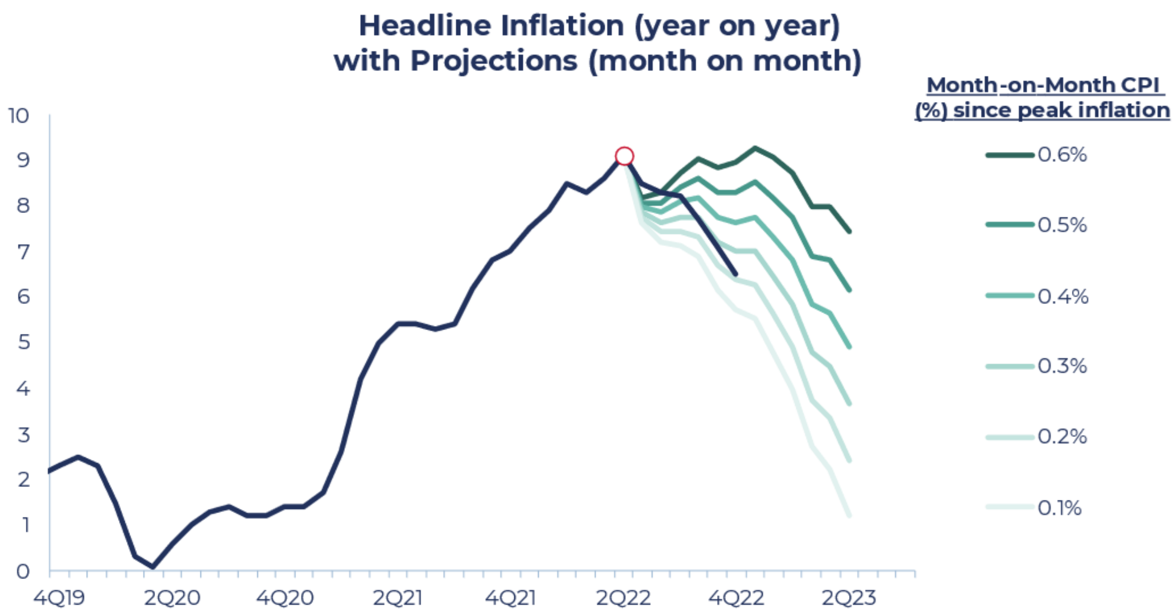
**Guinness Atkinson**
**Global Innovators Fund**
Managers Update – February 2023

**January in review:**

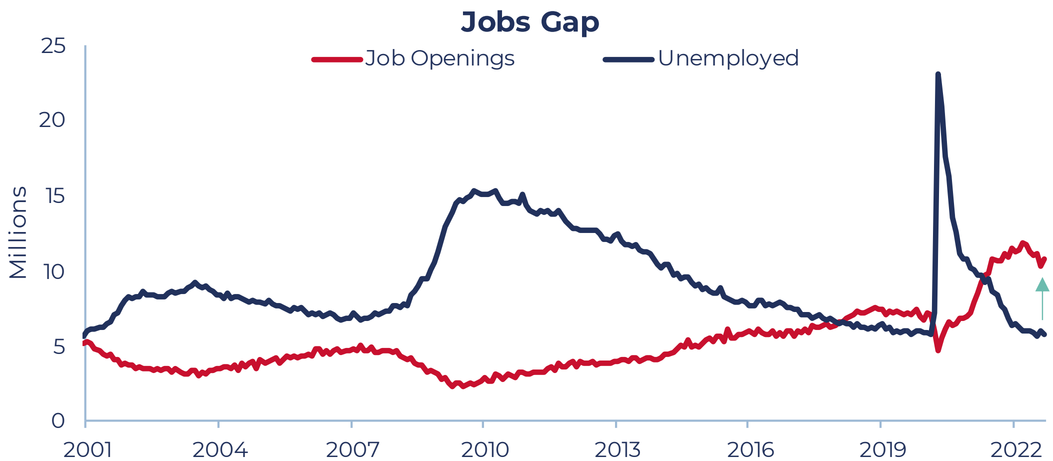
**Many of the key market concerns that drove equity markets downwards over 2022 were somewhat abated over the course of January.** Following the speedier-than-expected removal of the controversial 'Covid-Zero' policy in China, market expectations of a quick economic recovery drove equities +12% USD higher in the region. This also provided European equities with a boost due to the intertwinement of the two economies, with Europe accounting for 22% of Chinese imports (2Q21), and China accounting for 10% of European exports. Also buoyed by a warmer winter that saw gas storage reach 75% of capacity in January (35% during the same time last year), together these factors drove indicators of economic activity higher in the Eurozone, with the composite Purchasing Managers' Index (PMI) reaching 50.2 (49.3 Dec 22).

**US markets rallied off of renewed hope that the Federal Reserve can in fact achieve a 'soft landing', something that was all but ruled out just a few months ago.** Inflation fell from 7.1% to 6.5% in December, and wage pressures eased to 6.1% (average wage growth, Atlanta Fed) from 6.4% in November, following a peak of 6.7% in August. While the Fed remains hawkish in commentary, markets are betting on the idea that 'peak-rates' may already be imminent and can now see a potential pathway towards the Fed's target rate of 2%. The below graph takes the peak-rate and forecasts out over a 12-month period, with differing positive month-on-month Consumer Price Index (CPI) rates (held flat over a 12 month period). The graph suggests that headline CPI is 'on track' to dip-below 3% just 12 months after peak inflation. The latest month-on-month headline CPI print was -0.1%.



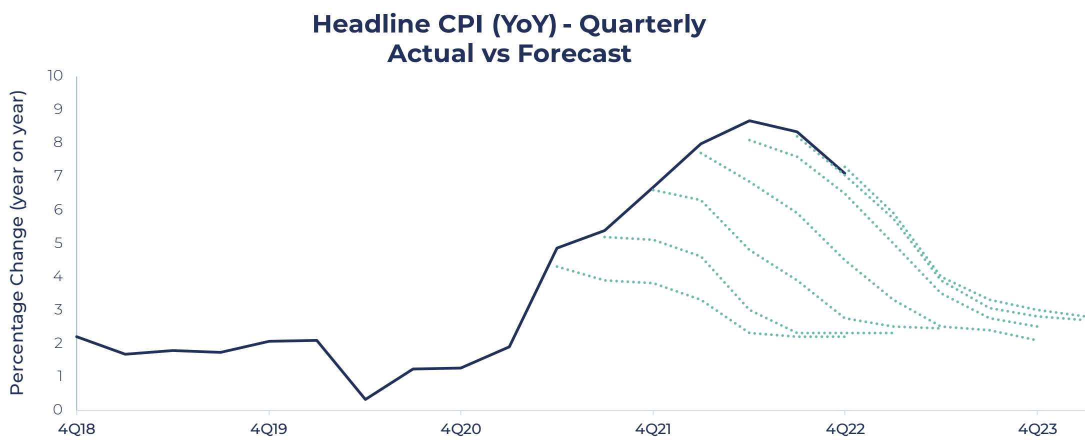

*Source: Bloomberg, Guinness Atkinson Asset Management*

**Despite positive developments, we remain cautious over the macro outlook.** In our view, the strength of the argument for a much improved macro-outlook is based on fragile evidence, and volatile data points. While we are not ruling out a continued positive run for equities, the developments over January are far from definitive. While wage growth may have slowed slightly, unemployment remains at record lows, the four month low in weekly jobless claims suggests a robust labor market, and the jobs gap actually increased over the month.




