

India IT Services

Year Ahead 2024: Less pain but slow gain

Industry Overview

Growth to move up vs CY23 but remain below trend

CY23 saw revenue growth for IT services decelerate from 9% at start of year to -0.5% YoY (estimated) by year-end. Large cap stock returns of 2% to 40% & Nifty IT (24%) were reasonably good in comparison, with consensus viewing the deceleration as a cyclical headwind and expectations of a rebound to the 12%-15% handle post it. For CY24, we expect revenue growth for the sector to increase to 6-7%, which would be higher than 3.5% in CY23 but lower than the 10%+ level of a typical year.

IT budgets could be flat; share gains to drive small growth

There are 3 parts to our view of a mild growth acceleration in CY24. (1) Budgets: Customers are largely done with the cuts in CY23 but are not yet targeting an expansion in spend initiatives. CY24 budgets are thus expected to be flat to mildly up. (2) With cuts largely done, we expect a lower drag from project run downs. (3) Market-share gains for India IT to continue, with their strong positioning in cost takeout IT projects.

Margins: A year of playing defense

We think companies shifted into a cost optimization mode during CY23. Given their execution strength, we expect more cost takeout benefits to come through into CY24 (discretionary expenses, employee utilization, sub-contracting etc.). That said, we think pricing tailwind will be lower than prior year and variable pay could also be higher than CY23. This could thus result in flattish to small expansion in profitability.

Wild cards: US elections, India elections, M&A

(1) US elections: Stances on EV, reshoring, fiscal austerity could matter for IT spends in manufacturing and healthcare. News flow on tightening of H1B has already picked up. (2) India elections: India IT Services has historically underperformed 3 months & 6 months going into national elections. (3) M&A: Valuations & growth projections have likely normalized for assets in niche areas that could lead to increased M&A.

Al and Cloud: It takes two to tango

Performance of IT stocks is often shaped by tech narratives likely to play out in coming years. Al was one such topic in CY23 that hurt stocks initially but subsequently got viewed as not so detrimental. We see Al usage being led by consulting offerings while it being net positive or deflationary could be a debate that could persist through the year. We also expect companies to highlight adoption of cloud and Al moving in tango as the next leg of enterprise tech modernization agenda.

BPO looks good; IT could correct into initial FY25 guides.

With consensus baking in 7-10% FY 25 revenue growth for IT and valuations trending between parity and 35% above 5-year mean, we expect the initial guidance season (February & April) to drive a correction in sector. Conversely, we think BPO could guide for 10%+ growth and valuations are also 15-35% below 5-year mean.

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Refer to important disclosures on page 32 to 34.

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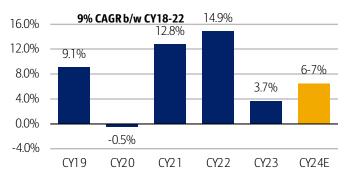
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Focus Charts

Exhibit 1: We expect mild growth acceleration in CY24 which would be lower than the 10%+ level of a typical year

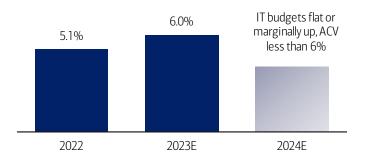
YoY constant currency revenue growth for top 4 India IT Services companies



Source: Companies, BofA Global Research estimates. Note: Top 4 companies include TCS, Infosys, HCL & Wipro (top 4 by revenues as well as market cap)

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Exhibit 3: Strength in managed services deals could continue but CY24 may not necessarily be able to match with the 6% growth seen in CY24 ISG managed services ACV growth

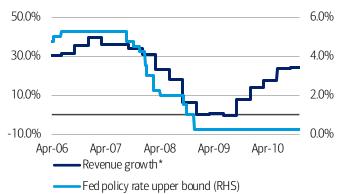


Source: ISG

BofA GLOBAL RESEARCH

Exhibit 5: The prior instances of rate cuts saw compression ...

Rate cuts in US during September'07 to December'08

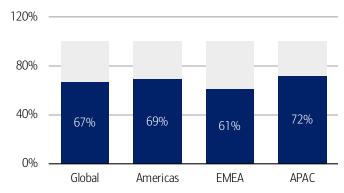


 $\textbf{Source:} \ \ Companies, \ Bloomberg, \ BofA \ Global \ Research. \ Aggregate \ revenue \ growth \ for \ top \ 4 \ India \ IT \ Services \ company \ in \ USD \ terms$

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Exhibit 2: Technology leaders are expected to continue working with smaller budgets

% of technology leaders who say that they are now expected to do more with smaller budgets than they were last year

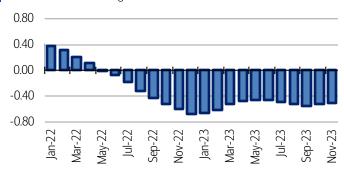


Source: KPMG Global tech report 2023

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Exhibit 4: Our BofA India IT Services Indicator continues to hover around the lows, and remain unchanged on a MoM basis.

BofA India IT Services Indicator. Refer to Exhibit 20 for long term trend and correlation with revenue growth and for related disclaimers.

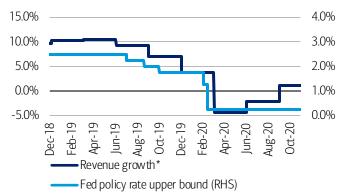


Source: BofA Predictive Analytics

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Exhibit 6: ... in revenue growth at start of the cycle

Rate cuts in US during July'19 to March'20



Source: Companies, Bloomberg, BofA Global Research. Aggregate revenue growth for top 4 India IT Services company in constant currency terms



Exhibit 7: Mid/small banks on a cost control mode. Larger banks highlighting disciplined approach to investing in technology

Commentary on technology spends or spend outlook in general from earnings transcripts of key US & European banks

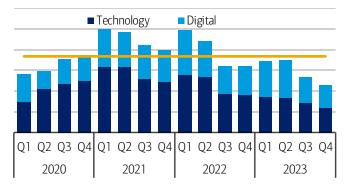
| Bank | Comments on technology spending plans | Bank | Comments on technology spending plans |
|-----------------|--|--|--|
| JP Morgan | Tech investments are a long-term play & wouldn't try to generate cosmetically lower costs in response to a lower revenue environment, planned on a through-the-cycle basis | Citizens Financial Looking ways to simplify the organization and save a party spends. Initiated zero-based review of expense spenses flat in 2024. | |
| Bank of America | Plans to spend \$3.8bn in CY24 on new initiative technology spending, marginally up from last year | Truist Financial Aggressively managing 3 rd party spends and ration technology spends. | |
| US Bancorp | Expecting full-year overall expenses to be flat in CY24 vs CY23 | HSBC | Willing to tolerate the continued investments on technology & operations as overall doing well on other costs. |
| Goldman Sachs | Continue to bring down the non-compensation expenses. | Barclays | Evaluating actions to reduce structural costs across the group. |
| Citi Group | Tech spends are crucial to modernize the firm. Continue to see a shift in investments from 3 rd party consulting to full-time employees. | Banco Santander | New global agreements with vendors have allowed to capture EUR 60mn in savings. |

Source: Company transcripts

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Exhibit 8: US Consumer Disc. – Mentions of tech/digital remain low vs 2021 / early 2022

Mention of words on earnings call. Refer to inside section for other sectors.

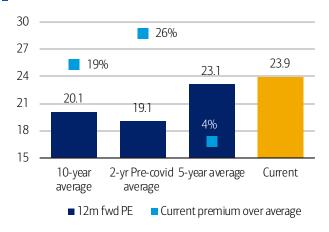


Source: Bloomberg, BofA Global Research

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Exhibit 10: Sector (aggregate of top 4 large caps) is trading at a premium to historic averages

India IT valuations – historical vs current (12m fwd PE)

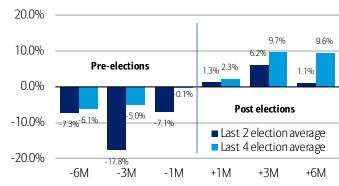


Source: Bloomberg, BofA Global Research

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Exhibit 9: IT sector has underperformed broader Indian markets going into national elections and outperformed post results

NSEIT returns relative to NIFTY – 6 months before & after national elections

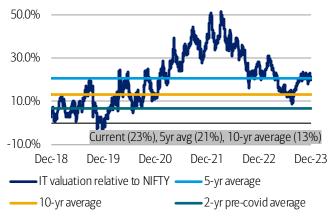


Source: Bloomberg, BofA Global Research

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Exhibit 11: Premium to broader markets is also higher than historical averages

India IT valuation relative to Nifty



Source: Bloomberg, BofA Global Research

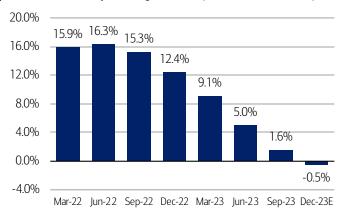


IT budgets could be flat; share gains to drive mild growth acceleration in CY24

CY23 saw revenue growth for IT services decelerate from 9% at start of the year to - 0.5% YoY (estimated) by year-end. For CY24, we expect revenue growth for the sector to increase to 6-7%, which would be higher than c.3.5% in CY23 but lower than the 10%+ level of a typical year.

