

Investment Manager's Report



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Market Review

As discussed in our last Annual Report, we believe 2022 is best understood as the year 'risk was repriced' as central banks moved forcefully to rein in the economy, defend their credibility and prevent inflation expectations becoming unanchored. Proving anything but 'transitory', inflation continued to surprise to the upside taking global risk-free rates with it. In the US, consumer price inflation (CPI) averaged 8.0% during the calendar year, while the +9.1% reading in June was the largest year-on-year (y/y) monthly gain since 1981. The inflation shock was hardly unique to the US, with soaring energy and food prices, labour markets with more jobs than available workers and the release of pent-up demand combining to create the most inflationary backdrop globally for 40 years. For the full year, global inflation averaged 8.8% compared to pre-pandemic levels of around 3.5%.

As a result of this persistent inflation, 2022 was also a year of unprecedented interest rate rises, after an oddly slow start by central banks. In the US, the Federal Reserve (Fed; the US central bank) embarked on the steepest set of rate hikes in 40 years as rates were raised by 450 basis points (bps), including four 75bps hikes, in addition to the resumption of quantitative tightening (QT) whereby the Fed reduces its monetary reserves to 'tighten' its balance sheet. Futures markets at the start of 2022 had priced in expectations for Fed Funds (the key benchmark rate targeted by the Fed) to be at c1% by June 2023; by year end, this figure had risen to c5%. In Europe, the decade-long experiment with negative interest rates ended as the European Central Bank (ECB) raised rates by 250bps despite a high likelihood of recession. Most other major markets experienced tightening in excess of 200bps.

Sharply higher risk-free rates weighed heavily on asset prices, not least bonds which experienced their worst calendar year returns since at least the 1970s, the

Bloomberg US Aggregate Float-Adjusted Index losing 13.1%. This theme was painfully echoed in equity markets – the longer the duration, the worse the return. Ten-year US Treasuries suffered their worst annual performance since 1788 while record government bond losses were recorded in Japan, Europe, and the UK with drawdowns of 16.2%, 22% and c32% respectively. Having stood at \$10trn in January 2022, the global stock of negative-yielding bonds had fallen to essentially zero by calendar year end.

Higher sovereign yields weighed heavily on global equities, which also had to contend with elevated recession risk and negative earnings revisions. During the calendar year, 2yr-10yr Treasury yields fell to their most negative spread (where 2-year yields are higher than 10-year yields) in more than 40 years. Aggregate earnings estimates for companies in the S&P 500 Index in 2023 fell from \$245 to around \$230, while 2024 forecasts fell to c\$250, essentially losing a year of growth. As measured by the MSCI All-Country World Index (ACWI), global equities fell by -18.4%, in dollar terms, their worst showing since 2008. The S&P 500 Index (-19.4%) also posted its biggest fall since 2008 and its seventh worst year since 1926. The unusual correlation between bond and equity markets, courtesy of inflation, meant that 2022 will probably be remembered for being the first year that both the S&P 500 (equities) and 10-year US Treasuries (bonds) each registered losses of more than 10% on a total return basis. It was also the worst year for combined total returns of stocks and bonds since 1982.

A bad year for US equities proved a calamity for growth stocks which suffered their worst year compared to value stocks since 2000. Helped by energy's record year (+59%) versus the broader market, the Morningstar US Value Index fell just c1% while the Morningstar US Growth Index plunged by c37%.

Equities started strongly in 2023 as extreme pessimism and bearish positioning were challenged by disinflationary data, weaker energy prices and sharply lower real rates, as well as a better than feared Q4 company earnings season and a momentum / short squeeze. European equities and 60/40 portfolios recorded their best start to a year since at least 1987, while the tech-heavy NASDAQ Composite Index enjoyed its strongest year-to-date performance since 2001.

However, sentiment turned more negative in February as a slew of strong economic data for January challenged the excitement that the interest rate tightening cycle was largely complete. Investment grade global bond markets gave back their year-to-date gains, while corresponding equity market weakness has seen US indices either approach or break 50-day moving averages as positioning and sentiment tailwinds came to an end and stocks began to fall on bad news or weak earnings reports.

The collapse of Signature Bank and then Silicon Valley Bank (SVB) in March provided the most significant casualties of aggressive Fed tightening. In order to prevent contagion, the US Treasury, Federal Reserve and Federal Deposit Insurance Corporation (FDIC) announced that all deposits of SVB and Signature Bank would be insured, solving the immediate risk to deposit holders, and helping to stem rapid withdrawals which totalled \$42bn in just four hours at peak. However, concerns remained that these bank failures were emblematic of wider issues in the banking sector, prompting extreme bond volatility and a 'flight to safety' with US 2-year yields falling by 130bps in just eight trading days. Credit Suisse fell soon afterwards, when actions by the Swiss central bank failed to stem client outflows and counterparty de-risking. UBS Group agreed to buy the 166-year-old lender for 3bn Swiss francs (40% of its market value) in a historic government-brokered deal aimed at containing the crisis.

Technology Review

In addition to the pressures felt by the broader market, technology stocks also had to contend with the further unwinding of perceived 'Covid winners' which weighed on the sector's relative growth and its companies' valuations. However, marked outperformance by the sector giants during early 2023 left the technology sector (represented by the Dow Jones Global Technology Index) modestly ahead of the broader market (MSCI ACWI) for our full fiscal year to 30 April 2023, the Dow Jones Global Technology Index returning +2.7% and the MSCI ACWI +2.1% respectively, both in sterling terms.

However, overall index returns contrasted with those enjoyed by the average stock, especially during 2022,

when just 30% of technology stocks outperformed. For the 2022 calendar year (two-thirds of which fell within our past fiscal year), the Dow Jones Industrial Average (DJIA) outpaced the NASDAQ Composite Index by more than 2,400bps, the greatest divergence between the two since 2000. During this period, value significantly outperformed, outpacing the most expensive quintile of technology stocks by 35% in 2022. Perceived defensive businesses such as Hewlett Packard Enterprise (+17%), IBM (+24%) and Oracle (+7%) sidestepped the massive de-rating of growth stocks that all but wiped out the EV/sales valuation premium normally enjoyed by next-generation software stocks over legacy incumbents, making it another challenging year for growth-oriented technology investors, us included.

As in 2021, the greatest weakness was reserved for the longest duration assets with limited valuation support. Tesla fell an incredible 65% during 2022, commensurate with the decline experienced by MSCI Ukraine and Bitcoin, revealing extreme cross-correlation. Weakness in category leaders like Tesla presaged a collapse in 'second liners' such as would-be electric vehicle (EV) makers Rivian (-82%) and Lucid (-82%). The ARK Innovation fund fell a further 63% in 2022 after declining 23% in 2021. Thankfully – and something we have highlighted for the past two years – the most pain was felt beyond listed equities as bubbles in cryptocurrency, non-fungible tokens (NFTs) and Special Purpose Acquisition Companies (SPACs) were destroyed. Cryptocurrencies plunged in 2022, led by Solana (-94%), Cardano (-81%) and Ethereum (-68%) leading to many industry bankruptcies before engulfing FTX and Sam Bankman-Fried. PCTT does not invest in either SPACs or cryptocurrencies.

