Guinness Atkinson
Global Innovators Fund
Managers Update – January 2019

Review of 2018

2018 proved to be a volatile year for equities as uncertainty increased around trade tensions, central bank policy tightening and continued fears over equity valuations. While the MSCI World Index (the benchmark) returned 5.4% (in USD) in the first 3 quarters of 2018, a sharp sell-off in Q4 left some equity markets in bear territory with the MSCI World returning -8.7% (in USD) over the full year.

Earnings continue to rise:

The year picked up where 2017 left off, with equity markets extending their surge off the back of continued strength in corporate earnings helped in large by US tax cuts. The tax reform bill, approved in December 2017, was a major legislative victory for President Trump and resulted in the corporate tax rate falling from 35% to 21%. Robust economic and corporate data ensured major equity markets continued their run with growth stocks the main beneficiaries for the first three quarters. The portfolio, which has an overweight exposure to IT stocks, subsequently yielded some strong stock specific returns over the period with such names as Nvidia, who in early February, reported their largest earnings surprise since 2011. Earnings continued their advancement throughout the year, however, as turbulence entered the market in Q4, earnings growth was not enough to stem the selloff that companies later endured.

Volatility returns:

With corporate earnings continuing to rise and US jobs reports indicating wages were rising faster than expected, fears of heightened inflation spread. This led to an increased expectation of multiple interest rate hikes from the US FED, prompting increases in bond yields. The uptick in bond yields had a knock-on effect in equity markets, spiking volatility (as measured by the VIX index) and erasing 10% off the S&P 500 in a swift February sell-off that raised concerns of the almost decade long bull run was showing signs of ending. However, as volatility enveloped the market over the February period, the fund outperformed the benchmark owning to strong idiosyncratic stock movements including AAC Technologies which returned 19.1% (in USD) over the month. With volatility softening post-February, the last few months brought about a period of unprecedented turbulence as volatility once again rose causing stock prices to 'see-saw'. The last three months of the year saw investors shift away from IT companies and as such our overweight exposure became a drag on the portfolio.

Trade tensions:

2018 saw President Trump continue to repeal agreements he deemed unfair to the United States, including the North American Free Trade Agreement and the re-imposition of economic sanctions on Iran that were waived in 2015.

Tensions between the US and China were high throughout the year as a series of escalating trade tariffs were enacted upon each other. This came as Donald Trump looked to reduce the trade deficit the US has with China – China exports around $370bn more to the US than is bought from US producers - alongside addressing fears surrounding IP protection on US technology. The inability for any concrete discussion to take place left China with $250bn of the $500bn it exports to US with tariffs of 10% to 25%. Slowing growth numbers from China throughout the year left China as one of the worst performing regions, erasing -18.9% (in USD) off the MSCI China Index. The portfolio's overweight position to Chinese stocks – for which the MSCI World has zero exposure – thus contributed negatively to the portfolio. The year ended with the US and China agreeing to a 2-month truce until March 1st in order to negotiate a more material agreement.

China was not the only region to experience Donald Trump's trade agreement upheaval as the US imposed tariffs on steel and aluminium imports worldwide. The move was met with outcry from countries alike resulting in tit-for-tat retaliatory responses, in particular from Canada which is key supplier of steel to the US. However, the US did manage to negotiate a revamp of NAFTA, the North American Free Trade Agreement, renamed the United States-Mexico-Canada Agreement or USMCA for short. The agreement covers more than $1tn in annual trade and has been updated to include provisions regarding intellectual property, automotive manufacturing and dairy markets.

Central bank policies:

Much of investor's focus going into 2018 was on central banks' policies with an end to quantitative easing on the horizon and the prospect of rising interest rates from historic lows starting in the US. In Europe, the European Central Bank (ECB) announced the widely anticipated halting of the multi-trillion-dollar stimulus program enacted post financial crisis, although signaled caution on interest rate rises for now. The US, which has been steadily increasing its interest rates over the last two years, continued on its rate hiking path much to the distaste of the President Trump. However, with equity markets experiencing sharp sell-offs in the last quarter of the year, Jerome Powell, the FED chairmen, pointed to a possible slowdown going into 2019, much to the (brief) relief of equity markets. The portfolio has no exposure to consumer staples or 'bond proxies' most sensitive to interest rate changes and hence the fund benefited when these companies sold-off in February as speculation around interest rates increased.

Emerging market currency sell-off:

Emerging market (EM) currencies faced substantial declines in 2018, led by the Argentinian Peso and Turkish Lira. A strengthening US dollar has had substantial downward pressure on EM currencies, not least on a relative basis, but due to the large volumes of EM debt denominated in US dollars, causing its relative value to increase. But not all the deterioration can be linked to the US dollar, as domestic inflation spiraled – Turkish inflation rose to highs of 25% - and investors worried over increasing fiscal debt levels. The Argentinian Peso was the hardest hit, amplified by the governments request to the International Monetary Fund (IMF) to speed up the distribution of its loan alongside the substantial increase in interest rates from 45% to 60% to help curb inflation. The movement in emerging market currencies had little effect on the portfolio's performance throughout the year.

Brexit:

As the Brexit saga continues and with the looming March 29th, 2019 deadline approaching, the outcome is still very much uncertain. The year has seen fierce opposition to Theresa May and her negotiations with a divided cabinet, ministerial resignations and challenges for the prime minister's leadership. In July, the prime minister released her Chequers plan – the government's proposed Brexit plan – which was met with the resignations of two pro-Brexit cabinet members. Come November, some progress seemed to have been made with a withdrawal agreement reached between the EU and UK. However, it is yet to be seen whether Theresa May can rally her supporters enough for the government to pass the proposal through parliament. The fund currently holds no companies domiciled in the UK.

Oil:

By October, oil prices had risen almost 30%, with Brent crude reaching $86 a barrel and talk of a possible $100 a barrel discussed in the market once again. However, strong headwinds approached as stronger than expected US oil output, weakening global oil demand and Iranian sanction waivers to select countries, sent oil prices into a bear market with prices falling more than 35% below their October peak. This was much to the delight of Donald Trump, who has been keen to keep oil prices low and has been placing pressure on Saudi Arabia to not cut oil production. This comes as the US surpasses Saudi Arabia to become the global leader in oil production. The portfolio currently holds no energy stocks and as such was largely unaffected by movements in oil prices over 2018.

Guinness Atkinson

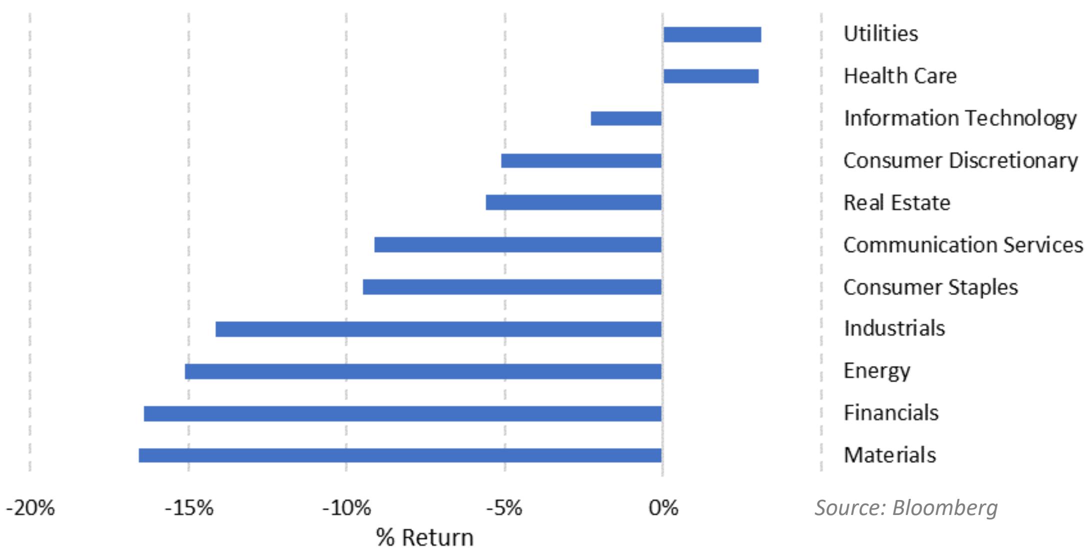
Global Innovators Fund

Managers Update – January 2019

Red October:

