GS GLOBAL FUTURE TECHNOLOGY LEADERS EQUITY PORTFOLIO: QUARTERLY UPDATE

TECH OUTLOOK: 2023


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After many consecutive years of strong returns from tech stocks, including in 2020 and 2021, 2022 proved to be a difficult year. Inflation concerns early in the year were exacerbated by geopolitical conflict in Europe and ongoing Covid-19 lockdowns in China. Supply chain disruptions that were expected to ease over the course of the year instead became more severe. Inflation rose rapidly, with US headline CPI peaking at 9.0% YoY in June, the highest level in four decades. In response, federal governments worldwide moved swiftly to curb accelerating inflation. In stark contrast to the last decade of dovish interest rate policy, the Fed has grown hawkish, raising rates more aggressively and promising to maintain these high rates for the foreseeable future (“higher for longer”).[1]

This macroeconomic deterioration led to a broad sell-off in equity markets, particularly in growth and tech equites. Investors rotated away from growth and into value-oriented, cyclical stocks, and within tech from small and mid-cap stocks into large and mega-cap tech companies. Notably, the multiple that investors were willing to pay has compressed significantly, as interest rate increases have led to a contraction in valuations. Tech stocks’ heightened sensitivity to rate increases and starting point of elevated valuations meant that while fundamentals have remained broadly stable, the global tech universe was more acutely impacted by the drawdown than the broader equity market.

Despite this, we believe there is optimism in 2023 for the areas of tech we invest in:

- **Fundamentals remain broadly stable,** even in the current environment.
- **Secular trends are accelerating,** brought about by changes during the pandemic and further accelerated by the current macro and geopolitical environment.
- **We may be past peak inflation,** which could be a tailwind for tech valuations, particularly within the mid and small-cap cohort of tech that we favor.
- **Valuations are below 5 and 10-year averages,** creating interesting opportunities for long-term investors to buy highly disruptive companies at attractive valuations.

FUNDAMETALS REMAIN BROADLY STABLE

One of the unique benefits of Goldman Sachs Asset Management’s Fundamental Equity franchise is our ability to meet with company management teams at the c-suite level. Our tech team met with over a hundred CEOs and CFOs at the end of 2022, discussing trends they are seeing within tech. The key takeaway from these management meetings was the strength in non-consumer levered parts of tech and the weakness we are seeing in consumer tech.

In non-consumer parts of tech, fundamentals remain broadly stable. Our team spoke to the CFO of a very large IT services business who has relationships with almost every large enterprise globally. They said that their customers will continue to spend on tech at high levels into 2023. The CEO of a very large software company also said they believed that IT spend as a percentage of GDP would continue to increase as a result of businesses trying to fortify

[1] Wall Street Journal, December 2022

themselves with digital tech to navigate the challenging macro environment. We have seen this trend throughout 2022 in our portfolio companies, which have shown resilience this past year in a tighter spending environment.

Conversely, we learned that areas of consumer tech are experiencing weakness. Spending on PCs and smartphones has slowed, and advertising budgets have come down significantly, leading to a weak earnings cycle for many consumer tech companies.

Overall, while the macroeconomic environment remains uncertain, tech spending remains a high priority for corporations and as a result, the outlook on spending remains fairly stable. In our tech portfolios, we continue to have limited exposure to consumer parts of tech and high exposure to software and non-consumer semiconductors, sectors we believe will be more resilient in a lower growth environment.

SECULAR TRENDS ARE ACCELERATING

On top of a fairly stable spending environment for tech, we believe several secular trends are accelerating, providing tailwinds for areas of tech where we see long-term secular growth. One example is the growing demand for electric vehicles, a trend that has continued to accelerate rapidly in the post-pandemic environment. This increase in demand is directly benefitting semiconductor companies that are levered to the auto end-market, since electric vehicles contain more than twice the number of semiconductors as internal combustion engine vehicles. We are focused on owning the winners in this end market given the TAM expansion and increasing market share of the best semiconductor companies. Spending on semi-cap equipment is growing rapidly and, in our view, leading-edge semi-cap equipment companies are well positioned to benefit from this increased investment due to their high barriers to entry and extremely specialized technology.

Additionally, the pandemic and its ensuing disruption accelerated the digital transformation of businesses globally. This transformation is focused on increasing efficiency, enhancing agility, and unlocking value through targeted expenditure. Cloud-based computing and software-as-a-service providers are critical in enabling this transformation as they provide the infrastructure necessary for businesses to migrate to these new modalities. With remote work options for employees here to stay, businesses need to adopt cloud-based computing and public cloud services. Management teams are taking note as worldwide spending on public cloud services is projected to grow by 20.7% in 2023.[2] This shift to cloud computing has also catalyzed the transition away from traditional cybersecurity models such as perimeter network defenses towards cloud data security. Cybersecurity firms specializing in cloud data security will disproportionally benefit and we see this as another growth opportunity heading into 2023.

