IT SERVICES

23 February 2023

Runaway cloud growth hits a bump; tier-I players a safe haven

- **Macro uncertainty inducing cautious IT budget spends and a sharper focus on cost optimisation**
- **Capex moderation by tech giants (Google, Microsoft) a clear indicator of near-term weakness in cloud migration**
- **Despite the challenging backdrop, deal wins and pipeline commentary remain strong for Indian IT players; prefer large-caps over mid-caps**

Saptarshi Mukherjee
research@bobcaps.in

Cloud capex moderating: Cloud capex, a key growth indicator for the cloud migration business, has softened against the backdrop of a weak global macro and moderating capex by tech giants such as Microsoft and Google. In contrast, Amazon is showing positive traction with US$ 16.4bn in capital outlay during Q3CY22, beating consensus estimates by 8%. We note that semiconductor chip suppliers have a cautious outlook on the purchasing pattern of cloud service providers. Enterprise clients remain conservative on capex which could, in turn, impact cloud vendors.

SaaS players recalibrating strategies amid slowdown: Global SaaS companies have downgraded their growth guidance due to the recessionary headwinds. Earnings commentary indicates elongated decision-making cycles for digital/cloud business and a shift in client priorities towards cost-takeout projects. Managements of Hubspot and ServiceNow confirmed that clients are increasingly favouring shorter-tenure projects which deliver quicker ROI than multi-year engagements. Amid macro challenges, Google and Microsoft have renewed their focus on high-growth areas and on increased productivity of the existing workforce.

Cloudy near-term outlook for hyperscalers: Hyperscalers (software/SaaS vendors) such as Microsoft and Amazon witnessed high sequential growth till Q3CY22 but are likely to come under pressure in Q4CY22/Q1CY23. Players anticipate a slowdown in cloud spends over the near term, though the long-term growth story of an organisational shift to the cloud remains intact. Despite the weak quarter, Indian IT companies witnessed above-average deal wins and their market share in cloud deal wins, in particular, remains intact.

Prefer large-caps over mid-caps: We have already factored in the postponement of product development and large digital transformation projects, as well as slowing demand for hyperscalers that will impact the revenue growth of IT services players. We prefer Indian stocks that are less vulnerable to the slowdown and that will continue to gain market share even in a weak economic environment. Accordingly, we retain our preference for large-caps – **INFO** (BUY, TP: Rs 1,760) and **HCLT** (BUY, TP: Rs 1,240) in that order, over mid-caps.

Recommendation snapshot

Ticker	Price	Target	Rating
HCLT IN	1,093	1,240	BUY
INFO IN	1,562	1,760	BUY

Price & Target in Rupees | Price as of 22 Feb 2023

Strong global economic headwinds spilling over to EMs

Global think tank, The Conference Board, expects a sustained weakening in incremental annual global GDP growth over the next five years (2024-29) as compared to 2011-19 and 2020-23. The Conference Board's Leading Economic Index (LEI) points to continued recession risk in the US and UK, with similar indicators for Europe. CFOs have expressed concern over management calls about a variety of risks, especially political/government stability. In addition, the projected US unemployment rate remains elevated for 2023.

Hyperscalers' runaway cloud growth hits a bump

Hyperscalers reported lower cloud revenue growth during Q3CY22 due to a high base effect in the wake of Covid-19 and a volatile demand environment. Microsoft Azure's September quarter revenue decelerated materially owing to continued moderation in demand followed by the changes in client priorities toward cost optimising projects. Amazon Web Services (AWS) has witnessed a similar downtrend over the past three quarters. On the other hand, Google experienced elongated decision-making cycles for deals along with smaller ticket sizes for both new and renewal contracts.

All three cloud service providers are facing challenges stemming from a change in client demand toward cost takeout projects as compared to cloud/hybrid-cloud migration. In light of the macroeconomic challenges, Microsoft and Amazon are proactively helping customers to optimise operating costs by enabling them to "do more with less", moving storage to lower-priced tiers, and shifting workloads to processors with better pricing.

While hyperscalers anticipate a slowdown in cloud spends over the near term, we believe long-term tailwinds from the organisational shift to the cloud remains intact.

