

indian it Services sector

Structural and cyclical speed presenting





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Information Technology Sector

13 April 2015

Structural And Cyclical Speed-breakers Ahead

We initiate coverage on the Indian IT services sector with a negative view and expect a market cap-weighted return of -7% till March 2016. We expect the sector to grow at 8%-10% rate over FY15E-FY18E in US dollar (USD) terms, at least 200bps-400bps below current consensus estimate with a downside risk. The sector's growth, in our view, will be under pressure from: (1) Low IT spending because of tepid sales growth across enterprises in developed countries, and (2) Value/volume compression within the legacy business (likely >50% of revenue) because of increased automation and intense competition on convergence of capabilities/strategies among Tier-1 Indian players. 'Digital' is not going to move the needle materially. Earnings growth is likely to be muted (11% over FY15E-FY18E) and below consensus due to lower revenues, increased salaries, investments in (a) re-skilling (b) automation (c) sales and marketing. This will be countered by lower efforts due to automation, modest INR depreciation (61/63/64 in FY16/FY17/FY18) and use of whatever levers that are left. There are downside risks to our margin/earnings estimates from likely higher retrenchment costs arising out of large 'involuntary' attrition. We believe it is difficult to model some of the risks (and their timing) stated above and believe that investors should keep in mind P/E multiples when buying stocks. We find the current P/Es (1+SD above 3-year mean) to be rich in the above context. The other risk that will keep P/E multiple depressed is maturing of the US economic cycle. If the sector faces pressure during 'good times', it portends 'worst case' when the cycle turns.

Mini cycle of creative destruction on the cards: Indian IT industry has been built on the bedrock of labour cost arbitrage, as reflected in the decades-old onsite:offshore model. We believe this model is likely to be challenged by pieces of software that tend to disintermediate the human element (especially the offshore one which does a lot of mundane repetitive work). Increasing cognitive powers of these pieces of software will make more and more parts of the sector vulnerable to revenue/value compression. Unlike in many other cases connected with the technology sector in the past, we see no outside player - at least as of now - taking away the market. We believe the incumbents have been embracing automation at a calibrated pace till now. We see constrained demand and intense competition accelerating that pace. We also believe that the outsourcing opportunity will reduce as automation software players approach end-customers directly bypassing IT services vendors. We believe the bargaining power of various players within the industry will undergo change (see our five forces analysis inside). We are by no means writing off the sector. We believe a hybrid model of human and digital labor will develop. We do not see revenue falling off the cliff, but definitely see insipid revenue growth as this churn plays out over the next three-five years until Digital, IOT or some new technology becomes a sizable part of revenues and rescues the sector. Our base case view is that margins will not be hurt in a material way during this phase. However, any panicky and irrational behavior by players could hurt profitability of the entire industry.

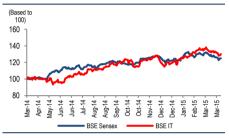
Risks to our view: A pick-up in sales growth across global enterprises, weaker-thanexpected moves in automation, disappointing domestic recovery leading to a much weaker INR, elongation of the US economic upcycle, etc will negate our view.

View: Negative

Girish Pai

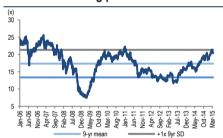
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One-Year Indexed Performance



Source: Bloomberg

CNX IT P/E nearing peak



Source: Bloomberg

US\$ revenue growth rate estimates

_						
	FY15E	FY16E	FY17E			
TCS	15.2	12.6	9.4			
Infosys	6.4	8.6	8.3			
Wipro	7.7	7.0	6.1			
HCL Tech	11.9	12.2	11.2			
Tech Mahindra	17.5	21.7	11.3			

Source: Nirmal Bang Institutional Equities Research

	Rating	CMP	М-сар	March 2016	Target P/E	get P/E Upside/ FDEPS (Rs)		FDEPS (Rs)			P/E (x)	
Companies		(Rs)	(US\$bn)	Target price	(x)	(Downside)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E
TCS	Sell	2,651	83.8	2,314	18.1	(12.7)	108.2	116.2	127.8	24.5	22.8	20.7
Infosys	Acc.	2,229	41.1	2,147	16.3	(3.7)	108.4	116.2	131.8	20.6	19.2	16.9
Wipro	Sell.	617	24.5	576	15.4	(6.6)	34.8	34.2	37.3	17.7	18.0	16.5
HCL Tech	Acc.	959	21.7	1,013	16.3	5.6	51.1	54.0	64.9	18.6	17.6	14.7
Tech Mahindra	Sell	660	10.0	593	14.5	(10.2)	29.2	32.7	41.0	22.0	19.6	15.6

Source: Company, Nirmal Bang Institutional Equities Research

[Acknowledge the contribution of Vivek Sarin, Associate, in data presentation connected with the report]



Creative Destruction

"Process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one"

Joseph Schumpeter - "Capitalism, Socialism and Democracy" (1942)



Table of Contents

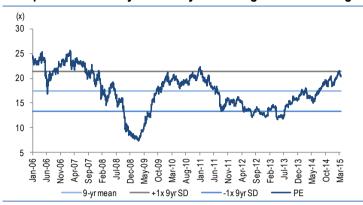
Revenue growth to disappoint	07
Why US recovery not reflected in better S&P 500 sales growth	15
Indian players already volume leaders in global IT space	17
Creative destruction on the cards	18
Digital will not move the needle very much	24
Revisit of Five Forces Analysis	25
US macro cycle maturing – increasing risks	27
Financials – Low growth with risks	28
Valuations – Current P/E not pricing in risks to growth	34
Risks to our view	39
Companies	
TCS	41
Infosys	57
Wipro	71
HCL Technologies	89
	40.



Focus charts

Exhibit 1: IT index is trading at +1 SD above mean P/E multiples based on 9-year history when its growth is slowing

Exhibit 2: Our numbers are below consensus



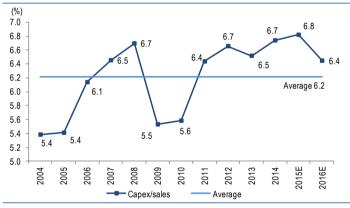
	Difference (%)			
	FY15E	FY16E	FY17E	
Revenue	(0.7)	(3.4)	(4.5)	
EBIT	(2.0)	(8.7)	(10.0)	
PAT Adj.	(1.6)	(7.7)	(8.3)	
EBIT Margin (%)	(34)bps	(133)bps	(140)bps	

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 3: S&P 500 capex/sales ratio running above mean

Exhibit 4: S&P 500 companies' sales growth below average currently with a decline likely in 2015



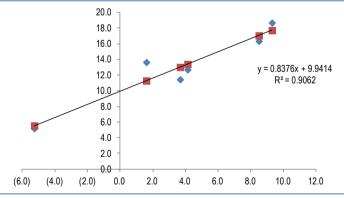


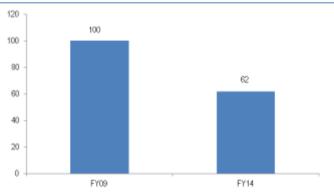
Source: Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 5: Linear regression analysis between industry growth (Y) and S&P 500 companies' sales growth (X)

Exhibit 6: Efforts required to deliver US\$1bn of revenue have gone down by as much as 38% in the last 5 years





Source: Bloomberg, Nirmal Bang Institutional Equities Research

Source: Nasscom, Nirmal Bang Institutional Equities Research



Revenue growth to disappoint

We expect the Indian IT services sector to grow at 8%-10% rate over FY15E-FY18E in USD terms, at least 200bps-400bps below current consensus estimates with a <u>downside risk</u>. Growth, in our view, will be pressured by: (1) Low IT spending because of tepid sales growth across enterprises in the developed world, and (2) Value/volume compression within the legacy business (likely >50% of revenue) because of increased automation and intense competition on convergence of capabilities/strategies within Tier-1 Indian players. 'Digital' is not going to move the needle materially.

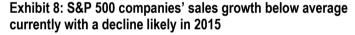
Sales growth of customers running below average levels

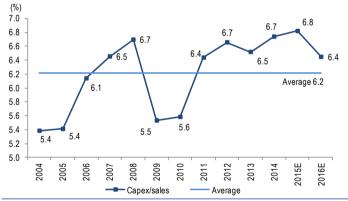
We believe what constitutes revenue for the Indian IT sector can be classified as both capital and operating expenditure in the context of its customers, with a larger part likely in the capex bucket. We believe that except for BPS (Business Process Services) which goes as a part of opex for customers, even application maintenance is likely to be a capitalised item as benefits of the work done are likely to be derived by customers over several years.

Whatever be the classification of spending, sales growth at the customer end is critical to sustain it. As far as operating spending goes, it is directly linked to sales under normal circumstances. A look at the capex-to-sales ratio of large listed companies in developed markets (represented by S&P 500 and Stoxx 600) in Exhibit 7 indicates that they are not under-investing, contrary to popular perception. Only a sales growth pick-up from here on will lead to higher capex. Sales is not picking up because of a combination of worsening demographics, deflationary pressure, current subdued wage growth of workers, debt-laden status of households and governments and sorry state of the health of overseas economies (in the context of US multinational corporations) exacerbated by the USD's strength (Exhibit 13). US companies, which are probably in their healthiest state ever (if measured by profitability), seem to be in no mood to push up capex higher or pay their employees more. They seem to be focused on returning cash back to their shareholders.

A look at analyst estimates shows that sales growth is unlikely to pick up above the mean level in the foreseeable future in the US and Europe (key markets addressed by the sector – constituting 80%-90% of the turnover of most companies). This should lead to slower growth in spending on IT.

Exhibit 7: S&P 500 capex/sales ratio running above mean







Source: Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research

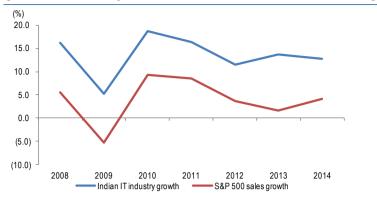
We project 8%-10% growth over FY15E-FY18E

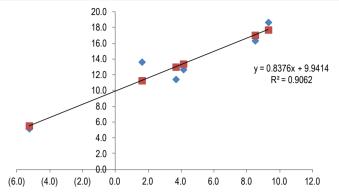
National Association of Software and Services Companies' (Nasscom) estimate for FY16 indicates a growth of 12%-14% in constant currency (CC) terms. What this finally translates into in reported USD terms is largely dependent on the strength of USD versus the euro and other currencies in the coming days. We understand from our interactions with the industry that Nasscom's number is based on a primary survey conducted by it among its members. We also have guidance of Cognizant Technologies to go by – which has a large part of its offshore back-end in India – at an organic USD revenue growth of 14.5% for 2015. The past track record of both Nasscom and industry players, in giving guidance correctly, is mixed. There have been both positive and negative deviations in the past because of various factors including changed state of the global economy, strength/weaknesses of currencies, execution issues, events in specific industries/customers, etc. Our attempt here is to estimate revenue growth for the industry based on a top-down view. We believe sales growth of S&P 500 companies in aggregate based on the patterns witnessed in the recent past is a good predictor of industry growth. We believe the revenue of S&P 500 companies represents global demand and not just US demand, as close to 40%-45% of their revenue is derived from overseas geographies.



Exhibit 9: IT sector's growth and S&P 500 companies' sales growth seem closely linked

Exhibit 10: Linear regression analysis between industry growth (Y) and S&P 500 companies' sales growth (X)





Note: S&P 500 sales growth for the calendar year and the Industry growth (as per Nasscom) for the fiscal year. For instance 2014 is FY15 for Indian Industry growth considerations; Source: Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research

The linear regression analysis (Exhibit 10) done on industry growth (Y) and S&P 500 companies' sales growth (X) suggests a strong correlation. Based on this analysis and using Bloomberg consensus S&P 500 sales growth estimate, we get a value of ~9.8% for industry growth in 2015. A similar exercise for 2016 delivers a number of ~14.5% growth. However, we have taken the output of this analysis only as one of the data points. A lot depends on how sales growth expectations move through the course of the next 12-24 months. An inadequacy we have witnessed in our analysis is that it uses only six data points (from 2009 till 2014). They may be too few. However, we believe that using data before the GFC contaminates results. Linear regression also has to be used with some care. Should industry dynamics change structurally, we feel the equation may look different from the one given above. We believe the industry will go through such a change adversely, as elaborated later in this report.

Exhibit 11: Contribution of various sectors to S&P 500 companies' sales

(%)	2008	2009	2010	2011	2012	2013	2014	2015E	2016E
Basic materials	4	3	3	3	3	3	3	3	3
Consumer goods	10	11	11	11	11	12	11	11	11
Consumer services	21	23	22	22	22	22	23	25	25
Financials	14	16	15	14	14	14	14	13	13
Healthcare	7	8	8	8	8	9	9	10	10
Industrials	13	12	12	12	12	12	12	12	12
Oil & gas	17	13	14	15	14	14	13	10	11
Technology	7	7	8	8	9	9	9	9	9
Telecommunications	3	3	3	3	3	3	3	3	3
Utilities	4	4	3	3	3	3	3	3	3

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 12: Sales growth of various sectors in S&P 500

(%)	2008	2009	2010	2011	2012	2013	2014	2015E	2016E
S&P 500	6	(5)	9	9	4	2	4	-	5
Basic materials	23	(23)	17	14	(2)	-	2	(2)	6
Consumer goods	1	2	11	9	4	3	1	-	4
Consumer services	7	2	6	8	5	3	7	7	5
Financials	(19)	11	4	(1)	5	(1)	3	(3)	5
Healthcare	7	8	17	5	7	7	8	7	7
Industrials	8	(11)	5	8	5	1	3	1	3
Oil & gas	25	(28)	19	17	(3)	(2)	(2)	(22)	13
Technology	15	(6)	14	16	9	-	9	6	5
Telecommunications	4	4	2	7	5	2	5	3	2
Utilities	10	(13)	4	2	(1)	5	8	-	3

Source: Bloomberg, Nirmal Bang Institutional Equities Research



Profit growth has not pushed up IT spending

The relationship between profit growth of global enterprises and IT spending growth has waned ever since the 2008 global financial crisis. While S&P 500 companies' profits have not only recovered but are at life-time highs (topping the highs made in 2007-08 by a large margin as seen in Exhibits 14 and 15), the propensity to spend on IT has not witnessed a comeback. We believe this is largely because the visibility on sales growth has not been as good as on profitability. US companies have been in a generous mood to return capital to their shareholders, represented by record dividends and stock buybacks. They have not been as generous to their employees, in our view (Exhibit 16) nor on splurging on capex. Adjusted for inflation, wages have been almost stagnant. A part of the decline in sales growth in 2015 is likely because of the strength of the USD versus other global currencies (Exhibit 13). A look at the growth expectations across sectors indicates that consumer services (largely retail) and healthcare will display much better growth than the others in 2015. On consumer services sales growth the general expectation is that lower fuel prices will translate into greater purchasing power in the hands of the US/global consumer and that should lead to greater consumer spending. It remains to be seen if the global consumer would do that or would try to repair the household balance sheet by saving and not by spending.

Exhibit 13: Dollar index has strengthened a lot

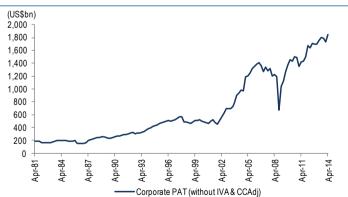


Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Exhibit 14: US corporate profits as a percentage of US GDP at all-time peak Exhibit

Exhibit 15: US corporate profits in aggregate exceed pre-GFC level





Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research



- 90-Inf

Jul-07

Feb-06

Institutional Equities

Exhibit 16: US corporate profits do not translate into better wage growth for workers

(%) 4.0 3.5 3.0 2.5 2.0 1.5

Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

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Oct-10

Average hourly earnings of all employees: Total private

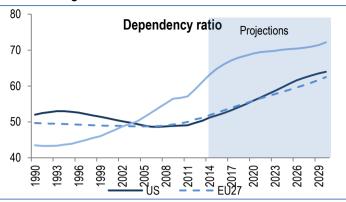
Mar-12

Apr-11 Oct-11

May-09 Nov-09

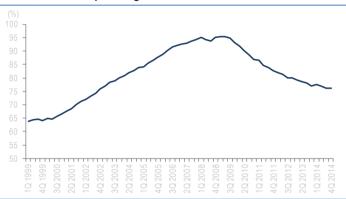
Jun-08

Exhibit 17: Demographic profile of developed countries is deteriorating



Source: OECD, Nirmal Bang Institutional Equities Research

Exhibit 18: Household debt (% of GDP) got repaired a bit in the US, but still quite high



Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

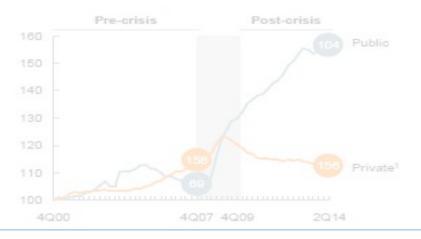
Exhibit 19: Household debt (% of GDP) situation in Europe remains at an elevated level



Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Exhibit 20: While advanced economy households have not added to debt, the public sector debt has significantly expanded post GFC



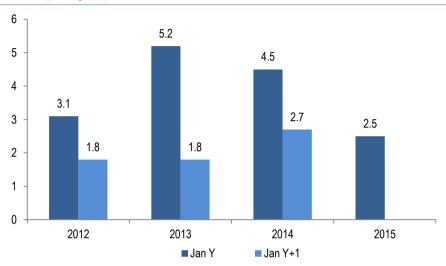


Source: Mckinsey

Gartner's estimates on IT services spending had to be revised downwards over the past three years

Another disconnect between the improving macro environment (at least in the US) and IT services spending comes through in the revisions made to global research and advisory firm Gartner's predictions on IT services spending growth over the course of the past three years. They have been revised downwards. Possibly, this has prompted a conservative estimate for CY15 global IT services growth at the start of the year! If consensus estimates for S&P 500 companies' sales growth in 2015 are a reality, we believe this number will witness a downward revision again.

Exhibit 21: Gartner's IT services spending growth projections for the past three years have been downgraded subsequently (%)



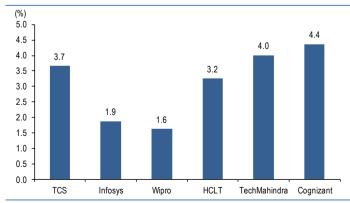
Source: Gartner, Nirmal Bang Institutional Equities Research

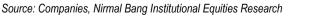
Some large industry segments in the US and Europe likely to face growth pressure in 2015

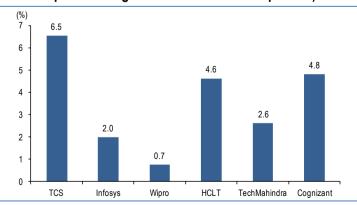
An analysis of the capex-to-sales ratio in combination with sales growth of S&P 500 and Stoxx600 companies indicates the likely IT spending growth patterns in the US and Europe. Over the past few years, we have seen revenues of the Indian IT services sector from Europe growing faster than that from the US, despite the former having a less robust economy. A large part of this is because of lower/late exposure to offshore IT services and the other reason, we believe, stems from having a lower capex-to-sales ratio in the recent past (under-investment). US companies, as indicated earlier, have a capex-to-sales ratio higher than the average currently. A look at individual industry segments also reveals some patterns that are fairly entrenched in IT sector demand currently.

Exhibit 22: USD revenue CQGR of major Indian companies over the past eight quarters

Exhibit 23: Europe revenue CQGR (in US\$) of major Indian companies over the past eight quarters (likely impacted by euro depreciation against the USD in recent quarters)





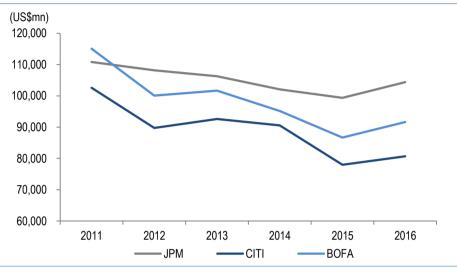


Source: Companies, Nirmal Bang Institutional Equities Research



The financial services sector, which contributes 40% to the IT sector's revenues, has in recent times shown weaker growth, especially in most of the Tier-1 companies. A look at the revenue growth in aggregate of the BFSI components of both S&P 500 and Stoxx600 companies indicate that the segment continues to be under pressure because of various problems. Regulatory fines, slow loan growth, disintermediation, requirement of capital, shedding of businesses, etc have been the problems plaguing most companies. A look at revenue growth of some global banks like JP Morgan, Citibank and Bank of America indicate stagnant/declining revenues, as witnessed in Exhibit 24.

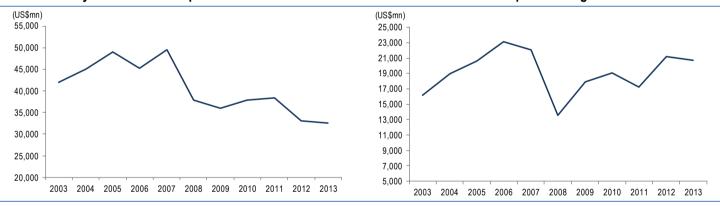
Exhibit 24: Most large US banks/financial institutions showing a declining revenue trend



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 25: Net Interest Income of the banking sector in US has reduced by 30-40% from the peak

Exhibit 26: Non-interest income of the banking sector in the US has rebounded to the previous high

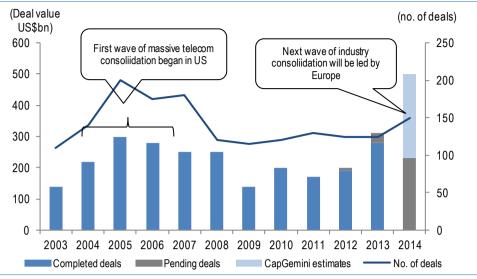


Source: FDIC, Nirmal Bang Institutional Equities Research

Source: FDIC, Nirmal Bang Institutional Equities Research

Telecom has been a problem sector for many years now and a look at Exhibits 30 and 31 tells the reasons. Also the sector has been going through a large consolidation exercise (Exhibit 27) on a global basis which could put near term under pressure on revenues for the IT services vendors.

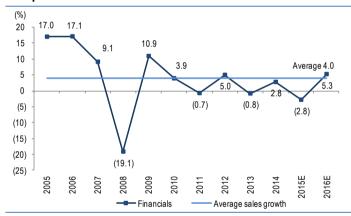
Exhibit 27: Massive consolidation in global service provider market



Source: CapGemini

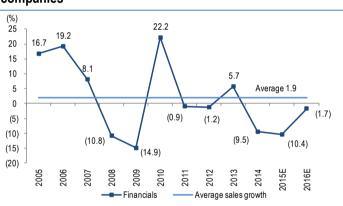
The recent crash in crude oil prices has exerted pressure on sales growth/capex of energy companies (see Exhibits 32 and 33), which is getting reflected in lower IT spending. Manufacturing and life sciences have been relatively robust sectors for Indian IT sector because of the fact that their revenue growth has been reasonable.

Exhibit 28: Sales growth of S&P 500 financial services companies



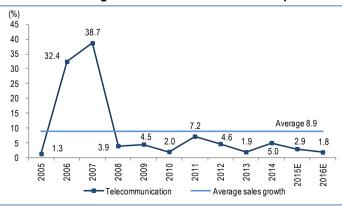
Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 29: Sales growth of Stoxx 600 financial services companies



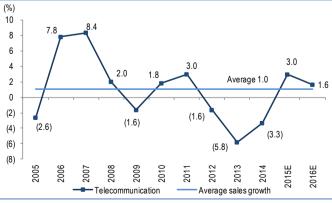
Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 30: Sales growth of S&P 500 telecom companies



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 31: Sales growth of Stoxx 600 telecom companies

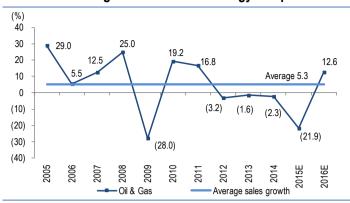


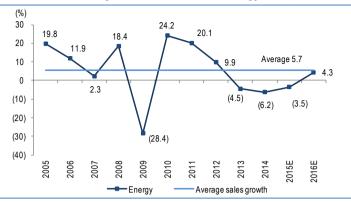
Source: Bloomberg, Nirmal Bang Institutional Equities Research



Exhibit 32: Sales growth of S&P 500 energy companies

Exhibit 33: Sales growth of Stoxx 600 energy companies





Source: Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research



Why US recovery not reflected in better S&P 500 sales growth

The US is posting a reasonable real GDP growth (Exhibit 34) on the back of greater consumer spending (Exhibit 35). However, this is not reflected in S&P 500 companies' sales growth. This may be because the composition of the US economy and the sales mix of S&P 500 companies is very different. The S&P 500 companies are more international in their sales mix, with close to 40%-45% coming from non-US geographies, where the economic situation is not as robust as it is in the US (Exhibit 34). S&P 500 companies' sales growth is also muted because of a deflationary situation in the US (Exhibit 39) as well as Europe (Exhibit 36). This is further compounded by the exceptionally strong USD versus other currencies over the past 6-12 months. The fact also remains that investment in computer equipment and software connected with the US has moved down and settled at a much lower level than it had during the dotcom/telecom boom era of the late 90s and early 2000s, respectively (Exhibit 38). It has taken a leg down post GFC too.

Exhibit 34: US real GDP is growing well



Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Exhibit 35: US consumer spending growth is steady



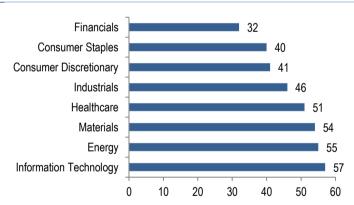
Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Exhibit 36: Eurozone real GDP growth is weak



Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Exhibit 37: Exposure to overseas sales by S&P 500 industry segments as a percentage of sales is fairly large

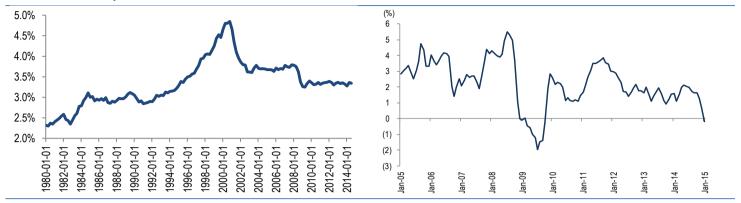


Source: Wall Street Journal



Exhibit 38: Private fixed investment in information processing equipment and software as a percentage of net GDP has declined post the GFC

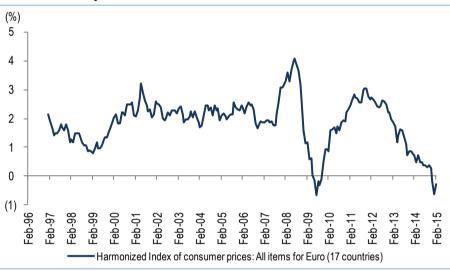
Exhibit 39: US CPI touching the deflationary level



Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Exhibit 40: Euro area already in deflation



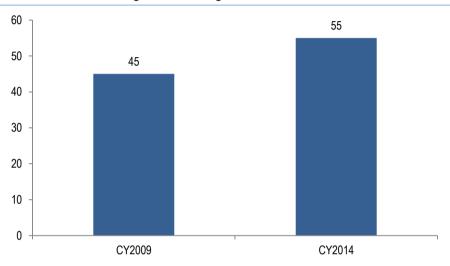
Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research



Indian players already volume leaders in global IT space

In the global sourcing space, based on Nasscom estimate, India is already the leader with a 55% market share, up 10 ppts from 45% in 2009. Indian IT services companies are already volume leaders in global IT services business (and not just in global sourcing), with Tata Consultancy Services (TCS) being among the largest employer in the world in this space. The Indian offshore IT services industry has been able to manage scale better than one would have imagined a decade ago. The question that comes up now is whether the industry will go the way of electronics contract manufacturing companies like Foxconn – a Taiwanese company – which employs more than 1mn workers, largely in China. The efforts from here on should be to push up revenue productivity.

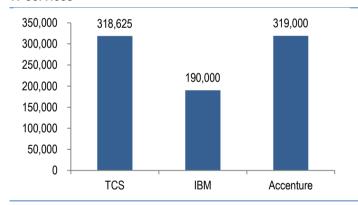
Exhibit 41: India's market share in global sourcing

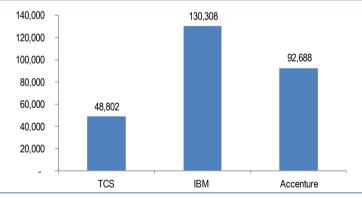


Source: Nasscom, Nirmal Bang Institutional Equities Research

Exhibit 42: TCS is likely the largest player in volume terms in IT services

Exhibit 43: TCS has significantly lower revenue productivity compared to global companies (US\$ per capita)





Note: IBM number is based on publically available 2012 information. We have kept that constant because revenues have been flat/lower since then

Source: Companies, Nirmal Bang Institutional Equities Research

Source: Companies, Nirmal Bang Institutional Equities Research



Creative destruction on the cards

Indian IT industry has been built on the bedrock of labour cost arbitrage as reflected in the decades-old onsite:offshore model. We believe this model is likely to be challenged by pieces of software that tend to disintermediate the human element. Improving cognitive powers of these pieces of software make more and more parts of the sector vulnerable to revenue/value compression. Unlike in many other cases connected with the IT sector in the past, we see no outside player - at least as of now - taking away the IT/ITE services market. We believe the incumbents have been embracing automation at a calibrated pace till now. We believe constrained demand and intense competition will accelerate that pace. This could then be the beginning of a mini cycle of creative destruction. We believe this could play out over the next three-five years, leading to insipid revenue growth for the sector as automation chips away at industry size. Our base case view is that margins will not be hurt materially during this phase. However, any irrational behavior by players could hurt profitability of the entire industry. We also believe that the outsourcing opportunity will reduce as some of the automation vendors are likely to approach end-customers directly. Insourcing could be a significant issue to handle in the coming days.

What we mean by automation in IT/ITES services

Over the past two decades (and especially in the last decade), global enterprises have been able to lower their IT and business processing costs by using low-cost resources in developing countries like India, Eastern Europe, Philippines, etc. To squeeze more productivity from outsourcing, customers are forcing vendors 'to do more for less'. Just as robotics changed the face of automobile manufacturing globally, we believe 'software robots' or 'cognitive agents' or 'digital labour' have started doing the same job in the IT and ITES sector.

IT services companies - because of cost pressure and to develop a competitive advantage - have started using pieces of software (either internally developed or sourced from outside) that can take on large masses of routine iterative work which is being done currently manually. Such work can be in business processing or in IT operations. Some pieces of software have also been developed that can learn (by observing human beings at work or by themselves as they execute) routine and not so routine tasks. The capabilities of such software are improving by the day. In most situations these pieces of software work in tandem with human efforts to deliver a desired business outcome. The vendors share gains with customers. Automation in IT services started seriously about three-five years ago, but is increasingly gaining momentum as those who have this capability have been winning big in the market place in services lines like IMS and BPO.

Wipro's CEO Mr.TK Kurien, in recent analyst interaction indicates that 43% of people across Wipro do what can be called hand off activities and are basically reacting to information on their computer screens. He is of the view that Artificial Intelligence based solutions can reduce the human element significantly in such activities.

Some of the activities that can be automated as per a leading automation vendor are:

- Running diagnostics: Up to 70% of the time taken to fix an issue is in diagnosing the cause. Automation
 can free up significant amounts of employee time.
- Predictive incident management: Automation can be taught to recognise impending problems and take corrective action before they have any impact.
- Requesting permission: Many support tasks stall because the staff have to seek approval. Automation
 can seamlessly manage approval and escalation processes.
- Service readiness checks: Many applications require complex multi-stage 'ready for service' checks before opening for business, where automation can save both time and effort.
- Password management: While password self-service is commonplace, automation can take the next step and provide SMS users a new password immediately after they hit the retry limit.

Recent announcements of activity in the automation space:

- Infosys, Cognizant and Accenture have partnered IPsoft in using its automation software, especially in the field of IMS. While the Accenture relationship was expanded in late 2014, the other two relationships which seem to have been struck a long time ago, have not gained much traction.
- Accenture is working with IPsoft's Amelia, a new artificial intelligence platform that makes it possible to automate and augment business processes across a broad range of functions. According to Accenture,



this can enable companies to build more efficient workforces who use cognitive "aids" to improve customer service, client service delivery, workforce productivity, and the ability to manage ever-growing amounts of data. Accenture is undertaking pilot projects with two clients to deploy Amelia into their operations. The first pilot is with Baker Hughes, an oil field services company, while the other is Shell, a global group of energy and petrochemical companies. In both use cases, a cognitive agent will help support service delivery by learning through natural language interactions and documentation, as well as observing other agents' live interactions in order to constantly improve on its abilities.

- Media reports indicate that Infosys plans to roll out its automation capabilities to all its customers over the course of the next one year. It was indicated in March 2015, that Infosys is targeting around 900 clients globally for its IAP (Infosys Automation Platform). Apparently IAP was being leveraged by just 18 clients at that point in time. It was indicated by Infosys that while 60 per cent of the IT budget of a large enterprise was spent on keeping the lights on, over 30 per cent of IT operations work is repetitive and was still being done manually and could be automated.
- At a recent analyst/investor meet, Wipro indicated that it would roll out its frameworks ServiceNXT being the most important - to all of its 700 clients in IMS. Currently it is using these frameworks to service just 80 clients.

Automation is because of pressure from clients to reduce costs

We believe the constant pressure to reduce costs on an annual basis and in some instances by a very large margin is what has led to the upsurge in automation. This could come especially from industries where dramatic cuts in costs are required. A recent example is the energy sector where spending has come under severe pressure because of the steep fall in crude oil prices. That explains the tie-up of Accenture with a leading automation software company to address needs of two very large customers in this sector. We believe the customers' need to reduce costs dramatically is what has led to this situation. Following high competitive intensity, this was required from Accenture's perspective to retain clients – the fear that 'someone else will do it'.

Future of IT services - hybrid model

We believe the IT services business model of the future will be a hybrid one - involving human labour and digital labour (software). Work done by IT services vendors that has mass volumes and are repetitive, mundane and maintenance-oriented will attract automation. Where complex reasoning, handling unstructured situations and creative thinking is required, we expect human labour to prevail. We expect IT service organisations of the future to have considerably lower number of employees to deliver a unit of revenue than they do today.

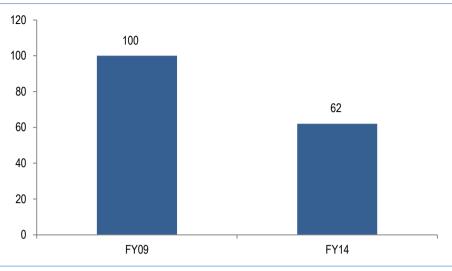
Automation fundamentally changes the size of opportunity

Automation has led to a situation where human efforts required to do a certain activity has been cut by 10%-40% in certain parts of IT/BP services, leading to significant savings for customers. Automation is also required by IT service vendors to maintain margins under a situation where labour costs are rising and customers want pricing of services to be reduced. We, therefore, believe that it crunches the opportunity size in specific areas of the industry by as much as 40%. Customers redeploy savings to other parts of their IT spend resulting in incremental spending being constrained.

Thus while automation will not lead to a steep decline in industry revenues in the foreseeable future, it will slowly chip away at industry size and thereby its growth

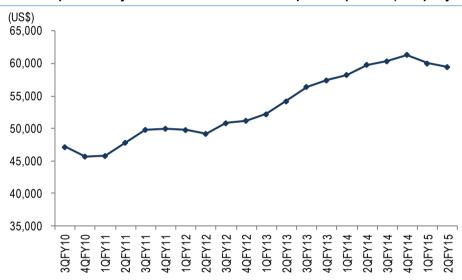
Data from Nasscom indicates that efforts involved to deliver US\$1bn in revenue have come off by 38% over the past five years in the industry. We attribute some of this to higher employee utilisation and a change in the revenue mix. However, we also believe that some of it has come through the use of platforms, frameworks and AI (all of which we club under automation). The revenue productivity increase in HCL Technologies over the past few years can only be explained by heightened level of employee utilisation and more importantly, the use of automation in executing large deals in the IMS and other areas.

Exhibit 44: Employee addition per US\$bn of revenue added is 38% lower in FY14 versus FY09 and we believe this will go still lower



Source: Nasscom, Nirmal Bang Institutional Equities Research

Exhibit 45: Revenue productivity at HCL Tech rose 1/3rd in the past 20 quarters (US\$ per year)



Source: Company, Nirmal Bang Institutional Equities Research

Insourcing could be a big threat in the coming days

One of the key reasons investors have been attracted to the IT service space is the large opportunity and the fact that incrementally there is greater outsourcing likely as customers transfer work to external vendors. From press releases and media articles, we gather that automation software companies are directly approaching customers. With the centre of gravity in IT services likely to shift back to onsite (as that is where bulk of the cognitive quotient is likely to be based), we believe the threat of insourcing is very real, especially if it is a combination of in-house IT staff and automation capabilities. This could mean the market will have to cut back expectations of growth in the long term as the opportunity gets constrained. This is a structural problem. This will depress P/E multiples for sure!

