarter:** USD revenue grew by 5.1% QoQ and 2.1% YoY at US\$5,702mn, above our estimate of US\$5,549mn. INR revenue grew by 4.7% QoQ and 5.4% YoY. Growth (the best in the last 9 years; QoQ) was broad-based across all segments and geographies, led by Cloud Services, Analytics & Insights, Cognitive Business Operations, IoT and Engineering & Transformation Platform Services. While the seasonal furloughs did exist in both BFSI and Retail they were offset by new work. TCS stated that the strong growth was not part of a 'budget flush' but strengthening of the investment mandate that customers had in 2H2020. 3QFY21 EBIT margin at 26.6% (highest in the last 5 years; above our estimate of 25.6%) increased by 160bps YoY and 40bps QoQ despite rolling out salary hikes from 1st October 2020, led by (1) higher revenue growth (2) favorable cross currency movement (3) higher utilization and (4) operational efficiencies from the SBWS model. The EBIT margin is now in TCS' long-term aspirational band of 26-28%. Net profit grew by 3.2% QoQ and 7.2% YoY.
- Growth drivers:** The management commented that strong demand for cloud and core transformation services (which is pandemic-induced), faster revenue conversion from earlier deals and market share gains led growth helped TCS overcome seasonal headwinds. The business teams that grew customer spending during the quarter included those focused on customer experience enhancement, new product initiatives, regulatory work and ESG initiatives. From a technology perspective, this translated into investments in call center modernization, analytics and insights workplace transformation, cybersecurity and core modernization. TCS is also witnessing increased activity in its assessment and transaction business.
- Double-digit growth a certainty in FY22:** TCS believes that it will enjoy the tailwind of the two large deals it won in 3QFY21 in 4QFY21. With the strong exit rate, TCS is expecting to return to double-digit growth in FY22. The company had an internal target to get YoY positive by 4QFY21 in CC terms, which it has delivered a quarter in advance.
- Greater participation in the growth and transformation agenda:** Unlike in the past, when TCS was more involved in helping customers take out costs by helping them in operations transformation or generating efficiencies, it believes that it is playing a greater role in the growth and transformation agenda of its customers. This typically involves work on new business models, new revenue lines, new customer experiences and addressing new segments of customers. It believes in the incremental spending of its customers the two - growth related work and efficiency related work- have an equal share.
- Vertical commentary:** All verticals showed positive sequential CC growth, led by Manufacturing (7.1%), Life Sciences and Healthcare (5.2%) and Communications & Media (5.5%) which grew faster than the company. BFSI (2%) and Retail & CPG (3.1%) grew slower than the company. On a YoY CC basis, Life Sciences and Healthcare recorded a stellar growth of 18.2% followed by BFSI (2.4%) and Technology & Services (2.4%). TCS stated that the retail sector showed strong growth despite a seasonally weak quarter due to the holiday season and weakness in discretionary retail spending. TCS believes that the BFSI vertical has a lot of levers for growth; most companies in the BFSI space are experimenting with the public cloud strategy but substantial workloads have not been shifted. Thus, there is significant headroom for growth as hybrid cloud strategy is the only way to go for these companies. Being the largest service provider to BFSI companies globally, TCS is placed in a very strong position to gain market share.
- Geography-wise:** All markets showed good sequential growth in CC terms, with North America growing by 3.3%, UK by 4.5% and Europe by 2.5%. Emerging Markets also performed well, with India growing by 18.1%, MEA by 6.7%, Latin America by 3.1% and Asia Pacific by 2.6%. The significant traction in India was driven by some of the platforms surrounding testing. On UK, its view was that while growth thus far has been strong, it is difficult to predict (likely because of the volatile macro conditions surrounding Brexit and the economy).
- Strong deal wins:** Deal wins were a mixed bag - comprising a mix of large and small-size deals on the back of increased tech consumption. TCS also indicated that the pipeline is strong and has a normal mix of large, mid-sized and small deals. This is unlike what the company saw in 1QFY21 when it indicated that it saw only large and small sized deals with the mid-sized ones missing. Total deal wins stood at US\$6.8bn (excluding the large deal of Postbank System in Germany) in 3QFY21 against US\$8.6bn in 2QFY21 (US\$6.1bn if one takes out the Phoenix group large deal) and US\$6bn in 3QFY20. TCS stated that of the two large BFSI deals that it signed in 3QFY21, the Prudential deal was closed in mid-December and thus a very small part of revenue from this deal has been added to the 3QFY21 revenue. The Postbank Systems deal was closed on 1st January 2021 and thus it has not been included in the 3QFY21 TCv. BFSI deals

stood at US\$2.6bn and Retail deals stood at US\$0.98bn. North America deals stood at US\$4bn. The TCV for both BFSI and for North America are at their highest ever. TCS believes that the deal pipeline continues to be strong and well distributed across verticals, led by a mix of digital foundation, integrated deals from smaller clients, experience transformation and core transformation deals.