*Source: Bloomberg, Guinness Atkinson Asset Management*

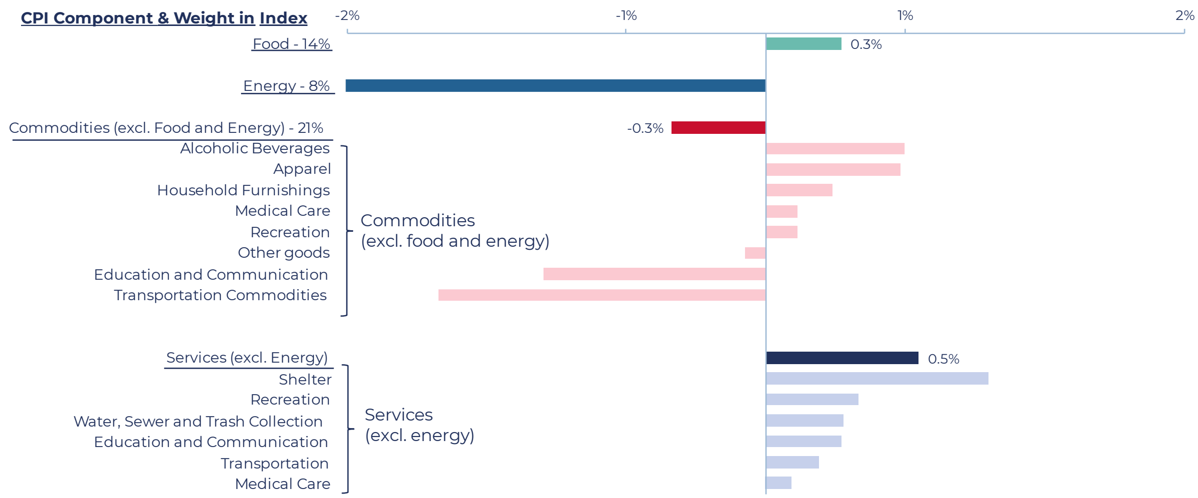
Market inflation expectations have been wrong before and have been more-wrong-than-right throughout much of the COVID induced inflationary period. Only recently have CPI forecasts started matching actual prints, and we are cognizant of the fact that this could very quickly reverse. For example, the re-opening of China could be a meaningful inflationary force.




*Source: Bloomberg, Guinness Atkinson Asset Management*

**It is also important to point out that inflation is being driven by 'Services', rather than 'Goods' – the former being traditionally more 'sticky' than the latter.** This could result in the rate of disinflation tapering, or even reversing, quicker than expected. It is also important to note that 'Goods' deflation is being driven by very few sources, namely Transportation and Education. In our view, it is certainly too early to state that inflation will 'behave' and remain predictable. It remains at levels significantly ahead of the 2% target, and the macro-environment remains volatile.

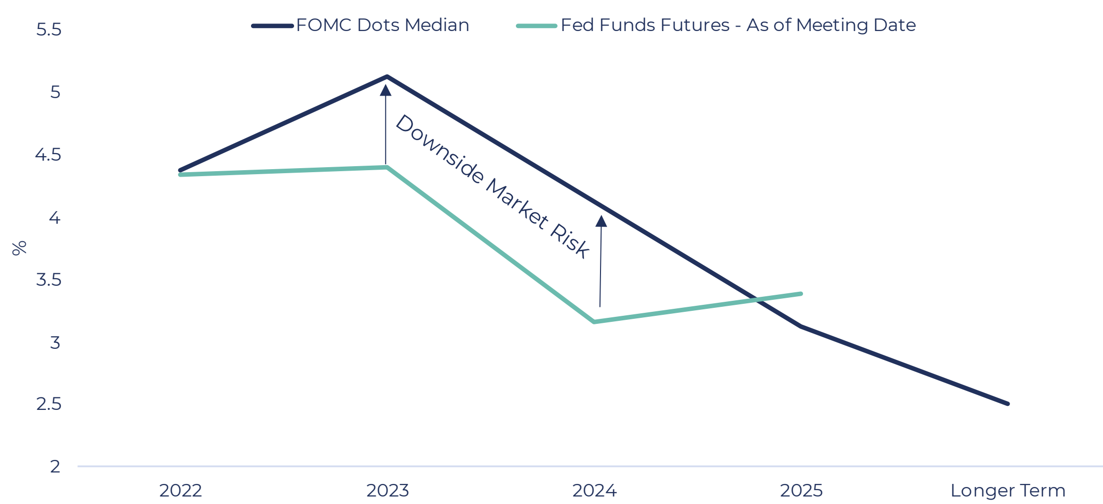
## Components of the Consumer Price Index (month on month)




*Source: Bloomberg, Guinness Atkinson Asset Management*

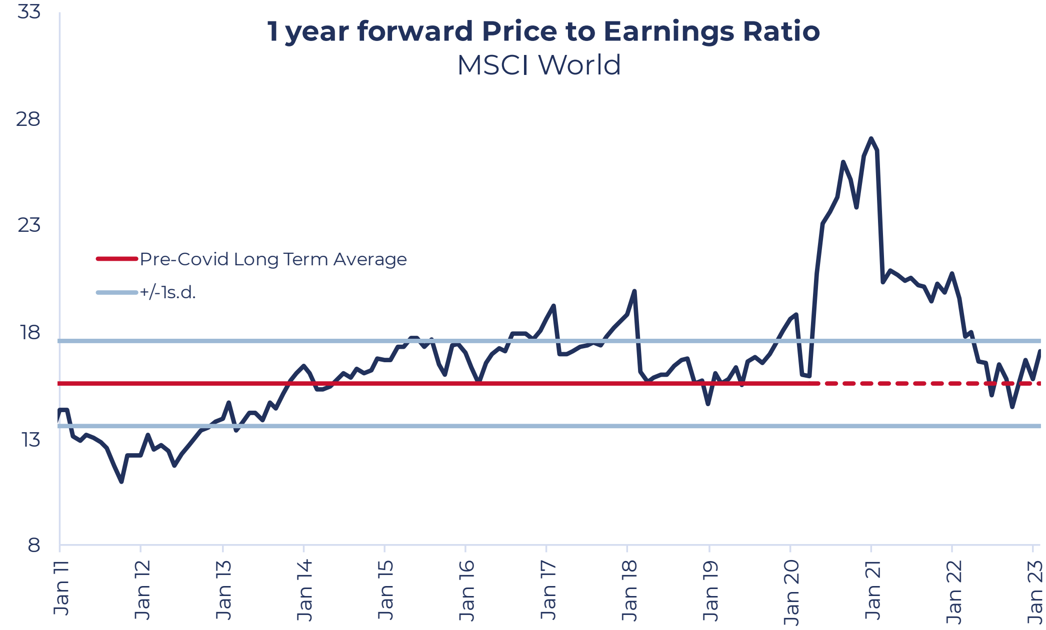
In addition, there is a significant divergence between market expectations and commentary from the Federal Reserve. The Federal Open Market Committee's (FOMC) median 'dot' (expectation for the base rate) in 2023 sits 73.5 basis points above the market implied expectation. In 2024, it is 96.5 basis points higher. This divergence has been a core driver behind the equity rally. Higher equity prices are linked with higher consumer spending, an inflationary force and the opposite of what the Federal Reserve wants to see. We therefore see moderate downside risk to market expectations of flat rates over 2023, with expectations materially below Federal Reserve commentary. Should market expectations shift upwards, we are likely to see multiple contraction – particularly in growth stocks.