INFLATION IS PEAKING

While we remain confident in tech fundamentals, the performance of tech stocks will not only be dependent on fundamentals, but also be driven by the valuation multiple that investors are willing to pay for future earnings and cash flows. One of the primary drivers of forward multiples will be the direction of interest rates. After starting with a 25bp increase in March 2022, the Fed has now made three consecutive 75bps hikes between June and September, lifting 10-year yields from 1.4% in November 2021 to north of 3.8% at the end of 2023.

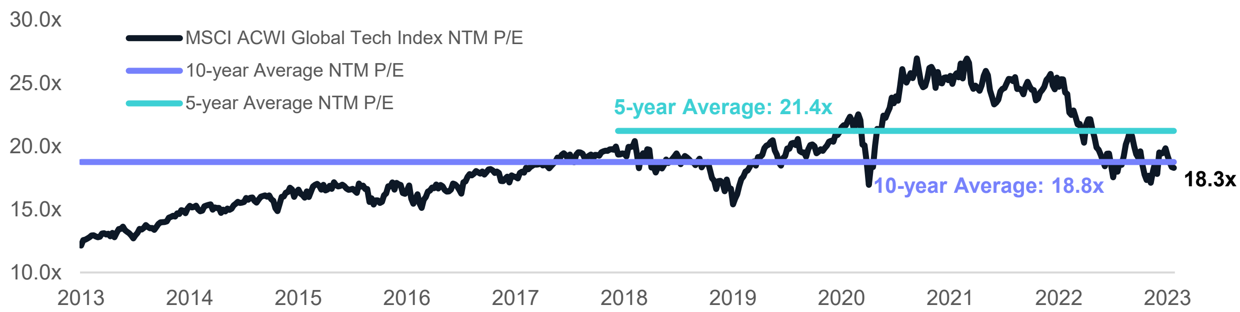
Though these accelerated hikes have been painful for tech multiples, we are encouraged that from here, the frequency and magnitude of hikes is likely to slow. There have been some tentative signs of this so far, with US core inflation having shown broad-based deceleration across categories toward the end of last year.

There are also signs in the real economy that the Fed's actions have started to cool the economy and we believe that a few months from now, we could be past peak inflation expectations. Slowing inflation is important for tech stocks as this would cause the Fed to move less aggressively, which would be a tailwind for tech valuations and multiples, particularly for the mid and smaller-cap tech companies that we have a bias to in our portfolios.

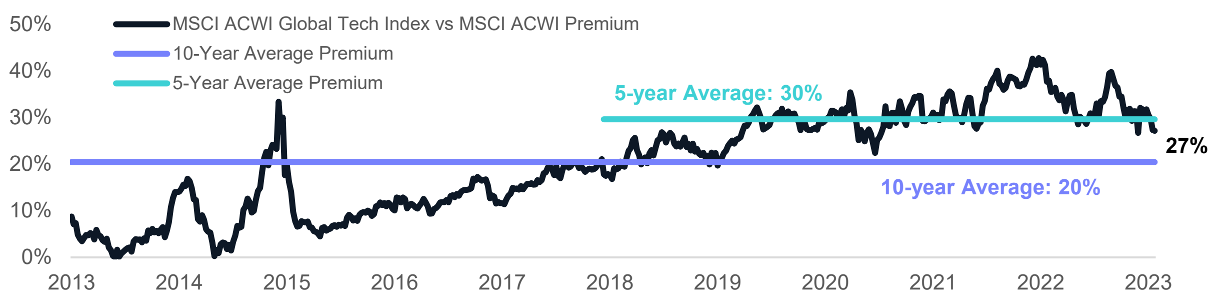
[2] Gartner Inc., 2022.

VALUATIONS ARE ATTRACTIVE

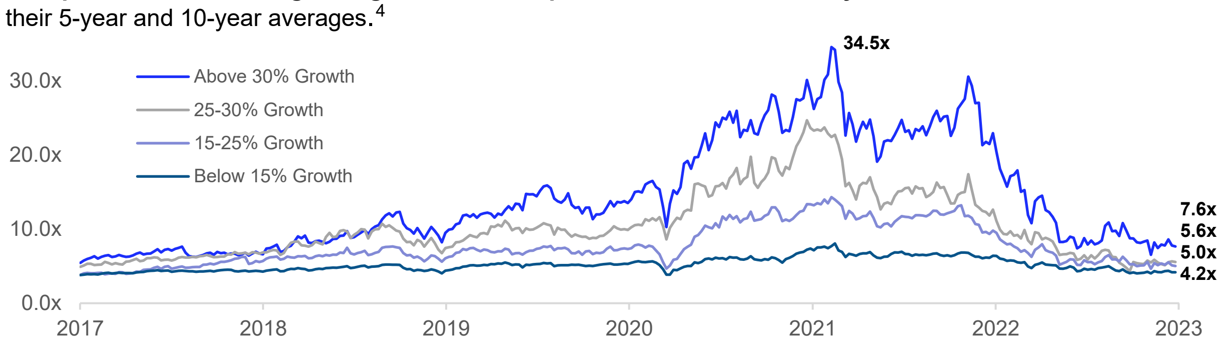
The multiple that investors are willing to pay for future earnings and cash flows has compressed significantly. The global tech universe is now **trading at 18.3x 12 month forward earnings, which is below both their 5-year and 10-year averages.**[3]