Thankfully the technology sector's fortunes reversed with the arrival of the new calendar year, covering the final four months of our fiscal year, during which our benchmark advanced +16.9% as compared to the MSCI ACWI's +4.7% gain. This was driven by better-than-expected macroeconomic data which prompted optimism around e-commerce and digital advertising growth against low expectations, while Artificial Intelligence ("AI") provided a new growth outlet to many semiconductor companies given the calculation (compute)-intensive nature of large language model (LLM – see more below) training and inference. However, this period also saw extraordinary outperformance of large-cap companies, as measured by the Russell 1000 Technology Index, which delivered +22% while small-caps as measured by the Russell 2000 Technology Index, fell 1.9%, both in sterling terms. Mega-cap technology stock performance has been even more pronounced, benefitting from a 'flight to quality' amid the

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collapse of SVB, money flowing from the financials and energy sectors and excitement about and desire for AI exposure.

At the technology subsector level, AI enthusiasm proved an important driver for semiconductors, the Philadelphia Stock Exchange Semiconductor Index (SOX) returning +4.2%. This was impressive given weakness in other end markets including smartphones and PCs. Earlier widespread semiconductor shortages and price increases scared customers who then scrambled to modify procurement policies to secure supply at the expense of inventory discipline, resulting in a severe inventory correction. Auto and industrial markets were more stable and datacentre spending remained relatively resilient as the large cloud providers continue to invest in anticipation of a compute-intensive AI future. These trends, together with further evidence of 'semiconductor sovereignty' (epitomised by the \$280bn CHIPS and Science Act) saw wafer fabrication equipment (WFE) spending surpass \$100bn for the first time.

Despite enthusiasm about AI, there was a significant slowdown in cloud revenue growth as customers optimised spend following the pandemic-induced acceleration. Aggregate cloud revenue growth slowed by 400-500bps per quarter from +36% in Q2'22 and +31% in Q3 before falling to +26% and +21% in Q4 and Q1 respectively. This was a disappointment despite the public cloud's vast scale at >\$170bn annualised revenue run rate.

The slowdown in cloud revenues reflected a broader slowdown within software, especially at Software as a Service (SaaS) companies. During the year, many software companies highlighted greater deal scrutiny, longer sales cycles, deal compression and in later months found it more difficult to expand seat counts as customers retrenched. While the Bloomberg Americas Software Index returned 4%, this largely reflected strong returns from legacy players with limited growth profiles but generally strong pricing power and undemanding valuation multiples. Microsoft also delivered strong returns (+11.8%) as Azure continued to grow well and customers consolidated spend on the largest platforms. Conversely, diminished risk appetite and a higher interest rate environment presaged a material valuation reset in the higher growth parts of the sector which saw the Goldman Sachs Expensive Software basket return -27%.

In the internet sector, echoes of the pandemic period continued to impact results, from still-slipping gross merchandise value (GMV) growth at many e-commerce companies, inventory issues at retailers and an ongoing

travel and entertainment spending boom, as consumer spending continued to shift from goods to services. The NASDAQ Internet Index returned +1.0% during the fiscal year with a material divergence between mega-cap and smaller-cap constituents.

Portfolio Performance

The Company underperformed its benchmark with the net asset value (NAV) per share falling -2.8% during the fiscal year versus an increase of 2.9% for the Dow Jones Global Technology Index. The Company's share price fell by -4.9%, reflecting the additional impact of the discount widening from 11.5% to 13.4% during the period. We continue to monitor the discount and the Company bought back 6.07 million shares during the fiscal year, at an average discount of 12% to NAV.

The greatest headwind to the Company's relative performance was the dominance of large-cap technology stocks which we are structurally underweight. The Russell 1000 Technology Index (large cap) returned +5.5%, while the small-cap Russell 2000 Technology Index declined -13.8%, in sterling terms, with divergence becoming more accentuated into the end of the fiscal year following the collapse of SVB. Mega-cap outperformance was even more striking as Goldman Sachs' equal-weighted index of the six largest technology stocks returned +10.2% during the fiscal year and +16.3% since the end of February 2023. Within the growth part of the technology market, the divergence in performance was even more stark. The Russell 1000 Growth Technology Index returned +6.3% while the Russell 2000 Growth Technology Index returned -14.4% during the fiscal year. Unsurprisingly, mega-cap technology companies were responsible for some of the largest individual detractors to the Company's relative performance versus the benchmark. This included large absolute but relative underweight positions in Meta Platforms, Microsoft and Apple. Underweight positions in the largest five index names were responsible for a little more than a fifth of underperformance, with a larger portion of underperformance due to compression of next generation valuations.

During the latter half of 2022 we looked to cautiously rebuild the Company's exposure to next-generation software companies following significant valuation compression. This proved premature and was responsible for several of our largest detractors that included CrowdStrike (-40%), CloudFlare (-45%), Atlassian (-34%) and GitLab (-37%). Software proved our biggest detractor at the subsector level as a period of extreme multiple derating was followed by softer 2023 guidance as growth slowed and customers looked to optimise their cloud and software spending post-Covid. Less expensive software

companies fared little better as our positions in Elastic (-25%), Five9 (-41%), CyberArk (-21%) and Tenable (-33%) all contributed negatively to relative performance. There were also a number of genuine disappointments which impacted performance despite their modest position sizes, including Snap (-69%), Bill.com (-55%), Square (-39%) and Kornit Digital (-72%).

In terms of positives, our growth semiconductor positions made a strong positive contribution given ongoing strength in data centre demand and enthusiasm around AI. This included Lattice Semiconductor (+66%), Monolithic Power Systems (+18%), eMemory Technology (+36%), Advanced Micro Devices (+5%) and the impact of our zero-weight position in Intel (-29%), which made up c1% of our benchmark. Leading networking company Arista Networks (+39%) also benefitted from robust hyperscale data centre spending. Strong automotive demand and an inflection in electronic vehicle (“EV”) adoption helped power semiconductor holdings Infineon Technologies (+26%) and ON Semiconductor (+38%). Semiconductor capital equipment players KLA Tencor (+21%) and Disco (+40%) also delivered solid returns.

Given the weak performance of most major technology subsectors (especially beyond the largest companies), a number of positive contributors to our relative performance came from peripheral areas including public sector technology, MedTech and FinTech. They included Axon Enterprise (+88%), Intuitive Surgical (+26%), Dexcom (+19%) and Wise (+39%).

