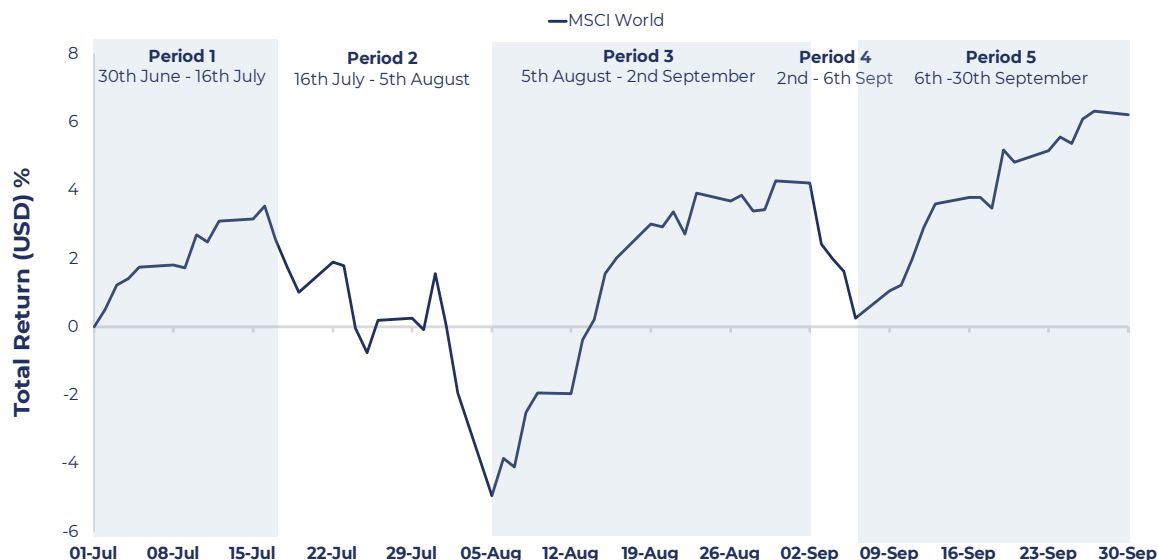


Market Commentary:

What happened over the quarter?

MSCI World Indices Total Return - Q3 2024



Source: MSCI as of September 30th 2024

Period 1: (June 30th - July 16th)- Positive equity performance marked by a small cap rotation

Equity markets continued their rally into Q3, led by the Magnificent Six (Magnificent Seven ex-Tesla), continuing the outperformance of growth stocks from earlier this year. However, attention shifted towards small cap stocks with the Russell 2000 index (US small-cap stocks) outperforming the S&P 500 by 10% from July 10th to July 17th. This rotation coincided with a cool inflation report, in which June's core Consumer Price Index (on a monthly basis, annualized) came in at below 1%. Small-caps often carry greater debt and are therefore more sensitive to interest rate changes: the perceived increasing probability of interest rate cuts in September allowed small-caps to outperform.

During this period, the Fund benefited from its overweight allocation to the IT sector as all three underlying industries Semiconductors, Software & Services and Technology Hardware delivered positive returns.

Period 2: (July 16th - August 5th)- Equity weakness emerges as investors move towards more 'defensive' areas of the market

Following positive equity momentum led in part by mega-cap tech stocks, a notable shift was observed in July as investors rotated away from these stocks, partly driven by fears over the certainty of returns from rising AI investment and capital expenditure. Comments made by presidential candidate Donald Trump about future security spending in Taiwan raised concerns over the trade relations between the US and China (and thus Taiwan by proxy) which are critical to the semiconductor industry. These fears were deepened by rumors that the Biden administration could employ stricter trade restrictions on semiconductor firms to prevent Chinese access to cutting-edge equipment. Falling semiconductor

stocks drove the underperformance of growth and cyclical-oriented stocks leading to the outperformance of 'value', 'defensive' and 'small-cap' names into August.

The broadest and most pronounced sell-off during 'period 2' came in the first three trading days of August, as weak economic data suggested that tight monetary policy may not be able to cool inflation without harming the economy. Manufacturing data and US jobs data released in the first two days of the month proved disappointing and brought into question the strength of the US economy. Since the Fed had announced on the final day of July that rates would be held at current levels - and did not make a firm commitment to cut them in September - concerns arose that it may have waited too long to begin the rate cutting cycle. The global sell-off deepened on August 5th, as Japan's TOPIX fell 12.4% (after a 5.8% fall the previous day) after the strengthening of the Yen and the shock rate hike from the Bank of Japan prompted an unwinding of the so-called yen-dollar carry trade. Global volatility spiked, the VIX Index reached its highest level since 2020, and investors moved sharply away from riskier assets and toward assets deemed more defensive.

During this period, given the sell-off of IT stocks, the Fund's overweight position to the sector contributed to relative underperformance compared to the benchmark. However, this was somewhat offset by strong positive stock selection provided by Fund holdings within the Financials sector which displayed better performance than the wider sector (-1.4% vs -7.1%).

Period 3: (August 5th - September 2nd): Economic concerns are somewhat appeased

The market selloff preceding this period was followed by a swift rebound as the MSCI World Index managed to recover the entirety of losses made in the drawdown earlier in the month (although the same cannot be said for the S&P 500). In the US, signs of a healthier-than-expected US labor market (unemployment claims fell faster than predicted) and a significant acceleration in retail sales (1% year-on-year vs 0.3% predicted) paired with robust results from Walmart boosted confidence that the US consumer remained in good shape – suggesting the risk of a recession was lessened. The prospect of lower rates also proved to be a boon to equities, following commentary from Fed chair Jay Powell at Jackson Hole – the loudest signal yet that rate cuts are imminent. As a result, the S&P 500 broke a four-week losing streak, closing out its strongest week in nine months. While the sell-off affected more growthier sectors, the rally was far broader with Small & Large Cap, Growth & Value, and Defensives & Cyclical, largely performing in line with one another.

During this period, the Fund slightly outperformed the benchmark, benefitting from asset allocation and stock selection effects. As growth stocks clawed back some of the losses from the sell-off in early August, the Fund's overweight position to the IT sector supported outperformance. Fund performance was also aided by strong stock selection in the Communication Services sector as recent addition Netflix delivered a solid +17.2% alongside Meta (+9.6%).

Period 4: (September 2nd - September 6th): Volatility resurfaces as economic fears

Concerns of a weaker US economy re-emerged as September kicked off with a worse than expected non-farm payrolls report with an increase of just 142,000 jobs, lower than expectations of 165,000. This was coupled with US manufacturing activity which remained in contraction territory, evidencing a slowdown and allowing investor uncertainty and fears over the US economy to resurface. The lack of clarity on interest rate cuts also fuelled investor worries that the Fed may have waited too long to act, contributing to 'risk-off' sentiment. Growthier sectors of the market led the sell-off as defensives (Utilities and Consumer Staples) outperformed.

During this period, the Fund performed relatively in line with the benchmark. Despite broader weakness in the IT sector and in the Semiconductor industry, the Fund benefitted from positive stock selection.

The Fund's semiconductor holdings performed better than the benchmark (-4.7% vs -5.8%), offsetting asset allocation effects.

Period 5: (September 6th - September 30th): Markets buoyed by the Fed's first interest cut

The Federal Reserve delivered the long-awaited beginning of the rate cutting cycle on September 18th, marking the first interest rate cut in the US since March 2020. The market was split heading into September's meeting with a 50-60% implied probability of a 50bp cut priced in, and though this was delivered, Fed Chair Jerome Powell suggested that this should not be seen as the Fed's new pace. Markets rallied on news of the bumper cut with the S&P 500 delivering one of its best days this year, jumping 1.7% on the day. Positive news followed towards the end of September, as the People's Bank of China announced a bold stimulus package, spurring on a rally in Chinese equity markets. The package included a 50bp cut to the reserve requirement ratio and a 20bp cut in mortgage interest rates - both larger cuts than expected. The recent policy pivot was thought to be motivated by restoring confidence in the domestic economy and pulling it out of a deflationary period and back towards the 5% GDP growth target. Upon the news, Chinese equities delivered strong performance with the MSCI China up more than 25%, drawing the quarter to a strong close.

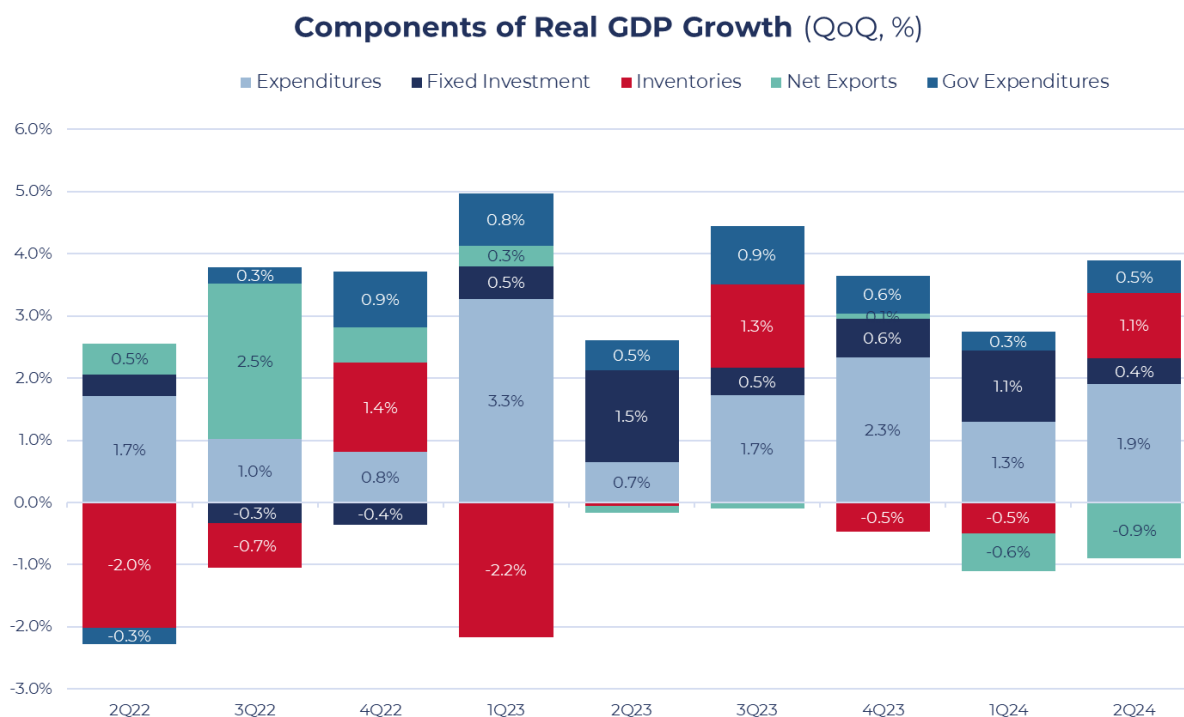
During this period, the Fund outperformed the benchmark, driven by the Fund's overweight exposure to China. Fund holding Anta Sports, a Chinese sportswear manufacturer and off-benchmark name, delivered a stellar 27.5% from the policy announcements to the end of the quarter, contributing to the Fund's relative outperformance. Despite a rotation away from growth stocks over the quarter, encouragingly within this period, the Fund saw strong positive allocation effects from the overweight position to IT.