- Ignio sees continued momentum:** Ignio - TCS' cognitive automation software - is doing very well and is expanding from IT operations to business operations. It commented – “the best of Ignio is yet to come”. It is helping in the end-to-end operational transformation of companies. Ignio acquired 8 new logos during the quarter and 7 customers went live on the product. During the quarter, the product won 3 more awards and was granted 2 more patents, taking the total number of patents granted till date to 27.
- Strong collections:** DSO stood at 69 days vs. 65 days in 2QFY21 and 68 days in 3QFY20. The cash flow from operations to net profit ratio was at an all-time high at almost 137% in 3QFY21. Free cash flow stood at Rs112.3bn, up 28.5% YoY.
- Products and Platforms performance was robust:** TCS' BaNCS scored 5 new wins in the Banking domain and 6 go-lives, of which 2 were for digital banking platform, 2 were for wealth management solutions and 1 for payments. This includes one of the largest deal wins ever. TCS BaNCS was selected as the cloud based platform for its wealth management business in the US by a global investment bank. Quartz - The Smart Ledger scored 4 new wins and 1 go-live in 3QFY21. TCS' HOBS – a platform for communication service providers - scored 3 new wins and 4 go-lives during the quarter. As customers progressed with their modernization and core transformation journeys, TCS witnessed accelerated demand for MasterCraft, which is a suite of intelligent automation products for end-to-end enterprise modernisation. TCS saw 8 new wins for MasterCraft in 3QFY21.
- Secure Borderless Workspaces (SBWS Model):** TCS has invested in open agile workspaces in the past, enabling the company to swiftly adapt to changes in the working environment. The management stated that ~3.4% of the workforce is currently working from the company's facilities only for business-critical activities.
- Domain, contextual and cross industry knowledge key to gaining market share:** TCS' contextual master pool grew by 25% in 3QFY21 and now has 15,000 contextual masters. TCS stated that its policy of retaining and retraining its employees has held it in good stead with a big focus on domain and contextual knowledge. Domain/vertical knowledge has helped it to address clients' needs with complete solutions rather than just executing technical projects. The deep contextual understanding of a customer' business because of a long association with them has helped it to come up with differentiated solutions. Similarly, TCS has brought forward cross industry knowledge to deliver breakthrough improvements rather than incremental improvements. For example, TCS talked about how claims processing in the insurance space has helped it to address issues in healthcare.
- Digital Services:** According to TCS, there was strong demand for hyperscaler cloud services. The key areas included mainframe and legacy modernizations, data modernization on cloud (MDM, data lakes), augmented analytics for in-context insights, risk regulatory & compliance analytics and use of cloud platforms for collaboration. TCS stated that Cybersecurity continued to be of the highest priority as new work models emerge. “The need to enhance user experience across enterprise functions drove good growth for professional services around Salesforce, SAP S/4 HANA and BPM. Consumer demand for automated and contact-less services led to good growth for TCS Interactive; in design led services, digital marketing and content services. Growth in IoT was led by strong demand for implementing IoT-enabled remote monitoring and self-optimizing plant operations".
- New offerings launched in 3QFY21:** CogniX™, an AI-driven suite of pre-built solutions for accelerating digital transformation of operations; ConvertCore™ for accelerated S/4HANA transformation assessment & migration and an expanded version of Crystallus™, a contextualized pre-configured solution for enterprise transformation, to cover Railways.

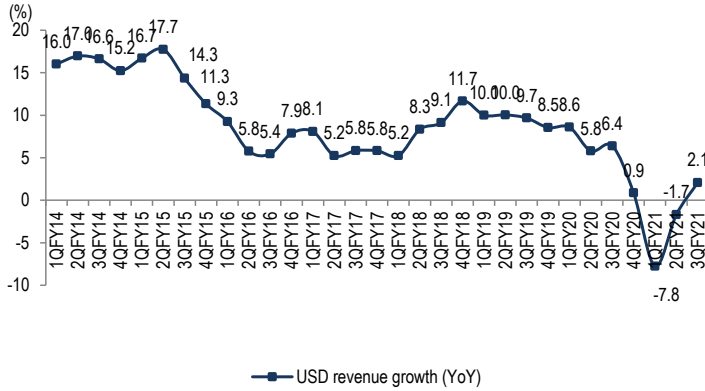
Miscellaneous

- TCS reported a record low LTM attrition rate (in IT services) of 7.6% vs. 8.9% in 2QFY21 and 12.2% in 3QFY20. This bodes well for revenue growth and margins. However, TCS stated that it expects attrition to increase going forward. In terms of salary hikes, it indicated that it would go back to its normal cycle but did not clearly state whether the next hike would happen in April 2021.
- Net manpower increased substantially by 15,721 QoQ - the highest ever in its history in a quarter - taking the total employee count to ~469,261. This includes 1,500 employees joining TCS' new delivery center in

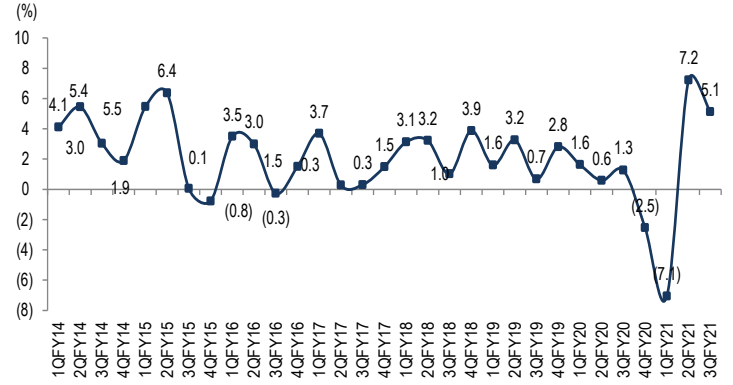
Ireland (Pramerica) and ~12,000 trainees who were on-boarded in the quarter. In the wake of the increased demand for business transformation and tech adoption, TCS has up-skilled more than 366,000 employees in advanced technologies and 444,000 in agile methods. TCS believes that its sustained investment in organic talent development is now paying rich dividends and is helping it to support business growth. TCS stated that it is also continuing along its journey of reimagining and transforming the HR value chain, leveraging technology innovatively to digitize processes, virtualize interactions and enhance responsiveness. The successful implementation of TCS' initiatives for entry-level hiring, training and on-boarding have encouraged the company to roll out similar models for mid-level hiring and incremental reskilling.

- TCS lost one client in the US\$100M+ bracket; clients in the US\$50M+, US\$10M+ and US\$5M+ remained flat; one client was added in the US\$20M+ bracket.
- In line with TCS' capital return policy, TCS announced an interim dividend of Rs6 per share. The buyback of shares by TCS closed on 1 January 2021. It had opened on 18 December 2020. In all the TCS would have bought back Rs160bn worth of stock at price of Rs3000 in a tender offer. This has led to a reduction in the outstanding shares by ~1.4%. This is the third share buyback by TCS after August 2018 and May 2017.