We are never happy when we underperform our benchmark, even during periods when growth stocks are deeply out of favour. However, we are heartened by the fact that according to Lipper data, the performance of the Company versus the broader technology peer group remains first or second quartile over almost every period which suggests that the challenge posed by a highly concentrated benchmark firing on most cylinders is being widely felt.

Market Outlook

Last year we observed how risk was being repriced as the range of potential macroeconomic outcomes had become unusually wide. Valuations were elevated, earnings numbers at risk and early hopes that inflation would subside proved sadly complacent. Twelve months and 350bps of US rate hikes later, the range of potential outcomes appears narrower. Tightening has weighed on growth expectations: in its May update, the IMF forecast global growth of 2.8% in 2023, a moderation from 3.4%

in 2022, and c10bps lower than it estimated in January. The slowdown continues to reflect sharply higher central bank rates necessary to combat inflation as well as the conflict in Ukraine. While growth may be bottoming out (aided by lower energy prices, robust private consumption, and ongoing fiscal support), recent turmoil in the financial sector following the collapse of several US regional banks is a reminder that recovery is unlikely to be straightforward.

Latest World Economic Outlook Growth Projections

(Real GDP, annual percent change)	PROJECTIONS		
	2022	2023	2024
World Output	3.4	2.8	3.0
Advanced Economies	2.7	1.3	1.4
United States	2.1	1.6	1.1
Euro Area	3.5	0.8	1.4
Germany	1.8	-0.1	1.1
France	2.6	0.7	1.3
Italy	3.7	0.7	0.8
Spain	5.5	1.5	2.0
Japan	1.1	1.3	1.0
United Kingdom	4.0	-0.3	1.0
Canada	3.4	1.5	1.5
Other Advanced Economies	2.6	1.8	2.2
Emerging Market and Developing Economies	4.0	3.9	4.2
Emerging and Developing Asia	4.4	5.3	5.1
China	3.0	5.2	4.5
India	6.8	5.9	6.3
Emerging and Developing Europe	0.8	1.2	2.5
Russia	-2.1	0.7	1.3
Latin America and the Caribbean	4.0	1.6	2.2
Brazil	2.9	0.9	1.5
Mexico	3.1	1.8	1.6
Middle East and Central Asia	5.3	2.9	3.5
Saudi Arabia	8.7	3.1	3.1
Sub-Saharan Africa	3.9	3.6	4.2
Nigeria	3.3	3.2	3.0
South Africa	2.0	0.1	1.8
Memorandum			
Emerging Market and Middle-Income Economies	3.9	3.9	4.0
Low-Income Developing Countries	5.0	4.7	5.4

Source: IMF, *World Economic Outlook*, April 2023

Note: For India, data and forecasts are presented on a fiscal year basis, with FY 2022/2023 (starting in April 2022) shown in the 2022 column. India's growth projections are 5.4 percent in 2023 and 6.3 percent in 2024 based on calendar year.

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The end of China's zero-Covid policy has already seen **emerging markets** accelerate, led by China and India which are forecast to grow 5.2% and 5.9% respectively this year. In contrast, growth in **advanced economies** is expected to slow to just 1.3% (2022: 2.7%). Risks to this outlook appear skewed to the downside while inflation, expected to fall to 5.6% this year and 3.7% in 2024, is likely to continue to dictate the tenor of monetary policy.

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The good news for the market outlook is that **most of the world's major central banks appear substantially through their rate tightening cycles**. At the beginning of 2022, Fed Funds were near zero with futures markets pricing in c70bps of rate hikes. Ten-year US Treasury yields were 1.5% while real rates were negative. A little more than a year later and following 500bps of rate hikes, the **Fed had begun to signal** that the current rate-tightening cycle might be over. However, recent central bank rhetoric and/or action has become incrementally hawkish, dampening earlier hopes of a more benign interest rate environment.

With the Fed remaining 'data dependent', we are hopeful that rate expectations will moderate given our view that **peak inflation is behind us**. At the February Fed press conference, Fed Chair Jerome Powell unexpectedly declared it was "most welcome to be able to say that we are now in disinflation". While he offered many caveats, Powell mentioned disinflation 15 times during the press conference. While subsequent data has been mixed; headline inflation almost certainly peaked last summer. Others also appear to be past peak inflation with c84% of countries expected to have lower headline CPI in 2023 than in 2022. A key contributor to headline disinflation has been sharply lower energy prices, as well as falling goods prices as supply bottlenecks improve. Without question, the faster-than-expected adjustment in commodity prices to the shock from Russia's invasion of Ukraine represents the most constructive market development during the past year. In Dollar terms, crude oil has fallen by c.40% since its June highs while natural gas prices (having risen to 18x their pre-crisis level) have fallen precipitously, although they remain significantly higher than before Russia began preparing to invade Ukraine. The combination of a fortuitously warm winter, an impasse in Ukraine and conservation measures recently saw EU consumption of natural gas fall 25% below the 2017-21 average.

Although both core and service inflation remain uncomfortably high, policymakers will likely be encouraged by falling headline prices that may help reduce wage pressure by feeding into lower wage demands that are typically informed by headline rates. Inflation expectations also remain well-anchored, with market expectations of US inflation 5-10 years out still around 2.5%, less than half the current level. Policymakers may also regard recent bank failures as evidence that the long and variable lag associated with significant monetary tightening is beginning to show up, with US regional bank turmoil acting like a further rate

hike transmitted through the credit creation channel.

According to the ECB, the negative impact on inflation will increase from 0.2% in 2022 to 1.2% this year before rising to 1.8% in 2024. Likewise, excess savings, which have acted as a buffer for consumption, have also been significantly depleted. In the US, an estimated \$1.6trn of the \$2.5trn in Covid-related stimulus savings have been spent while the personal saving rate is at its lowest in more than 60 years (except for July 2005). These factors may end up proving Powell right on disinflation, stock returns have been strong following a peak in inflation as long as a severe recession is avoided. Since 1948, the S&P 500 has averaged a 59.2% price gain five years post-peak inflation, including the negative 2008 and 1973-74 experiences.