Global tech equities are currently trading at a lower premium to the broader equity market than their 5-year average (30% vs. 27%).[3]



Multiples for the fastest growing software companies have contracted by more than 78%, to levels far below their 5-year and 10-year averages.[4]



Software valuations have come down substantially. The past year has been the largest period of value destruction in the history of public SaaS. However, we believe that this pullback is an opportunity for investors. We see pipelines building for several companies across industries and applications, including next-generation data storage, cybersecurity, and software developer tools.

Technology valuations are attractive against their own history and relative to the broader market, particularly within the context of their higher growth and profitability characteristics.

[3] Goldman Sachs Asset Management, FactSet 2022.
[4] Keybanc, 2022.

AREAS WHERE WE ARE BULLISH

The companies we invest in are well-aligned with long-term, secular growth themes. As we have outlined, many of the themes we were invested in prior to last year's growth and tech sell-off have accelerated and are well positioned generate returns in a lower growth environment.

Semiconductors For Auto EV Supply Chain

We view the auto electric vehicle (EV) supply chain as a key area of secular growth in tech. More than 4.2 million electric vehicles were sold worldwide in the first half of 2022, up over 60% from the previous year, a trend that is expected to continue into 2023.[5] Given that the semiconductor content for a typical electric car is more than double that of a traditional internal combustion engine car, the semiconductor companies producing specialized chips for these vehicles are well-positioned to benefit from the proliferation of EVs across the globe. The worldwide automotive semiconductor market is anticipated to increase from $41.84 billion in 2021 to $72.52 billion in 2026 as a result of this increase in penetration and growth in semi content per car.[6] The most technologically advanced and innovative semiconductor manufacturers aligned to EVs, such as those included in our funds, will be disproportionate beneficiaries of this growth due to the innovation within the semiconductor itself.

Leading-Edge Semi-cap Equipment

The pandemic exposed the fragile global supply chains across industries, none more so than for the semiconductor industry. The extreme global dependency of the semiconductor value chain on a very limited number of countries (over 90% of the world's leading-edge chips are manufactured in just one country – Taiwan) poses significant risks to global supply chains, elevating the necessity of localized production to a matter of national security. Consequently, governments around the world have committed billions of dollars in stimulus packages aimed at bringing reshoring semiconductor manufacturing capacity, a process that will be enabled by leading-edge semi-cap equipment manufacturers. High barriers to entry, coupled with an ever-evolving definition of "leading-edge", has led to significant differentiation in this space, emphasizing the need for selectivity through active management. As end-market demand for semiconductors continues to grow, demand will intensify for semi-cap equipment manufacturers, driving elevated levels of spending and investment.

Software

Additionally, we are bullish on several areas within software, underpinned by growing connectivity and data creation.

Data and data management remain key growth areas within software, with estimates that over 175 zettabytes (175 trillion gigabytes) of data will be created by 2025, a ~400% increase versus the 44 zettabytes created in 2020.[7] This increase demands the development of improved offerings for the processing, organizing, and monitoring of this data. We seek to identify leading software companies that offer highly specialized, bespoke products that their customers need to run their businesses effectively as they stand to benefit the most from this trend.

Cybersecurity software will benefit as critical vulnerabilities have increased 170% YoY as companies have raced to digitize their businesses.[8] With the rise of remote and hybrid work arrangements, threat vectors have become increasingly complex. At the same time, the costs of cyber-attacks and data breaches have continued to increase, emphasizing the need for robust cybersecurity provisions. These tailwinds enhance the growth outlook for leading security software companies.

Lastly, **software for developers and developer tools.** The International Data Corporation (IDC) now predicts that 750 million new apps will be created over the next three years, more than the total number of apps created in the previous 40 years.[9] We remain invested in the leading developers of software geared toward assisting developers innovate, design, and produce these new applications.

[5] Canalys, 2022.
[6] Research and Markets, 2022.
[7] Bank of America Global Research, 2020.
[8] Seed Scientific, 28-Oct-2021 article "How Much Data is Created Every Day? + 27 Staggering Stats"
[9] International Data Corporation, 2022.