As equity markets continued to soar into late September, October proved to be one of the worst months for equity markets since October 2011 erasing previous gains and sending global stocks into correction and even bear market territory. Although there was not any one specific catalyst for the sell-off, bullish comments from the US FED off the back of strong economic data, the continued sell-off in bonds on interest rate rises and geopolitical tensions seemed to come together to cause investors to become substantially 'risk-off'. The result was the MSCI World losing 7.3% (in USD) within the space of the month. With the portfolio tilted towards growth stocks, the portfolio subsequently underperformed the benchmark over October. The sell-off also coincided with the largest change in sector classifications for the MSCI with the introduction of the Communication sector – a fact not widely discussed but may have caused significant turnover in portfolios linked or aligned to sector weightings within indices.

Figure 1: Sector performance in 2018 (Total Return in USD)

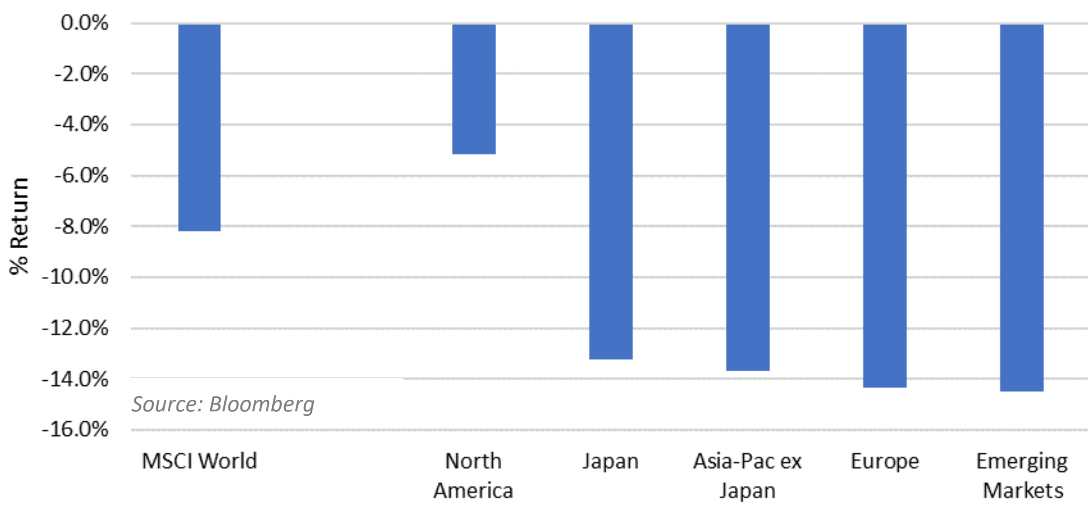


Source: Bloomberg

Past performance data quoted represents past performance and does not guarantee future results.

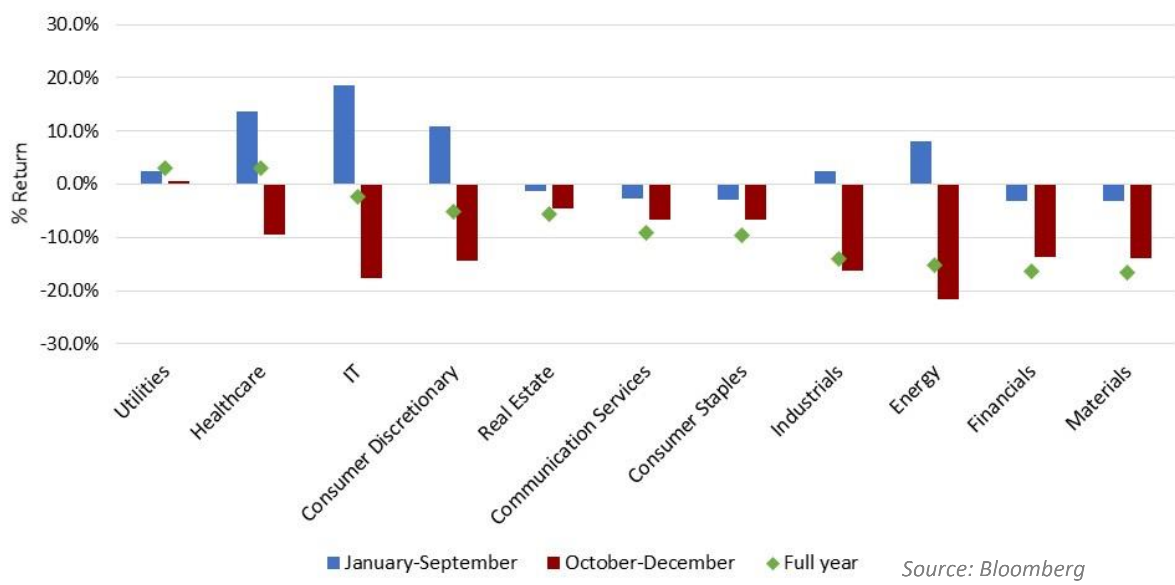
Figure 1 illustrates the individual sector performances of the MSCI World Index over 2018. The only sectors that produced positive returns over 2018 were Utilities and Healthcare returning 3.1% and 3.0% respectively. The 'risk-off' attitude from investors resulted in the more cyclical sectors - such as financials, materials, energy and industrials - suffering. The most notable outlier to the 'cyclical' classification was IT, which ended the year in the red, but was one of the relative outperformers after a very strong rally in the first three quarters of the year.

Figure 2: Regional performance in 2018 (Total Return in USD)



Geographically, as figure 2 highlights, Asia and the Emerging Markets reside as some of the largest underperformers in 2018 after trade tensions, a strengthening US dollar and idiosyncratic issues weighed down their economic growth. Similarly, Europe produced the second lowest returns over 2018, as the region faced slowing economic output, on-going Brexit negotiations and budget disputes between Italy and the EU.