Exhibit 12: Revenue growth decelerated from 9% at start of the year to -0.5% YoY by year-end

YoY constant currency revenue growth for top 4 India IT Services companies

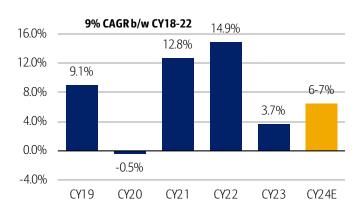


Source: Companies, BofA Global Research. Note: Top 4 companies include TCS, Infosys, HCL & Wipro (top 4 by revenues as well as market cap)

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Exhibit 13: We expect mild growth acceleration in CY24 which would be lower than the 10%+ level of a typical year

YoY constant currency revenue growth for top 4 India IT Services companies



Source: Companies, BofA Global Research estimates. Note: Top 4 companies include TCS, Infosys, HCL & Wipro (top 4 by revenues as well as market cap)

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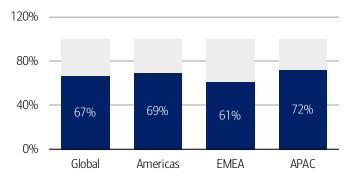
There are 3 parts to our view of a mild growth acceleration in CY24

- (1) Budgets: Customers are largely done with the cuts in CY23 but are not yet targeting an expansion in spend initiatives. CY24 budgets are thus expected to be flat to mildly up.
- Per surveys from KPMG, 2/3rd of technology leaders agree that they are now expected to do more work with smaller budgets vs the prior year. Another similar survey shows that the cohort of CIOs working with flat or increased tech budgets has marginally fallen from Aug'22 to Aug'23. (Exhibits 14 and 15)
- Accenture's FY24 (ending Sep'24, capturing 1st half of CY24) revenue guidance was
 modest compared to last year and the typical trend. This likely bases in no
 significant expansion in tech budgets for CY24 & suggests that any growth
 improvement in H1CY24 looks unlikely. (Exhibit 16)
- (2) With cuts largely done, we expect a lower drag from project run downs.
- (3) Market share gains for India IT are likely to continue, with their strong positioning in cost take IT projects: While revenue growth has been on a decelerating trajectory, continued strong trend in deals wins for India IT Services companies came out as a shining beacon of competitive positioning. While these may not help with a quick uplift to the revenue growth trajectory, it does offer comfort on win rates / market positioning in a demand constrained environment. (Exhibits 18-19)



Exhibit 14: Technology leaders are expected to continue working with smaller budgets

% of technology leaders who say that they are now expected to do more with smaller budgets than they were last year

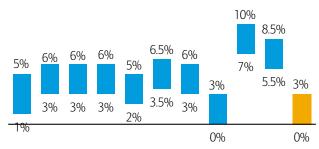


Source: KPMG Global tech report 2023

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Exhibit 16: Accenture's initial FY24 revenue guidance (ending Sep'24) compared to prior years

Accenture's initial organic revenue guidance trend



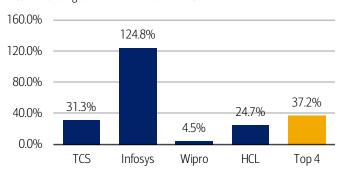
FY14 FY15 FY16 FY17 FY18 FY19 FY20 FY21 FY22 FY23 FY24

Source: Accenture, BofA Global Research

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Exhibit 18: Continued strong trend in deals wins for India IT Services companies came out as a shining beacon of competitive positioning

Deal wins YoY growth – H1FY24 vs H1FY23



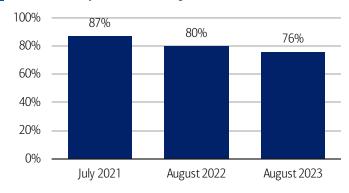
Source: Companies, BofA Global Research.

Note: Above growth numbers are based on All-deal TCV (new & renewal) for TCS & Wipro. Largedeal TCV (new & renewal) for Infosys & Net new deal TCV for HCL.

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Exhibit 15: Cohort of CIOs with flat or increased tech budgets has declined

% of CIOs who say that their tech budgets are flat or increased

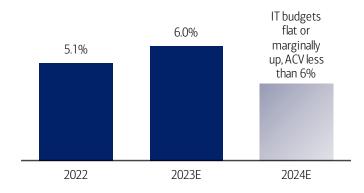


Source: Bain Technology Report 2023

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Exhibit 17: Strength in managed services deals could continue but CY24 may not necessarily be able to match with the 6% growth seen in CY24

ISG managed services ACV growth

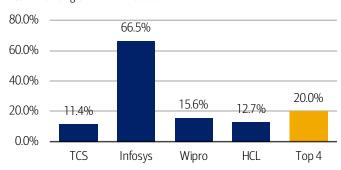


Source: ISG

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Exhibit 19: Deal wins offer comfort on win rates / market positioning in a demand constrained environment

Deal wins YoY growth - LTM basis



Source: Companies, BofA Global Research.

Note: Above growth numbers are based on All-deal TCV (new & renewal) for TCS & Wipro. Largedeal TCV (new & renewal) for Infosys & Net new deal TCV for HCL.



Snapshot of latest developments in the sector: ACN readacross, industry soundbites, read from our new indicator & US rate cycle

#1 Read across from Accenture earnings and comments from European companies

- ACN maintained all its F24 guidance, which continues to assume no improvement in discretionary spending. Demand for short-cycle consulting projects remains soft & it also cited a softer UK market. Refer to Accenture O1FY24 earnings update note from Jason Kupferberg here.
- For F2Q, ACN guided to -2% to +2% CC revenue growth (midpoint ~2% below BofA/Street).
- Company cited that CMT industry group continues to be challenged and contributed to the decelerations in the operations segment.

Feedback from our European technology team from their virtual field trip in December:

IT Services companies remain prudent on the demand outlook heading into 2024, with clients delaying decisions amidst a slowing macro backdrop. However, mid-term growth drivers around digital transformation/ AI remain intact. Focus is on cost efficiencies for 2024.

CAP is seeing lower demand in some legacy areas of enterprise management, while demand is strong for software around digital core. Alten, CAP and Netcompany all expect an inflection in demand in 2024, although the timing is uncertain. SOP expects growth in 2024 to be below the mid-term target of 4-6%. TIETO flagged weaker growth in smaller client engagements and legacy infra/ outsourcing while Bechtle continues to see reluctance from SMEs to invest in traditional IT.

#2 Initial impressions on CY24 from ISG: Uptick in discretionary not a given yet

We hosted outsourcing deal consultant ISG to garner initial impressions on CY24 IT budgets / spend appetite. <u>Detailed takeaways note here.</u> As per ISG, the project approval environment during CY23 was one of the toughest ever seen, especially in the financial services sector. While this has started to ease to a certain extent, there remains a high level of uncertainty in the environment. **Customer conversations suggest that new discretionary projects are unlikely to get under way in the next 2-3 quarters**. Any uptick in the macro environment could help during the later part of CY24.

As per ISG, the uptick in managed services deals is being driven by business transformation and modernization agenda of enterprises. This is driving up the volume of managed services deals which are now emanating from several departments other than the CIO office. That said, CY24 may not necessarily be able to match with the 6% growth seen in CY23.

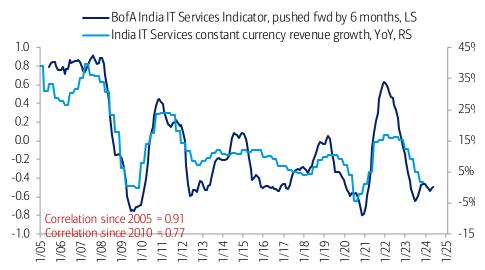
#3 Latest read from our newly launched BofA India IT Services Indicator

We update BofA India IT Services Indicator for input data available till Nov'23. The indicator continues to hover around the lows, and remain unchanged on a MoM basis. Considering the 6-month lead of the Indicator, this suggests there will unlikely be any improvement in revenue growth in the upcoming December and March quarters.



Exhibit 20: BofA India IT Services Indicator vs constant currency revenue growth of top 4 India IT Services companies

BofA India IT Services Indicator vs constant currency revenue growth of top 4 India IT Services companies Historical correlation of 0.91 since 2005 with a lead of 6 months



Source: BofA Predictive Analytics, Company data. Notes: Constant currency revenue growth is at an aggregate level for top 4 India IT Services companies i.e. TCS, Infosys, HCL Technologies and Wipro. Revenue growth in constant currency terms from June 2014; for prior periods revenue growth is in USD terms due to disclosures not available in constant currency. Disclaimer: The indicator is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. The indicator was not created to act as a benchmark.