How have markets changed?

As mentioned in earlier commentaries, markets entered 2024 with a positive view on the state of the US economy and the trajectory of interest rates. Economic data at the start of the year pointed almost universally to strength, feeding into expectations of several interest rate cuts and almost certainly no sight of an interest rate increase. However, signs of weakness emerged over Q2 as US GDP, manufacturing activity and consumer sentiment data all came in below consensus forecasts. This was echoed by comments from company management citing signs of a weaker consumer, feeling the pinch of rising inflation. Moving into Q3, we delve into how these two key themes have changed.

Economic Growth

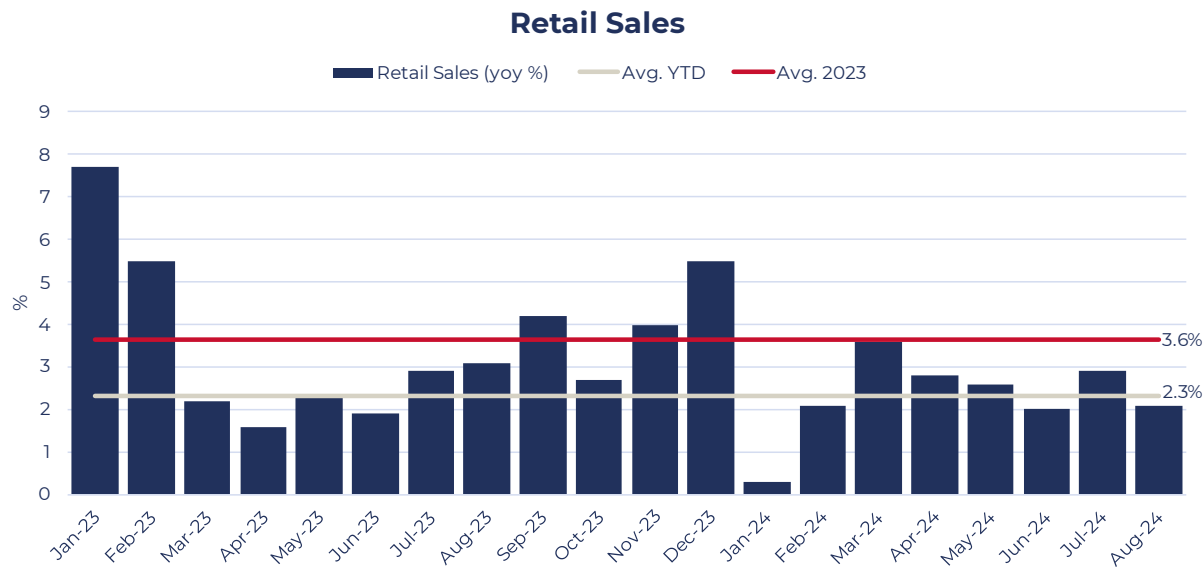
As the US economy navigates the post pandemic landscape, overlayed with a high-interest rate environment and heightened geopolitical tensions, debate over whether the economy will experience a soft landing, or a hard landing/recessionary scenario has been top of mind for many investors. Although there have been mixed signals, economic growth has pointed towards strength. Over the last quarter, revised US GDP data for 2Q24 increased at an annual rate of 3%, an acceleration from 1.6% in Q1. Given the current higher interest rate environment, markets had anticipated slower economic growth, but positively, the recent print was largely driven by consumer spending offering a 1.9% positive contribution, an indicator of economic strength. Furthermore, inventories jumped into positive territory, contributing 1.1% to real GDP growth, following two quarters of decline, pointing towards expectations of stronger demand going forward.



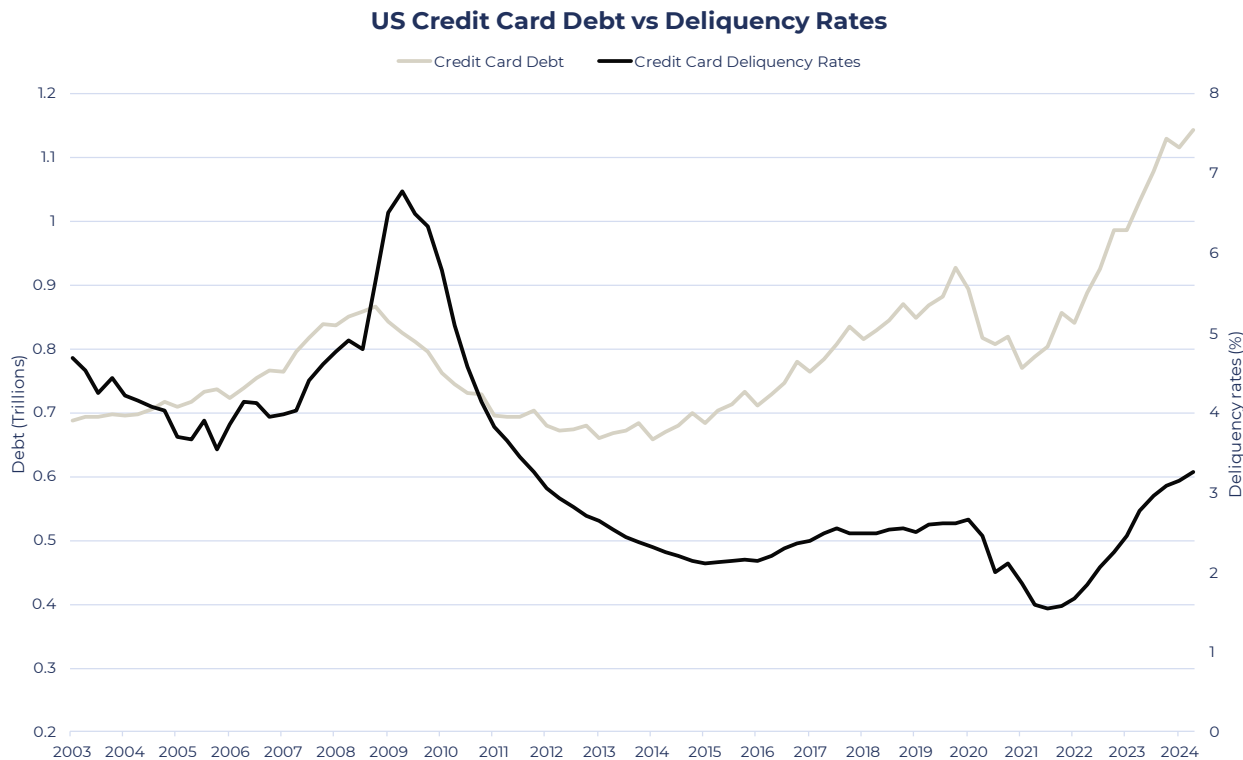
Source: Guinness Atkinson Asset Management, Bloomberg, as of September 30th 2024

Consumer Spending

As the largest component of overall GDP, consumer spending is a key driver of economic growth but in the face of tougher macroeconomic environment and rising inflation, pockets of weakness have emerged through the year. Over the quarter, retail sales growth held up well with a significant jump in July to 2.9% from 2% in June. This was coupled with an uptick in consumer confidence, measure by the CPI Index which grew in both July and August. However, retail sales growth looks slightly weaker over this year, when compared to last year which arguably presented a tough environment for consumers, at the peak of inflation with rising interest rates. This contributes to concerns that the 'consumer-led' economy may be gently running out of steam, born out of the rising levels of credit card debt and related delinquency rates in the US, which appear akin to levels leading up to the 2008 financial crisis. However, it is worth noting that although credit card and general household debt levels are rising, the household debt to income ratio has declined and remains historically low around 0.75 in recent quarters compared to over 1.0 during the financial crisis, indicating that consumers are on the whole borrowing within their income limit. The mixed picture seems to be echoed in commentary from company management. Mastercard's CEO cited 'healthy' and 'consistent' levels of consumer spending while Intuit's CEO highlighted a different picture of lower spending. However, the outlook seems promising as consumer spending is expected to rise following the recent interest rate cut from the Fed.



Source: Guinness Atkinson Asset Management, National Bureau of Economic Analysis, as of September 30th 2024



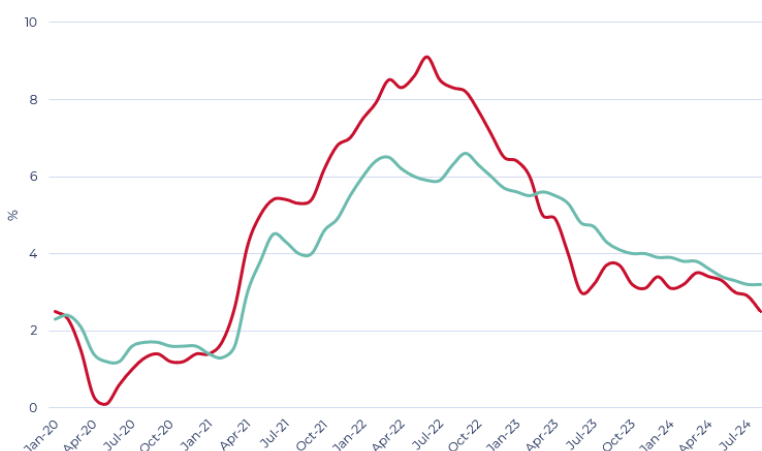
Source: Guinness Atkinson Asset Management, Federal Reserve Bank of New York Consumer Credit Panel/Equifax and U.S. Bureau of Economic Analysis, as of September 30th 2024

Inflation on the way to target

Inflation has presented a visible concern particularly in the US in recent years and has played a key role in determining the path of interest rates. Consumer Price Index readings through the quarter have been encouragingly positive as we diverge further from highs of more than 9% in 2023, a contributing factor to the high-interest rate environment. Headline CPI has come in under 3% over the past two months, a significant improvement as inflation remained at 3% or higher for more than a year. The Fed's preferred inflation measure, the PCE price index reached 2.2%, its lowest reading since March 2021, and increasingly close to the Fed's target of 2%.