HR angle – bound to be one-time costs

Indian companies have been putting up a brave face, indicating the manpower that gets released because of automation will be redeployed elsewhere. This is likely to some extent. But as more and more activities get automated, we believe a part of the workforce will have to go because of skill set mismatch, inability to learn new skills or purely because of lack of demand. This could create human resources (HR) and industrial relations problems, which could have adverse implications on margins (see our financials section).



Focusing beyond IT spending

SG&A-related services and research and development (R&D) services are two areas which are large and will appeal to Indian IT services/ITES players. While the R&D services opportunity has been indicated to be a very large one (US\$1.4trn, according to Nasscom), most of the work is done internally by customers – possibly not to put at risk proprietary intellectual property or IP. Some of these customers have leveraged offshore delivery by setting up development centres in India and other destinations. We are not very clear how automation, as it stands today, will impact demand in this area. However, the important element here is to give comfort to customers that their IP is safe. We do not see external vendors making a big breakthrough in this area for this reason. Focusing entirely on services, not building patents or coming up with own commercial products thereby threatening their customers, would be pre-requisite. We believe the success of HCL Technologies in this area stems from addressing that concern. HCL Technologies has cut back on some internal IP initiatives and also has among the least patents filed in the entire industry. It has however been jointly filing patents or filing them on behalf of its customers. At one level, one could argue with that strategy, but from a revenue generation standpoint within engineering/RD services, it makes perfect sense.

On the SGA side, BPO work gets outsourced to offshore destinations like India and Philippines. We believe BPO more than IT services is most likely to feel the heat of automation. Work in BPO is mass volume and repetitive, which can be automated. We believe bulk of SGA-related work that can be outsourced will fall in this category. The threat of insourcing in this space is probably the highest.

An eco-system of software developers is coming up

It is natural that a lot of software developed on the automation side has actually come from software start ups and vendors and not from IT services players whose business model is going to be radically disrupted. However, increasingly we see a situation where the two have started to work together in addressing the market. The IT services provider has the contract or the customer relationship, while the automation software company has the capability to deliver on productivity gains that the customers want. In some cases, we see the services player buying out the software developer - for instance, Infosys buying out Panaya. Many software developers in this area are now being venture capital-funded. We believe more venture capital-funding and high multiples paid for acquisitions will spur entrepreneurs to focus on this space with renewed vigour and thereby accelerate automation.

We believe market forces and next recession to accelerate this trend

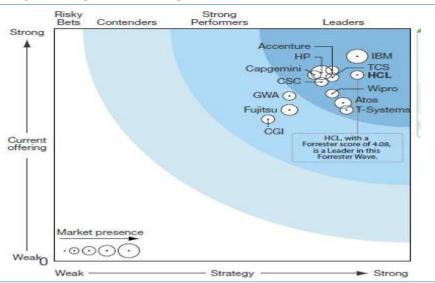
We believe almost all Tier-1 Indian players have initiatives in the area of automation and AI (artificial intelligence) to bring down human effort required in a project. It is difficult to size up which player is ahead in the game currently. Any gap can be filled through tie-ups with automation software vendors or by buying them out to reduce time-to-market. Commentary from the industry indicates that use of automation is still at a nascent stage. We believe market forces will lead to a quicker adoption in the coming days.

Convergence of competencies/strategies

Based on our interactions with companies and public statements made, we believe that competencies of Tier-1 players are converging. We believe automation capabilities are most developed in case of TCS and HCL Technologies based on their win rates in the IMS rebid business, TCS generated large deals also based on fixed price contract share of its revenue. We have not seen that happen in the recent past for Infosys and Wipro. However, the latter two seem to be catching up through both organic and inorganic efforts. Those companies that have capabilities to build this in-house should have better valuation than those that do not. This will be a source of competitive advantage in future.



Exhibit 46: Forrester's analysis of the competitive landscape among infrastructure solution providers. Interestingly, Infosys and Cognizant do not figure in this set



Source: Company, Forrester Research, Nirmal Bang Institutional Equities Research

Companies need to take some pain and embrace automation to stay relevant

If incumbents take up the difficult route of being their own disrupters, their chances of survival are higher. Pain in the interim is likely in the form of a downsized opportunity. The positive aspect of cannibalisation is that the incumbent will have a larger share of the shrunk profit pool (which is anyway inevitable with timing being the only variable). Probably the reason why Wipro lost market share in the IMS space was its reluctance to cannibalise a large revenue stream through automation. The latest catch up has been due to the automation initiatives that it has taken up over the last 3 years. These have been deployed in the mart only in the last 6 quarters which is when we have seen a pickup in IMS growth. But a new player like HCL Technologies, which did not have much to lose in terms of revenue, came up with an automated solution and won a large part of the rebid market.

Renewals would be a 'pain point' in our view in the future for even Indian vendors

While Indian companies have become disruptors in the rebid/renewal space by taking away market share from west based global MNC vendors, we believe they themselves would face pain when their own existing customers/contracts come up for renewal. The Indian players are no longer small and with customers no longer wary of putting up their large contracts for competitive rebidding every 5/7 years we believe the vendors would have to deliver extra productivity gains to hold on to these contracts. We would think that companies with large 'legacy' contracts that are coming up for renewal will likely be particularly vulnerable.

Strategic build-up of automation capability is required

Strategically, building automation capability in areas which are large and relatively uncontested will give the player a long lead time before others catch up. For instance, the efforts made by HCL Technologies to focus on IMS - which was considered large but unattractive revenue stream a decade back because of its low margins and asset intensity - to build automation capability helped it get a very large share of incremental business from that service line. Companies that have an automaton advantage in a relatively new area and hold on to that advantage over a longer period of time will draw outsized benefits. Early adopters like HCL Technologies and TCS - in our view - are likely to have benefited from it by being able to provide productivity gains to customers without sacrificing their own margins. Early market movers have, therefore, developed a competitive advantage which late comers - Wipro, Infosys, etc are trying to neutralise with their own recent efforts/tie-ups/buying of software start-ups. Infosys' recent acquisition of Panaya is likely to give it a leg-up with customers in package software implementation, maintenance, upgrade etc.

Large part of sector's revenues are vulnerable

We believe routine tasks in all areas of IT and BP operations which do not require a great deal of reasoning/judgement skills are vulnerable to automaton. We believe non-standard activities including consulting and a large part of application development are unlikely to be under threat in the foreseeable future. A large part of the rebid market (which is currently sized at a few hundred billion dollars over the next few years) is, in our view, likely to be application management and infrastructure management-related. We believe a large part of these projects will contract in size as automation is brought to bear on the opportunity. A look at the segments addressed by the Indian IT services industry (in Exhibits 47, 48 and 49 indicates that a very large part (possibly >50% of the current revenue base) can be looked for automation over the next five years. Some of them can be addressed immediately, but for others a more sophisticated version of the current automation software is what is required.

Exhibit 47: Indian IT-BPM (export) revenue in FY15 (US\$bn)

IT services	55.4
BPM	22.7
Software products, ER&D and product development	20
Hardware	0.4
Total	98.5

Source: Nasscom, Nirmal Bang Institutional Equities Research

Exhibit 48: Indian IT services exports -areas which are vulnerable to automation are shaded

(US\$bn)	FY13	FY14	FY15E
Project-based	21.8	24.8	27.7
IT consulting	1.2	1.4	1.5
Systems integration	1.3	1.4	1.6
Custom application development	15.7	17.9	19.7
Network consulting & integration	0.5	0.5	0.6
Software testing	3.1	3.6	4.3
Outsourcing	18.0	20.8	23.9
Application management	5.4	6.2	6.8
IS outsourcing	7.8	9.2	11
Others (SOA & web services)	4.8	5.4	6.1
Support & training	3.3	3.6	3.9
Software deployment & support	2.6	2.9	3.1
Hardware deployment & support	0.2	0.2	0.2
IT education & training	0.5	0.5	0.6
Total	43.1	49.2	55.5

Source: Nasscom, Nirmal Bang Institutional Equities Research

Exhibit 49: Indian BPM exports -Almost all the areas are vulnerable, in our view

(US\$bn)	FY13	FY14	FY15E
Customer interaction services	7.6	8.4	9.2
Finance & accounting	4.0	4.5	4.9
HR administration	0.4	0.4	0.4
Procurement & logistics	0.1	0.1	0.1
Knowledge services	3.3	3.9	4.7
Other horizontal services	0.3	0.3	0.3
Vertical-specific BPM services	2.6	2.8	3
Total	18.3	20.4	22.6

Source: Nasscom, Nirmal Bang Institutional Equities Research

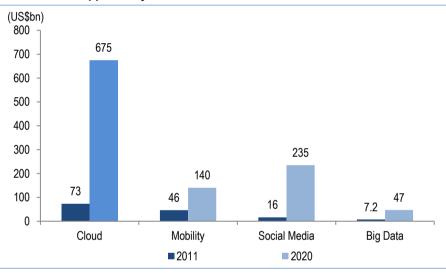
Digital projects not going to move the needle very much

Digital projects accounted for 12%-14% of industry revenue in FY15, based on Nasscom estimate. We believe value compression for a large part of the legacy business is unlikely to be mitigated by a small revenue stream like Digital, even if it grows at a much higher rate than the sector average.

If we assume that Digital forms 14% of industry revenue and the rest consists of legacy IT services and that latter suffers a compression of a few percentage points because of automation, Digital revenue will have to grow in excess of 100% in FY16, if the industry has to deliver even a 10% growth. We feel Digital, while it is growing at a very healthy rate, is probably not growing at 100% currently in aggregate.

Digital is more 'front office' rather than 'back office' software implementation and is more critical to generating revenue than to cutting costs from a customer standpoint. This could mean that for certain types of industries which are more B2C in nature like BFSI, Retail, etc, Digital is very critical as there could be technology-driven disrupters who could take customers/market share away through a low-cost strategy (by having a leaner IT, low corporate office costs and sharp focus on certain segments of the business). For others, we believe, while spending on Digital is important, it will be more in the form of cutting costs/simplification, etc. It will not be 'survival spending', like it is for consumer-facing companies.

Exhibit 50: Size of SMAC opportunity



Note: Big Data till 2017

Source: Gartner, Nasscom, Nirmal Bang Institutional Equities Research

Digital projects require a human angle in the short term

Digital is short cycle, iterative, multiple release, and parallel execution model. The old way of linear, multimonth, multi-quarter approach to application development is increasingly getting outdated. But what this 'agile' application development means is that the vendor's employee has to be stationed onsite (mostly), and will put out proof of concepts or prototypes in short timeframes. Not exactly the kind of work that will get automated soon.



Revisit of Five Forces Analysis

Large attractive profit pool

Extreme fragmentation (largest player by revenue has <7% market share), medium capital intensity, high margins, extremely high RoCEs/RoICs that have sustained over decades have inherent contradictions if one goes by conventional thought on industry attractiveness, at first sight. A top-down analysis indicates a very large profit pool that could be eyed by a non-conventional new entrant. On Indian IT industry's exports of ~US\$100bn for FY15, for instance, a profit pool of at least US\$15bn is likely at a RoIC of at least 25%.

Fragmentation on buyer's side lends some balance of power

Once there is a drill down, the model looks more sustainable. For enterprise customers with large IT budgets, the relevant universe of vendors is quite small - probably bulk of the spending goes to less than five players (some global IT providers with US and European background and some global players that are India-based). The relevant vendor set will probably not exceed 10-15 members, in our view. The competition has been reasonably rational. This explains the high margins and RolCs. While it seems that market share is fragmented, it is fragmented on the buyer side as well as the vendor side. The fact that end-demand is fragmented lends some bargaining power to the vendors.

Automation changes industry dynamics

We believe the introduction of automation changes the Indian IT service industry dynamics in a substantial manner. The value driver for the offshore model was low-cost labour in large numbers. If this part can be eliminated or materially reduced, the viability of the offshore model will be put to question. Our interaction with companies indicates that automation software will only address a part of services that are being currently handled by the companies. Over the next three-five years, we expect automation software to be more sophisticated - handling a larger part of demand. A hybrid model, which combines human and software efforts, will emerge. The redefinition of who is a supplier, competitor, substitute and a new entrant is required and the equations between them will also undergo a change. The buyer remains the same, but the change in dynamics in the other four constituents improves the bargaining power of the buyer.

Industry centre of gravity will slowly shift back a bit to global providers

Global IT services players began to replicate the Indian IT services model as it became the de facto standard over the past 10 years. Offshore delivery became the biggest competitiveness driver. Accenture embraced the global delivery model in a far more aggressive way than the Indian IT players themselves did. In the new era that we foresee in IT services over the next three-five years, we expect the centre of gravity shifting back to the global players who have great consulting front-ends and domain capabilities. While we are not writing off the offshore model completely, its relevance, in our view, will come off on the back of higher automation. In the hybrid model, the human labour that is valued will be the one with creative, consulting and domain skills.

Given below in Exhibits 51 to 55 is a comparative analysis - based on our thoughts - of how Five Forces will move in coming days in the industry – pre and post automation.

Exhibit 51: Bargaining power of supplier: Supplier definition changes; labour force has lower power; automation software player and the 'intelligent work' force gains

 Labour force is the supplier. Bargaining power is medium. In the offshore model, at the lowest level there is no bargaining power as supply of fresh engineering and non-engineering graduates far outstrip demand. Salaries have remained stagnant for more than 10 years. At the project management and 'hot' skill level, the power is higher. Limited possibility of the supplier becoming the next competitor, especially in contracts that are materially large. The best programmer, architects will continue to have good bargaining power. Overall workforce will lose power as automation software begins to handle greater complexity. Automation software companies' bargaining power should gain collectively in this new era. It will be reflected in better valuation being accorded to them The software developer could become or add to competition by tie-up with another player or approaching the customer directly. Both situations have been developing over time. Vertical (domain skill sets) will be valued more. However, high-end technical skills will still be in demand. Onsite labour will be more important (client-facing, knowledge transfer-related, consulting-related). 	Pre-automation era			Post-automation era			
no bargaining power as supply of fresh engineering and non-engineering graduates far outstrip demand. Salaries have remained stagnant for more than 10 years. At the project management and 'hot' skill level, the power is higher. • Limited possibility of the supplier becoming the next competitor, especially in contracts that are materially large. • Horizontal skill sets and vertical skillsets equally valued. • Both onsite and offshore labour were equally important. power. Overall workforce will lose power as automation software begins to handle greater complexity. Automation software companies' bargaining power should gain collectively in this new era. It will be reflected in better valuation being accorded to them The software developer could become or add to competition by tie-up with another player or approaching the customer directly. Both situations have been developing over time. • Vertical (domain skill sets) will be valued more. However, high-end technical skills will still be in demand. • Onsite labour will be more important (client-facing, knowledge transfer-	•	Labour force is the supplier.	•	· ·			
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	•	Horizontal skill sets and vertical skillsets equally valued.	•				
, ,	•	Both onsite and offshore labour were equally important.	•				

Source: Nirmal Bang Institutional Equities Research



Exhibit 52: Bargaining power of buyer improves

Pr	Pre-automation era		st-automation era
•	Medium.	•	Improves versus Indian IT services vendors. Overall higher competitive intensity will favour the buyer. Also, prospects of insourcing or using automation software internally will be a threat used to squeeze vendors.
•	Many buyers. While each is price and quality-sensitive, IT vendors can pick and choose.	•	Many buyers. But there is pressure on the vendor to close a deal as opportunity size contracts because of lower requirement of labour force. Finally, it could be battle of whose hybrid package (human + automation software) is better.
•	Buyer can switch - costs not prohibitive.	•	Buyer can switch - costs even lower with automation software.
•	Price renegotiations happen at more frequent intervals now than in the past.	•	Will be able to extract greater productivity promise from the vendor.

Source: Nirmal Bang Institutional Equities Research

Pre-automation era

Exhibit 53: Entry barriers: Depends on whether one is an IT vendor or a software vendor, high entry barriers in case of the former

Post-automation era

•	Entry barriers, though not prohibitive, are high at the Tier-1 vendor level with years of track record, client references, breadth of horizontal and vertical skill sets, good geographic spread of delivery, etc required to make the cut.	•	For IT vendors, barriers rise as they now have to have automation capabilities to remain relevant to their clients. However, for automation software players the barriers are lowered as they dis-intermediate the IT vendor and go directly to clients. Clients will take them seriously.
•	Capex is incremental in nature and not very high.	•	Capex is higher, especially if it involves development of own automation software or buying a company that possesses it.
•	The large market size and big RoIC-WACC gap is very attractive for new players to enter if they can build up the skill sets over time.	•	We believe market size shrinks and so does the big RoIC-WACC gap, making it less attractive for new players.

Source: Nirmal Bang Institutional Equities Research

Exhibit 54: Threat from substitutes: This was low previously, but will be high in the new era

Pre-automation era	Post-automation era
 No serious substitutes, although SAAS and cloud-based offerings are likely to decrease demand for IT services in the long run. Automation software has not become mature enough to be taken as a material element in the overall equation. 	 The automation software providers have become substitutes. These companies pose a threat as they can start working with end-customers directly, dis-intermediating the IT services vendor.

	become mature enough to be taken as a material element in the overall equation.		directly, dis-intermediating the IT services vendor.								
Sour	ce: Nirmal Bang Institutional Equities Research										
Exh	xhibit 55: Threat from competitors goes up, especially from new players – software vendors										
Pre	e-automation era	Po	st-automation era								
•	Fragmented nature of market indicates significant competitive intensity - largest player <7% market share. However, no irrational competition.	•	Competitive intensity is going to increase. The source of competitive advantage changes from cheaper labour to possession of complex software.								
•	Cannot raise prices significantly, but no dramatic cuts also likely. No material destruction of the profit pool.	•	Value of the contract can fall significantly. The profit pool shrinks even if margins are maintained.								
•	Offshore delivery being the main source of competitiveness, it becomes mainstream. MNC players adapt to the new paradigm and shift large amounts of work offshore.	•	Labour pivot to likely shift towards more onsite (relatively) as the necessity of offshore labour to do repetitive and mundane tasks is limited.								
•	Differentiation based on horizontal and vertical skill sets and ability to generate cost savings for the customer over a period of time. Ability to provide this service in multiple geographies is also a plus point.	•	Differentiation based on horizontal and vertical skill sets and multi- country service capabilities remain the same Ability to develop this software in-house becomes a key driver of competitive advantage. If that is not the case, then the ability to acquire such a software provider is critical.								
		•	Ability to retain talented employees is also a problem.								

Source: Nirmal Bang Institutional Equities Research

US macro cycle maturing - increasing risks

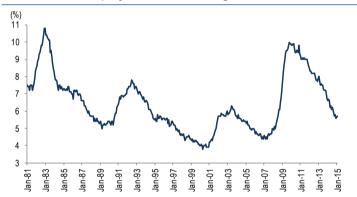
Based on historical thumb rules and macro indicators like unemployment rate, initial jobless claims, GDP cycle and the gap between recessions (see Exhibits 56, 57 and 58) we believe the economic cycle of the US (the largest market for the sector) is maturing, if not peaking. While in such phases in the past, global corporations' IT spending used to be strong (especially on the discretionary side), we see no such behavior currently. This is despite US corporate sector profitability and cash flows being at their historic peak. In fact, we have a situation where there is significant pricing pressure in some of the commoditised services.

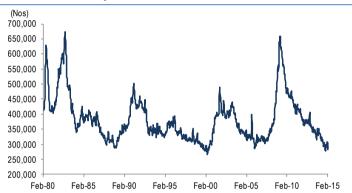
We are not in a position to say when the cycle will turn down. The US and rest of the developed world are in the midst of an unprecedented monetary policy era. Our expectation remains that the monetary policy of the US will continue to remain benign as long as inflation does not raise its head in a decisive way. So the 'good times' could get stretched for while.

We believe that if in the midst of 'good times' of the US economy, the Indian IT services vendors are facing pressure in their businesses and they are bound to mount significantly when the industry faces an economic down cycle. We think the impact on growth and margins could be adverse. This could lead to a severe compression of multiples, as has been the case in the past. The maturing of the US economic cycle and the risks connected with this, in our view, should lead to investors being careful about the P/E at which they purchase a stock.

Exhibit 56: Unemployment rate heading towards historical lows

Exhibit 57: Initial jobless claims close to historic lows





Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research

Exhibit 58: GDP uptrend likely to last for a few more years



Source: St. Louis Fed Research, Nirmal Bang Institutional Equities Research



Financials - Low growth with risks

Based on the analysis given above, we believe USD revenue growth for the industry is going to be in the range of 8%-10% over FY15E-FY18E. With convergence of competencies and strategies we believe the growth rate gap that existed between the industry leaders in growth - Cognizant, TCS, HCL Technologies - and the others to narrow considerably. We expect EBIT margin in aggregate to be flat with a downward bias. The downward bias stems from the need to compensate employees adequately and investments made to reskill staff, higher SGA to compensate underinvestment in the past, lower contract profitability in 'legacy' projects, higher onsite and lower employee utilisation profile of digital projects, limited availability of 'hot' skills, etc. These pressures will be countered by upsides from automation, modest INR depreciation and tightening of whatever levers are left with the companies (not many, in our view). With the advent of automation, we foresee the prospect of higher retrenchment costs in the next few years as companies right-size themselves to the new reality. We believe the current retrenchment policies vis-à-vis mid-level employees will evoke strong push-back as the numbers increase significantly. We therefore see something akin to a VRS (voluntary Retirement Scheme) scheme being implemented in some fashion or even a more generous settlement. We have, however, not factored in this in our numbers currently as we believe it is difficult to estimate and time it, but we believe it is a risk nevertheless.

Retrenchment costs will have to be borne at some point

We see a HR/industrial relations problem looming as some part of the 'middle' and the 'lower end' staff will be asked to move out to maintain margins because of increased use of automation in many projects in the coming years. A push-back from such employees could mean higher retrenchment costs, which have been hitherto low. We have not factored in such costs in our numbers. A look at technical employee salary costs for a company like TCS, for instance, will give a broad view regarding what kind of damages will have to be borne. 3QFY15 numbers indicate that salary costs of technical employees were at 38% of revenue. Assuming 10% of the technical employees are asked to leave with a total of one year's compensation as settlement, then the total costs incurred (one-time expense) will be about 3.8% of revenue. How this gets accounted for (amortised or one-time) will determine the hit taken on the P&L account for a particular year. Investors will ignore if it is just a one-time expense, but if there is continuous forced attrition, then investors will have to reevaluate. Obviously, we are not stating that this scenario is a certainty. We think such costs will be significantly higher for other companies as their salary costs, as a percentage of revenue, will be much higher than that of TCS.

Continued salary pressure

A mid to high single-digit average salary growth for Indian employees and at least 2%-3% wage growth in developed markets is likely in the coming years. In India, we believe there is pressure driven by higher attrition rate for the 3-10 year experience band of employees who get offers not only from other IT services companies but also from the fast-growing technology startup eco-system in various metros. Besides, Indian e-commerce companies are luring them with significantly higher salaries and ESOPs. We see a far more differential compensation structure in play, with performers rewarded with significantly higher-than-average salary levels even within the same experience bracket. We have seen this already implemented in some companies in the sector. This has led to higher attrition in such organisations.

Automation

In legacy services which are amenable/vulnerable to automation - we believe at least 50% of the revenue base will be in such a situation - we expect customers to ask vendors to cut costs by at least 15%-20%. Unless the same output is delivered by lower number of resources, margin pressure is likely to be felt. Those who have invested in automation early will be beneficiaries in this regard. The others will either have to forego such projects or settle for lower margins. Margins will be impacted in two ways because of automation: (1) If the company decides to invest in building automation tools and frameworks. (2) If the company decides to part with a larger part of the gains generated from automation to its customers.

Pyramid to an Apple

In the wake of slower growth, the employee pyramid looks to be in far worse shape than it did a few years back resulting in a higher cost structure. We believe attrition to an extent and replacement with younger staff is key to retaining margins and also in execution as the newer/younger employees will be able to absorb newer technologies more easily. In a number of companies, in the wake of slower growth, we have a situation



where the number of employees with sub-3 years' experience is around 25%-30%. This number was above 50% about five years ago in most Tier-1 companies.

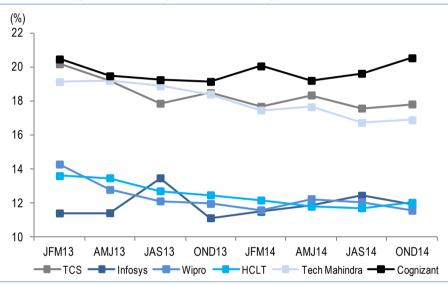
Investments in retraining of staff

With technology changing at a rapid pace, the need to re-skill employees has become important, especially with the increase in demand for skills in SMAC. We see this as an essential investment to keep the company workforce relevant to the market.

Higher investment in SGA likely

We believe higher investment in SGA is required by those who have underinvested in the recent past, among them being Tier-1 players and some mid-cap ones too. In the Tier-1 set, Infosys, Wipro and HCL Tech have been much below those in the other set – TCS, Cognizant and Tech Mahindra have been investing reasonable amounts.

Exhibit 59: SGA spending of various players in the industry - some have underinvested

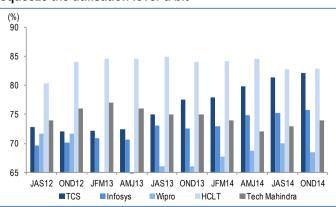


Source: Companies, Nirmal Bang Institutional Equities Research

Running out of levers

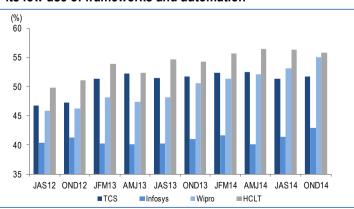
On many operational parameters like employee utilisation, shift to offshore, fixed price projects, etc, we believe Tier-1 Indian players have reached optimum levels with little headroom for improvement. Still, we expect them to squeeze out as much as possible.

Exhibit 60 : Wipro, Tech Mahindra and Infosys can still squeeze the utilisation lever a bit



Source: Companies, Nirmal Bang Institutional Equities Research

Exhibit 61: Infosys' low fixed-price contract share exposes its low use of frameworks and automation



Note: Denotes months of the year

Source: Companies, Nirmal Bang Institutional Equities Research



Digital projects will have lower margin, although per capita profitability will be in line

Digital projects are currently 'proof of concept' projects with short iterations. They are onsite-intensive, unstructured when they start out and could lead to lower utilisation of employees as there could be downtime in between projects. This could mean that initially, Digital projects are likely to have lower margins, despite having higher billing rates.

Cross-currency headwinds

We expect cross currency movements to cause an adverse impact on margins of various companies in the near future. Currently, those who have large exposure to Europe are likely to witness significant currency-related pressure. What will compound the pain is the fact the INR has remained extremely strong in the context of the movement of the DXY by almost 25% from 80 to a level of 100 in a matter of months.

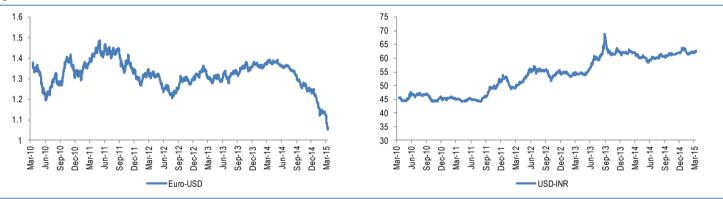
Exhibit 62: Exposure to various geographies of Tier-1 companies

	US	Europe	RoW
TCS	54	24	22
Infosys	68	17	15
Wipro	51	28	21
HCL Technologies	56	32	12
Tech Mahindra	51	29	14

Source: Companies, Nirmal Bang Institutional Equities Research

Exhibit 63: Euro has depreciated significantly against the greenback

Exhibit 64: INR has held up strongly against the greenback



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Bloomberg, Nirmal Bang Institutional Equities Research

Factoring in a modest INR depreciation, we expect a level of Rs61/63/64 against the USD in FY16E/FY17E/, respectively.

Earnings of Indian IT services firms are extremely sensitive to INR. We have factored in a modest depreciation in the forecasted period. This is on the back of the view taken by Nikhil Gupta, our economist. His view is given below:

INR set to strengthen next year, but weaken in subsequent years

After averaging 61 against the USD in 2014, INR has averaged 62 in the past couple of months, ranging between 61 and 64. As far as the domestic economy is concerned, twin deficit (fiscal and current account) has narrowed substantially, capital flows have been strong and inflation has eased. We believe that even if GDP growth is not as strong as in the past couple of years (6.9% and 7.4% in FY14 and FY15, respectively), it will not be a cause of concern until inflation is kept under control. Further, lower GDP growth is acceptable, as it will help to keep current account balance in check and give some space to households to rebuild their savings. We also believe that India will be adding to its foreign exchange reserves, as capital inflows will be more than sufficient to cover external deficit. In fact, with China slowing, India is likely to become the most favoured Asian destination for investors. Overall, the favourable domestic environment will certainly provide a boost to the currency. Accordingly, we expect the INR to strengthen to the level of 60 in FY16.

Our projections are based on an assumption that insufficient inflation (Core PCE deflator grew 1.3% YoY in December 2014) and low hike in (real) earnings (+1% YoY in December 2014) will not allow the US Federal Reserve to hike policy rates this year, let alone June 2015. We believe that the rate hike is likely to



be postponed towards the middle of the next year (2016), which makes FY17 projections trickier. This is because India's economy is likely to remain more favourable. Further, the European Central Bank has also covered - as of now - its banking sector (at least) up to September 2016. Higher probability of the US Federal Reserve moving towards monetary normalisation and associated higher uncertainty could lead to a broad-based strength in the USD, putting some pressure on all emerging market (EM) currencies. Consequently, we will not be surprised if the INR weakens ~3% and averages 63 against the USD in FY17.

In FY18, we believe the Indian economy will start witnessing significant uptick in investments and consumption, along with sustainably lower inflation. Nevertheless, better US economic outlook and improving Eurozone, Japan and Chinese economy could help INR weaken marginally. Further, although the inflation differential vis-à-vis US is expected to narrow, it will remain. Consequently, we believe the INR could weaken slightly and average 64 against the USD. However, if the Eurozone outlook deteriorates further in FY18, the USD could continue to witness broad-based strength on the back of lower risk appetite and the INR could weaken sharply. On the other hand, if Indian economy performs better than other major economies, or the latter fails to witness significant improvement, the INR can also strengthen.

Thus, we expect the INR to strengthen (to the level of 60 and average at 61) next year before weakening later (average at 63 and 64 in FY17E and FY18E, respectively).

Our estimates are below Bloomberg consensus estimates on revenue and earning fronts

As indicated in our basic thesis on the sector, we believe revenue will be lower than Bloomberg consensus estimate. We also expect some mild margin pressure leading to earnings coming in lower than street estimate. Given below are our estimates in comparison with street estimates. There are certain companies where we are significantly more bearish than the street.

Exhibit 65: Us vs consensus-aggregate

		•										
	Aggregate											
	(Consensus			NBIE		Difference (%)					
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E			
Revenue	2,564	2,928	3,331	2,547	2,829	3,181	(0.7)	(3.4)	(4.5)			
EBIT	619	706	804	606	644	724	(2.0)	(8.7)	(10.0)			
PAT Adj	530	599	681	521	553	624	(1.6)	(7.7)	(8.3)			
EBIT Margin (%)	24.1	24.1	24.1	23.8	22.8	22.8	(34)	(133)	(140)			

Source:Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 66: Us vs consensus-Infosys

	Infosys											
	Consensus			NBIE			Difference (%)					
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E			
Revenue	540	606	687	535	581	650	(1.0)	(4.0)	(5.3)			
EBIT	141	157	180	139	149	166	(1.1)	(5.3)	(7.6)			
PAT Adj	125	138	157	124	133	151	(0.7)	(4.0)	(4.1)			
EPS Adj (Rs)	109.0	121.0	137.4	108.4	116.2	131.8	(0.6)	(3.9)	(4.1)			
EBIT Margin (%)	26.1	25.9	26.2	26.0	25.6	25.6	2bps	(34)bps	(64)bps			

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 67: Us vs consensus-HCL Technologies

	HCL Tech											
	(Consensus			NBIE		Difference (%)					
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E			
Revenue	373	425	484	369	414	473	(1.1)	(2.7)	(2.1)			
EBIT	88	98	110	85	91	109	(4.3)	(7.1)	(0.9)			
PAT Adj	76	84	95	72	76	92	(5.3)	(9.7)	(3.6)			
EPS Adj (Rs)	54.7	60.4	66.6	51.1	54.0	64.9	(6.4)	(10.6)	(2.5)			
EBIT Margin (%)	23.7	23.1	22.8	22.9	22.1	23.1	(78)bps	(107)bps	29 bps			

Source:Bloomberg, Nirmal Bang Institutional Equities Research



Exhibit 68: Us vs consensus-TCS

		TCS											
	Consensus				NBIE			Difference (%)					
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E				
Revenue	953	1098	1261	948	1064	1202	(0.5)	(3.1)	(4.7)				
EBIT	257	297	340	253	272	297	(1.5)	(8.3)	(12.6)				
PAT Adj	214	244	279	212	228	250	(0.8)	(6.8)	(10.3)				
EPS Adj (Rs)	108.9	124.0	142.1	108.2	116.2	127.8	(0.7)	(6.3)	(10.0)				
EBIT Margin (%)	26.9	27.1	27.0	26.7	25.6	24.7	(26)bps	(146)bps	(224)bps				

Source:Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 69: Us vs consensus-Wipro

		Wipro												
	Consensus			NBIE			Difference (%)							
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E					
Revenue	472	520	579	472	500	545	(0.2)	(3.8)	(5.8)					
EBIT	95	106	118	93	92	101	(1.9)	(12.6)	(14.4)					
PAT Adj	86	95	106	85	84	92	(1.1)	(10.6)	(13.3)					
EPS Adj (Rs)	35.1	38.3	43.0	34.8	34.4	37.4	(0.9)	(10.3)	(13.0)					
EBIT Margin (%)	20.1	20.3	20.4	19.8	18.4	18.5	(36)bps	(186)bps	(187)bps					

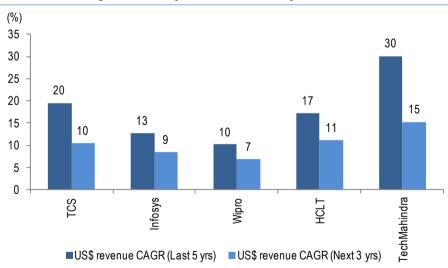
Source:Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 70: Us vs consensus-Tech Mahindra

	Tech Mahindra											
	(Consensus			NBIE		Difference (%)					
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E			
Revenue	225	279	321	223	270	311	(0.7)	(3.3)	(3.2)			
EBIT	38	48	56	36	40	50	(4.2)	(16.5)	(10.7)			
PAT Adj	29	37	44	28	32	40	(3.1)	(14.7)	(9.0)			
EPS Adj (Rs)	31.8	40.2	47.7	29.2	32.7	41.0	(8.2)	(18.7)	(14.0)			
EBIT Margin (%)	16.9	17.1	17.5	16.3	14.8	16.1	(58)bps	(234)bps	(135)bps			

Source:Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 71: Chart on revenue growth last 5 years versus next 3 years in US\$ terms



Source: Companies, Nirmal Bang Institutional Equities Research

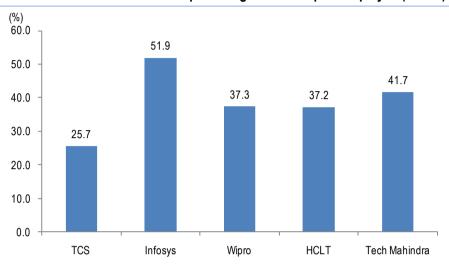
Note: Tech Mahindra's revenue includes LCC revenue



Cash usage could be a big determinant of valuation

With the Tier-1 companies having and generating a large amount of cash, return of this capital to shareholders and/or use of this cash to generate better growth for the companies in the coming days is going to be critical to the valuation given by the market to these companies. With growth slowing down, we see a pick-up in both (greater return of capital and greater acquisitive intensity). We think the latter will largely be confined to buying companies in 'futuristic technologies' or buying into geographies where the current footprint is weak (areas in continental Europe or in Japan).

Exhibit 72: Cash & financial investments as a percentage of total capital employed (FY15E)



Source: Companies, Nirmal Bang Institutional Equities Research



Valuation: Current P/E not pricing in risks to growth

Stocks of companies in the Indian IT sector are currently trading at forward P/Es that are more than +1SD above mean of the past three years (which we believe is the relevant period in light of the sector's growth slowdown). CNXIT Index is currently trading at a +1 SD above mean (Exhibit 81) even from a 9 year perspective. Valuations have possibly benefited from higher overall market multiples. CNXIT vis-à-vis Sensex is trading at P/E multiples that are at par with historical averages (Exhibit 80). We believe the sector is witnessing flows as it represents the cheapest (based on consensus expectations) among those sectors that have high near-term earnings visibility (Consumer, Pharma and Private Banks being the others) despite growth being mediocre. We do not see this situation sustaining as we believe consensus numbers will be marked downwards on the back of disappointment on revenue growth. Currently, the fascination for the so-called safe sectors is because of lack of visibility on turnaround in the domestic economy. Once that is visible, we believe flows into domestically-oriented sectors will lead to a P/E compression for the IT sector. We also believe that the maturing of the US economic cycle brings with it a set of risks that should not be ignored. We, therefore, believe that one should be careful about the price being paid to buy a stock. Our purchase points on all the stocks will ideally be 10%-15% lower than our target prices.