Fig 1 – Commercial cloud revenue trends

IaaS/PaaS (% YoY)	Q1CY20	Q2CY20	Q3CY20	Q4CY20	Q1CY21	Q2CY21	Q3CY21	Q4CY21	Q1CY22	Q2CY22	Q3CY22
Amazon Web Services YoY CC	32.8	29.0	29.0	28.0	32.1	37.0	39.0	40.0	37.0	33.0	28.0
Microsoft Cloud YoY US$	38.5	30.0	31.9	33.6	33.1	36.4	35.3	32.3	32.2	28.7	24.2
Microsoft Azure YoY US$	59.0	47.0	48.0	50.0	50.0	51.0	50.0	46.0	46.0	40.0	35.0
Microsoft Azure Cloud Services YoY CC	61.0	50.0	47.0	48.0	46.0	45.0	48.0	46.0	49.0	46.0	42.0
Google YoY US$	57.9	43.2	44.8	46.5	45.7	53.9	44.9	44.6	43.8	35.6	37.6
Alibaba	58.0	59.0	60.0	50.0	37.0	29.0	33.0	20.0	12.0	10.0	NA
IBM YoY CC (TTM Total Hybrid Cloud)	23.0	30.0	19.0	10.0	21.0	13.0	21.0	16.0	17.0	24.0	20.0

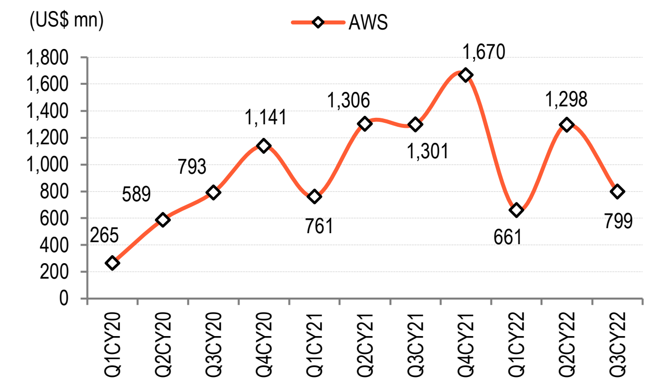
Source: Company, BOBCAPS Research | IaaS: Infrastructure-as-a-Service; PaaS: Platform-as-a-Service

Fig 2 – Revenue growth of SaaS players has weakened in recent quarters

SaaS (% YoY)	Q1CY20	Q2CY20	Q3CY20	Q4CY20	Q1CY21	Q2CY21	Q3CY21	Q4CY21	Q1CY22	Q2CY22	Q3CY22
Microsoft											
Office 365 Commercial	25.0	19.0	21.0	21.0	22.0	25.0	23.0	19.0	17.0	15.0	17.0
Dynamics 365	47.0	38.0	38.0	39.0	45.0	49.0	48.0	45.0	35.0	31.0	32.0
LinkedIn Commercial	21.0	10.0	16.0	23.0	25.0	46.0	42.0	37.0	34.0	26.0	17.0
Oracle	4.0	2.0	4.0	2.0	4.0	8.0	5.0	6.0	8.0	7.0	20.0
SAP Cloud	27.0	19.0	10.0	7.0	7.0	11.0	20.0	28.0	31.0	34.0	37.8
Workday	23.4	19.6	17.9	15.9	15.4	18.7	20.0	21.6	22.1	21.9	NA
Salesforce	30.0	29.0	20.0	20.0	23.0	23.0	27.0	26.0	24.0	21.8	NA
ServiceNow	34.5	30.1	30.7	31.7	29.9	30.9	30.8	28.6	26.1	24.7	22.1

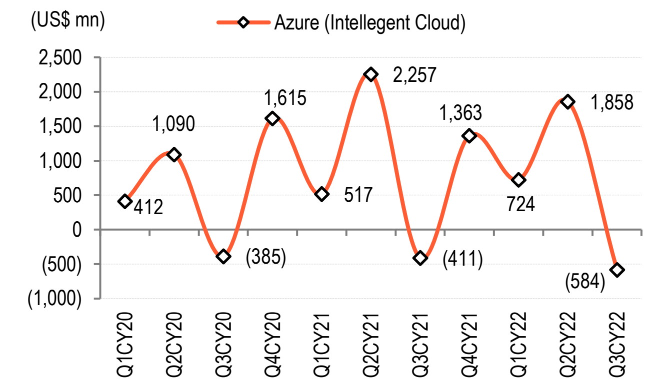
Source: Company, BOBCAPS Research

Fig 3 – Incremental cloud sales YoY for AWS



Source: Company, BOBCAPS Research

Fig 4 – Azure's incremental YoY growth has plunged



Source: Company, BOBCAPS Research

Cloud capex moderating

Gartner recently reduced its CY22/CY23 growth outlook for worldwide IT spends on data centre systems from 11.1%/4.4%YoY to 10.4%/3.4% YoY, as the shift in customer priorities is likely to prompt a pullback in cloud capex spends. We note that data centre investments continue to be based on customer demand and usage.