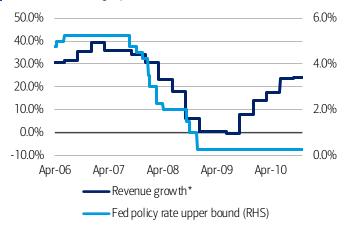
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#4. What happens during start of interest rate cut cycle in US?

The focus topic at start of the year is likely to be how fast could the customer appetite improve from here now that we are looking at a rate cut cycle in the US. The prior instances of 2007 and 2019 saw growth rates and multiples of India IT compress at the start of the rate cut cycle. (Exhibits below).

Exhibit 21: The prior instances of rate cuts saw compression in revenue growth...

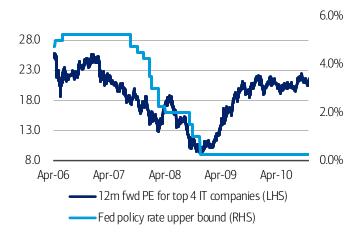
Rate cuts in US during September'07 to December'08



 $\textbf{Source:} \ \ Companies, \ \ Bloomberg, \ \ BofA \ \ Global \ \ Research. \ \ Aggregate \ revenue \ growth \ for \ top \ 4 \ India \ IT \ \ Services \ \ company \ in \ \ USD \ \ terms$

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Exhibit 22: ... as well as valuation multiples at start of the rate cut cycle Rate cuts in US during September'07 to December'08

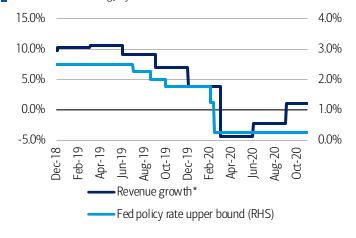


Source: Bloomberg, BofA Global Research



Exhibit 23: The prior instances of rate cuts saw compression in revenue growth...

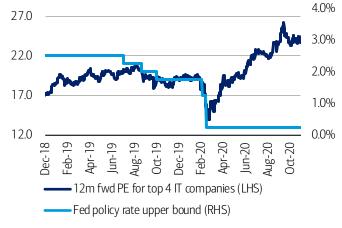
Rate cuts in US during July'19 to March'20



Source: Companies, Bloomberg, BofA Global Research. Aggregate revenue growth for top 4 India IT Services company in constant currency terms

DofA CLODAL DECEADOL

Exhibit 24: ... as well as valuation multiples at start of the rate cut cycle Rate cuts in US during July'19 to March'20



Source: Bloomberg, BofA Global Research

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Bottom-up health check of end-markets

Financial Services: Still in the cost control mood

We scan commentaries of key US & European banks to gauge their technology spend intentions for the coming year. Comparing this year's comments (Exhibit 27) with those of prior two years (Exhibit 29), plans for new technology initiatives appear to be lower.

Key takeaways from recent commentary of key US and European banks include:

- Banks that are relatively smaller in size (vs the top 5) & the ones skewed towards capital markets appear to still be in a cost control mode. Some of these mentioned rationalizing tech spends / 3rd party spends as one of the means of driving savings for CY24. (Exhibit 27, marked in red)
- Large banks are highlighting a disciplined approach on expenses. Cybersecurity & regulatory tech spends are the priority areas.

From a business / earnings outlook perspective:

The trend in net interest income levels: CY23 saw 'higher-than-normal' Net
Interest Income levels for US banks on account of the time lag between re-pricing
of deposits and loan book. Most banks see these levels as 'unsustainable' &
aggregate NII for both large-cap and mid-cap US banks is expected to see a YoY
decline in CY24.

Our US banks team also highlights that despite material downward EPS revision in 2024e EPS YTD, downside risks still persist & for these to abate, the sector would need a clearing event in form of peak rates or Fed cuts.

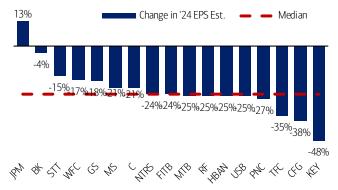
Capital markets rebound expectations: Within the financial services industry, the
cut in spends has been more pronounced in specific pockets like capital markets.
 Comments from banks indicate that while there is some improvement in the last
few months, it is likely going to be a slow grind rather than a quick turnaround.

As per our US banks team, poor performance of recent IPOs, rising geo-political risks, tightening funding markets topped with uncertainties tied to next year's US presidential elections also add to the uncertainties around a capital market rebound. (Refer to US Banks: Earnings & beyond dated October 29, 2023)



Exhibit 25: Large cap YTD 2024e EPS revision: -24.3%

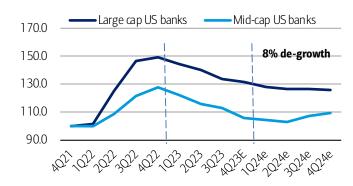
YTD 2024e EPS revisions



Source: BofA Global Research, Visible Alpha

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Exhibit 26: Net interest income for banks to continue to fall Consensus NII for large and mid-cap US banks – indexed to 4Q21



Source: BofA Global Research, company filings

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Exhibit 27: Mid/small US Banks on a cost control mode. Larger banks highlighting disciplined approach to investing in technology Commentary on technology spends or spend outlook in general from earnings transcripts of key US banks

| Bank | Commentary on technology spends or spend outlook in general | | |
|--------------------------|--|--|--|
| JP Morgan | Aim is to remain a technology-centric business & have to remain competitive vs fintechs. Hence, technology investments are a long-term play & wouldn't try to generate cosmetically lower costs in response to a lower revenue environment. Spending is planned on a through-the-cycle basis and intent is to manage the expense baseline with discipline and independent of revenue environment. Areas that are essential from a tech spending point of view include cybersecurity, data systems resilience and regulatory. | | |
| Bank of America | • Plan to spend \$3.8bn in CW24 on new initiative technology spending, marginally up from last year. • Overall costs have come down on a qoq basis in the current year on account of good cost discipline. That said, continued planned investments for marketing and technology. | | |
| Wells Fargo | •Company had announced a long-term strategy in 2021 to be digital first and has been taking step towards this. Recent initiatives include expanding capabilities of Al-powered virtual assistant and launching a mobile app for wealth banking that provides a personalized digital approach. | | |
| Citi Group | • Technology spend across the firm grew 8%YoY in Q3CY23 (10%+ in 9MCY23) and while a significant increase, these are crucial to modernize the firm. • Continue to see a shift in investments from 3rd party consulting to technology and full-time employees. | | |
| US Bancorp | • Expecting full-year overall expenses to be flat in CY24 vs CY23. | | |
| Goldman Sachs | •Continue to bring down the non-compensation expenses and are making progress on the \$400mn run-rate efficiency goal. | | |
| Truist Financial | Announced a \$750mn gross savings plan in September 2023, to be achieved over 12 to 18 months and components include \$200mn reduction in technology expenses. Aggressively managing 3rd party spends and rationalizing technology spends. | | |
| Citizens Financial Group | Initiated zero-based review of expenses in an effort to keep expenses flat in 2024. Looking ways to simplify the organization and save more in 3rd party spends. On the technology front on medium term, have an extensive agenda with multi-year cloud migration to be done by 2025. | | |
| M&T Bank | • Remain focused on diligently managing expenses and decrease in expenses in the quarter was on account of lower expenses for contracted labor. | | |

Source: Company transcripts



Exhibit 28: Similar to US banks, European banks are focused on taking costs out of the system

 $Commentary \ on \ technology \ spends \ or \ spend \ outlook \ in \ general \ from \ earnings \ transcripts \ of \ key \ US \ banks$

| Bank | Commentary on technology spends or spend outlook in general | | |
|-----------------|--|--|--|
| Barclays | • Evaluating actions to reduce structural costs across the group. | | |
| | Existing savings measures are largely proceeding in line or ahead of plan, which includes streamlining of front to back processes. Technology investments are already paying off. | | |
| HSRI | Higher technology & operation spends in CY23E than earlier anticipated, given the importance of digitization at the group level. Willing to tolerate the continued investments on technology & operations as overall doing well on other costs. | | |
| Banco Santander | New global agreements with vendors have allowed to capture EUR 60mn of savings. Deploying tech platforms to improve customer experience & cost saving initiatives at the bank are offsetting investments & digitalization. | | |
| UBS | • CS integration work completed or expected to be complete within CY23 - Operating model roll-out for Switzerland, consolidated BD reporting and planning process, fully aligned risk frameworks, commenced onboarding of employees and flows onto UBS systems and platforms, detailed data migration and technology wind-down roadmap. • Key priorities for 2024 - First waves of client migration for core business and decommissioning technology & infrastructure. | | |