Unlike over the past two-three years where earnings and returns of the sector witnessed a large dispersion (see Exhibit 73), our expectation is that returns are likely to converge for Tier-1 players. Our 12-month target prices have been arrived at by using a target P/E on March 2017 expected earnings. We have used TCS' three-year mean forward P/E as the benchmark for the sector. Despite some disappointments in the recent past, the steady and industry-leading growth and margins makes it the natural benchmark. We believe it will continue to outperform the industry even in FY16 – albeit by a smaller margin - because of its broad-based growth and investment made in new growth engines.

Exhibit 73: Price performance of various Indian IT services firms

	CY12	CY13	CY14	3- month	6- month	12- month	CYTD (up to April 2015)
Tata Consultancy Services	8.4	72.5	17.7	4.1	(8.3)	19.0	(1.0)
Infosys	(16.2)	50.3	13.1	11.3	13.2	31.3	8.1
Wipro	(1.1)	58.9	(0.9)	13.7	0.8	12.1	11.3
HCL Technologies	59.5	104.0	26.4	21.3	7.1	33.4	16.1
Tech Mahindra	62.6	97.3	41.0	1.4	2.0	41.9	(1.3)
Mindtree	71.8	124.3	67.5	19.5	26.3	102.9	10.6
Hexaware Technologies	13.6	54.9	51.8	59.6	53.3	94.4	53.5
Persistent Systems	55.9	90.9	70.1	(10.5)	3.9	42.0	(17.7)

Source: Bloomberg

The target P/E multiple for each stock is at par or at a discount to the benchmark P/E multiple. We have also used a capability matrix (see Exhibit 87) based on various parameters to arrive at a view on P/E multiple for each stock relative to TCS. This methodology, we admit, is inherently subjective, but we believe it reflects our confidence/or lack of it in the growth potential of these companies.

Exhibit 74: Relative competitive matrix

	TCS	Cognizant	Infosys	Wipro	HCL Tech	Tech Mahindra
Breadth						
Service lines	4	3	3	3	2	2
Verticals	4	3	4	3	3	2
Geographies	4	2	3	3	3	3
Depth						
Service lines	4	3	3	3	4	3
Verticals	4	4	4	3	3	3
Geographies	4	2	3	3	3	3
Hunting skills	4	4	3	3	5	3
Farming skills	4	4	3	3	5	3
Automation efforts	3	3	2	3	4	2
Strength in						
Run the business	4	3	3	4	5	3
Change the business	4	4	4	3	2	3
Cost control	4	4	3	2	3	3
SGA spending	4	5	2	2	3	3
Asset usage	4	3	5	3	4	3
Usage of cash	3	3	2	2	4	3
M&A savvy	4	3	2	2	4	3
Total score	62	53	49	45	57	45

Note: We have rated each company on a scale of 1-5 with 5 being the highest. This is relative score vs the peer set rather than versus the larger universe of companies in the Industry; Source:Bloomberg, Nirmal Bang Institutional Equities Research



Despite our not-so-optimistic commentary on the sector's growth, we have refrained from taking a very bearish view on target P/E multiples. This is a function of our positive view on the overall market. We believe Sensex/Nifty can trade up to +1SD above mean territory in the coming days because of a likely domestic recovery and benign risk appetite globally. We, therefore, do not expect the IT services sector - which has the second-largest weight in most benchmark indices - to trade significantly below the mean P/E multiple levels.

Absolute valuation should be seen with growth

While the absolute valuation for the sector is not demanding, revenue and earnings growth have also come off quite dramatically over the past few years, at least in USD terms. It was the sharp depreciation of INR to the USD which helped the sector post strong revenue and earnings growth in FY13, FY14 and even a part of FY15. We therefore believe the absolute valuation has to be seen in conjunction with revenue growth prospects.

Exhibit 75: US\$ and INR revenue growth-TCS

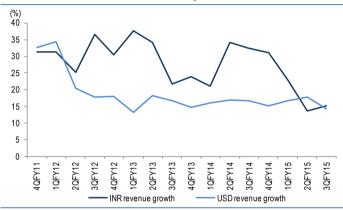
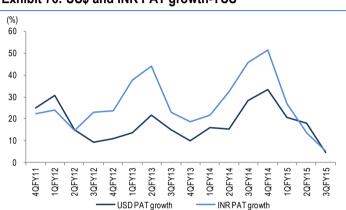


Exhibit 76: US\$ and INR PAT growth-TCS



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 77: US\$ and INR revenue growth-Infosys

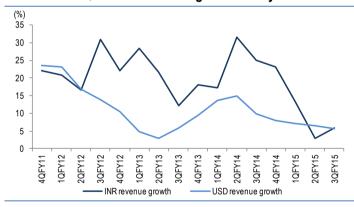
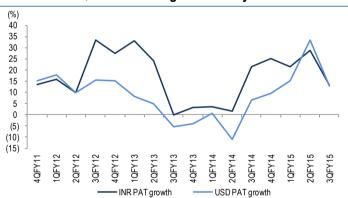


Exhibit 78: US\$ and INR PAT growth-Infosys



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Based on our view that the sector will deliver revenue growth below consensus estimate and the fact that stocks are trading at or more than 1SD above their mean multiples for the past three years, we do not see much value in them. We think none of them will deliver returns greater than 15%, which forms the threshold for a buy at NBIE (see Exhibit 87). However, some of them could deliver modest single-digit returns over the next 12 months, which leads to an 'Accumulate' rating on them.

Our top picks based on our target prices are HCL Technologies and Infosys among Tier-1 companies. The stocks we like the least in the Tier-1 space are Tech Mahindra, TCS and Wipro.



Exhibit 79: IT index is trading at all-time high P/E multiples based on 3-year history

Exhibit 80: IT index is trading at a slight P/E premium to Sensex and broadly in line with history





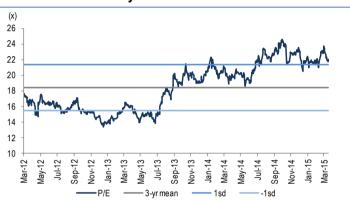
Source:Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 81: CNX IT (9 year) P/E

Exhibit 82: TCS three year P/E chart





Source:Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 83: Infosys three year P/E chart

Exhibit 84: Wipro three year P/E chart





Source:Bloomberg, Nirmal Bang Institutional Equities Research

Source:Bloomberg, Nirmal Bang Institutional Equities Research



Exhibit 85: HCL Technologies three year P/E chart

Exhibit 86: Tech Mahindra three year P/E chart





Source:Bloomberg, Nirmal Bang Institutional Equities Research

Source:Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 87: Basis for according target P/E multiples to stocks in our coverage universe

Company	Target P/E multiple	Comments
TCS	18.1	Mean P/E multiple based on past three years' trading history. Among the Tier-1 set, we believe, it will still have industry-leading growth and margins and RoIC in the coming days. Do not think it should trade at a premium to its mean because both revenue and earnings growth will disappoint consensus expectations and will show a marked slowdown in relation to history.
Infosys	16.3	10% discount to TCS' P/E. While RoIC has been at par with TCS, the company has had lower growth and not witnessed broad-based growth. The lower P/E discount versus recent history is also because there is expectation that Mr. Vishal Sikka, CEO of Infosys will take steps for putting the company back on industry-leading growth and margin path and will narrow the growth rate gap between the two companies considerably.
Wipro	15.4	15% discount to TCS' P/E. Growth has been inconsistent, its loss of market share in an erstwhile area of strength like IMS, the poor financial parameters like low gross margin, poor RoIC makes us believe that a lot of work lies ahead for it to gain a P/E multiple which is close to the industry benchmark.
HCL Tech	16.3	10% discount to TCS' P/E. While on most financial parameters, HCL Technologies has been at par with TCS, or even superior, based on the competitive matrix (Exhibit 55) we have seen some weakness in its capabilities. We do not feel it has the breadth of offerings which can lead to de-risked growth. Overall, the company has done an excellent job of driving growth through extraordinary initiatives in IMS.
Tech Mahindra	14.5	20% discount to TCS' P/E. The large inorganic element in its plans ahead has been a worry- that it will land up overpaying and that these acquisitions will lead to dilution of margins. The very large exposure to the Telecom vertical makes us wary because of poor revenue growth in the sector and the significant M&A action happening there which could lead to a slowdown in the growth rate. Our concerns on the Telecom front so far have not really played out over the past many quarters. We are also unclear about its prospects in large deals and in building automation capabilities.



Exhibit 88: Indian IT services sector valuations

	TCS	Infosys	Wipro	HCL Tech	Tech Mahindra
Year ending	March	March	March	June	March
Prices as on 10 April 2015	2,651	2,229	617	959	660
Currency	INR	INR	INR	INR	INR
Market value (Rsbn)	4,991	2,491	1,524	1,309	603
(US\$bn)	80,496	40,182	24,578	21,117	9,723
March 2016 target price	2,314	2,147	576	1,013	593
Upside/(downside) %	(12.7)	(3.7)	(6.6)	5.6	(10.2)
Recommendation	Sell	Accumulate	Sell	Accumulate	Sell
FDEPS (Rs)					
FY15E	108.2	108.4	34.6	51.1	29.2
FY16E	116.2	116.2	34.2	54.0	32.7
FY17E	127.8	131.8	37.3	64.9	41.0
FY18E	141.8	148.7	39.9	72.0	50.8
P/E (x)					
FY15E	24.5	20.6	17.7	18.6	22.0
FY16E	22.8	19.2	18.0	17.6	19.6
FY17E	20.7	16.9	16.5	14.7	15.6
FY18E	18.7	15.0	15.4	13.2	12.6
EV/EBITDA (x)					
FY15E	19.0	16.1	12.9	13.6	13.7
FY16E	17.7	14.6	12.5	12.3	12.1
FY17E	16.2	12.6	11.0	10.0	9.5
FY18E	14.7	11.1	9.9	8.9	7.5
EV/sales (x)					
FY15E	5.5	4.2	2.9	3.3	2.6
FY16E	4.9	3.7	2.6	2.9	2.1
FY17E	4.3	3.2	2.3	2.4	1.8
FY18E	3.9	2.8	2.1	2.1	1.5
RoIC (%)					
FY15E	57.1	72.7	35.5	36.8	48.2
FY16E	54.7	72.9	33.7	33.6	43.8
FY17E	54.0	73.7	32.3	34.7	47.3
FY18E	54.0	72.7	34.2	32.3	51.1



Risks to our view

We currently expect a negative 7.3% return for the sector over the next 12 months.

Risks that could lead to higher returns than we have forecast:

- A pick-up in sales growth in developed market enterprises from current levels to above average rates. We think this could happen if:
 - Wage growth picks up, leading to greater purchasing power in the hands of the consumer
 - Companies decide to cut back on returning capital to shareholders and start to invest larger than current sums in technology
 - Non-US developed market growth starts picking up
 - US dollar starts to weaken against the extremely strong position that it is at currently. This should translate into better revenue and profits for US multinationals having global operations.
- INR depreciates far more than we have factored in: This will happen if:
 - A higher-than-expected or an earlier-than-expected (or both) Fed rate hike happens
 - A material EM event that increases risk aversion for a long enough period, which could lead to capital outflow
 - Indian domestic economy's growth disappoints over the next 12-18 months, making investors sceptical and fund flows adverse
 - Steep increase in the price of crude oil, which will put pressure on the current account deficit or CAD.
- Adoption of automation is much slower than what we expected. We expect to see 20%-30% of the
 existing revenue base of the companies to witness volume pressure within the next two-three years.

Risks that could lead to returns being even lower than what we expect:

- A material slowdown in the US economy over the next two years. This can happen if Fed rate hikes are early and material.
- We believe the use of automation is in its initial stages. We expect the usage to pick up pace gradually
 over the next three years, but we do not expect large-scale deployment of it in a short period of time. If
 the latter happens, revenue growth will be considerably slower than what we have forecast.
- We have not factored in entry of a completely new player into the industry, which is software-driven. There is an outside chance that such a situation may arise.



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Tata Consultancy Services

13 April 2015

Reuters: TCS.BO Bloomberg: TCS IN

Slowdown To Reflect In Lower P/E Multiple

We initiate coverage on Tata Consultancy Services (TCS) with a Sell rating and a March 2016 target price of Rs2,314 (at a target P/E of 18.1x FY17E EPS, mean of the past three years). Our target price represents a downside of 12.7%. We believe that past three years is a relevant period for analysis as the growth rate of the industry has slowed down from high teen to low teen. We expect slower US dollar (USD) revenue CAGR of 10.5% over FY15E-FY18E versus historical fiveyear/three-year (ending FY15) CAGR of 19.5%/15.7%, respectively and therefore believe that it should trade at lower multiples than it is doing currently on FY17 EPS. Our FY17 revenue/EBIT/EPS estimates are 4.7%/12.6%/10% below Bloomberg consensus estimates, respectively. Slower revenue growth for TCS largely stems from our concerns about growth detailed in the sector analysis. Specifically with respect to TCS we are concerned about (1) its large size (among the largest volume players in the global IT services business currently) (2) its large exposure to the BFSI sector, which we believe will be weak in terms of growth over the forecasted period due to slower IT spend by its customers (3) its large exposure to legacy businesses which are likely to witness value/volume compression in an era of automation/frameworks and (4) lower market share gains because of convergence of capabilities/strategies of different players in the Tier-1 India player set. TCS has lost some P/E premium it used to command as the market perceived that the growth rate gap it enjoyed in FY14 and FY15 versus peers is likely to contract over FY15E-FY18E .

Will still likely grow ahead of industry: Despite slower growth compared to its past, TCS will likely deliver industry leading revenue growth and margins in the foreseeable future because of its well-rounded business mix among Tier-1 set of peers (defined as India-listed companies with >US\$5bn in revenue). It has the broadest range of capabilities - service line, vertical and delivery - in the peer set and these will still lead to consistent, broad-based growth across several quarters. TCS has invested in new growth drivers, which we believe will deliver over FY15E-FY18E. As investments start paying off, we believe it will maintain EBIT margin of around 25% and RoIC of > 50% over FY15E-FY18E. TCS has been good at both account hunting and mining with an impressive number of relationships not only added, but also scaled up. This has been possible because of the breadth of its capabilities and strong execution. Therefore while we believe the stock is overpriced, we have TCS as the P/E benchmark for the sector and have accorded it the highest Target P/E of 18.1x. All other companies have target P/Es that are at a discount to that of TCS'.

Risks to our view: Pick up in revenue growth of developed market enterprises, especially the financial sector, ability to hold on to all of its existing contracts without too much value compression when they come up for renewal, higher than expected INR depreciation are some of the key risks to our view on the stock.

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
Revenue	818	948	1,064	1,202	1,336
YoY (%)	29.9	15.9	12.2	13.0	11.2
EBIT	238	253	272	297	327
EBIT (%)	29.1	26.7	25.6	24.7	24.5
Adj. PAT	191	212	228	250	278
YoY (%)	38.2	10.8	7.4	10.0	10.9
FDEPS (Rs)	97.7	108.2	116.2	127.8	141.8
RoE (%)	39.2	36.5	35.2	34.0	33.3
RoCE (%)	43.7	39.0	37.7	36.3	35.3
ROIC (%)	62.7	57.1	54.7	54.0	54.0
P/E (x)	27.1	24.5	22.8	20.7	18.7
P/B (x)	9.3	8.6	7.5	6.6	5.8

Source: Company, Nirmal Bang Institutional Equities Research

SELL

Sector: Information Technology

CMP: Rs2,651

Target price: Rs2,314

Downside:13 %

Girish Pai

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Key Data

Current Shares O/S (mn)	1,958.7
Mkt Cap (Rsbn/US\$bn)	5,198/83.4
52 Wk H / L (Rs)	2,840/1,969
Daily Vol. (3M NSE Avg.)	1,346,796

Share holding (%)	1QFY15	2QFY15	3QFY15
Promoter	73.9	73.9	73.9
FII	16.5	16.8	16.8
DII	5.1	4.8	4.7
Others	4.5	4.5	4.6

One-Year Indexed Stock



Price Performance (%)

	1 M	6 M	1 Yr
TCS	0.4	(0.9)	26.8
Nifty Index	0.8	11.7	29.2

Source: Bloomberg

P/E at +1 SD above mean does not reflect the slowdown ahead

The P/E premium that TCS used to command over its immediate Indian peer set has contracted over the past six-nine months (Exhibits 1, 2, and 3). This has been driven by disappointment of the market regarding the company's inability to deliver on its FY15 organic growth guidance (of having a growth rate faster than in FY14). Also, the market's expectations with respect to its peers have risen with some decent quarterly numbers posted by Infosys, Wipro and HCLT recently.

Exhibit 1: P/E (discount)/premium (TCS versus Infosys)

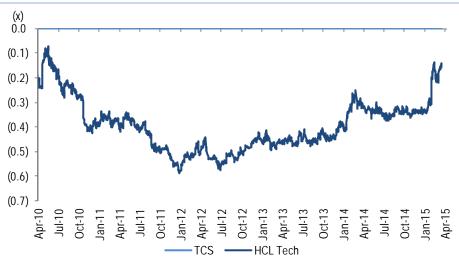
Exhibit 2: P/E (discount)/premium (TCS versus Wipro)



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 3: P/E (discount)/premium (TCS versus HCL Tech)



Source: Bloomberg, Nirmal Bang Institutional Equities Research

With Infosys' new Chief Executive Officer Mr. Vishal Sikka promising to deliver industry-leading growth and margins over the next 18-24 months and also taking measures in line with those promises (including taking initiatives in the automation space by acquiring Panaya, an area where we believe Infosys has been lagging behind the industry, trying to proactively engage with customers with his Design Thinking workshops, continued investment in IMS, etc), there are expectations that the growth rate of Infosys would pick up in the coming years. Similarly we believe Wipro will grow closer to industry levels than it has ever in the past due to some steps that it has taken in the last few years and intends to take in FY16 including investing in frameworks, putting in place a new sales incentive structure to drive client mining, etc. In HCLT we think the new driver, Engineering and R&D services would likely keep growth of the company at elevated levels.

So the growth gap that was about 9-10ppts in FY15 between Infosys/Wipro and TCS will contract in FY16E to 300bps-400bps before contracting further to 100bps-200bps in FY17E and FY18E.

We therefore feel that the current P/E multiple which is +1 SD above mean is unlikely to sustain. We believe consensus would downgrade both revenue and earnings as quarter pass by and we believe the stock to trade at about its mean P/E based on its 3 year history – 18.1x.

Exhibit 4: TCS 5 year P/E chart



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Growth to slow down because of multiple factors

Growth at TCS is likely to be slower over FY15E-FY18E as it has a large exposure to the BFSI sector (40% plus of total revenue), which we believe will witness cautious IT spending. Similarly we believe the energy vertical (about 3%-4% of revenue) will see slower spending in FY16. We believe its size (likely the largest volume player in the space) and big legacy services portfolio (IMS, BPO and application management, which we believe are under volume/value stress on the back of automation constitute about 30-40% of total revenue) and convergence of capabilities among players will mean that market share gains of the sort witnessed in the past five years will be difficult to achieve going forward. Hence, we see revenue growth in US\$ terms for the company at 10.5% over FY15E-FY18E vs 19.5%/15.7% seen over FY10-FY15E/FY12-FY15E, respectively. Some of its peers are expected to grow at around the same rate, or slightly lower.

Exhibit 5: Revenue growth chart

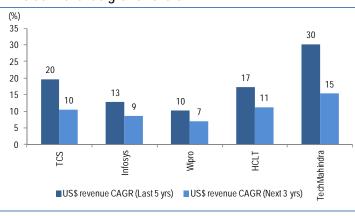
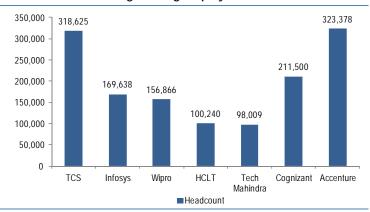


Exhibit 6: TCS among the largest players in terms of volume



Source: Company, Nirmal Bang Institutional Equities Research

Note: TechM numbers for FY15-FY18 include LCC

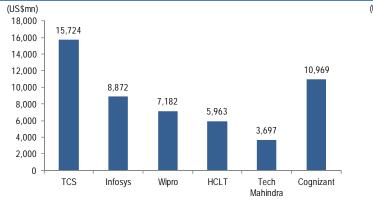
Source: Company, Nirmal Bang Institutional Equities Research

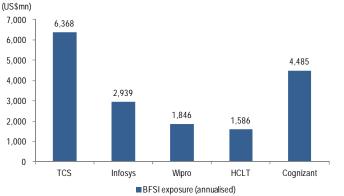
BFSI sector unlikely to increase IT spend over the foreseeable future

The traditional financial institutions in both US and in Europe have been growing revenues far slower than what they used to do in the pre GFC period (Exhibits 9, 10). Part of this will likely be because of lower loan growth – likely due to debt laden households wanting to repair their balance sheets and corporates likely in very good financial health because of record profits and no aggressive capex plans. A look at Exhibit 9 indicates the kind of decline one has seen in revenue for the large banks in the US. Exhibits 12, 13 also indicate that the Net Interest Income of the banking sector in the US has actually declined post the GFC is about 35% off from its decadal peak. However, Non – interest income has rebounded and is back to its peak levels. Also market share of some of these institutions are being eaten away by new disruptors who focus on certain niches and adopt latest technologies and run very lean organizations. But these startups are not the core customers of Indian firms currently and probably do not have the large IT budgets that some of the established global financial firms have. With slow revenue growth we see the customers focus on shrinking the traditional services related spend and channeling the savings to doing more discretionary work that would be used to take on the disruptors.



Exhibit 7: Quarterly revenue run-rate (December quarter Exhibit 8: BFSI exposure (December quarter annualised) annualised)





Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

companies

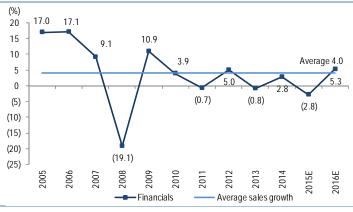


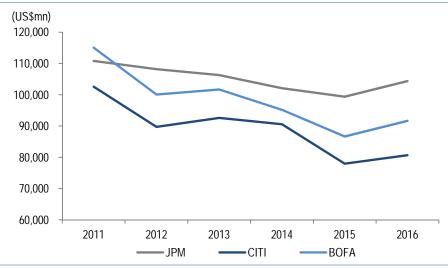
Exhibit 9: Sales growth of S&P 500 financial services Exhibit 10: Sales growth of Stoxx 600 financial services companies



Source: Bloomberg

Source: Bloomberg

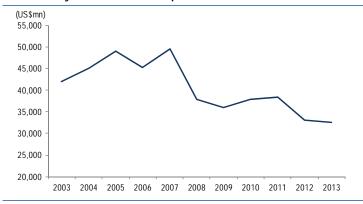
Exhibit 11: Most large US banks/financial institutions showing a declining revenue trend

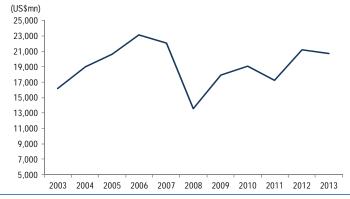




come off by 30-40% from the peak

Exhibit 12: Net interest income of banking sector in the US has Exhibit 13: Non-interest income of banking sector in the US has held up





Source: FDIC, Nirmal Bang Institutional Equities Research

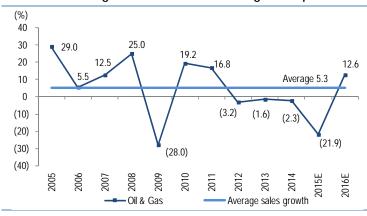
Source: FDIC, Nirmal Bang Institutional Equities Research

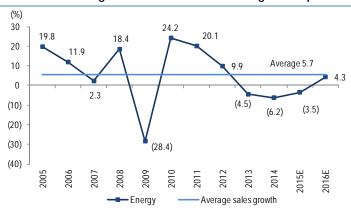
TCS has about 41-42% of its total revenue coming from BFSI sector of which about a third is from Insurance firms. Lately the insurance part has been very sluggish. Insurance too is facing the same market environment as the large global banks. Markets for insurance in the developed countries are highly penetrated. Growth is largely coming from emerging markets. In Insurance too there are disruptors who are nibbling away at market shares based on being highly technology savvy and having a very low cost structure.

On the energy front the situation is very difficult with the plunge in the price of crude impacting both revenues and profits significantly of the customers (Exhibits 14 and 15). This has impacted the Capex plans of most of the energy companies. The current expectation is that there is going to be significant pain that would be felt by the Indian IT services providers from this vertical. However the general Industry expectation is that post 6-9 months, if the crude price remains broadly at current levels there is going to be massive cost cutting likely from the energy corporations which could lead to good demand for the kind of value-for-money services that Indian companies are famous for.

Exhibit 14: Sales growth of S&P 500 oil and gas companies

Exhibit 15: Sales growth of Stoxx 600 oil and gas companies





Source: Bloomberg

Source: Bloomberg

Large legacy business could face value compression

Within the India Listed IT services peer group, TCS is 80%-90% larger than the next player – Infosys. While size is good from many angles especially when it comes to being invited to bid for some of the large contracts, it also has a negative fallout. We believe 30-40% of the existing revenue of TCS would definitely be vulnerable to value compression as these are services lines where automation can be applied in a material way. If TCS seeks to hold on to these contracts when they come up for renewal then it would have to offer its customers significant cost savings which would mean compression of value of the contract. This in our view would create problems for TCS to show incremental growth in the times ahead. With there being significant convergence in capabilities and strategies within the peer set we believe the competitive intensity is likely to be very high and therefore leading to significant value being left on the table for the customer.

(US\$mn) 12,000 10,000 8,000 6,211 6,000 4,000 2,075 918 1.840 3,054 682 292 2,000 479 2.248 1,961 **TCS HCLT** Infosys Wipro

Exhibit 16: TCS has large exposure to legacy business (OND14 qtr. annualised)

■IMS

Source: Company, Nirmal Bang Institutional Equities Research

Low per capita revenue number deceptive

If one sees the per capita revenue numbers of TCS and its peers (Exhibit 17) it would come out that the company has headroom to grow this significantly. However this conclusion is erroneous as a large part of its revenue unlike a number of its peers comes from emerging markets (18%-20%) – Exhibit 18. In emerging markets like India, China, Middle East, APAC and possibly Latin America, we believe bill rates would be lower than in developed markets leading to lower per capita revenue and most likely lower profitability per capita. We do not expect per capita numbers to be too different between the different players in the same geography and in the same service line. However there exists a case for TCS to increase its revenue productivity in the coming days through increased use of automation, though it has been improving over the years (Exhibit 19).

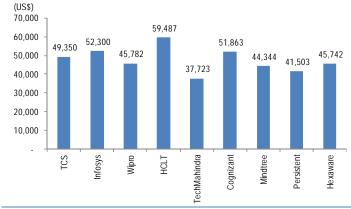
BPO



(US\$mn) 3.000 23.0 2 465 20.8 2.500 20 2,000 15 1,374 1 500 1,229 9.1 9.5 10 7.1 1,000 711 669 500 46 26 30 n TCS Wipro Persistent Mindtree 덮 Indian and non-developed markets revenue (FY14)

Exhibit 18: Exposure to Indian and non-developed markets

■ Application management

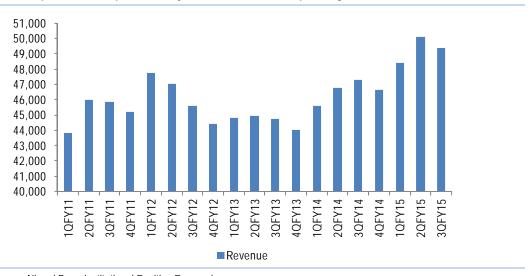


Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research



Exhibit 19: Per capita revenue productivity of TCS has been improving





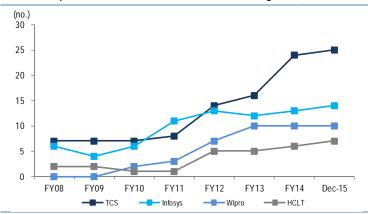
TCS can still deliver industry-leading growth

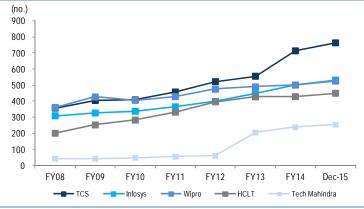
While we believe the gap between TCS's growth and its peers will contract and that its growth will slow down considerably with respect to history, we still expect it to grow at a rate slightly higher or at least in line with the industry in the coming years. TCS's higher-than-industry average growth over the past five years has been on the back of market share gains driven by the broadest range of capabilities among the Indian listed peer set. Its service lines (which straddle both Run The Business (RTB) and Change The Business (CTB)), verticals and delivery capabilities set it apart from immediate peers. The ability to invest ahead of the curve in non-linear growth initiatives, in service lines (Digital and IMS, for instance), in new geographies (France and Japan), sensible acquisitions, etc have done a lot of good. One should also appreciate the strong leadership provided by Mr. N Chandrasekaran, who has been at the helm since 2009. We believe these same attributes will drive growth for TCS in the next three years.

Sales have also been driven by high spending that the company has been making in SGA, both in absolute terms as well as a percentage of revenue. This has been sustained by very high gross margin that the company has been able to squeeze out of its business over a period of time.

Exhibit 20: TCS has been very good at farming (number of US\$100m plus clients added have been the highest)

Exhibit 21: It has been good a hunting too - number of US\$1m clients



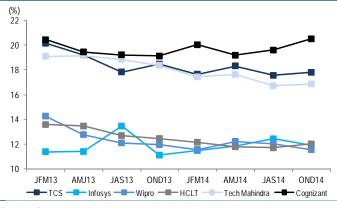


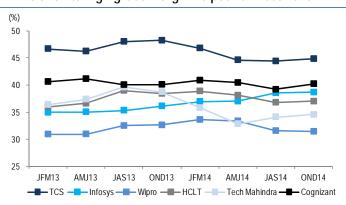
Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 22: TCS has done adequate spending on SGA

Exhibit 23: Its high gross margin helped reinvestment

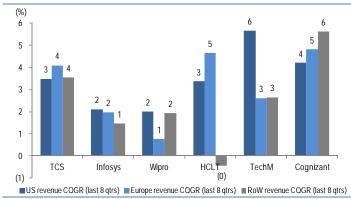




Source: Company, Nirmal Bang Institutional Equities Research

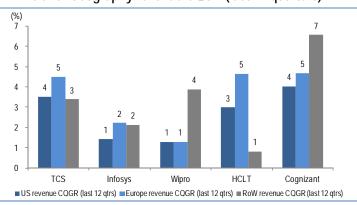


Exhibit 24: Geography revenue CQGR (last eight quarters)



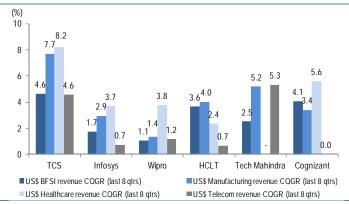
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 25: Geography revenue CQGR (last 12 quarters)



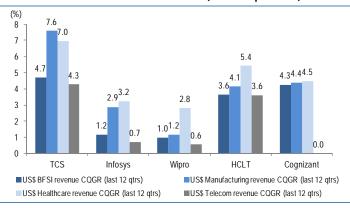
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 26: Vertical revenue CQGR (last eight quarters)



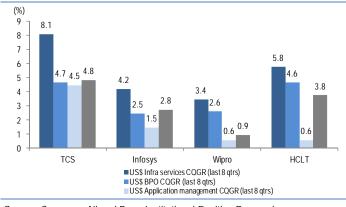
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 27: Vertical revenue CQGR (last 12 quarters)



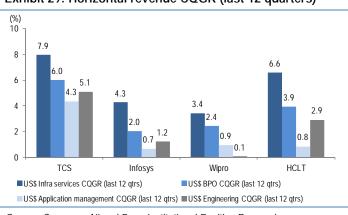
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 28: Horizontal revenue CQGR (last eight quarters)



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 29: Horizontal revenue CQGR (last 12 quarters)



Source: Company, Nirmal Bang Institutional Equities Research

Best global delivery capabilities among the Tier-1 set

TCS has the most extensive global delivery capabilities among Tier-1 Indian players having operations in more than 50 countries and employing staff from 120 nationalities. It has, for instance, been ahead of the curve in investing to build meaningful businesses in Latin America, France and Japan. This, in our view, probably helps it to position well ahead of other Indian players and probably mimic the presence of some of the large global multinational customers in their geographic spread of operations. It is not just physical presence, but the fact that many of these operations likely have local leaderships that probably helps the company win large transformation orders which requires multi-country implementation and maintenance.



Financials

We expect US\$ revenue CAGR of 10.5% over FY15E-FY18E driven by growth in Europe and IMS and broad growth across multiple verticals and service lines excluding the BFSI space and the Energy sector. We expect both gross and EBIT margin to trend down over the FY15-FY18. This will be on the back of salary increases, pricing pressure in legacy businesses, lower margins in the Digital business as it is likely to be onsite intensive and possibly lower in utilization. We believe economies of scale will reduce as growth comes off from mid teen level to very low double digit level. Also the company has operating levers left for improving margins. Both from an Employee utilization and Fixed Price project share perspective it is running at Industry high levels.

We expect TCS to deliver among the best RoICs among Indian listed peers driven by high EBIT margin and excellent turnover ratios on invested capital.

Exhibit 30: Gross margin comparison

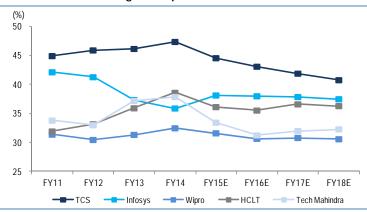
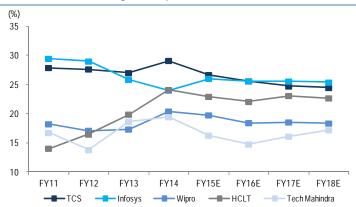


Exhibit 31: EBIT margin comparison



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 32: Few levers left for improving margins: Employee utilisation, FPP

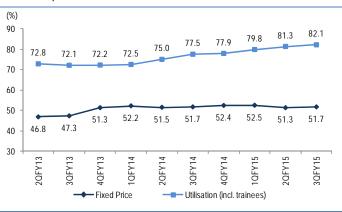
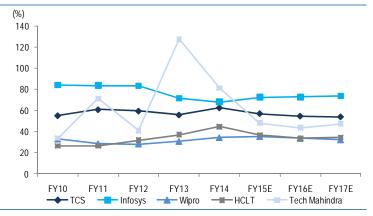


Exhibit 33: RoIC comparison



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 34: Sales/IC comparison

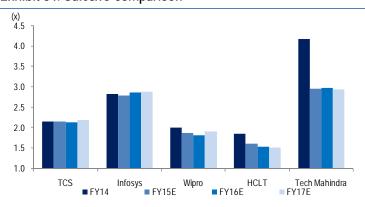
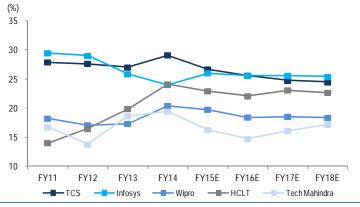


Exhibit 35: EBIT margin comparison



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research



Exhibit 36: Our estimates for the company are lower than consensus

	TCS									
	(Consensus			NBIE		Difference (%)			
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	
Revenue	953	1098	1261	948	1064	1202	(0.5)	(3.1)	(4.7)	
EBIT	257	297	340	253	272	297	(1.5)	(8.3)	(12.6)	
PAT Adj	214	244	279	212	228	250	(0.8)	(6.8)	(10.3)	
EPS Adj (Rs)	108.9	124.0	142.1	108.2	116.2	127.8	(0.7)	(6.3)	(10.0)	
EBIT Margin (%)	26.9	27.1	27.0	26.7	25.6	24.7	(26)bps	(146)bps	(224)bps	

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Valuation

We initiate coverage on Tata Consultancy Services (TCS) with a Sell rating and a March 2016 target price of Rs2314 (at a target P/E of 18.1x FY17E EPS, mean of the past three years). Our target price represents a downside of 12.7%. We believe that past three years is a relevant period for analysis as the growth rate of the industry has slowed down from high teen to low teen. We expect slower US dollar (USD) revenue CAGR of 10.5% over FY15E-FY18E versus historical five-year/three-year (ending FY15) CAGR of 19.5%/15.7%, respectively and therefore believe that it should trade at lower multiples that it is doing currently on FY17 EPS. TCS has lost some P/E premium it used to command as the market perceived that the growth rate gap it enjoyed in FY14 and FY15 versus peers is likely to contract over FY15E-FY18E .

Despite slower growth compared to its past, TCS will likely deliver industry leading revenue growth and margins in the foreseeable future because of its well-rounded business mix among Tier-1 set of peers (defined as India-listed companies with >US\$5bn in revenue). It has the broadest range of capabilities - service line, vertical and delivery - in the peer set and these will still lead to consistent, broad-based growth across several quarters. TCS has invested in new growth drivers, which we believe will deliver over FY15-FY18. As investments start paying off, we believe it will maintain EBIT margin of around 25% and RoIC of > 50% over FY15E-FY18E. TCS has been good at both account hunting and mining with an impressive number of relationships not only added, but also scaled up. This has been possible because of the breadth of its capabilities and strong execution. Therefore while we believe the stock is overpriced, we have TCS as the P/E benchmark for the sector and have accorded it the highest Target P/E of 18.1x. All other companies have target P/Es that are at a discount to that of TCS'.