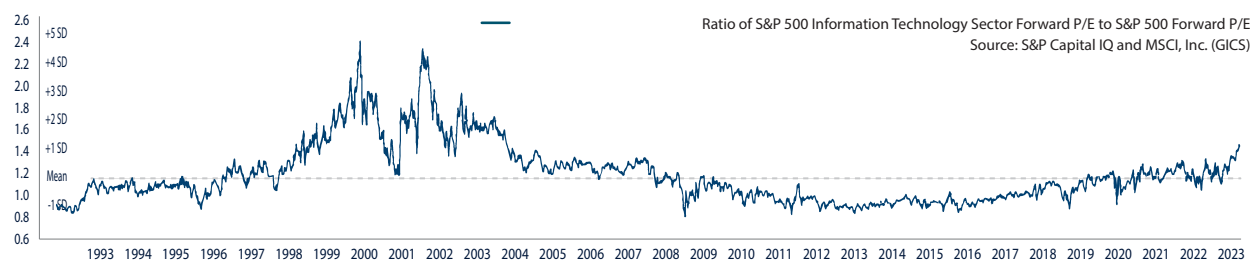
While we do not anticipate a severe downturn, US recession risk remains elevated as indicated by the spread between two-year and 10-year Treasury yields. However, this remains at odds with a US economy that, despite record monetary tightening, still grew 1.1% y/y during Q1, supported by an incredibly robust labour market, sharply lower energy prices and "remarkably resilient" consumer spending. While we expect the backdrop to remain choppy, first-quarter reporting season has been better-than-expected as 54% of S&P 500 firms have beaten consensus earnings expectations by more than one standard deviation of analyst estimates versus a historical average of 46%, according to Goldman Sachs. The downward slope of earnings per share (EPS) revisions has also continued to improve, which could suggest the steepest of the estimate cuts are behind us. This apparent contradiction is in part explained by the fact that GDP is measured in real terms while earnings estimates are nominal. As such, inflation – which has been supportive for (nominal) corporate revenues – continues to represent a greater risk to valuations (via a higher discount rate/lower multiple) than to corporate earnings, although cost pressures have seen S&P net margins slip to 11.2% in Q4'22 from 12.4% in Q4'21.

Against a more persistent inflationary backdrop and a good start for markets this calendar year, **valuations appear relatively full**, with the S&P 500 trading at 18.8x forward earnings (2022: 19x). This leaves US stocks trading a little above both the five (18.6x) and 10-year (17.4x) averages. Having previously lent on past data that compares inflation to average PE ratios, history suggests there is further valuation downside (to c.15x PE) should inflation remain above 4%, and considerably more with inflation above 6% (c.11x). However, significantly lower valuation ranges may be more appropriate during periods

S&P 500 Info Tech Forward PE (1992 – Present)



Ratio of S&P 500 Info Tech Forward PE (1992 – Present)



Source: Ned Davis Research

where central banks are less able to curtail inflation (as with the 1970s' oil crisis) or when policymakers choose to de-emphasise it. For now, central banks remain highly credible and longer-term inflation expectations well-anchored. Inevitably, equities will have to contend with greater competition from bonds and cash than during the era of 'free money', when long-term rates averaged 2.3%. However, **over the medium term we can envisage many scenarios where equities outperform bonds but very few where the opposite is true.** That said, we remain cautious of assets that are illiquid, complex, or dependent on access to capital.

Upside risk will likely depend on the worst of inflation being behind us and recession being avoided. A Fed pause suggests that significantly tighter monetary policy has begun to bite. This is evident not just in the banking sector but also in waning consumer confidence, CEO sentiment, housing affordability and the availability of credit. However, should the Fed prove able to becalm the labour market without causing a major spike in unemployment, the most widely forecast recession in history might still be averted. While history suggests this is unlikely, there is little that is 'normal' about the current cycle – the Fed has tightened substantially over the past 15 months without any significant impact on the labour market while price inflation has declined. This unusual combination – coined 'immaculate disinflation' – offers

hope the Fed is able to recalibrate price expectations without causing an economic dislocation. With no post-1950 precedent, economists are naturally dismissive, but as Fed Governor Philip Jefferson, put it, "history is useful, but it can only tell us so much, particularly in situations without historical precedent". Supply-chain disruptions are improving, the labour participation rate is recovering, and Fed credibility is high. While 1970s throwbacks make good copy ("another winter of discontent"), the US became a net exporter of energy in 2019 and union membership in the US stands at a third of its 1960 peak. Even if the US cannot avoid a recession, it does not have to be a disaster, just as a loss does not have to be total. With investors said to be facing "the worst backdrop for equities in over 40 years", a mild recession may not prove too bitter a pill. Also, absent a recession, markets may have bottomed in October 2022.

If 'immaculate disinflation' seems fanciful, consider the post WWII period when a temporary malalignment of demand and supply saw CPI leap from 1.7% in February 1946 to a peak of 19.7% in March 1947, before plunging to zero in 1949 with no lasting impact on inflation expectations. Pent-up demand was part sated, part choked by a modest Fed-induced recession while supply recovered as factories retooled from armaments to consumer goods. If this sounds oddly familiar, consider how the rejection (or resignation) of 'victorious' pandemic

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leaders – Arden, Conte, Johnson, Merkel, Sturgeon, and Trump – is also reminiscent of Churchill and De Gaulle's post-war experiences.

Market Risks

Except for Covid (which has diminished further as a risk, thanks to a high level of immunity and lack of a new variant), many of the key challenges posed to equities are unchanged from last year. The principal risk faced by most risk assets is **inflation** with central banks focused on preventing relative price changes becoming entrenched. However, calibrating monetary policy to prevent "transitions from low to high inflation regimes" is extremely challenging. Thankfully, the Fed's preferred measure – the personal consumption expenditures (PCE) price index – has fallen back to 4.4%, from a high of 7% in June 2022. However, services inflation and wage growth remain at levels incompatible with central bank inflation targets. Services inflation will not be easy to resolve due to post-pandemic pent-up demand and the fact that it has averaged c3.3% growth per annum between 1982-2021. It will also be made more difficult by an extremely tight US labour market with unemployment recently at its lowest in over 50 years (3.4%) and only 0.6 unemployed people available for every job opening. Although a weaker economy should help, the market remains desynchronised with sectors such as healthcare and leisure still operating with fewer people than pre-Covid.

Should inflation fail to return to old ranges, policymakers may adopt much more restrictive policy or admit defeat and accept that the post-pandemic world is likely to experience persistent higher levels of inflation. This scenario envisages many of the same medium-term inflationary headwinds we discussed last year: greener but more expensive energy, deglobalisation and supply-chain fragmentation. These (and others, such as the loss of the peace dividend) may be incompatible with present inflation targets that are "too low for such a world and yet hard to revise given [the risk to] central bank credibility". However, we remain relatively sanguine about inflation given **potential productivity gains** that have yet to manifest themselves (especially related to AI) that could offset some of these potential inflationary headwinds. We are also encouraged by the fact that high and persistent US inflation is rare, especially outside war.

While the overarching need for central banks to remain credible means monetary policy will remain data dependent, the **risk of policy error** is magnified by the potential shift from a low to high inflation regime. The Fed will also wish to avoid a repeat of the 1962-66 cycle

when aggressive easing in late 1966 was followed by "a decade of engrained inflation". If so, rates might stay higher for longer, with the first rate cut arriving later than the typical 7-9 months after the last hike. As such, **recession risk** remains elevated; the economy might 'slow dance' into recession, as in 2000, or a 'no landing' scenario might force the Fed into inducing a recession to bring inflation down. If history is any guide, markets may retest lows if recession is not avoided. According to Ned Davis Research, the broader market takes a median of 5.3 months to reach its nadir following the official declaration of a recession by the National Bureau of Economic Research (NBER). Meanwhile the average recessionary bear market has seen the market fall by c33% over 17 months.