TAKING A LONG-TERM VIEW

Our investment process is grounded in the belief that going forward, the world is going to look fundamentally different from the past. We take a bottom-up approach to investing based on fundamental research. We maintain a strong valuation discipline and a long-term focus.

We believe investors now have an opportunity to invest in some of fastest growing, most innovative technology companies at very attractive prices. Going forward, we believe active management will be even more important, as increased volatility and uncertainty are likely to drive greater stock-level dispersion. Finally, it will be very important to own companies that generate positive Free Cash Flow in the current environment, particularly if the funding environment continues to remain tight. Our global tech fund has approximately 98% of the fund is invested in names with positive free-cash-flow.[10]

Tech innovation is actively providing solutions, improvements, and efficiency across every sector. The themes within tech we invest in are deeply secular and have long runways for growth. While last year was difficult for tech, we believe this environment will not persist and that the re-rating in tech has given investors unprecedented access to some of the most innovative companies in tech.

[10] Bloomberg as of 31-Dec-22 based on 2024E EBITDA.

QUARTERLY UPDATE – 4Q 2022

PORTFOLIO PERFORMANCE

MARKET OVERVIEW

- Global tech equities experienced the sharpest correction in 2022 due to an ever-more-aggressive Federal Reserve-led tightening cycle, given their relatively greater sensitivity to interest rates and starting point of elevated valuations**.** In addition, stocks faced headwinds on the back of the **COVID-19 lockdowns in China** as well as the **escalating conflict in Russia/Ukraine.**
- Since the macro-driven repricing, tech valuations have come down and are **trading below or below their 5-year and 10-year averages** on a next-twelve-month price/earnings. While tech trades at a premium to the broad market, they have historically and currently offer higher margins and faster earnings growth. **This premium is also below its 5-year average.**
- However, active management matters, and we are beginning to see that the market is beginning to differentiate between high growth, growth high margin businesses and high growth, low margin businesses.

PORTFOLIO COMMENTARY

- The Global Future Technology Leaders Equity Portfolio returned -1.64% underperforming (net of fees) its benchmark, which returned 7.24% during the quarter, by -888bps. YTD, the portfolio has returned -47.21% (net), underperforming its benchmark, which returned -29.74% by -1,746bps.
- In 2022, the portfolio faced pressure from several macroeconomic factors that dictated underperformance relative to the benchmark. The majority of underperformance was derived from <u>three areas</u>: 1) leaning into growth given our focus on innovation; 2) our overweight to mid and small cap companies relative to the benchmark; and 3) our overweight to Emerging markets.
    1) This year, growth and tech equities experienced increased pressure due to rising rates, which disproportionately affected the companies we invest in. More specifically, this portfolio is designed to invest in the most innovative tech companies within our benchmark. **Value companies in our benchmark meaningfully outperformed growth and innovation** throughout the year, which was the most important factor when evaluating the portfolios relative performance. **We do not believe this will persist forever and are positioned to take advantage of a recovery.**
    2) Our bias towards small and mid-cap companies detracted from returns this year. Investors rotated into larger cap tech in the first half of the year as they sought protection from the volatility in small and mid-cap tech. **We maintain our strong belief that investors need to look down in the market cap spectrum to identify and invest in highly disruptive, tech companies.** We believe the best risk and reward outcomes over the long-term are in this cohort of stocks.
    3) Our overweight to Emerging Markets relative to the benchmark also detracted from performance. Similar to our bias in small and mid-cap tech, we believe that investors need to look across all geographies, in both developed and emerging markets to find the best long-term opportunities in tech. This year was an extremely difficult year for tech companies outside of the US due to geopolitical uncertainty and COVID-19 cases increasing, particular in China and Taiwan. **However, we are bullish on China as they begin to reopen, ease regulatory pursuits, and improve relations with the US.** In 4Q22 we saw a large rebound from our holdings in China and Taiwan in part due to these positive developments.
  - While these areas were hit the hardest, they are precisely where we as investors want to have exposure to. We see the most compelling risk rewards opportunities in these areas going forward, and when the recovery begins, we think these areas will see the largest rebound.
- Despite the macro headwinds and the construction of our portfolio leading to relative underperformance against our benchmark, our high conviction themes and stocks did outperform and contributed positively to the portfolio. Key areas of strength in the portfolio during the year were: 1) Our bullish view on the EV end-market for Semiconductors; 2) Cybersecurity within the software space; and 3) the reshoring of Semi-cap Equipment.

Past performance does not predict future returns and does not guarantee future results, which may vary.