Microsoft reported total capex of US$ 6.6bn in Q3CY22, while cash capex remained at US$ 6.3bn which was 5% lower than consensus expectations. Google incurred capex of US$ 7.3bn for the quarter, 5% below consensus, and management softened its tone on spends from the earlier stance of "aggressive investment". AMD (Advanced Macro Devices) mentioned that continued macro weakness has affected enterprise clients who have turned slightly more conservative on spends, leading to elongated decision-making cycles.

Fig 5 – Near-term demand slowdown likely to interrupt the cloud growth story

Company	Q3CY22 Earnings Call Commentary of Hyperscalers
Microsoft	▪ Due to the changing macro environment, Microsoft is shifting focus toward optimising the spending patterns of clients through migration from cloud/hybrid cloud to cost take out projects. Optimisation will bring value to customers and create additional room for new workloads.
Google	▪ While the company has experienced elongated decision-making cycle along with smaller deal sizes of shorter duration, cloud adoption continues to witness multi-year tailwinds with sustained client investments. ▪ Google Cloud resolves new business challenges, improves productivity, reduces costs and unlocks a new growth engine. ▪ Organizations are evolving at a faster pace on the back of hybrid cloud along with an increasingly distributed workforce.
Amazon	▪ Ongoing macro uncertainty has impacted AWS due to the continuous change in client priorities, especially in favour of cost takeout projects. ▪ Amazon is proactively working to increase the depth and breadth of its service offerings through efficient processors, especially by moving to lower priced storage tiers or shifting the workload to its gravitation chips.

Source: Company, BOBCAPS Research

Fig 6 – Microsoft and Google moderating their capex

Company	Q3CY22 Earnings Call Commentary on Capex Spends
Microsoft	▪ Capital expenditure, including financial leases, stood at US$ 6.6bn and cash paid for property, plant and equipment (PP&E) totaled at US$ 6.3bn in Q3CY22. ▪ Capex is likely to increase by data centre to cope with rising customer demand and usage signals.
Google	▪ Google continues to invest on building its AI-based processing support system to improve the technical infrastructure servers that cater to clients.
Amazon	▪ Amazon will support its clients through continued expansion of AWS infrastructure and has expanded its reach in the MENA region along with plans to enter APAC region as well. ▪ The company is likely to invest US$ 60bn in CY22, similar to CY21. Reduction in capex for traditional and logistics businesses will be offset by increased capex in the AWS business.
Meta Platforms	▪ Capex in the range of US$ 34bn-39bn has been allocated for data centres, servers and network infrastructure in CY23 (compared to US$ 32bn-34bn in CY22), which will be mainly deployed toward an increase in AI capacity (this sum includes principal payment on financial leases).

Source: Company, BOBCAPS Research

SaaS players are experiencing a prolonged weak spell

Software-as-a-Service (SaaS) players mirror the business models of global technology companies in terms of cost optimisation and software project deal wins. Many software vendors have witnessed elongation of deal cycles through both Q3 and Q4CY22.

- Hubspot’s management indicated that the macro climate was worsening, leading to a longer decision cycle at clients and hence an elongated deal cycle.
- Adobe reduced its revenue growth guidance to 9% at the end of Nov’22 (vs. 12% YoY in YTD CY22) partly due to forex and other macroeconomic headwinds.
- Pega raised concerns over winning new logos in the current environment. The company is, therefore, focusing on existing large clients who are willing to consolidate vendors due to high inflation and the unpredictable economic backdrop.
- Companies such as Coupa and Atlassian witnessed softness in Europe in terms of decision cycles and slower user conversion from free to paid versions, respectively.
- Freshworks’ management mentioned that mid-market and enterprise customers are focused on value and managing their software costs, especially towards the beginning of the next year.
- Duck Creek’s commentary implies that clients are less likely to sign a long-term, multi-year, multi-million-dollar transformational deal.
- Informatica has slowed the pace of hiring due to a tighter rein on discretionary spends and has hired a majority of its new employees in low-cost locations.
- Google and Microsoft indicated that they intend to channelise resources toward high-growth priorities and improving workforce productivity.