Exhibit 5: USD revenue growth rises QoQ and YoY

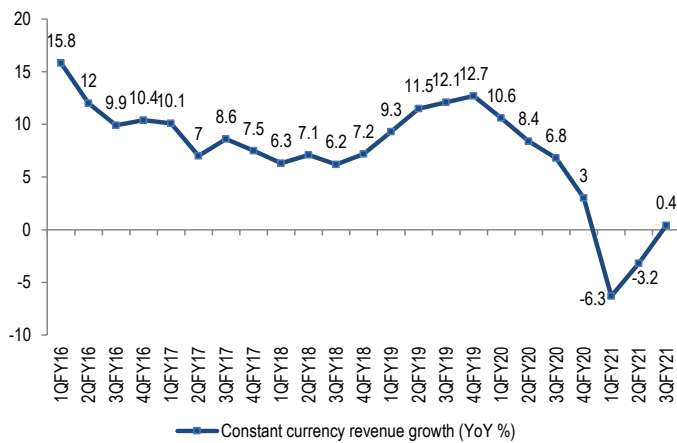


Source: Company, Nirmal Bang Institutional Equities Research



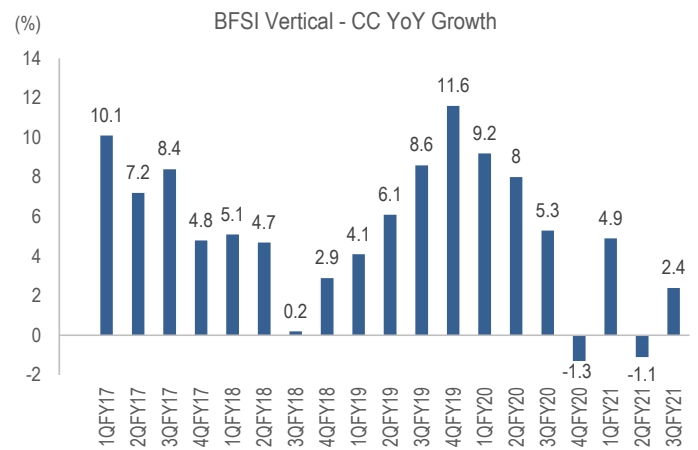
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 6: CC YoY revenue improves QoQ



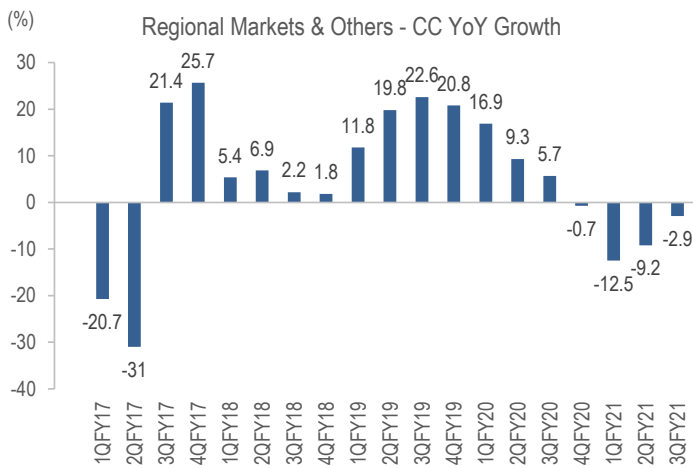
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 7: CC YoY of BFSI vertical



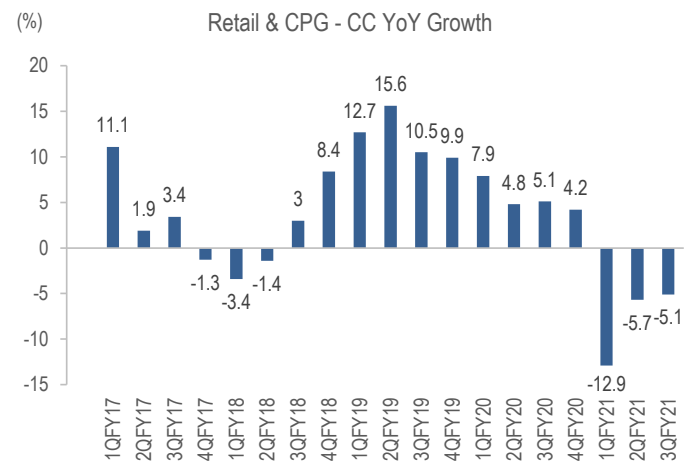
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 8: CC YoY Regional Markets and others



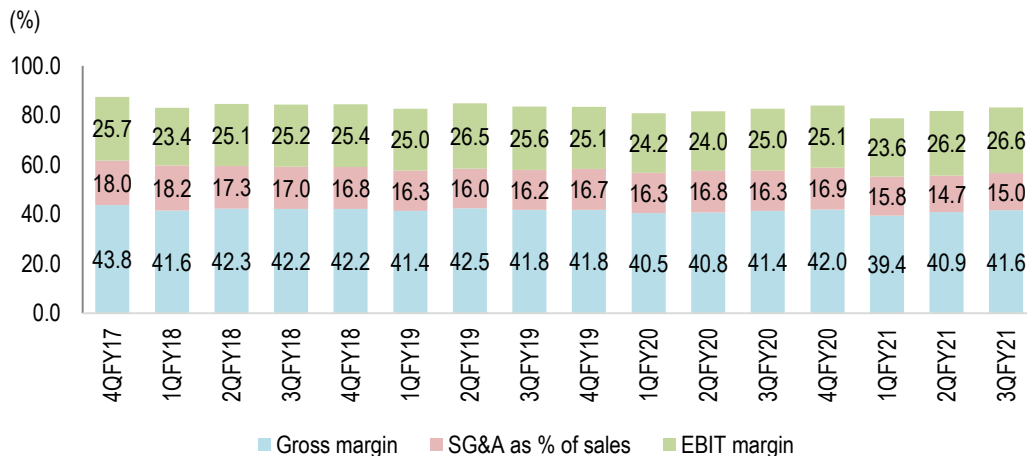
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 9: CC YoY Retail and CPG vertical



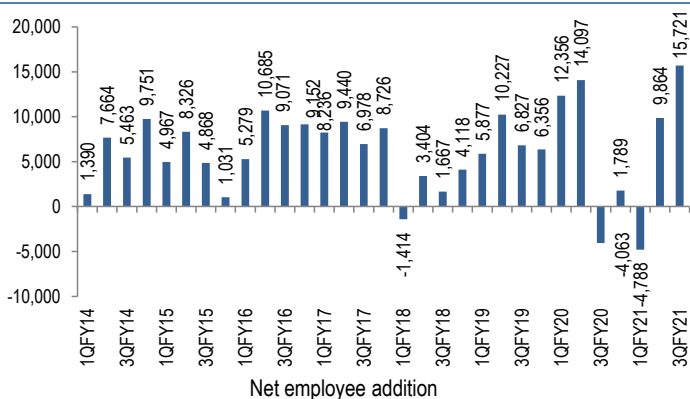
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 10: Gross, EBIT margin and SGA picture



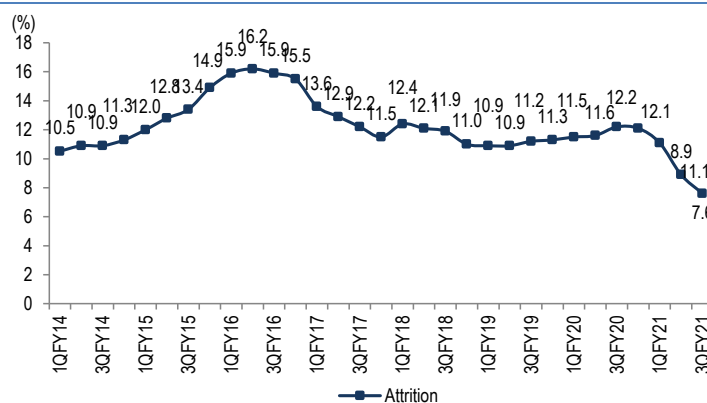
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 11: Net employee addition highest ever