Figure 3: Sector performance rotation (Total Return in USD)

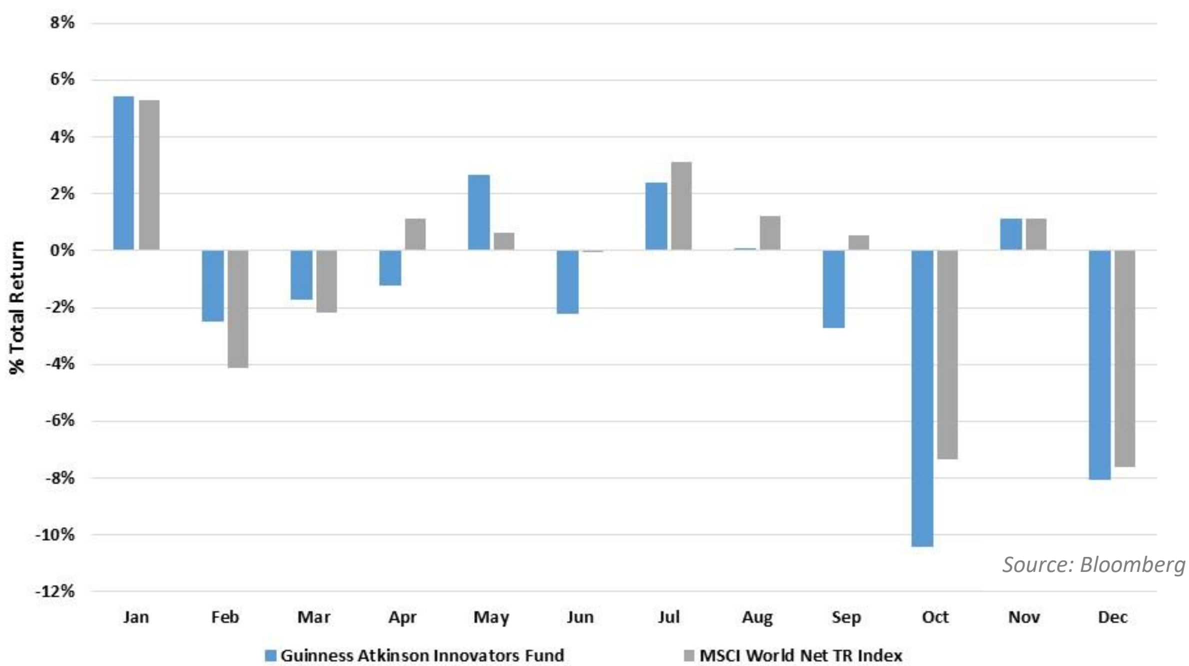


As can be observed from figure 3, outperformance seen in the first three quarters of the year from sectors such as IT, Consumer Staples, Healthcare and Energy, experienced some of the largest reversals during the final quarter of the year. A continuation of strong earnings propelled the IT sector to returns of 19% until October when investor fears of a global slowdown sent the higher valued technology stocks back down 18% between October and the end of year. Within this, companies such as Facebook – which we own in the portfolio – weighed heavily on sentiment, as the company struggled with data security disputes and suggestions of increased regulations.

Review of 2018 fund performance

As we have highlighted in previous reviews, historically, the Global Innovators Fund has tended to outperform in months where the index performance has been positive and underperform in months where the index performance has been negative. In a year where markets rallied strongly through the first 3 quarters but suffered substantial loses in the last quarter, the picture generally held true. The general sector rotation and 'risk-off' attitude in the latter part of the year resulted in much of the fund's underperformance during 2018.

Figure 4: Monthly returns of Fund (IWIRX Investor Class) vs benchmark in 2018 (all Net Total Return in USD) [1]



The fund outperformed the MSCI World in each of the first three months of the year, most notably outperforming by ~2% in February as volatility spiked, sending the majority of stocks down. Our overweighting to IT stocks, which was the top performing sector, was the largest contributor to the outperformance as strong corporate earnings resulted in large idiosyncratic stock movements.

[1] *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, visit https://www.gafunds.com/our-funds/global-innovators-fund/#fund_performance or call (800) 915-6566.*

Come the second quarter, the fund produced mixed results as our overweighting to IT became unfavorable. Stock selection was the main drag on the portfolio during this period as semiconductor companies and Apple supply chain names sold off – for example AAC Technologies and Catcher Technology, which are not constituents of the benchmark. However, our underweighting to financials provided some positives with our only financial stock, Intercontinental Exchange, returning 1.75% (in USD) while the sector was down 4.1% (in USD).

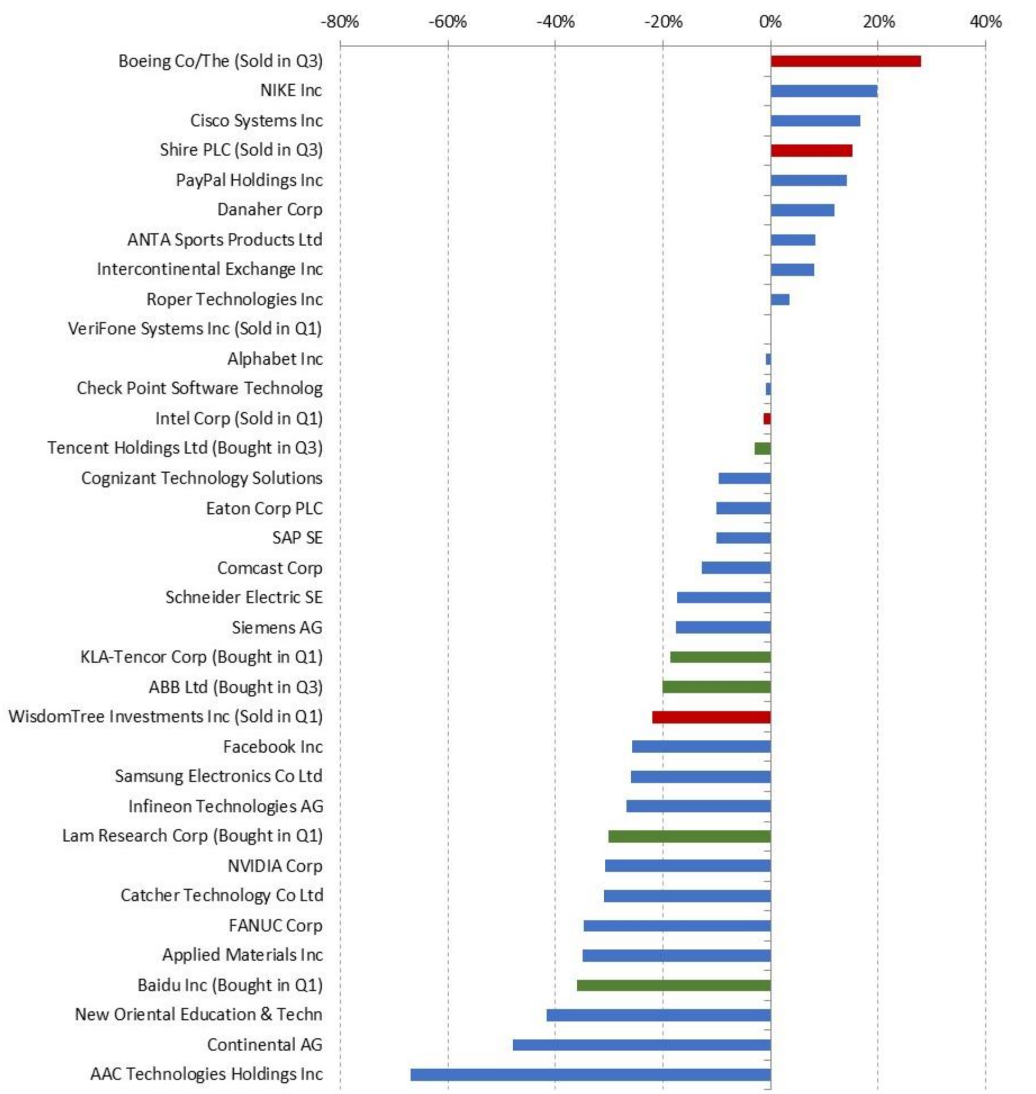
Entering the third quarter, the fund underperformed the benchmark as a continuation of the sell-off in semiconductor stocks resulted in a substantial drag on the portfolio. Additionally, our underweighting to healthcare stocks proved to be a negative contributor with the sector producing the largest returns amongst the GICS (The Global Industry Classification Standard) sectors. The fund's position in Checkpoint Software – the fund's only exposure to the Africa/Middle East region – returned 20.4% (in USD) over the quarter and thus was a key positive contributor to the fund's performance.