Risks to our negative view

Since we have a negative view on the stock, the risks to our view stem from better than expected revenue and profits that could potentially come through if (1) there is better revenue growth amongst BFSI customers and especially among Insurance companies so that they spend more on IT (2) Crude price moves up and the pressure on energy companies to cut costs ease. (3) if TCS is able to win a large part of the rebid opportunity that is coming up in the IMS space over 2015-16 (4) INR depreciates a lot more than we have built into our model (5) It is able to retain a large part of the business where it is an incumbent and which comes up for renewal without making too many concessions.



Exhibit 37: Key metrics

		1QFY13										
Revenue (US\$mn)	2,648	2,728	2,853	2,948	3,040	3,165	3,337	3,438	3,503	3,694	3,929	3,931
EBIT (US\$mn)	734	750	763	804	806	856	1,007	1,023	1,021	972	1,055	1,063
PAT (US\$mn)	587	604	643	652	645	701	740	836	861	845	872	873
P&L (Rsmn)												
Revenue	132,593	148,687	156,208	160,699	164,301	179,871	209,772	212,940	215,511	221,110	238,165	245,011
EBITDA	36,747	40,897	41,789	43,809	43,584	48,627	63,295	63,347	62,810	58,149	63,942	66,242
PAT	29,455	32,748	35,123	35,516	34,970	39,866	46,539	51,797	52,967	50,578	52,884	54,441
Vertical mix (%)												
BFSI	42.2	43.0	42.8	43.0	43.5	43.0	43.1	42.7	42.9	41.7	40.4	40.5
Manufacturing	7.9	7.9	8.2	8.5	8.5	8.4	8.4	8.8	8.6	8.6	10.1	10.1
Telecom	10.0	10.3	10.3	9.5	9.3	9.6	9.3	9.6	9.3	9.4	8.9	8.9
Life sciences	5.3	5.3	5.2	5.2	5.1	5.5	5.7	5.9	6.1	6.3	6.3	6.4
Retail	12.5	13.2	13.4	13.4	13.4	14.0	13.9	13.8	13.5	13.8	13.5	13.4
Energy and utility	3.8	3.6	3.6	3.8	3.8	3.7	3.8	3.8	3.8	3.9	4.3	4.2
Horizontal mix (%)												
Application development & maint,	44.4	43.4	43.1	42.4	42.4	42.3	41.7	41.4	41	40.8	40.5	39.5
Business Intelligence	4.2	-	-	-	-	-	-	-	-	-	-	-
Product engineering services	4.6	4.6	4.6	4.7	4.6	4.7	4.7	4.6	4.8	4.5	4.6	4.5
Enterprise solutions	11.0	15.2	14.9	15.1	15.5	15.1	15.4	15.7	15.7	15.9	15.6	15.4
Infrastructure management	10.4	10.6	11.4	11.7	12.1	11.9	11.8	12	12	12.6	13.8	14.3
Business process outsourcing	11.5	13.0	12.6	12.4	12.0	11.9	11.9	12.1	12.1	11.9	11.6	11.7
Delivery (%)												
Offshore	50.3	50.5	49.1	49.4	46.5	48.5	48.1	47.8	47.4	47.2	45.7	46
Onsite	45.2	44.7	45.8	45.6	48.3	46.3	46.5	46.8	47.0	47.1	48.9	48.2
Project type												
T&M	53.0	53.2	53.2	52.7	48.7	47.8	48.5	48.3	47.6	47.5	48.7	48.3
Fixed price	47.0	46.8	46.8	47.3	51.3	52.2	51.5	51.7	52.4	52.5	51.3	51.7
Staff utilisation (%) (including trainees)	71.3	72.3	72.8	<i>72.1</i>	72.2	<i>72.5</i>	75.0	77.5	77.9	79.8	81.3	82.1
Client concentration (%)												
Top client	6.8	6.7	6.5	6.3	6.1	-	-	-	-	-	-	-
Top 5 clients	19.2	18.8	18.4	18	17.8	-	-	-	-	-	-	-
Top 10 clients	27.1	26.5	25.6	25.2	25.2	-	-	-	-	-	-	-
Number of clients												
US\$100mn +	14	14	14	16	16	19	22	22	24	24	24	25
US\$50mn +	43	46	45	47	48	53	53	55	53	58	62	65
Employees	238,583	243,545	254,076	263,637	276,196	277,586	285,250	290,713	300,464	305,431	313,757	318,625
Attrition (%)	12.2	10.9	11.4	9.8	10.6	10.5	10.9	10.9	11.3	12.0	12.8	13.4

Source: Company, Nirmal Bang Institutional Equities

Company background

TCS was founded in 1968 by J.R.D. Tata as a division of Tata Sons and it has been the pioneer of Indian IT services industry. It created what is now called the onsite:offshore model. TCS posted revenue of US\$13.4bn in FY14 compared to peers like Infosys (US\$8.2bn), HCL Technologies (US\$5.4bn) and Wipro (US\$6.6bn). In 1995, the company clocked revenue of US\$125mn. It employed 318,625 employees as of December-end 2014. The company's customer-centric engagement model enabled it to build teams around the clients' domain and technology requirements, offering specialised services and solutions that meet their business needs. Over the past 47 years, the company has had only three chief executive officers or CEOs, Mr. FC Kohli, Mr. Ramadorai and the current CEO, Mr. N. Chandrasekaran.

Management

- Mr. Cyrus Mistry is the chairman.
- Mr. N. Chandrasekaran is the CEO and managing director.
- Mr. Rajesh Gopinathan is the chief financial officer.



Exhibit 38: Quarterly snapshot

(Rsmn)	4QFY13	1QFY14	2QFY14	3QFY14	4QFY14	1QFY15	2QFY15	3QFY15
Revenue	164,301	179,871	209,772	212,940	215,511	221,110	238,165	245,011
Gross margin	76,709	83,171	100,724	102,683	100,871	98,678	105,760	109,852
EBIT	43,584	48,627	63,295	63,347	62,810	58,149	63,942	66,241
Other income	3,186	4,422	(906)	5,386	6,990	8,151	5,659	6,295
PBT	46,770	53,049	62,389	68,733	69,800	66,300	69,601	72,536
Tax	11,420	12,312	15,563	16,524	16,313	15,312	16,045	17,453
PAT	34,970	39,866	46,539	51,797	52,967	50,578	52,883	54,441
YoY growth (%)								
Revenue	23.9	21.0	34.3	32.5	31.2	22.9	13.5	15.1
Gross profit	23.9	21.1	42.2	37.8	31.5	18.6	5.0	7.0
EBIT	18.6	18.9	51.5	44.6	44.1	19.6	1.0	4.6
Net profit	18.7	21.5	32.5	45.8	51.5	26.9	13.6	5.1
QoQ growth (%)								
Revenue	2.2	9.5	16.6	1.5	1.2	2.6	7.7	2.9
EBIT	(0.5)	11.6	30.2	0.1	(0.8)	(7.4)	10.0	3.6
Net profit	(1.5)	14.0	16.7	11.3	2.3	(4.5)	4.6	2.9
Margins (%)								
Gross margin	46.7	46.2	48.0	48.2	46.8	44.6	44.4	44.8
EBIT	26.5	27.0	30.2	29.7	29.1	26.3	26.8	27.0
PAT	21.3	22.2	22.2	24.3	24.6	22.9	22.2	22.2
SGA	20.2	19.2	17.8	18.5	<i>17.7</i>	18.3	17.6	17.8

Source: Company, Nirmal Bang Institutional Equities

News flow over the past few months

- TCS has appointed Mr. Dinanath Kholkar to succeed Mr. Abid Ali Neemuchwala as the global head of its US\$1.9bn BPO division (FY15E revenue, 12% of sales).
- TCS has been certified as top employer in eight European countries the UK, Belgium, the Netherlands, Germany, Switzerland, Sweden, Denmark and Norway by Top Employers Institute.
- 4QFY15 will be similar to 4QFY14, as per TCS. Currency volatility will have a negative impact of 275bps in constant currency terms on Indian rupee revenue and a negative impact of 200bps on US dollar revenue.
- TCS has announced that it will hire 35,000 freshers in FY16, up from 25,000 in FY15.
- 'Involuntary attrition' in 9MFY15 stood at 2,574 employees. The corresponding numbers for FY14 and FY13 stood at 2,203 and 2,132, respectively.
- TCS is targeting a revenue of up to US\$5bn from the digital vertical in the next few years, says its CEO.
- Mr. N. Chandrasekaran reappointed for another five years as CEO, with effect from October 2014.



Exhibit 39: M&A activity

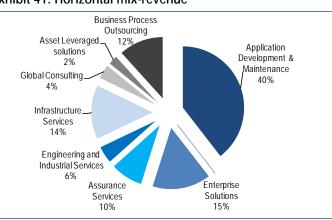
Name	Acquisition date	Activities	Country of HQ
CMC	2001 October	IT services	India
Airline Financial Support Services India (AFS)	2004 January	BPO	India
Aviation Software Development Consultancy India(ASDC)	2004 March	IT services	India
Phoenix Global Solutions	2004 May	BPO	India
Swedish Indian IT Resources AB(SITAR)	2005 May	IT services	Sweden
Pearl Group	2005 October	Insurance	United Kingdom
Financial Network Services (FNS)	2005 October	Core banking product	Australia
Comicrom	2005 November	Banking BPO	Chile
Tata Infotech	2006 February	IT services	India
TCS Management	2006 November	IT services	Australia
TKS-Teknosoft	2006 November	Banking product	Switzerland
Citigroup Global Services Limited	2008 December	Captive BPO of Citigroup Inc.	India
Supervalu Services India	2010 September	Captive IT/BPO unit of Supervalu Inc. in India	India
Computational Research Laboratories	2012 August	High performance computing	India
Alti SA	2013 April	IT services	France

Source: Media, Company, Nirmal Bang Institutional Equities

Exhibit 40: Vertical mix-revenue

Energy and Utilities Media and Others Entertainment Transportation. 0% Travel and Hospitality BFSI 5% 42% Hi-Tech Retail and distribution 13% Life Science. 6% Telecom Manufacturing 9% 10%

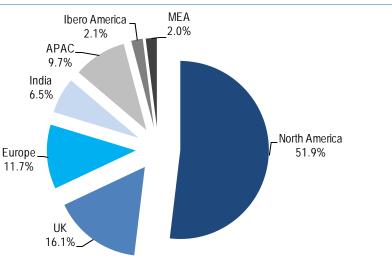
Exhibit 41: Horizontal mix-revenue



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 42: Geography mix-revenue





Financials

Exhibit 43: Income statement

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
Average INR/USD	60.8	61.2	61.0	63.0	64.0
Net sales (US\$mn)	13,443	15,491	17,443	19,081	20,880
-Growth (%)	16.2	15.2	12.6	9.4	9.4
Net sales	818	948	1,064	1,202	1,336
-Growth (%)	29.9	15.9	12.2	13.0	11.2
Direct costs	431	526	606	699	792
Gross margin	387	423	458	504	545
% of sales	47.4	44.6	43.1	41.9	40.8
SG& A	149	170	186	206	218
% of sales	18.3	17.9	17.5	17.2	16.3
EBIT	238	253	272	297	327
% of sales	29.1	26.7	25.6	24.7	24.5
Other income (net)	15	27	28	33	40
PBT	254	280	301	331	366
-PBT margin (%)	31.0	29.5	28.3	27.5	27.4
Provision for tax	61	66	71	78	86
Effective tax rate (%)	23.9	23.4	23.5	23.5	23.5
Minority interest	2	2	3	3	3
Net profit	191	212	228	250	278
-Growth (%)	38.2	10.8	7.4	10.0	10.9
-Net profit margin (%)	23.4	22.3	21.4	20.8	20.8

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 45: Balance sheet

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
Equity capital	21	21	21	21	21
Reserves & surplus	539	581	669	760	868
Net worth	560	602	690	781	889
Minority interest	-	-	-	-	-
Other liabilities	17	17	19	22	24
Total loans	3	3	3	3	3
Total liabilities	580	622	713	806	917
Goodwill	42	40	40	40	40
Net block (incl. CWIP)	104	119	136	154	171
Investments	23	-	-	-	-
Deferred tax asset - net	23	24	27	31	35
Other non-current assets	68	52	56	61	66
Other current assets	63	99	101	104	107
Debtors	222	254	285	321	360
Cash & bank balance	15	25	25	25	25
Bank deposits	130	136	181	224	282
Total current assets	430	513	592	674	775
Total current liabilities	109	127	139	154	170
Net current assets	321	387	453	521	605
Total assets	580	622	713	806	917

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 44: Cash flow

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
EBIT	238	253	272	297	327
(Inc.)/dec. in working capital	(95)	(56)	(66)	(68)	(84)
Cash flow from operations	143	197	206	230	242
Other income	(17)	(20)	(28)	(33)	(40)
Depreciation & amortisation	13	19	20	23	26
Financial expenses	1	-	-	-	-
Tax paid	(61)	(66)	(71)	(78)	(86)
Dividends paid	(73)	(127)	(139)	(160)	(169)
Net cash from operations	6	3	(12)	(18)	(27)
Capital expenditure	(22)	(15)	(17)	(17)	(17)
Net cash after capex	(15)	(12)	(29)	(36)	(44)
Inc./(dec.) in debt	-	-	-	-	-
(Inc.)/dec. in investments	(14)	3	-	-	-
Equity issue/(buyback)	-	-	-	-	-
Cash from financial activities	(15)	4	-	-	-
Others	26	19	29	36	44
Opening cash	18	15	25	25	25
Closing cash	15	25	25	25	25
Change in cash	(4)	10	-	-	-

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 46: Key ratios

Y/E March	FY14	FY15E	FY16E	FY17E	FY18E
EPS	97.6	108.2	116.2	127.8	141.8
FDEPS	97.7	108.2	116.2	127.8	141.8
Dividend per share	32.0	55.5	60.7	69.7	74.0
Book value	286.3	307.5	352.7	399.1	454.4
Dividend payout ratio (excl. DT)	32.8	51.3	52.2	54.5	52.2
Return ratios (%)					
RoE	39.2	36.5	35.2	34.0	33.3
RoCE	43.7	39.0	37.7	36.3	35.3
RoIC	62.7	57.1	54.7	54.0	54.0
Turnover ratios					
Asset turnover ratio	1.2	1.3	1.2	1.3	1.2
Debtor days (incl. unbilled rev.)	99	98	98	98	98
Working capital cycle days	136	139	147	150	158
Valuation ratios (x)					
PER	27.1	24.5	22.8	20.7	18.7
P/BV	9.3	8.6	7.5	6.6	5.8
EV/EBTDA	23.0	22.0	20.5	18.8	17.2
EV/sales	6.32	5.45	4.86	4.30	3.87
M-cap/sales	6.34	5.47	4.88	4.32	3.88



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Infosys

13 April 2015

Reuters: INFY.BO; Bloomberg: INFO IN

Enjoying A Longish 'Honeymoon'; Reality Check Ahead

We initiate coverage on Infosys with an Accumulate rating and setting a March 2016 target price of Rs2147 (down 3.7%, see our rating system on the last page) with a target P/E multiple of 16.3x on FY17E EPS (Target P/E at 10% discount to TCS'). Infosys stock has done well ever since the announcement of Mr. Vishal Sikka as its CEO and has substantially narrowed the P/E discount with TCS. This is on the back of view taken by the market that Mr. Sikka will restore revenue growth of the company to industry level, if not higher, in the foreseeable future. Two decent quarters of growth and margins (September and December quarters of 2014) have whetted its appetite, although we do not attribute much of this to the new CEO. However his technical background (former chief technology officer or CTO of SAP AG, with some key product initiatives under his belt there), his forceful enunciation of what needs to be done at Infosys to get it back to industry-leading growth, a better connect with the workforce, a more risk-taking approach to merger and acquisitions, etc makes us confident that growth pick-up is a matter of time, although we believe the market is expecting too much in the near term and is likely to be disappointed.

Parity with TCS in P/E multiple terms premature: Further contraction of P/E multiple discount to TCS depends on the performance of both these companies and how much the growth gap between them will narrow in FY16 compared to FY15 (when it was likely 8-10ppts). We expect Infosys to continue to trail TCS in terms of growth rate in FY16 as well as in FY17. Our projections indicate that a convergence is likely only by FY18. We are more conservative than Infosys' management, which believes the company will deliver industry-leading growth and margins in 18-24 months. For industry-leading growth, we need to see whether the company wins more large deals than it has done in the recent past.

EBIT margin could witness modest pressure in near term: While there is an outside chance that Infosys will stop giving guidance altogether to focus on rebuilding its business, recent statements of the new CEO indicate that he will take a balanced view of both short-term expectations of the market and medium-term requirements of the business. This makes us believe that Infosys will continue with its policy of giving guidance. It could give guidance of ~8% revenue growth in US dollar (USD) terms with an EBIT margin of ~25% for FY16. On the revenue front, this is likely to be a tad below industry growth (that we are forecasting and significantly below Nasscom's estimate). We will not be surprised if EBIT margin guidance is lowered by 100bps for FY16 versus FY15, primarily because of likely pricing pressure in legacy services in the wake of higher competitive intensity, investments required in re-skilling the workforce, investment in SGA which has fallen to a long-term low, and a greater element of onsite-oriented 'Digital' projects

official Digital projet	us.				
Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
Revenue	501	535	581	650	715
YoY (%)	24.2	6.7	8.7	11.8	10.0
EBIT	120	139	149	166	181
EBIT (%)	24.0	26.0	25.6	25.6	25.4
Adj. PAT	106	124	133	151	170
YoY (%)	13.0	16.3	7.2	13.4	12.9
FDEPS (Rs)	93.2	108.4	116.2	131.8	148.7
RoE (%)	24.4	24.9	23.6	23.0	22.4
RoCE (%)	33.7	34.9	<i>33.2</i>	32.4	31.1
ROIC (%)	68.0	72.7	72.9	73.7	72.7
P/E (x)	23.9	20.6	19.2	16.9	15.0
P/B (x)	5.4	4.9	4.2	3.6	3.1

Source: Company, Nirmal Bang Institutional Equities Research

ACCUMULATE

Sector: Information Technology

CMP: Rs2,229

Target price: Rs2,147

Downside: 3.7%

Girish Pai

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Key Data

Current Shares O/S (mn)	1,148.5
Mkt. Cap (Rsbn/US\$bn)	2,565.5/41.2
52 Wk H / L (Rs)	2,336/1,440
Daily Vol. (3M NSE Avg.)	2,201,452

Share holding (%)	1QFY15	2QFY15	3QFY15
Promoter	15.9	15.9	13.1
FII	41.6	42.7	41.6
DII	14.1	14.5	15.3
Others	28.4	26.9	30.1

One-Year Indexed Stock



Price Performance (%)

	1 M	6 M	1 Yr
Infosys	1.6	14.9	39.6
Nifty Index	0.8	11.7	29.2

Source: Bloomberg



P/E parity with TCS is premature

Ever since the entry of Mr. Sikka in Infosys, the large P/E multiple discount which used to exist between the company and TCS contracted substantially (see Exhibit 2). The contraction that took place was on the back of the market's view that the growth rate gap between the two companies will substantially narrow in FY16 versus FY15 (likely at 8-10ppts). Part of the contraction can be explained by TCS' FY15 performance falling short of elevated expectations of the street (which was in the first place driven by TCS' strong growth guidance). The other part has been driven by the view that the market has assumed that Infosys' revenue growth will pick up under the leadership of Mr. Sikka and touch industry level (or be at least higher than that of FY15E – 6%-7%). Further convergence of P/E multiple depends on the performance of both these companies. In our estimates, we have factored in narrowing of the growth rate gap to a level of 100bps-300bps in FY16E and FY17E, with Infosys continuing to trail TCS. We believe the initiatives of the new CEO will take time to show results. Our projections indicate a convergence only by FY18. Our expectation is more conservative than that of Infosys management, which believes that it will deliver industry-leading growth and margins in 18-24 months. We believe the 'Renew' and 'New' construct about the business that Mr.Sikka has been expounding is pretty similar to that of a number of Tier-1 company managements about their businesses. What he, however, brings to the table are technology credentials which can lead to better execution of his strategies. The reorganisation of the delivery set-up along horizontal lines is possibly the call taken by the management that in the current environment the emphasis is on cost take-out by the customer rather than on any vertical/domain skill-set.

Exhibit 1: Infosys P/E at more than +1 SD

(x) 22 20 18 16 14 12 Oct-13 -Jun-13 · Feb-14 Apr-14 Jun-14 · Oct-12 Oct-14 Dec-14 Aug-14 Aug-Feb-Dec-Feb-P/F - Mean 1sd

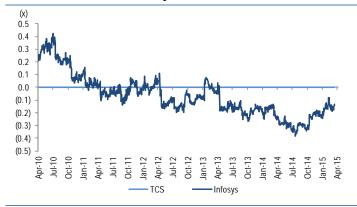
Exhibit 2: TCS versus Infosys P/E multiple scenario over the last 10 years



Source: Bloomberg, Nirmal Bang Institutional Equities Research

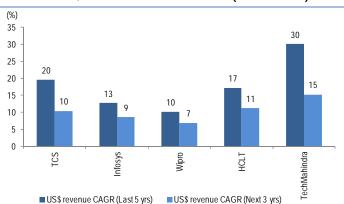
Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 3: TCS versus Infosys: Discount narrows



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 4: US\$ revenue CAGR estimates (FY15E-F18E)



Source: Company, Nirmal Bang Institutional Equities Research

Note: Tech Mahindra inclusive of LCC



Getting out of the 'high margin' mindset

We believe the worries of Infosys, especially post global financial crisis (GFC), have been because of the sustained focus on relatively higher margin software services opportunity and underinvestment in addressing other areas of the global IT/ITES market like IMS and BPO - where demand remained relatively robust. We also believe that the market for discretionary spending never truly recovered post GFC – something that Infosys was banking on. May be there was also some amount of top management bandwidth which was consumed by the work visa cases which the company was fighting in the US against a former employee at that time. We believe the 'high billing rate'/'high margin' focus which the company had for a long time because of its excellent brand equity with customers bred complacency and prevented the company from investing materially into automation initiatives to address the large and what seemed like a relatively unattractive IMS/BPO space. A player like HCL Technologies - because of its weak market positioning a decade ago in the software services area - took the hard way out by focusing on a relatively uncontested and unattractive but a large-spending area of customers, changed the business model to make it profitable and got a disproportionately large share of the opportunity. So the relative lack of success stemmed from complacency (or paranoia in case of HCL Technologies) that existed within Infosys, in our view.

Modest pick-up in discretionary spending to help

Fundamentally, Infosys is more geared towards discretionary spending if one goes by its current revenue mixin our view - and the rise in Digital business will help it gain some of the lost ground. Some ERP spending also seems to be making a comeback, if one goes by the management commentaries of various players. However, we believe Infosys needs to focus on being a bigger player on the non-discretionary side of demand, which tends to be much larger (we expect 70%-80% of the spending) and is less prone to cut-back during recessionary times.

Exhibit 5: IMS performance versus competitors

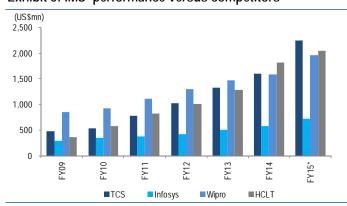
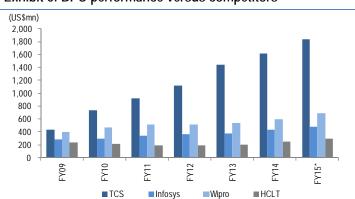


Exhibit 6: BPO performance versus competitors



Note: * Note:Dec quarter annualised

Source: Company, Nirmal Bang Institutional Equities Research

Note: * Note:Dec quarter annualised

Source: Company, Nirmal Bang Institutional Equities Research

New energy; greater client intimacy; greater risk-taking

We believe the appointment of Mr. Sikka has infused new energy into Infosys. His efforts at restoring employee morale through various internal initiatives - ranging from significantly stepped-up communication through town halls in major locations, through his regular blogs, employee access to social media during work hours, involvement in generation of new ideas, more promotions and a greater focus on re-skilling, in our view, will keep the organisational workforce motivated. We believe this will help address the problem of a high attrition rate which the company has been facing for a while now. Indications from the management in recent times indicate a decline in attrition.

The new CEO has also focused a lot on customer intimacy by personal meetings with more than 500 customers since he joined Infosys. More than 100 Design Thinking (DT) workshops have been conducted along with its customers that have focused on addressing yet-to-be articulated business problems of customers and delivering solutions to them. We believe the DT workshops will help - to an extent - in not only moving the company to the next level by bringing in strategy/management consulting elements to it but also help build a stickier relationship at the CEO level. We also believe the DT workshops indicate a different approach to sales compared to what the industry/Infosys has been doing in the not-too-distant past. The earlier approach focused on the cost arbitrage a lot, making Infosys vulnerable to more competition, not only from peers but also from those who had better automated solutions.



Exhibit 7: Steps taken by Mr. Sikka to promote customer intimacy and restore employee morale

Fostering customer intimacy	Restoring employee morale
Met more than 60% of the customers within seven months of joining the organization.	More promotions made.
Conducting Design Thinking workshops to learn more about the unarticulated problems of the customers.	Relaxation of dress code.
Placing most of the senior staff of the company (non-execution) in customer markets – in US and Europe	Access to the Internet and social media while at work.
Improving focus in account management by redeploying senior resources from delivery. This is to help mine accounts better. So far around 150-200 people have been transferred from delivery to the front line.	More training, especially on new technologies and design thinking.
Getting sales people proactively think about solutions to customer's problems.	Crowd-sourcing ideas from employees – murmuration.
	Programme called 'Green Channel' to woo back exemployees.

Source: Media, Nirmal Bang Institutional Equities Research

Cash chest to be a driver of growth and valuation

We believe it is unlikely that the new management will give back to the shareholders a material part of the USD5.5bn in cash which it has accumulated over the years. We believe this will be used for investing in new technologies and keeping the company relevant in the fast-changing IT services landscape. We expect the new management to be less conservative in valuations that it is likely to pay for potential targets (in comparison with the very tight-fisted approach of the promoter-led management of the past) if it sees economic logic in them and if they are likely to generate Rol which is higher than its cost of capital. With larger contracts being split and contract tenor being curtailed, we believe that acquiring companies for the sake of size will be unproductive. Beyond the 'technologies of tomorrow' we believe the company is likely to acquire some geography-specific players in areas like Japan, continental Europe and possibly even in Latin America to expand the footprint so as to make it relevant to a multinational enterprise customer present in these geographies. We, therefore, do not foresee the new management to do a large one-time payout, either in the form of large dividend or a large share buyback. We believe the industry is probably going through a very challenging time from a competitive intensity standpoint and believe the cash that it has is indeed a very strategic asset which needs to be deployed judiciously to drive growth.



Internal restructuring to align employees with the new management's strategy

As expected, Mr. Sikka is rebuilding his team at Infosys by taking in some of his ex-colleagues from SAP. (see Exhibit 8) and moving around some senior Infosys managers to different roles. While much of the erstwhile senior management of Infosys has moved on in the run-up and post entry of Mr. Sikka into the company, we believe there have been no high profile exits at the senior management level in recent days, which would make us feel uncomfortable.

Exhibit 8: Employees who have joined Infosys from SAP post entry of Mr. Sikka

Mr. Michael Reh	Senior VP, Head of Edgeverve, Finacle
Mr. Abdul Razack	Head of Platforms
Mr. Navin Budhraja	Head of Architecture & Technology
Mr. Ritika Suri	Head of M&A
Mr. Sanjay Rajagopalan	VP, Design, Innovation and Research
Mr. Anirban Dey	VP, Global Head of Edge Products
Mr. Kaustav Mitra	VP, Innovation Ecosystem
Mr. Ganapathy Subramanian	VP, Unit Technology Officer – Big Data and Analytics

Source: Media, Nirmal Bang Institutional Equities Research

Internal restructuring in Infosys

- Improving focus in the account management by redeploying senior resources from delivery. The move is
 expected to help mining the accounts better. So far around 150-200 people have been moved.
- Separated delivery from sales and created a horizontal unit under the leadership of Mr.Ravi Kumar S. who was previously heading Insurance, Cards and Payments at Infosys. Infosys' delivery will be organised around seven service lines digital integration services, application development and maintenance, engineering services, cloud and infrastructure services, independent validation and testing, enterprise package application services, and management consulting services. Heads of these service lines will report to Mr. Kumar.
- Mr. Kumar's responsibilities will be divided between financial services head Mr. Mohit Joshi and life sciences and services head Mr. Manish Tandon. Mr. Joshi will head the cards and payments portfolio, while Mr. Tandon will be responsible for insurance and healthcare.
- Infosys' ex-head of human resources (HR) Mr. Srikantan Moorthy will be in charge of application development and maintenance, and independent validation and testing.
- Edgeverve and Finacle, the core banking solution of Infosys, will now be looked after by Mr. Michael Reh, who comes from SAP. Infosys will soon appoint a CEO for Edgeverve, who will report to Mr. Reh.
- The two consulting units Lodestone which was earlier operating as a subsidiary of the company and Infosys Consulting were merged to form a single consulting unit with Mr Sanjay Purohit as its head. Mr. Purohit was previously heading the horizontal products and platform subsidiary, Edgeverve.

Focusing on automation a lot more and of the right kind

The new management has indicated tremendous sense of urgency to use automation, image recognition, voice recognition, rule-based processing, document understanding, etc in some of the service lines of the company. We believe this stems not only from the point of driving better revenue productivity, but also a must-have customer requirement to drive costs lower. The valuation of Panaya at US\$200mn (6x revenue) also to an extent indicates - in our view - that Infosys has been behind the curve in adoption of automation. The lack of large deal wins in the IMS space - at least not as many as some of its peers - and the imperative to hold on to its existing large ADM contracts that may come up for renewal, in our view, has driven the move.

Large deals are very critical to driving growth at Infosys because of its size. These would have IMS, ADM as well as vendor consolidation flavour to them. Without strong automation capabilities, no vendor will be able to win large deals and generate good margins for itself, while giving productivity gains for the customer on an annual basis. One of the key metrics the market should keep track in the coming days is per capita revenue productivity as it indicates the success of the company to move up the value chain and also incorporate automation in its work.

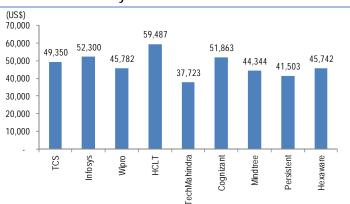


We believe the acquisition of Panaya is probably to address the immediate automation needs of Infosys. We believe Infosys will have to defend its existing contracts that are coming up for renewal whereby it is in a position to give gains to the customers without hurting its own profitability significantly. With a larger chunk of business likely in the application and ERP maintenance side, Panaya is likely to create some amount of differentiation for Infosys versus its competitors in a segment that is relevant to it. The price paid will not look very prohibitive if one takes into account the likely loss of business that Infosys would have had to bear in the coming days without this software piece. We believe extracting value from Panaya and other such buyouts is critical to Infosys' growth and survival. The management has indicated that efforts will be made to apply Panaya's skills in automation in the area of IMS also, besides enterprise-packaged solutions. We believe the lead indicators for success in its strategy on automation will be the number and Total contract value (TCV) of large deal wins..

Exhibit 9: Per capita productivity numbers have improved over the past few quarters



Exhibit 10: Per capita revenue productivity of Infosys is the second best currently



Source: Company, Nirmal Bang Institutional Equities Research



Financials

We expect revenue USD/INR CAGR of 8.4%/10.2% over FY15E-FY18E against a growth of 13% over FY10-FY15E in USD terms, driven by a fresh impetus in IMS and BPO business, broad growth across multiple verticals excluding BFSI, Energy and Europe. We believe EBIT margin of the company will largely be maintained with some modest decline in FY16E of 40bps, primarily because of likely pricing pressure in legacy services due to convergence of capabilities in the Tier-1 set, investments required in re-skilling the workforce, investment in SGA which has declined to long-term lows and a greater element of onsite-oriented Digital projects.

Tightened up levers to generate funds for investment elsewhere

Cost-cutting initiatives taken up since 2013 have led to surprises on the margin front over the past few quarters. We believe there are a few levers left which can be tightened more to extract value. We believe the employee utilisation rate, which is quite high compared to history, can be moved up a bit higher. On the fixed-price project front, we believe there is a large scope for value to be extracted as automation capabilities of the company mature.

Exhibit 11: Gross margin comparison

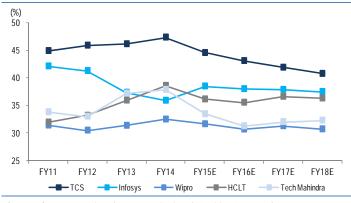
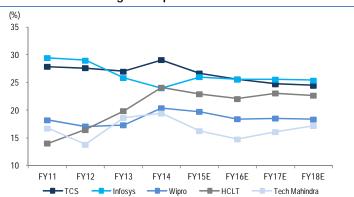


Exhibit 12: EBIT margin comparison



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 13: Fixed-price contract is the only key lever left for improvement in margins

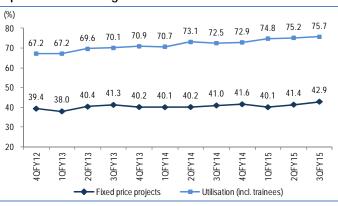
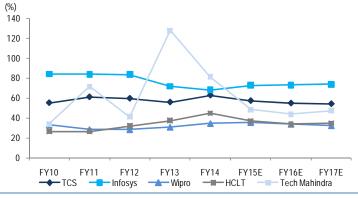


Exhibit 14: RoIC comparison



Source: Company, Nirmal Bang Institutional Equities Research

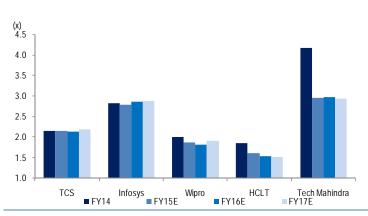
Source: Company, Nirmal Bang Institutional Equities Research

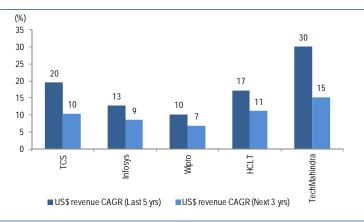
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Exhibit 15: Sales/IC comparison – Infosys is running one of the most efficient operations in the Industry

Exhibit 16: Revenue growth rate

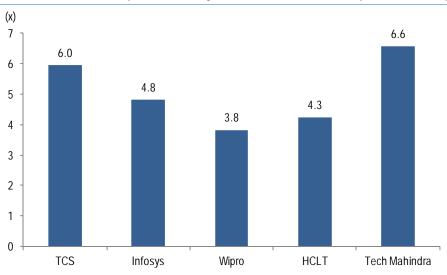




Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 17: Sales/Fixed Asset comparison: Infosys runs one of the most capital-efficient operations



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 18: Our expectations versus street expectations

	Infosys								
	(Consensus		NBIE			Difference (%)		
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E
Revenue	540	606	687	535	581	650	(1.0)	(4.0)	(5.3)
EBIT	141	157	180	139	149	166	(1.1)	(5.3)	(7.6)
PAT Adj.	125	138	157	124	133	151	(0.7)	(4.0)	(4.1)
EPS Adj. (Rs)	109.0	121.0	137.4	108.4	116.2	131.8	(0.6)	(3.9)	(4.1)
EBIT margin (%)	26.1	25.9	26.2	26.0	25.6	25.6	2bps	(34)bps	(64)bps



Valuation

We believe TCS should be the valuation benchmark for the IT sector considering the fact that it will continue to lead the market in terms of growth and EBIT margin in the Tier-1 set. We believe Infosys' P/E will have to be benchmarked versus TCS' P/E. We expect Infosys' revenue growth in USD terms to be 8.4% over FY15E-FY18E from the levels of 13% over the past five years. We have, therefore, assigned a multiple of 16.3x, which is at a 10% discount to the target P/E multiple of TCS. The P/E multiple discount to TCS has reduced and will sustain at around the current level, as the growth gap will not be as large as the one witnessed in the recent past.

Exhibit 19: Standalone P/E of Infosys



Exhibit 20: TCS versus Infosys discount has reduced



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Risks

While many risks which are sector-related and discussed in the sector note will be applicable to Infosys, we believe the company-specific risks are the relatively high exposure to the BFSI vertical (33% of revenue), its high attrition rate which impacts execution, large-sized exposure to legacy business on the application management and enterprise solutions side which may exert pressure on pricing when these contracts come up for renewal. While inorganic growth is going to be a very vital element of its growth strategy going forward in our view - a lot of money is likely to be spent on building capability and in expanding geographic exposure. If the price paid for acquisitions is excessive and the synergies generated are not good enough to offset the price, then RoIC will be negatively impacted in future. Similarly, because of its very large size, any large-scale 'involuntary' attrition, in our view, could lead to sizable one-time retrenchment costs.