## FOMC Median Projection vs Market Implied Expectations



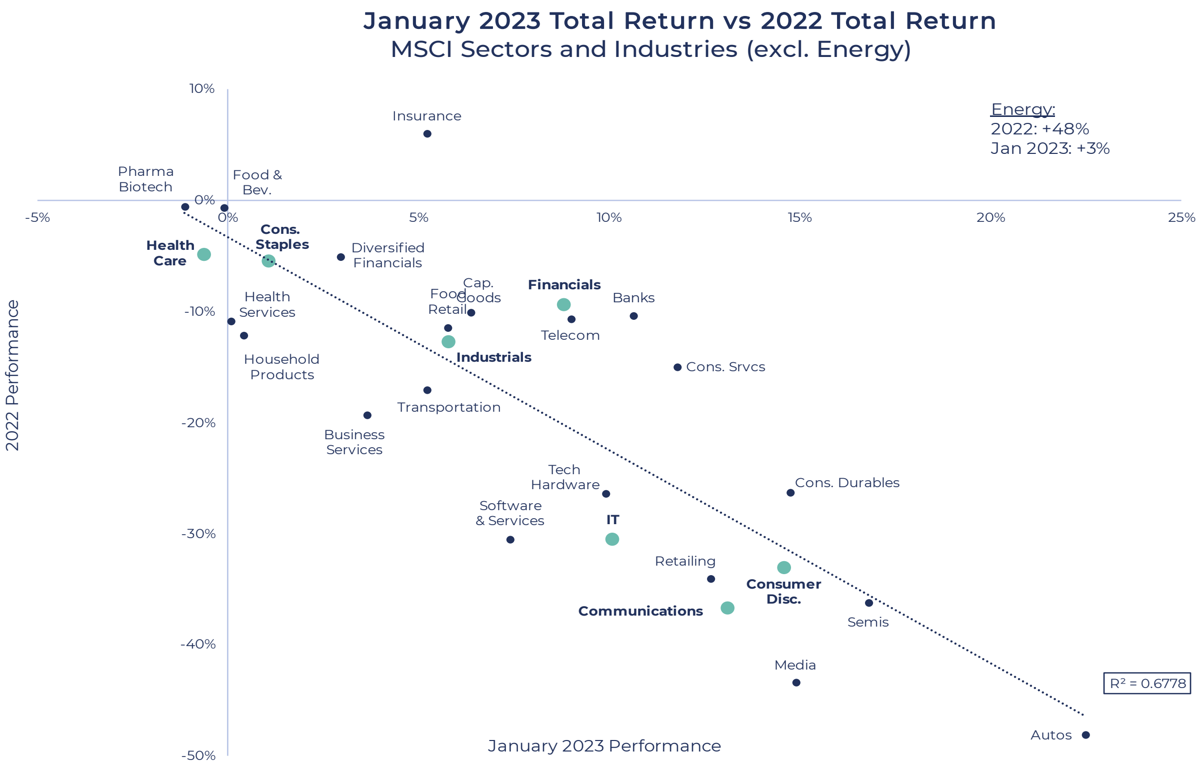

*Source: Bloomberg, Guinness Atkinson Asset Management*

**Moderating inflation, a central bank pivot and fading recessionary risks could already be in the price**. Looking at the MSCI World, valuations appear to be 'running out of track', as they near 1 standard deviation (s.d.) away from their pre-COVID long run average (2.7% away), suggesting the balance of valuation risk is to the downside. To bring valuations back down to long-term averages, we need to see earnings growth – but average analyst expectations for 2023 earnings actually fell over January (discussed in more detail later on).



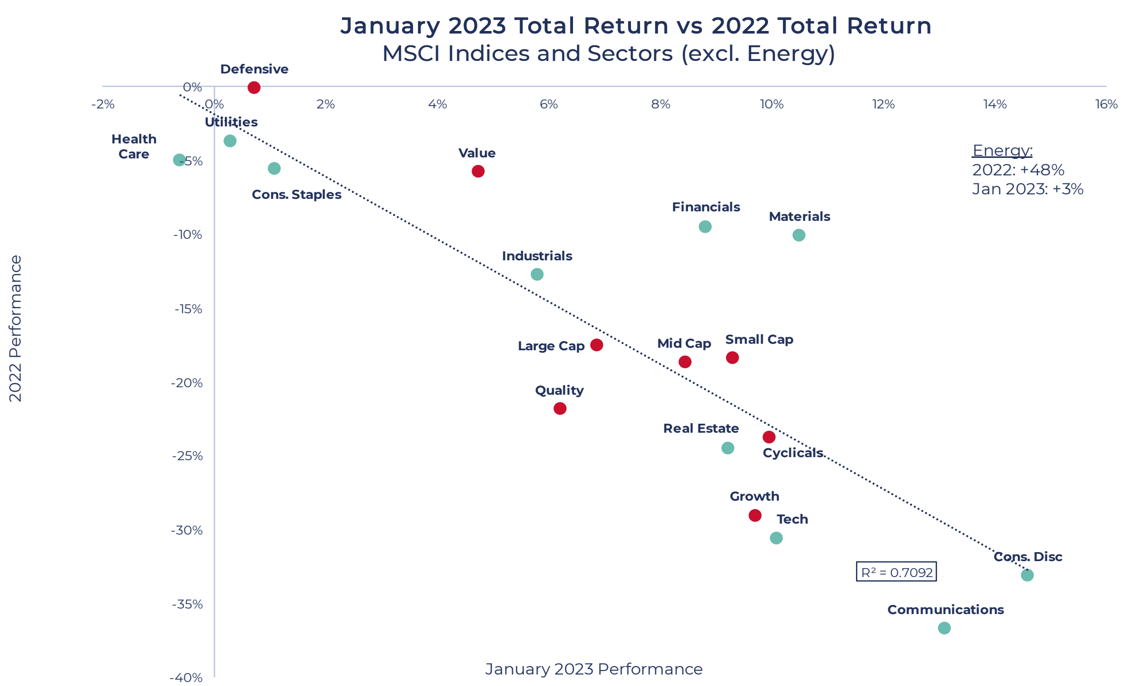

*Source: Bloomberg, Guinness Atkinson Asset Management*

**The rally seen in January has largely been based off of hope of an improved macro backdrop, rather than fundamentals.** There has been a strong positive correlation between areas of the market that sold off the most in 2022, when markets were pricing in a material deterioration in the macro-environment, and performance in January 2023, when macro-expectations have pivoted substantially. This could be seen at both the industry and sector level.



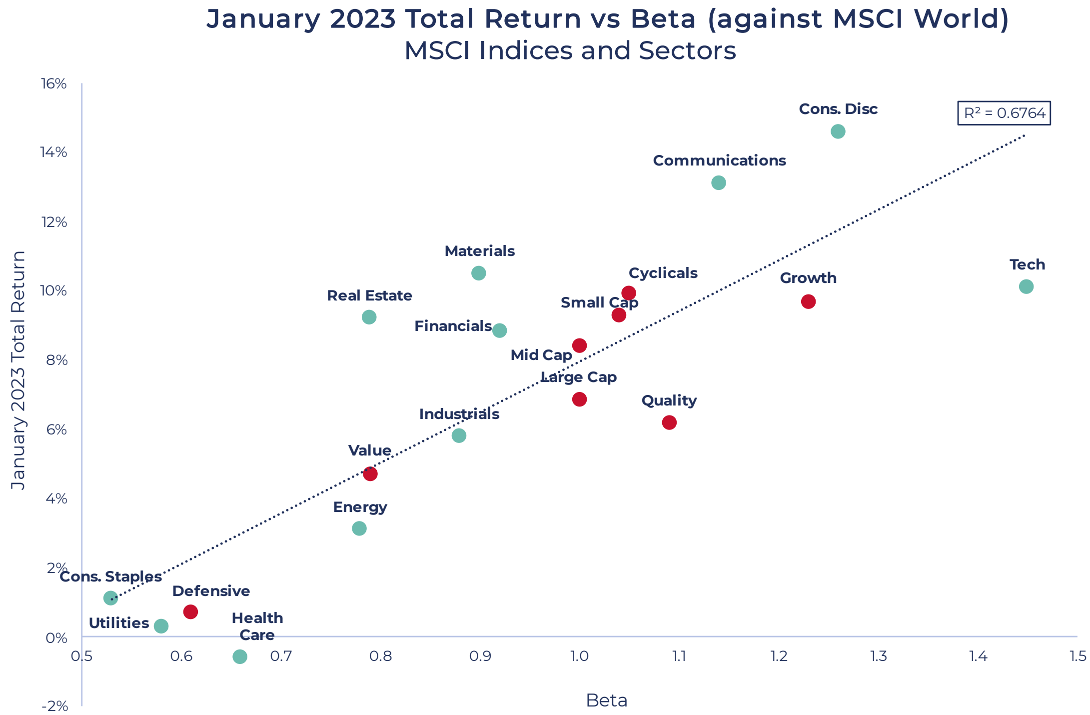

*Source: Bloomberg, Guinness Atkinson Asset Management*

This could be also be seen on a factor basis.