In October and December, notable sell-offs in sectors which had been outperforming throughout the year contributed negatively to asset allocation – in particular, IT in which the fund is overweight. The trade dispute between the US and China seemed to begin having a notable negative impact on economic indicators coming through in China – for which the fund has an overweight exposure. Reports of slowing iPhone demand and growing fears that consumers are upgrading phones more irregularly sent a sharp sell-off through Apple supply chain names. Additionally, weakness in the automotive industry, primarily driven by falling sales in China – the world's largest automotive market - resulted in the German tire manufacturer and auto components company Continental, which we own in the fund, selling off. However, with the fund continuing to have no energy exposure and significantly underweight financials, the portfolio benefited from the avoidance of the two worst performing sectors over the quarter.

Overall, our overweighting to Asia Pacific stocks, and in particular Chinese stocks, resulted in over 5% of the fund's underperformance over 2018. This can be attributed to the large sell-offs in AAC Technologies, New Oriental Education and Baidu, as well as the zero exposure the benchmark has to Chinese stocks. On a sector level, our overweighting to IT produced the majority of our underperformance with semiconductor and Apple supply chain names underperforming.

Figure 5 highlights these trends in more detail by showing all the companies held in the portfolio over the year and their total returns. Red and green highlighted bars indicate the company was sold or bought respectively during the year.

Figure 5: Individual stock performance over 2018 (total return USD)



Source: Bloomberg

Individual companies that performed well over 2018 included Nike (up 19.9% in USD), Cisco (up 16.6% in USD) and Boeing (up 28.0% in USD to 09/28/2018 when it was sold in the portfolio) which is discussed later in the 'changes to the portfolio' section.

Having rallied strongly up to September off robust earnings reports, Nike lost some ground from a fallout having made Colin Kaepernick – the National Football league quarterback famous for his protest movement against police brutality –

the face of their latest advertising campaign. However, Nike posted 4th quarter earnings that surpassed analysts' expectations by ~13%, sending the stock price up some 7%. The continued results point to Nike's on-going restructuring efforts which have seen Nike focus on direct-to-consumer sales, cutting out third party middlemen, and reducing the number of products sold by 25% in order to speed up product development. This has allowed Nike to increase its pricing power and improve gross margins by 80bps (basis points) in the most recent quarter.

Cisco, which continues to be a strong contributor to the fund's long-term performance, beat quarterly earnings estimates in each quarter of 2018. This was taken as further evidence that their new strategic transformation is yielding results as the company moves from a focus on traditional hardware to software products. The company aims to derive 50% of sales from software by 2020, as opposed to nearly 100% derived from hardware in the recent past. Several high-growth products, including programmable switches, security and collaboration products, are helping offset the weakness in legacy product sales. Building on this strategy, Cisco also announced they intended to acquire Duo, a company providing identification and authentication solutions via the cloud, better allowing customers to securely connect to networks.

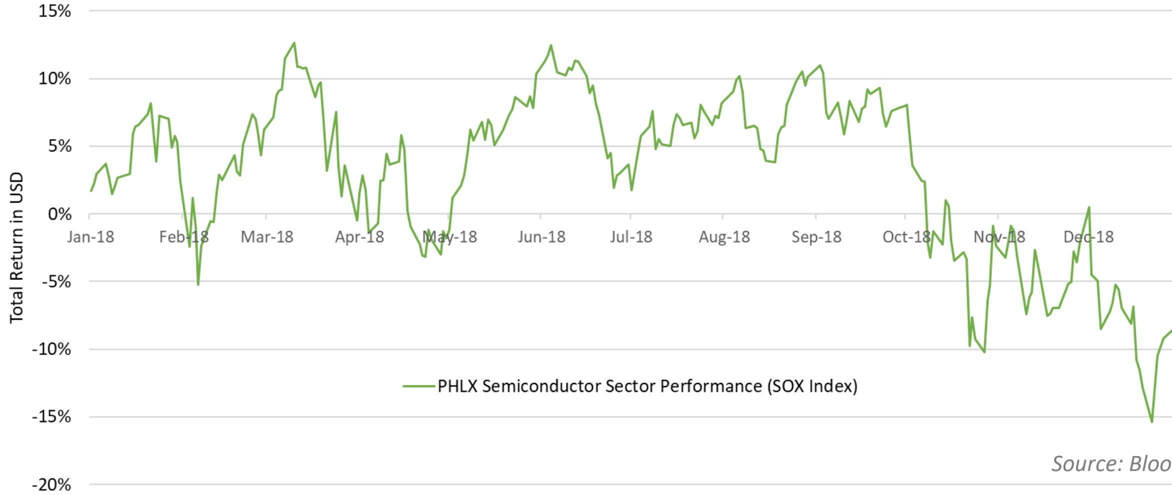
Individual companies that underperformed over the year were AAC technologies (-66.9% in USD) and Continental (-47.9% in USD).

AAC technologies, a key supplier of smartphone components including acoustics, haptics and optics, experienced continued downward pressure over the year from slowing smartphone demand and fears of increased competition. As a key supplier to Apple's iPhones, AAC has been part of the recent sell-off in Apple supply chain names as reports of slowing iPhone demand have raised fears of deteriorating growth. AAC continues to produce innovative products including the use of smartphone screen surfaces as speakers and the increased use of haptics for user feedback. The rising demand for premium smartphones, leads to the necessity for premium components, and as such, AAC's superior products should be able to regain any temporary loss in market share to new entrants. AAC now trades on a 1 year forward P/E of around 11.5x - a figure we believe is not reflective of the company's potential future growth but is more in line with the compression seen in Asian IT multiples in general.

Continental's underperformance was driven by profit warnings signaled by management in August, citing lower expected sales and increased costs. It was an indication of softening demand in the automotive sector as interest rates rises, trade tariffs, increased costs and consumers change in preferences to such vehicles as SUVs. Continental continues to be a quality company – returns on capital are above 10% for the last 7 years - and we remain positive in our belief that their automotive segment, which includes breaking, drive chains and chassis, can benefit from the changing automotive landscape to the electric car and autonomous vehicle. Continental currently trades on a 1 year forward P/E of 8.6x – significantly below its historic valuations.

2018 saw the Philadelphia Semiconductor Index fall 6.0% with most of the underperformance in the last 3 months of the year. The fund's exposure to semiconductor companies such as Applied Material and Nvidia had a negative impact on the portfolio's performance over the year. As discussed in December's monthly brief, semiconductor names have historically been more cyclical than other parts of the IT sector. However, long-term prospects look very favorable given the numerous innovation themes and the attractive multiples and long-term growth rates they currently exhibit versus alternative IT companies – as of the 31st of December the Philadelphia Semiconductor Index traded at a 22% discount to the MSCI World IT index, yet only implied a 2% slower grower rate.