Source: Company transcripts

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Exhibit 29: Comparing with comments of prior two years, plans for new technology initiatives appear to be lower this year

Comments on technology initiatives and spending from our 2022 and 2023 editions of year-aheads.

| | 1 Year-ahead 2023: Comments as of 2022 end | From Year-ahead 2022: Comments as of 2021 end | | |
|---------------------|--|--|--|--|
| JP Morgan | Almost no change in tech spends (as of Oct'22) as highlighted on investor day (May'22). Not planning to touch spends in important areas like risk & fraud. | JP Morgan | Shifting the retail core banking system to public doud is priority & partnership with Thought Machine is a major milestone in the ongoing tech modernization roadmap. | |
| Bank of America | Continue to make steady investments in technology as we are seeing increased digital adoption by customers. | Bank of America Continues to see investment in technology as clientador uses continue to grow. Digital plans on track. | | |
| Wells Fargo | Company had announced a long-term strategy last year to be digital first and all planned work has happened so far. | Wells Fargo | Announced new long-term digital infrastructure strategy as part of multi-year journey to be digital first. | |
| Morgan Stanley | Tech spends are going up & are the fastest growing part of the firm. Doing a lot of stuff around cybersecurity, data, Al. | Morgan Stanley | Meaningfully investing in technology. Announced multi-year deal with Microsoft on cloud strategy. | |
| Goldman Sachs | Continue making investments in technology infrastructure but also extremely focused on mitigating costs where we can. | Goldman Sachs | Spending significantly on technology to expand the digital platforms. In the middle of execution path to put more of the business on cloud and will continue to invest in cloud. | |
| Citizens Financials | Migrated 1/3 rd of applications to cloud-enabled platform and over next 3 years expect to be fully on cloud | Citizens Financials | Implementing next wave of next-gen technology platforms including app rationalization and branch optimization | |
| Citigroup | Ongoing investments in technology are expected to peak sometime in the near term but slowing the pace of some investments in impacted areas like wealth mgt. | Citigroup | Transformation is top priority and need to ensure company is investing long term across the franchise but in an optimal manner. | |

Source: Company transcripts

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Manufacturing: Near-term headwinds but also structural tailwinds

The manufacturing vertical has been one of the few bright spots for the Indian IT Services companies in an otherwise dull last twelve months on growth. This was despite a weak near-term outlook for the industry since start of the year. The drivers for growth, in our view, were structural tailwinds in form of:

• An increasing tech intensity for the industry driven by increased enterprise focus on product innovation, which is now seen as a necessity for protecting market share.

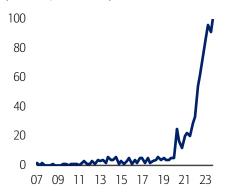


 Strengthening of the theme of re-shoring and near shoring for US manufacturing sector. This has likely come with outsourcing to locations like India given talent supply constraints in the US.

Going into CY24, the structural tailwinds remain, and the US manufacturing capacity continues to expand after 10+ years of under-investment. At the same time, near-term cyclical headwinds (GDP slowdown, higher cost of capital & manufacturing PMI for both US and Eurozone remain in the contraction zone). Our US Industrials team highlights that macro-outlook for industrials remains relatively stable with no signs of a clear acceleration or deterioration.

Exhibit 30: Mentions of re-shoring skyrocketed over past year

Companies mentions of re-/near-/on-shoring (100=max; 2006-10/23)

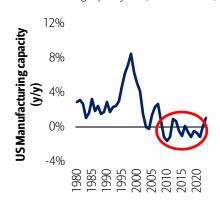


Source: Alpha Sense, BofA Global Research

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Exhibit 31: 10+ years of underinvestment in US manufacturing

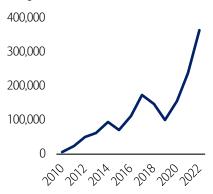
US manufacturing capacity YoY (1980-10/2023)



Source: Federal Reserve, BofA Global Research
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Exhibit 32: Reshoring in practice: FDI jobs in 2022 all-time high

Manufacturing job announcements, reshoring + Foreign Direct Investment

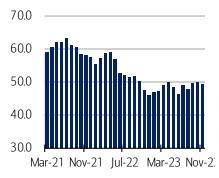


Source: Reshoring Initiative Library data

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Exhibit 33: Manufacturing PMI stays on contraction zone for US...

 ${\sf US\,Manufacturing\,PMI}$



Source: Bloomberg (IHS Markit)

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Exhibit 34: ... as well as Europe Eurozone Manufacturing PMI

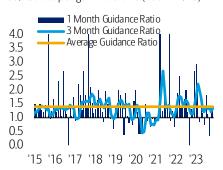


Source: Bloomberg (IHS Markit)

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Exhibit 35: Slightly below average-consensus capex guidance

S&P 500 capex guidance ratio (2007-11/23)



Source: FactSet, BofA US Equity & Quant Strategy
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Retail: No respite in the near-term

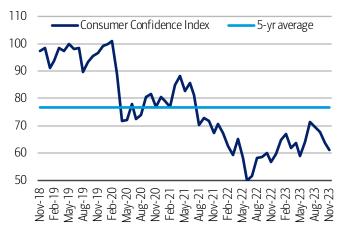
Growth in the retail vertical for India IT Services companies decelerated from 20%YoY cc in Sep-22 to 2% in Sep-23. While macro was one of the reasons, another important driver of the deceleration in our view was unwinding of digital initiatives started post Covid.

Our recent discussion with industry consultants indicated that this vertical could be one of the latter ones in pecking order of recovery given a challenging business outlook for the sector.

The US Consumer spending data had continued to surprise on the positive in the past year but a cool off in spending seems imminent, part of which is already visible in a declining growth trajectory of supermarket sales in the US (Exhibit 37).

Exhibit 36: US Consumer Confidence is falling again

US Consumer Confidence



Source: University of Michigan, BofA Global Research

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Exhibit 37: Conventional Supermarkets vs All Outlets Combined (incl. drug & mass) total store monthly \$ sales y/y % change

Grocery sales in November-MTD slowed -60bp vs October for Conventional Supermarkets (to -1.3% y/y) & -40bp for the AOC channel (to +0.1% y/y)



Source: Nielsen, BofA Global Research

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Telecom: New investments have taken a back seat

The telecom vertical has been one of the harder hit verticals for Indian IT Services companies given telecom enterprises have been relatively more stressed on spending amid a high interest rate environment.

The latest read of commentaries from key telecom players indicates that:

- Most of them are now past their peak capital investment levels and incremental focus is on cash flow generation.
- Cost saving programs initiated by most of the telcos over the last couple of years are likely to continue for the next 1-2 years as well, with the companies identifying newer avenues of cost savings.

Exhibit 38: Most global telcos are in a cost control mode

Comments on spends and investments from major US and European in their latest earnings calls

| Company | Comments on spends and investments | | | |
|----------|--|--|--|--|
| AT&T | Expect to move past peak capital investment levels as they exit the year. | | | |
| | Had been investing in Information Technology Infrastructure which required a lot of work and time, now getting to a point where those platforms are becoming stable and scaling up on operations. | | | |
| | Focus remains on improving cash flows and reducing net debt, significant opportunity to drive cost saving initiatives. Did \$6bn of cost savings over last 3 years, see scope of incremental \$2bn cost savings over next 3 years. | | | |
| | Lead in cable issue - Doing additional testing at selected sites and co-operating with the regulators. Company view is that they don't see any reasons to believe that the cables pose a public health risk. | | | |
| T-Mobile | CY23E to finish with Capex of \$9.6bn to \$9.8. Expecting Capex for CY24E to fall YoY and be closer to the lower end of the earlier guide of \$9-\$10bn. | | | |
| Verizon | On track to achieve forecasted \$2bn to \$3bn in annual savings by 2025. Finding cost efficiencies across the business as part of new structure & doing a lot of transactions on the IT side | | | |
| | Peak capital spend is behind after recent completion of the \$10bn C-band program and now at a business-as-usual capex run-rate. | | | |
| BT group | On track to achieve GBP 3bn annualized cost savings target by FY25-end. | | | |
| | Annual capex for next 3 years will be similar to FY23 levels, slightly up from previous guidance because of strong demand for FTTP. | | | |



Exhibit 38: Most global telcos are in a cost control mode

Comments on spends and investments from major US and European in their latest earnings calls

| | Digitization and investment in IT are still part of our strategy. | | | |
|-----------------|--|--|--|--|
| Deutsche Teleco | Deutsche Telecom Announced an additional cost saving program for the headquarter functions & shared services. | | | |
| | At the beginning of the stage where efficiency gains have started coming in from digitization and automation. | | | |
| | Consumed relatively more capex than anticipated in H1 but this will phase out in H2. | | | |
| Orange | Capex is on a declining trajectory. | | | |
| | All efforts are focused on EBITDA recovery and the recovery plan initiated this year will take time to materialize. | | | |
| | Have a new operating model in place this year which has a tighter P&L monitoring | | | |

Source: Company transcripts

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Hi-tech: Al tailwinds place in a better place than last year

A decelerating growth trajectory for hyperscalers and other SaaS / software companies since the start of the macro weakness meant that along with BFSI & Telecom, Hi-tech vertical also got severely impacted for Indian IT Services companies, with growth decelerating from 15%YoY cc in Sep-22 to -3%YoY cc in Sep-23.