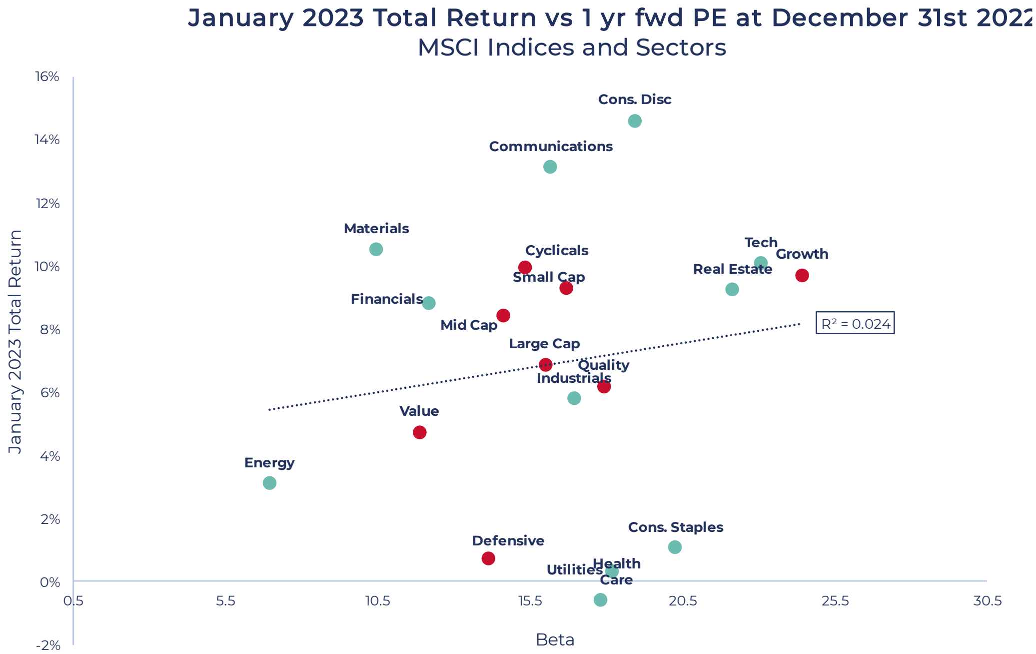

*Source: Bloomberg, Guinness Atkinson Asset Management*

There was also a strong correlation between the two-year beta of the indices (as of January 31st, Bloomberg) and their total return over January. This again suggests that performance was not driven by fundamentals, but by sentiment.



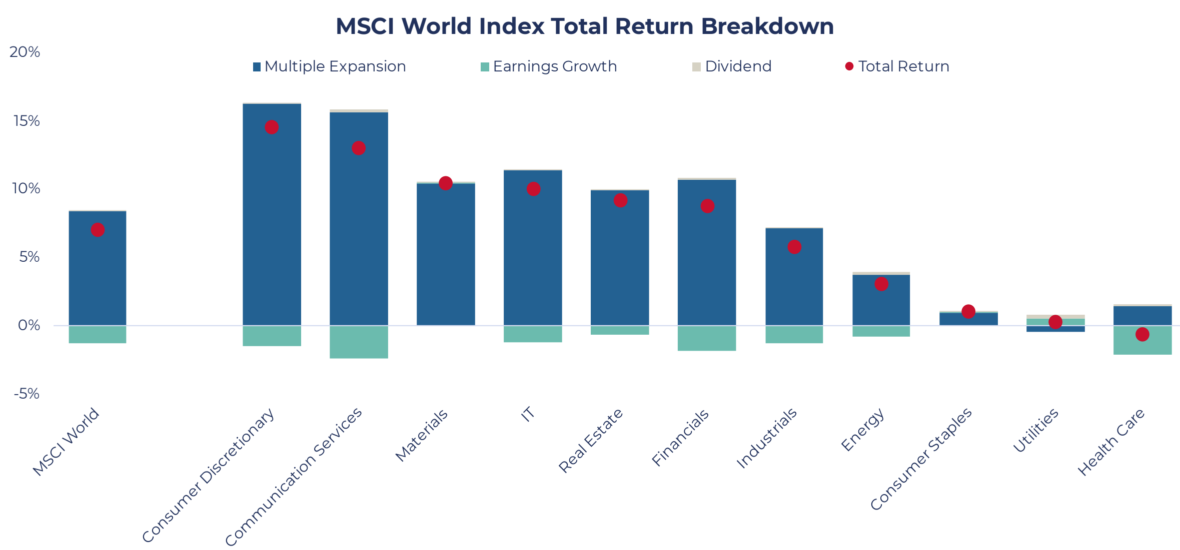

*Source: Bloomberg, Guinness Atkinson Asset Management*

Plotting returns against valuation gave an R-squared of 0.02, suggesting no correlation between the two metrics. Valuation is therefore having a minimal impact on performance, again, suggesting a sentiment driven rally. This suggests the rally was driven by positive sentiment towards growth, rather than weakness in value.



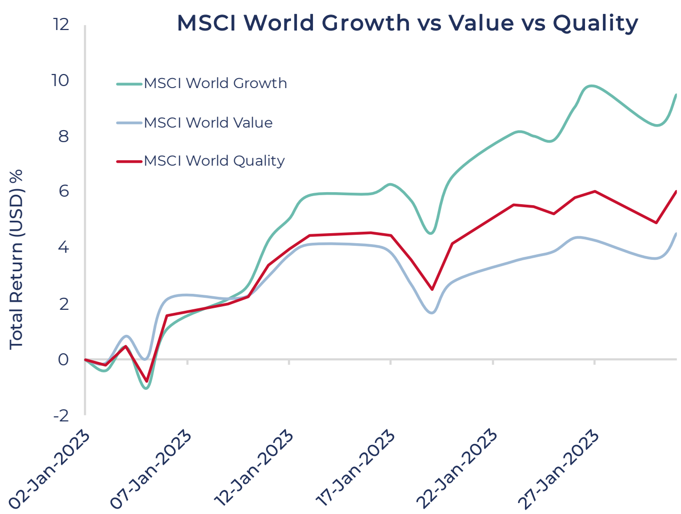

*Source: Bloomberg, Guinness Atkinson Asset Management*

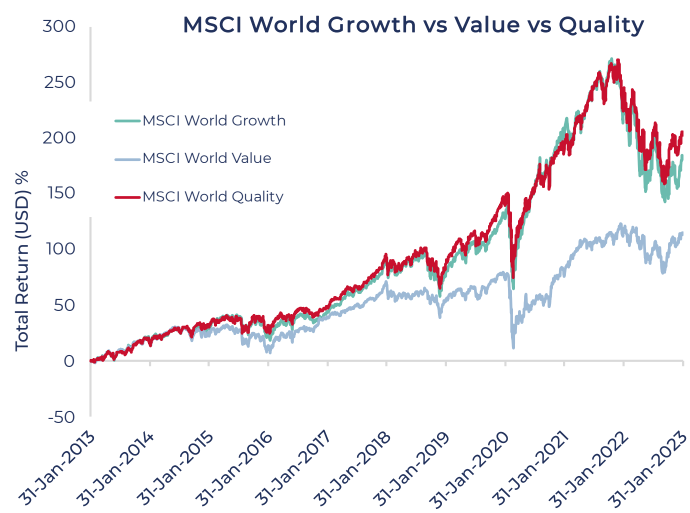
Giving further evidence to this argument, multiples expanded almost universally across sectors, despite earnings downgrades from analysts. Counter-intuitively, two of the only three sectors not to exhibit any earnings downgrades, consumer staples and utilities, were two of the three worst performing sectors over the month. In fact, utilities was the only sector to offer positive earnings upgrades, and the only sector to suffer multiple contraction. At the other end of the spectrum, two of the four sectors that had the greatest earnings downgrades over the month were the top two performing: Consumer Discretionary and Communication Services.