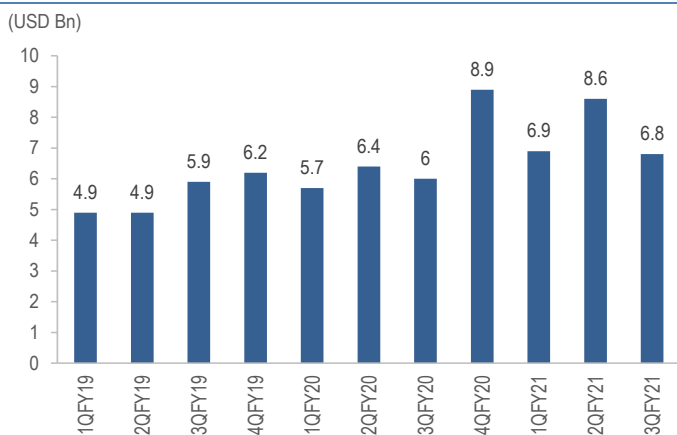
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 12: Attrition rate further declined QoQ



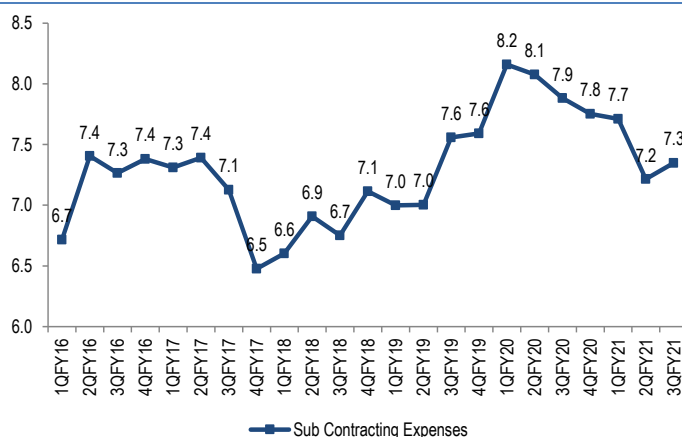
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 13: Quarterly TCV numbers

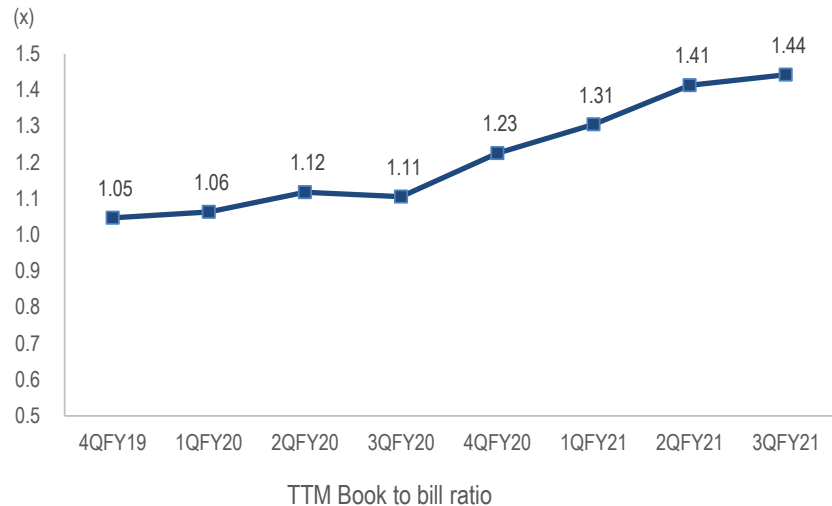


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 14: Subcontractor charges increased marginally QoQ



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 15: TTM Book/Bill ratio has improved significantly


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 16: Quarterly snapshot

Year to 31 March	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20	1QFY21	2QFY21	3QFY21
INR/USD	64.4	64.5	64.6	64.5	67.8	70.0	72.2	70.4	69.6	70.6	71.4	72.3	75.8	74.0	73.7
Revenue (in USDmn)	4591	4739	4787	4972	5051	5215	5250	5397	5485	5517	5586	5444	5059	5424	5702
(Rsmn)															
Revenue	295,840	305,410	309,040	320,750	342,610	368,540	373,380	380,100	381,720	389,770	398,540	399,460	383,220	4,01,350	4,20,150
Gross margin	122,930	129,300	130,420	135,510	141,780	156,540	156,030	158,700	154,510	159,140	164,850	167,770	151,080	1,64,200	1,74,880
EBIT	69,140	76,600	77,810	81,470	85,780	97,710	95,640	95,370	92,200	93,610	99,740	100,250	90,480	1,05,150	1,11,840
Other income	9,320	8,120	8,640	9,820	12,080	5,930	11,470	11,650	14,180	11,680	5,950	4,870	4,560	7,400	5,080
PBT	78,460	84,720	86,450	91,290	97,860	103,640	107,110	107,020	106,380	105,290	105,690	105,120	95,040	1,12,550	1,16,920
Tax	18,960	20,120	21,000	22,040	24,240	24,370	25,900	25,500	24,850	24,710	24,260	24,190	24,550	27,930	29,650
PAT	59,450	64,460	65,310	69,040	73,400	79,010	81,050	81,260	81,310	80,420	81,180	80,490	70,080	84,330	87,010
Number of shares	3,941	3,829	3,829	3,829	3,829	3,829	3,752	3,752	3,752	3,752	3,752	3,752	3,752	3,752	3,752
EPS	15.1	16.8	17.1	18.0	19.2	20.6	21.6	21.7	21.7	21.4	21.6	21.5	18.7	22.5	23.2
YoY Growth (%)															
USD Revenue	5.2	8.3	9.1	11.7	10.0	10.0	9.7	8.5	8.6	5.8	6.4	0.9	-7.8	-1.7	2.1
INR Revenues	1.0	4.3	3.9	8.2	15.8	20.7	20.8	18.5	11.4	5.8	6.7	5.1	0.4	3.0	5.4
Gross profit	-1.7	1.4	1.4	4.5	15.3	21.1	19.6	17.1	9.0	1.7	5.7	5.7	-2.2	3.2	6.1
EBIT	-5.9	0.6	0.6	6.8	24.1	27.6	22.9	17.1	7.5	-4.2	4.3	5.1	-1.9	12.3	12.1
Net profit	-5.9	-2.1	-3.6	4.5	23.5	22.6	24.1	17.7	10.8	1.8	0.2	-0.9	-13.8	4.9	7.2
QoQ Growth (%)															
USD Revenues	3.12	3.22	1.01	3.86	1.59	3.2	0.7	2.8	1.6	0.6	1.3	(2.5)	(7.1)	7.2	5.1
INR Revenues	(0.2)	3.2	1.2	3.8	6.8	7.6	1.3	1.8	0.4	2.1	2.3	0.2	(4.1)	4.7	4.7
EBIT	(9.3)	10.8	1.6	4.7	5.3	13.9	(2.1)	(0.3)	(3.3)	1.5	6.5	0.5	(9.7)	16.2	6.4
Net profit	(10.0)	8.4	1.3	5.7	6.3	7.6	2.6	0.3	0.1	(1.1)	0.9	(0.8)	(12.9)	20.3	3.2
Margins (%)															
Gross margin	41.6	42.3	42.2	42.2	41.4	42.5	41.8	41.8	40.5	40.8	41.4	42.0	39.4	40.9	41.6
EBIT	23.4	25.1	25.2	25.4	25.0	26.5	25.6	25.1	24.2	24.0	25.0	25.1	23.6	26.2	26.6
PAT	20.1	21.1	21.1	21.5	21.4	21.4	21.7	21.4	21.3	20.6	20.4	20.1	18.3	21.0	20.7
SGA	18.2	17.3	17.0	16.8	16.3	16.0	16.2	16.7	16.3	16.8	16.3	16.9	15.8	14.7	15.0