Fig 7 – SaaS players expect a prolonged spell of economic weakness

Company	Q3CY22 Earnings Call Commentary of SaaS Players
ServiceNow	▪ Clients are unlikely to be involved in long-drawn, expensive, multi-year projects. ▪ Companies are shifting from a capex to opex model as they migrate to the cloud, prompting ServiceNow to revise its subscription growth guidance to 28.5%+ YoY CC (from 28% earlier guidance), adjusted for forex impact.
Adobe	▪ Adobe is well-positioned to hedge risks related to weak macros and is closing multi-million-dollar deals, especially enterprise/transformational projects, with a strong deal pipeline in Q4CY22 and Q1CY23.
Hubspot	▪ Hubspot continued to witness pressure due to an elongated client decision cycle amid budget tightening and stringent approvals. The situation is likely to persist over a couple of quarters due to the poor macroeconomic conditions.
Salesforce	▪ Salesforce's sales cycle could get stretched due to a higher level of inspections.
Freshworks	▪ The impact of slower economic activity on business was partially offset by a pickup in new business activity and measured expansion, boiling down to a cut in growth forecasts and headcount. ▪ Mid-market/enterprise business, especially from the North America region, is showing traction despite rumours of cost cuts on software and an increasing focus on value-based/cost takeout deals (SMB has begun to stabilise after the churn in its customer service solution).
Atlassian	▪ Transition of users to the fully paid version (per-user license) has slowed down.
Appian	▪ Sales have been delayed due to the rising interest rates but the effect is not material. Management experienced some deal deferrals including a sizeable one. ▪ Appian is focusing on capping discretionary-related expenses in the current environment.
Informatica	▪ As macroeconomic headwinds lead to elongated deal cycles, Informatica has altered its recruitment strategy to bring a majority of new hires into low-cost locations. ▪ The company continues to invest in R&D to strengthen the cloud/strategic cloud partnership journey.

Source: Company, BOBCAPS Research

Indian IT companies cautiously optimistic

The Q3FY23 earnings commentary of Indian IT companies reveals a cautiously optimistic outlook on demand. Players acknowledged that the unpredictable macro climate is taking a toll on discretionary spending and has materially impacted the hi-tech, retail, mortgage, investment banking and communications verticals. However, the outlook on energy & utilities, BFSI (ex-mortgage), manufacturing, travel and hospitality remains strong.

In line with global trends, Indian IT companies are also seeing more cost takeout deals in the pipeline but indicated that spending on digital transformation programmes is continuing as clients do not wish to abruptly halt these initiatives midway. In terms of geographies, while a majority of players saw strong Europe business in the December quarter, the outlook has deteriorated given deferred decision-making cycles. In contrast, the outlook for US business remains strong across tier-I Indian IT companies.

Deal-win TCV (total contract value) was robust during the quarter, with players clocking strong YoY growth and stable book-to-bill ratios. INFO reported a deal win TCV of US$ 3.3bn – an eight-quarter-high. Pipeline commentaries remained healthy on the back of vendor consolidation. We believe that vendor-led opportunities, strong client relationships, a proactive approach for servicing customers, and robust digital capabilities will be beneficial for tier-I Indian IT companies.

Fig 8 – Strong deal wins for Indian IT companies in the Dec'22 quarter despite shift in client priorities

Company	Q3FY23 Earnings Commentary highlights of Indian IT companies
TCS	▪ Delayed decision-making in smaller pockets is driving an increased focus on long-term projects that have built-in economic variables to minimise the downside risk. ▪ BFSI growth (ex-mortgage and insurance) in Q3 was powered by strong spending on cloud, data, analytics and CX (customer experience).
INFO	▪ The hi-tech/telecom verticals have slowed due to reduced discretionary spends. ▪ Some deal closures could be delayed.
HCLT	▪ Products and Platforms business is showing traction with strong recognition and adoption of some of its products. ▪ Clients are lagging behind in consuming cloud capacity and need to accelerate spends to utilise the same.
WPRO	▪ Delivery of value-added products is likely to rise due to the growing demand for automation. ▪ A weaker macro has changed the nature of deals with clients, inducing a skew towards cost takeout projects (barring mandatory digital expenditure toward hybrid cloud/IaaS).
TECHM	▪ No demand pressure related to the global slowdown is currently visible, but deal sizes have changed, especially in the US and Europe.