Recent financial sector stress has highlighted the **liquidity risk** associated with unwinding record monetary and fiscal pandemic stimulus. While we are hopeful that recent bank failures have been contained, they – together with the earlier cryptocurrency collapse and disfunction last year in the UK pension market – are salient reminders of the systemic risk posed by continued withdrawal of liquidity. Likewise, the **geopolitical risk** remains heightened too. While **Ukraine** no longer dominates the headlines, war remains a key determinant of the ongoing energy/cost of living crisis while continuing to pose myriad risks. Despite both sides threatening major new offensives, our base case assumes the current 'impasse' in Ukraine persists as neither side looks capable of winning the conflict nor acceding to peace terms this year. While there remains a very serious risk of escalation, the conflict has remained relatively well contained even as the rhetoric has flared up on occasion. For now, stalemate ahead of a 'frozen conflict' (as per Korea) rather than a negotiated peace, looks the most likely outcome. Beyond Ukraine, other key geopolitical risks include **US-Sino relations** with the downing of three Chinese spy balloons over US airspace earlier this year reminding us of the risk associated with rising nationalism in both countries. In the US, this has taken the form of economic policy designed to frustrate Chinese technological progress with recent export controls aimed at denying Chinese access to advanced semiconductors representing a notable escalation. While anti-China rhetoric is likely to remain heightened ahead of US presidential elections, we remain hopeful that further decoupling need not end in acrimonious divorce. However, industrial policy is clearly back in vogue, evidenced by greater subsidies, export restrictions and content requirements such as the Inflation Reduction Act, which collectively may unwind some of the benefits of post-war globalisation.

Finally, there are a number of **tail risks**. These include a new deadlier Covid variant, a faltering Chinese recovery or a particularly cold winter that might reignite energy prices. Iran also represents an elevated tail risk with a number of factors – domestic repression, nuclear advances, military support for Russia and a Netanyahu-led government in Israel – increasing the likelihood of confrontation this year.

Technology Outlook

Earnings outlook

Having only increased 0.5% in 2022, worldwide IT spending is expected to reach \$4.6trn this calendar year, representing an increase of 5.5%, in dollar terms. However, this relatively sanguine forecast captures recent dollar weakness; constant currency growth is likely to prove considerably weaker. For 2023, the technology sector is expected to deliver revenue and earnings growth of 1.4% and 0.8% respectively. Although this compares unfavourably with the market, which is forecast to grow revenues and earnings 2.4% and 1.1% respectively, the technology sector is expected to revert to more typical above-market growth in 2024 with revenues and earnings progress currently pegged at 8.7% and 16.3% y/y. Technology sector progress will likely be driven by macroeconomic conditions; net profit margins remain a key focus for earnings as they remain above long-term averages, despite having fallen back to 22.6% from 26% last year. After two years of strength, recent dollar weakness represents a potential tailwind for technology estimates given the sector's international exposure of 58% (the highest of any sector) versus 40% for the market.

Valuation

The forward price to earnings (P/E – comparing a company's share price to its annual net profits) of the technology sector continued to contract during the past year. A year ago, valuations had fallen back to 24x forward P/E, having earlier made cycle highs of c28x ahead of the Fed pivot in November 2021. Since then, valuations have continued to compress against a backdrop of higher risk-free rates and greater economic uncertainty, with technology stocks ending the year at c19x forward P/E. However, the calendar year to date surge in large-cap technology stocks (against a backdrop of falling estimates) has seen valuations recover to 27.1x at the time of writing, ahead of both five (22.4x) and 10-year (19.2x) averages. The premium enjoyed by the sector has also expanded during 2023 with technology stocks today trading at 1.4x the market multiple in excess of the post-bubble range of between 0.9-1.3x. While

current ebullience reflects understandable excitement around AI, the recent recovery in valuations may leave the sector vulnerable to near-term setbacks. However, downside risk associated with full valuations should be considered alongside actual progress made in AI, which we believe represents a key moment for the technology sector. It is also worth recalling that during the dot.com period, the technology sector traded well in excess of twice the market multiple.

No valuation premium for next-generation stocks

While aggregate sector valuations have fully recovered, **next-generation stocks**, particularly within software, have not. Last year we referenced that valuations were in "price discovery mode" but the correction proved far more dramatic than we anticipated. What began as an overdue reset has seen software valuations fall back to c.6.3x forward EV/sales having peaked at c.14.8x in late 2020. According to KeyBanc, this leaves them 25% below the trailing five year average (8.4x) and broadly in line with the ten-year average (6.6x). This has also recently left next-generation software stocks trading at a small discount to legacy ones on a forward EV/sales metric.

Software: Cloud vs. legacy valuations EV/trailing 12-month revenue multiples



Source: KeyBanc

Investment Manager's Report continued

What pandemic?

The current situation is highly unusual, reflecting a challenging investment backdrop as well post-pandemic 'demand normalisation' with many of the vestiges of the pandemic period being swept away. Reopening has not just challenged 'new' pandemic categories such as home fitness and telehealth; it has also hurt existing ones such as online dating and videogaming, while more durable segments such as e-commerce and payments have had to contend with decelerating demand and/or increased competition. In more mature markets, earlier working from home ('WFH')-related strength has been followed by exceptionally weak demand. This is most evident in the PC market where an extraordinary 2021 was followed by a dismal 2022 as units shipped declined by the most year-on-year since Gartner began tracking PC data. This dynamic has also played a part in slower cloud and associated software demand as customers moved to optimise their spending having earlier migrated aggressively to the cloud. The impact on cloud spending demonstrates the breadth of readjustment and why it has been so difficult to avoid the miasma of post-Covid demand normalisation.

Risk/reward much improved

We hope the largest part of any next-generation valuation reset is behind us. In the absence of a recession, it is highly likely we have already seen the valuation lows. While the absence of strategic M&A remains something of a headscratcher, we are encouraged by **private equity (PE) activity** that has picked up significantly, with Avalara, Coupa, Duck Creek and ForgeRock all being taken private in recent months. These take-private transactions were consummated between 6.9-8.9x Enterprise Value/ next 12 months sales – well in excess of where most software stocks trade today. As the recent (and competitive) bid for Software AG attests, we expect private equity to remain very active, providing software valuations with something of a floor. Private equity is said to have c\$2trn of 'dry powder' available while Thoma Bravo (an investor in more than 420 technology companies over two decades) raised \$32bn across PE funds last year. In January, founder Orlando Bravo revealed that despite the large fund raise, the selloff in software stocks meant the opportunity to buy assets was "many, many, many, many, many multiples of that".