*Source: Bloomberg, Guinness Atkinson Asset Management*

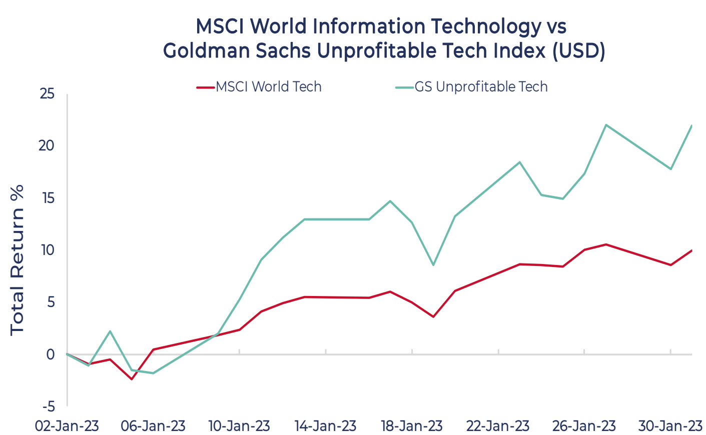
While outperforming 'Value', 'Quality' underperformed the broader MSCI World Index over the month. Typically, growth and quality perform relatively in-line, with a correlation of 0.996 over the past 10 years. On the other hand, value and quality have a correlation of 0.953. The divergence in performance over the past month could imply a rally led by lower-quality growth stocks.

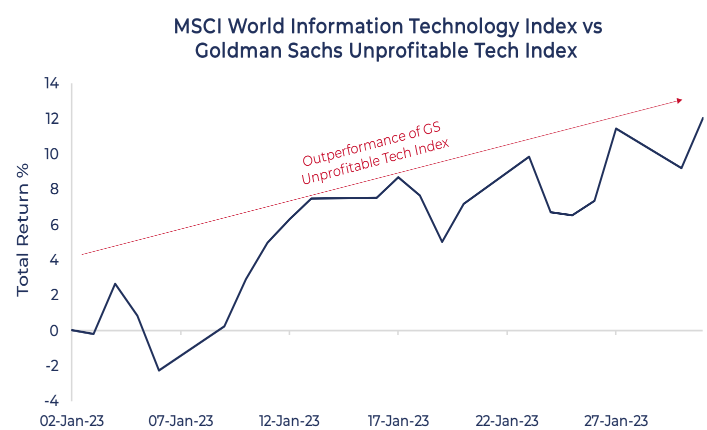



*Source: Bloomberg, Guinness Atkinson Asset Management*

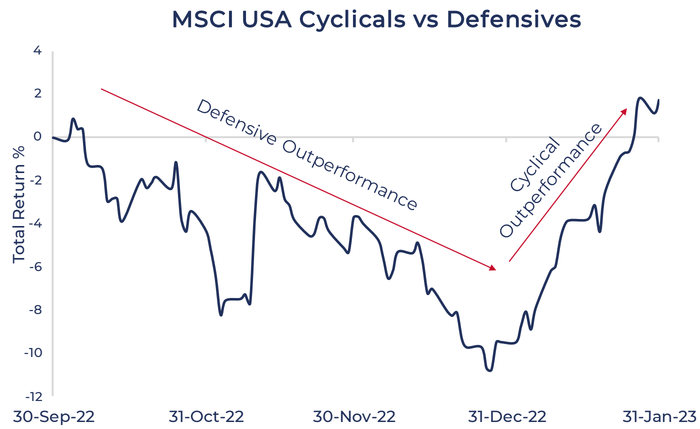
In further evidence to this argument, it was stocks at the more 'speculative' end of the spectrum that outperformed, with the Goldman Sachs Unprofitable Tech Index materially outperforming that of the higher quality MSCI World Tech Index.



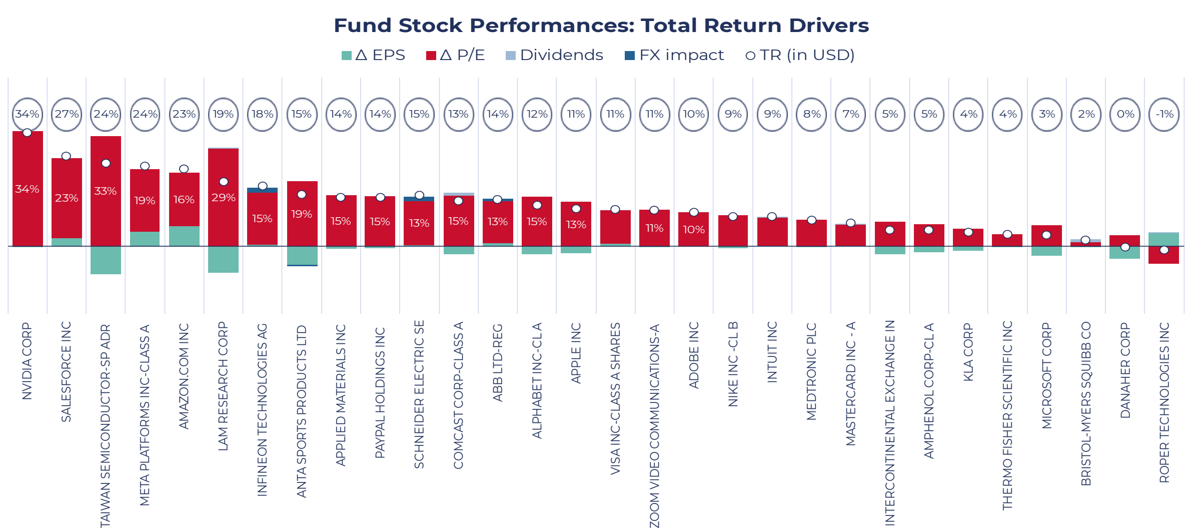

*Source: Bloomberg, Guinness Atkinson Asset Management*

All in all, it appears that this rally has so far been driven by the most beaten up stocks over the prior year's bear market - the most economically sensitive, speculative, and volatile (high beta) stocks – rather than fundamentals. There has been a clear 'risk-on' pivot, where valuation is seemingly unimportant and the perceived macro-outlook is.


*Source: Bloomberg, Guinness Atkinson Asset Management*

As was the case with the broader MSCI World index, Fund performance was multiple driven rather than fundamental. On top of the rotation towards growth, the outperformance of the broader benchmark was aided by the fact that the Fund had less of a negative impact from earnings downgrades, which supported total returns. Over the month of January, the average earnings downgrade for the MSCI World was -1.27%. To account for the Fund's zero weighting to sectors such as consumer staples and utilities, and to improve overall comparability, we used Fund sector weightings and MSCI World sector indices earnings downgrades to find a weighted average earnings downgrade of -1.45%. Assuming an equally weighted portfolio, (as is the Fund process) the average downgrade for the Fund was -0.73%, approximately half the magnitude of our weighted average calculation.




*Source: Bloomberg, Guinness Atkinson Asset Management*

Through choosing stocks with more assured earnings (i.e. higher quality) and exposure to long-term secular trends that are more isolated from the highly cyclical areas of the market, performance was less impacted by earnings downgrades over the month. This acted to support outperformance. Pleasingly, the Fund was also able to outperform the MSCI World Growth Index (10.8% USD vs 9.7% USD). While we lagged the more speculative end of the spectrum, as seen by the GS unprofitable tech index, we are unlikely to see the large swings and volatility should macro sentiment shift again.

With inflation seemingly moderating and global Central Banks appearing to slow the rate of growth hikes, many of the headwinds for equity markets seen over 2022, and growth stocks in particular, are looking more positive. But, while we are not necessarily 'bearish' about the macro-outlook, we are wary that none of the macro-factors that have been driving market sentiment and stock performance over the month are definitive, and could quite easily change. We are also wary of the idea that this is the beginning of a bull market, with the market broadly led by lower quality, higher beta stocks, rather than fundamentals. Indeed, uncertainty remains as none of these issues have been resolved conclusively and second-order effects, or indeed new issues, may arise in the coming months. The prospects of a recession remain high (particularly in Europe and Asia), potentially creating a meaningful dent into company earnings. In many respects, we believe these concerns have largely been 'priced-in' to earnings estimates, but this does not necessarily preclude further earnings downgrades to come.