Source: Company, BOBCAPS Research

Fig 9 – Demand outlook of global technology companies

Company	Demand commentary	Pipeline commentary
SaaS		
Workday (29 Nov 2022)	▪ Likely to rise due to strategic technology vendor consolidation, especially in HR and Finance ▪ Elongation of deal cycles to continue; net new deal wins likely to peak out	▪ Confident outlook with a diversified pipeline and focus on executing a strong Q4CY22
Salesforce (30 Nov 2022)	▪ Despite decision-making delays, traction continues in transformation/ multi-cloud expansion deals, especially with large brands ▪ Telecom driving the deal win momentum	▪ C360 platform supporting a healthy pipeline in the recent macro environment
PaaS		
ServiceNow (26 Oct 2022)	▪ Not fully immune to macro headwinds but the breadth of the product portfolio plays a key role in bagging deals, including 98% of renewal deal wins ▪ Retail and hospitality driving net new ACV (average contract value) growth ▪ "Deliver more with less" policy pushing modern enterprises towards automation and productivity, spurring steady technology upgrades	▪ Continued investments behind robust multi-quarter pipeline ▪ Q4CY22 to remain strong on the back of multimillion-dollar deals, especially in HR services (as the Top 20 clients are investing 20-30% of the total deal investments to streamline the workflow of the employees)
Pega (26 Oct 2022)	▪ Change in engagement style leading to a slight delay in conversion of deal wins, but no impact on the deal funnel thus far ▪ Cloud ACV seeing traction and steady growth in CC terms	▪ More than US$ 1mn in deal wins clocked despite altered engagement style
Appian (3 Nov 2022)	▪ Q3CY22 saw a comparatively elongated sales cycle, driven by federal business. ▪ Client-related constraints led to a couple of large deal slips and increasing demand for on-premise deals (low-margin business)	▪ Demand is resilient and so is the pipeline ▪ Slight deterioration in the deal pipeline mostly due to currency impact but intact overall
Guidewire (6 Dec 2022)	▪ Changes to the operating model due to rising inflation leading to changes in deal composition ▪ Large deal wins delayed, especially in cloud infrastructure, but traction seen in new deals (to replace mainframe systems)	▪ Ramp-up in deals from the backlog is leading to a steady build-up in pipeline
IaaS		
Google (25 Oct 2022)	▪ Macro events have led to deal wins either with smaller duration or sizes, or both ▪ US$ 200mn+ customers are asking for newer methods of searching instead of the traditional approach	▪ Pullback in spend creates some challenges in the deal pipeline, considering its strong measurability and focus on delivering

Company	Demand commentary	Pipeline commentary
Microsoft (25 Oct 2022)	▪ Traction in long-term Azure and Microsoft 365 contracts seen across deal sizes, especially backed by cloud-based suite 'E5' ▪ Despite strong execution on core annuity sales of platforms, macro volatility instils uncertainty in terms of timing of deal wins/deal mix	▪ Commercial business (cloud/hybrid) down 3% of late, but the multi-year growth story remains intact ▪ RPO pipeline remains robust
AWS (17 Nov 2022)	▪ Traction in cost reduction and efficiency improvement deals ▪ Decline in gross merchandise value offers a clear picture about the current macro scenario	▪ No significant visible changes in deal pipeline
Nutanix (30 Nov 2022)	▪ Despite rising inspections by clients amid an uncertain macro climate, newer deals/ACVs have risen	▪ Smaller/new deal pipeline continues to grow
Oracle (12 Dec 2022)	▪ Robust deal win momentum with no suggestion of any immediate drag on the digital business	▪ Pipeline remains robust, backed by continuous shift of midsized-to-large clients to OCI (Oracle Cloud Infrastructure)
Automation/Robotic Process Automation (RPA)		
IBM/BluePrism 19 Oct 2022	▪ Traction is visible in cross/up-selling products and has successfully leveraged business ▪ Deal wins are coming in with comparatively smaller sizes	▪ Pipelines remains strong and the backlog is down to two months
Analytics		
Cloudera	▪ Dataflow/Data Science workbench with IBM helps in bagging various deal wins in the cloud/hybrid cloud segment	▪ Resell and cross-sell with IBM supports a robust pipeline in the near term
Digital Services		
EPAM (3 Nov 2022)	▪ Scouting for inorganic growth opportunities ▪ Russia-Ukraine war has disrupted the onshore centre severely, seriously hampering deal wins	▪ Despite unfavourable forex movement, Russia business showed plenty of traction during the first half of the calendar year which is likely to continue ▪ Fears of recession in Europe likely to create a robust backlog in the deal pipeline
Globant (17 Nov 2022)	▪ Clients' reinvention for their own core space to improve process optimisation ▪ Digital commerce transformation, CX, and platform engineering are showing traction ▪ Deal wins accelerating in the areas of process efficiency and cost optimisation	▪ Clients are looking for application tools to reduce time/cost while developing/deploying products
Endava (15 Nov 2022)	▪ Global transformation projects are flowing from UK MNCs ▪ Payment vertical continues to see solid traction in digital payments globally	▪ Healthy deal pipeline in the areas of go-to-market and improved customer experience
Semiconductor/Networking		
Ericsson 20 Jan 2022	▪ Positive traction in RAN (Radio Access Network) market which leads to a better pricing environment and margins	▪ Pipelines are seeing traction in the areas of IPR, consumer electronics and IoT (Internet of Things) ▪ Global communication platforms are drawing attention in 5G rollouts
Intel (27 Oct 2022)	▪ Solid pickup in long-term transformation deals in Q3, especially with large foundry customers ▪ NEX (Network and Edge Group) and PSG (Programmable Solutions Group) businesses continue to deliver stellar revenue growth	▪ Data centre, 4 HPC (high performance computing) offerings and PVC seeing positive traction; no spend cuts observed ▪ PSG backlog robust and will drive growth due to a limited supply chain
Cisco (16 Nov 2022)	▪ Web scale business, 400G products, AI fabrics and Silicon One routers are creating solid demand on the back of IoT, 5G and other transformational projects ▪ Clients focusing more on programmability, bandwidth and energy efficiency	▪ Customers are balancing private and public cloud workloads; re-architecture of the infrastructure is likely to create new traffic patterns as well as new opportunities