Exhibit 21: Key metrics

	4QFY12	1QFY13	2QFY13	3QFY13	4QFY13	1QFY14	2QFY14	3QFY14	4QFY14	1QFY15	2QFY15	3QFY15
Revenue (US\$mn)	1,771	1,752	1,797	1,911	1,938	1,991	2,066	2,100	2,092	2,066	2,201	2,218
EBIT (US\$mn)	528	489	472	491	457	468	451	526	534	451	575	592
PAT (US\$mn)	463	416	431	434	444	418	383	463	487	383	511	522
P&L (Rsmn)												
Revenue	88,520	96,160	98,580	104,240	104,540	112,670					133,420	137,960
EBITDA	26,470	26,930	25,970	26,770	24,620	26,640	28,370	32,590	32,810	32,110	34,830	36,890
PAT	23,160	22,890	23,690	23,690	23,940	23,740	24,070	28,750	29,920	28,860	30,960	32,500
Vertical mix (%)												
Manufacturing	21.3	22.5	22.1	21.7	22.2	22.5	23.2	22.8	23.0	23.2	23.3	23.4
Insurance, finance and banking	34.3	33.7	33.7	33.7	33.9	33.7	33.4	33.5	33.5	33.4	32.8	33.1
Telecom	10.1	8.5	9.9	9.6	9.3	8.5	8.3	7.9	8.6	8.7	8.9	8.7
Retailing & CPG	15.8	15.8	17.0	16.0	15.4	15.8	15.7	16.0	15.5	15.8	15.3	14.9
Others	13.0	12.4	12.0	12.7	12.5	12.4	12.7	12.8	12.8	12.4	13.1	12.8
Life sciences	3.9	4.7	3.9	4.8	4.8	4.7	4.6	5.0	4.7	4.6	4.7	5.1
Healthcare	1.6	2.4	1.4	1.5	1.9	2.4	2.1	2.0	1.9	1.9	1.9	2.0
Horizontal mix (%)												
Application development	16.9	17.1	17	15.8	15.5	15.7	16	15.9	15.5	15.8	16.1	14.9
Application maintenance	20.9	20.9	21.4	20	19.9	19.3	19.1	19.2	19.4	18.7	18.9	19.5
Package implementation	31.1	29.9	30	32.6	32.7	33.6	33.3	33.4	32.5	32.3	32.4	32.6
Testing	7.8	8.3	8.6	8.4	8.3	8.4	8.4	8.7	9.2	9.5	9.4	9.1
Product engineering services	3.4	3.5	3.4	3.2	3.2	3.2	3.3	3.2	3.4	3.4	3.4	3.4
Business process management	4.8	4.9	4.7	5.2	5.2	5.1	5.1	5.3	5.5	5.3	5.1	5.4
Infrastructure management	6.2	6.6	6.8	6.9	7.2	7	7.2	6.9	7.2	7.9	7.9	8.2
Other services	2.7	2.7	2.6	2.4	2.3	2.3	2.3	2.1	2.2	2.3	2.2	2.3
Products, platforms and solutions	6.2	6.1	5.5	5.5	5.7	5.4	5.3	5.3	5.1	4.8	4.6	4.6
Products	4.4	4.5	3.8	3.9	4	3.7	3.7	3.8	3.5	3.2	2.9	2.9
BPM platform	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.2	1.2	1.2	1.1
Others	0.4	0.3	0.4	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.6
Project type	(0.4	(0.0	50.7	50.7	50.0	50.0	50.0	50.0	50.4	50.0	50.7	F7.4
T&M	60.6	62.0	59.6	58.7	59.8	59.9	59.8	59.0	58.4	59.9	58.6	57.1
Fixed price	39.4	38.0	40.4	41.3	40.2	40.1	40.2	41.0	41.6	40.1	41.4	42.9
Staff utilisation (%) (including trainees)	67.2	67.2	69.6	70.1	70.9	70.7	73.1	<i>72.5</i>	72.9	74.8	75.2	<i>75.7</i>
Onsite mix (%)	49.6	49.6	50.7	51.4	52.1	<i>57.5</i>	56.6	51.1	54.7	54.5	54.6	54.8
Offshore mix (%)	50.4	50.4	49.3	48.6	47.9	42.5	43.4	48.9	45.3	45.5	45.4	45.2
Client concentration (%)	11	11	4.0	27	27	2.0	2.0	2.7	2./	2.4	2.4	2.2
Top Client	4.1 15.4	4.1 16.2	4.0	3.6 14.6	3.6 14.7	3.9	3.9 15.0	3.7	3.6 14.1	3.4 13.7	3.4 13.6	3.2 13.3
Top 5 clients Top 10 clients	15.4 24.4	25.3	16.0 25.4	14.6 23.9		14.9	15.0 24.5	14.1 23.5	23.4	13.7 22.9	13.0 22.9	13.3 22.4
Number of clients	24.4	20.3	23.4	23.9	24.0	24.0	24.3	23.0	23.4	22.9	22.9	22.4
US\$1mn	399	403	413	419	448	466	469	495	501	520	526	532
US\$5mn	190	199	205	209	213	215	221	226	232	235	237	240
US\$10mn	132	132	134	136	137	139	146	148	148	148	150	154
US\$20mn	79	83	82	81	80	82	86	88	NA	NA	NA	NA
US\$30mn	64	64	61	62	62	64	66	69	NA	NA	NA	NA
US\$40mn	50	53	52	50	49	49	51	55	NA	NA	NA NA	NA NA
US\$50mn	40	41	40	40	40	41	40	41	42	43	43	46
US\$60mn	28	31	32	34	33	35	34	36	NA	NA	NA	NA
US\$70mn	23	24	22	25	28	29	30	30	NA	NA	NA	NA
US\$80mn	23 17	18	19	20	19	22	22	21	NA	NA	NA	NA
US\$90mm	16	16	14	15	17	17	17	17	NA	NA	NA	NA
US\$100mn	13	12	11	12	12	15	15	15	13	12	13	14
US\$200mn	2	3	3	3	3	3	3	4	3	3	3	4
US\$300mn	1	ა 1	NA	NA	NA	NA	NA	1	ა 1	ა 1	0	0
Employees		151,151	153,761	155,629				158,404			165,411	-
Attrition (%)	15.6	21.5	20.5	16.9	20.3	24.4	23.2	21.4	22.6	26.4	24.8	21.3



History

Infosys was founded in 1981. The company posted revenue of US\$8.2bn in FY14 compared to peers like TCS (US\$13.4bn) and Wipro (US\$6.6bn). It employed 169,638 employees as of end-December 2014.

Management

- Mr. Vishal Sikka took over as CEO and MD from Mr. S.D. Shibulal. Prior to joining Infosys, Mr. Sikka was a member of the executive board of SAP AG.
- Mr. Pravin Rao is the chief operating officer or COO. He joined Infosys in 1986 and has held senior leadership roles such as head of infrastructure management services, delivery head for Europe, and head of retail, consumer packaged goods, logistics and life sciences.
- Mr. Rajiv Bansal is the chief financial officer or CFO and executive vice president. He joined the company in 1999, prior to which he worked in different capacities at Tata Technologies, Cable & Wireless, and ABB

Exhibit 22: Quarterly snapshot

IOEV12	10EV14	20EV14	20EV14	40EV14	10EV1E	20EV1E	20EV1E
							3QFY15
							137,960
36,520	39,480	45,810	47,050	47,580	47,240	51,410	53,340
11,900	12,840	17,440	14,460	14,770	15,130	16,580	16,450
24,620	26,640	28,370	32,590	32,810	32,110	34,830	36,890
6,740	5,770	5,100	7,310	8,510	8,290	8,770	8,400
31,360	32,410	33,470	39,900	41,320	40,400	43,600	45,290
7,420	8,670	9,400	11,150	11,400	11,540	12,640	12,790
23,940	23,740	24,070	28,750	29,920	28,860	30,960	32,500
18.1	17.2	31.5	25.0	23.2	13.3	2.9	5.9
(0.0)	3.7	22.0	22.0	30.3	19.7	12.2	13.4
(7.0)	(1.1)	9.2	21.7	33.3	20.5	22.8	13.2
3.4	3.7	1.6	21.4	25.0	21.6	28.6	13.0
0.3	7.8	15.1	0.5	(1.2)	(0.8)	4.5	3.4
(8.0)	8.2	6.5	14.9	0.7	(2.1)	8.5	5.9
1.1	(0.8)	1.4	19.4	4.1	(3.5)	7.3	5.0
34.9	35.0	35.3	36.1	37.0	37.0	38.5	38.7
23.6	23.6	21.9	25.0	25.5	25.1	26.1	26.7
22.9	21.1	18.6	22.1	23.2	22.6	23.2	23.6
11.4	11.4	13.5	11.1	11.5	11.8	12.4	11.9
	24,620 6,740 31,360 7,420 23,940 18.1 (0.0) (7.0) 3.4 0.3 (8.0) 1.1 34.9 23.6 22.9	104,540 112,670 36,520 39,480 11,900 12,840 24,620 26,640 6,740 5,770 31,360 32,410 7,420 8,670 23,940 23,740 18.1 17.2 (0.0) 3.7 (7.0) (1.1) 3.4 3.7 0.3 7.8 (8.0) 8.2 1.1 (0.8) 34.9 35.0 23.6 23.6 22.9 21.1	104,540 112,670 129,650 36,520 39,480 45,810 11,900 12,840 17,440 24,620 26,640 28,370 6,740 5,770 5,100 31,360 32,410 33,470 7,420 8,670 9,400 23,940 23,740 24,070 18.1 17.2 31.5 (0.0) 3.7 22.0 (7.0) (1.1) 9.2 3.4 3.7 1.6 0.3 7.8 15.1 (8.0) 8.2 6.5 1.1 (0.8) 1.4 34.9 35.0 35.3 23.6 23.6 21.9 22.9 21.1 18.6	104,540 112,670 129,650 130,260 36,520 39,480 45,810 47,050 11,900 12,840 17,440 14,460 24,620 26,640 28,370 32,590 6,740 5,770 5,100 7,310 31,360 32,410 33,470 39,900 7,420 8,670 9,400 11,150 23,940 23,740 24,070 28,750 18.1 17.2 31.5 25.0 (0.0) 3.7 22.0 22.0 (7.0) (1.1) 9.2 21.7 3.4 3.7 1.6 21.4 0.3 7.8 15.1 0.5 (8.0) 8.2 6.5 14.9 1.1 (0.8) 1.4 19.4 34.9 35.0 35.3 36.1 23.6 23.6 21.9 25.0 22.9 21.1 18.6 22.1	104,540 112,670 129,650 130,260 128,750 36,520 39,480 45,810 47,050 47,580 11,900 12,840 17,440 14,460 14,770 24,620 26,640 28,370 32,590 32,810 6,740 5,770 5,100 7,310 8,510 31,360 32,410 33,470 39,900 41,320 7,420 8,670 9,400 11,150 11,400 23,940 23,740 24,070 28,750 29,920 18.1 17.2 31.5 25.0 23.2 (0.0) 3.7 22.0 22.0 30.3 (7.0) (1.1) 9.2 21.7 33.3 3.4 3.7 1.6 21.4 25.0 0.3 7.8 15.1 0.5 (1.2) (8.0) 8.2 6.5 14.9 0.7 1.1 (0.8) 1.4 19.4 4.1 34.9 <	104,540 112,670 129,650 130,260 128,750 127,700 36,520 39,480 45,810 47,050 47,580 47,240 11,900 12,840 17,440 14,460 14,770 15,130 24,620 26,640 28,370 32,590 32,810 32,110 6,740 5,770 5,100 7,310 8,510 8,290 31,360 32,410 33,470 39,900 41,320 40,400 7,420 8,670 9,400 11,150 11,400 11,540 23,940 23,740 24,070 28,750 29,920 28,860 18.1 17.2 31.5 25.0 23.2 13.3 (0.0) 3.7 22.0 22.0 30.3 19.7 (7.0) (1.1) 9.2 21.7 33.3 20.5 3.4 3.7 1.6 21.4 25.0 21.6 0.3 7.8 15.1 0.5 (1.2) (0.8)	104,540 112,670 129,650 130,260 128,750 127,700 133,420 36,520 39,480 45,810 47,050 47,580 47,240 51,410 11,900 12,840 17,440 14,460 14,770 15,130 16,580 24,620 26,640 28,370 32,590 32,810 32,110 34,830 6,740 5,770 5,100 7,310 8,510 8,290 8,770 31,360 32,410 33,470 39,900 41,320 40,400 43,600 7,420 8,670 9,400 11,150 11,400 11,540 12,640 23,940 23,740 24,070 28,750 29,920 28,860 30,960 18.1 17.2 31.5 25.0 23.2 13.3 2.9 (0.0) 3.7 22.0 22.0 30.3 19.7 12.2 (7.0) (1.1) 9.2 21.7 33.3 20.5 22.8 3.4

Source: Company, Nirmal Bang Institutional Equities Research

Latest events

- Infosys said it will raise salaries by 6.5%-9.0% for its employees in India.
- Ms. Ritika Suri, head of M&A, to be responsible for the US\$500m Innovation Fund.
- Infosys will follow a two-pronged acquisition strategy, according to Mr. Pravin Rao, COO. It will look for
 acquiring companies of smaller sizes for innovative tech and larger ones for geographic expansion and
 vertical growth.
- Internal restructuring done at Infosys, with delivery separated from sales and made into a horizontal.
- Infosys eyes 900 clients for its automation platform. Currently the automation platform serves only about 2% of its total clients.
- Infosys announced that it will buy Panaya Inc, a New Jersey-based provider of automation technology, for an enterprise value of US\$200mn.

67



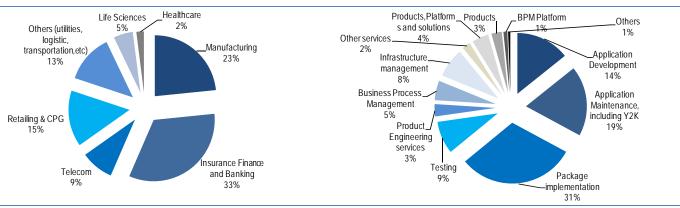
Exhibit 23: Acquisitions done by Infosys over the past 15 years (partial list)

Target company	When done	Valuation	Comment
Expert Information Services – Australian IT services firm	December 2003	USD23mn	-
Atlanta-based McCamish Systems	December 2009	USD58mn	Insurance and financial service back-office service provider.
Captive operations of Dutch consumer electronics giant Philips	2010	USD28mn	Came bundled with a multi-year business commitment of US\$250mn.
Australia-based Portland Group	January 2012	AUD37mn	BPO acquired, provider of strategic sourcing and category management services.
Switzerland-based Lodestone Management Consultants	September 2012	USD345mn	For consulting capability.
California/Israel-based company, Panaya	February 2015	USD200mn	For software automation capabilities.

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 24: Vertical mix-revenue

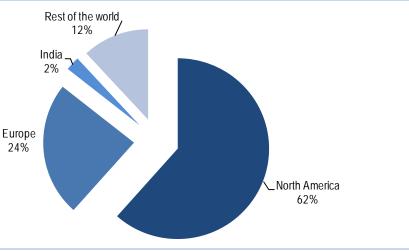
Exhibit 25: Horizontal mix-revenue



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 26: Geography mix-revenue



Source: Company, Nirmal Bang Institutional Equities Research



Financials

Exhibit 27: Income statement

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
Average INR/USD	60.7	61.2	61.0	63.0	64.0
Net sales (US\$mn)	8,247	8,777	9,528	10,317	11,172
-Growth (%)	11.6	6.4	8.6	8.3	8.3
Net sales	501	535	581	650	715
-Growth (%)	24.2	6.7	8.7	11.8	10.0
Direct costs	321	331	360	404	447
Gross margin	180	204	221	246	268
% of sales	35.9	38.1	38.0	37.9	37.5
SG& A	60	65	72	80	87
% of sales	11.9	12.1	12.4	12.3	12.1
EBIT	120	139	149	166	181
% of sales	24.0	26.0	25.6	25.6	25.4
Other income (net)	27	35	38	46	55
PBT	147	174	187	212	236
-PBT margin (%)	29.3	32.5	32.2	32.6	33.0
Provision for tax	41	50	54	62	66
Effective tax rate (%)	27.6	28.7	29.0	29.0	28.0
Net profit	106	124	133	151	170
-Growth (%)	13.0	16.3	7.2	13.4	12.9
-Net profit margin (%)	21.2	23.2	22.8	23.2	23.8

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 29: Balance sheet

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
Equity capital	34	34	34	34	34
Reserves & surplus	442	486	572	670	780
Net worth	475	519	606	704	814
Deferred tax liability	1	1	1	1	1
Other liabilities	3	1	1	1	1
Total loans	-				
Total liabilities	479	521	607	705	815
Goodwill	22	21	21	21	21
Other intangible assets	3	3	3	3	3
Net block	79	90	103	119	136
Investments	43	29	29	29	29
Deferred tax asset - net	7	6	6	6	6
Other non-current assets	17	18	20	22	25
Unbilled revenue	28	30	33	37	41
Derivative financial instrument	2	-	-	-	-
Other current assets	26	29	31	35	39
Income tax assets-current	-	-	-	-	-
Debtors	84	92	102	114	125
Cash & bank balance	260	312	378	453	538
Total current assets	400	463	545	639	743
Total current liabilities	91	109	120	134	147
Net current assets	308	354	425	505	596
Total assets	479	521	607	705	815

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 28: Cash flow

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
EBIT	120	139	149	166	181
(Inc.)/dec. in working capital	(6)	(7)	5	6	5
Cash flow from operations	115	133	153	172	187
Other income	27	35	38	46	55
Depreciation & amortisation	14	13	12	13	14
Financial expenses	-	-	-	-	-
Tax paid	(41)	(50)	(54)	(62)	(66)
Dividends paid	(23)	(52)	(63)	(63)	(93)
Net cash from operations	92	79	86	106	97
Capital expenditure	28	24	25	28	32
Net cash after capex	64	54	61	78	65
Inc./(dec.) in debt	-	-	-	-	-
(Inc.)/dec. in investments	-	-	-	-	-
Cash from financial activities	-	-	-	-	-
Others	(22)	(2)	6	(4)	20
Opening cash	218	260	312	378	453
Closing cash	260	312	379	452	538
Change in cash	42	52	67	74	85

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 30: Key ratios

Y/E March	FY14	FY15E	FY16E	FY17E	FY18E
EPS	93.2	108.4	116.2	131.8	148.7
FDEPS	93.2	108.4	116.2	131.8	148.7
Dividend per share	20.0	20.0	30.0	30.0	30.0
Book value	416	455	530	616	712
Dividend payout ratio (excl. DT)	21.5	18.5	25.8	22.8	20.2
Return ratios (%)					
RoE	24.4	24.9	23.6	23.0	22.4
RoCE	33.7	34.9	33.2	32.4	31.1
RoIC	68.0	72.7	72.9	73.7	72.7
Turnover ratios					
Asset turnover ratio	0.9	8.0	0.8	8.0	0.7
Debtor days (incl. unbilled rev.)	80	82	83	83	83
Working capital cycle days	51	39	38	37	37
Valuation ratios (x)					
PER	23.9	20.6	19.2	16.9	15.0
P/BV	5.4	4.9	4.2	3.6	3.1
EV/EBTDA	21.2	18.3	17.1	15.3	14.0
EV/sales	5.1	4.8	4.4	3.9	3.6
M-cap/sales	5.1	4.8	4.4	3.9	3.6



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Wipro

13 April 2015

Reuters: WIPR.BO; Bloomberg: WPRO IN

Show Us The Execution (Money)!

We initiate coverage on Wipro with a Sell rating and a March 2016 target price of Rs576 (return of -6.6%) based on a target P/E of 15.4x (15% discount to our target P/E of TCS, our benchmark) FY17E EPS. While recent quarters have shown broad-based growth, the track record before that over multiple quarters has not been inspiring. Only consistent and above industry rate of growth will lead its P/E multiple to converge with that of TCS'. Over the past 15 years, Wipro has dropped many balls. Despite being an early mover in a number of service lines like IMS, BPO, R&D services and IT services for telecommunication service providers, Wipro lost market share because of - in our view - higher-than-normal leadership turnover and lessthan-satisfactory execution. Its risk-taking appetite has switched between being reactive to being pro-active a few times in the past, with the latter being the current mood. RoIC of Wipro has been the poorest among Tier-1 players. We believe its business is more asset-intensive, partly because of the company not being able to squeeze out enough value from its various acquisitions and also partly because it likely follows a more asset-intensive IMS business. Wipro has tried to claw its way back with some success under Mr. T.K. Kurien, chief executive officer (CEO) since February 2011. However, in each of the past four years under Mr. Kurien's leadership, Wipro has grown below the industry rate. One of the problems, in our view, has been its inability to extract more from clients, despite having a broad range of services to sell. The company's recently articulated strategy looks fine on paper, but is similar to some of its peers. We need to see good execution.

Positive moves afoot, but are late: Over the past three years, Wipro invested in building automation frameworks and platforms that helped it win large orders and also enjoy decent margins on them. The 'hyper automation' initiative is likely to be rolled out to all its clients in FY16. Also, starting FY16, the company has instituted an incentive regime that rewards sales people on growing the account size and selling a broader range of services, something that could have been attempted earlier. We see margins impacted slightly in FY16 because of salary hike, investments in developing/improving frameworks and also pricing pressure from legacy contracts. We also expect additional investments to diversify geographically, leading to higher SGA spending.

Near-term risk - Succession exercise may lead to attrition and dissipation of top management bandwidth: Mr. Kurien's five-year tenure ends in 1Q2016 and we believe the new chief operating officer (COO) - Mr. Abid Ali Neemuchwala (a TCS veteran of 23 years) - is possibly the frontrunner to replace him. As the process touches its climax over the next nine months, we believe it could lead to top management attrition This is likely to result in dissipation of some top management energy, affecting relationships with clients, similar to what happened at Infosys while the company was on its CEO hunt in 2013-14. We have already witnessed a few senior managers leaving Wipro in the past few weeks after the recent reshuffle.

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
Revenue	438	472	500	545	592
YoY (%)	0.9	7.8	6.0	8.9	8.6
EBIT	89	93	92	101	109
EBIT (%)	20.4	19.8	18.4	18.5	18.4
Adj. PAT	78	85	84	92	99
YoY (%)	7.5	9.6	(1.1)	9.0	7.2
FDEPS (Rs)	31.7	34.6	34.2	37.3	39.9
RoE (%)	24.8	22.7	19.5	18.8	18.1
RoCE (%)	19.7	19.9	18.0	16.1	16.1
ROIC (%)	34.5	35.5	33.7	32.3	34.2
P/E (x)	19.5	17.8	18.0	16.6	15.4
P/BV (x)	4.4	3.7	3.3	2.9	2.7

Source: Company, Nirmal Bang Institutional Equities Research

SELL

Sector: Information Technology

CMP: Rs618

Target price: Rs576

Downside: 6.6%

Girish Pai

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Key Data	
Current Shares O/S (mn)	2,469.0
Mkt Cap (Rsbn/US\$bn)	1,525.1/24.5
52 Wk H / L (Rs)	678/475
Daily Vol. (3M NSE Avg.)	2,027,922

Shareholding (%)	1QFY15	2QFY15	3QFY15
Promoter	73.4	73.4	73.4
FII	9.4	9.1	8.9
DII	4.0	4.6	4.7
Others	13.2	12.9	13.0

One-Year Indexed Stock



Price Performance (%)

	1 M	6 M	1 Yr
Wipro	(5.6)	5.6	10.1
Nifty Index	0.8	11.7	29.2

Source: Bloomberg

Needs to show above industry, consistent growth

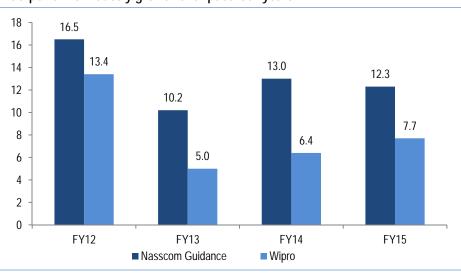
Wipro stock has traded at a significant P/E discount compared to TCS over the past five years (discount contracting in recent days because of better-than-expected quarterly performance by the company and weaker performance by TCS) because of the fact that it has grown slower than the industry and has had RoIC much lower than peers (Exhibit 1 and Exhibit 3). Quarterly results have been patchy with a few good ones followed by some insipid ones (Exhibit 4). Unlike TCS, Wipro has not been able to show broad-based growth across multiple service lines, verticals and geographies consistently. This is despite having been one of the early movers in service lines like BPO, R&D, IMS and IT services for telecom service providers. Wipro lost market share - in our view - because of higher-than-normal leadership turnover and poor execution. We also believe that acquisitions done over the past 10-15 years have had a mixed impact and the company has not been able to extract adequate value from them, leading to RoIC dilution.

Exhibit 1: Wipro's P/E has been at a discount compared to TCS over the past five years



Source: Bloomberg

Exhibit 2: Underperforms industry growth over past four years



Source: Nasscom

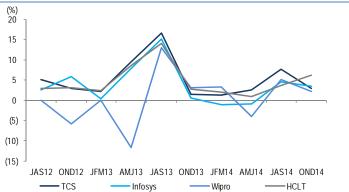
72 Wipro



Exhibit 3: RolC comparison

140 120 100 80 60 40 20 0 FY12 FY14 FY15E FY16F FY17F - Infosys Wipro Tech Mahindra

Exhibit 4: Volatile sequential growth across quarters



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 5: Telecom service revenue

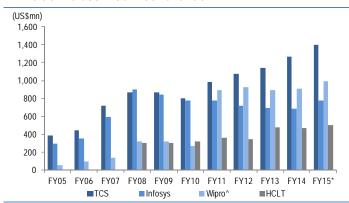
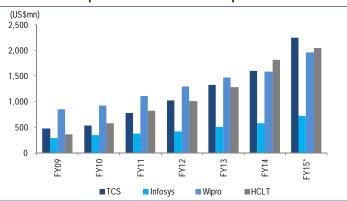


Exhibit 6: IMS performance versus competitors

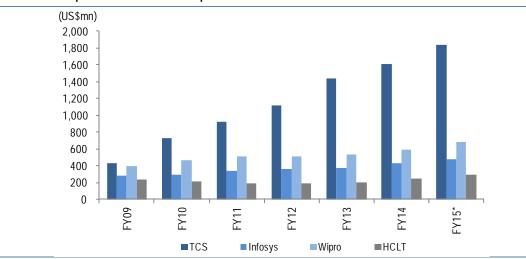


Source:Company, Nirmal Bang Institutional Equities Research *Note:Dec quarter annualised

^Reclasified as Global Media & Telecom from FY11

Source:Company, Nirmal Bang Institutional Equities Research *Note:Dec quarter annualised

Exhibit 7: BPO operations versus competitiors



Source: Company, Nirmal Bang Institutional Equities Research

Note: * Dec quarter annualised



High leadership turnover

Leadership turnover has been quite high for Wipro. It is not just the turnover; we believe the transitions may have been quite disruptive internally, with top managers' attrition during each transition leading to customer relationship discontinuities. The most stable transitions in the Tier-1 India listed space have been in TCS and HCL Technologies. TCS already had Mr N.Chandrasekaran as the COO before he was made the CEO. HCL Technologies' Mr. Anant Gupta eased into the CEO role from his COO role. Infosys, with its promoter-CEO driven model, always had continuity in some form or the other with Mr. Narayana Murthy keeping a close eye on the business at all points in time, irrespective of who the CEO was - in our view. This was until the promoters stepped down to make Mr. Vishal Sikka the new CEO.

In Wipro, transitions have been more frequent than those at its peers - in our view. If one were to look back over the past 15 years, Mr. Vivek Paul was brought in from outside as the CEO in 1999. His tenure lasted till 2005. Between 2005 and early 2008, Mr. Azim Premji was the Chairman and CEO, with a COO in the then R&D services head, Mr. A.L. Rao. Then there were co-CEOs Mr. Suresh Vaswani and Mr. Girish Paranjpe between early 2008 and early 2011. Mr.Kurien started his tenure in early 2011 as the CEO. He overhauled the senior management team in a few months after taking charge.

Each of these transitions witnessed attrition at the senior management level at Wipro as each new CEO put together a set of people who could run the company with him. Because of shorter tenures of the CEOs (and also the global financial crisis that happened in between), we believe the time was probably spent in fire-fighting and being reactive rather than taking a long-term approach to building a business.

Over the past four years, Mr. Kurien has done his bit in turning things around on the delivery and sales side and probably will leave Wipro in a far healthier state that it was when he took over (assuming he is not given an extension). Mr. Kurien, despite not delivering on short-term financial metrics, has probably invested more in the future than any of the past CEOs. It could also be that the external macro-economic environment was far more benign during his tenure when compared to the period before he came in.

Poor execution shows up in multiple metrics

Signs of poor execution are only visible when the output is poorer than that of the industry. There are a number of things that come to mind which point to poor execution. Some of which may be interlinked. If there are three outcomes one has to look for in an IT services company (or any other enterprise for that matter) they are:

- Revenue growth
- Margins
- RolC

Exhibit 8: Revenue growth (US\$ term)

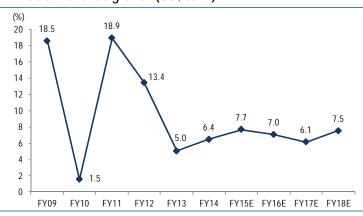


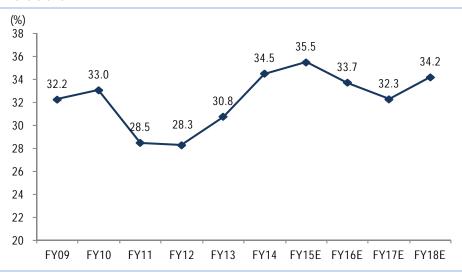
Exhibit 9: EBIT margin trend



Source: Company, Nirmal Bang Institutional Equities Research



Exhibit 10: RoIC trend



Source: Company, Nirmal Bang Institutional Equities Research

Revenue growth

Revenue growth has been lower than the industry level for a considerable period of time. Even before Mr. Kurien came in, Wipro had this problem. While the company has a large number of clients, it has been unable to gain wallet share among its largest ones. This could be because of several reasons. We do not think the breadth of its services is one of them. Except for insurance sub-vertical in the BFSI space, we believe it has breadth of services/verticals which can match with most of its peers. We are, however, unable to judge the depth of its capabilities (which also matter, in our view). Lack of early investments in automation probably led Wipro to lose out on large IMS contracts - which have been a key driver of growth for the entire industry for the past several years. From a geographic spread standpoint, we believe it does not match up to the breadth of some of its peers - be its presence in continental Europe, Australia and Latin America.

The company's sales team - until very recently - also does not seem to have been incentivised to increase the accounts. We also believe Wipro's list of clients is probably weaker than that of its peers and inherently have lower IT spending. Wipro, because of its late entry into the enterprise IT services, faces an uphill task as some of its peers are deeply entrenched in some of these large 'must have' accounts.

Lower SGA spending is also probably the reason why growth has been poor. This is where the linkage between the various elements in the financial model comes to light. The poor gross margin of the company and pressure from the market to deliver a minimum EBITDA/EBIT margin led to a situation where spending on SGA got squeezed.

Margins

Gross margin of Wipro global IT services has generally been among the lowest amongst its peer group of companies by almost 400bps-500bps (see Exhibit 11). There are several reasons for this - in our view. Mr. Kurien, at an analyst meet recently, indicated that Wipro had a lower exposure to the annuity business by 20bps-25bps compared to peers, resulting in its gross margin being lower. We do not have data to corroborate this. Our understanding of Infosys' business, for instance, indicates that among Tier-1 players, probably it has the least annuity in its revenue mix and should, therefore, have the lowest gross margin. But Infosys's gross margin has been higher than those of Wipro's for a long time now. Wipro has a higher fixed price (managed service type of work) with in its revenue mix compared to Infosys, yet its gross margin is lower. So the CEO's take on margins may only be partly right. We believe lower gross margin is likely because of: (1) Its lower billing rate in the Enterprise part of the business, as it was a late entrant and could have won over clients only at lower billing rates. (2) Higher-than-industry revenue exposure to non-developed geographies. These tend to have a lower billing rate and lower gross margin. (3) Running a sub-optimal delivery engine. On many margin levers like employee utilisation, the company has typically been running below the optimal level. (4) Inability to mine clients. Higher client mining would have helped in improving margins as fixed spending on a client gets spread across a larger revenue base.



Exhibit 11: Gross margin comparison

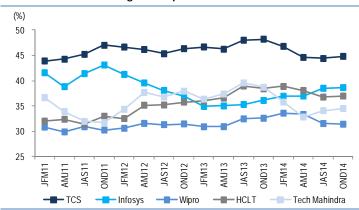
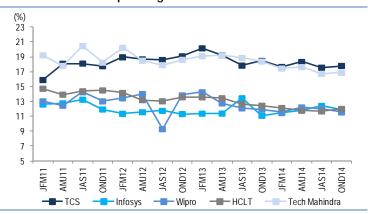


Exhibit 12: SG&A spending



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 13: Exposure to non-developed market as % sales



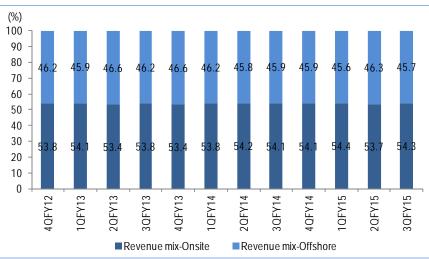
Exhibit 14: Employee utilisation (including trainees)



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 15: Onsite-offshore mix



Source: Company, Nirmal Bang Institutional Equities Research

RolC has been the worst among Tier-1 players

While a part of the problem has to do with the numerator – the margins – which we have analysed above, there is also an issue with the denominator – the capital invested in the business (ex-cash and investments). We believe two reasons why RoIC has been lower for Wipro: (1) Acquisitions have not really delivered. (2) Wipro seems to have taken a more asset-intensive route in the IMS space by setting up its own data centres.

M&As have not really paid off in a significant way

The goodwill on the balance sheet forms about 14.2% of invested capital and this is the excess price that the company has paid to book value to acquire an asset. If we assume that the rest of the capital employed in the business is probably delivering RoIC in line with peers, then RoIC on capital invested in acquisitions is quite poor. The issue could be one or a combination of the factors given below:



- The price paid was too high in relation to the benefits that were sought to be extracted.
- The targets were appropriate, but Wipro could not extract adequate value for various reasons lack of management bandwidth/follow-through could be one or lack of an effective operational plan.

Exhibit 16: Acquisitions made by Wipro over the years (partial list)

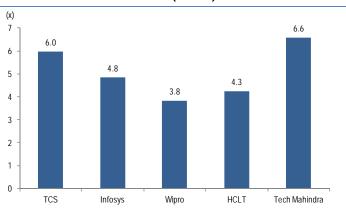
Company	Date	Space	Price
Spectramind	July-2002	BPO	US\$100mn
Ericsson's R&D arm	September-2002	Telecom vertical	Not disclosed
AMS Global Energy Practice	November-2002	Energy and utility domain	US\$26mn
Nervewire	April-2003	IT consulting	US\$18.7mn
mPower	December - 2005	Payment	US\$28mn
Infocrossing	August-2007	IMS	US\$600mn
Citi Technology services	December-2008	IMS/BPO	US\$127m
Citi's data Centre, Germany	Jul-2010	IMS	Not disclosed
SAIC's oil & gas business	April 2011	Energy Domain	US\$150mn
Promax Applications Group	April 2012	Trade promotion planning, management, and optimization solutions	AUD35mn
Opus CMC	Dec-2013	Mortgage due diligence and risk management services	US\$75mn
ATCO I-Tek, Canada	July, 2014	Deal includes a \$1.12-billion pact under which Wipro would provide outsourcing solutions to ATCO group till December 2024	US\$195mn

Source: Media, Company, Nirmal Bang Institutional Equities Research

Exhibit 17: Sales/IC (FY15E)

(X) 3.5 3.0 2.5 2.0 1.9 1.6 1.0 0.5 0.0 TCS Infosys Wipro HCLT Tech Mahindra

Exhibit 18: Sales/fixed assets (FY15E)

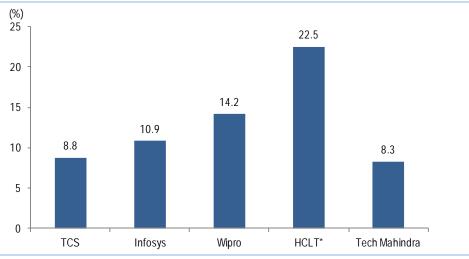


Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

77

Exhibit 19: Goodwill as % of invested capital



Note: * - Refers to total intangible assets; Source: Company, Nirmal Bang Institutional Equities Research

Things have been improving of late

While the overall performance has been patchy, there have been bright spots within the company, especially in recent times. Wipro has begun to claw back some of its lost market share in IMS, for instance, in recent times, possibly aided by its efforts in automation. Healthcare and life sciences is now a fast-growing vertical for the company. Until the recent instance of a sharp decline in crude oil prices, the energy segment of the business was doing very well. Large deal wins have picked up.