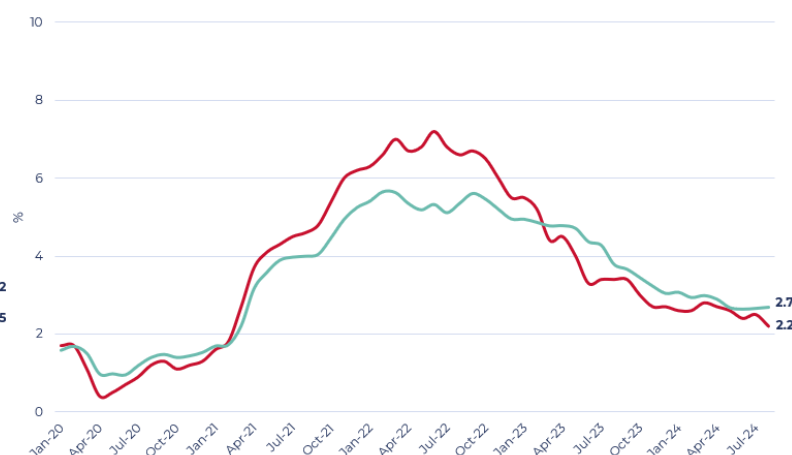
Consumer Price Index (yoy%)

— Headline CPI — Core CPI



Personal Consumption Expenditure (yoy%)

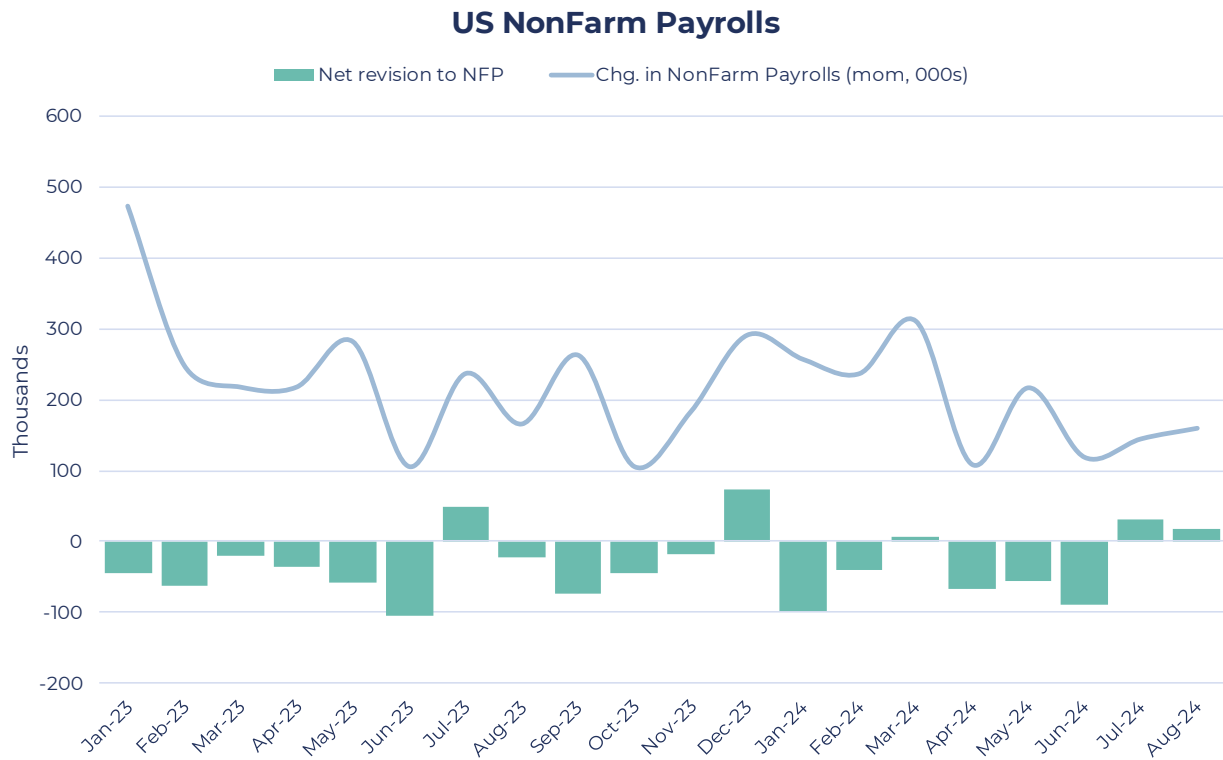
— Headline PCE — Core PCE



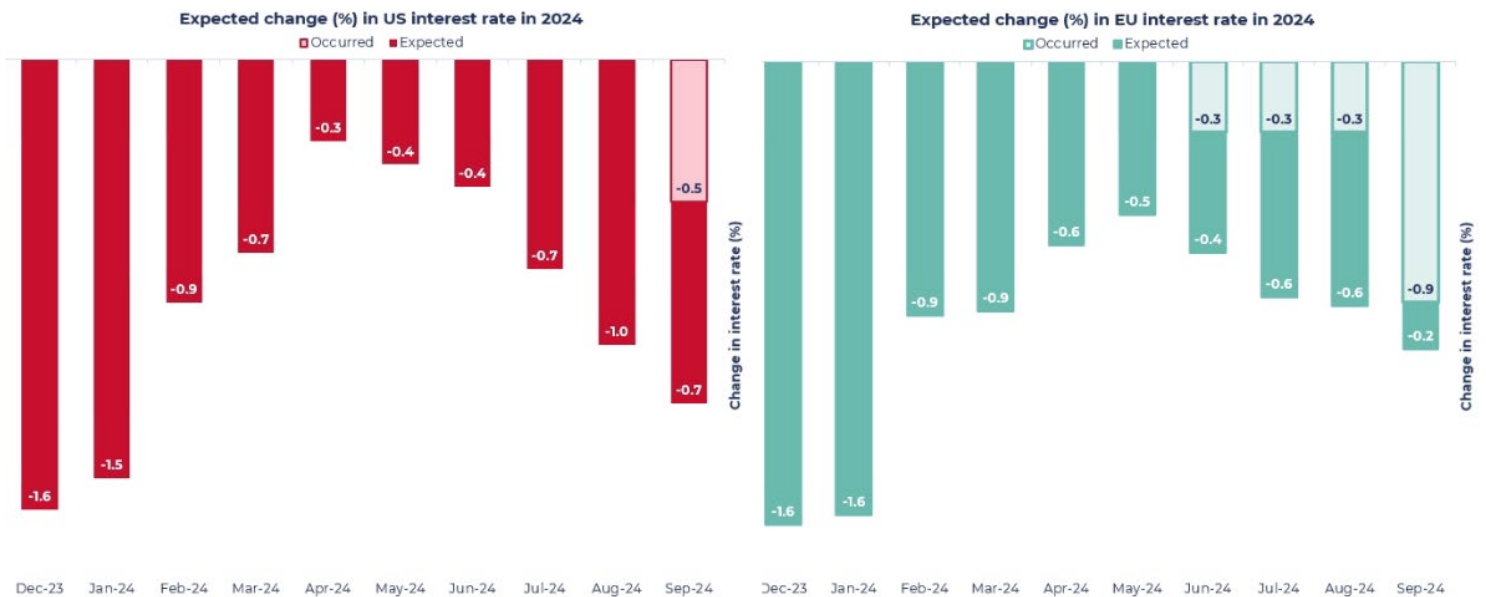
Source: Bloomberg, US Bureau of Labor Statistics as of September 30th 2024

The path of Interest rates

Expectations for interest rate cuts have shifted significantly this year following mixed signals from economic data and the tone set by the Fed across their committee meetings through the year. In Q1, markets were pricing in more than 6 cuts but 'hotter than expected' inflation coupled with stronger US economic data contributed to a more hawkish tone from the Fed. By April, expectations quickly fell to just 1 cut and many believed another hike was not off the table. Moving into Q3, stronger GDP data and improving disinflation was seemingly enough to hasten expectations of a cut. A particularly weak US non-farm payrolls report in August sparked fears that the Fed may have left it too late to begin the rate cutting cycle. The data came in with a downward revision of 112,000 jobs, one of the highest downward revisions since the start of the year and markets began to price in significant monetary policy easing (4 cuts) by the end of the year. Further, investors seemed encouraged by the dovish tone set by comments from Jerome Powell at the annual Jackson Hole Symposium. Powell provided arguably the strongest signal yet that the Fed is prepared to make an imminent cut to interest rates, which have remained at 5.25-5.5% for over a year. He stated "the time has come" for policy easing and indicated the softening labor market data could prompt the rate-setting committee to cut rates more quickly. This culminated in a long awaited 50bp cut delivered by the Fed during September, spurring on a rally in equity markets towards the end of the month.