Adopting a slower growth playbook

In the meantime, companies are borrowing from the so-called 'PE playbook' by recalibrating their businesses to

account for slower growth and earlier disruption-related exuberance. The pivot towards profitability is evident from widespread workforce reductions within the technology sector that have intensified during 2023, with activist investors such as Starboard helping drive the focus on greater cost discipline. Epitomised by restructuring at Salesforce (which announced a 10% headcount reduction and increased operating margin targets), the unwinding of erroneous extrapolation of pandemic-related demand has seen layoffs move from growth-challenged companies to high-flyers like Confluent and HubSpot. Cost-cutting initiatives have shown positive early results: the median software company operating margin has expanded by nine percentage points over the past three quarters, according to Goldman Sachs.

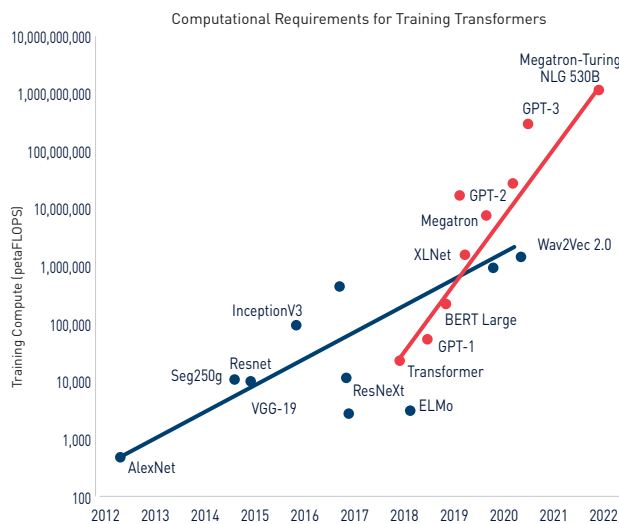
Nonetheless, revenue growth is slowing just as it did in the recessions of 1990, 2002 and 2009 as well as during the 2016 deflationary echo. While macroeconomics will likely dictate the magnitude of the current slowdown, the good news is the best companies should still grow, just as the median SaaS company grew 18% in 2009 while, in 2002, median maintenance/subscription revenue growth was 14%. Salesforce was still able to grow revenues 21% in 2009 – impressive given the prevailing macroeconomic conditions – and therein lies the even better news which is that **growth slowdowns should help us identify more than our fair share of next-cycle winners**. After all, there is nothing like an ordeal to test strength. In 2009, each of Baidu, Google, MercadoLibre, and Salesforce.com were able to grow through a financial crisis before becoming multi-baggers during the following cycle.

Artificial Intelligence

While the macroeconomic backdrop remains highly uncertain, Chief Information Officer (CIO) spending priorities still align well with many of our key themes such as digital transformation (software), cloud and cybersecurity. The portfolio also has several additional core themes including connectivity/5G, digital advertising/ e-commerce and EV/energy transition as well as secondary/emerging themes such as fintech/ payments. However – as the theme of this year's Annual Report attests – 2023 belongs to **Artificial Intelligence (AI)**. We have been excited about the potential of AI for many years, highlighting the remarkable progress the technology has made in narrow fields. This was led by Google's *DeepMind* acquisition which achieved 'superhuman' ability in games such as Go (2016) and Chess (2017) before solving one of the grand challenges in biology during 2021 when *AlphaFold* was able to predict 3D models of protein

structures described at the time as “the most important achievement in AI ever”.

That lasted until ChatGPT used a transformer model trained on 175Tb of text to generate human-like responses to seemingly any question. Able to take on different personas, write poems or programming code, even offer opinions, ChatGPT is already the first AI to “vially compete with humans”. **This is likely to prove a pivotal moment for AI** with Microsoft’s \$10bn investment in ChatGPT maker OpenAI best understood as one of the ‘opening shots’ in an **AI war** that has just commenced. We have long argued that the semiconductor industry looks well positioned, with McKinsey arguing this sector might capture as much as 40-50% of the value associated with AI. This view was seemingly supported following recent record-breaking July quarter guidance from chipmaker Nvidia that was more than 50% ahead of consensus driven by AI-related strength. On the earnings call, CEO Jensen Huang spoke to a \$1trn opportunity over ten years to replace CPU-based infrastructure with more efficient, accelerated computing based around GPU architectures as generative AI becomes the “primary workload of most of the world’s data centres”. Nvidia stock rose 24% on the day, despite having already gained 109% on a year-to-date basis prior to the report.



Source: <https://blogs.nvidia.com/blog/2022/03/25/what-is-a-transformer-model/>

Of course, there are myriad risks associated with AI, many of which are beyond the scope of this report. However, the fact that ChatGPT makes mistakes (so-called ‘hallucinations’) is not one of them; most disruptive technologies begin as ‘good enough’ and trading accuracy for speed worked wonders for the telegraph, Encyclopaedia Britannica, and the biro. Moral and legal questions posed by AI are more difficult to dismiss,

especially those regarding bias and the potential for it to “industrialise plagiarism”. While eventual regulation of AI seems inevitable, the industry would likely welcome the introduction of legislative guardrails. However, this will not be straightforward; rather than a restrictive set of regulations applied suddenly, we believe regulation may follow a ‘governance by accident’ approach that has underpinned the development of the airline industry; if aviation is any guide, it is possible that by reducing risk, regulation actually accelerates the adoption of AI, rather than stymies its progress.

As such, the focus on regulation – so soon after the advent of generative AI – might say more about investor fatigue around ‘technology disruption’ than it does about the risk regulation poses to the development of this nascent industry. This is understandable, following a period that has witnessed more than its fair share of investment hyperbole, much of which was catalysed by the pandemic. In contrast with blockchain and the metaverse – early stage technologies in search of a problem – **artificial intelligence might be “the most profound technology humanity is working on”**. From a historical perspective, generative AI could prove another key moment in human history when **codification and dissemination of knowledge is accelerated**. In the ancient world, these included the development of writing systems (such as cuneiform and hieroglyphics) around 3500-3000 BCE, as well as advanced mathematics and philosophy in Ancient Greece from the eight century BCE onwards. Libraries, historical record-keeping, and translation of ancient texts were other key developments in the codification and preservation of knowledge, aided by breakthroughs that enabled information to be stored (e.g., papyrus, paper), retrieved (e.g., cataloguing systems, encyclopaedia) and distributed (e.g., libraries, printing press). Advances in science, technology and communication during the Modern Era have “led to the codification of knowledge on an unprecedented scale” epitomised by the Internet which has facilitated knowledge sharing and democratised access to information in a manner that has changed the world.