1) Companies aligned to EV semiconductors had a strong 2022. **We did not observe any demand destruction for auto EV semi content** despite the difficult macro backdrop. Some of the strongest performers include ON Semiconductor and Infineon, who were top performing semis in the sector.
2) **Demand for truly innovative products and services such as Cybersecurity has not deteriorated** despite the tougher macroeconomic environment. We saw our portfolio companies pass on cost increases to their end customers due to the quality of their cybersecurity services. **Palo Alto Networks** was a top holding in our portfolio throughout the year and was a strong performer in 2022.
3) One area that emerged as a result of our bottom-up stock selection this year was Leading-Edge Semi-cap Equipment theme, which invests in companies that are making the most advanced semiconductor manufacturing equipment. **Given the tailwinds with semi-reshoring and investments from governments around the world, these companies performed very well in 2022.** Our top holdings in this theme, KLA Corporation and Cadence Design Systems were top performers within semi-cap equipment in 2022 and we expect to see strong demand for these companies' products throughout 2023.

- While 2022 was a difficult year for many tech stocks, we view this rerating as an opportunity to invest in some of the most innovative companies at very attractive valuations. We are positioning ourselves accordingly and adding to distressed parts of the market, while also balancing the portfolio with high-quality businesses that are also disruptive.
  - We selectively added back to ad-levered names (Trade Desk) as we believe the growth of TV and streaming platforms integrating advertising will be a long-term opportunity.
  - We are moving capital away from areas of the portfolio that did well in 2022 (trimming Palo Alto Networks and other Semi companies) and **shifting capital selectively to areas that underperformed in 2022.**
  - We are shifting away from areas where estimates may still fall such as software, PC's, smartphones and towards areas where estimates are closer to bottom like the EV end-market.
  - We have taken the pullback to buy high quality businesses **that previously would not have been in our portfolio due to the market cap limitation (ServiceNow).**

PERFORMANCE

	GS GLOBAL FUTURE TECHNOLOGY LEADERS EQUITY PORTFOLIO (I-SHARES ACC.)		
Period Ending 31-Dec-2022	**Fund Net Returns (%)**	**Benchmark (%)**	**Net Excess Return (bps)**
Q4 2022	-1.64	7.24	-888
Trailing 1-Year	-47.21	-29.74	-1,746
Since Inception	0.73	2.06	-132

Returns <1 year are cumulative, 1+ years are annualized. **Inception Date:** 25-Feb-2020. **Past performance does not guarantee future results.**

CALENDAR YEAR PERFORMANCE

	GS GLOBAL FUTURE TECHNOLOGY LEADERS EQUITY PORTFOLIO (I-SHARES ACC.)		
Period Ending 31-Dec-2022	**Fund Net Returns (%)**	**Benchmark (%)**	**Net Excess Return (bps)**
2022	-47.21	-29.74	-1,746
2021	15.19	8.17	**+701**
2020 (Feb – Dec)	67.90	39.43	**+2,847**

Source: Goldman Sachs Asset Management as of 31-Dec-2022

CHARACTERISTICS

	GS GLOBAL FUTURE TECHNOLOGY LEADERS EQUITY PORTFOLIO
Benchmark	MSCI ACWI Select Information Technology + Communication Services + Internet & Direct Marketing Retail (Excluding > $100bn Market Cap)
Holdings Range	60-80
Geographic Mix	Global (Developed Markets & Emerging Markets)
Capitalization	<$100bn with an emphasis on Small/Mid Cap
Fund AUM	$2.6Bn
Inception Date	25-Feb-2020
ISIN (I-Shares Acc.)	LU2094235459 (I-Shares Acc.)
Bloomberg Ticker	GSGFTLI LX (I-Shares Acc.)

PERFORMANCE ATTRIBUTION

TOP CONTRIBUTORS

- **Kingdee International Software Group.** – an enterprise software-as-a-service (SaaS) provider in China was a top contributor to returns during the quarter. Near term guidance projects 2023 revenues to grow at 20-25% YoY which is mainly driven by Kingdee's cloud business (Galaxy, Cosmic / Constellation) and a strong demand from large sized enterprise customers. During the quarter, the company has been more focused on cash flow measures in order to create a better overview of the subscription-based business. We remain positive on Kingdee's fast growing top tier product line and its leadership in the SME Enterprise Resource Planning (ERP) market. Despite the company experiencing higher than expected labor costs and experiencing prolonged COVID-19 lockdowns, which slowed project delivery and new contract signing, we believe that Kingdee has established a leading position in servicing the emerging leaders across different sectors in new economy industries such as technology, biotech, and supply chains.