Source: Company, Nirmal Bang Institutional Equities Research. Note: Excludes the one-off provisioning for Epic Systems

Exhibit 17: Key metrics

	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20	1QFY21	2QFY21	3QFY21
P and L (Rsmn)															
Revenue	295,840	305,410	309,040	320,750	342,610	368,540	373,380	380,100	381,720	389,770	398,540	399,460	383,220	401,350	420,150
EBITDA	69,140	76,600	77,810	81,470	85,780	97,710	95,640	95,370	92,200	93,610	99,740	100,250	90,480	105,150	111,840
PAT	59,450	64,460	65,310	69,040	73,400	79,010	81,050	81,260	81,310	80,420	81,180	80,490	70,080	84,330	87,010
Vertical Mix (%)															
BFSI	32.9	33.0	32.1	31.5	31.1	31.2	30.8	30.9	30.8	31.0	30.4	29.7	31.3	31.9	31.3
Manufacturing	7.5	7.5	7.6	7.4	10.2	9.8	9.8	9.6	9.8	9.8	10.0	10.1	9.7	9.4	9.6
Communication and Media	7.3	7.3	7.4	7.4	7.1	6.8	6.9	6.8	6.9	7.0	7.0	7.2	7.1	6.5	6.6
Life Sciences	7.1	7.2	7.3	7.2	7.3	7.5	7.6	7.7	7.9	8.1	8.3	8.8	9.6	9.8	9.8
Retail & Distribution	12.2	11.9	12.5	12.3	15.4	15.4	15.5	15.1	15.0	14.8	15.2	15.4	14.0	14.6	14.5
Hi-Tech	7.9	8.1	8.0	7.8	9.0	8.9	8.7	8.6	8.8	8.7	8.4	8.7	9.1	8.9	8.6
Travel and hospitality	3.5	3.8	3.8	4.0	-	-	-	-	-	-	-	-	-	-	-
Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Energy And Utility	4.0	4.2	4.5	4.8	-	-	-	-	-	-	-	-	-	-	-
Media & Entertainment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	17.6	17.0	16.8	17.6	19.9	20.4	20.7	21.3	20.8	20.6	20.7	20.1	19.2	18.9	19.6
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Geographic Mix (%)															
North America	52.5	51.9	52.0	50.2	51.0	51.1	51.2	50.7	50.6	50.6	50.1	50.3	51.4	49.9	49.1
UK	13.9	14.0	14.1	15.2	15.5	15.6	15.5	15.9	15.8	15.6	15.9	16.0	15.3	15.5	15.7
Europe	12.5	13.4	13.5	14.2	14.0	14.0	14.1	14.1	14.3	14.6	14.9	15.2	15.6	16.3	16.2
India	7.0	6.3	6.3	6.2	5.8	5.6	5.7	5.8	6.0	5.7	5.7	5.5	4.3	5.0	5.6
APAC	9.5	9.8	9.5	9.7	9.6	9.6	9.4	9.5	9.4	9.4	9.3	9.3	9.8	9.7	9.7
Ibero America	2.1	2.2	2.2	2.0	1.9	2.1	2.0	2.0	1.8	1.9	1.9	1.8	1.7	1.7	1.7
MEA	2.5	2.4	2.4	2.5	2.2	2.1	2.1	2.0	2.1	2.2	2.2	1.9	1.9	1.9	2.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Client															
\$100mn +	36	37	37	38	40	44	45	44	44	47	47	49	48	49	48
\$50mn +	85	91	94	97	97	98	99	99	100	101	102	105	100	97	97
Employee Number	385,809	389,213	390,880	394,998	400,875	411,102	417,929	424,285	436,641	450,738	446,675	448,464	443,676	453,540	469,261
Net Addition	(1,414)	3,404	1,667	4,118	5,877	10,227	6,827	6,356	12,356	14,097	(4,063)	1,789	(4,788)	9,864	15,721
Attrition (%)	12.4	12.1	11.9	11.0	10.9	10.9	11.2	11.3	11.5	11.6	12.2	12.1	11.1	8.9	7.6

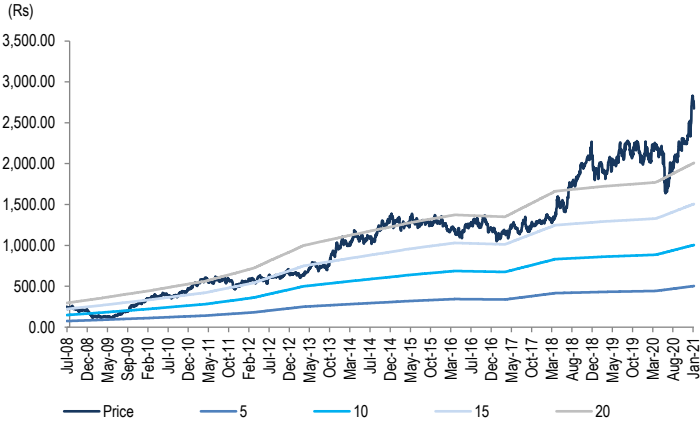
Source: Company, Nirmal Bang Institutional Equities Research .Note: Excludes the one-off provisioning for Epic Systems