Source: Company, BOBCAPS Research

Prefer large-cap Indian IT players over mid-caps

Capex moderation by tech giants such as Google and Microsoft is a clear indication of fraying customer spending patterns, but Indian IT companies haven't witnessed any pressure thus far in terms of digital deal wins/pipeline, especially in the areas of cloud and hybrid cloud. Due to the tenuous macro environment worldwide, we do foresee a deviation in the quality of revenue as cost optimisation projects take centerstage.

We have already factored in the postponement of product development and large digital transformation projects along with slowing demand for hyperscalers which will impact the revenue growth of IT services players. We prefer Indian stocks that are less vulnerable to the slowdown and that will continue to gain market share even in a global recessionary environment.

Tier-I IT players fit the bill as they are best placed to benefit from vendor consolidation, strong client relationships and robust digital capabilities. We thus retain our preference for large-caps – INFO (BUY, TP Rs 1,760) and HCLT (BUY, TP Rs 1,240), in that order, over mid-caps.

INFO | BUY, TP Rs 1,760

Despite INFO's cautious outlook on a few verticals, we believe its strength in managing the twin journeys of digital transformation (Cobalt) and cost takeout will drive growth leadership. We retain BUY and continue to value the stock at 20.5x FY25E, translating to an unchanged TP of Rs 1,760. The stock is trading at ~20% discount to its last five-year average.

HCLT | BUY, TP Rs 1,240

Given its deep capabilities IMS space and strategic partnerships alongside continued investments in cloud/digital capabilities, we expect HCLT to emerge stronger on the back of rising demand from enterprises. High sequential growth within IT services, robust headcount addition, healthy deal wins and a solid pipeline indicate an improving outlook. We retain BUY and continue to value the stock at 18.7x FY25E EPS, yielding an unchanged TP of Rs 1,240. The stock is trading at ~25% discount to its last five-year average.

NOT FOR DISTRIBUTION, DIRECTLY OR INDIRECTLY, IN OR INTO THE UNITED STATES OF AMERICA ("US") OR IN OR INTO ANY OTHER JURISDICTION IF SUCH AN ACTION IS PROHIBITED BY APPLICABLE LAW.

Disclaimer

Recommendation scale: Recommendations and Absolute returns (%) over 12 months

BUY – Expected return >+15%

HOLD – Expected return from -6% to +15%

SELL – Expected return <-6%

Note: Recommendation structure changed with effect from 21 June 2021

Our recommendation scale does not factor in short-term stock price volatility related to market fluctuations. Thus, our recommendations may not always be strictly in line with the recommendation scale as shown above.

Analyst certification

The research analyst(s) authoring this report hereby certifies that (1) all of the views expressed in this research report accurately reflect his/her personal views about the subject company or companies and its or their securities, and (2) no part of his/her compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) in this report. Analysts are not registered as research analysts by FINRA and are not associated persons of BOB Capital Markets Limited (BOBCAPS).

General disclaimers

BOBCAPS is engaged in the business of Stock Broking and Investment Banking. BOBCAPS is a member of the National Stock Exchange of India Limited and BSE Limited and is also a SEBI-registered Category I Merchant Banker. BOBCAPS is a wholly owned subsidiary of Bank of Baroda which has its various subsidiaries engaged in the businesses of stock broking, lending, asset management, life insurance, health insurance and wealth management, among others.