- **Infineon Technologies AG.** – a German semiconductor manufacturer and system solutions company, was a contributor to returns during the quarter. Infineon has continued to benefit from accelerating momentum in the rollout of Silicon Carbide (SiC) as well as recent engagement with various automobile manufacturers. Infineon has continued to maintain a competitive advantage in reliably producing transmitter and SiC power semis at scale for automakers, securing close to €3bn in design-win volumes within the year. We continue to see a fundamental role for power semis for electrified vehicles, but also for renewables (given the recent impetus for greater energy security) which could support Infineon's FY23 revenue growth, as both technologies compete for the same capacity and could remain in allocation in 2023-24. We believe the general shift towards battery electric vehicles and the company's strong performance following FY4Q22 results indicates that the stock is currently at an attractive valuation, as despite offering faster revenue growth and stronger EBITDA margins, Infineon currently trades at a 30% discount to the broader EU tech sector. Overall, we continue to monitor end-market demand, the semi cycle, and volatile macro conditions and maintain conviction in our investment thesis.

	TOP FIVE CONTRIBUTORS		
Security Name	**Ending Weight (%)**	**Total Return (%)**	**Contribution to Relative Return (bps)**
Kingdee International Software Group	3.42	63.78	+113
Infineon Technologies AG	2.11	36.38	+45
Venustech Group	2.19	31.63	+40
KLA Corporation	3.31	25.01	+33
Etsy	1.60	19.62	+31

Past performance does not predict future returns and does not guarantee future results, which may vary.

TOP DETRACTORS

- **Atlassian Corp.** – an Australian software company that develops products for software development teams and project managers, was a detractor from returns during the quarter. The company reported a disappointing quarter which was largely driven by underperformance of the cloud business. The ongoing macroeconomic headwinds have slowed the company's subscription revenue due to weaker conversion trends of free to paid users. On a positive side, management reiterated their growth expectations for its data center business and reported that cloud migrations, upsells to higher edition products, as well as cross sells of other products have not been impacted by the high inflationary environment. Atlassian offers a best in-class product which is a platform at the intersection of IT Service Management, DevOps, and workflow management, we believe the company is well positioned to capitalize on the growing demand for more efficient DevOp practices across organizations.

  Zscaler Inc. – a cloud-based information security company that has developed a platform incorporating security functionalities needed to enable access to cloud resources based on identity, context, and organization policies, was a detractor to returns during the quarter. Zscaler's revenue grew 54% ahead of guidance of 47 - 48%. While earnings beat consensus estimates across all metrics, the magnitude of the beat was significantly lower than historical rates. Based on these results, we believe Zscaler has been affected by the macro headwinds, including prolonged deal cycles and market weakness in Europe. During the quarter, Zscaler, announced membership in Joint Cyber Defense Collaborative (JCDC) which will continue to expand the company's relationship with the federal government. Through this relationship, Zsacler's research team will have the opportunity to share insights and expertise with the JCDC based on Zscaler's massive zero trust network. Cybersecurity has remained the number one IT priority and a top Board level issue, underscoring the need for integrated solutions to sophisticated cybersecurity challenges, for which Zscaler is best-in-class.

	TOP FIVE DETRACTORS		
Security Name	**Ending Weight (%)**	**Total Return (%)**	**Contribution to Relative Return (bps)**
Atlassian	1.20	-38.90	-105
Zscaler	2.01	-31.92	-81
Viavi Solutions	2.05	-19.46	-67
AppLovin	0.71	-45.97	-58
Bill.com	1.91	-17.69	-52

KEY TRADES

- **Jack Henry & Associates (Buy)** – During the quarter, we added Jack Henry & Associates Inc., a technology company engaged in the provision of technology solutions and payment processing services primarily for financial services organizations, to the portfolio. Jack Henry provides commercial banks and credit unions with core operating systems, as well as on-premises and private cloud delivery environments with identical functionality. We believe that Jack Henry is poised to benefit from the accelerated digital transformation of banking services, with many banks set to maintain if not increase investment in digital infrastructure. The business now offers over 300 services to more than 7,800 customers and has earned a reputation for providing cutting-edge solutions together with excellent customer service. Additionally, we believe that Jack Henry is uniquely positioned to handle a softer macro environment as over 90% of revenues are recurring, and with long-term contracts and significant switching costs, customer retention rate is high.

- **NXP Semiconductors (Sell)** – During the quarter, we exited our position in NXP Semiconductors NV, a Dutch semiconductor designer and manufacturer. Although the stock performed well for us during the year, we have exited the position to manage our semiconductor auto-end market exposure more carefully in anticipation of further estimates contraction. Moreover, we anticipate that NXP Semi may face declining revenue growth as consumer end markets (e.g. smartphones) continue to face diminishing demand. The capital generated through this exit has been reallocated into opportunities with a better risk/reward profile.