Generative AI offers similar- if not greater - promise. Built using ‘foundation’ models which contain “expansive neural networks inspired by the billions of neurons connected in the human brain”, generative AI applications are able to process extremely large and varied sets of unstructured data and perform more than one task. This allows them to “augment human creativity, automate labour-intensive tasks and generate novel solutions to complex problems”. They can also understand natural language which means that generative AI could “change

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the anatomy of work" by automating activities that today account for as much as 60-70% of employees' time. However, in contrast with historic patterns of technology automation, disruption is expected to be disproportionately felt by knowledge workers. While Goldman Sachs estimate that more than 300m jobs could be at risk, we remain optimistic that humans will graduate to higher value work just as 60% of workers today are employed in occupations that did not exist in 1940. Furthermore, McKinsey forecast that generative AI could deliver \$2.6-4.4trn annually to global GDP driven by productivity gains that could be as high as 3.3% per annum when generative AI is combined with other technologies. This would be remarkable given current labour market tightness, ageing Western populations and below-average productivity growth achieved during the past twenty years.

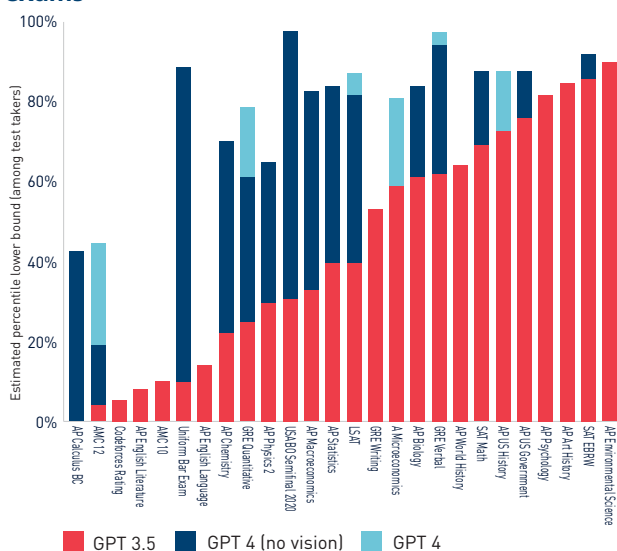
Artificial intelligence also has the potential to become a transformative 'general purpose technology' (GPT) which -like electricity, steel, and the internet - may "reshape economies, drive innovation and create new opportunities". If so, history suggests that bold, early predictions about AI may prove extremely conservative. Not just because humans struggle with non-linear change (an observation that has long informed our investment approach) but also because *as yet unknown technology improvements subsequently transform the opportunity set*. If early applications for steel were predictable (e.g., bridges, ships, rails), later and significantly larger market opportunities represented by skyscrapers, cars and home appliances could not be known in 1855 when Bessemer perfected his steelmaking process. The same was true for aviation when the jet engine (and other avionic developments) transformed the cost and safety profile of flight, resulting in passenger traffic growth compounding by more than 10% per year between 1950-1970 and helping travel and tourism become one of the world's largest sectors. More recently, the confluence of internet, cloud and smartphone has presaged widespread disruption and exponential change well beyond late 1990s predictions that were only able to peer into a near and incomplete future that was yet to feature Google, AWS, and iPhones. Today, the *app economy* is worth c.\$63trn, more than 60x times greater than the value of the handset market in 2007, the year that Apple introduced the iPhone.

The impact of generative AI is likely to be felt more rapidly than either the internet or the smartphone. In part, this reflects the role that both earlier pervasive technologies will play as AI-enablers with access to ChatGPT (and other natural language 'chat' interfaces)

only requiring an internet connection and a smartphone. These low barriers to adoption have already supported an **unprecedented rate** with ChatGPT taking just 2.5 months to reach 100m users, as compared to Instagram which took 2.5 years (in itself extraordinary). Another major difference between AI and prior technology shifts is the **astonishing speed of AI improvement**. This is most evident when comparing the capability of two OpenAI large language models (LLMs) – GPT-4 (the latest version) and the earlier GPT-3.5 (ChatGPT) released approximately a year apart. While GPT-3.5 was trained on 175bn parameters (akin to internal variables the model learns during its training phase), the newer GPT-4 may have been trained on as many as 170trn. In addition, GPT-4 also has a much larger context window – 25,000 words vs. c.3,000 for its predecessor – which means it is able to retain far more information from earlier conversations. Aside from its "mastery of natural language", GPT-4 "can solve novel and difficult tasks that span mathematics, coding, vision, medicine, law, psychology and more, without needing any special prompting". In all of these tasks, model performance is "strikingly close to human-level performance", evidenced by consistently high exam scores across a diverse range of disciplines (see chart).

The improvements in GPT-4 have been so remarkable that Microsoft recently posited in a whitepaper ('Sparks of artificial general intelligence ("AGI")') that the LLM "could reasonably be viewed as an early version of AGI system". The concept of AGI was popularised in the early 2000s to differentiate between 'narrow AI' being developed at the time and "broader notions of intelligence". Until recently, AGI remained a popular science fiction topic and long-term aspirational goal within AI. That is until the range and depth of GPT-4's capabilities "challenge(d) our understanding of learning and cognition" with the model said to "exhibit many traits of intelligence". Naysayers argue that large language models do not 'understand' concepts and are merely adept at 'improvising on the fly'. However, like Microsoft, we believe the question is moot. After all, one might ask "how much more there is to true understanding than 'on-the-fly' improvisation?".

GPT-4 Outperforms GPT-3.5 across multiple exams



Source: GPT3.5 vs 4 = Microsoft White Paper, 'Sparks of Artificial General Intelligence'

Technology Risks

As ever, there are multiple risks to our constructive medium-term view. Many of these relate to **macroeconomics**, particularly recession and inflation, that are covered elsewhere in this report. As previously highlighted, there remain downside risks to technology spending should CEO confidence meaningfully deteriorate. Similarly, **earnings estimates** are likely to remain subject to macroeconomic turbulence; while cost-cutting has ameliorated downward revisions to date, technology margins may be at risk should things worsen materially. Likewise, a weaker macroeconomic environment might see the current semiconductor downturn extend, resulting in delayed industry recovery and/or result in a disappointing recovery trajectory for **cloud spending** which would weigh on cloud-related sentiment.

Valuation is another key risk because the recent surge in technology stocks has seen aggregate sector valuations revisit their pandemic highs. While next-generation valuations have already been meaningfully reset, a **steeper yield curve** may delay any recovery in longer-duration valuations.

As in previous years, regulation remains a key risk too, although we are comforted by a divided Congress

(making sweeping legislation unlikely) and the fact that the largest US technology companies represent the vanguard in the emerging AI battleground with China. However, deteriorating **US-Sino relations** represent a more significant threat to supply chains, especially in semiconductors. For now, the Chinese appear able to work around US legislation, suggesting it is more for domestic consumption ahead of elections, but if this is the beginning of a new economic cold war, then Taiwan – responsible for producing c90% of leading-edge semiconductors – represents a critical fault line while a meaningful escalation of tensions could weigh materially on a large part of our portfolio.