Source: Bloomberg, US Bureau of Labor Statistics as of September 30th 2024 (Note August 2024 net revision over 1 month rather than 2 due to data not available yet)

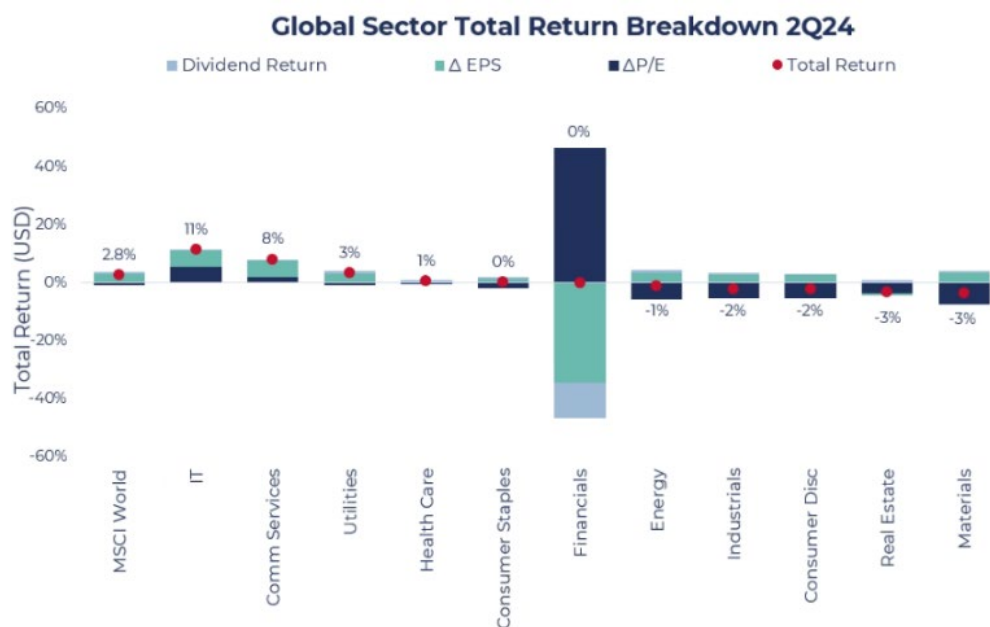


Source: Bloomberg, as of September 30th 2024

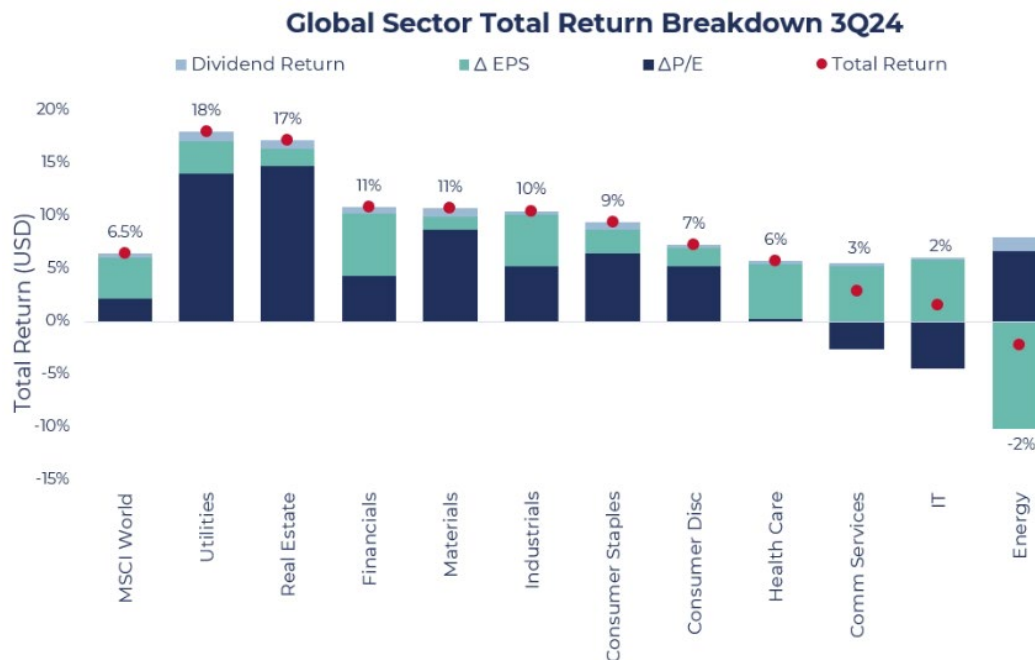
While the rate cutting cycle was initiated only within the last month in the US, the European Central Bank began cutting rates at their June meeting. Interestingly, policy between the Fed and ECB has often moved in a similar vein given the potential impact of interest rate divergence in harming the respective economies. However, economies across Europe have seen very different levels of economic growth and inflationary dynamics, which were arguably weaker than in the US, encouraging European policymakers to act faster.

Sector Rotation

Equity markets have been particularly influenced by the changing expectations for the path of US interest rates as we have noted a significant divergence in sector performance compared to previous quarters. Previously weaker sectors of the MSCI World Index such as Real Estate, among the worst performing in Q2, outperformed over Q3, returning +17%. The potential for lower interest rates and the resulting 50bp cut in September buoyed the Real Estate sector, one that is typically rate sensitive. The prospect of interest rate cuts were also thought to have contributed to the rotation towards small-cap stocks within the quarter as the Russell 2000 Index posted a return of 10.2% (USD) compared to almost flat returns (1.1%) from the S&P 500 during July. Small-cap companies tend to perform better in falling interest rate environments as this eases the cost of borrowing that these companies might depend on. Between quarters there was also a notable style rotation towards defensive sectors such as Utilities which outperformed by a significant margin compared to the prior quarter. IT and Communication Services had been the top performers earlier this year, however ended the quarter on up slightly a result of profit taking and some growing concerns over the guarantee of AI-related returns from increased Capex.



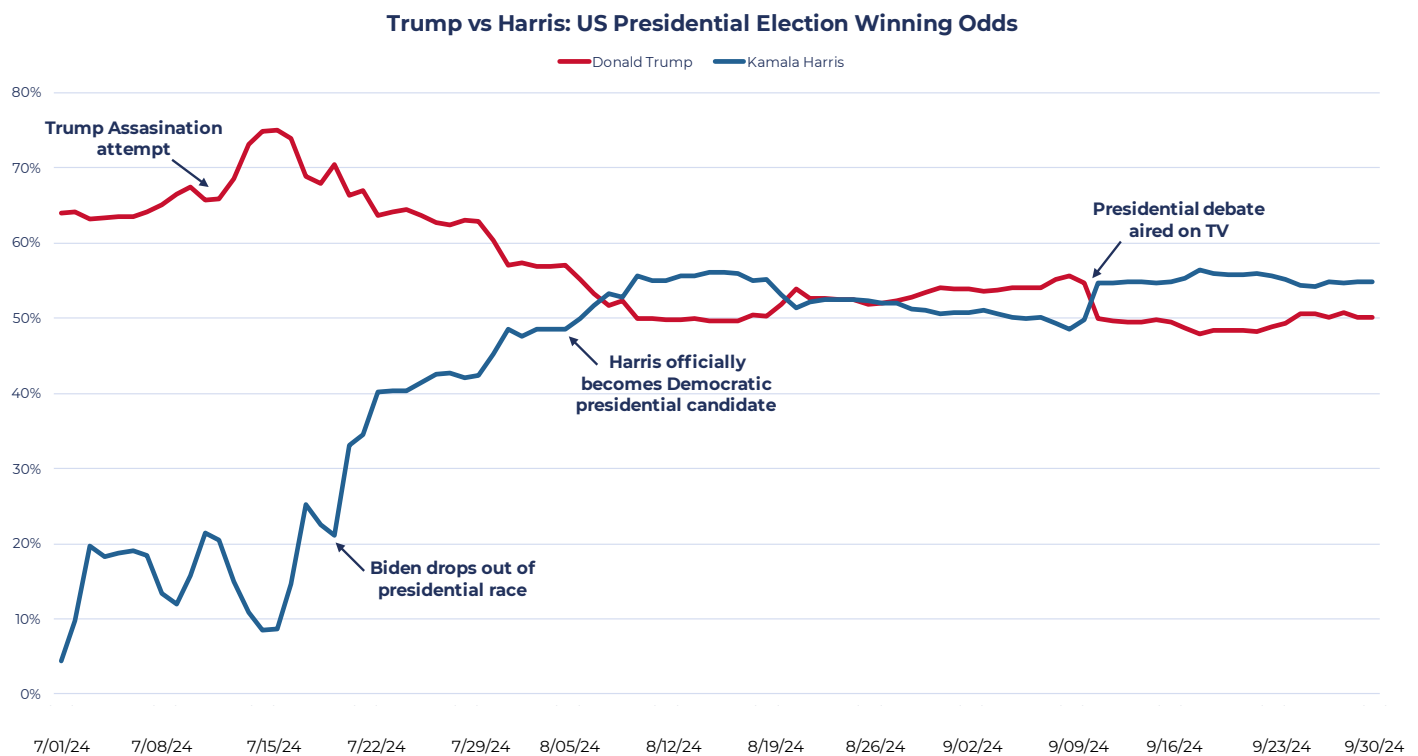
Source: Bloomberg, MSCI as of September 30th 2024



Source: Bloomberg, MSCI as of September 30th 2024

US Election

With less than a month to one of 2024's most pivotal general elections, the US Presidential race has certainly heated up, and the odds are changing. The election landscape pivoted following President Biden's withdrawal from the race in July, leaving Kamala Harris and Donald Trump vying for office. The quarter began with a Trump win implied, however the odds between both candidates are now closer than ever.

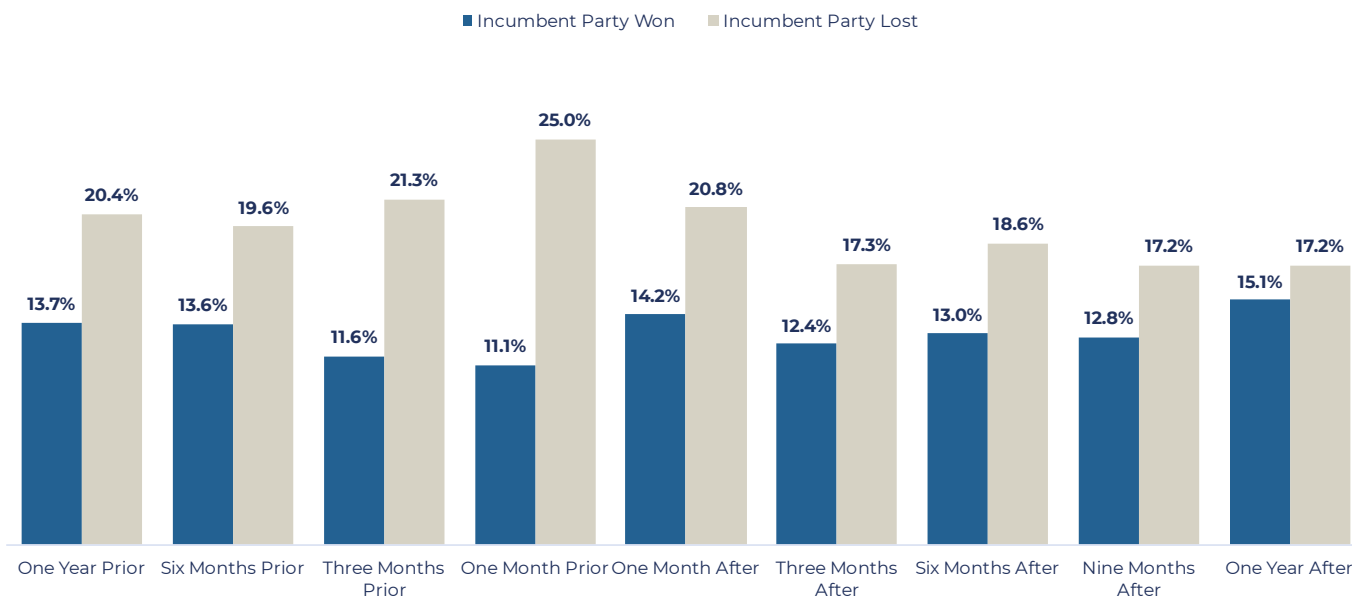


Source: UBS Evidence Lab (Implied probability based on betting odds at leading bookmakers) as of September 30th 2024

Elections have consequences

While former president Barack Obama's famous quote 'elections have consequences', certainly carries weight, the impact in capital markets is arguably limited. With several exogenous influences during election years, we remain cautious of highlighting correlations between the results of a US presidential election and stock market performance. There is however evidence concerning heightened volatility during election years, particularly when comparing the outcome for the incumbent party. Measuring volatility by the standard deviation in daily S&P 500 returns data indicates that there is lower volatility on average when the incumbent party retained presidency, compared to heightened volatility particularly running up to the election if they lost. The higher level of volatility potentially reflects the uncertainty created by increasing policy changes following a change in administration.