BOBCAPS's activities have neither been suspended nor has it defaulted with any stock exchange authority with whom it has been registered in the last five years. BOBCAPS has not been debarred from doing business by any stock exchange or SEBI or any other authority. No disciplinary action has been taken by any regulatory authority against BOBCAPS affecting its equity research analysis activities.

BOBCAPS has obtained registration as a Research Entity under SEBI (Research Analysts) Regulations, 2014, having registration No.: INH000000040 valid till 03 February 2025. BOBCAPS is also a SEBI-registered intermediary for the broking business having SEBI Single Registration Certificate No.: INZ000159332 dated 20 November 2017. BOBCAPS CIN Number: U65999MH1996GOI098009.

BOBCAPS prohibits its analysts, persons reporting to analysts, and members of their households from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover. Additionally, BOBCAPS prohibits its analysts and persons reporting to analysts from serving as an officer, director, or advisory board member of any companies that the analysts cover.

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additionally, other important information regarding our relationships with the company or companies that are the subject of this material is provided herein.

This material should not be construed as an offer to sell or the solicitation of an offer to buy any security in any jurisdiction We are not soliciting any action based on this material. It is for the general information of BOBCAPS's clients. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Before acting on any advice or recommendation in this material, clients should consider whether it is suitable for their particular circumstances and, if necessary, seek professional advice. BOBCAPS research reports follow rules laid down by Securities and Exchange Board of India and individuals employed as research analysts are separate from other employees who are performing sales trading, dealing, corporate finance advisory or any other activity that may affect the independence of its research reports.

The price and value of the investments referred to in this material and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide for future performance, future returns are not guaranteed and a loss of original capital may occur. BOBCAPS does not provide tax advice to its clients, and all investors are strongly advised to consult with their tax advisers regarding any potential investment in certain transactions — including those involving futures, options, and other derivatives as well as non-investment-grade securities — that give rise to substantial risk and are not suitable for all investors. The material is based on information that we consider reliable, but we do not represent that it is accurate or complete, and it should not be relied on as such. Opinions expressed are our current opinions as of the date appearing on this material only. We endeavour to update on a reasonable basis the information discussed in this material, but regulatory, compliance, or other reasons may prevent us from doing so.

We and our affiliates, officers, directors, and employees, including persons involved in the preparation or issuance of this material, may from time to time have "long" or "short" positions in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein and may from time to time add to or dispose of any such securities (or investment). We and our affiliates may assume an underwriting commitment in the securities of companies discussed in this document (or in related investments), may sell them to or buy them from customers on a principal basis, and may also perform or seek to perform investment banking or advisory services for or relating to these companies and may also be represented in the supervisory board or any other committee of these companies.

For the purpose of calculating whether BOBCAPS and its affiliates hold, beneficially own, or control, including the right to vote for directors, one per cent or more of the equity shares of the subject company, the holdings of the issuer of the research report is also included.

BOBCAPS and its non-US affiliates may, to the extent permissible under applicable laws, have acted on or used this research to the extent that it relates to non-US issuers, prior to or immediately following its publication. Foreign currency denominated securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of or income derived from the investment. In addition, investors in securities such as ADRs, the value of which are influenced by foreign currencies, effectively assume currency risk. In addition, options involve risks and are not suitable for all investors. Please ensure that you have read and understood the Risk disclosure document before entering into any derivative transactions.

No part of this material may be (1) copied, photocopied, or duplicated in any form by any means or (2) redistributed without BOBCAPS's prior written consent.

Company-specific disclosures under SEBI (Research Analysts) Regulations, 2014

The research analyst(s) or his/her relatives do not have any material conflict of interest at the time of publication of this research report.

BOBCAPS or its research analyst(s) or his/her relatives do not have any financial interest in the subject company, except for Research Analyst Saptarshi Mukherjee having 20 shares of Infosys (INFO IN). BOBCAPS or its research analyst(s) or his/her relatives do not have actual/beneficial ownership of one per cent or more securities in the subject company at the end of the month immediately preceding the date of publication of this report.

The research analyst(s) has not received any compensation from the subject company or third party in the past 12 months in connection with research report/activities. Compensation of the research analyst(s) is not based on any specific merchant banking, investment banking or brokerage service transactions.

BOBCAPS or its research analyst(s) is not engaged in any market making activities for the subject company.

The research analyst(s) has not served as an officer, director or employee of the subject company.