Indeed, we believe there is a good argument for high quality, secular growth stocks in this current market environment, even in a recessionary and/or slower growth environment, as these companies should continue to be able to grow despite the market headwinds and have better fundamental characteristics in terms of margins and balance sheets. We continue to focus on these key tenets in the fund and remain confident of this process over the long term.

*Past performance does not guarantee future results.*

**Earnings Summary**

Of the ten Fund holdings that reported during the month of January, seven reported modest 'beats' to consensus (>0.5%), three reported 'in-line' results (within 0.5% of expectations), and one company missed (<0.5%). All companies reported a 'beat' for adjusted earnings per share (EPS), with an average surprise of +5.7%.

**Danaher** (+6.6% sales surprise, +14.4% adj. EPS surprise)

Danaher surprised to the upside, while also significantly outperforming management guidance. Following phenomenal performance during the pandemic, the key market concern has been how well the firm will manage the expected step down in COVID related sales. Positively, the beat to consensus was driven by strength in the core of the business (i.e., non COVID related revenues) which grew +7.5% year on year. The firm executed well on pricing over the course of 2022 driving a 4% sales benefit, and going forward, Danaher expects to continue raising prices by an additional 2-3% over 2023, highlighting the pricing power of the firm. In 2023, the firm is guiding for mid-single digit sales declines, although we believe the 'core' of the business should grow by high-single digits – a far more important metric, in our view.

**Microsoft** (-0.3% sales surprise, +1.09% adj. EPS surprise)

Results were largely in-line with estimates, with particularly strong performance from the firm's core growth drivers, Azure (+38% at constant currency) and the broader cloud segment (+24% cc). Shares fell on the management outlook, however, as sales guidance for the next quarter was 3% lower at the mid-point than the markets' expectation of +6% - alongside an estimated 100bp (in constant currency) operating margin contraction. CEO Satya Nadella struck a cautious tone about the forward outlook for cloud demand. With customers working to *"optimise"* their spending on existing contracts, there would be a lag before they started to increase spending again.

**Amphenol** (+2.9% sales surprise, +4.4% adj. EPS surprise)

Amphenol reported a strong end to the year, driven by strength in automotive and industrials end-markets, where demand is still outstripping supply. However, weakness in the firm's communications verticals, particularly cloud, enterprise and telecoms, offset some of this growth. These results highlighted the strength and diversity of the firm's portfolio - when one of the biggest segments faces high single digit declines, the firm's other segments were able to 'pick up the slack'. Management are anticipating continued weakness in the firm's communications vertical, as customers continue to work through built up inventories. However, looking through short term macro weakness, the firm's diverse revenue base and lean operating model should help Amphenol manage any short-term macro-volatility, and potentially continue to grow through 2023.

**Lam Research** (+3.8% sales surprise, +7.1% adj. EPS surprise)

While Lam posted record results, management struck a very cautious tone for the outlook of the industry, announcing cuts of 7% (1,300 employees) to the global workforce. Record revenues were partially supported by recognition of supply constrained deferred revenues from the prior year, with supply chain pressures now abating. This is expected to continue over Q1, but the firm believes their backlog will rest at significantly higher levels than history from the March quarter forwards. While the near-term outlook for the industry remains weak, the firm appears to be well positioned when entering this new phase of the semiconductor cycle. Continued growth in the firm's 'installed base' is providing a platform for stable revenue growth long term (e.g. services and upgrades).

**KLA** (+6.7% sales surprise, +5.5% adj. EPS surprise)

KLA benefitted from improved supply chain performance, and strength in foundry and logic. The declining demand environment in Wafer Fab Equipment (WFE) drove management to issue weaker than expected guidance, estimating a decline in *market* WFE spend of approximately 20% in 2023. KLA's leading position within the market mean they are positioned to perform ahead of smaller competitors. The firm have high exposure to leading-edge customers such as TSMC, Samsung and Intel, who are likely to maintain high capex spend towards new technologies, despite a declining WFE environment. While the firm suffered from negative headwinds from their Chinese exposure (49% of sales vs 58% of sales the quarter prior), the majority of the firm's Chinese business is on mature process technologies which are not subject to export restrictions. Management expects a 10% total hit to sales from China during 2023.

**TSMC** (-1.6% sales surprise, +3.0% adj. EPS surprise)

While the top-line missed, revenue growth remained extremely strong, growing 43% year-on-year, with a 78% increase in profits (from favorable exchange rates and widespread cost-cutting). Gross margins stayed flat, with resilience during a semiconductor downturn offering a strong signal of pricing power. In terms of outlook, the firm made strong progress in price negotiations, with most of the firm's customers (including Apple) accepting a 3-6% wafer price hike for 2023. While the overall quarter was strong, CFO Jen-Chai Huang noted a weakening demand outlook - *"As overall macroeconomic conditions remain weak, we expect our business to be further impacted by continued end-market demand softness and customers' further inventory adjustment."*

**Comcast** (+0.7% sales surprise, +6.4% adj. EPS surprise)

Comcast delivered solid performance across the majority of its business lines. The firm delivered notably solid results from the Cable segment, which drives ~80% of the company's EBITDA. While broadband user growth remains slightly sluggish, the firm's pricing power has allowed strong ARPU (average revenue per customer) trends to continue, helping offset a difficult operating environment (management noted few household moves). Additionally, subscriber growth across mobile, Peacock, and Sky all surprised to the upside, which bodes well for the long-term strategic outlook. Despite slight bottom line weakness, this is more a function of one-off severance costs as opposed to structural decline in the margin profile.

**Visa** (+2.8% sales, +8.8% adj. EPS) & **Mastercard** (+0.2% sales, +2.7% adj. EPS)

This was a very strong quarter for Visa and Mastercard, who both executed well on their growth drivers, but also continued to benefit from the removal of cross-border travel restrictions. Despite the difficult macro-backdrop (inflation, recessionary concerns), both companies are seeing a resilient consumer with stable domestic volumes and transactions. Visa offered a surprisingly bright outlook for 2023, stating *that "business trends have been remarkably stable…spend levels around the world have indexed in the mid-140s for almost 4 straight quarters now, and there's no evidence of a change in trend",* and reiterating their growth expectations for the year. Mastercard offered similar sentiment: "*From an overall consumer spending standpoint, we expect the consumer to be relatively resilient. Spending patterns have largely normalized relative to the effects of the pandemic with the notable exception of China."* All in all, both companies stand to benefit from further upside from travel volumes, as well as their own prospective growth drivers.

**Roper Technologies** ( +0.7% sales surprise, +4.0% adj. EPS surprise)

Despite a 'beat' to consensus, the market reacted negatively to the firm's earnings release (-2.3% USD on the day of results), off of the back of slowing organic growth. This deceleration was in part a result of some delayed decision making in government contracts, although a weakening demand environment and some strong comps from pandemic induced demand the prior year, were the core drivers. We view these headwinds as temporary, and believe the underlying strength and quality of the firm positions Roper well when entering a weaker demand environment. As the Fund's bottom performer during January, we discuss Roper Technologies in greater detail in the section below.

**Stock Specific Performance**

**Nvidia (+33.7% USD)**

Nvidia ended the month as the Fund's top performer, continuing on its three-month streak of strong gains (+74% USD since 14TH October). With an improved macro-economic backdrop, growth and cyclically inclined stocks significantly outperformed their value and defensive counterparts over January. This acted as a tailwind for Semiconductor stocks, which were buoyed by an upgraded Semiconductor outlook by Barclays, who stated the environment was "getting more positive", following an "extremely negative" outlook for the industry in 2022. While semiconductor firms largely struggled over 2022, since mid-October there has been a strong rebound in the sector. Since the 14th of October, when the MSCI World Semiconductor Index touched a two year low, the Index is up +49% (USD). Management teams often noted of the short-term difficulties facing firms going in to 2023, but markets are now largely expecting the 'bottom' of the cycle to be in sight. Barclay's upgraded their price target from $170 to $250 for Nvidia, supporting momentum in the stock. During the month, Nvidia presented at the JP Tech Forum, stating that despite a challenging end to the year, revenues were on track to remain flat – a result of strong end market diversification. Going into FY23, the firm expect gaming and datacenter cycles to come back strongly, with continued strong performance in the autos end-market. However, the majority of the positive sentiment around the stock stemmed from industry news and earnings read-across from chip companies who had reported during the month, with an improved semiconductor outlook on the horizon as we near the bottom of the cycle.