Average S&P 500 volatility around US Elections (1928-2020)



Source: Guinness Atkinson Asset Management, T.Rowe Price

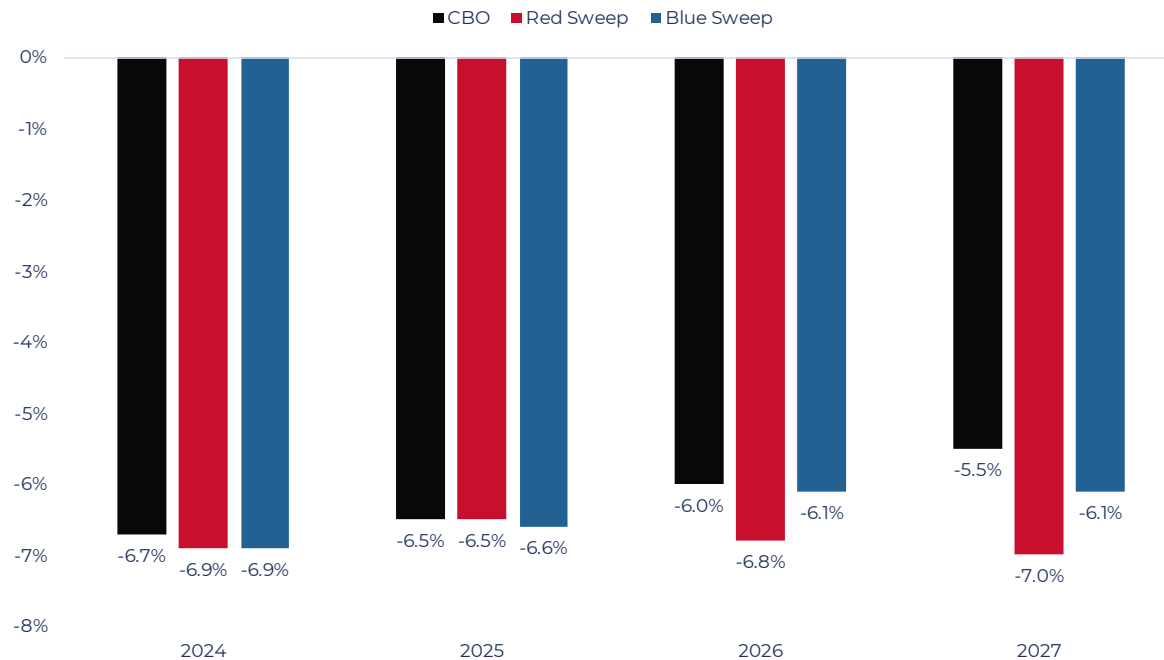
But Policy matters

Although investment decisions are unlikely to be made by nature of an upcoming US election, the potential policy changes from candidates could play an important role for equity markets going forward. Notably, the joint control of the White House and Congress by either political party (a blue or red 'sweep') would determine the extent to which policy is enacted and a divided government could render more neutral policy outcomes. We look at the policy areas which could see material change:

Fiscal Policy:

Both Harris and Trump are advocating for significant spending and tax plans. At the core of Trump's plans is the full extension of the expiring provision from the 2017 Tax Cuts and Jobs Act (TCJA) which changed tax brackets and deductions for individuals and businesses. The 2017 Tax Cuts and Jobs Act (TCJA) reduced tax rates for individuals and corporations, increased the standard deduction, and limited certain deductions, yet these are set to expire in 2025. A second Trump term could see these individual tax cuts extended beyond 2025 and potentially making them permanent, while also considering further cuts to stimulate economic growth. Fully extending the expiring 2017 tax cuts, could cost approximately 4 trillion dollars, according to estimates. The Democrats, under Harris have proposed a varied fiscal plan which would focus on raising taxes on corporations and wealthy individuals while providing support for low-income earners and families. Looking towards estimates, the fiscal package under a red sweep would leave the fiscal deficit almost 1% higher by 2027 than under a blue sweep, but both higher than under the Congressional Budget Office (CBO) baseline. However, both candidates face a common challenge over policy implementation. Congress holds control over government spending, and under a divided government, opposition parties can block the president's fiscal agenda and although this could lead to tougher negotiations, a bipartisan majority is most likely to avoid a fiscal cliff.

Estimated Fiscal Deficit (CBO vs Red Sweep vs Blue Sweep)



Source: UBS, CBO, Haver

Trade Policy:

Under certain sections of US law, Presidents can enact trade policy change through tariffs without Congressional approval making it a policy area susceptible to change, regardless of the election outcome. This leaves the door open for policy change that could influence growth, inflation and equity markets within and outside of the US. Trump has voiced clear plans to level a blanket levy on all US imports plus a 60% to 100% tax on Chinese products, alongside a 10% tariff on all US imports. There is some upside to this as it could offset the costs of other proposed fiscal spending however this presents a headwind to foreign equities and could increase inflationary pressure. Conversely, Harris has not shown support for across-the-board tariffs or raising tariffs on Chinese imports and would likely retain existing tariffs and sanctions. The observed impact from tariffs on some Chinese companies and particular industries such as semiconductors in recent years highlights companies that could be vulnerable under a Trump administration. While the Fund has an overweight position to semiconductors, we continue to monitor the ongoing impact of export controls and tariffs.

Estimated Tariffs under a Second Trump Administration

Country	Coverage/ Goods	Amount (\$bn)	Current Tariff	Incremental Tariff	Possible Final Tariff
China	List 1-2 (no consumer goods)	40	25%	60%	85%
	List 3 (20% consumer)	120	25%	35%	60%
	List 4a (mostly consumer)	90	7.5%	10%	17.50%
	List 4b (mostly consumer)	200	0%	5%	5%
Mexico	Auto Imports	Very small	0-2.5%	97.50%	100%
EU	Auto Imports	80	2.5%	22.50%	25%
Global	All imports	3100	2.7%	10%	12.70%
China	All imports	450	13.7%	40%	53.70%
Global	All imports	3100	2.7%	TBD	TBD

Source: Goldman Sachs Investment Research

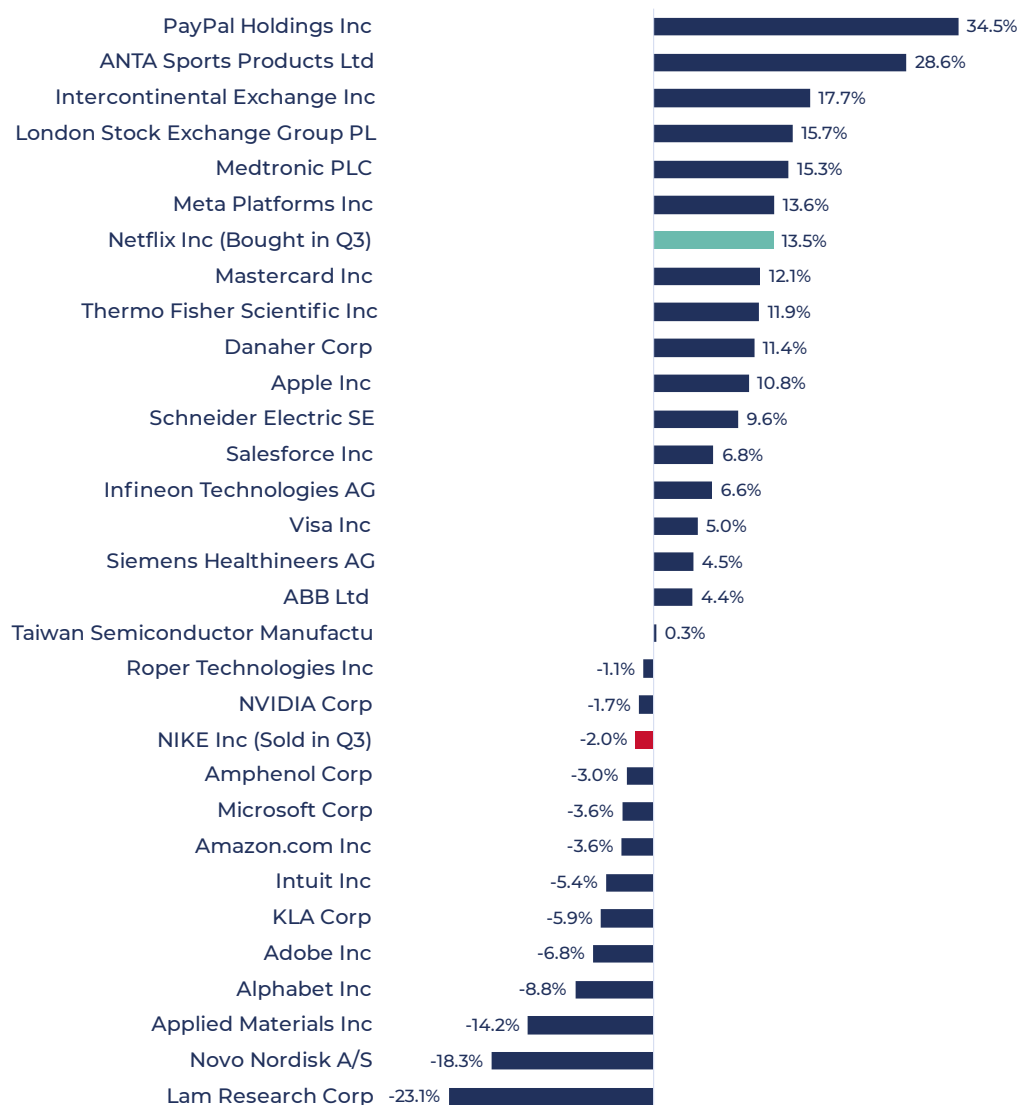
Immigration Policy (Labor market):

Both candidates have signaled plans to tighten immigration policies in response to the increase in net immigration since the COVID-19 pandemic. U.S. presidents have some authority to independently influence immigration policy, at least on a temporary basis. A stricter immigration approach under Trump could reduce the labor supply, potentially leading to faster wage growth, higher consumer inflation, rising U.S. Treasury yields, and narrower profit margins for U.S. businesses. In contrast, a more lenient immigration policy under Harris could produce the opposite outcomes, but given the noted impact of jobs data and the general labor market on investor sentiment in recent quarters, this remains an important policy area to watch.