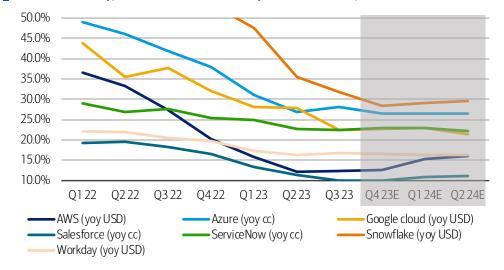
While hyperscalers, in their latest commentary, indicated that cost optimization headwinds are still persisting, they are now seeing signs of stabilization and are also seeing new workload starts driven by AI / GenAI. As in Exhibit 39, our global tech analysts highlight that growth for hyperscalers (cloud business) and other SaaS / Software companies has likely bottomed out.

Long-term growth outlook for technology names has also seen an improvement over the last few quarters (Exhibit 40).

Net basis, we think that tailwinds from AI workload starts (Exhibit 41) puts the Hi-tech industry in a better place vs last year.

Exhibit 39: Our global tech analysts highlight that growth for hyperscalers (cloud business) and other SaaS / Software companies has likely bottomed out





Source: Companies, BofA Global Research estimates



Exhibit 40: Long-term growth outlook for key hi-tech clients has improved. We use magnificent 7 here as a proxy for the technology industry.

LTG growth expectations for the magnificent 7

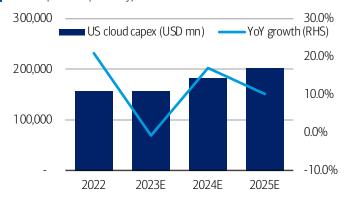


Source: BofA US Equity & Quant Strategy, FactSet. Note: Magnificent 7 includes Amazon, Alphabet, Nvidia, Meta, Apple, Microsoft and Tesla

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Exhibit 41: US hyperscalers are expected to increase spends on cloud capex by 20%YoY in CY24, largely driven by AI

Cloud capex for top 5 US hyperscalers



Source: BofA Global Research estimates

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Which industries are talking (or not) about technology?

We measure the frequency with which the terms "technology" and "digital" were mentioned in earnings call of current and past earnings season by industry verticals in the US.

- Mentions of 'tech' / 'digital' / '5G' continue to remain below levels of 2021 / early 2022 (post-covid periods of high growth for Indian IT Services) for key industries like Financials, Retail/Consumer, Telecom. This is in line with our earlier findings that most corporates are not thinking aggressively about new tech initiatives at the moment, a key reason behind our assumption of only a mild recovery in growth.
- Industrials and Energy sectors screen out well on this parameter.

Exhibit 42: US Financials – Mentions of tech/digital remain low vs 2021 / early 2022

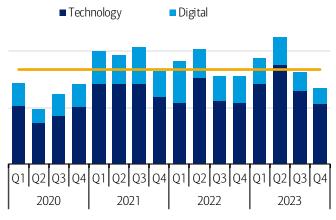
Mention of words on earnings call



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Exhibit 43: US Industrials – Mentions of tech/digital remain healthy & in-line with 4-yr average

Mention of words on earnings call

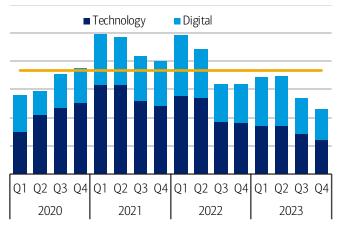


Source: Bloomberg, BofA Global Research



Exhibit 44: US Consumer Disc. – Mentions of tech/digital remain low vs 2021 / early 2022

Mention of words on earnings call

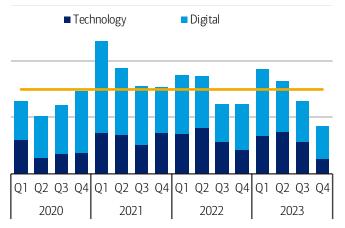


Source: Bloomberg, BofA Global Research

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Exhibit 46: US Consumer Staples – Mentions of tech/digital remain low vs 2021 / early 2022

Mention of words on earnings call

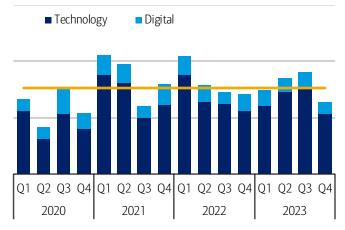


Source: Bloomberg, BofA Global Research

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Exhibit 45: US Energy – Mentions of tech/digital remain healthy & inline with 4-yr average

Mention of words on earnings call

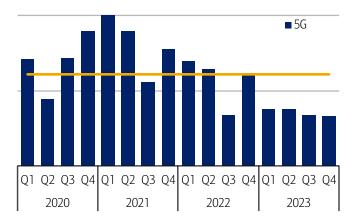


Source: Bloomberg, BofA Global Research

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Exhibit 47: US Communications. – Mentions of 5G have significantly come down vs 2021 / early 2022

Mention of words on earnings call



Source: Bloomberg, BofA Global Research

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Macro watch: Corporate US has calibrated itself before actual GDP slowdown

Our US economists team expects a soft landing with 2024 being a period of positive but below-trend growth. They forecast a modest increase in unemployment rate & thus expecting a slowdown in consumer outlook but no crash.

We look at two important conclusions from our US equity strategy year-ahead:

#1 Companies have cut costs and adopted to the weaker demand environment...

Our US equity strategy team, in their year-ahead, highlights that an earnings recession in the US has already occurred. Despite the resilient US economy in 2023, earnings were in a recession, with S&P 500 earnings falling YoY for three straight quarters. During the period, companies have cut costs and adopted to the weaker demand environment, and saw earnings growing again in 3QCY23 (+3% YoY).



S&P 500 profits have had their recession and our US team forecasts \$235 (+6% YoY) in 2024 EPS despite slowing GDP. The 1950s establishes precedent: EPS troughed six quarters before the recession and continued to grow during the recession.

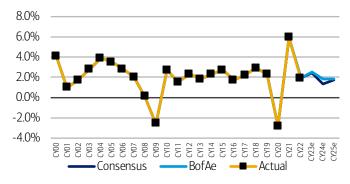
#2 ... but demand concerns remain

While S&P EPS grew 3%YoY in the September quarter, real sales growth remains weak at -2% YoY. "Weak demand" mentions are still near record highs (Exhibit 55)

Our net read from above also suggests that customers could largely be done with the cuts in CY23 as **they adopted to the weaker demand environment**. But they may not yet be targeting an expansion in spend initiatives **since visibility on sales is still not great**.

Exhibit 48: BofA economists expect a soft landing with GDP growth slowing down to 1.8% YoY in CY24 i.e. +ve but below trend growth

US Real GDP growth trend

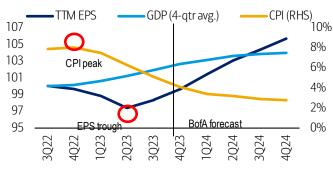


Source: BofA Global Research, Consensus from Bloomberg

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Exhibit 50: Our US Equity Strategy team expects S&P EPS to rise from here, despite economic slowdown

S&P 500 EPS vs economic cycle (3Q22-4Q24E)

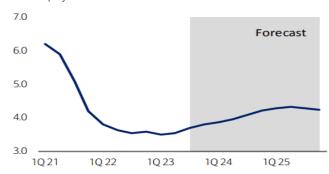


 $\textbf{Source:} \ \ \mathsf{BofA} \ \ \mathsf{US} \ \ \mathsf{Equity} \ \ \& \ \mathsf{Quant} \ \ \mathsf{Strategy}, \\ \mathsf{Haver} \ \ \mathsf{Analytics}, \\ \mathsf{FactSet}, \ \mathsf{Bloomberg}$

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Exhibit 49: Our economists are only looking at a modest increase in unemployment rate & thus expecting a slowdown in consumer outlook but no crash

US unemployment – BofA forecast

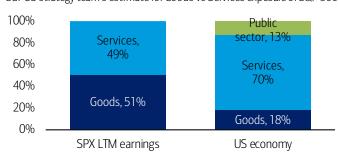


Source: BofA Global Research Economics forecast, Bureau of Economic Analysis,

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Exhibit 51: S&P 500 is more geared towards goods than overall economy & economy is now entering a more 'normal' environment with stabilizing goods consumption and moderating services consumption, a tailwind for earnings vs GDP