Exhibit 18: QoQ and YoY growth on various parameters for TCS

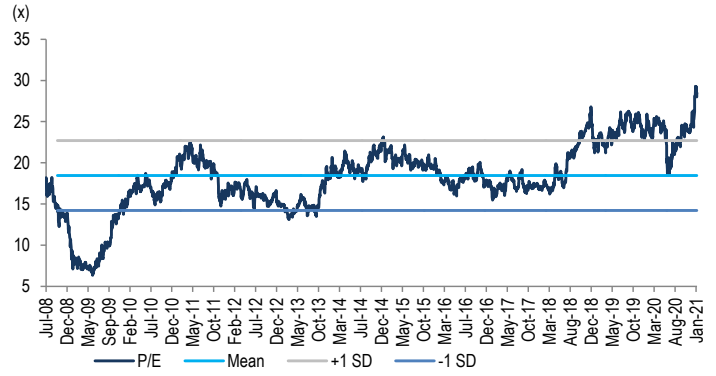
QoQ Growth (%)	1QFY17	2QFY17	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	3QFY20	4QFY20	1QFY21	2QFY21	3QFY21
Revenue	4	0	0	1	3	3	1	4	2	3	1	3	2	1	1	-3	-7	7	5
Geographical Data																			
Americas	3	1	2	(2)	2	2	1	0	3	3	1	2	1	1	0	(2)	(5)	4	3
UK	3	(7)	(3)	5	5	4	2	12	4	4	0	5	1	(1)	3	(2)	(11)	9	6
Europe	6	3	(6)	8	9	11	2	9	0	3	1	3	3	3	3	(1)	(5)	12	4
India	9	(6)	9	10	6	(7)	1	2	(5)	(0)	2	5	5	(4)	1	(6)	(27)	25	18
APAC	4	7	(6)	3	1	6	(2)	6	1	3	(1)	4	1	1	0	(3)	(2)	6	5
Ibero America	4	0	10	(3)	3	8	1	(6)	(3)	14	(4)	3	(9)	6	1	(8)	(12)	7	5
MEA	4	0	4	6	(1)	(1)	1	8	(11)	(1)	1	(2)	7	5	1	(16)	(7)	7	11
Verticals																			
BFSI	-	1	1	(2)	3	4	(2)	2	0	4	(1)	3	1	1	(1)	(5)	(2)	9	3
Manufacturing	-	0	2	1	5	3	2	1	40	(1)	1	1	4	1	3	(2)	(11)	4	7
Communication and Media	-	3	(7)	9	5	3	2	4	(3)	(1)	2	1	3	2	1	0	(8)	1	7
Life Science & Healthcare	-	3	(1)	1	6	5	2	2	3	6	2	4	4	3	4	3	1	9	5
Retail and distribution	-	(3)	0	(4)	2	1	6	2	27	3	1	0	1	(1)	4	(1)	(16)	12	4
Hi-Tech (Now Technology Services)	-	(1)	2	1	4	6	(0)	1	17	2	(2)	2	-	-	-	-	-	-	-
Travel and hospitality	-	3	(3)	8	6	12	1	9	0	0	0	0	0	0	0	0	0	0	0
Energy and Utilities	-	3	(2)	4	11	8	8	11	-	-	-	-	-	-	-	-	-	-	-
Regional Market & Others	-	(1)	2	7	(1)	(0)	(0)	9	15	6	2	6	(1)	(0)	2	(5)	(11)	6	9
YoY Growth (%)																			
Revenue	8	8	5	6	6	5	8	9	12	10	10	10	9	9	6	6	1	(8)	(2)
Geographical Data																			
Americas	10	8	9	4	3	4	3	5	7	8	8	10	8	5	4	0	(6)	(3)	0
UK	(1)	(11)	(11)	(3)	(1)	10	16	24	23	23	21	14	11	6	9	2	(11)	(2)	1
Europe	13	15	8	11	14	23	33	34	23	15	15	8	11	10	12	9	1	10	11
India	5	(6)	11	22	19	18	9	2	(9)	(2)	(1)	2	12	8	6	(4)	(34)	(14)	0
APAC	8	14	8	7	4	4	8	12	11	8	9	6	6	4	5	(1)	(4)	1	6
Ibero America	14	17	11	11	11	19	9	6	(0)	5	(0)	9	3	(4)	1	(9)	(13)	(12)	(9)
MEA	18	5	20	15	10	8	5	7	(3)	(4)	(4)	(13)	4	11	11	(4)	(17)	(15)	(7)
Verticals																			
BFSI					4	6	3	7	4	4	5	6	8	5	5	(3)	(6)	1	5
Manufacturing					8	11	12	12	50	44	41	41	4	6	9	6	(9)	(6)	(2)
Communication and Media					10	10	21	15	7	3	2	(0)	6	9	8	7	(5)	(9)	(4)
Life Science & Healthcare					10	11	15	17	13	15	14	16	18	14	16	15	12	19	21
Retail and distribution					(5)	(1)	5	12	39	42	36	33	6	2	4	3	(14)	(3)	(3)
Hi-Tech					7	14	12	12	25	21	19	20	6	3	3	2	(5)	1	5
Travel and hospitality					15	25	30	31	0	0	0	0	0	0	0	0	0	0	0
Energy and Utilities					17	23	36	45	-	-	-	-	-	-	-	-	-	-	-
Regional Market & Others					6	7	5	7	24	32	35	31	14	7	6	(5)	(15)	(10)	(3)