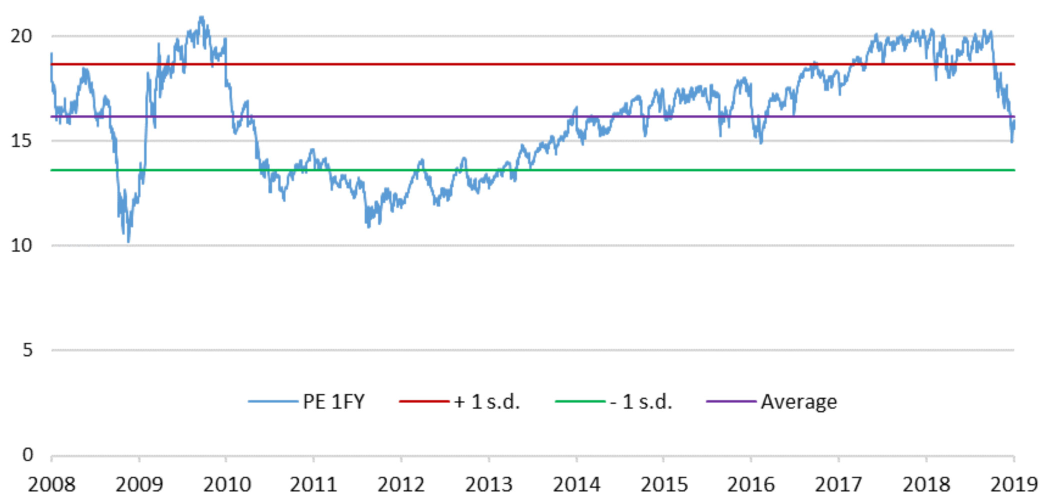
Figure 6: Philadelphia Semiconductor Index performance over 2018 (total return USD)



Source: Bloomberg

Looking at the fund's overweight position to IT overall, we believe the recent sell-off, in which IT was one of the biggest underperformers, has left the IT sector in an attractive position. From figure 7, it can be observed that the MSCI World IT index is now trading below its 10-year average and has an implied earnings growth of 11% in 2019 and 10% in 2020 versus 9.2% and 7.3% for the MSCI World. Additionally, in line with the fund's investment philosophy, the MSCI World IT index also exhibited a significant return on equity (21.2% vs 13.4%) and greater profit margins (12.7% vs 9.1%) versus the MSCI World – aspects we believe point to a higher quality of company.

Figure 7: MSCI World IT 1-year forward P/E over 2018



Standard deviation (s.d.)

Source: Bloomberg

Changes to the portfolio

We sold five positions and initiated five new positions over the course of 2018.

Figure 8: Number of changes to the portfolio

	2015	2016	2017	2018
Buys	6	7	4	5
Sales	6	7	4	5
Total Holdings	30	30	30	30

We made three changes to the portfolio in the **first quarter**. We sold Intel, Verifone and WisdomTree and bought KLA Tencor, Lam Research and Baidu.

Intel had been held in the fund since February 2011, performing well over the holding period, with particularly strong performance materialising in 2017. Earnings released in October 2017 exceeded market expectations, but we did not foresee strong growth continuing throughout 2018 and beyond. Cash flow return on investment has also been declining in recent years, adding to the potential risks.

Verifone provide the technology and infrastructure that allow merchants to offer a variety of payments options including chip and pin, contactless card payments and the likes of Apple Pay and Google Wallet. The company was bought on the original thesis of benefitting from the rollout of chip and pin technology in the US which was being driven by a shift in card fraud liability to merchants that do not offer this technology. The adoption of this has remained slow and demand for Verifone's payment terminals has slowed alongside softer card-network rules regarding fraud liability for non-chip terminals, decreasing the urgency to upgrade in certain merchant segments. This combined with a declining cashflow return on investment profile and increasing debt on their balance sheet contributed to our decision to sell Verifone.

WisdomTree, an ETF provider, sold off due to weaker Q4 2017 earnings, which were reported in early February amid weaker markets. Their business suffered outflows in Europe and inflows slowed in its Canadian operations. WisdomTree has been struggling to capture market share from larger passive rivals in the U.S. market. This has contributed to decreasing returns on capital and lower growth expectations.

KLA Tencor, a US based supplier of semiconductor process control and yield management solutions, is at the forefront of improving yields and reducing failure rates in the semiconductor industry. The company's products include defect inspection and calibration products. We see potential for the overall industry to expand, with the key market drivers being data centers, high performance computing, autonomous driving and artificial intelligence. At the time, KLA Tencor offered an attractive valuation of 14.4x p/e with a strong cashflow return on investment profile and well covered debt. We think the company is in a strong position to meet our return requirements at a valuation which provides some downside protection.

Lam Research, the US manufacturer of semiconductor processing equipment has been at the forefront of innovative wafer fabrication. Wafer manufacturing has been integral to a range of secular trends within the Information Technology sector. On a company level, Lam Research has seen improving cashflow return on investment while maintaining a strong balance sheet. The company has continually invested in R&D to help preserve its competitive edge. Recently, earnings and margins have been trending upwards. When looking at the company on a valuation basis, it is attractively priced versus its own history, trading below its long-term average forward P/E and cheaper than the majority of its peers.

Baidu, a Chinese based search engine internet company has been strengthening its core online marketing business using AI and big-data technology to enhance its search, news feed and video products. Their margins are expected to improve with the sale of non-core business and focus on investment in core products. The recent spin-off of iQiyi, their streaming platform, in the US being a good example. In the period of market uncertainty at the end of January the share price dropped almost 20% and far more than the market, which provided us a favorable entry point to a company with a strong balance sheet, a high level of return on capital, at a reasonable valuation, with potential to grow its revenue and earnings.

We did not make any changes to the portfolio in the **second quarter**.

We made two changes to the portfolio in the **third quarter**. We sold positions in Shire and Boeing and initiated new positions in ABB and Tencent Holdings.

Shire, the biotech company who research and develop medicines for rare diseases, was bought in the fund in September 2016. We had previously owned the stock in 2013, selling after the (ultimately failed) bid for the company by AbbVie. Shire operates in a highly lucrative industry and displays strong margins as a reflection. However, having sold-off around 25% to lows in March 2018, Shire was subject to M&A (merger and acquisition) speculation from larger rivals including Japanese firm Takeda, whose US$62 billion bid was still subject to EU regulatory approval in November. The stock gained 44% after the bid was first proposed and with additional regulatory hurdles to still to overcome, we took the opportunity to sell.

Boeing had been a very strong holding for the portfolio, returning ~245% USD since purchase in 2014. One of the less obvious holdings in the Innovators Fund, Boeing was bought as we believed it was driving efficiencies by drastically reducing construction time on airlines and using 3D printing for some non-critical components to drive down costs. However, the valuation of the company had increased significantly which was what ultimately drove our sell decision.

ABB is one of the leading manufacturers of industrial robots as well as providing electrification products and power generation solutions. We believe ABB is set to benefit from the increasing demand for industrial robots as companies strive to improve efficiencies through factory automation and should benefit from announced splitting off of its power grid business. After selling off around 14% from record highs in January, this presented an opportunity to buy a company offering strong growth prospects and rising returns on capital at a reasonable valuation.