**Roper Technologies (-1.1% USD)**

Roper Technologies ended the month as the firm's bottom performer, despite a relatively resilient set of earnings. During the quarter, Roper concluded their 'multi-year divestiture program', which has improved the quality of the firm's overall portfolio. The firm has transitioned towards less-cyclical, asset light, and higher growth businesses, whose revenues are highly recurring. To this end, compared to 2018 (pre-divestiture cycle), revenues have increased +3.5%, and EBITDA up +23.2%, with EBITDA margins expanding from 34.8% to 41.41% - all despite divesting nearly 40% of the revenue base, towards a portfolio with more durable and higher growth prospects. The firm saw broad-based growth and strength across all of their operating segments, and delivered a solid outlook of organic revenue growth of at least mid-single digits for each segment. Given the firms relatively new-found exposure to high recurring revenues and low cyclically inclined businesses, the relatively volatile macro-environment positions the firm well for an uncertain macro-backdrop. While the quality of the business is certainly enhanced, organically sales growth appears to be decelerating towards 5-6% (which management expect to be the long-term trend-line), and short-term margin impact is likely from the macro environment. Despite this, we remain confident in the long-term growth outlook for Roper, and believe the firm's portfolio positioning to high margin, low cyclical products positions the firm well in the current environment.

We thank you for your continued support.

**Portfolio Managers**

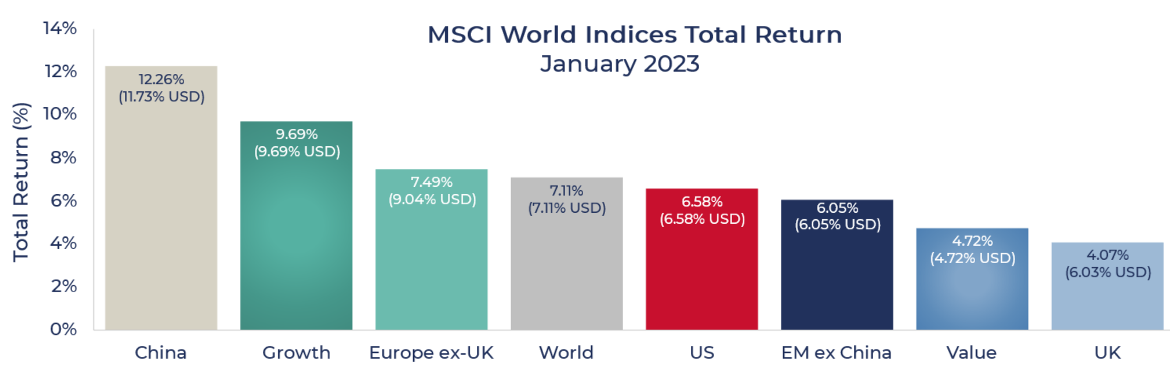
Matthew Page, CFA

Dr Ian Mortimer, CFA

**Summary performance**

The first month of 2023 was a positive one for global equities, with markets becoming more optimistic about the macro-economic outlook. In particular, markets turned more optimistic on many of the key concerns that drove equities downward in 2022, such as inflation, COVID-19 lockdowns in Asia, interest rates, recessionary risk and an energy crises. In Asia, a Chinese re-opening attracted a wave of investment back into the region, as markets bet on a surge in re-opening demand. In Europe, growth risks eased on the news of the Chinese unlocking, and a warmer-than-expected winter allowed the region to largely avert an energy crisis, supporting economic growth that could result is a 'less deep' recession than expected. In the US, which underperformed China and Europe, there was renewed hope that a 'soft' economic landing may yet be possible. The consequence was a broad rotation towards riskier assets, with bonds selling off across maturities and 'growthier' stocks rallying the hardest.

*Source: Bloomberg, Guinness Atkinson Asset Management*



This renewed optimism that the US may yet achieve a 'soft landing' was based on moderate progress on both of the Fed's two dual mandates, jobs and inflation. During 2022, a 'hot' jobs market had markets concerned that wage growth could contribute to inflation to become entrenched in the economy. While unemployment actually dropped slightly in the month of December, wage growth decelerated from 4.8% to 4.6% - a material improvement from the 5.6% peak. Headline inflation came in at 6.5%, in-line with expectations but a modest deceleration from November (7.1%) – the sixth consecutive month of falling CPI numbers and a 15-month low. Markets were also buoyed by indications of softening demand, with the US Manufacturing PMI falling to 48.4, and US Services PMI falling 6.9 points in December to 49.6 – any number below 50 indicating a deterioration in economic activity that could help slow inflationary pressures. All in all, moderate disinflation paired with signs that economic growth may cool enough to satisfy the Fed's goal of cooling inflation (but not so much that it slips into recession) drove equity markets higher. Markets have grown increasingly sensitive to any indication over the future path of interest rates. While news in January has been positive for equity markets, we are cognizant of the fact that this data is volatile, and it is certainly too early to say with any certainty that inflation will continue to 'behave', that Europe will fully avert an energy crisis, and that the US has avoided a recession.

Corporate earnings season got off to a relatively unremarkable start, with average sales (+1.2%) and earnings beats (+2.5%) below their long run averages (5 yr average of 1.9% and 8.6%), even after analysts downgraded EPS expectations by 6.5% over the course of Q4. Despite this, equities still rallied, less driven by fundamentals but through an improved market perception of the macro-environment. While markets have been broadly positive since the beginning of Q4, January saw a reversal of market drivers, with significant outperformance from the likes of 'Growth' and 'Cyclically' orientated stocks – a result of this new macro optimism.

Over the month of January, Fund performance can be attributed to the following:

- Both stock selection and asset allocation contributed to Fund outperformance to the MSCI World benchmark during the month of January. The broad rotation towards 'growth' orientated stocks was a core driver, as was the relative underperformance of more defensive sectors such as Consumer Staples – to which the Fund has a zero allocation.
- The Fund's overweight position to Information Technology, which outperformed the MSCI World by 3.0% (USD), acted as a tailwind to performance. In particular, the Fund's high exposure to Semiconductor stocks, the MSCI's second top performing industry over the month, benefitted the Fund from an allocation perspective.
- The Fund's Information Technology exposure was also positive from a stock selection perspective, particularly within Software and Services. Of the Fund's 17 tech stocks, 16 registered positive returns, 10 of which were double-digit. There was particularly strong performance from Nvidia (+33.7% USD), Salesforce (+26.7% USD) and TSMC (+24.5% USD), the Fund's top three performing stocks over the month.
- Outside of the Information Technology sector, Fund performance also benefitted from stock selection within Industrials, Health Care and Communication Services. There was a relatively neutral impact from an allocation perspective within these sectors.
- The Fund's zero allocation to the defensive-orientated Consumer Staples sector, and the value-tilted Energy and Utility sectors acted as a positive from an allocation perspective, with each sector materially underperforming the MSCI World.

| as of 01.31.2023 (in USD) | 1 year | 3 years annualized | 5 years annualized | 10 years annualized |
|---|---|---|---|---|
| Global Innovators, Investor Class[1] | -15.86% | 8.99% | 6.83% | 12.41% |
| Global Innovators, Institutional Class[2] | -15.65% | 9.27% | 7.10% | 12.61% |
| MSCI World Index NR | -7.45% | 7.57% | 6.49% | 9.05% |

| as of 12.31.2022 (in USD) | 1 year | 3 years annualized | 5 years annualized | 10 years annualized |
|---|---|---|---|---|
| Global Innovators, Investor Class[1] | -29.67% | 5.18% | 5.81% | 11.99% |
| Global Innovators, Institutional Class[2] | -29.51% | 5.44% | 6.07% | 12.19% |
| MSCI World Index NR | -18.41% | 4.94% | 6.13% | 8.85% |

All returns after 1 year annualized.