Exhibit 20: Traction back in IMS (YoY growth)

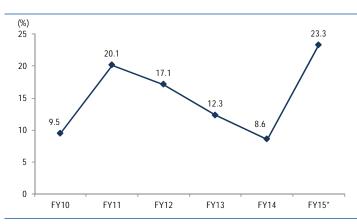
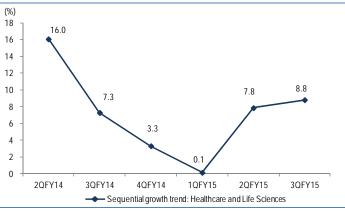


Exhibit 21: Healthcare and life sciences is now a fast-growing vertical



Source: Company, Nirmal Bang Institutional Equities Research

Note: * - Annualised

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 22: Catching up quickly with HCL Tech on IMS revenue front

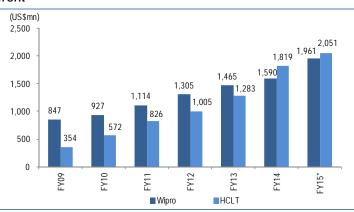
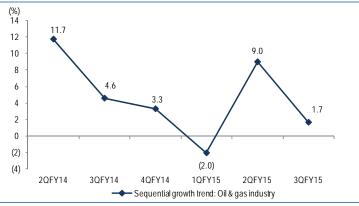


Exhibit 23: Oil and gas industry growth



Source: Company, Nirmal Bang Institutional Equities Research

Note: * - Annualised



Strategy similar, but execution is key

Last month, Wipro outlined its medium-term strategy at an analyst meet. We believe much of what the company stated was similar to what we have learnt from some of its peers. It talked about 'Turbo charging the Core' and 'Securing the Future'. This is broadly similar to the 'Renew' and 'New' strategy of Infosys or the '3 Horizons' strategy of Cognizant.

Turbo-charging the core involves:

- Driving scale in core markets: Wipro aims to maintain its market leadership in the UK and India/Middle
 East; North America was indicated to a very critical market where it wants to attain leadership status.
 Indicated investments in Canada, Continental Europe, and Australia to drive scale and in Japan to reboot.
 Japan reboot is most likely through a partnership with a local player. Japan used to be a significant
 market about 15 years ago for Wipro (as a percentage of total global IT services sales) but has fallen far
 behind as the company focused on other geographies like North America and the UK.
- Driving quality and hyper-automation in delivery: Wipro expects to reduce efforts by 35% for the same scope of work through its automation efforts. The company started its efforts three years ago by putting together a team of 200 people, which is now 700-people strong. This group develops tools/frameworks which are being deployed in various service lines. Wipro's automation solutions are likely to be rolled out to most of its clients by FY16. Wipro is using these tools currently on 80 of its customers out of a total of 700 customers in IMS. Wipro is looking to shave off US\$200mn-US\$250mn in its current cost base to make the company more efficient by using reduced work force. This will help it to offset price declines.

Exhibit 24: Various frameworks created by Wipro team

ServiceNXT™	Wipro's blueprint for next-gen IT monitoring & mgmt. services
VirtuaDesk™	Wipro's appliance-based desktop virtualisation solution
FixOmatic™	End-user service requests & data centre operations automation
istructure™	Wipro's public / private cloud laaS / PaaS offering
ROBODO™	Integrated appliance-based solution for remote office-branch offices
SDi	Wipro's blueprint for software defined storage & network
InsightX ™	Application-led discovery of infrastructure & dependencies for rationalisation & optimisation

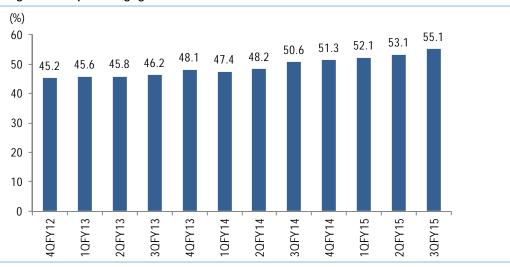
Source: Company, Nirmal Bang Institutional Equities Research

Building intellectual property (IP) assets and capabilities: Against 40-70 patents that were filed a few
years ago, in FY15 Wipro indicated that it would have filed 240. It aims to file about 1,000 patents in a few
years on an annual basis.

With these frameworks and IP that is being built, we believe Wipro will not only protect its turf (as current customer contracts come up for renewal) but also try to take a bite of the US\$190bn-US\$200bn rebid opportunity in IMS that is being eyed by Indian vendors over 2015-16. Global MNC players are the incumbents in most of these. India heritage players are apparently winning about 30%-40% of the rebid contracts versus about 10% a few years ago. Also, unlike a number of Indian players, Wipro has not been shy to invest in data centres. The company has been driving the number of its fixed-price (FP) engagements higher. 3QFY15 numbers indicates that FP engagements currently comprise 55% of IT services. This indicates that the company has greater confidence in being able to generate cost savings that not only satisfy clients, but also help it hold on to its margins.



Exhibit 25: Higher fixed-price engagements' share of revenue



Source: Company, Nirmal Bang Institutional Equities Research

Securing the future

- Servicing the new buyer (CMO, CFO) with a distinct agenda: The new buyer has to be approached in a different manner as the positioning of Wipro in his/her mind is of a traditional IT vendor who caters largely to the chief information officer or CIO. The buyer has to be convinced that Wipro can help him deliver digital transformation. In digital, Wipro wants to focus on a much larger piece of the opportunity beyond just the front-end piece that currently involves consulting, iterative application development, user experience enhancement, etc. Besides the front-end piece, the company wants to help its customers to be digital-ready from an infrastructure and legacy investment standpoint.
- Accelerate the digital agenda: Digital, according to Wipro, will be among the top three service lines over the next three years. A separate business unit will be created in FY16 to drive the efforts. Enterprises were indicated to be behind the curve in adoption of the latest technologies while their customers have been quick to change. Digital is customer-centric, involving IT solutions that help attract, retain and make the customer transact more with the enterprise. Wipro believes that digital will lead to a fundamental reorientation and reimagining of processes within corporations that could lead to enormous cost savings. Wipro illustrated this with an example of a travel management application that completes all steps booking tickets, managing logistics, settling of expenses and approval process but involves the efforts of only 20 people as against 700 currently. This is going to be tested internally in Wipro before it is rolled out to clients. This travel application uses image analytics, an AI (artificial intelligence) engine and automated transaction processing. The extent of disintermediation that digital and AI can do to human labour is the kind of disruption that we talked about in the sector part of the report.
- Reimagining the business with new themes Internet of Things (IoT), open source, AI: Wipro management's focus in IoT is on industrial applications and not so much on consumer devices at this point in time. The focus on open source stems from customers' preference for cheaper applications which are not based on standard commercial packages that tie them up and also force them to buy the upgrades. In AI, the company indicated that it is working on four specific solutionS using its in house cognitive agent Holmes.

Mining of existing clients continues to be a problem and is being addressed with new incentives

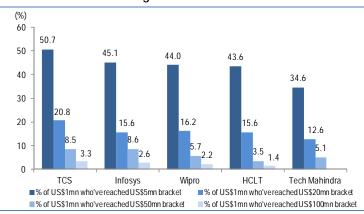
For Wipro, mining of clients has been a perennial problem, despite having a wide menu of services to offer its clients. According to the company, the 'Hunting' team delivered orders in FY15 which were 12x of what it delivered in FY13. However, the 'Farming' team has not been delivering, with its number of clients above US\$100m remaining stagnant over the past 9 quarters. Besides, while top accounts - which constitute 70% of revenue - have been growing 300bps-400bps above the company's rate of growth, the clients that constitute the bottom 26% of revenue have been growing much slower than the company. To correct this situation, the sales team (and delivery team) is being incentivised to increase the accounts rather than focusing on maintaining size. They also now have to sell a minimum number of service lines into each account so as to broaden the revenue mix. There is also an attempt to push up revenue growth in smaller accounts by putting specific incentives regarding the same. The new incentive scheme came into force on 1 April, 2015.



Exhibit 26: No. of clients (Dec quarter)

764 800 700 600 532 495 500 429 400 254 300 240 200 100 2811 0 TCS Wipro HCLT Tech Mahindra Infosys US\$5mn

Exhibit 27: Client mining



Source: Company, Nirmal Bang Institutional Equities Research

*Note: Annualised

Source: Company, Nirmal Bang Institutional Equities Research

We still believe that non-IMS and non-technology business services are difficult to sell: At the analyst meet, it was indicated that in IMS business the client mining has been fairly good. So the question is whether the lacunae lies with the enterprise side of the business. Also, whether it has enough number of automation frameworks built that can take care of application management work or maintenance work connected with ERP packages.

Product engineering (PE) is a large opportunity: The engineering and R&D services spending globally is about US\$1.44tn in 2014, according to industry body Nasscom. Indian companies currently address only a very small part of this opportunity. Wipro is the second Tier-1 company in the Indian IT services space which is flagging off this opportunity in recent times, the first having been HCL Technologies. Both companies have a 15-20 year history of having worked in the PE space with some of the biggest names in technology and telecom. Both seem to be focusing on the large deal opportunity. Wipro has indicated that the re-bid opportunity in product engineering is likely be about one-third the size of the one in IMS. This itself is a large number. Also, competitive intensity is likely to be lower.

.....but aggressive patenting could come in the way: The aggressive patenting approach taken by Wipro could be a dampener for customers. One of the reasons why outsourcing has not taken off in a significant way in PE and R&D services space has been the fact that customers are wary to outsource, what they believe is their area of core competence. They also possibly have problems relating to IP protection. So there is a situation where many large technology companies have captive R&D centres in India using local engineering and scientific talent pool (which is likely to be cheaper and larger than in their home countries). HCL Technologies is approaching this opportunity in a completely different way from that of Wipro - from what we can make out - by focusing more on services and less on its own patents. The number of patents filed by HCL Technologies has actually fallen over the years. HCL Technologies views its opportunities on the services side which are possibly larger than attempting to do anything on the IP side by itself. In fact it has been filing patents jointly with its customers or going them on behalf of its customers. Wipro would probably have to allay concerns about its patenting policies when bidding for projects in this area.



Succession is a near-term challenge

Based on recent management moves in Wipro over the past few months (Exhibit 28), we believe the current CEO is likely to leave his post after serving his contract period of five years, possibly in 1QCY16 (Mr. Kurien was made the CEO in February 2011). A critical top management move made recently has been to appoint Mr. Abid Neemuchwala as the COO – a 23-year old veteran of TCS and arguably one of its key top managers having handled multiple roles within the organisation, making him the front-runner to take over as the CEO. Several insiders in senior management roles who were possibly being considered as potential successors to Mr.Kurien are bound to be disappointed with this move - in our view. Some of them have been - in our view - been possibly placated by giving them new designations within the organisation (Exhibit 28) without any material change likely in their responsibilities. Mr. Neemuchwala has been given a larger portfolio and by all measures is the likely successor to Mr. Kurien. We have doubts whether he would have joined Wipro otherwise.

We think Wipro is therefore handling a sub-optimal top management situation over the next 12 months with some of its key managers probably looking to quit. We call the situation sub-optimal as it appears similar to the one that prevailed in Infosys prior to the appointment of Mr. Vishal Sikka as the CEO. We believe this could lead to some deterioration in client relationships and thereby lead to slowdown in growth.

We not only see attrition before the new CEO is appointed, but probably a few months after that is done as the new CEO may want to bring in a set of people who are aligned to his thinking and ways of working.

Exhibit 28: Recent management reshuffle at Wipro

	· ·
Mr. Abid Ali Neemuchwala	Joined Wipro as Group President and COO.
Mr. Anand Padmanabhan	Elevated to President, Energy, Natural Resources and Utilities Business.
Mr.Bhanumurthy B.M	Elevated to President, Business Application Services.
Mr. G. K. Prasanna	Elevated to President, Global Infrastructure Services
Mr. Rajan Kohli	Made Head of Digital Services.
Mr. Angan Arun Guha	Will now oversee BFSI customers in the US, Australia, West Asia and emerging markets, including India. Reports to Mr. Shaji Farooq, who is the head of BFSI.
Mr. Shailendra Singh	Will now oversee business in Europe and South Africa. Reports to Mr.Shaji Farooq who is the head of BFSI.
Mr. Rishad Premji	Besides being the Chief Strategy Office, he has been made the Chief Technology Officer.

Source: Media, Nirmal Bang Institutional Equities Research



Financials

We expect USD revenue CAGR in USD terms of 7% over FY15E-FY18E against a growth of 10% over FY10-FY15E, driven by IMS service line, Europe geography and the healthcare & life sciences vertical. We believe EBIT margin will be under pressure in FY16. This will be partly because of higher investments in frameworks and platforms so as to keep the company ahead in the automation race and also in sales and marketing. We think the energy sector will be weak in FY16, at least in the first-half. Energy vertical contributes 6% to Wipro's revenue. The drop in crude oil prices is likely to put pressure on clients across the value chain and not just on upstream companies. Industry interactions indicate that spending cut-backs could be pretty severe over the next three-six months.

While it will continue to make investments in building frameworks and platforms, Wipro is looking to shave off US\$200mn-US\$250mn from its current cost base. These cuts (if they can be successfully executed) will help it to offset price decline from competitive bids. We have not assumed any significant amount of costs savings in FY16. We believe the margins are also likely to be negatively impacted by salary hikes. Cross-currency headwinds are also likely to be strong in FY16, but we have not factored it much in our calculations.

Exhibit 29: Revenue growth (US\$ terms)

(%) 18 5 20 18 16 13.4 14 12 10 8 6 4 2 0 FY12 FY15E FY16E FY17E FY18E

Exhibit 30: FP versus T&M contracts – FP share has gone up to 55%



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 31: Revenue exposure to various currencies

	TCS	Infosys	Tech Mahindra	Wipro	HCL Tech
US Dollar	54	68	51	51	56
Europe	24	17	26	28	32
Rest of the world	22	15	24	21	12

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 32: Our estimates versus. consensus estimates

					Wipro				
	(Consensus			NBIE		L	Difference (%)	
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E
Revenue	472	520	579	472	500	545	(0.2)	(3.8)	(5.8)
EBIT	95	106	118	93	92	101	(1.9)	(12.6)	(14.4)
PAT Adj	86	95	106	85	84	92	(1.1)	(10.6)	(13.3)
EPS Adj (Rs)	35.1	38.3	43.0	34.8	34.4	37.4	(0.9)	(10.3)	(13.0)
EBIT Margin (%)	20.1	20.3	20.4	19.8	18.4	18.5	(36)bps	(186)bps	(187)bps

Source: Bloomberg, Nirmal Bang Institutional Equities Research

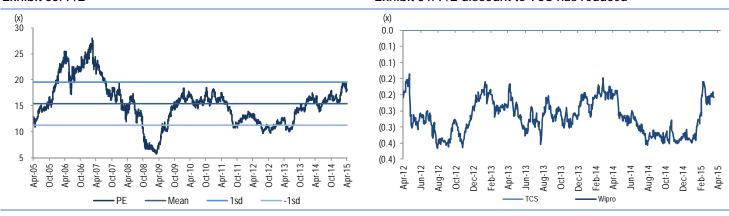


Valuation

We believe TCS should be the valuation benchmark for the IT sector considering the fact that it will continue to lead the market in terms of growth and EBIT margin in the Tier-1 set in the foreseeable future. We believe Wipro's target P/E will have to be benchmarked versus TCS. Wipro's revenue growth in organic USD terms is likely to be 7% over FY15E-FY18E. This is against 10% of TCS. RoIC of Wipro over this time frame is likely to be an average of 34% against 55% of TCS over the next three years. We have also looked at the overall business mix, risks, operating metrics, etc, and have assigned a multiple of 15.4x, which is at a 15% discount to the target P/E multiple of TCS. We believe any sustained contraction in P/E discount to TCS will have to be driven by sustained broad-based growth, which is in line with that of the industry.

Exhibit 33: P/E

Exhibit 34: P/E discount to TCS has reduced



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Risks to our view

Since we have a negative view on the stock, the risks to our view include (1) likely smooth transition of leadership over the next 12 months without losing too much of the current senior management talent (2) ability to gain a higher than currently expected market share in the IMS rebid market over 2015-2016 (3) success in its efforts to improve client mining on a sustainable basis (4) a big turnaround in the crude price which could help it in its energy sector vertical (5) a big turnaround in the Euro/USD relationship where by its current pressures abate.



Exhibit 35: Key metrics

	4QFY12	1QFY13	2QFY13	3QFY13						1QFY15		
Revenue (US\$mn)	1,536	1,515	1,541	1,577	1,585	1,588	1,631	1,678	1,720	1,740	1,772	1,79
EBIT (US\$mn)	343	341	342	357	341	315	363	381	418	394	374	380
PAT (US\$mn)	300	288	437	315	320	289	313	327	360	348	338	347
P&L (Rs mn)												
Revenue	98,691	106,530	106,566	110,246	110,264	97,346	109,920	113,317	117,045	112,456	118,161	120,851
EBITDA	19,362	21,176	21,136	21,931	20,806	20,204	25,037	26,527	28,679	26,605	26,137	27,681
PAT	14,808	15,802	23,773	17,168	17,288	16,233	19,321	20,147	22,254	21,032	20,848	21,928
Vertical Mix (%)												
BFSI	NA	NA	NA	NA	NA	26.5	26.4	26.4	26.8		26.0	25.
HLS	NA	NA	NA	NA	NA	9.8	10.1	10.6	10.6		11.1	11
RCTG	NA	NA	NA	NA	NA	15.0	14.8	14.6	14.5	14.0	13.9	14.
ENU	NA	NA	NA	NA	NA	15.9	15.8	16.1	16.2		16.8	16.4
MFG	NA	NA	NA	NA	NA	19.1	19.0	18.6	18.0		18.2	18.
GMT	NA	NA	NA	NA	NA	13.6	13.9	13.7	13.9		13.9	13.8
IT Products	4.7	2.2	3.0	2.4	2.5	1.6	1.6	(1.1)	1.3	2.2	0.7	1.
Consumer care & lighting	12.5	11.6	11.3	13.6	12.8	-	-	-	-	-	-	
Horizontal mix (%)												
Practices (IT services + BPO sales)	22.6	22.8	23.2	23.7	24.5	23.7		24.3	24.3		26.8	27.
Technology infrastructure services	-	-	-	-	-	11.4	11.5	11.4	11.3	11.3	11.5	11.2
Advanced technologies & solutions	-	-	-	-	-	-	-	-	-	-	-	
Testing services	-	-	-	-	-	-	-	-	-	-	-	
Package implementation	6.8	7.1	7.1	7.1	7.1	-	-	-	-	-	-	
Analytics and information management	30.6	30.7	30.7	31.4	31.4	28.3	28.7	28.4	28.5	28.7	29.1	28.
Business application services	8.2	8.4	8.7	8.8	8.8	8.8	8.6	8.7	9.6		9.2	9.3
BPO	8.2	8.5	8.2	7.5	7.5	7.2	7.2	7.3	7.2		7.0	7.
Product engineering and mobility	23.6	22.5	22.1	21.5	20.7	20.6	20.2	19.9	19.1	18.0	16.4	16.0
ADM	12.0	12.0	11.6	10.4	10.4	10.2		10.1	9.8		9.7	9.8
R&D	2.9	2.5	2.4	2.3	2.4	2.5	2.5	2.4	2.2	2.0	2.0	1.
Consulting	-	-	-	-	-	-	-	-	-	-	-	
Staff utilisation (%) (gross)	<i>75.5</i>	73.7	71.7	71.7	64.9			66.0	67.7			68.3
Revenue mix-onsite	53.8	54.1	53.4	53.8	53.4	53.8	54.2	54.1	54.1	54.4	53.7	54.
Revenue mix-offshore	46.2	45.9	46.6	46.2	46.6	46.2	45.8	45.9	45.9	45.6	46.3	45.
Clients' concentration (%)												
Top client	3.5	3.5	3.5	3.2	3.6				3.7			3.8
Top 5 clients	11.5	12.2	13.0	13.2	13.1				13.9		12.9	12.
Top 10 clients	20.0	20.9	22.3	22.4	21.9	22.5	22.8	23.0	22.6	21.8	21.5	21.0
Number of clients												
> US\$100mn	7	8	9	10	10	10	10	11	10	10	10	10
> US\$75mn	16	14	16	16	16	15	15	15	14	14	15	16
> US\$50mn	25	25	25	26	26	27	27	28	29	29	30	31
> US\$20mn	75	73	71	73	76	76	78	80	82	84	85	84
>US \$10mn	121	131	133	132	133	133	137	136	143	143	150	153
> US\$5mn	208	213	218	214	213	218	220	218	220	224	225	226
> US\$3mn	292	302	293	293	291	281	282	280	278	293	292	300
> US\$1mn	475	478	475	484	490	492	487	495	501	511	524	526
Employees	135,920	138,552	140,569	142,905	145,812	147,281	147,216	146,402	146,053	147,452	154,297	156,866
Attrition (%)	14.4	15.2	14.4	12.9	12.5	13.2	13.5	14.3	15.1	17	16.9	16.4

Source: Company, Nirmal Bang Institutional Equities Research

Wipro Wipro



Company background

Wipro, founded in 1945, is the third-largest India-listed IT services player. Wipro's IT offerings were R&D services and telecom-centric, but over the years the company diversified into new areas. Unlike most of its peers (except TCS), Wipro has a large presence in India and also the Middle East. The company posted revenue of US\$6.6bn in FY14 compared to peers like TCS (US\$13.4bn) and Infosys (US\$8.2bn). It employed 156, 668 employees as of end-December 2014.

Management

- Mr. T.K. Kurien is the CEO and a member of the board of directors. He has worked with the company for 10 years prior to which he served as the managing director of GE X Ray.
- Mr. Abid Neemuchwala was appointed the COO of the company recently after a 23-year stint with TCS, where he handled various portfolios and was a part of the top management.
- Mr. Jatin Dalal is the CFO who joined Wipro in 2002. Before joining Wipro, he was part of the Financial Management Program (FMP) of General Electric.

Exhibit 36: Quarterly snapshot

(Rsmn)	4QFY13	1QFY14	2QFY14	3QFY14	4QFY14	1QFY15	2QFY15	3QFY15
Revenue	110,264	97,346	109,920	113,317	117,045	112,456	118,161	120,851
Gross margin	34,103	30,129	35,713	36,952	39,334	37,515	37,295	37,984
SG&A expenses	15,726	12,427	13,291	13,534	13,535	13,744	14,233	13,950
EBIT	18,377	17,702	22,422	23,418	25,799	23,771	23,062	24,034
Other income	3,276	2,866	2,756	2,914	3,117	3,351	4,120	4,225
PBT	21,653	20,568	25,178	26,332	28,916	27,122	27,182	28,259
Tax	4,376	4,251	5,754	6,060	6,536	5,942	6,199	6,228
PAT	17,191	16,233	19,321	20,147	22,254	21,032	20,848	21,928
YoY growth (%)								
Revenue	11.7	(8.6)	3.1	2.8	6.1	15.5	7.5	6.6
Gross profit	12.8	(10.5)	6.9	6.4	15.3	24.5	4.4	2.8
EBIT	8.5	(5.4)	20.6	20.3	40.4	34.3	2.9	2.6
Net profit	16.7	2.7	(13.2)	17.4	28.7	29.6	7.9	8.8
QoQ growth (%)								
Revenue	-	(11.7)	12.9	3.1	3.3	(3.9)	5.1	2.3
EBIT	(5.6)	(3.7)	26.7	4.4	10.2	(7.9)	(3.0)	4.2
Net profit	0.7	(5.6)	19.0	4.3	10.5	(5.5)	(0.9)	5.2
Margins (%)								
Gross margin	30.9	31.0	32.5	32.6	33.6	33.4	31.6	31.4
SGA expenses	14.3	12.8	12.1	11.9	11.6	12.2	12.0	11.5
EBIT	16.7	18.2	20.4	20.7	22.0	21.1	19.5	19.9
PAT	15.6	16.7	17.6	17.8	19.0	18.7	17.6	18.1

Source: Company, Nirmal Bang Institutional Equities Research

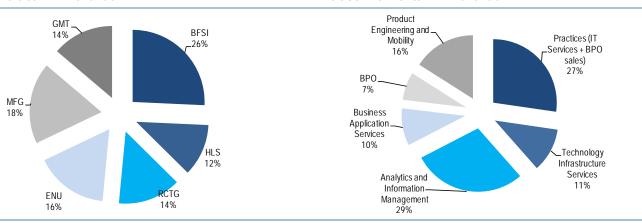
Latest events

- Mr. Suresh C. Senapaty, the CFO of Wipro retires.
- Mr. Abid Neemuchwala, a veteran of 23 years in TCS, joins Wipro as Group President and COO.
- Wipro bags five-year deal from Greater Cincinnati Water Works.
- Wipro creates 'Wipro Digital', which is going to be separate arm of the company.
- Wipro acquires a minority stake in Drivestream for US\$5mn. The investment will strengthen Wipro's Oracle application services space, particularly in cloud applications.



Exhibit 37: Vertical mix-revenue

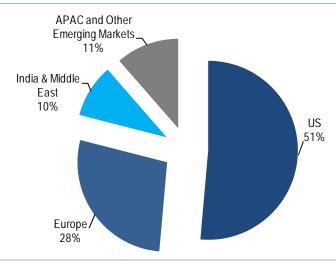
Exhibit 38: Horizontal mix-revenue



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 39: Geographic mix-revenue



Source: Company, Nirmal Bang Institutional Equities Research

87



Financials

Exhibit 40: Income statement

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
Average INR/USD	60.3	61.8	61.0	63.0	64.0
Net sales (US \$mn)	6,618	7,126	7,628	8,096	8,702
-Growth (%)	6.4	7.7	7.0	6.1	7.5
Net sales	438	472	500	545	592
-Growth (%)	0.9	7.8	6.0	8.9	8.6
Cost of sales & services	296	323	347	377	411
% of sales	67.5	68.4	69.3	69.2	69.4
Gross profit	142	149	153	168	181
% of sales	32.5	31.6	30.7	30.8	30.6
SG&A	53	56	61	67	72
% of sales	12.1	11.9	12.2	12.3	12.2
EBIT	89	93	92	101	109
% of sales	20.4	19.8	18.4	18.5	18.4
Interest expenses	3	3	3	3	3
Other income (net)	15	21	21	22	23
PBT	101	110	110	120	129
-PBT margin (%)	23.1	23.4	22.0	22.0	21.7
Provision for tax	23	24	25	28	30
Effective tax rate (%)	22.4	22.2	23.0	23.0	23.0
Minority Interest	0.4	0.5	0.4	0.4	0.4
Net profit	78	85	84	92	99
-Growth (%)	7.5	9.6	(1.1)	9.0	7.2
-Net profit margin (%)	17.8	18.1	16.9	16.9	16.7

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 42: Balance sheet

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
Equity capital	5	5	5	5	5
Reserves & surplus	340	401	456	512	566
Net worth	345	406	461	517	571
Deferred tax liability, net	(2)	(1)	(1)	(1)	(1)
Other liabilities	8	11	11	11	11
Total loans	11	13	13	13	13
Total liabilities	362	429	484	539	594
Goodwill	63	69	69	69	69
Other intangible assets	2	9	9	9	9
Net block	51	54	52	49	45
Investments	63	86	86	86	86
Other non-current assets	25	25	25	25	25
Unbilled revenue	39	42	45	49	54
Inventories	2	4	4	4	4
Other current assets	53	66	71	76	83
Debtors	85	89	96	105	114
Cash & bank balance	114	135	181	226	270
Total current assets	294	337	398	461	526
Total current liabilities	136	151	155	160	166
Net current assets	158	186	243	301	359
Total assets	362	429	484	539	594

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 41: Cash flow

Y/E March (Rsbn)	FY14	FY15E	FY16E	FY17E	FY18E
EBIT	89	93	92	101	109
(Inc.)/dec. in working capital	(14)	(23)	(11)	(13)	(14)
Cash flow from operations	76	70	82	88	94
Other income	(15)	(21)	(21)	(22)	(23)
Depreciation & amortisation	11	13	14	15	16
Financial expenses	(3)	(3)	(3)	(3)	(3)
Tax paid	(23)	(24)	(25)	(28)	(30)
Dividends paid	(23)	(30)	(30)	(37)	(44)
Net cash from operations	24	4	16	14	10
Capital expenditure	(12)	(15)	(12)	(12)	(12)
Net cash after capex	12	(11)	4	2	(2)
Inc./(dec.) in debt	18	-	-	-	(70)
(Inc.)/dec. in investments	(23)	-	-	-	86
Equity issue/(buyback)	-	-	-	-	(5)
Cash from financial activities	(5)	-	-	-	11
Others	23	32	-	-	-
Opening cash	85	114	135	181	226
Closing cash	115	135	181	226	270
Change in cash	30	21	46	45	44

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 43: Key ratios

,					
Y/E March	FY14	FY15E	FY16E	FY17E	FY18E
Per share (Rs)					
EPS	31.8	34.8	34.4	37.4	40.1
FDEPS	31.7	34.6	34.2	37.3	39.9
Dividend per share (incl. DT)	9.5	12.2	12.0	15.0	18.1
Book value	140.5	165.4	187.7	210.2	232.2
Dividend payout ratio (incl. DT)	29.9	35.0	35.0	40.0	45.0
Return ratios (%)					
RoE	24.8	22.7	19.5	18.8	18.1
RoCE	19.7	19.9	18.0	16.1	16.1
RoIC	34.5	35.5	33.7	32.3	34.2
Turnover ratios					
Asset turnover ratio	0.9	0.8	8.0	0.8	0.8
Debtor days (incl. unbilled revenue)	104	101	103	103	104
Working capital cycle days	73	85	88	89	91
Valuation ratios (x)					
PER	19.5	17.8	18.0	16.6	15.4
P/BV	4.4	3.7	3.3	2.9	2.7
EV/EBTDA	15.6	14.8	14.4	12.7	11.4
EV/sales	3.2	2.9	2.7	2.4	2.1
M-cap/sales	3.5	3.2	3.0	2.8	2.6

Source: Company, Nirmal Bang Institutional Equities Research

Wipro Wipro



HCLTechnologies

13 April 2015

Reuters: HCLT.BO; Bloomberg: HCL IN

Balanced Above-industry Growth To Keep P/E At Elevated Level

We initiate coverage on HCL Technologies (HCLT) with an Accumulate rating and a March 2016 price target of Rs1013 (return of 5.6%). We have valued HCLT at 16.3x P/E (a 10% discount to TCS's multiple) on FY17 EPS. We believe the market has not given HCLT enough credit for the correct strategic steps the company has taken over the past 10 years and also for its good execution. It is only recently that the P/E multiple discount vis-à-vis TCS has contracted. We believe the current low P/E discount will continue as we expect a more balanced growth from HCLT in the coming days driven by large orders from Engineering and Research & Development (R&D) Services. On the Infrastructure Management Services (IMS) front, we believe the industry is staring at a very large rebid opportunity over the next two years worth US\$190bn-US\$200bn (with the possibility of about 30%-40% moving away from the incumbents). We believe HCLT is likely to get a decent portion of what will go to the India-listed players.

Strategy good, execution even better: The strategy of HCLT has been to focus on relatively uncontested and unattractive spaces within the IT services sector and tweak the business model to make them more profitable. Also, fortunately for the company some of these service lines have been more in non-discretionary areas and hence it was able to sidestep the negative effects of the 2008 global financial crisis (GFC) on IT services demand. Having missed the Y2K opportunity and Enterprise services-related boom in the BFSI space, HCLT was in the doldrums 10 years ago. HCLT took a bold step by addressing the needs of the IMS segment, which appeared unattractive then. IMS was shunned by most players for being a low margin and highly capital-intensive segment. HCLT configured solutions (involving automation/platforms/frameworks) which addressed these problems, focused on rebid/renewal market, endured multiple quarters of extremely low EBIT margin and bounced back with better profitability as the deals matured. The under-penetrated IMS segment still presents a large opportunity in the coming years.

Some other bets could also pay off: HCLT took a second big bet by addressing the needs of the Enterprise solutions space by acquiring Axon - the largest merger and acquisition (M&A) deal in the Indian IT services space so far. Constrained spending on ERP post GFC, in our view, led to the bet not paying off fully. Of late, the company decided to go back to its roots and refocus on Engineering and R&D services - not a crowded space currently with a major portion of the opportunity still residing inside client organisations. Should this develop into another blockbuster opportunity like IMS, the company could potentially deliver industry-leading growth in the foreseeable future. This could lead to broadening of its revenue mix, thereby giving it more stability and a better P/E multiple. With the strength in IMS, the company can become a beneficiary of the bundling of discretionary spending components in its contracts.

Risks: We believe higher competitive intensity in the IMS space with peers trying to catch up as well as likely pressure on margins in the near term from higher investments are the key risks

Y/E June (Rsmn)	FY14	FY15E	FY16E	FY17E	FY18E
Revenue	329,180	369,063	413,811	473,380	527,532
YoY (%)	27.7	12.1	12.1	14.4	11.4
EBIT	79,350	84,642	91,272	109,263	119,604
EBIT (%)	24.1	22.9	22.1	23.1	22.7
Adj. PAT	63,713	72,145	76,190	91,618	101,662
YoY (%)	56.9	13.2	5.6	20.2	11.0
FDEPS (Rs)	45.1	51.1	54.0	64.9	72.0
RoE (%)	37.1	32.2	28.7	30.0	28.7
RoCE (%)	40.9	34.4	31.8	33.1	31.3
RoIC (%)	44.7	36.8	33.6	34.7	32.3
P/E (x)	20.1	17.8	16.8	14.0	12.6
P/B(x)	6.4	5.2	4.5	3.9	3.4

Source: Company, Nirmal Bang Institutional Equities Research

ACCUMULATE

Sector: Information Technology

CMP: Rs959

Target price: Rs1,013

Upside: 5.6%

Girish Pai

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+91-22-3926 8017

Key Data

Current Shares O/S (mn)	1,405.7
Mkt Cap (Rsbn/US\$bn)	1,327/21.3
52 Wk H / L (Rs)	1,058/623
Daily Vol. (3M NSE Avg.)	3,165,097

Share holding (%)	1QFY15	2QFY15	3QFY15
Promoter	61.6	61.5	61.4
FII	28.9	29.1	29.0
DII	3.7	3.6	3.7
Others	5.8	5.8	5.8

One-Year Indexed Stock



Price Performance (%)

	1 M	6 M	1 Yr
HCL Technologies	(8.6)	9.2	35.3
Nifty Index	(3.3)	10.1	29.1

Source: Bloomberg

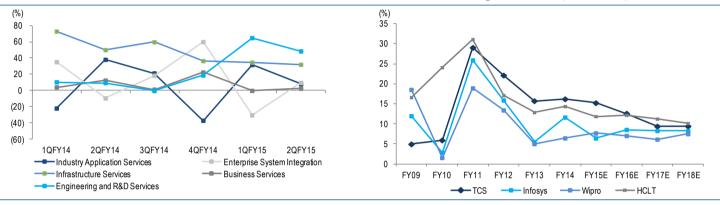


Narrow P/E discount versus TCS likely to continue

As seen in Exhibit 3, the P/E discount of HCLT versus TCS has narrowed as the market's concerns regarding the former's lack of revenue breadth have been put to rest in the past two quarters. In Exhibit 1 we see that IMS has fallen to 40% or lower of incremental revenues over the last two quarters with Engineering and R&D services taking precedence. We believe this narrow discount will continue as the revenue growth from here on will be far more broad-based compared to the past on the back of large orders in the Engineering and R&D space and also in the Application development area driven by digital work. We also believe that HCLT, on an organic basis, is likely to be among the fastest-growing companies in the Tier-1 space on the back of what is likely to be strong order inflow in the IMS segment - a rebid opportunity worth US\$190bn-US\$200bn has been indicated by various industry players over 2015-16.

Exhibit 1: Share of service lines in incremental revenue

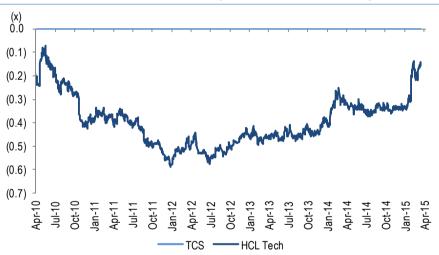
Exhibit 2: Revenue growth trend (US\$ terms)



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 3: P/E discount to TCS has narrowed sharply and we believe it will stay



Source: Company, Nirmal Bang Institutional Equities Research

Breadth improving

One of the key areas of concern for the market has been the fact that HCLT has been growing largely on the back of only one revenue stream - IMS. However, over the past few quarters, we have witnessed Engineering and R&D Services (E&RDS) also beginning to contribute towards the growth of the company.

We believe that the new proposition of the company - 'beyond the contract' - indicates its aim to develop revenue streams beyond IMS and E&RDS. These are in the areas of application management, digitalisation, IT services supporting the CMO (Chief Marketing Officer), enterprise function as a service, etc, which are essentially old services that have been re-imagined and repackaged. In many of these new propositions, HCLT is promising to deliver substantial savings and probably contains high levels of automation.