Our US strategy team's estimate for Goods vs Services exposure of S&P 500



Source: Haver Analytics, FactSet, BofA US Equity & US Quant Strategy



Exhibit 52: Consensus 2024 revisions tracking in-line ex-recessions

S&P 500 historical FY2 EPS revisions vs 2023 consensus EPS (2023-24 as of 10/16/23)

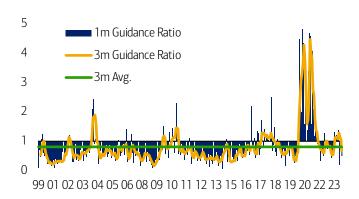


Source: BofA US Equity & Quant Strategy, FactSet; Note: historical average based on 2001-2022

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Exhibit 53: Our guidance ratio fell below the historical average

S&P 500 Management Guidance Ratio (# Above vs Below Consensus) – as of 11/10/23



Source: BofA US Equity and Quantitative Strategy

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Demand concern remains

Exhibit 54: Real sales growth remains weak at -2% YoY

S&P 500 sales growth and real growth (constant FX) – 2013-3Q23E

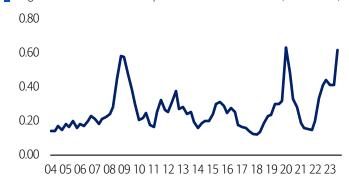


Source: FactSet, BofA US Equity & Quant Strategy

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Exhibit 55: Mentions of weak demand near record highs

Avg. mention of weak demand per co. for Consumer sectors ('03-11/2/23)



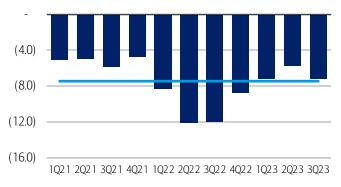
Source: BofA Global Research

Note: mentions include "lower," "softer," "moderating," "weaker"

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Exhibit 56: Corporate negative sentiment score has been volatile

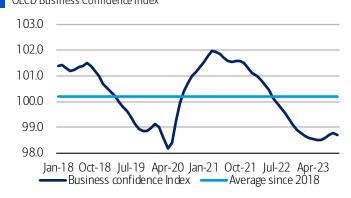
Average negative sentiment score for S&P 500 companies



Source: BofA Global Research, FactSet

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Exhibit 57: Business confidence index for US still hovering around lows OECD Business Confidence Index



Source: OECD, BofA Global Research

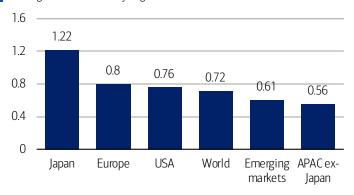
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Earnings revisions improved in the US but remains below long-term average



Exhibit 58: Earnings Revision Ratio for USA and Europe continues to be below one

Earnings Revision Ratio by Region – Last 3 Months



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Exhibit 59: Earnings revisions improved in USA last month but remains below long-term average

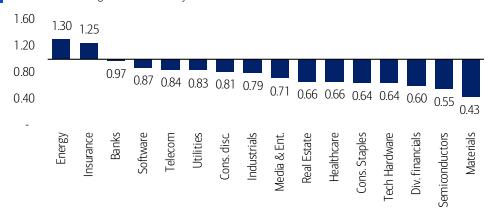
Trends in Earnings Expectations – USA



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Exhibit 60: Energy & BFSI screen out the best-placed sectors from an Earnings Revision point of view Three-month Earnings Revision Ratio by Global Sectors



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Margins: A year of playing defense

We think companies shifted into a cost optimization mode during CY23. Given their execution strength, we expect more cost take out benefits to come through into CY24 (discretionary expenses, employee utilization, sub-contracting etc.). That said, we think pricing tailwind will be lower than prior year and variable pay could also be higher than CY23. This could thus result in flattish to small expansion in profitability.

Absence of FX gain to hurt

Taking into consideration the soft landing scenario in the US & subsequent rate cuts, our FX rate strategists are projecting weakness in USD in 2024. We see INR appreciating gradually as USD weakens, but that said the RBI may build up lost reserves which could limit INR appreciation, as indicated by the governor in recent comments.

Basis our FX team's projections, average USD INR could stay flat in CY24 vs CY23. For the India IT Services sector, base case expectations are generally of a 2%-3% depreciation in INR for which companies also plan for, in their margin management. Thus, a flattish INR could be a headwind of 50-75 bps relative to the base case.



Exhibit 61: Company commentaries suggest that are likely to remain in a cost control mode till growth returns

Company comments on margin management from Q2FY24 earnings calls

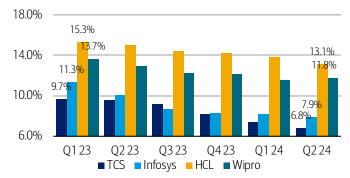
| Company | Comments on margin management |
|---------|--|
| TCS | Impact of sluggish revenue growth has been managed by specific initiatives in H1FY24 & same will be continued in the 2nd half. Invested significantly when the supply side was challenging and focus is now to continue using levers such as productivity, utilization and further optimizing subcontractor expenses. |
| | |
| Infosys | Launched a margin program (Project Maximus) in Q1FY24 which aims to improve margins across five pillars and over 20 tracks. Early benefits from areas like utilization, overheads optimization & these will continue in H2 & next year as well. |
| | |
| HCL | • Margin management initiatives in the recent quarters include productivity and utilization improvement, fresher deployment, sub-con reduction, optimization on discretionary cost & overhead reduction. |
| | |
| Wipro | Levers used as part of current margin management initiatives include faster bench deployment, uptick in utilization, offshore rationalization, and sub-con reduction. Continue to remain nimble on costs in order to keep margins steady despite de-growth in revenues. |

Source: Company transcripts

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Exhibit 62: Sub-contracting expenses as a % of revenue are on a declining trajectory and aiding margin management

Sub-contracting expenses as a % of revenue – quarterly trends

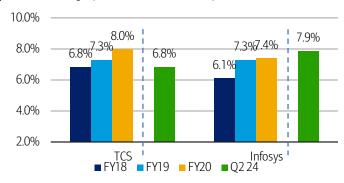


Source: Companies, BofA Global Research

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Exhibit 63: Sub-contracting expenses as a % of revenue are now closer to pre-covid levels.

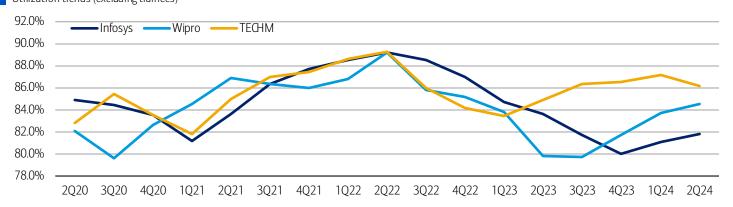
Sub-contracting expenses as a % of revenue – pre-covid vs current levels



Source: Company, BofA Global Research

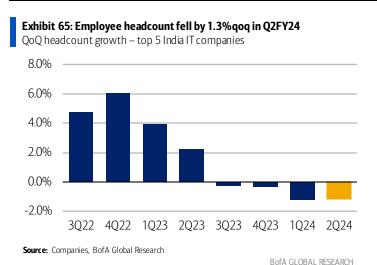
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Exhibit 64: Utilization levels went up by 70-80bps on a sequential basis for Infosys and Wipro in Q2FY24. Still more room in case of Infosys than Wipro. Utilization trends (excluding trainees)



Source: Companies, BofA Global Research





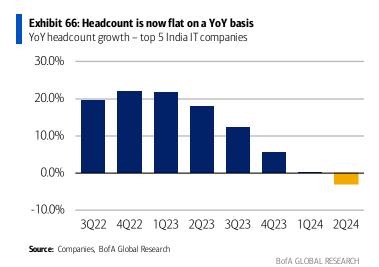
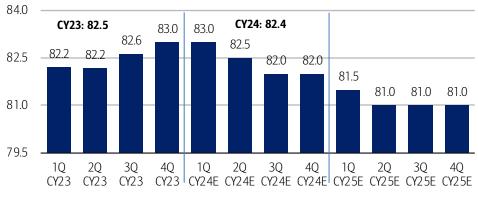


Exhibit 67: We see INR appreciating gradually as USD weakens, but that said the RBI may build up lost reserves which could limit INR appreciation

BofA projections for USD INR



Source: BofA Global Research

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Wild cards: Elections in US & India; M&A

#1 US elections: Watch out for stance on reshoring and fiscal austerity

US elections are scheduled for November 2024. Contesting parties' stances on reshoring, fiscal austerity could matter for IT spends in manufacturing and healthcare. News flow on tightening of H1B has already picked up

- Fiscal austerity poses a risk to Health Care & Industrials which (besides Defense) have the highest exposure to government spending. US's current government debt-to-GDP is at record highs. In the upcoming election, we will likely hear different solutions to government indebtedness. Republicans historically push for spending cuts, Democrats for increased tax revenues. Since the 2020 peak, government spending hasn't slowed, suggesting that curtailed spending is likely to come, and could be a bone of contention in campaign rhetoric of 2024, and thus could have a bearing on IT spends in verticals of manufacturing and healthcare.
- Re-shoring, as highlighted earlier, has been a focus area for the last 2 US governments.