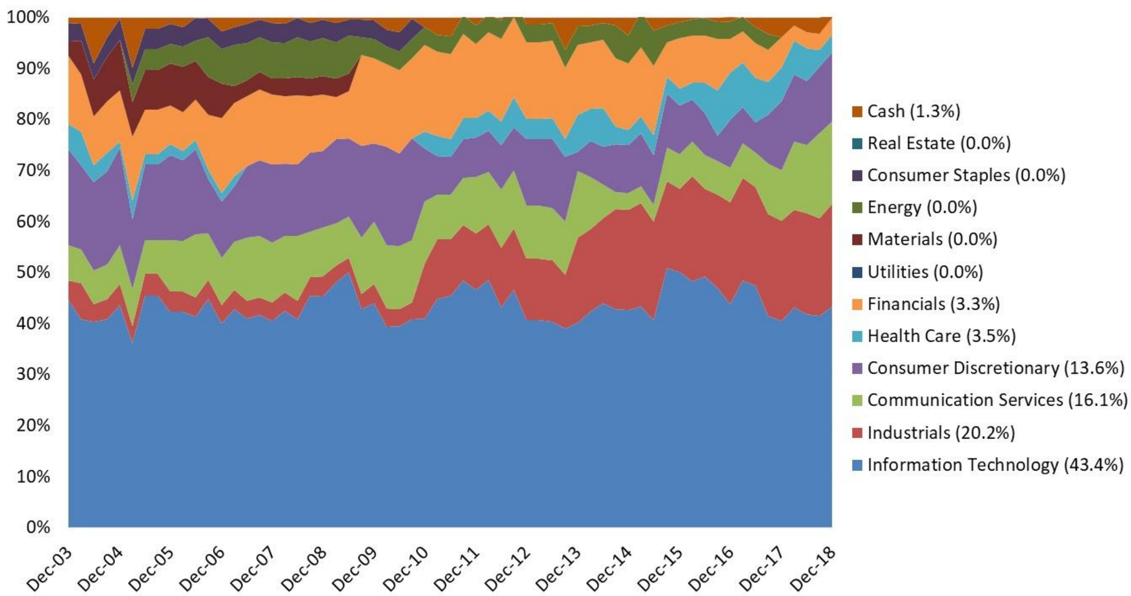
Tencent, the Chinese conglomerate and largest gaming company in the world has subsidiaries including: WeChat, the social media platform which boasts over 1 billion active monthly users and offers a platform for activities ranging from payment making to ordering a taxi; JD.com, China's answer to Amazon; and Tencent Music Entertainment (TME) which has four times as many users as Spotify. However, Tencent has underperformed in 2018, selling off around 35% from highs in January. This was a result of trade tariff concerns, Chinese intervention in the gaming industry and headlines surrounding their e-commerce holding JD.com. Tencent may still not appear cheap relative to the market, however, with returns on capital around 20% and growth prospects above 20% per annum we believe the higher valuation is warranted and Tencent appears likely to benefit from continuous R&D in its new and existing channels.

We made no changes to the portfolio in the **fourth quarter.**

Portfolio characteristics

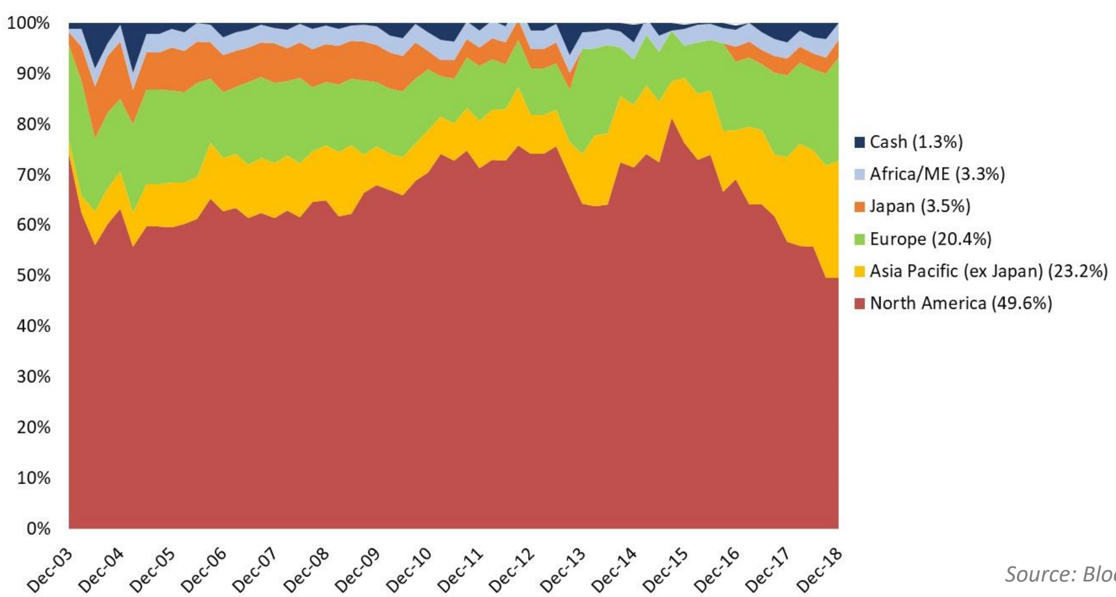
The charts below show the sector and geographic breakdown of the portfolio at the end of each quarter since 2003.

Figure 9: Portfolio sector breakdown (all dates at quarter end)



Source: Bloomberg

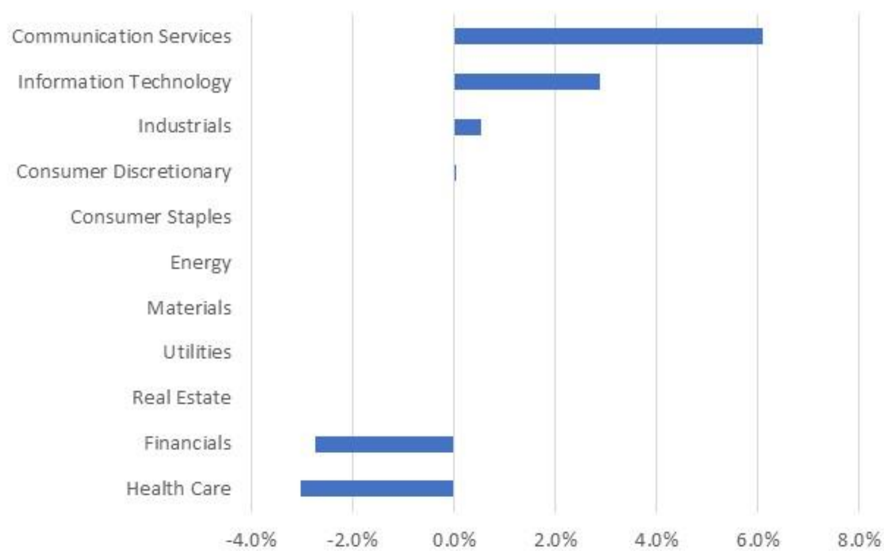
Figure 10: Portfolio geographic breakdown (all dates at quarter end)



Source: Bloomberg

Under the new GICS sector reclassification, effective the 1st of October 2018, the Telecommunication Services sector was renamed as Communication Services. As part of the changes, Comcast has been reclassified from 'Consumer Discretionary' to 'Communication Services' and Tencent, Baidu, Alphabet and Facebook have all been reclassified from 'Information Technology' to 'Communication Services'. Changes in sector exposure as a result of new positions (excluding reclassification changes) led to an increase in IT, while reducing our exposure to financials and healthcare.