[1] Investor class (IWIRX) Inception 12.15.1998 Expense ratio* 1.24% (net); 1.17% (gross)
[2] Institutional class (GINNX) Inception 12.31.2015 Expense ratio* 0.99%

[2] Performance data shown for Global Innovators, Institutional Class (GINNX), prior to its launch date on 12/31/15, uses performance data from the Global Innovators, Investor Class (IWIRX).

*Performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. For most recent month-end and quarter-end performance, https://www.gafunds.com/our-funds/global-innovators-fund/#fund_performance or call (800) 915-6566.*

*The Advisor has contractually agreed to reimburse expenses (excluding Acquired Fund Fees and Expenses, interest, taxes, dividends on short positions and extraordinary expenses) in order to limit the Fund's Total Annual Operating Expenses to 1.24% for the Investor class and 0.99% for the Institutional class through June 30, 2025. To the extent that the Advisor absorbs expenses to satisfy this cap, it may recoup a portion or all of such amounts absorbed at any time within three fiscal years after the fiscal year in which such amounts were absorbed, subject to the expense cap in place at the time recoupment is sought, which cannot exceed the expense cap at the time of waiver. The expense limitation agreement may be terminated by the Board of the Fund at any time without penalty upon 60 days' notice.

**Mutual fund investing involves risk and loss of principal is possible. Investments in foreign securities involve greater volatility, political, economic and currency risks and differences in accounting methods. These risks are greater for emerging markets countries. The Fund also invests in medium and smaller companies, which will involve additional risks such as limited liquidity and greater volatility. The Fund's focus on the technology, internet and communications sectors are extremely competitive and subject to rapid rates of change.**

**Securities mentioned are not recommendations to buy or sell any security.**

Current and future portfolio holdings are subject to risk.

Top 10 holdings for Global Innovators Fund, as of 1/31/2023:

| | | |
|---|---|---|
| 1. | Amphenol Corp | 4.21% |
| 2. | Mastercard Inc | 4.21% |
| 3. | ABB Ltd | 4.13% |
| 4. | Visa Inc | 4.07% |
| 5. | Thermo Fisher Scientific Inc | 3.95% |
| 6. | Schneider Electric SE | 3.84% |
| 7. | Roper Technologies Inc | 3.76% |
| 8. | Intercontinental Exchange Inc | 3.68% |
| 9. | KLA-Tencor Corp | 3.59% |
| 10. | Intuit Inc | 3.53% |

For a complete list of holdings for the Global Innovators Fund, please visit: https://www.gafunds.com/our-funds/global-innovators-fund/

***The Fund's investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectuses contain this and other important information and can be obtained by calling 800- 915-6565 or visiting www.gafunds.com. Read and consider it carefully before investing.***

**Earnings growth is not representative of the Fund's future performance.**

MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets.

MSCI World Value Index captures large and mid-cap securities exhibiting overall value style characteristics across 23 Developed Markets countries. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield.

MSCI World Growth Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of large and mid-cap securities exhibiting overall growth style characteristics across developed markets.

The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Indexes are available for the U.S. and various geographic areas.

The Purchasing Managers' Index (PMI) is an index of the prevailing direction of economic trends in the manufacturing and service sectors.

One basis point is equal to 1/100th of 1%, or 0.01%, or 0.0001, and is used to denote the percentage change in a financial instrument. The relationship between percentage changes and basis points can be summarized as follows: 1% change = 100 basis points and 0.01% = 1 basis point.

The Federal Open Market Committee (FOMC) consists of twelve members--the seven members of the Board of Governors of the Federal Reserve System; the president of the Federal Reserve Bank of New York; and four of the remaining eleven Reserve Bank presidents, who serve one-year terms on a rotating basis.
Standard deviation is a statistic that measures the dispersion of a dataset relative to its mean and is calculated as the square root of the variance. If the data points are further from the mean,

there is a higher deviation within the data set. A volatile stock has a high standard deviation, while the deviation of a stable blue-chip stock is usually rather low.
The Nasdaq-100 (NDX) is a large-cap growth index. It includes 100 of the largest domestic and international non-financial companies listed on the Nasdaq Stock Market based on market capitalization.

Beta is a measure of a stock's volatility in relation to the overall market.

R-squared ($R^2$) explains to what extent the variance of one variable explains the variance of the second variable. R-squared is a statistical measure that represents the proportion of the variance for a dependent variable that's explained by an independent variable or variables in a regression model.

Duration: The duration number is a complicated calculation involving present value, yield, coupon, final maturity and call features. Fortunately for investors, this indicator is a standard data point provided in the presentation of comprehensive bond and bond mutual fund information. The bigger the duration number, provided in years, the greater the interest-rate risk or reward for bond prices. It can also be used to describe equities in a similar manner: a higher duration suggests most cash flows are expected far into the future, with a lower duration suggesting more stable cash flows over the short and long term.

Gross domestic product (GDP) is the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period.

*Earnings per share* (*EPS*) is calculated as a company's profit divided by the outstanding shares of its common stock.

Price-Earnings (P/E) ratio is a valuation ratio of a company's current share price compared to its per-share earnings. Forward earnings differ from trailing earnings, which is the figure quoted more often, as they are a projection and not a fact.

Forward price-to-earnings (forward P/E) is a version of the ratio of price-to-earnings (P/E) that use forecasted earnings for the P/E calculation. While the earnings used in this formula are just an estimate and not as reliable as current or historical earnings data, there are still benefits to estimated P/E analysis

Cash Flow is the total amount of money, in cash, being transferred into and out of a business.

The multiples approach is a valuation theory based on the idea that similar assets sell at similar prices. It assumes that the type of ratio used in comparing firms, such as operating margins or cash flows, is the same across similar firms.

Multiple expansion is when a stocks valuation multiple (for example, their Price to Earnings ratio, or EV to EBITDA ratio) increases, meaning that the stock is now more expensive than before.

Correlation is the interdependence of variable quantities. It is a statistical measure that expresses the extent to which two variables are related i.e. how much one variable changes when another variable changes. The relationship does not need to indicate causation.

The MSCI World Information Technology Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of large and mid-cap equities across 23 developed markets, all classified within the Information Technology sector.

The S&P 500 Index features 500 leading U.S. publicly traded companies, with a primary emphasis on market capitalization.

Capital expenditures (CapEx) are funds used by a company to acquire, upgrade, and maintain physical assets such as property, technology, or equipment. CapEx is often used to undertake new projects or investments by a company.

EBITDA, or earnings before interest, taxes, depreciation, and amortization, is an alternate measure of profitability to net income

The MSCI World Semiconductors and Semiconductor Equipment Index is composed of large and mid-cap stocks across 23 Developed Markets (DM) countries*. All securities in the index are classified in the Semiconductors and Semiconductor Equipment Industry Group (within the Information Technology sector)

The MSCI World Quality Index is based on MSCI World, its parent index, which includes large and mid cap stocks across 23 Developed Market (DM) countries. The index aims to capture the performance of quality growth stocks by identifying stocks with high quality scores based on three main fundamental variables: high return on equity (ROE), stable year-over-year earnings growth and low financial leverage.

The Goldman Sachs Non-Profitable Technology Index consists of non-profitable US listed companies in innovative industries. Tech is defined quite broadly to include new economy companies across Global Industry Classification Standard (GICS) industry groupings. The basket of tech stocks is optimized for liquidity with no name initially weighted greater than 4.65%

The MSCI USA Index is designed to measure the performance of the large and mid cap segments of the US market. With 625 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in the US.

Forex (FX) refers to the global electronic marketplace for trading international currencies and currency derivatives. Most of the trading is done through banks, brokers, and financial institutions.

One cannot invest directly in an index.

Distributed by Foreside Fund Services, LLC