The outcome of the U.S. election could have implications for U.S. equity markets, as the fiscal, tax, and regulatory policies of the next administration will shape the economic landscape. However, the exact impact remains uncertain due to several variables, including potential shifts in Congress, the close odds of winning between candidates, and broader economic conditions. While policies like tax cuts, increased spending or tariffs could influence specific sectors, market responses are often driven by complex factors beyond just electoral outcomes. As a result, while the election will undoubtedly play a role in shaping market expectations, the full effect on U.S. equities remains inherently unpredictable and our investment philosophy remains grounded in a more bottom-up stock selection process.

Individual Stock Performance in Q3 2024

The chart below shows the portfolio constituents' returns over Q3 2024 in USD.



Source: Guinness Atkinson Asset Management, Bloomberg, as of September 30th 2024



PayPal (+34.5% USD)

PayPal, ended the quarter as the Fund's best performer following solid second quarterly earnings, indicating renewed strength after several quarters of weakness. In recent years, investor enthusiasm over the stock has waned due to concerns over the intensifying competition with its core PayPal Button business from newer digital payment wallets such as Apple Pay or CashApp and slower growth in Venmo and Braintree, PayPal's subsidiary products. However, in July, PayPal posted an encouraging set of earnings, beating estimates with 8% revenue growth year-on-year. PayPal reported improving traffic as Total Payment Volume grew at 11% year-on-year and the company saw a 3% increase in the Monthly Active Accounts year-on-year. Furthermore, the transaction margin dollar, a key measure of profitability which refers to the gross profit the company earnings from each transaction accounting for the revenues and direct costs associated with processing transactions came in at 8%, accelerating by 340 bps, the fastest growth rate since 2021. Management attributed the transaction margin growth to Branded checkout (core Button business), and Braintree; two areas of weakness in previous quarters. Importantly, the drivers of these strong earnings are likely to sustain themselves in the near term such as Braintree pricing changes which could positively impact numbers over the next few quarters. Results were impressive given the backdrop of PayPal's weaker performance in the post-pandemic period. PayPal saw high double-digit growth during the pandemic with the rise of e-commerce and the acceleration of digital payment adoption as people were required to stay at home. However, after the pandemic, e-commerce volumes slowed and structural issues concerning PayPal's branded checkout button translated into weaker earnings and margin contraction. It is worth noting that renewed strength has coincided with the arrival of new CEO Alex Chriss and a management refresh last year. Execution of new products such as FastLane, which Chriss outlined in his strategy, have accelerated and proved to be successful, providing some reassurance to investors about PayPal's near-term potential, though overall we remain watchful of the company's structural headwinds.



Anta Sports (+28.6%):

Anta Sports, the Chinese manufacturer and retailer of sports-related products ended the quarter as the Fund's second top performer. Within the quarter, Anta posted solid H1 results coming in largely above expectations. The company beat expectations with top line sales growth of 13.8% yoy with the core Anta brand, the Fila brand and more premium brands Descente/ Kolon up 13%, 7% and 42% respectively. Positively, gross margins grew by 80bps to 64.1% and all brands delivered GM expansions driven by lighter discounts on products. Looking forward, despite lowering revenue guidance for its Fila brand from 10-15% to high single digits, management have maintained the +10% guidance for the overall business and remain confident in delivering this thanks to performance this year and solid brand momentum. This is encouraging given the tougher macroeconomic environment within China over the past year. The region has experienced a period of lower than-expected GDP growth and a property market downturn in 2023, dampening consumer sentiment and spending. This was echoed by management commentary from earnings stating that "although the consumer segment in the first

half of the year continued to face numerous uncertainties, the overall trend in the sportswear industry remains stable and positive". Importantly, the stock's performance was also buoyed by improving investor sentiment for Chinese equities following a surprising fiscal stimulus from the People's Bank of China (PBOC). The PBOC China announced a sweeping \$114bn economic stimulus package, alongside a 50bp cut to the reserve requirement ratio and a 20bp cut in the interest rate, both larger than expected. This was coupled with changing rhetoric from Beijing's Politburo, expressing favor for neglected consumers and the need for fiscal spending, creating a positive signal for the company given its exposure to consumer spending habits. While the fiscal stimulus provided an exogenous stock catalyst, the underlying business characteristics are high quality (strong multi-brand portfolio, strong operational management and ongoing innovation), giving us confidence in the company's long term growth potential.

Novo Nordisk (-18.2%):



Novo Nordisk, one of the world's leading pharmaceutical providers, ended the quarter as the Fund's second weakest performer among growing competition in the weight-loss and obesity drug market. The company gained popularity as one of the first movers with its flagship GLP-1 drugs Ozempic and Wegovy. Similarly, close peer Eli Lilly followed suit with its drugs Mounjaro and Zepbound but the duopoly of the two pharmaceutical giants has recently been threatened by new private and public entrants emerging. The global GLP-1 drug market has potential to reach \$200bn, making it an enticing prospect for peers Pfizer, Roche and AstraZeneca who have all shown progress in developing rival drugs. Although Novo Nordisk and Eli Lilly hold significant first-mover advantage, the threat of new entrants taking market share, adding pricing pressure and increasing then general competition of the market has heavily weighed on the stock price. This was not helped by Q2 earnings that narrowly missed high consensus expectations (-1% at the top line), driven by supply constraints for Wegovy and Ozempic. This overshadowed management raising guidance, a confidence we share with management that Novo Nordisk can continue to generate profitability and sales despite growing competition. The company holds strong intangible assets in diabetes and related cardiometabolic diseases like obesity, contributing to the wide economic that should shield profitability. Alongside, the company is actively diversifying its portfolio of GLP-1 products, notably with pipeline product CagriSema already producing strong efficacy data in phase 3 trials. While pricing pressure is a concern, volume is arguably more relevant to the obesity market given the current low penetration rates and the company's outlined plans to ease supply constraints. We remain watchful of updates in the ever-evolving GLP-1 market however given its clear competitive advantages we believe Novo is well-placed to remain one of the key players in the market.



LAM Research (-23.1%):

LAM Research, the American supplier of wafer-fabrication equipment ended the quarter as the bottom performing stock. Semiconductor stocks entered August already with negative equity momentum, ending July as the bottom-performing industry following indications of stricter US trade restrictions in China. Given Lam generates 42% of sales (2024) from the region, the company suffered significant

declines as investor sentiment dampened with concerns over the risk of souring US-China trade relations. Despite broader semiconductor weakness, Lam research posted solid earnings, with a slight beat on sales (\$3.87bn vs \$3.83bn), driven primarily by a strong beat in their Customer Services Business Group. Despite some weakness in the Systems segment, gross margins were strong at 48.5%, about 100bps above guidance. Importantly, the company also reiterated its FY 2024 wafer fab equipment (WFE) market outlook, voicing optimism on a rebound to NAND (Not AND) flash memory and delivered guidance in line with expectations. Ultimately, recent updates on tightening export controls within the semiconductor industry is a risk factor, however the long-term growth thesis for LAM Research remains intact and signs of recovery from the latest cycle are emerging.

Changes to the portfolio:

In August, we made one switch, selling Nike for Netflix.

NETFLIX

Buy - Netflix. The streaming giant is a high-quality, fast-growing business with a solid growth runway that is being leveraged by a competent and well-run management team. Netflix transitioned to streaming well before competitors and are now the dominant streaming player. Their first mover advantage allowed them to accrue a vast content library (when capital was cheap and investors patient) and they have built on this moat given continued investment into their own original content. This includes a growing non-English catalog, which has opened up international markets and allowed continued subscriber base growth, which now stands at 270m. Going forward, monetising their ad-tier subscribers, expanding penetration in developing markets, and incremental average revenue per unit (ARPU) increases will drive the growth outlook - while Gaming / Sports remain a potential growth avenue for the future. While the valuation is not overly cheap in the absolute (~34x 1yr fwd PE), the stock has historically traded in a wide range (40x+ in the pre COVID growth era and troughing at ~12X in late 2021 over growth fears), although we feel the currently quality-growth attributes of the firm justify this premium to the market. At present, the business (and the narrative) has turned a corner following concerns over profitability, but management actions have driven both subscriber numbers and profits meaningfully in the past years, and investors look forward to the encouraging growth – and most importantly *profitable-growth* – runway that lies ahead. Even as management shift investor focus away from pure subscriber adds to user engagement, the growth story still has legs with double digit topline forecast, ~25%+ on the bottom line and a strong improvement in margins and free cash flow (FCF) all pointing to an encouraging outlook.