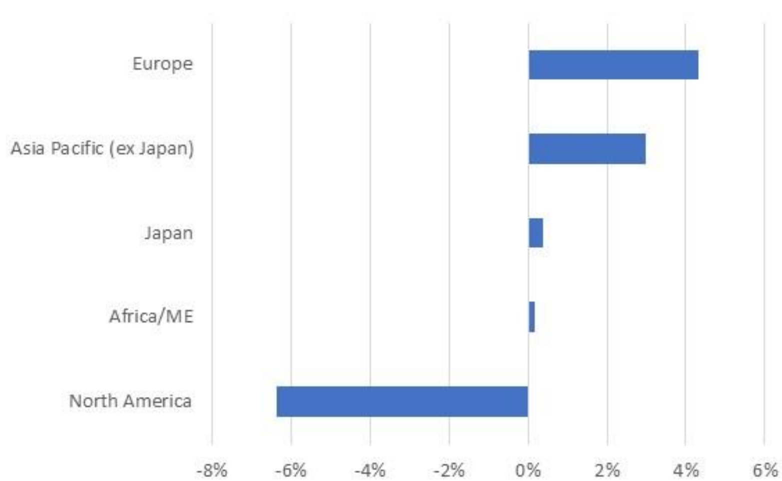
Figure 11: Change in portfolio sector allocation (12.31.2018 vs 12.31.2017)



Source: Bloomberg

In terms of the portfolio's geographic breakdown, the portfolio continues to have a bias to the U.S., but we reduced this over 2018, decreasing the fund's allocation by just over 6%. We increased our exposure to Asia and Europe as we increasingly find companies trading as substantial discounts to their historic valuations with attractive future growth rates.

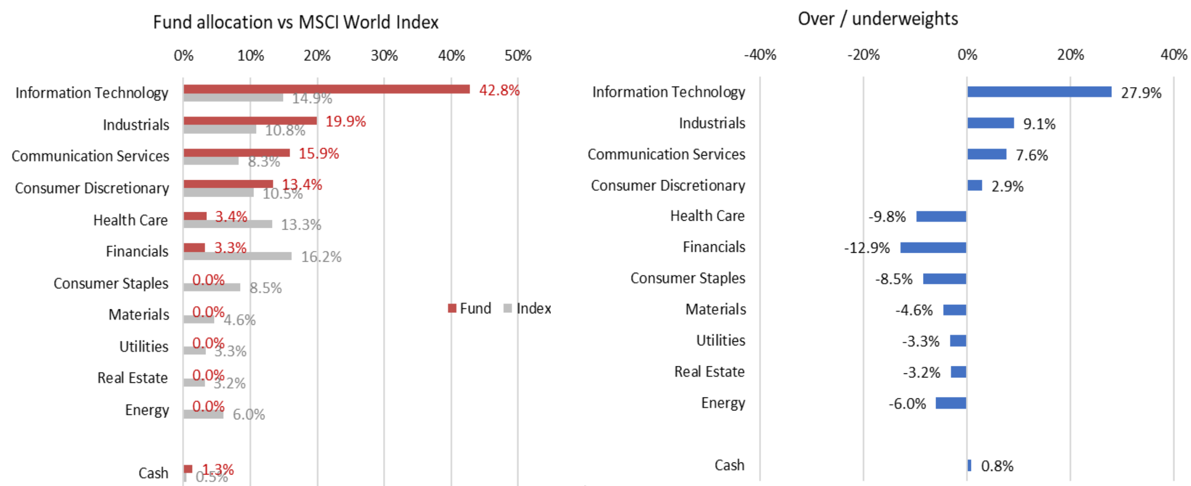
Figure 12: Change in portfolio geographic allocation (12.31.2018 vs 12.31.2017)



Source: Bloomberg

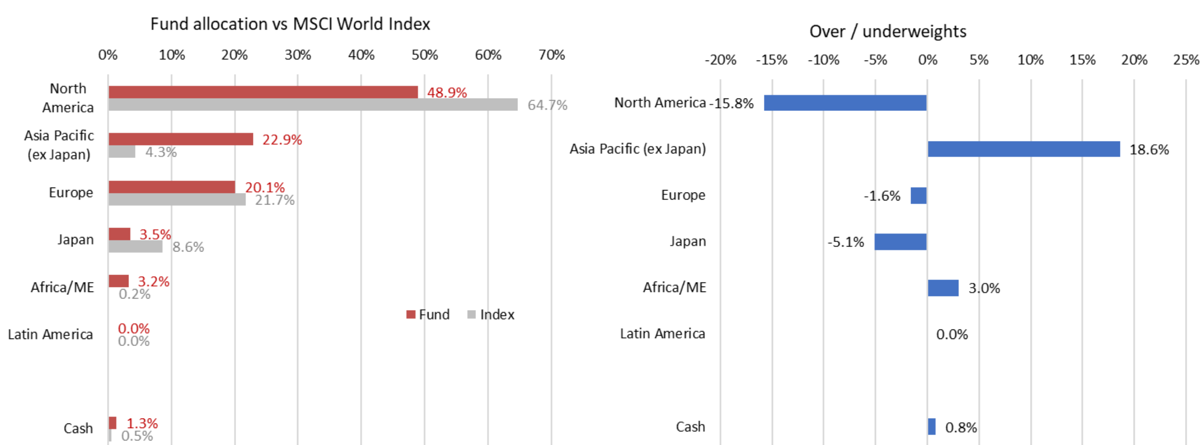
Figure 13 shows the over and underweight positioning of the fund by sector. Our overweight position relative to the benchmark in Information Technology (about 28% overweight as at 12.31.2018) was a drag on the portfolio over the year. Similarly, our overweight position to Asia Pacific ex-Japan contributed negatively to the portfolio. However, our underweight positions to Materials, Financials and Energy all provided positive contributions to the fund over the year.

Figure 13: Sector breakdown of the fund versus MSCI World Index. Guinness Atkinson Asset Management, Bloomberg (data as at 12.31.2018)



Source: Bloomberg

Figure 14: Geographic breakdown versus MSCI World Index. Guinness Atkinson Asset Management, Bloomberg (data as at 12.31.2018)



Source: Bloomberg

Outlook

2018 brought uncertainty and volatility back into the markets despite companies' continuing their strong earnings growth post the financial crisis. A tightening Fed rate cycle, US-China tensions, weakness in EM currencies, slowing economic growth indicators in Europe and Asia and a fall from grace of market leaders of the 2017 tech rally, were in stark contrast to the 'unified global growth' consensus of 2017 which fueled a significant equity rally, a good proportion of which was from multiple expansion and not just earnings growth. However, after the recent market falls, global equity valuations on a sector and regional level now mostly trade at a discount to their 5 and 10-year valuations based on rolling 1-year forward P/E ratios, creating better prospects for higher future returns, despite current headwinds.