BOBCAPS or its associates may have material conflict of interest at the time of publication of this research report.

BOBCAPS's associates may have financial interest in the subject company. BOBCAPS's associates may hold actual / beneficial ownership of one per cent or more securities in the subject company at the end of the month immediately preceding the date of publication of this report.

BOBCAPS or its associates may have managed or co-managed a public offering of securities for the subject company or may have been mandated by the subject company for any other assignment in the past 12 months.

BOBCAPS may have received compensation from the subject company in the past 12 months. BOBCAPS may from time to time solicit or perform investment banking services for the subject company. BOBCAPS or its associates may have received compensation from the subject company in the past 12 months for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory services in a merger or specific transaction. BOBCAPS or its associates may have received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past 12 months.

Other disclaimers

BOBCAPS and MAYBANK (as defined below) make no representation or warranty, express or implied, as to the accuracy or completeness of any information obtained from third parties and expressly disclaim the merchantability, suitability, quality and fitness of this report. The information in this report has not been independently verified, is provided on an "as is" basis, should not be relied on by you in connection with any contract or commitment, and should not be used as a substitute for enquiries, procedures and advice which ought to be undertaken by you. This report also does not constitute an offer or solicitation to buy or sell any securities referred to herein and you should not construe this report as investment advice. All opinions and estimates contained in this report constitute BOBCAPS's judgment as of the date of this report and are subject to change without notice, and there is no obligation on BOBCAPS or MAYBANK to update this report upon issuance. This report and the information contained herein may not be reproduced, redistributed, disseminated or copied by any means without the prior consent of BOBCAPS and MAYBANK.

To the full extent permitted by law neither BOBCAPS, MAYBANK nor any of their respective affiliates, nor any other person, accepts any liability howsoever arising, whether in contract, tort, negligence, strict liability or any other basis, including without limitation, direct or indirect, special, incidental, consequential or punitive damages arising from any use of this report or the information contained herein. By accepting this report, you agree and undertake to fully indemnify and hold harmless BOBCAPS and MAYBANK from and against claims, charges, actions, proceedings, losses, liabilities, damages, expenses and demands (collectively, the "Losses") which BOBCAPS and/or MAYBANK may incur or suffer in any jurisdiction including but not limited to those Losses incurred by BOBCAPS and/or MAYBANK as a result of any proceedings or actions brought against them by any regulators and/or authorities, and which in any case are directly or indirectly occasioned by or result from or are attributable to anything done or omitted in relation to or arising from or in connection with this report.

Distribution into the United Kingdom ("UK"):

This research report will only be distributed in the United Kingdom, in accordance with the applicable laws and regulations of the UK, by Maybank Securities (London) Ltd ("**MSL**") who is authorised and regulated by the Financial Conduct Authority ("FCA") in the United Kingdom (MSL and its affiliates are collectively referred to as **"MAYBANK**"). BOBCAPS is not authorized to directly distribute this research report in the UK.

This report has not been prepared by BOBCAPS in accordance with the UK's legal and regulatory requirements.

This research report is for distribution only to, and is solely directed at, selected persons on the basis that those persons: (a) are eligible counterparties and professional clients of MAYBANK as selected by MAYBANK solely at its discretion; (b) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended from time to time (the "Order"), or (c) fall within Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc. as mentioned in the stated Article) of the Order; (all such persons together being referred to as "relevant persons").

This research report is directed only at relevant persons and must not be acted on or relied on by any persons who are not relevant persons. Any investment or investment activity to which this material relates is available only to relevant persons and will be engaged in only with relevant persons.

The relevant person as recipient of this research report is not permitted to reproduce, change, remove, pass on, distribute or disseminate the data or make it available to third parties without the written permission of BOBCAPS or MAYBANK. Any decision taken by the relevant person(s) pursuant to the research report shall be solely at their costs and consequences and BOBCAPS and MAYBANK shall not have any liability of whatsoever nature in this regard.

No distribution into the US:

This report will not be distributed in the US and no US person may rely on this communication.

Other jurisdictions:

This report has been prepared in accordance with SEBI (Research Analysts) Regulations and not in accordance with local regulatory requirements of any other jurisdiction. In any other jurisdictions, this report is only for distribution (subject to applicable legal or regulatory restrictions) to professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions by Maybank Securities Pte Ltd. (Singapore) and / or by any broker-dealer affiliate or such other affiliate as determined by Malayan Banking Berhad.

If the recipient of this report is not as specified above, then it should not act upon this report and return the same to the sender.

By accepting this report, you agree to be bound by the foregoing limitations.