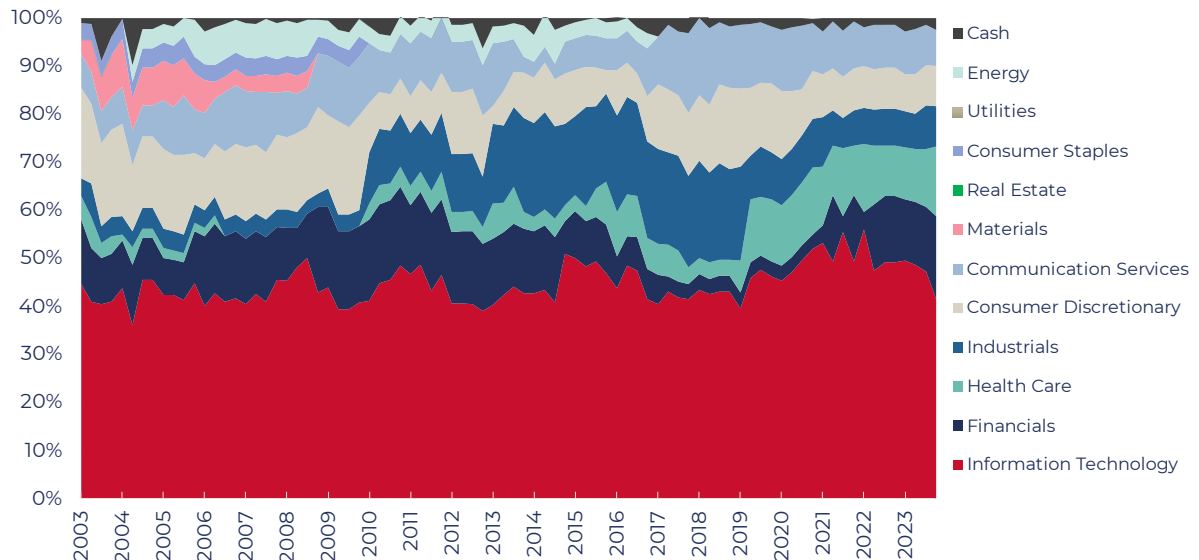
Sell – Nike. We first purchased Nike in November 2016, delivering a total return of ~60% (in USD terms) over the holding period (vs MSCI World +147%). The first 5 years of the holding period saw strong outperformance, particularly during the pandemic when the benefits of global lockdowns amplified the success from the firm's decision to focus on Direct-To-Consumer (DTC) and 'Online' - while moving away from wholesale partners. Since then, however, it appears that these pandemic-era benefits served to mask deeper underlying issues with the strategy – in particular a declining level of competitiveness,

despite the benefits to profitability. Results in July brought to the forefront many of these concerns. After seeing no growth in FY24 and guidance for negative growth in FY25, the reacceleration of revenues investors had patiently been holding out for seemed to have once again been pushed further out. The slowdown had previously been attributed to a weak economic backdrop and thus a weak consumer – this argument carries weight, but not only do these headwinds appear deeper than expected, there are now questions around competitiveness, in light of inroads made by the likes of Adidas, Lululemon and On Running, and the multi-year decline in share for Nike. In all likelihood, these firms gained share as a direct result of Nike cancelling relationships with Wholesalers, and opening up shelf-space for challenger brands. A marked slowdown in the 'Lifestyle' portfolio (i.e. non-performance-wear, about 60% of sales) has spurred a rethink in strategy, with a complete refresh of the portfolio set to be completed by the end of FY25 (May 2025), with significant SKU (stock keeping unit) cutting underway. This quarter appeared to be a hard reset for Nike – a recognition that the current portfolio is not going to deliver the required growth, and a refresh and refocus towards innovation is their plan to do it (alongside greater brand and marketing investment).

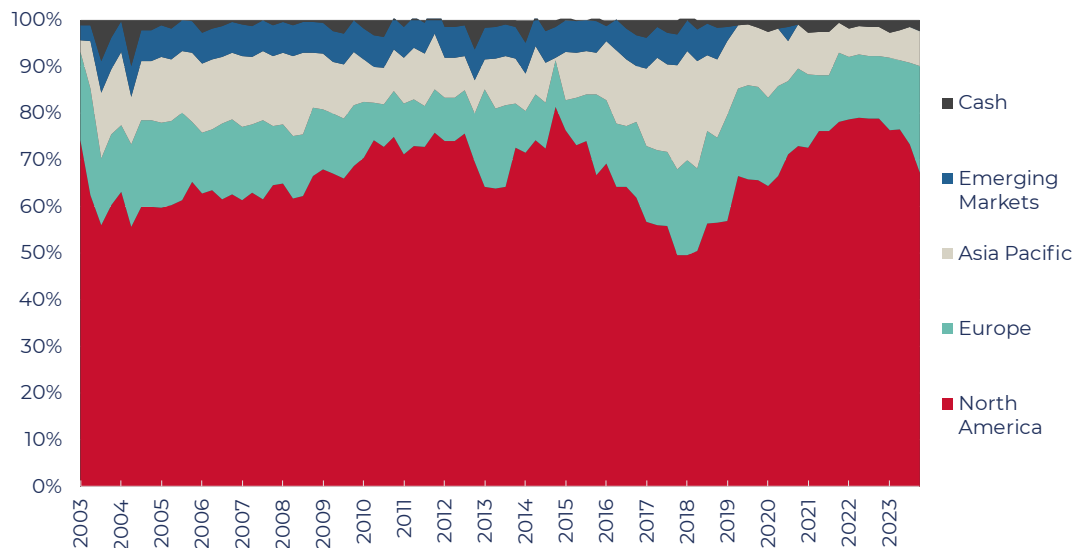
The foundations for Nike remain strong: they retain #1 market share across major markets, their brand equity is undoubtedly strong (even if diminished), the firm have a robust supply and distribution network with strong retailer relationships and broad category exposure – all while retaining a very strong balance sheet. Not only this, but Nike have proved over their history their ability to drive sales growth through innovation. Whilst we acknowledge they may be able to repeat this cycle again, we see increased risk to the near-to-mid term outlook and note that with a greater competitive threat and new, innovative competition this task is all the harder to achieve. Management commentary appears to suggest that the reinvigoration of growth is not on a near-term horizon, and macro trends in the meantime are not favorable. Consumer trends change often, and Nike have often repositioned to capture these trends, but relying on 'innovation' for growth appears to be a difficult sell when there is no guarantee this will flow through to real earnings. We view the firm's problems are more than a weakening consumer environment, but a diminished ability to compete with peers, and a misstep in strategy. This could be a 'multi-year' reset for the firm, with no quick rebound in earnings. To summarise, while we do not rule-out success in Nike's new strategy, we have lost confidence that the stock will be able to reinvigorate growth back into the product portfolio in a desired time frame, and therefore believe there are better opportunities elsewhere.

Portfolio characteristics

The two charts below show how the exposure of the fund has evolved since we launched the strategy back in 2003. We continue to hold no exposure to Real Estate, Energy, Materials, Consumer Staples, and Utilities. Information Technology remains our largest exposure, split between the three sub-sectors of semiconductors; software and services; and technology hardware. On a regional basis, North America continues to be the largest exposure (67%), followed by Europe (23%) and Asia Pacific (8%).



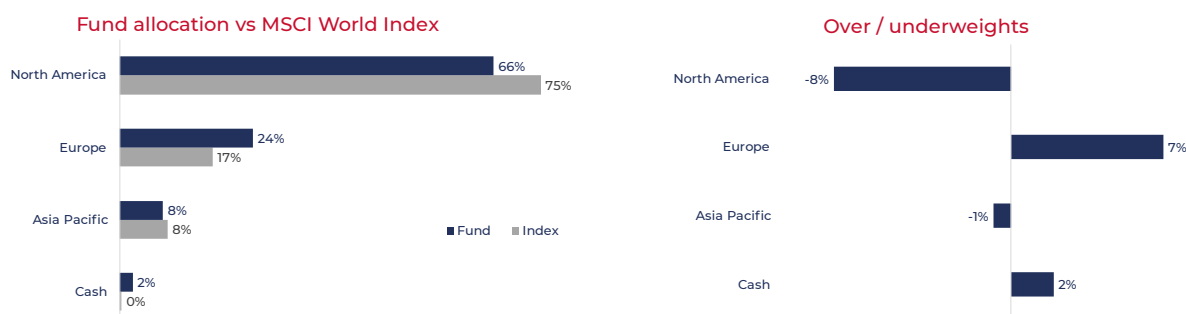
Portfolio sector breakdown. Guinness Atkinson Asset Management, Bloomberg (September 30th 2024)



Portfolio geographic breakdown. Guinness Atkinson Asset Management, Bloomberg (September 30th 2024)

On a regional level, the Fund remains at a small underweight position to North America and a small overweight position to Europe. Asia Pacific remains relatively underweight, relative to the benchmark.

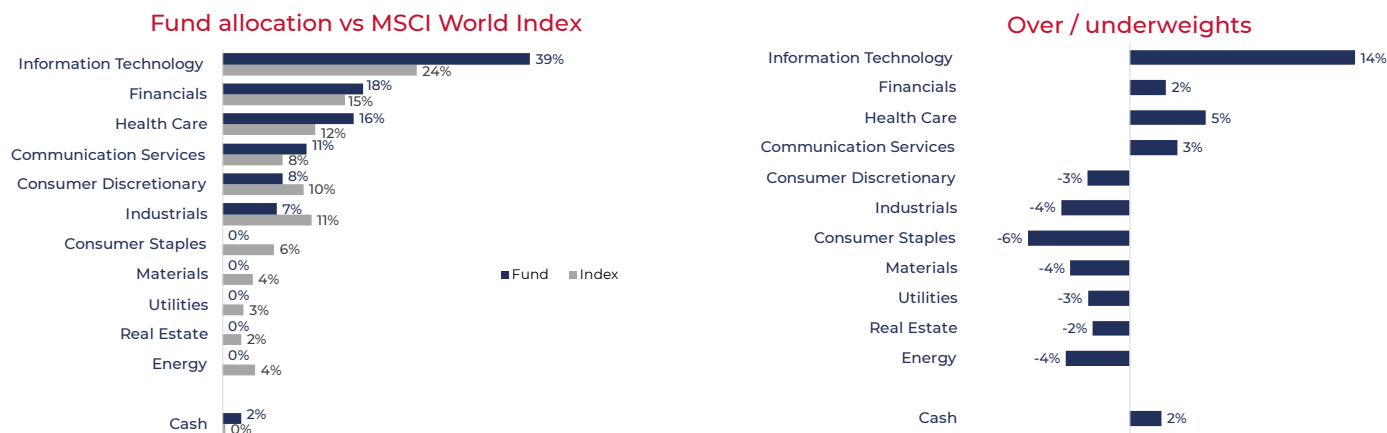
Geographic breakdown versus MSCI World Index



Guinness Atkinson Asset Management, Bloomberg (data as at September 30th 2024)

On a sector level, the fund continues to have a large overweight to IT (14%), while the fund's 0% exposure to Real Estate, Energy, Materials, Consumer Staples, and Utilities leaves these areas underweight relative to the benchmark. The impact of the switch resulted in an increase to Communication Services (purchase of Netflix), a reduction in Consumer Discretionary (the sale of Nike).