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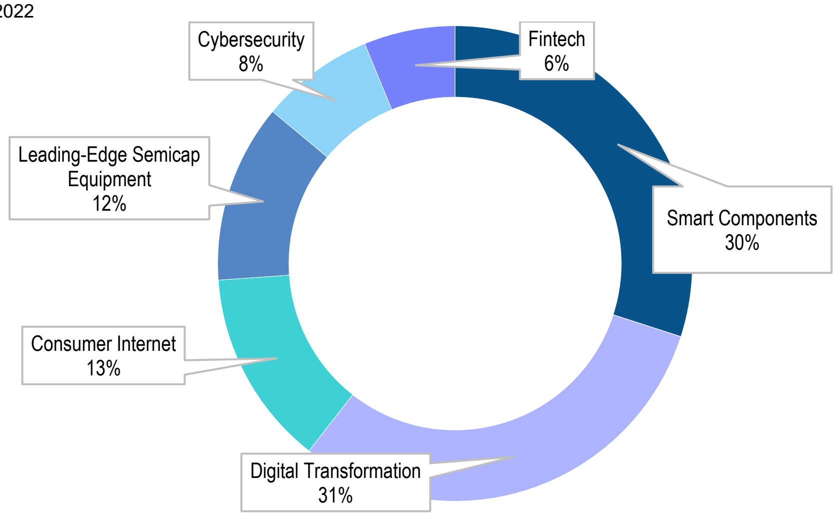
PORTFOLIO POSITIONING