Second Generation Outsourcing

Considering the relatively weak positioning in non IMS parts of the IT services spend, HCL Technologies is trying to attack that part of the business by being very aggressive in terms of its value propositions and trying to gain market share. In many of traditional areas of strength of its India based competitors it has put together alternative propositions such as

- ALT ASM
- Enterprise of the Future
- Digital Systems Integration
- Enterprise Functions as a Service
- Innovation Monetization
- zCMO

These are basically old services repackaged and re-imagined with possibly large amounts of automation component to them so that they can disrupt the market just on the basis of price. For instance:

HCLT's **ALT ASM™** (Alternative Application Support and Maintenance) dwells on the concept of Proactive Obsolescence. While other IT Vendors are motivated to keep growing their ASM engagement, HCLT proactively tries to kill it. The CIO can use the savings to focus on CTB initiatives. Here HCLT guarantees 30% cost savings.

HCL's **ENTERPRISE OF THE FUTURE** (EOF) Framework enables customers to build a faster, better, and more cost-effective technology delivery model by developing new approaches for infrastructure provisioning, application development, deployment, and management.

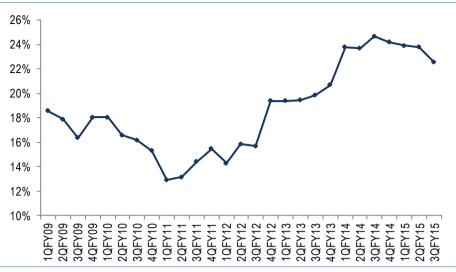
HCL's **Enterprise function as a service** (EFaaS™) gives competitive advantage to its customers by cutting down costs in enterprise functions such as Finance, Procurement, Marketing, Legal and HR. EFaaS™ not only reduces business operation costs and increases profitability but also makes enterprise functions lean, agile, flexible and scalable. It has indicated 25% reduction in business operation costs, Flexible management models, Innovative commercial constructs

Differentiated strategy

In the middle of the last decade, after missing the Y2K opportunity at the turn of the century and largely missing the enterprise IT services-related boom, HCLT was in the doldrums. Mr. Vineet Nayar, who was the chief executive officer (CEO) at that time, decided on a differentiated strategy of addressing less contested and relatively unattractive (from margin and RoIC standpoints then) segments of the market. The plan was to tweak the model to achieve better profitability and RoICs by taking more work offshore (RIMS – Remote Infrastructure Management Service) and also to use automation tools to dis-intermediate the human element. It also focused more on the rebid market and was able to displace a number of MNC incumbents with its proposition of aggressively cutting costs. The company, from being an also-ran, became the largest India-based player in the IMS space (the fastest-growing segment within the IT services export market over the past few years). It subsequently extended the template to other services like Application management, BPO and to Engineering and R&D services where it has fundamentally re-imagined and repackaged the services and followed it up with good execution. Many of these services lines are non-discretionary in nature and therefore HCLT was able to overcome the negative effects of GFC on the demand for IT services.

HCLT also benefited post GFC as discretionary spending never really took off in a big way. Following poor sales growth, enterprises concentrated on cost-cutting and HCLT was correctly positioned for this. Once the initial pain of investing in building a solution was through (which resulted in EBIT margin collapse - see Exhibit 5 before recovering), the solutions can then be replicated and used for other customers. As a result, the margins improved on the projects that matured and also on incremental projects.

Exhibit 4: EBIT margin collapse as projects commence and rise as they mature



Source: Company, Nirmal Bang Institutional Equities Research

HCLT gained significant market share over the past six years in the IMS space, largely because of its investments in automation and building up repeatable solutions. In the latest Forrester Research's analysis of infrastructure solution providers, HCLT is placed in the leader quadrant and rated a bit higher than TCS. We also believe that HCLT has probably built on its lead in automation by being able to retain contracts that have been coming up for renewal in recent times. These were contracts that were obtained five to seven years ago. We believe the customers would not have awarded these contracts to HCLT unless they were guaranteed annual productivity improvement.

Exhibit 5: Market share of Indian players with the IMS space (top 4 India listed players only considered)

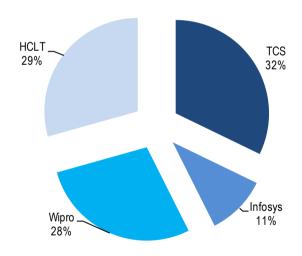
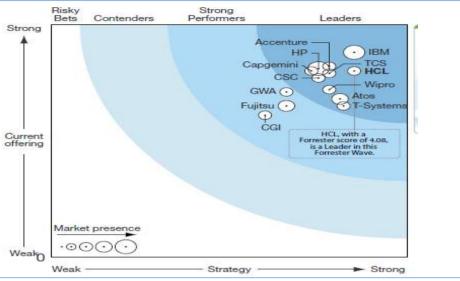




Exhibit 6: HCLT figures in the leader quadrant in Forrester's analysis of infrastructure solution providers and placed better than all other providers including TCS. Interestingly, Infosys and Cognizant do not figure in this set.



Source: Company, Forrester Research, Nirmal Bang Institutional Equities Research

Forrester has rated HCLT as a leader in Forrester Wave: Global Infrastructure Outsourcing, 1Q 2015. According to Forrester, HCLT enjoys a solid reputation for flexibility, cost-effectiveness, and technological capability, which gives it an extremely strong value proposition.

Discretionary spending never really took off in a significant way post GFC...

HCLT is probably a beneficiary of the trend that the services which it focused on were the ones that witnessed the maximum amount of spending by its customers. Post GFC, discretionary spending never really took off with end-customer demand in various developed markets constrained by structural issues like debt-laden households and governments, high unemployment, no material improvement in wages, etc. These are the reasons why companies like Infosys, which were highly geared towards recovery in discretionary spending, did not do well. We believe customers found it tough to make a business case for spending more on IT. Therefore, the post GFC period can be classified as the one where RTB (run the business) spending was preferred over CTB (change the business) IT spending.

Enterprises have focused on living with a flat budget. However, within this budget, companies have focused on getting more for less from their vendors. Enterprise customers have pushed for cut in one part of the spending and channelised the savings to another part of the spending. This means there was tremendous pressure to cut costs in certain areas, leading to pressure on pricing and margins. This forced the vendors to reconsider how to serve their customers in a different manner so as to not only hold on to their contracts, but also make decent profits from them. This led to the usage of software automation to address new market conditions. We believe HCLT, among Indian companies, was ahead of the market in building automation tools and frameworks.

..but discretionary spending slowly picking up of late

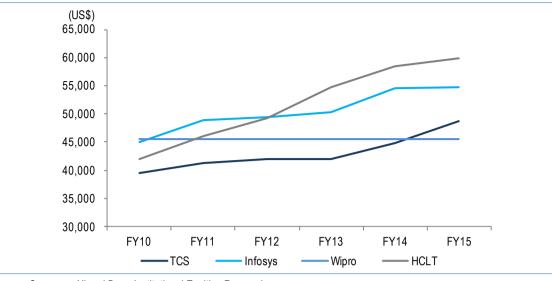
Of late, we believe discretionary spending is picking up in the form of 'digital' projects (SMAC). This is because new players in various end-customer markets are using technology to disrupt incumbent business models and thereby getting the incumbent enterprises to respond. Technology has become far more core to many businesses now and mobiles as well as desktops have become the preferred platforms that end-customers use to interact with enterprises. The businesses that have a significant connection with consumers are going 'digital' in a far more significant way than the others that are not. In Digital, HCLT is focused on delivering a full service effort in digital transformation and not just in front office application development.

HCLT is the only company to improve revenue productivity significantly over the past several years

A look at Exhibit 7 indicates that HCLT has been probably the only company which has been increasing its revenue productivity for the past several years. For all the other players, productivity remained flat over the past four-five years. This, in our view, has primarily to do with higher automation by HCLT.



Exhibit 7: Revenue productivity



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 8: Revenue growth comparison (US\$ terms)

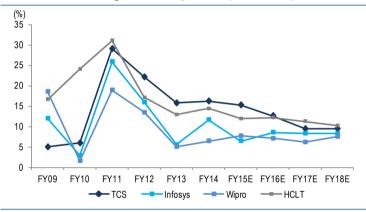
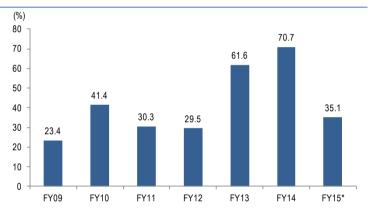


Exhibit 9: Contribution of IMS to incremental revenue



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

*Note: 1HFY15

Exhibit 10: IMS revenue comparison

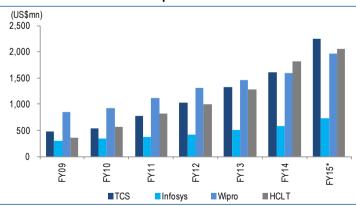
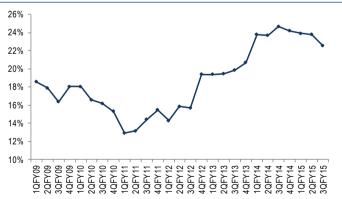


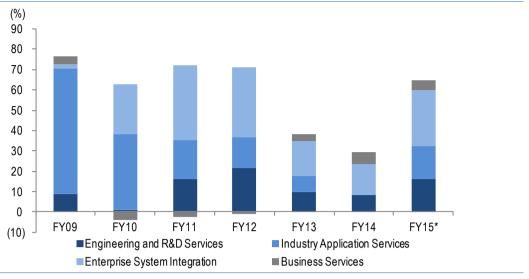
Exhibit 11: EBIT margin dips sharply in the investment phase



Source: Company, Nirmal Bang Institutional Equities Research



Exhibit 12: Incremental revenue from non-IMS segments



Source: Company, Nirmal Bang Institutional Equities Research

* Note: 1HFY15

Engineering and R&D services opportunity is very large and not highly penetrated at this point in time

Engineering and R&D Services market was as large as US\$1.44trn in 2014, growing in low single-digits. Global sourcing in this area is just about 4.7% in 2014. India's contribution to global sourcing is about 22-25%. Therefore the penetration level is very low currently. While many Indian players have been in this space for more than 15 years, not much headway has been made. This could be because there is IP (intellectual Property) sensitivity from the customer's side. If a customer wants to generate savings from offshoring Engineering and R&D Services, it directly sets up a captive centre in India. However, this has its own set of pros and cons. To provide comfort to its customers, HCLT decided not to build products by itself and also not file for any significant number of patents by itself. It decided to be a pure services player and filed patents jointly with its customers or only under its customer's name. This removed the distrust that generally developed when there was outsourcing in this type of a service line.

Engineering and R&D services, according to HCLT, have not reached an inflection point like IMS did in 2008-09. But the inflection point is ahead. The work in Engineering and R&D Services in the past has been to sustain the life cycle of a specific product or work on a new product. These projects have largely been smaller programmes which are not long-term in nature and having little visibility beyond the life of a contract. However, now the company is becoming a full service end-to-end outcome-based outsourcer. There seems to be a more balanced mix between existing product sustenance and new product development. Also, there is focus on the product for both developed as well as emerging markets based on some specific business models that HCLT has been able to offer to its clients. Also, unlike in the past, it is not just the hi-tech sector (aeronautics, automobile, etc). Some new segments are driving growth such as industrial goods and B2B medical device companies, etc. Outsourcing helps customer companies to reduce time to market. HCLT offers frugal engineering skills, especially when one is looking at new product development for emerging markets.

There are challenges too

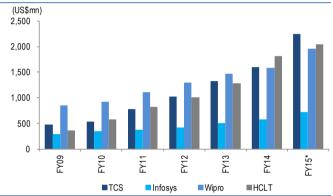
Rising competitive intensity in IMS segment

With the IMS segment expected to be a strong growth driver for the IT industry over several years (with a potential US\$200bn opportunity indicated in 2015-16 and the extent of under-penetration indicated to be large, more players have invested significant sums to build automation tools and frameworks. Some players are also willing to make additional investments, taking in on their books hardware assets like data centres or building data centres of their own. Vendors open to taking on board IT employees of their clients has become a bit of a norm in the industry. This being the case, we see a situation where capabilities of the players competing in the space have begun to converge. This also means that some early investors in this opportunity like HCLT and TCS have, on the margins front, started feeling the heat of the competition. Wipro has more than 700 clients in the IMS space. Probably, it has many more in India/Middle East geographies than HCLT has got, but nevertheless we believe it will be a credible player in the coming days, despite being a late entrant to the automation game. As seen in Exhibit 13, newer players are gaining market share

Exhibit 13: Various frameworks created by Wipro team

ServiceNXT™ Wipro's blueprint for next-gen IT monitoring & mgmt. services VirtuaDesk™ Wipro's appliance-based desktop virtualisation solution **FixOmatic**™ End-user service requests & data centre operations automation istructure™ Wipro's public / private cloud laaS / PaaS offering Integrated appliance-based solution for remote office-branch ROBODO™ offices SDi Wipro's blueprint for software defined storage & network Application-led discovery of infrastructure & dependencies for InsightX ™ rationalisation & optimisation

Exhibit 14: IMS performance versus competitors



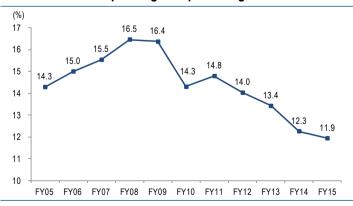
Source: Company, Nirmal Bang Institutional Equities Research

Source:Company, Nirmal Bang Institutional Equities Research *Note:Dec quarter annualised

HCLT is more a horizontal player

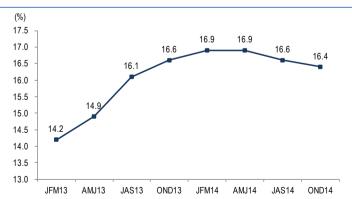
We believe HCLT's skills are more horizontal than vertical. Even in a very large acquisition like Axon, the primary reason for its acquisition was horizontal capability (Enterprise package implementation) rather than vertical capability. RTB, on which HCLT has been focusing, is immune to major cuts, but vulnerable to pressure from automation. We believe HCLT will be a key player as long as it remains ahead of others in the automation space.

Exhibit 15: SG&A spending as a percentage of revenue



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 16: Trend in attrition rate



^{*}Note:Dec guarter annualised

[^]Reclasified as Global Media & Telecom from FY11



Short-term pressure on margins

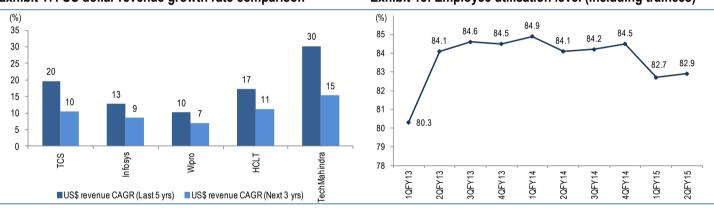
HCLT has been indicating that its stable-state EBIT margin should be in the 21-22% range rather than 23%-24% which it has been delivering over the past few quarters. If we look at SG&A spending as a percentage of sales (Exhibit 13), possibly HCLT has reached a point where it will have to increase the spending to remain relevant to clients and to grow its new service lines. This is without taking into account any kind of cross-currency headwinds that are bound to hit in FY16, should the US dollar-Indian rupee level remains where it is right now. We also believe that the high attrition rate which HCLT is witnessing could result in a high single-digit salary hike. Should some of the large contracts that HCLT is likely to win requires it to rebadge some onsite employees of its customers, it can be another pressure point to watch out for. However, excluding cross-currency headwinds, we do not see any reason as to why HCLT will breach the 21% EBIT margin number on the downside in the near term.

Financials

We expect US dollar revenue CAGR of 11% over FY15E-FY18E against a growth of 17% over FY10-FY15E, driven by IMS service line. We believe that the EBIT margins of the company will likely move to 21-22% indicated by the company as it invests in frameworks and tools to broaden its revenue mix, spend a bit more on SGA compared to the recent past and also be willing to invest upfront when it takes on some large projects. We believe the margins are also likely to be negatively impacted by salary hikes. Cross-currency headwinds are also likely to be strong in FY16, but we have not factored in this significantly in our calculations. It currently does not have too many margin levers to fall back up on. Utilisation is already at very high and so is the fixed price part of its revenues.

Exhibit 17: US dollar revenue growth rate comparison

Exhibit 18: Employee utilisation level (including trainees)



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 19: Fixed-price contracts versus Time & Material contracts

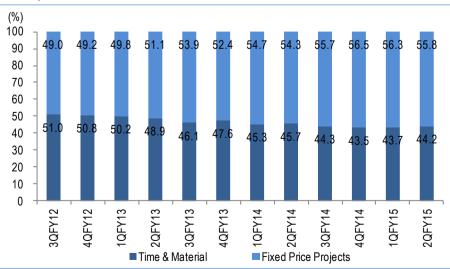




Exhibit 20: Revenue exposure to various currencies

	TCS	Infosys	Tech Mahindra	Wipro	HCL Tech
US Dollar	54	68	51	51	56
Europe	24	17	26	28	32
Rest of the world	22	15	24	21	12

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 21: Our estimates versus Bloomberg consensus estimates-HCL Technologies

HCLT

Tech Mahindra

	Bloomberg	Bloomberg consensus estimates			NBIE		Difference (%)		
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E
Revenue	373	425	484	369	414	473	(1.1)	(2.7)	(2.1)
EBIT	88	98	110	85	91	109	(4.3)	(7.1)	(0.9)
PAT adj.	76	84	95	72	76	92	(5.3)	(9.7)	(3.6)
EPS adj. (Rs)	54.7	60.4	66.6	51.1	54.0	64.9	(6.4)	(10.6)	(2.5)
EBIT margin (%)	23.7	23.1	22.8	22.9	22.1	23.1	(78)bps	(107)bps	29 bps

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 22: Sales/Fixed Assets (FY15E)

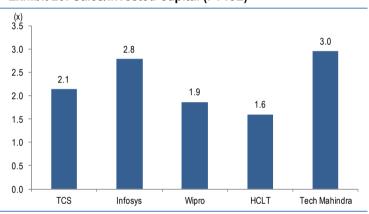
(x)
7
6
5
4.8

4.8

4.3

Wipro

Exhibit 23: Sales/Invested Capital (FY15E)



Source: Company, Nirmal Bang Institutional Equities Research

Infosys

0

TCS

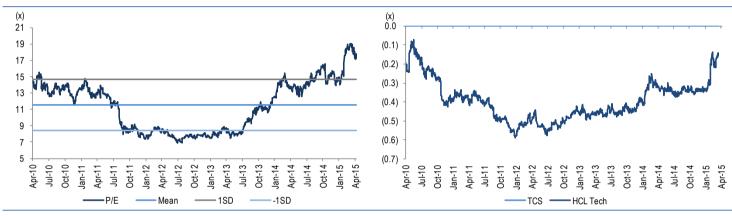


Valuation

We believe TCS should be the valuation benchmark for the IT sector considering the fact that it will continue to lead the market in terms of growth and EBIT margin in the Tier-1 set in the foreseeable future. We believe HCLT's target P/E will have to be benchmarked against that of TCS. HCLT's revenue growth in organic US dollar terms is likely to be 11% over FY15E-FY18E. This is against 10% of TCS. RoIC of HCLT over this time frame is likely to be an average of 33% against 54% of TCS. We have also looked at the overall business mix, risks, operating metrics, etc, and have assigned a multiple of 16.3x, which is at a 10% discount to the target P/E multiple of TCS. While RoIC has been not so great vs other players, what has surprised the market has been its industry leading growth and we believe that performance will continue even in the foreseeable future. Recently, there has been a P/E multiple discount contraction between the two companies. We believe this will sustain as the broad-based growth shown by HCLT is here to stay.

Exhibit 24: P/E

Exhibit 25: P/E discount versus TCS reduces



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Risks

While many risks which are sector-related and discussed in the sector report will be applicable to HCLT, we believe the company-specific risks are more connected with whether its strategy of broad-basing growth will be successful or not. Inorganic growth has been a vital element of its growth strategy and there could be risks connected with this i.e. if the price paid for an acquisition is excessive and the synergies generated are not good enough to offset the price, then RoIC will be negatively impacted in future.



Exhibit 26: Key metrics

		4QFY12					1QFY14	2QFY14	3QFY14	4QFY14		2QFY15
Revenue (US\$mn)	1,048	1,080	1,114	1,154	1,191	1,228	1,270	1,321	1,361	1,407	1,433	1,49
EBIT (US\$mn)	164	210	216	229	236	258	302	313	335	341	342	35
PAT (US\$mn)	121	156	162	178	193	214	226	242	264	305	307	308
P&L (Rsmn)												
Revenue	52,156	59,191	60,910	62,780	64,247	69,800	79,610	81,840	83,490	84,240	87,350	92,830
EBITDA	9,592	13,010	13,509	13,940	14,394	16,150	20,930	21,250	22,320	22,170	21,920	23,19
PAT	6,028	8,537	8,846	9,440	10,399	11,920	14,160	14,950	16,240	18,360	18,740	19,16
Vertical mix (%)												
Banking, financial services & insurance (BFSI)	24.0	23.8	24.1	25.8	25.0	25.3	26.0	25.9	26.9	28.4	28.2	26.
Hi-tech - manufacturing	29.0	28.4	31.6	31.0	32.2	32.7	33.3	33.7	33.3	31.6	32.3	32.
Telecom	8.6	8.0	10.4	10.3	10.0	10.1	9.1	8.9	8.4	8.9	8.7	8.
Retail & CPG	8.6	8.6	9.2	9.0	8.9	8.6	8.3	8.6	8.5	8.5	9.5	9.
Media publishing & entertainment	6.7	6.7	-	-	-	-	-	-	-	-	_	
Life sciences	9.1	10.8	12.0	11.9	11.3	11.3	11.6	10.8	10.4	10.2	9.8	11.
Energy-utilities-public sector	6.8	7.2	6.9	7.0	7.7	8.0	7.8	9.2	10.1	10.1	9.3	9.
Others	7.2	6.4	5.8	4.8	4.8	4.0	3.9	3.1	2.3	2.3	2.2	1.
Horizontal mix (%)												
Engineering and R&D Services	18.5	18.6	18.1	17.6	17.1	17.1	16.9	16.6	16.1	16.2	17.1	18.
Enterprise Application Services	20.7	20.8	19.8	19.0	19.0	17.7	16.3	17.1	17.2	15.4	15.7	15.
Industry Solutions (ADM)	32.1	31.3	31.1	30.6	29.7	29.2	29.5	28.0	27.7	28.8	27.7	27.
Infrastructure Services	24.0	24.8	26.6	28.4	22.9	31.5	33.1	33.7	34.4	34.5	34.5	34.
BPO Services	4.7	4.4	4.5	4.4	4.3	4.3	4.3	4.6	4.5	5.1	5.0	4.
Geographical mix (%)												
US	56.7	56.6	57	56.9	57.1	57	57.2	56.9	55.4	54.3	56.3	57.
Europe	27.6	28	27.9	28.5	28.9	30.5	30.2	31.3	31.8	33	32.3	31.
Asia Pacific	15.7	15.5	15.1	14.6	14	12.5	12.6	11.8	12.8	12.7	11.4	10.
Project type												
T&M	51.0	50.8	50.2	48.9	46.1	47.6	45.3	45.7	44.3	43.5	43.7	44.
Fixed price	49.0	49.2	49.8	51.1	53.9	52.4	54.7	54.3	55.7	56.5	56.3	55.
Staff utilisation (%) (including trainees)	-	-	80.3	84.1	84.6	84.5	84.9	84.1	84.2	84.5	82.7	82.
Client concentration (%)												
Top 5 clients	16.0	16.4	16.2	15.7	15.4	15.4	15.1	14.8	15.0	14.7	14.4	14.
Top 10 clients	24.3	24.7	24.5	24.2	24.0	23.8	23.8	23.8	24.1	23.7	23.1	22.
Top 20 clients	33.9	34.1	33.6	33.3	32.8	33.0	33.2	33.6	34.2	33.7	33.0	32.
Number of clients												
No. of US\$1mn clients	386	397	401	418	422	428	427	427	432	429	428	45
No. of US\$5mn clients	152	164	173	178	187	186	184	183	183	187	193	20
No. of US\$10mn clients	92	96	98	98	98	102	105	107	109	114	115	12
No. of US\$20mn clients	44	45	49	50	51	51	57	61	64	67	67	6
No. of US\$30mn clients	25	25	29	29	29	30	29	30	32	37	37	3
No. of US\$40mn clients	14	14	14	15	15	18	19	18	18	18	20	2:
No. of US\$50mn clients	10	10	10	10	10	11	11	12	14	15	15	1
No. of US\$100mn clients	4	5	5	5	5	5	6	6	6	6	7	
No. of clients	516	536	536	544	547	549	0	0	0	0	0	
Employees	82,464	84,319	85,335	85,194	84,403	85,505	87,196	88,332	90,190	91,691	95,522	100,24
Attrition (%)	15.0	14.0	13.6	13.6	14.2	14.9	16.1	16.6	16.9	16.9	16.6	16.



Company background

HCL Technologies was founded in 1976 by Mr. Shiv Nadar and Mr. Arjun Malhotra. It posted revenue of US\$5.4bn in FY14 compared to peers like Infosys (US\$8.2bn), TCS (US\$13.4bn) and Wipro (US\$6.6bn). HCLT employed 100,240 employees as of end-December 2014.

Management

- Mr. Shiv Nadar, Founder Chairman, HCL Technologies. He established HCL in 1976.
- Mr. Anant Gupta is the president and chief executive officer. He joined the company in 1993 and has worked in leadership positions in the company, most recently as the president of Infrastructure Services Division.
- Mr. Anil Chanana is the chief financial officer. He held several positions in the finance function and is also
 involved in financial planning, taxation, fund-raising and investment management.

Exhibit 27: Quarterly snapshot

(Rsmn)	3QFY13	4QFY13	1QFY14	2QFY14	3QFY14	4QFY14	1QFY15	2QFY15
Revenue	64,247	69,800	79,610	81,840	83,490	84,240	87,350	92,830
Gross margin	23,118	25,540	31,030	31,440	32,460	32,090	32,130	34,340
EBITDA	14,394	16,150	20,930	21,250	22,320	22,170	21,920	23,190
EBIT	12,760	14,450	18,950	19,400	20,600	20,400	20,880	22,100
Other income	888	770	(1,200)	(470)	(70)	1,580	3,050	2,160
PBT	13,648	15,220	17,750	18,930	20,530	21,980	23,930	24,260
Tax	3,249	3,300	3,590	3,980	4,290	3,620	5,190	5,100
PAT	10,399	11,918	14,162	14,950	16,241	18,361	18,741	19,160
EPS	14.7	16.9	20.0	21.2	23.0	26.0	26.6	27.2
YoY growth (%)								
Revenue	23.2	17.9	30.7	30.4	30.0	20.7	9.7	13.4
Gross profit	36.2	22.6	44.6	39.9	40.4	25.6	3.5	9.2
EBITDA	50.1	24.1	54.9	52.4	55.1	37.3	4.7	9.1
Net Profit	72.5	39.6	60.1	58.4	56.2	54.1	32.3	28.2
QoQ growth (%)								
Revenue	2.3	8.6	14.1	2.8	2.0	0.9	3.7	6.3
EBITDA	3.3	12.2	29.6	1.5	5.0	(0.7)	(1.1)	5.8
Net profit	10.2	14.6	18.8	5.6	8.6	13.1	2.1	2.2
Margins (%)								
Gross margin	36.0	36.6	39.0	38.4	38.9	38.1	36.8	37.0
EBITDA	22.4	23.1	26.3	26.0	26.7	26.3	25.1	25.0
EBIT	19.9	20.7	23.8	23.7	24.7	24.2	23.9	23.8
PAT	16.2	17.1	17.8	18.3	19.5	21.8	21.5	20.6
SGA	13.6	13.5	12.7	12.5	12.1	11.8	11.7	12.0

Source: Company, Nirmal Bang Institutional Equities

Latest events

- HCLT said that cross-currency fluctuation was expected to affect revenue to the extent of 280 basis points (bps) in the January-March quarter. HCL also said that Ebit margin would be impacted by 80 bps in the quarter.
- Shiv Nadar Foundation, in March 2015, sold its entire 0.8% share in HCL Technologies worth Rs11bn in the open market to comply with statutory regulations.
- HCL Tech, Tele2 partner to tap M2M, IoT opportunities in Europe. Under the partnership, the companies
 are planning to develop remote patient monitoring systems that are enabled through smartphones
- HCL Tech bags multi-million dollar IT deal from De Beers. HCL already manages the IT Infrastructure of Anglo American plc, the majority shareholder of De Beers. The deal allows a tighter integration across the two companies with common technology platforms and IT service management
- HCL Tech appoints Matt Preschern as Chief Marketing Officer



 Sydney Trains selects HCL Technologies as strategic partner. The IT service provider will provide end-toend application management and support services to transform the company's IT landscape

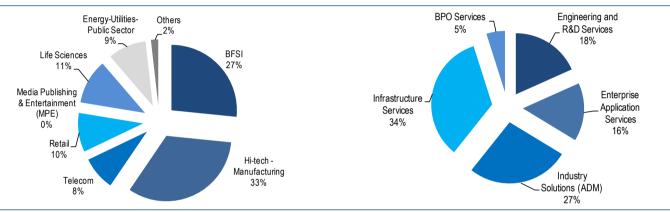
Exhibit 28: M&A activities (partial list)

Company acquired	Country	Date	Business
CapitalStream Inc	US	February 2008	Provides lending automation solutions
Liberata Financial Services	UK	July 2008	ВРО
Control Point Solutions Inc	US	August 2008	Telecom solutions company
Axon Group Plc	UK	December 2008	SAP consulting company
UCS Group's Enterprise Solutions SAP practice	South Africa	July 2009	SAP unit

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 29: Vertical mix-revenue

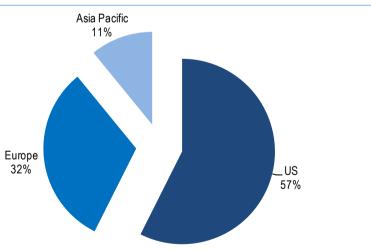
Exhibit 30: Horizontal mix-revenue



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 31: Geography mix-revenue





Financials

Exhibit 32: Income statement

Y/E June (Rsmn)	FY14	FY15E	FY16E	FY17E	FY18E
Average INR/USD	61.5	61.7	61.5	63.3	64.0
Net Sales (US\$)	5,360	5,996	6,727	7,483	8,243
-Growth (%)	14.4	11.9	12.2	11.2	10.1
Net Sales	329,18	369,063	413,811	473,380	527,532
-Growth (%)	27.7	12.1	12.1	14.4	11.4
Cost of Sales & Services	202,16	235,728	266,780	300,140	336,042
Gross Margin	127,02	133,335	147,031	173,240	191,490
% of sales	38.6	36.1	35.5	36.6	36.3
SG&A	40,350	44,053	50,361	58,074	65,479
% of sales	12.3	11.9	12.2	12.3	12.4
EBITDA	86,670	89,283	96,670	115,166	126,010
% of sales	26.3	24.2	23.4	24.3	23.9
Depreciation	7,320	4,640	5,398	5,902	6,406
EBIT	79,350	84,642	91,272	109,263	119,604
% of sales	24.1	22.9	22.1	23.1	22.7
Other income (net)	5,730	8,830	8,407	10,195	12,731
PBT	79,190	92,093	97,679	117,458	130,335
Provision for tax	15,480	19,949	21,489	25,841	28,674
Effective tax rate (%)	19.5	21.7	22.0	22.0	22.0
Minority Interest	3	1	0	0	0
Net profit	63,713	72,145	76,190	91,618	101,662
-Growth (%)	56.9	13.2	5.6	20.2	11.0
-Net profit margin (%)	19.4	19.5	18.4	19.4	19.3

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 34: Balance sheet

Y/E June (Rsmn)	FY14	FY15E	FY16E	FY17E	FY18E
Net worth	200,780	247,944	282,097	328,875	380,091
Other liabilities	14,616	17,030	19,809	22,333	24,418
Total loans	7,507	4,000	4,000	4,000	4,000
Total liabilities	222,903	268,974	305,906	355,207	408,510
Intangible assets	51,490	51,753	51,753	51,753	51,753
Net block	31,470	35,039	38,513	41,987	45,461
Investments	120	121	121	121	121
Other non-current assets	23,460	28,383	33,016	37,221	40,697
Debtors	77,080	85,148	99,047	111,663	122,091
Cash & bank balance	10,210	10,000	10,000	10,000	10,000
Other current assets	111,040	146,516	175,805	217,847	264,547
Total current assets	198,330	241,664	284,851	339,510	396,639
Total current liabilities	81,967	87,986	102,348	115,385	126,161
Net current assets	116,363	153,678	182,503	224,125	270,477
Total assets	222,903	268,974	305,906	355,207	408,510

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 33: Cash flow

Y/E June (Rsmn)	FY14	FY15E	FY16E	FY17E	FY18E
EBIT	79,350	84,642	91,272	109,263	119,604
(Inc.)/dec. in working capital	(949)	(4,451)	(3,397)	(3,084)	(2,549)
Cash flow from operations	78,401	80,191	87,874	106,179	117,055
Other income	(5,730)	(8,830)	(8,407)	(10,195)	(12,731)
Depreciation & amortisation	7,320	4,640	5,398	5,902	6,406
Tax paid	(15,480)	(19,949)	(21,489)	(25,841)	(28,674)
Dividends paid	(16,767)	(30,839)	(42,037)	(44,840)	(50,445)
Net cash from operations	47,744	25,214	21,339	31,206	31,611
Capital expenditure	(11,507)	(8,209)	(8,872)	(9,376)	(9,880)
Net cash after capex	36,237	17,004	12,466	21,829	21,731
Inc./(dec.) in debt	547	(3,507)	0	0	0
(Inc.)/dec. in investments	(48,620)	(37,997)	(30,061)	(42,743)	(47,279)
Equity issue/(buyback)	6	(1,400)	0	0	0
Cash from financial activities	(48,067)	(42,904)	(29,967)	(42,532)	(46,855)
Others	14,718	25,689	17,501	20,703	25,124
Opening cash	7,321	10,210	10,000	10,000	10,000
Closing cash	10,210	10,000	10,000	10,000	10,000
Change in cash	2,889	(210)	0	0	0

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 35: Key ratios

Exhibit 33. Ney ratios					
Y/E June (Rsmn)	FY14	FY15E	FY16E	FY17E	FY18E
Per share (Rs)					
EPS	45.6	51.5	54.4	65.4	72.6
FDEPS	45.1	51.1	54.0	64.9	72.0
Dividend Per Share	12.0	22.0	30.0	32.0	36.0
Book Value	150	185	211	246	284
Dividend Payout Ratio	26.3	42.7	55.2	48.9	49.6
Return ratios (%)					
RoE	37.1	32.2	28.7	30.0	28.7
RoCE	40.9	34.4	31.8	33.1	31.3
ROIC	44.7	36.8	33.6	34.7	32.3
Tunover Ratios					
Asset Turnover Ratio	1.1	1.0	1.0	1.0	1.0
Debtor Days (incl. unbilled Rev)	85	84	87	86	84
Working Capital Cycle Days	45	57	66	75	82
Valuation ratios (x)					
PER	20.1	17.8	16.8	14.0	12.6
P/BV	6.4	5.2	4.5	3.9	3.4
EV/EBTDA	13.7	12.9	11.7	9.5	8.4
EV/Sales	3.6	3.1	2.7	2.3	2.0
M-cap/Sales	3.9	3.5	3.1	2.7	2.4



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Tech Mahindra

13 April 2015

Reuters: TEML.BO; Bloomberg: TECHM IN

Market Prices In Tier-1 Status, But Yet To Achieve It

We initiate coverage on Tech Mahindra (TML) with a Sell rating and a March 2016 target price of Rs593 (down 10.2% from the CMP) based on a target P/E of 14.5x (20% discount to TCS') on FY17E EPS. TML has been trying to be part of the India-listed Tier-1 set and is doing several things to get there. The company is broadening its service line and vertical capabilities through the inorganic route – BFSI, Engineering services, etc. It is also (like HCL Technologies in IMS) focusing on a relatively uncontested area of Network services (for telecom service providers or TSPs, 180 of which are its clients currently) through the acquisition of Lightbridge Communication Corporation (LCC). This opportunity is adjacent to the IT services one that TML has built with TSPs over the past few decades. However, there is a difficult road ahead in terms of execution on both these fronts. We believe the organic growth, which has been good in FY15, is likely to slow in the foreseeable future because of a skewed revenue mix, competitive intensity in the Enterprise space and likely teething trouble in Network services side. The market - in our view - is being generous by giving TML a P/E multiple that is at par with more accomplished and diversified players in the Tier-1 set. We feel it is unwarranted.

Unbalanced business mix: Though TML has delivered better-than-industry organic growth over FY15E, we believe structurally the business is not balanced because of its reliance on two drivers – Telecom and Acquisitions. TSPs are going through challenging times globally. TML has been able to grow by increasing its share through deeper market penetration and also by expanding the opportunity size. Nevertheless we continue to be concerned because of its very large share of the revenue mix–55%-57% (including LCC) - with a large number of its top 10 customers coming from this space. Also, TSPs globally are going through a phase of consolidation, which could delay decision making. Though TML's inorganic efforts have been a reasonable success so far, any pressure to deliver a stretched revenue goal could force a wrong acquisition and saddle its balance sheet with an asset which has sub-optimal growth, margins and RoIC. We also see acquisitions, takeover of client personnel, and upfront investment in some large deals adding to the margin crunch in FY16E and FY17E.