Sector breakdown of the fund versus MSCI World Index



Guinness Atkinson Asset Management, Bloomberg (data as at September 30th 2024)

Outlook

The Guinness Atkinson Global Innovators Fund seeks to invest in quality growth companies trading at reasonable valuations. By doing so, we seek to invest in companies that are experiencing faster profit growth, larger margins and with less susceptibility to cyclical pressures. In particular, our focus on quality growth-at-a-reasonable-price has shown its strength in avoiding the highly valued non-profitable tech businesses that have swung between large rises and falls, but ultimately underperformed significantly over the post-pandemic period.

The table below illustrates how the portfolio reflects the four key tenets of our approach of growth, quality, valuation, and conviction.

- **Growth** drives long-term returns. We focus on companies with exposure to long-term secular growth themes, that are expected to grow faster than the market over time, and which may offer more predictable, sustainable growth.
- **Quality** protects against downside risks. We focus on high and consistent return on capital, balance sheet strength, and sustainable competitive advantages. Valuation is important; we aim to avoid overpaying for (uncertain) future growth.
- **Valuation** is important – we will not overpay for future growth.
- **Conviction** is reflected in our high active share, 30-stock, equal-target-weight portfolio, long-term, low-turnover approach.

The Fund has many superior characteristics to the broad market; higher sales and earnings growth, superior return on capital, and greater balance sheet strength, with higher historic growth. The fund currently trades at a 32.1% premium to the MSCI World Index on a P/E (2024e) basis, with expected earnings growth (2025 vs 2024) of 18.2% vs the MSCI World of 12.5%. Compared to the MSCI World Growth index, the Fund trades at an 10.7% discount (P/E 2024e), but with a comparable level of expected EPS growth.

Portfolio metrics versus MSCI World Index		Fund	MSCI World Index
Growth	Trailing 5-year sales growth (annualized)	13.8%	4.3%
	Estimated earnings growth (12M forward)	18.2%	12.5%
Quality	Return-on-Capital	21.4%	8.5%
	Median net debt / equity	16.4%	38.9%
Valuation	PE (2024e)	27.6x	20.9x
	PE (2025e)	23.3x	18.6x
Conviction	Number of stocks	30	1480
	Active share	79%	-

Source: Guinness Atkinson Asset Management, Bloomberg, as of September 30th 2024

Though the macroeconomic outlook is certainly more mixed, there are signs of strength and the start of the rate cutting cycle in the US is a promising signal for consumers and businesses. Even through a quarter of heightened volatility, stock fundamentals have shown resiliency, giving us reassurance in our bottom-up approach to stock-picking in the face of economic and geopolitical uncertainty. We are confident that the Fund's focus on high quality growth stocks, underpinned by structural changes stands us in good stead going forward. Our bottom-up approach helps to identify these quality growth companies, while also maintaining a valuation discipline – particularly important in the context of a market where valuation is front of mind. In addition, our equally weighted positions limit over-reliance on any single company. We continue to focus on these key tenets in the Fund and remain confident of this process over the long term.

We look forward to updating you on the progress of the fund over the remainder of 2024.

We thank you for your continued support.

Portfolio Managers

Matthew Page, CFA & Dr Ian Mortimer, CFA

Summary performance

In the third quarter of 2024, the Fund returned 2.5% (in USD) and the MSCI World Index returned 6.4%. The Fund therefore underperformed the Index by -3.9% over the period.

Over the year-to-date, the Fund returned 21.3% (in USD) and MSCI World Index returned 18.9%. The Fund therefore outperformed the Index by 2.4% over the period.

Despite ending the quarter in positive territory, global equities experienced a relatively volatile Q3 as markets were rocked by the unwinding of the yen carry trade and a broader sell-off in larger cap and IT stocks toward the start of the quarter. Interest rate cut expectations dominated the narrative as investors grew increasingly concerned with the lack of cuts from the Federal reserve and the pace at which they have acted. Expectations have shifted significantly over the year but softer inflation, weaker jobs and manufacturing data within the quarter prompted heightened expectations of an imminent rate cut, amidst growing concerns over the health of the US economy. The quarter ended on a lighter note as the Federal Reserve finally began the long-anticipated rate cutting cycle in September with a 50bp cut, somewhat appeasing investor concerns. Finally, the unexpected announcement of a fiscal stimulus package in China supported a strong rally in stocks into the quarter end.

With the upcoming US election on November 5th, we take a brief look at how the election landscape has changed over the quarter. While we remain cautious of projecting the impact of elections on equity markets, we delve into policy areas that are more vulnerable to change.

CBOE Volatility Index (VIX)



Source: Bloomberg as of September 30th 2024

The Fund's relative performance over the third quarter can be attributed to the following:

- The Fund benefitted from strong selection within the Financials sector as holdings PayPal (+34.5%), Intercontinental Exchange (+17.7%) and Mastercard (+12.1%), all outperformed the broader MSCI World Financials sector (+10.8%). It was particularly encouraging to see recent addition to the Fund, London Stock Exchange Group (+15.8%) also outperform.
- From an asset allocation perspective, the Fund's overweight position to the Information Technology sector was a detractor to performance given the market sell-off during the quarter. However, this was somewhat offset by the Fund's overweight exposure to China, specifically Anta Sports (+28.6%) versus the MSCI World which outperformed during the market rally at the end of the quarter.
- The Fund benefited from a zero-weight allocation to the benchmark's worst performing sector Energy (-2.2%).

as of 09.30.2024 (in USD)

	1 year	3 years annualized	5 years annualized	10 years annualized
Global Innovators, Investor Class¹	38.05%	8.90%	16.91%	12.69%
Global Innovators, Institutional Class²	38.38%	9.17%	17.20%	12.94%
MSCI World Index NR	32.43%	9.07%	13.03%	10.07%

All returns after 1 year annualized.

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.

¹ Investor class (IWIRX) Inception 12.15.1998 Expense ratio* 1.24% (net); 1.28% (gross)

² Institutional class (GINNX) Inception 12.31.2015 Expense ratio* 0.99% (net); 1.13% (gross)

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).

*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, 2027. 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 09/30/2024:

1. ANTA Sports Products Ltd	4.27%
2. Meta Platforms Inc. - Class A	3.80%
3. PayPal Holdings Inc	3.74%
4. London Stock Exchange Group PL	3.62%
5. NVIDIA Corp	3.58%
6. Mastercard Inc	3.56%
7. Netflix Inc	3.55%
8. Siemens Healthineers AG	3.54%
9. Medtronic PLC	3.54%
10. Intercontinental Exchange Inc	3.49%

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.

The **Russell 2000 Index** is a stock market index that measures the performance of the 2,000 smaller companies included in the Russell 3000 Index (small cap). The Russell 2000 is managed by London's FTSE Russell Group.

The term "**Magnificent Seven**" in the context of the stock market refers to Apple, Microsoft, Amazon, Alphabet (Google), Tesla, Meta and Nvidia. These companies are at the forefront of innovation in various tech sectors, including cloud computing, e-commerce, social media, artificial intelligence and electric vehicles.

Basis points (BPS) refers to a common unit of measure for interest rates and other percentages in finance. 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 **Consumer Price Index (CPI)** is an index of the variation in prices paid by typical consumers for retail goods and other items.

The **European Central Bank (ECB)** is the central bank of the 19 European Union countries which have adopted the euro.

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.

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.

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 **Tokyo Price Index (TOPIX)**—is a metric for stock prices on the Tokyo Stock Exchange (TSE). TOPIX is a capitalization-weighted index that lists all firms in the "first section" of the TSE, a section that organizes all large firms on the exchange into one group. The second section of the TSE pools all of the smaller remaining companies.

The **CBOE Volatility Index (VIX)** attempts to measure the magnitude of price movements of the S&P 500 (i.e., its volatility). The more dramatic the price swings are in the index, the higher the level of volatility, and vice versa.

A **debt-to-income (DTI) ratio** is a financial metric used by lenders to determine your borrowing risk. It is measured as the percentage of your monthly gross income that goes to paying your monthly debt payments.

Volatility is a statistical measure of the dispersion of returns for a given security or market index. It is often measured from either the standard deviation or variance between those returns. In most cases, the higher the volatility, the riskier the security.

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

The **Nasdaq 100 Index** is a basket of the 100 largest, most actively traded U.S. companies listed on the Nasdaq stock exchange.

The **price-to-earnings ratio (P/E ratio)** is the ratio for valuing a company that measures its current share price relative to its earnings per share (EPS).

S&P Global is the world's foremost provider of transparent and independent ratings, benchmarks, analytics, data, research and commentary

Personal consumption expenditures (PCE), also known as consumer spending, is a measure of the spending on goods and services by people of the United States.

The **S&P 500 Index** features 500 leading U.S. publicly traded companies, with a primary emphasis on market capitalization. It is a float-weighted index, meaning the market capitalizations of the companies in the index are adjusted by the number of shares available for public trading.

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.

Free cash flow (FCF) is the cash left over after a company pays for its operating expenses (OpEx) and capital expenditures (CapEx).

Capital Expenditure (CAPEX) Funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment.

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

Return on capital (ROC) is a ratio that measures how well a company turns capital (e.g., debt, equity) into profits. In other words, ROC is an indication of whether a company is using its investments effectively to maintain and protect their long-term profits and market share against competitors. Return on capital is also known as return on invested capital (ROIC).

The meaning of **NAND** is a computer logic circuit that produces an output which is the inverse of that of an AND circuit. While an AND gate outputs a logical "1" only if both inputs are logical "1," a NAND gate outputs a logical "0" for this same combination of inputs.

Net debt is a liquidity metric that's used to determine how well a company can pay all its debts if they're immediately due. Net debt shows how much cash would remain if all debts were paid off and if a company has enough liquidity to meet its debt obligation

Net Equity is calculated by subtracting total liabilities from total assets. This equity represents the net value of a company, or the amount of money left over for shareholders if all assets were liquidated and all debts repaid.

Active Share is a measure of the percentage of stock holdings in a manager's portfolio that differs from the benchmark index. Managers with high Active Share have been found to outperform their benchmark indexes.

One cannot invest directly in an index.

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