Source: Nirmal Bang Institutional Equities Research

Exhibit 19: P/E multiple charts

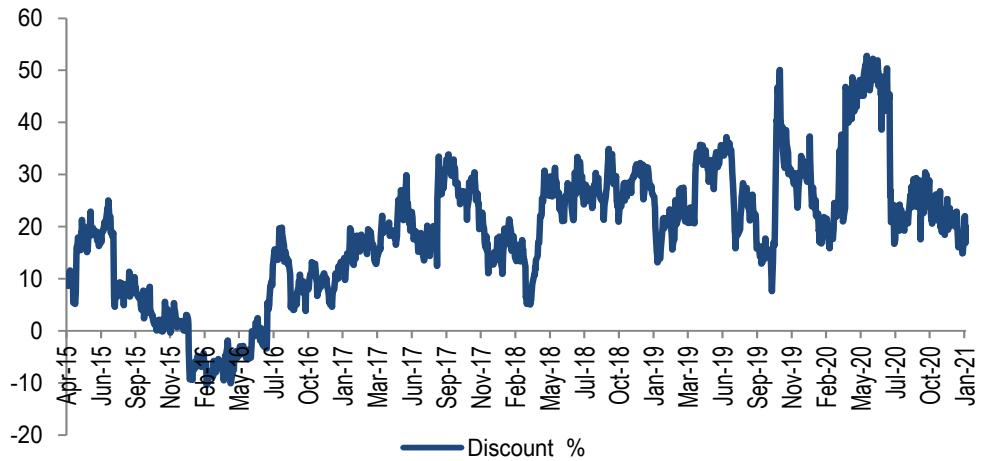


Source: Bloomberg, Nirmal Bang Institutional Equities Research



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 20: P/E premium/(discount) chart of TCS over Infosys



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Financials

Exhibit 21: Income statement

Y/E March (Rsbn)	FY19	FY20	FY21E	FY22E	FY23E
Average INR/USD	70.1	71.0	74.2	75.2	76.8
Net Sales (USD mn)	20,913	22,032	22,087	25,240	27,852
-Growth (%)	9.6	5.4	0.2	14.3	10.4
Net Sales	1,465	1,569	1,637	1,898	2,138
-Growth (%)	19.0	7.2	4.3	16.0	12.6
Cost of Sales & Services	852	923	970	1,115	1,237
Gross Margin	613	646	667	783	901
% of sales	41.9	41.2	40.8	41.3	42.1
SG&A	239	260	248	295	335
% of sales	16.3	16.6	15.2	15.5	15.7
EBIT	375	386	419	488	566
EBIT Margin (%)	25.6	24.6	25.6	25.7	26.5
Other income (net)	41	37	23	16	17
PBT	416	422	442	504	583
-PBT margin (%)	28.4	26.9	27.0	26.5	27.3
Provision for tax	100	98	110	118	137
Effective tax rate (%)	24.1	23.2	24.8	23.5	23.5
Minority Interest	1	1	1	1	1
Net profit	315	323	331	384	445
-Growth (%)	21.9	2.8	2.3	16.2	15.7
-Net profit margin (%)	21.5	20.6	20.2	20.2	20.8
Average Shares outstanding-	3,790	3,752	3,726	3,699	3,699

Source: Company, Nirmal Bang Institutional Equities Research; Note: Excludes the one-off provisioning for Epic Systems

Exhibit 23: Balance sheet

Y/E March (Rsbn)	FY19	FY20	FY21E	FY22E	FY23E
Equity capital	3.8	3.8	3.8	3.8	3.8
Reserves & surplus	916	844	914	965	1,051
Net worth	920	847	918	969	1,055
Minority Interest	-	-	-	-	-
Other liabilities	29	22	21	24	27
Total loans	1	-	-	-	-
Lease liabilities		82	79	79	79
Total liabilities	950	951	1,017	1,072	1,160
Goodwill	40	20	44	44	44
Net block (incl. CWIP)	117	118	121	124	128
Investments	2	2	2	2	2
Deferred tax asset - net	26	28	34	39	43
Other non-current assets	59	54	47	51	53
Right of use asset		80	77	77	77
Other current assets	470	443	467	481	493
Debtors	330	367	389	445	492
Cash & bank balance	72	86	72	62	52
Bank deposits	54	10	50	63	118
Total current assets	926	906	977	1,051	1,155
Total current liabilities	221	258	285	316	342
Net current assets	706	648	692	735	813
Total assets	950	951	1,017	1,072	1,160

Source: Company, Nirmal Bang Institutional Equities Research Note: Excludes the one-off provisioning for Epic Systems

Exhibit 22: Cash flow

Y/E March (Rsbn)	FY19	FY20	FY21E	FY22E	FY23E
EBIT	375	386	419	488	566
(Inc./dec. in working capital)	(50)	75	26	(44)	(38)
Cash flow from operations	325	461	445	444	528
Other income	41	37	23	16	17
Depreciation & amortisation	24	35	40	42	43
Financial expenses	-	-	-	-	-
Tax paid	(100)	(98)	(110)	(118)	(137)
Dividends paid	(136)	(330)	(104)	(401)	(432)
Net cash from operations	154	105	295	(18)	19
Capital expenditure	(18)	(19)	(10)	(15)	(15)
Net cash after capex	136	86	285	(33)	4
Inc./(dec.) in debt	(2)	(1)	-	-	-
(Inc./dec. in investments)	67	30	(48)	-	-
Equity issue/(Share Buyback)	(160)	-	(192)	-	-
Cash from financial activities	(95)	29	(240)	-	-
Others	17	(145)	(20)	36	40
Opening cash	69	127	97	122	125
Closing cash	127	96	121	125	170
Change in cash	58	(30)	25	3	44

Source: Company, Nirmal Bang Institutional Equities Research. Note: Excludes the one-off provisioning for Epic Systems

Exhibit 24: Key ratios

Y/E March	FY19	FY20	FY21E	FY22E	FY23E
Per Share (Rs)					
EPS	83.1	86.2	88.5	103.9	120.3
FDEPS	83.1	86.2	88.5	103.9	120.3
Dividend Per Share	29.9	73.0	23.2	90.0	97.0
Dividend Yield (%)	1.0	2.3	0.7	2.9	3.1
Book Value	240	221	240	253	281
Dividend Payout Ratio (incl DT)	36.0	84.7	26.1	86.6	80.7
Return ratios (%)					
RoE	35.0	36.6	37.5	40.8	44.0
RoCE	35.7	35.1	36.0	39.1	42.3
Pre Tax ROIC (%)	61.8	55.5	55.7	60.8	65.2
Turnover Ratios					
Asset Turnover Ratio	1.3	1.3	1.3	1.4	1.4
Debtor Days (incl. unbilled Rev)	82	85	87	85	84
Working Capital Cycle Days	72	49	41	43	44
Valuation ratios (x)					
PER	37.6	36.2	35.3	30.0	26.0
P/BV	13.0	14.1	13.0	12.3	11.1
EV/EBTDA	29.8	28.2	25.9	22.4	19.1
EV/Sales	8.1	7.6	7.3	6.3	5.5
M-cap/Sales	8.2	7.6	7.3	6.3	5.5