Factoring in low-teen organic growth over FY15E-FY18E: We are assuming organic growth (excluding LCC) of ~10% in FY16E. We are not factoring in any revenue growth for LCC in that year. Post FY16, we expect organic revenue CAGR of ~12% over FY16E-FY18E driven by market share gains in Network services.

Margins will be under pressure in FY16 and in the foreseeable future: Despite a 300bps fall in EBIT margin in FY15E to 16.3% versus FY14, we expect the pressure on margins to continue even in FY16 because of multiple headwinds. Wage hike (200bps), cross-currency margin impact (likely 100bps), LCC acquisition-related margin dilution of 110bps, etc, in our view, will push EBIT margin down to 14.8% in FY16E. This is despite mitigation that the company is attempting through higher employee utilisation, better employee pyramid and cost rationalisation post acquisitions. LCC's EBITDA margin, which is at 8%, is expected to increase 200-300bps over 12 months (driven by cost rationalisation) and then an attempt at mid-teen margin will be made on the back of offshoring and use of SDN (software defined networking) technology. We expect a recovery in margins of TML in FY17 and FY18, but we believe they are unlikely touch the levels witnessed in FY14

WILLIESSEU III FT 14.					
Y/E March (Rsmn)	FY14	FY15E	FY16E	FY17E	FY18E
Revenue	188,313	223,145	270,296	310,628	356,953
YoY (%)	31.4	18.5	21.1	14.9	14.9
Gross margin	71,312	74,623	84,454	99,435	115,249
YoY (%)	37.9	33.4	31.2	32.0	32.3
EBIT	36,615	36,308	39,907	50,010	61,397
EBIT (%)	19.4	16.3	14.8	16.1	17.2
Adj. PAT	29,122	28,207	31,611	39,599	49,140
YoY (%)	40.3	(3.1)	12.1	25.3	24.1
FDEPS (Rs)	30.1	29.2	32.7	41.0	50.8
RoE (%)	41.5	26.2	23.2	24.6	25.6
RoCE (%)	39.7	28.0	25.6	27.6	28.9
ROIC (%)	81.2	48.2	43.8	47.3	51.1
P/E (x)	21.3	22.0	19.6	15.6	12.6
P/BV (x)	6.7	5.0	4.2	3.5	3.0

Source: Company, Nirmal Bang Institutional Equities Research

SELL

Sector: Information Technology

CMP: Rs660

Target price: Rs593

Downside: 10.2%

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+91-22-3926 8017

Key Data

Current Shares O/S (mn)	960.8
Mkt Cap (Rsbn/US\$bn)	634.3/10.2
52 Wk H / L (Rs)	750/419
Daily Vol. (3M NSE Avg.)	3,531,527

Share holding (%)	1QFY15	2QFY15	3QFY15
Promoter	36.2	36.0	36.7
FII	39.1	39.6	38.1
DII	10.8	10.6	11.4
Others	14.0	13.7	13.7

One-Year Indexed Stock



Price Performance (%)

	1 M	6 M	1 Yr
Tech Mahindra	(7.0)	12.9	54.6
Nifty Index	0.8	11.7	29.2

Source: Bloomberg



Not in Tier-1 yet; Organic growth to slow because of an unbalanced mix

The P/E multiple expansion that TML witnessed and the compressed P/E discount to TCS' that its stock trades at (Exhibits 1 and 2) is likely because the market believes, in our view, that: (1) TML has already made it to the Tier-1 set, and (2) The industry-beating organic growth witnessed in FY15 will continue in future. However, the current revenue mix and other operating metrics indicate a different story - in our view. TML is probably on its way in the medium term to become a Tier-1 India-listed player, but there is a long and difficult road which it has to traverse to reach there. We believe the organic growth will be constrained by: (1) TML's large exposure to the TSP segment, which globally is going through some stress in spending, (2) Weak positioning in Enterprise IT services space (ex-Manufacturing), (3) Weak positioning in IMS - in our view - a key revenue driver for the industry, and (4) Large customer concentration - impact of top 10 customers facing slowdown in growth will be meaningful.

Exhibit 1: P/E multiple expanded significantly since mid-2013



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 2: P/E discount to TCS has narrowed considerably



Source: Bloomberg, Nirmal Bang Institutional Equities Research

A look at the operating metrics indicates that TML lags behind Tier-1 players (TCS, Infosys, Wipro and HCL Technologies) on a number of parameters. Be it revenue mix, which is largely skewed towards Telecom in case of TML, customer concentration (top 10 clients account for 50% of its revenue) which is more reflective of a mid-sized company or debtor days of 100.

One must admit, however, that on one parameter i.e. growth (combination of organic and inorganic) the company has been beating industry standards over the past few years. The growth rate displayed by it in Telecom, which has been acknowledged to be a slow-growing vertical (Exhibits 3 and 4), is worthy of appreciation. This is on the back of wallet share gains within its customer base. While margins (at the EBIT level) are definitely poorer than those of Tier-1 players, they have not been value destructive so far. RoIC has been comfortably above the 40% mark and we believe it will continue to be so in the foreseeable future.



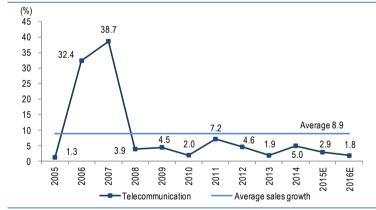
We expect organic growth for the company as a whole to be broadly in line with that of the market over FY15E-FY18E, at best. This is because of its large exposure to one particular vertical i.e. Telecom (55%-57% of revenue including LCC), high client concentration (top 10 clients accounting for 50% of its revenue) and weak positioning on the Enterprise side in verticals other than Manufacturing (Manufacturing was an area of strength of the erstwhile Mahindra Satyam which was acquired by TML). In terms of service line capabilities (TML does not put out a service line break-up), we believe the company is not ranked very high in IMS - which has been a growth driver of the entire industry for the past few years and the automation skills that are concurrent to that. Besides the managed services/IMS work which it does in the Telecom vertical (accounting for nearly 10% of its overall revenue), we do not see a very large presence on the Enterprise side.

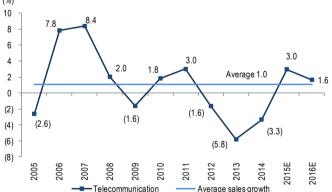
The strong organic growth (likely in late 20s in constant currency terms and ex-BT) witnessed in the Telecom segment in FY15 was largely because of bunched-up wins of some large orders early in FY15. This is not likely to be repeated in FY16 as no big order win has been registered in the recent past. While the large deal pipeline looks good in Telecom, there is uncertainty as to when these orders will be awarded. Besides, on the IT services side of TSPs, we believe TML already has a high market share. Only if it starts addressing a completely new revenue stream - Network services within TSPs - will it be able to get an even larger share of the overall TSP spending. This is what it intends to do through its acquisition of LCC.

We do not see TML making a material mark on the Enterprise side, except in Manufacturing vertical, as that part of the business is already very competitive and has India-based incumbents with very high competitive moats in terms of industry platforms, large pool of domain experts, and a large bank of reusable code and automation tools. Mahindra Satyam, which used to have a number of BFSI relationships, lost them post scam (though most of the manufacturing clients stayed put). TML will have to drive inorganic growth on the Enterprise side (ex-Manufacturing) or be willing to take on low-margin business. We believe it is doing a bit of both currently. The recent example of the former is the purchase of Sofgen, a Switzerland-based company, largely for client access in the BFSI space. It has ~20 Tier-1 clients and seems to be strong in implementation of Temenos - a core banking solution product and Avaloq - a wealth management solution. The expectation regarding TML is that it will be able to penetrate a few of these relationships over time and cross-sell its bouquet of horizontal services. The company has also been gaining entry into a number of Enterprise customers by taking on their employees. This has been an entry strategy adopted by a number of players in the industry and we do not fault TML for taking it up. However, we believe that retrenching high-cost onsite-based employees is likely to be difficult, thereby leading to lower margins over the foreseeable future.

Exhibit 3: Telecom revenue movement: S&P 500

Exhibit 4: Telecom revenue movement: Stoxx 600





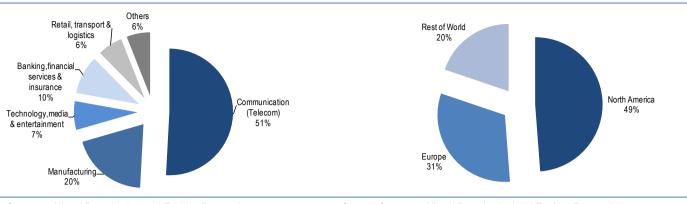
Source: Bloomberg, Nirmal Bang Institutional Equities Research

Source: Bloomberg, Nirmal Bang Institutional Equities Research



Exhibit 5: Vertical mix-revenue-3QFY15

Exhibit 6: Geography mix-revenue-3QFY15

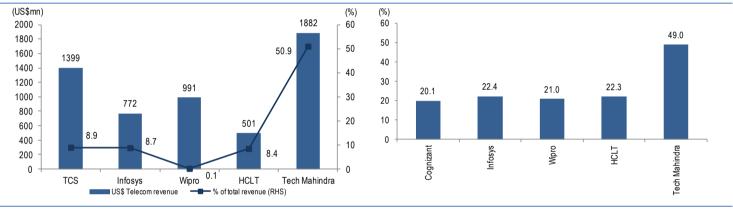


Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 7: Telecom exposure-TechM vs others (OND14 qtr annualised)

Exhibit 8: Top 10 client % share of total revenue (Dec Qtr 2014)

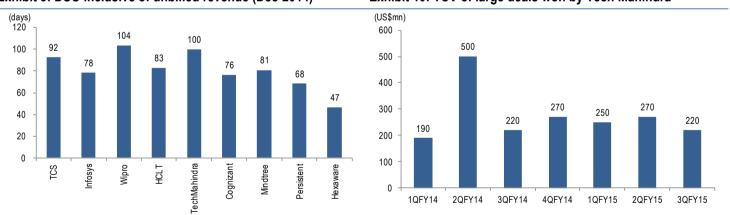


Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 9: DSO inclusive of unbilled revenue (Dec-2014)

Exhibit 10: TCV of large deals won by Tech Mahindra



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

(Deal value (no. of deals) US\$bn) 250 600 First wave of massive telecom Next wave of industry consoliidation began in US consoliidation will be led by 500 Europe 200 400 150 300 100 200 50 100 N 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2003 2004 Pending deals CapGemini estimates Completed deals

Exhibit 11: Massive consolidation in global service provider market

Source: Cap Gemini

Inorganic route has its challenges too

After the formal merger (reasonably smooth) of Mahindra Satyam with TML in June, 2013, the latter seems to have embarked on a journey to make it to the >US\$5bn revenue set as quickly as possible through organic as well as inorganic routes. While the company seems to be on its way to achieve that goal, we think the broadening of service line mix, or vertical mix, is still clearly missing. This lack of balance could exert pressure on growth and margins over the foreseeable future. On the inorganic growth side, we believe getting good companies at reasonable valuations is likely to be a challenge in the current bullish market environment. TML could either be saddled with good but expensive acquisitions or with cheap but mediocre businesses (from a margin and growth stand-point relative to Indian peers) that it will have a tough time turning them around. It is also getting a lot of contracts that involve absorbing employees of its customers. These orders are likely to be margin dilutive in the near/medium term.

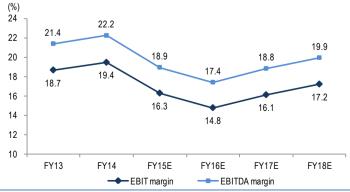
LCC's margin improvement is a 3-year affair and will peak out below the current company mark

LCC was acquired recently (a US\$430m revenue company was acquired for US\$240m in EV) to build critical mass in a new area of growth – Network services. The company's margins have to improve over a period of time to squeeze out value from it. LCC, according to TML, will take up to six months to integrate (technically merged for one month of 4QFY15). The current EBITDA margin of 8% is expected to move up to 10%-11% over the next 12 months on the back of cost rationalisation (compliance cost and other SGA expense rationalisation). The 10%-11% will then be moved to 15% in three years, largely driven by offshoring and usage of SDN (software defined network) technology. EBITDA margin beyond 15% looks unlikely as offshoring will be limited to only 25%-30% of TML's revenue. It was indicated that some cost savings in LCC initially are likely to be below the EBITDA level with a decrease in interest costs because some high-cost debt is refinanced.

Exhibit 12: EBIT margin comparison vs peers

(%)
35
30
25
20
15
10
FY11 FY12 FY13 FY14 FY15E FY16E FY17E FY18E
TCS Infosys Wipro HCLT Tech Mahindra

Exhibit 13: EBITDA & EBIT margin trend



Source: Company, Nirmal Bang Institutional Equities Research



Inorganic growth has its own set of problems. Most of the acquisitions made by the company over the past two-three years have mid-teen margins – Complex IT, Comviva and HGS. We aren't too sure whether the margins of these companies will move up any further from where they are currently. Some of the problems connected with improving margins include a very high onsite component and the difficulty in paring onsite staff of these companies lest they damage the brand equity of TML in the M&A (merger and acquisition) market. The employees taken on board in Europe connected with various deals will be largely retained and, therefore, the gains from offshoring will be limited, at least to begin with. However, over a period of time, the offshoring component will be pushed up to 20%-30%. In the Base Telecom deal, for instance, the current offshore component was indicated to be in the range of 20%-25%.

Through these acquisitions, TML is expected to be able to deliver an above industry overall revenue growth, but we believe incremental RolCs will be poor and, therefore, we feel the market has to take cognisance of this while assigning the valuation multiple.



New growth drivers: Enterprise, Network and Engineering services

TML is attempting to build a more balanced business without slowing the Telecom revenue stream. Some of the new revenue drivers include Network services (for TSPs), manufacturing-related Enterprise IT services and Engineering services. In terms of attractiveness in the context of TML's current business, we rate Network services the highest, followed by IT services for the Manufacturing vertical and then Engineering services. We believe the Network services opportunity - if properly executed - could be a big revenue driver as it is relatively uncontested at this point in time, except by some large OEM players like Ericsson and Huawei. However, this requires significant re-engineering of the service to make margins attractive (from the current single-digit EBITDA margin).

A wider Enterprise IT services play will be a difficult

We believe that making a material mark in Enterprise IT service business (ex-Manufacturing vertical) will be difficult considering the high competitive intensity, the late entry by TML, the domain skill-sets that are required and domain-specific platforms that have been created by incumbents which TML will not be able to match easily. One should remember that a player like HCL Technologies, an entrant earlier than TML in this area, with an Enterprise solutions acquisition like Axon has not been able to make a big mark in it.

Within manufacturing vertical, we believe it will be a tad easier, largely stemming from the manufacturing strengths inherited through Mahindra Satyam merger. There is a big attempt to cross-sell services. Currently, TML has about 20 service lines. To 70% of its current clients, only three-four service lines have been sold till now. Cross-selling more, engaging with outsourcing advisors like ISG, hiring industry specialists in sales roles, etc, is what the company has been doing/planning to expand revenue in the enterprise IT services space. It has won a few manufacturing deals against some Tier-1 players like TCS and Infosys. We, however, believe it will be a tough battle to increase the share in other verticals organically.

Network services looks to be the best opportunity

Network service is indicated to be a US\$40bn opportunity globally with little presence of Indian players. Most of the business is onsite-oriented. TML wants to do what HCL Technologies did to IMS over the last decade. Enter an unattractive (currently) relatively uncontested area, invest and try to change the business model and take a leadership position. Network services represent an adjacent opportunity to the IT services one that the company has with TSPs. This represents the sale of a new service line into its large TSP customer base. TML has 180 TSP clients currently after its acquisition of LCC - which brought in 20 new TSP accounts.

Currently, the leaders in carrier Network services are all OEM players, with Ericsson being the largest one with a 25% market share. But they have a vested interest in selling their own equipment. TML's proposition is the neutrality from equipment sourcing stand-point and being an end-to-end player (from planning, network design, procurement, installation and then management).

TML already had a network services business (pre-LCC acquisition) of about US\$100m. With the addition of LCC (US\$430mn revenue run-rate), we believe it achieves critical mass. While the Base Telecom deal (network services part) was indicated to be more a play on the RTB (run the business) opportunity, LCC is likely to let TML become a bigger player on CTB (change the business) part in Network services space. TML's network services business will focus on older networks and on re-bid contracts rather than on new ones. The new network business is still likely to remain in the hands of OEMs. However, over a period of time, say five years, a large number of disparate components which do not belong to that particular OEM get added to the network and the TSP will require a neutral service provider. TML is also looking for partnership deals where it could provide services to players like Ericsson and Huawei, assisting them in their network services business.

The existing Telecom business of TML is predominantly - 96% - service provider-related. Of this 50% is OSS/BSS (Operations Support System/Business Support Systems) type which is ADM (application development and maintenance)-driven, 20% is IMS/managed services, 15% is BPO (business process outsourcing) services and about 7% is VAS (value added services).

The large deal opportunity in IT services for TSPs is estimated at US\$16bn per year. Of this, the portion which will come up for re-bid is apparently 30%, resulting in a per year large deal opportunity of US\$4.8bn for all vendors in the TSP space for large deals in IT services.



Engineering services

While Engineering and research and development (R&D) services have been indicated to be a very large opportunity for the Indian industry at \$1.44trn (Nasscom estimate for 2014), the penetration in this space has been fairly low which is partly because of the reasons connected with IP (intellectual property) protection, in our view. With the strength in customer relationships in manufacturing, Engineering is an attractive business to look at for TML (and relatively less contested area, in our view). With no service line metrics available, our guesstimate is that Engineering is at best a mid-high single-digit business for the company. Sub-scale - in our view - despite the Mahindra Engineering Services acquisition in November 2013. We believe this requires both an organic and an inorganic build-up to achieve scale.

Intersection of capabilities - not material yet

With TML's strong relationships with TSPs and the capabilities in Mobile space, we think there is potential for business through the intersection of Mobile, Enterprise and Engineering services, which could throw up new business opportunities in future. TML has indicated working on a few projects in this space. However, we believe it will take time to achieve critical mass and impact revenue growth.

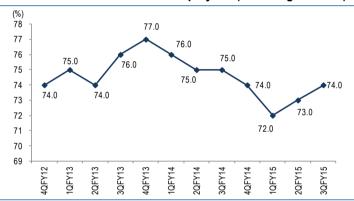


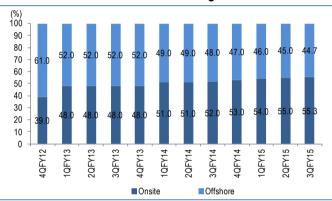
Financials

We expect revenue CAGR of 15% (~12% organic) over FY15E-FY18E driven by Enterprise, Network and Engineering services. We have not considered any potential acquisitions into our calculations other than the ones that have been concluded recently like LCC and Sofgen. The growth over FY10-FY15E has been primarily driven by acquisitions (of Mahindra Satyam and many others detailed in Exhibit 22) and organic growth in Telecom vertical. We believe EBIT margin will be under pressure in 4QFY15 and in FY16. Despite a 300bps fall in EBIT margin in FY15E to 16.3% versus FY14, we expect the pressure on margins to continue even in FY16 because of multiple headwinds. Wage hike (200bps), cross-currency margin impact (likely 100bps), LCC acquisition dilution of 110bps, etc, in our view, will push EBIT margin down to 14.8% in FY16E. This fall in margin will be despite some mitigation that the company is attempting through improved employee utilisation, better employee pyramid and rationalisation of costs post acquisitions. In 4QFY15, there is likely to be some mitigation by Comviva's seasonally strong revenue. LCC's EBITDA margin, which is at 8%, is expected to rise 200bps-300bps over 12 months (driven by cost rationalisation) and then an attempt at midteen margin will be made on the back of higher offshoring and use of SDN (software defined networking) technology. We also believe that the large deals being won by the company require some bit of front-end investment, which could impact margins modestly.

Exhibit 14: Utilization level of employees (including trainees)

Exhibit 15: Onsite work is increasing





Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 16: Country-wise currency exposure

	TCS	Infosys	Tech Mahindra	Wipro	HCL Tech
US Dollar	54	68	51	51	56
Europe	24	17	26	28	32
Rest of the world	22	15	24	21	12

Source: Company, Nirmal Bang Institutional Equities Research

On the balance sheet side, we expect a slight deterioration in the working capital cycle as LCC's working capital picture has been indicated to be far worse than that of TML (which has 100 DSO). It looks unlikely that the DSO will come down further as the TSP space, especially in emerging markets, tends to be tight-fisted. However, LCC is likely to register US\$3mn-US\$5mn in savings because of a change in credit rating.

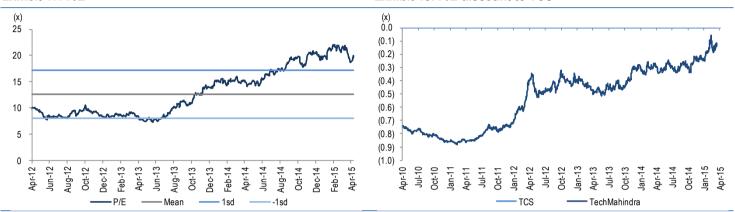


Valuation

We believe TCS should be the valuation benchmark for the IT sector considering the fact that it will continue to lead the market in terms of growth and EBIT margin in the Tier-1 set. We believe TML's target P/E will have to be benchmarked versus TCS'. We expect TML's revenue growth in organic USD terms to be 12% over FY15E-FY18E. This is against 10% of TCS. RoIC of TML over this time frame is likely to be an average of 47% (exacquisitions that are likely to be made) against 54% of TCS. We have also looked at the overall business mix, risks, operating metrics, etc, and have assigned a multiple of 14.5x, which is at a 20% discount to the target P/E multiple of TCS.



Exhibit 18: P/E discount to TCS



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Risks to our sell call

We believe the stock could perform better than we have indicated if (1) organic growth in the Telecom vertical turns out better than what we have projected (2) If company is able to leverage the LCC acquisition and make some early and large breakthroughs in the Network Services space (3) If it makes substantial progress to grow the enterprise piece of its business – especially on the non manufacturing side (4) be able to protect its margins more than we have anticipated by pushing up utilization very high and be able to move offshore far more than we have currently anticipated.

114



Exhibit 19: Key metrics

			2QFY13		4QFY13				4QFY14			3QFY15
Revenue (US\$mn)	282	615	644	675	698	724	758	791	825	855	900	924
EBIT (US\$mn)	78	113	103	112	108	112	117	119	111	93	108	107
PAT (US\$mn)	29	94	70	51	105	103	85	121	73	76	81	85
P&L (Rsmn)												
Revenue	14,190	33,727	35,237	36,683	37,673	41,032	47,715	48,985	50,581	51,215	54,879	57,517
EBITDA	2,391	7,392	7,569	7,957	7,713	8,645	11,110	11,363	10,718	9,284	10,973	11,601
PAT	745	5,405	4,558	3,215	6,376	6,863	7,183	10,099	6,143	6,307	7,196	8,054
Vertical Mix (%)												
Communication (Telecom)	NA	44.0	45.0	46.0	48.0	49.2	48.3	48.8	50.8	50.7	52.0	50.9
Manufacturing	NA	19.0	19.0	18.0	19.0	19.2	18.6	19.0	18.5	17.8	17.7	19.7
Tech,media & entertainment	NA	13.0	13.0	12.0	12.0	10.5	10.5	9.1	8.6	8.9	8.3	7.3
BFSI	NA	11.0	11.0	11.0	10.0	9.3	9.4	9.9	10.1	10.3	9.7	9.8
Retail, transport & logistics	NA	6.0	7.0	7.0	6.0	6.0	7.1	6.9	6.4	6.3	6.2	6.4
Others	NA	7.0	5.0	6.0	5.0	5.9	6.3	6.3	5.6	6.0	6.1	6.0
Geographical Mix (%)												
North America	34.0	46.0	45.0	43.0	42.0	45.1	44.2	47.1	45.0	46.8	49.1	48.8
Europe	46.0	33.0	34.0	35.0	33.0	32.4	33.0	30.9	30.6	31.1	31.2	31.4
Rest of world	20.0	21.0	21.0	22.0	25.0	22.5	22.8	22.0	24.4	22.1	19.8	19.8
Delivery (%)												
Onsite	39.0	48.0	48.0	48.0	48.0	51.0	51.0	52.0	53.0	54.0	55.0	55.3
Offshore	61.0	52.0	52.0	52.0	52.0	49.0	49.0	48.0	47.0	46.0	45.0	44.7
Utilisation (%) (including trainees)	74.0	75.0	74.0	76.0	77.0	76.0	75.0	75.0	74.0	72.0	73.0	74.0
Clients Concentration (%)												
Top Client	37.0	-	-	-	-	-	-	-	-	-	-	-
Top 5 Clients	71.0	40.0	41.0	39.0	37.0	37.0	36.0	37.0	36.0	37.0	40.0	37.0
Top 10 Clients	80.0	50.0	51.0	50.0	50.0	49.0	48.0	49.0	48.0	50.0	51.0	49.0
Top 20 Clients	0.0	62.0	64.0	62.0	61.0	60.0	61.0	61.0	61.0	62.0	63.0	61.0
Number of Client												
1 US\$mn +	60	188	200	206	206	215	223	239	239	242	245	254
2US\$mnr +	38	-	-	-	-	-	-	-	-	-	-	-
5US\$mn +	28	73	74	77	70	74	77	75	75	80	86	88
10US\$mn +	15	39	43	48	42	46	48	47	52	51	50	51
15US\$mn +	9	-	-	-	-	-	-	-	-	-	-	-
20US\$mn +	7	21	21	22	24	25	26	25	27	29	30	32
25US\$mnr +	5	-	-	-	-	-	-	-	-	-	-	-
50US\$mn +	2	7	9	9	9	10	10	11	11	11	12	13
Employees	40,763	76,292	86,906	85,646	83,109	83,063	85,234	87,399	89,441	92,729	95,309	98,009
Attrition (%)	19.0	17.0	16.0	16.0	16.0	14.0	14.0	15.0	15.0	16.0	18.0	19.0

Source: Company, Nirmal Bang Institutional Equities Research



Company background

TML was founded in 1986 as a division of the Mahindra Group. The merger of Mahindra Satyam with the company created a formidable player, making TML the fifth-largest player in the Indian IT services sector (ex-Cognizant). The merger enabled TML to diversify its portfolio vertically as well as geographically. TML posted revenue of US\$3.1bn in FY14 compared to peers like Infosys (US\$8.2bn), HCL Technologies (US\$5.4bn) and Wipro (US\$6.6bn). It employed 98,009 employees as of end-December 2014.

Management

- Mr. Vineet Nayyar is the executive vice chairman of TML. He has worked with the government of India, international multilateral agencies and in the corporate sector (both public and private)
- Mr. C. P. Gurnani is the chief executive officer and managing director. He earlier held several leading positions at HCL Hewlett Packard, Perot Systems (India) and HCL Corporation.
- Mr. Milind Kulkarni is the chief financial officer (CFO). He has been with the company since 2002 and had
 earlier worked with companies like Cadbury's India, The Standard Batteries, and served as the CFO of
 Mastek and Venkateshwara Hatcheries.

Exhibit 20: Quarterly snapshot

(Rsmn)	4QFY13	1QFY14	2QFY14	3QFY14	4QFY14	1QFY15	2QFY15	3QFY15
Revenue	37,673	41,032	47,715	48,985	50,581	51,215	54,879	57,517
Gross Margin	13,705	15,339	18,889	18,973	18,111	16,823	18,719	19,861
EBIT	6,506	7,471	9,888	9,967	9,289	7,792	9,548	10,160
Other income	381	2,073	380	(457)	(866)	893	576	190
PBT	6,634	9,321	10,027	9,274	8,326	8,644	10,083	10,312
Tax	1,461	2,328	2,840	264	2,092	2,308	2,807	2,512
PAT	5,173	6,993	7,187	9,010	6,234	6,336	7,276	7,800
YoY growth (%)								
Revenue	165.5	21.7	35.4	33.5	34.3	24.8	15.0	17.4
Gross Profit	181.0	20.6	45.7	36.3	32.1	9.7	(0.9)	4.7
EBIT	224.0	15.3	48.4	40.6	42.8	4.3	(3.4)	1.9
Net Profit	755.8	27.0	57.6	214.1	(3.7)	(8.1)	0.2	(20.2)
QoQ growth (%)								
Revenue	2.7	8.9	16.3	2.7	3.3	1.3	7.2	4.8
EBIT	(8.2)	14.8	32.4	0.8	(6.8)	(16.1)	22.5	6.4
Net Profit	98.3	7.6	4.7	40.6	(39.2)	2.7	14.1	11.9
Margins (%)								
Gross margin	36.4	37.4	39.6	38.7	35.8	32.8	34.1	34.5
EBIT	17.3	18.2	20.7	20.3	18.4	15.2	17.4	17.7
PAT	13.7	17.0	15.1	18.4	12.3	12.4	13.3	13.6
SGA	19.1	19.2	18.9	18.4	17.4	17.6	16.7	16.9

Source: Company, Nirmal Bang Institutional Equities Research

Latest events

- Tech Mahindra turns ex-bonus, ex-stock split. March 20 was record date for 1:1 bonus issue and subdivision of the shares in the ratio of 2:1.
- TM acquires Swedish firm SOFGEN. First acquisition in the banking space. SOFGEN is into core banking system, wealth management, commercial and retail banking solutions.
- Tech Mahindra forms a JV with Avion Systems to provide network design and engineering services
- Tech Mahindra to launch connected solutions for used cars. It has entered into a strategic alliance with Germany's Enquiss GmbH for the same
- CA Technologies and TM announce that they have entered into an agreement to develop and deploy endto-end secured Internet of Things (IoT) solutions for Enterprise customers worldwide.
- Tech Mahindra bets big on US\$41bn network services market with LCC acquisition.
- Tech Mahindra and Bosch in tie-up for smart cities, home solutions.



Exhibit 21: M&A Activity

Target	Year of the transaction	Valuation (US\$mn)	Revenue (US\$mn)	Employees
Mahindra Satyam	Apr - 2009	1,113	NA	48,000
vCustomer	Mar - 2012	27	16	-
Hutchison Global Services	Sep-2012	87	160	11,500
Comviva	Sep-2012	41	70	1,500
Complex IT	Feb-2013	23	45	-
Mahindra Engineering Services	Nov- 2013	112	38	-
LCC	Nov - 2014	240	430	5,700
Sofgen	Jan - 2015	30	45	450

Source: Media, Company, Nirmal Bang Institutional Equities Research

Exhibit 22: Us vs consensus-Tech Mahindra

				Te	ch Mahindra					
	(Consensus			NBIE			Difference (%)		
(Rsbn)	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	
Revenue	225	279	321	223	270	311	(0.7)	(3.3)	(3.2)	
EBIT	38	48	56	36	40	50	(4.2)	(16.5)	(10.7)	
PAT Adj	29	37	44	28	32	40	(3.1)	(14.7)	(9.0)	
EPS Adj (Rs)	31.8	40.2	47.7	29.2	32.7	41.0	(8.2)	(18.7)	(14.0)	
EBIT Margin (%)	16.9	17.1	17.5	16.3	14.8	16.1	(58)bps	(234)bps	(135)bps	

Source: Bloomberg, Nirmal Bang Institutional Equities Research

117



Financials

Exhibit 23: Income statement

Y/E March (Rsmn)	FY14	FY15E	FY16E	FY17E	FY18E
Average INR/USD	60.7	61	61	63	64
Net sales (US\$m)	3,098	3,640	4,431	4,931	5,577
-Growth (%)	17.7	17.5	21.7	11.3	13.1
Net sales	188,31	223,145	270,296	310,628	356,953
-Growth (%)	31.4	18.5	21.1	14.9	14.9
Cost of sales & services	117,00	148,523	185,843	211,193	241,704
Gross profit	71,312	74,623	84,454	99,435	115,249
% of sales	37.9	33.4	31.2	32.0	32.3
SG& A	29,476	32,388	37,448	41,006	44,113
% of sales	15.7	14.5	13.9	13.2	12.4
EBITDA	41,836	42,234	47,006	58,429	71,136
% of sales	22.2	18.9	17.4	18.8	19.9
Depreciation	5221	5927	7099	8419	9739
EBIT	36615	36308	39907	50010	61397
% of sales	19.4	16.3	14.8	16.1	17.2
Interest expenses	797	158	152	152	152
Other income (net)	1,130	2,337	3,422	4,187	5,328
PBT	36,948	38,487	43,177	54,044	66,573
-PBT margin (%)	19.6	17.2	16.0	17.4	18.7
Provision for tax	7,524	10,178	11,442	14,322	17,309
Effective tax rate (%)	20.4	26.4	26.5	26.5	26.0
Minority Interest	336	171	124	124	124
Net profit	30,288	28,423	31,611	39,599	49,140
-Growth (%)	54.9	(6.2)	11.2	25.3	24.1
-Net profit margin (%)	16.1	12.7	11.7	12.7	13.8

Source: Company, Nirmal Bang Institutional Equities Research

Note: FY16 USD revenue growth is high because of LCC's revenue. Only 1 month revenue accounted in FY15

Exhibit 25: Balance sheet

Y/E March (Rsmn)	FY14	FY15E	FY16E	FY17E	FY18E
Equity capital	2,350	2,409	2,409	2,409	2,409
Reserves & surplus	89,470	122,614	144,742	172,461	206,859
Net worth	91,820	125,023	147,151	174,870	209,268
Minority Interest	1,438	1,569	1,569	1,569	1,569
Other liabilities	20,199	17,974	17,974	17,974	17,974
Total loans	524	537	537	537	537
Total liabilities	113,981	145,103	167,231	194,950	229,348
Goodwill	5,640	6,224	6,224	6,224	6,224
Net block (incl. CWIP)	22,966	27,701	33,371	39,041	44,711
Investments	14,719	18,035	18,035	18,035	18,035
Deferred tax asset - net	3,830	4,109	4,109	4,109	4,109
Other non-current assets	9,347	10,716	12,466	14,782	16,585
Other current assets	11,617	16,074	18,700	22,174	24,877
Debtors	43,486	53,581	62,332	73,912	82,925
Loans & Advances	14,544	16,670	19,392	22,995	25,799
Cash & bank balance	33,149	42,530	51,403	63,416	84,333
Inventory	98	67	67	67	67
Total current assets	102,894	128,921	151,894	182,564	218,001
Total current liabilities	45,415	50,604	58,870	69,806	78,318
Net current assets	57,479	78,317	93,025	112,758	139,683
Total assets	113,981	145,103	167,231	194,950	229,348

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 24: Cash flow

Y/E March (Rsmn)	FY14	FY15E	FY16E	FY17E	FY18E
EBIT	36,615	36,308	39,907	50,010	61,397
(Inc.)/dec. in working capital	(19,898)	(11,457)	(5,835)	(7,720)	(6,008)
Cash flow from operations	16,717	24,850	34,072	42,290	55,389
Other income	(1,130)	(2,337)	(3,422)	(4,187)	(5,328)
Depreciation & amortisation	5,221	5,927	7,099	8,419	9,739
Financial expenses	(797)	(158)	(152)	(152)	(152)
Tax paid	(7,524)	(10,178)	(11,442)	(14,322)	(17,309)
Dividends paid	(1,673)	(8,437)	(9,483)	(11,880)	(14,742)
Net cash from operations	10,813	9,668	16,672	20,169	27,597
Capital expenditure	28,877	(19,690)	6,000	6,000	6,000
Net cash after capex	(18,064)	29,358	10,672	14,169	21,597
Inc./(dec.) in debt	(10,280)	13	-	-	-
(Inc.)/dec. in investments	26,268	(3,316)	-	-	-
Equity issue/(buyback)	1,054	65	-	-	-
Cash from financial activities	17,041	(3,238)	-	-	-
Others	28,814	(16,739)	(1,799)	(2,156)	(680)
Opening cash	5,358	33,149	42,530	51,403	63,416
Closing cash	33,149	42,530	51,403	63,416	84,333
Change in cash	27,792	9,381	8,873	12,013	20,917

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 26: Key ratios

,					
Y/E March	FY14	FY15E	FY16E	FY17E	FY18E
EPS	31.1	30.1	33.7	42.2	52.4
FDEPS	30.1	29.2	32.7	41.0	50.8
Dividend per share (incl. DT)	1.5	9.0	10.1	12.7	15.7
Book value	98	133	157	187	223
Dividend payout ratio (incl. DT)	4.7	29.7	30.0	30.0	30.0
Return ratios (%)					
RoE	41.5	26.2	23.2	24.6	25.6
RoCE	39.7	28.0	25.6	27.6	28.9
RolC	81.2	48.2	43.8	47.3	51.1
Turnover ratios					
Asset turnover ratio	1.2	1.1	1.2	1.2	1.2
Debtor days (incl. unbilled rev.)	84	88	84	87	85
Working capital cycle days	47	59	56	58	57
Valuation ratios (x)					
PER	21.3	22.0	19.6	15.6	12.6
P/BV	6.7	5.0	4.2	3.5	3.0
EV/EBTDA	14.0	13.7	12.1	9.5	7.5
EV/sales	3.1	2.6	2.1	1.8	1.5
M-cap/sales	3.3	2.8	2.3	2.0	1.7



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Stock Ratings Absolute Returns

BUY > 15%

ACCUMULATE -5% to 15%

SELL < -5%

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