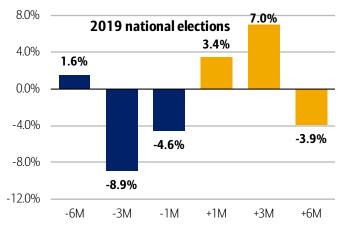


#2 India elections

A look at the sector's return performance relative to broader Indian markets 6 months before elections and 6 months after elections reveals that IT services sector has underperformed going into national elections and outperformed post results.

Exhibit 68: IT sector has underperformed broader Indian markets going into national elections.....

NSEIT returns relative to NIFTY before & after 2019 national elections



10.0% 6.1% 5.4% 2014 national elections 5.0% 0.0% -0.9% -5.0%

NSEIT returns relative to NIFTY before & after 2014 national elections

Exhibit 69: and outperformed post results

-10.0% -9.6% -15.0% -16.1% -20.0% -25.0% 26.6% -30.0% -6M -3M -1M +1M +3M +6M

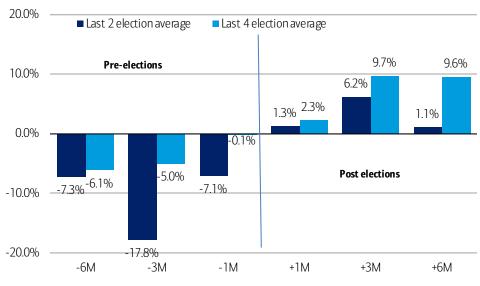
Source: Bloomberg, BofA Global Research BofA GLOBAL RESEARCH

Source: Bloomberg, BofA Global Research

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Exhibit 70: IT sector has underperformed broader Indian markets going into national elections and outperformed post results

NSEIT returns relative to NIFTY – 6 months before and after national elections



Source: Bloomberg, BofA Global Research

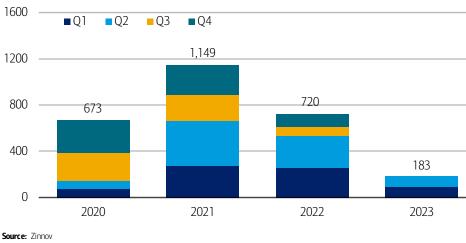
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3 M&A activity could increase after a lull in 2023

The last year-and-a-half have seen a lower-than-trend M&A activity in the IT Services sector. Valuations and growth projections have now likely normalized for assets in niche areas that could lead to increased M&A activity.

M&A strategy from companies could remain on similar lines of focusing on niche capabilities rather than focusing on gaining scale. Potential areas which could garner interest include cybersecurity, automotive / software ER&D and automation capabilities with the former likely gaining maximum interest as vendors will have to look at ways to leverage GenAl towards productivity enhancement.

Exhibit 71: Limited M&A activity in 2023 in the technology sector globally M&A activity in the technology sector (USD bn) – 2020 – H1 2023



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Al & Cloud: It takes two to tango

Performance of IT stocks is often shaped by tech narratives likely to play out in coming years. Al was one such topic in CY23 that hurt stocks initially but subsequently got viewed as not so detrimental. We see Al usage being led by consulting offerings while it being net positive or deflationary is a debate that could persist through the year. We also expect companies to highlight adoption of cloud and Al moving in tango as the next leg of enterprise tech modernization agenda.

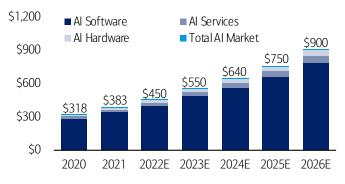
GenAl adoption needs cloud....

- Developing, training, and deploying generative AI models can either be done in a
 capex intensive way where firms purchase GPUs and other required computer
 hardware. Alternatively, compute / storage on public cloud could be used. The latter
 option is a clear winner for most firms as it offers flexibility of scale & needs low
 up-front investment, which is a key aspect to consider here given we are still in the
 early stages of identifying business use cases & desired ROI on upfront capex is
 thus not a given.
- In addition to this, data systems of enterprises are likely to need an upgrade for AI
 implementation. Thus, data management, data storage and hosting-related services
 are likely to see an increased demand, & thus portends well for cloud adoption as
 well.
- A largely cloud-first nature of GenAl offerings by hyperscalers further strengthens
 the argument that GenAl is best implemented on cloud & its adoption would
 accelerate cloud migration.



Exhibit 72: Growth in AI market bodes well for cloud adoption. AI market to reach $\sim\!900bn$ by 2026E and it will need cloud to scale.

Global AI market size (US\$bn)

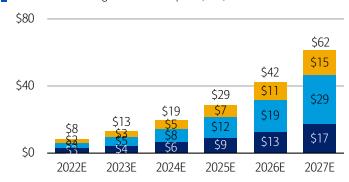


Source: BofA Global Research, IDC

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Exhibit 73: The market for Al focused cloud services is expected to grow at a CAGR (2022-27) of 49%.

PaaS Artificial Intelligence Platform Spend (\$ bn)



Source: Bloomberg, IDC

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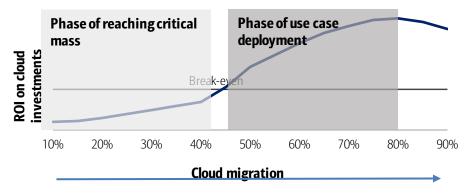
... and cloud needs AI applications for ROI maximization

ROI profile for cloud investments starts with a negative ROI in the initial years and it improves over time and turns positive once critical mass is achieved. The acceleration of ROI beyond that is a function of deploying and scaling use cases on cloud, which is also the phase commonly known as the Horizon 3 of digital transformation. Ways in which GenAI can help improve cloud ROI profile as below:

- At this phase, enterprises need to have identified use cases of digital technologies such as AI / ML, IoT, Blockchain, Digital twins etc. which they can deploy on the cloud and realize ROI. Generative AI expands the potential number of practical enterprise use cases which could be deployed on cloud, and thus could help in a faster ROI realization.
- Generative AI tools can also help reduce the costs of application migration & also
 accelerate it. Understanding the existing code of the legacy application is a key
 requirement of the application migration process and GenAI can help parse through
 millions of lines of legacy code in a relatively quick time, and also translate it into
 the new cloud compatible language.

Exhibit 74: Generative AI expands the potential number of practical enterprise use cases which could be deployed on cloud and thus can aid speed up ROI realization from cloud

A typical ROI profile of cloud migration

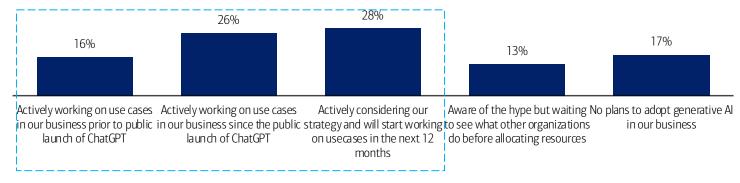


Source: Companies, BofA Global Research



Exhibit 75: 70% of organizations using enterprise intelligence services are considering or working on generative Al use cases

We expect consulting services to see the highest tractions initially as corporates plan their GenAl strategies

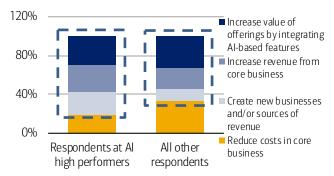


Source: Enterprise Intelligence Services Survey, IDC

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Exhibit 76: Most of the respondents intend to use AI for creating new revenue sources, increasing revenue from core business, or increasing value of their offerings rather than reducing costs

Top objective for organizations' planned generative Al initiatives

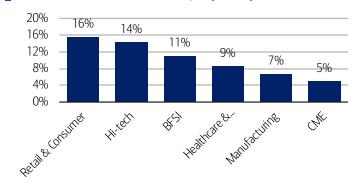


Source: McKinsey

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Exhibit 77: Retail, Hi-tech & BFSI are likely to lead in the journey of GenAl adoption given they are expected to yield the highest benefits

Share of estimated economic benefit split by industry verticals.



Source: NASSCOM, McKinsey. Others include supply chain, finance, risk / compliance, HR, legal, procurement etc.