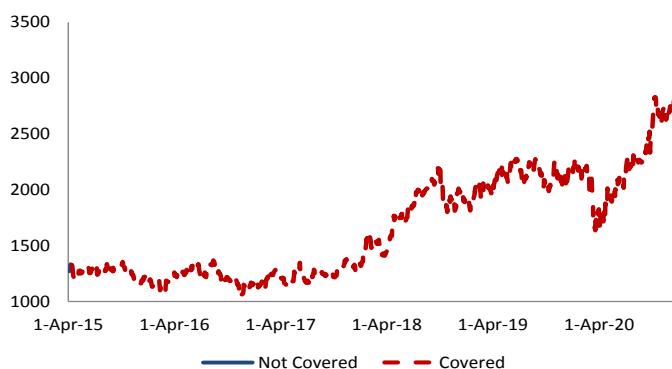
Source: Company, Nirmal Bang Institutional Equities Research. Note: Excludes the one-off provisioning for Epic Systems

Rating track

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
05 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
11 January 2019	Sell	1,883	1,545
18 March 2019	Sell	2,040	1,607
19 March 2019	Sell	2,023	1,607
15 April 2019	Sell	2,015	1,614
10 July 2019	Sell	2,120	1,601
23 September 2019	Sell	2,020	1,615
10 October 2019	Sell	2,004	1,593
2 January 2020	Under Review	2,170	-
20 January 2020	Under Review	2,220	-
30 March 2020	Sell	1,850	1,393
17 April 2020	Sell	1,716	1,393
10 July 2020	Under Review	2,204	-
6 September 2020	Accumulate	2,289	2,381
28 September 2020	Accumulate	2,422	2,537
8 October 2020	Accumulate	2,736	2,809
29 December 2020	Accumulate	2,929	3,001
10 January 2021	Accumulate	3,121	3,157

* Post 1:1 Bonus

Rating track graph



DISCLOSURES

This Report is published by Nirmal Bang Equities Private Limited (hereinafter referred to as “NBEPL”) for private circulation. NBEPL is a registered Research Analyst under SEBI (Research Analyst) Regulations, 2014 having Registration no. INH000001436. NBEPL is also a registered Stock Broker with National Stock Exchange of India Limited and BSE Limited in cash and derivatives segments.

NBEPL has other business divisions with independent research teams separated by Chinese walls, and therefore may, at times, have different or contrary views on stocks and markets.

NBEPL or its associates have not been debarred / suspended by SEBI or any other regulatory authority for accessing / dealing in securities Market. NBEPL, its associates or analyst or his relatives do not hold any financial interest in the subject company. NBEPL or its associates or Analyst do not have any conflict or material conflict of interest at the time of publication of the research report with the subject company. NBEPL or its associates or Analyst or his relatives do not hold beneficial ownership of 1% or more in the subject company at the end of the month immediately preceding the date of publication of this research report.

NBEPL or its associates / analyst has not received any compensation / managed or co-managed public offering of securities of the company covered by Analyst during the past twelve months. NBEPL or its associates have not received any compensation or other benefits from the company covered by Analyst or third party in connection with the research report. Analyst has not served as an officer, director or employee of Subject Company and NBEPL / analyst has not been engaged in market making activity of the subject company.

Analyst Certification: I, Girish Pai, research analyst, the author of this report, hereby certifies that the views expressed in this research report accurately reflects my personal views about the subject securities, issuers, products, sectors or industries. It is also certified that no part of the compensation of the analyst was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research. The analysis principally responsible for the preparation of this research report and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

Disclaimer

Stock Ratings Absolute Returns

BUY > 15%

ACCUMULATE -5% to 15%

SELL < -5%

This report is for the personal information of the authorized recipient and does not construe to be any investment, legal or taxation advice to you. NBEPL is not soliciting any action based upon it. Nothing in this research shall be construed as a solicitation to buy or sell any security or product, or to engage in or refrain from engaging in any such transaction. In preparing this research, we did not take into account the investment objectives, financial situation and particular needs of the reader.

This research has been prepared for the general use of the clients of NBEPL and must not be copied, either in whole or in part, or distributed or redistributed to any other person in any form. If you are not the intended recipient you must not use or disclose the information in this research in any way. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. NBEPL will not treat recipients as customers by virtue of their receiving this report. This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject NBEPL & its group companies to registration or licensing requirements within such jurisdictions.

The report is based on the information obtained from sources believed to be reliable, but we do not make any representation or warranty that it is accurate, complete or up-to-date and it should not be relied upon as such. We accept no obligation to correct or update the information or opinions in it. NBEPL or any of its affiliates or employees shall not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. NBEPL or any of its affiliates or employees do not provide, at any time, any express or implied warranty of any kind, regarding any matter pertaining to this report, including without limitation the implied warranties of merchantability, fitness for a particular purpose, and non-infringement. The recipients of this report should rely on their own investigations.

This information is subject to change without any prior notice. NBEPL reserves its absolute discretion and right to make or refrain from making modifications and alterations to this statement from time to time. Nevertheless, NBEPL is committed to providing independent and transparent recommendations to its clients, and would be happy to provide information in response to specific client queries.

Before making an investment decision on the basis of this research, the reader needs to consider, with or without the assistance of an adviser, whether the advice is appropriate in light of their particular investment needs, objectives and financial circumstances. There are risks involved in securities trading. The price of securities can and does fluctuate, and an individual security may even become valueless. International investors are reminded of the additional risks inherent in international investments, such as currency fluctuations and international stock market or economic conditions, which may adversely affect the value of the investment. Opinions expressed are subject to change without any notice. Neither the company nor the director or the employees of NBEPL accept any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this research and/or further communication in relation to this research. Here it may be noted that neither NBEPL, nor its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profit that may arise from or in connection with the use of the information contained in this report.

Copyright of this document vests exclusively with NBEPL.

Our reports are also available on our website www.nirmalbang.com

Access all our reports on Bloomberg, Thomson Reuters and Factset.

Team Details:			
Name		Email Id	Direct Line
Rahul Arora	CEO	rahul.arora@nirmalbang.com	-
Girish Pai	Head of Research	girish.pai@nirmalbang.com	+91 22 6273 8017 / 18
Dealing			
Ravi Jagtiani	Dealing Desk	ravi.jagtiani@nirmalbang.com	+91 22 6273 8230, +91 22 6636 8833
Michael Pillai	Dealing Desk	michael.pillai@nirmalbang.com	+91 22 6273 8102/8103, +91 22 6636 8830

Nirmal Bang Equities Pvt. Ltd.

Correspondence Address

B-2, 301/302, Marathon Innova,
 Nr. Peninsula Corporate Park,
 Lower Parel (W), Mumbai-400013.

Board No. : 91 22 6273 8000/1; Fax. : 022 6273 8010