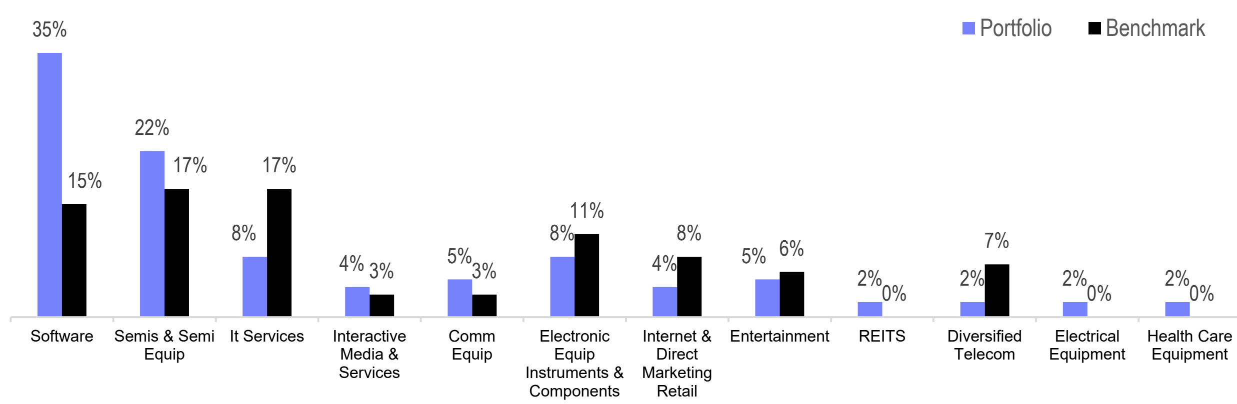
POSITIONING BY KEY AREA

As of 31-Dec-2022



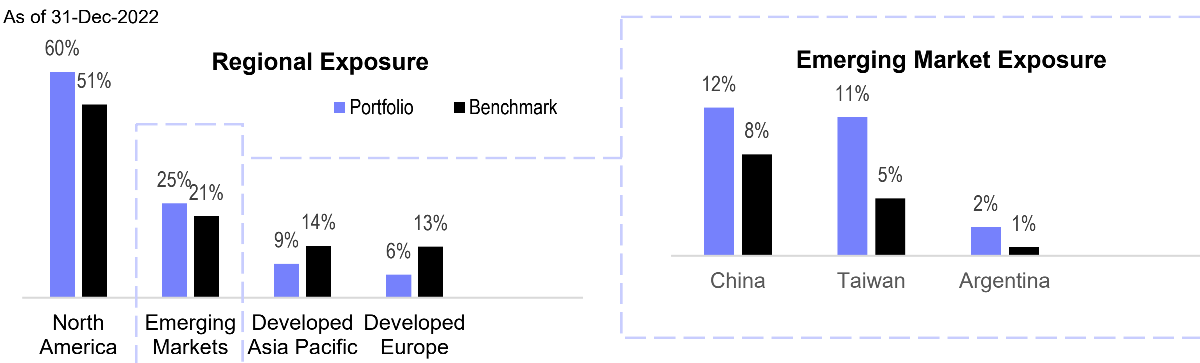
POSITIONING BY INDUSTRY

As of 31-Dec-2022



POSITIONING BY REGION

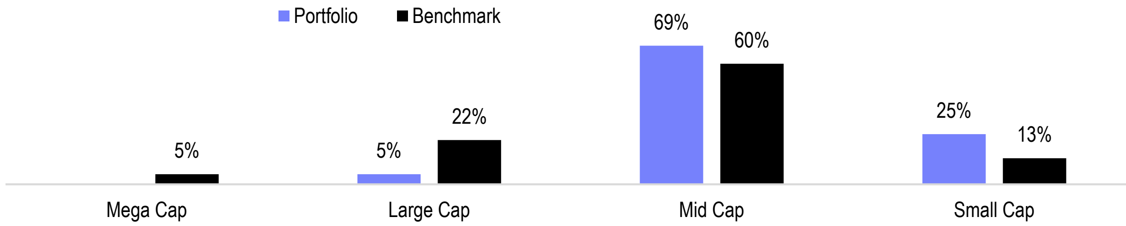
As of 31-Dec-2022



Past performance does not predict future returns and does not guarantee future results, which may vary. Portfolio holdings and/or allocations shown above are as of the date indicated and may not be representative of future investments. The holdings and/or allocations shown may not represent all of the portfolio's investments. Future investments may or may not be profitable.

POSITIONING BY MARKET CAP

As of 31-Dec-2022



INVESTMENT OUTLOOK

Our investment process is grounded in the belief that going forward, the world is going to look fundamentally different from the past. We take a bottom-up approach to investing based on fundamental research. We maintain a strong valuation discipline and a long-term focus, particularly compared to many tech investors.

- Looking ahead we believe technology stocks can outperform in an inflationary environment given that 1) tech-enabled innovation helps offset the impact of inflation; 2) innovative tech companies typically have pricing power; and 3) inflation encourages businesses to invest in technology to reduce costs and improve efficiencies.
- We believe investors now have an opportunity to invest in technology at a much more reasonable price, given that valuations of technology equities have fallen below their long-term average. Overall, we believe the pull-back in these companies' **valuations may offer long-term investors an attractive entry point**.
- Going forward we believe active management is even more important, as **increased volatility and uncertainty are likely to drive greater stock-level dispersion**. Being selective at the stock level and maintaining a balanced portfolio are critical as the market becomes more discerning. We are focused on investing **in profitable tech companies**, while also **maintaining balance** in our portfolios by complementing high growth stocks with more value-oriented tech ideas:

DISCLOSURES & APPENDIX

ROLLING RETURNS

Periods Ending 31-Dec-2022	Fund Net Returns (%)	Benchmark%)	Net Excess Return (bps)
January 2022 – December 2022	-47.21	-29.74	-1,746
January 2021 – December 2021	15.19	8.17	**+701**
February 2020 – December 2020	67.90	39.43	**+2,847**

Important Risk Considerations – Complete information on the risks of investing in the Fund are set out in the Fund's prospectus.

- Concentration risk this is a concentrated asset strategy that is likely to exhibit significantly greater fluctuations in asset values than a broad investment in a wide range of shares of companies.
- Counterparty risk a party that the Portfolio transacts with may fail to meet its obligations which could cause losses.
- Custodian risk insolvency, breaches of duty of care or misconduct of a custodian or subcustodian responsible for the safekeeping of the Portfolio's assets can result in loss to the Portfolio.
- Derivatives risk derivative instruments are highly sensitive to changes in the value of the underlying asset that they are based on. Certain derivatives may result in losses greater than the amount originally invested.
- Emerging markets risk emerging markets are likely to bear higher risk due to lower liquidity and possible lack of adequate financial, legal, social, political and economic structures, protection and stability as well as uncertain tax positions.
- Exchange rate risk changes in exchange rates may reduce or increase the returns an investor might expect to receive independent of the performance of such assets. If applicable, investment techniques used to attempt to reduce the risk of currency movements (hedging), may not be effective. Hedging also involves additional risks associated with derivatives.
- Liquidity risk the Portfolio may not always find another party willing to purchase an asset that the Portfolio wants to sell which could impact the Portfolio's ability to meet redemption requests on demand.
- Market risk the value of assets in the Portfolio is typically dictated by a number of factors, including the confidence levels of the market in which they are traded.
- Operational risk material losses to the Portfolio may arise as a result of human error, system and/or process failures, inadequate procedures or controls.
- Stock Connect is a new trading programme and the relevant regulations are untested and subject to change. Investments through the Shanghai-Hong Kong Stock Connect are subject to additional risks, including amongst others, quota limitations, restrictions on selling imposed by frontend monitoring, ownership of securities held on Stock Connect applicable to certain rules, participation in corporate actions and shareholders' meetings, non-protection by any investor compensation scheme, differences in trading day, operational risk, recalling of eligible stocks and trading restrictions, trading costs (including tax), local market rules, foreign shareholding restrictions and disclosure obligations, clearing, settlement and custody risk, currency risk and default risk.

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