Potential regulation could also stymie the explosive growth of Generative AI which has been a key driver of technology returns during 2023. Conversely, further excitement about Generative AI might result in large-cap technology stocks perceived as AI beneficiaries and safe havens continuing to 'crowd-out' small-cap companies. We must also acknowledge the risk posed to all companies: should it become a general purpose technology (GPT) as we suspect, history suggests there will be far more losers than winners from today's group of companies within and beyond the technology sector.

Concentration risk

In addition to market and sector-specific risks, it would be remiss of us not to remind our shareholders once again about the concentration risk both within the Company and the market-cap-weighted index around which we construct the portfolio. At the year end our three largest holdings – Apple, Microsoft, and Alphabet – represented c27% and c41.9% of our NAV and benchmark (Dow Jones Global Technology Index) respectively. Last year, when these three positions accounted for 29.3% of NAV and 40.7% our benchmark respectively, we argued that concentration risk was justified because they were unique, non-fungible assets that captured the zeitgeist of this technology cycle. Following another year of sustained outperformance from these stocks, as well as several other outsized benchmark positions including Nvidia, we are pleased to have retained large absolute positions in them all even if their dominance of our benchmark has meaningfully contributed to our relative underperformance.

We remain comfortable with the strategy of moving to materially underweight positions in the largest index constituents should we become concerned about their

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growth or return prospects, or should we find more attractive risk/reward profiles elsewhere in the market. However, this position is complicated by the fact that concentration today does not obviously reflect outlandish valuations as per the late 1990s; the top 10 positions in the benchmark recently accounted for c55% of constituent market capitalisation and an estimated 53% of net income in calendar year 2023. Likewise, Apple may have made headlines recently when its market-cap exceeded that of the Russell 2000 (small-cap) Index, but remarkably Apple also generates similar profits as those 2,000 companies combined. The emergence of AI also plays well into mega-caps given the significant scale (reach; data; cost) likely required to be competitive.

Unlike many of our competitors that are limited to a maximum 10% in any individual position, PCT is able to hold up to a full benchmark weight subject to a maximum limit of 15%. While this gives us more room for manoeuvre – and fewer excuses for underperformance – we rarely exceed 10% in individual stocks, and when we do, it is often via a smaller equity position held in combination with a slither of call options designed to ameliorate upside risk in exchange for a modest premium. Having been very clear with shareholders that we do not invest in certain types of stock (including private, value and those likely to require capital) perhaps this is a good opportunity to make it equally clear that we are unlikely to hold individual positions much above 10% even when they are as unique as Apple and Microsoft. If this sounds at odds with our 'benchmark-aware' approach, it is worth recalling that this approach has risk reduction at its core. It has helped us avoid hubris, appropriately size overweight positions while helping ensure the portfolio reflects the best the index has to offer. **However, benchmark concentration has begun to create a tension between managing absolute and relative risk.** As stewards of your capital as well as technology investors, we find it very difficult to argue we are reducing risk by making the portfolio ever more concentrated. While this may come at the expense of raw performance and greater relative variance, we believe a diversified portfolio of growth stocks and themes capable of outperformance, but also constructed to withstand investment setbacks will prove superior over the medium term, particularly on a risk-adjusted basis.

Conclusion

Market conditions in early 2023 lend support to a wide range of potential outcomes, both good and bad. Macroeconomics will likely continue to lead the market in the near term, although the primary debate has shifted somewhat to the timing and magnitude of a recession and its impact on revenue and earnings estimates, rather than the extent of the central bank response required to deal with inflation, as dominated last year. However, the relative performance of the technology sector – particularly after a strong run – may continue to take its cue from real rates – a good reminder that we are not out of the inflation woods yet, and the need to remain pragmatic (and highly liquid) in terms of portfolio positioning. While we typically avoid 'value' technology stocks, we do own companies able to pass on inflation to the consumer should it remain stubbornly high, even if this is not our base case.

There are two principal reasons for being more constructive on technology this year: more attractive risk/reward and the **rapid adoption of artificial intelligence**. Despite continued near-term macroeconomic uncertainty and the likelihood of further estimate cuts, the explosion of interest in AI has been a powerful reminder of why we remain so excited about our sector over the medium term. We also know that market narratives can change quickly should macroeconomic headwinds and/or exogenous risks subside. Furthermore, the risk/reward from current levels appears better: **next-generation valuations have returned to much more attractive levels**, as previously discussed. Before the recent move higher, growth internet valuations had reached multi-year lows, on an EV/NTM EBITDA basis, just as software growth-adjusted EV/sales multiples sat at 10-year lows. According to Morgan Stanley, at the beginning of 2023 80% of their software sector coverage was trading below 8.6x EV/forward sales - the median private equity takeout multiple since 2013. The semiconductor sector (SOX) had also meaningfully derated, by more than -40% from its recent highs at year end, against an average cycle decline of -26% over the past seven years. **Positioning has improved too**, although investor pessimism towards technology at the start of the calendar year has been ameliorated by its relative stability amid travails within US banking, combined with AI-related excitement.

The combination of better than expected first-quarter results and a 'flight to safety' (away from financials in favour of cash-generative mega-cap technology companies) has meant five technology stocks have driven almost two-thirds of the S&P 500's return year-to-date. An index made up of Apple, Amazon, Microsoft, Meta Platforms and Google has returned +31% versus the other 495 S&P 500 constituents' +3% return. For the calendar year, only 30% of S&P 500 companies have outperformed the market, a level not seen on a full calendar year basis since 1998 (28%) and 1999 (32%). Within technology, limited breadth is apparent by the remarkable year-to-date spread between large and small-cap technology performance (+26%) as well as the difference between the market-cap weighted NASDAQ 100 Index and an equally-weighted version of it, which at +11% is the widest spread seen over any 4.5 month period during the past 18 years.

While we expect the market to broaden, we cannot help but share the market's excitement about the AI opportunity which – at present – is most easily accessed via mega-cap stocks primarily within the semiconductor and cloud computing subsectors. After decades of unrealised hopes around artificial intelligence, we believe that generative AI is likely to prove the technology's so-called 'iPhone moment', the new user interface that sparks mass adoption. Other AI models will come, compete, and possibly surpass ChatGPT but it represents the first "hands-on introduction to how powerful modern AI has got". It has stunned consumers, investors, and companies alike; the risk and opportunity it poses to established market shares, consumer behaviour and existing profit pools has ignited a powerful wave of AI spending. Inevitably there will be technology casualties from AI disruption, while investors will have to navigate periods when narrative and fundamentals diverge. However, the "era of generative AI is just beginning" and our sector has front row seats for what is likely to be one of the most disruptive performances of our investment lifetimes.

Ben Rogoff & Ali Unwin

Polar Capital Technology Trust

18 July 2023



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