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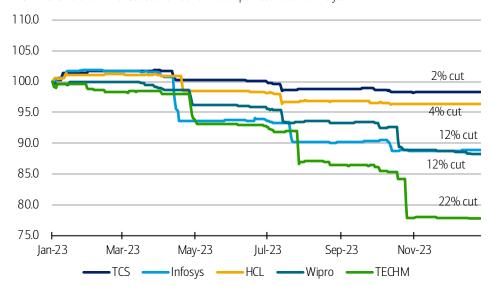
IT could correct into initial FY25 guides

With consensus baking in 7-10% FY 25 revenue growth for IT and valuations trending between parity and 35% above 5-year mean, we expect the initial guidance season (February & April) to drive a correction in sector. Conversely, we think BPO could guide for 10%+ growth and valuations are also 15-35% below 5-year mean.



Exhibit 78: FY25E EPS saw cuts of 2-10% for the top 4 companies in CY23 and we expect more cuts to come as consensus is still baking in a 7-10% revenue growth for FY25.

FY25E EPS revisions – EPS rebased to 100 for all companies at start of the year

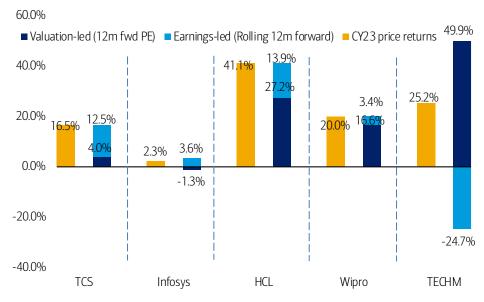


Source: Bloomberg, BofA Global Research

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Exhibit 79: CY23 stock returns – split into earnings growth (rolling 12 months) & valuation (change in 12m fwd PE)

Valuation multiple re-rating was a larger component of price returns for most names

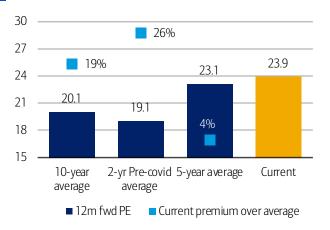


Source: Bloomberg, BofA Global Research

- Sector (aggregate of top 4 large caps) is trading at an 4% premium to 5-year average and 19% premium to 10-year average
- Relative to broader markets, IT services sector (large caps) are currently at a 23% premium, which is slightly higher than 5-year average of 21% but much above the 10-year average of 13%.

Exhibit 80: Sector (aggregate of top 4 large caps) is trading at a premium to historic averages

India IT valuations – historical vs current (12m fwd PE)

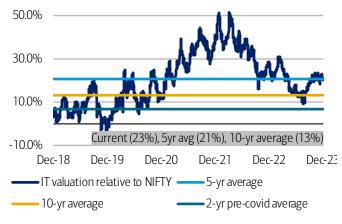


Source: Bloomberg, BofA Global Research

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Exhibit 81: Premium to broader markets is also higher than historical averages

India IT valuation relative to Nifty



Source: Bloomberg, BofA Global Research

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Exhibit 82: Large caps are trading above their 5 & 10 year average valuations

India IT valuations – historical vs current (on consensus 12m fwd PE)

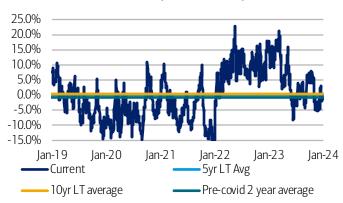
| | TCS | Infosys | HCL | Wipro | TECHM |
|------------------------|------|---------|------|-------|-------|
| 10-year average | 22.9 | 19.5 | 15.7 | 16.6 | 15.3 |
| 2-yr pre-covid average | 22.7 | 18.0 | 13.5 | 15.3 | 14.4 |
| 5-year average | 26.4 | 22.7 | 17.2 | 18.5 | 16.7 |
| Current | 26.7 | 23.0 | 22.6 | 19.8 | 22.6 |
| | | | | | |
| Current premium to: | | | | | |
| 10-year average | 16% | 18% | 43% | 19% | 46% |
| 2-yr pre-covid average | 17% | 28% | 67% | 29% | 56% |
| 5-year average | 1% | 1% | 31% | 7% | 35% |

Source: Bloomberg, BofA Global Research

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Exhibit 83: TCS is trading at parity to Accenture, in-line with historical averages

TCS valuation relative to Accenture (12m fwd PE basis)

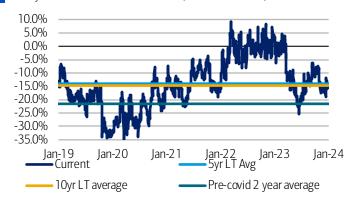


Source: Bloomberg, BofA Global Research

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Exhibit 84: Infosys is trading at 15% discount to Accenture, in-line with historical averages

Infosys valuation relative to Accenture (12m fwd PE basis)



Source: Bloomberg, BofA Global Research



Exhibit 85: TCS is trading at 15% premium to 10-year average valuations & parity to 5-year average

TCS - 12m fwd PE

40.0

35.0

30.0

25.0

20.0

15.0

Jan-19 Jan-20 Jan-21 Jan-22 Jan-23 Jan-24

TCS 12m fwd PE 5yr LT Avg

Source: Bloomberg, BofA Global Research. Note: Lines above 5yr LT Avg represent 1SD and 2SD above and below the 5 yr average

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Exhibit 87: HCI has seen strong re-rating over the last year on account of reduced growth delta with peers



Source: Bloomberg, BofA Global Research. Note: Lines above 5yr LT Avg represent 1SD and 2SD above and below the 5 yr average

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Exhibit 86: Infosys is trading at 18% premium to 10-year average valuations & parity to 5-year average

Infosys - 12m fwd PE

35.0

30.0

25.0

20.0

15.0

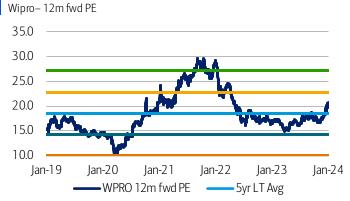
Jan-19 Jan-20 Jan-21 Jan-22 Jan-23 Jan-24

INFO 12m fwd PE 5yr LT Avg

 $\textbf{Source:} \ \ Bloomberg, \ BofA \ Global \ \ Research. \ \ \ Note: Lines \ above \ 5yr \ LT \ \ Avg \ represent \ 1SD \ and \ 2SD \ \ above \ and \ below \ \ the \ 5yr \ \ average$

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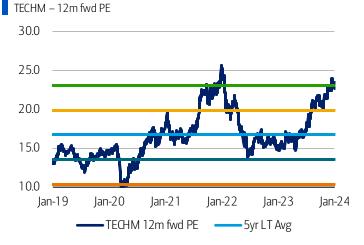
Exhibit 88: Wipro is trading at 7% / 19% premium to 5-year / 10-year average valuations



Source: Bloomberg, BofA Global Research. Note: Lines above 5yr LT Avg represent 1SD and 2SD above and below the 5 yr average



Exhibit 89: Most of TECHM's re-rating on back of optimism around new CEO whereas business fundamentals deteriorated in CY23



Source: Bloomberg, BofA Global Research. Note: Lines above 5yr LT Avg represent 1SD and 2SD above and below the 5 yr average

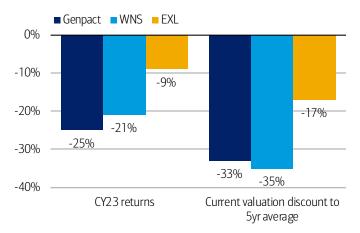
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Analytics plays & beaten-down BPO screen attractive

Commentaries have been unanimous in indicating that data systems of enterprises are likely to need an upgrade, on back of Al. EXLS is well-exposed to this segment. We also find value in the beaten down BPO names of WNS and G – their business models are already adapted to a 3%-4% annual productivity increase. We thus think that their outlook remains intact for next few years till Al pushes the productivity bar higher.

Exhibit 90: BPO names saw sharp correction in CY23 on account of GenAl worries

 $\mbox{CY23}$ returns & current valuation discount to historic averages for the BPO names



Source: Bloomberg, BofA Global Research

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Exhibit 91: Genpact is trading at 2sd below its historic valuations Genpact 12m fwd PE valuations



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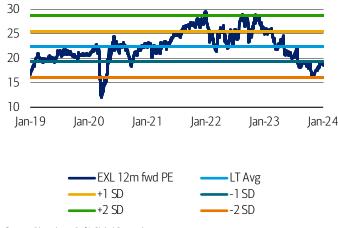
Exhibit 92: WNS is trading at 14x on 12m fwd PE which is at 2sd below historic valuations

WNS 12m fwd PE valuations



Exhibit 93: EXL is trading at 18x on 12m fwd PE

EXLS 12m fwd PE valuations



Source: Bloomberg, BofA Global Research

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