Figure 15: MSCI sector P/E valuations relative to their long-term history. Bloomberg (data as at 12.31.2018)

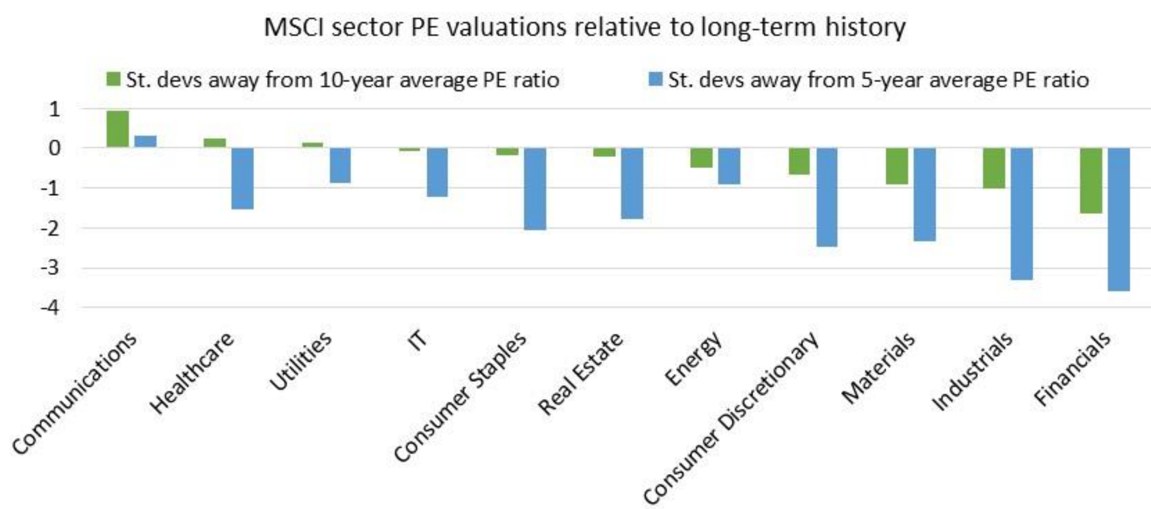
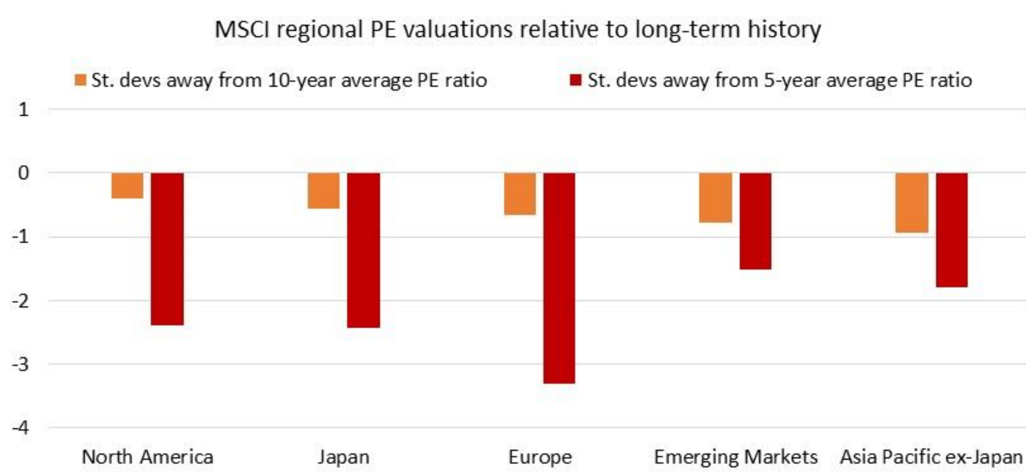


Figure 16: MSCI regional P/E valuations relative to their long-term history. Bloomberg (data as at 12.31.2018)



The Guinness Atkinson Global Innovators Fund seeks to invest in quality innovative companies trading at reasonable valuations. By doing so, we seek to invest in companies that are experiencing faster profit growth, larger margins and are less susceptible to cyclical pressures. By taking a long-term view on markets, the recent pull back in equity markets could well provide an attractive entry point for new investments.

In summary, the four key tenets to our approach are innovation, quality, growth, and conviction. As shown in figure 17, this philosophy is reflected in the metrics of the fund. The fund has superior characteristics to the broad market, higher spend on intellectual property, less capital intensiveness, higher cash flow returns on investment, net cash, with higher growth prospects and is now trading at a 5% ***discount*** to the benchmark in terms of valuation. Historically, the fund has traded at 10-20% *premium* to the benchmark and as such this has created a compelling opportunity.

Figure 17: Portfolio metrics versus index. Guinness Atkinson Asset Management, Credit Suisse HOLT, Bloomberg (data as at 12.31.2018)

		Fund	MSCI World Index
Innovation	R&D / Sales	8%	6%
	CAPEX / Sales	6%	10%
Quality	CFROI (median 2018)	16%	8%
	Weighted average net debt / equity	-10%	67%
Growth (& valuation)	Trailing 3-year sales growth (annualized)	14%	6%
	Estimated earnings growth (2020 vs 2019)	13%	8%
	FCF (free cash flow) yield	6%	5%
	PE (2019e)	13.6	14.3
Conviction	Number of stocks	30	1652
	Active share	95%	-

May we wish you a happy and prosperous New Year, and we look forward to updating you on the progress of the fund over the course of 2019.

Portfolio Managers

Matthew Page, CFA

Dr Ian Mortimer, CFA

Guinness Atkinson
Global Innovators Fund
Managers Update – January 2019

Performance

In 2018 the Guinness Global Innovators Fund produced a total return of -11.88% (in British pounds/GBP) vs the MSCI World Index net total return of -3.04% (in GBP). The fund therefore underperformed the benchmark by 8.84% over the year.

Global markets began 2018 where 2017 left off, with continued strength in corporate earnings allowing equity markets to extend further into their bull market. The ascent of major equity markets, which was led by emerging Asia and the US, was shortly disrupted in February as a selloff ensued, with fears surrounding heightened inflation the apparent catalyst. However, as volatility enveloped the market over the February period, the fund outperformed the benchmark owning to strong idiosyncratic stock movements such as AAC Technologies up 19.1% (in USD) over the month. As the year advanced, underlying economic and corporate data continued to indicate robust economic growth conditions despite the introduction of trade tariffs between the US and China. Sector rotation in the second quarter saw our overweighting to IT become unfavorable. However, the portfolio's underweight exposure to financials provided a positive contribution with our one financial stock, Intercontinental Exchange, producing positive returns while the sector was down. During the third quarter, semiconductor names and Apple supply chain companies – both of which the portfolio has exposure to – sold off on speculation of slowing near-term growth, resulting in significant drags over the quarter. The accumulation of on-going trade tariffs, rising bond yields and geopolitical tensions sent equity markets into turbulence over the fourth quarter. With the subsequent shift towards value stocks and the portfolio's overweight exposure to China and IT – two large underperformers over the fourth quarter - the portfolio concluded the year having underperformed the MSCI World.

as of 12.31.2018 (in USD)	YTD	1 year	3 years annualized	5 years annualized	10 years annualized
Global Innovators, Investor Class [1]	-16.80%	-16.80%	7.08%	6.03%	14.00%
Global Innovators, Institutional Class [2]	-16.59%	-16.59%	7.35%	6.19%	14.09%
MSCI World Index Net Return	-8.71%	-8.71%	6.30%	4.56%	9.66%

as of 09.30.2018 (in USD)	YTD	1 year	3 years annualized	5 years annualized	10 years annualized
Global Innovators, Investor Class [1]	-0.09%	6.15%	16.61%	12.55%	13.13%
Global Innovators, Institutional Class [2]	0.09%	6.41%	16.88%	12.70%	13.21%
MSCI World Index Net Return	5.43%	11.24%	13.53%	9.28%	8.55%

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, visit 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); 1.33% (gross)
30 Day SEC Yield (as of 12/31/18) 0.82% Subsidized 0.63% Unsubsidized

Guinness Atkinson
Global Innovators Fund
Managers Update – January 2019

[2]Institutional class (GINNX) Inception 12.31.2015 Expense ratio* 0.99% (net); 1.17% (gross)
30 Day SEC Yield (as of 12/31/18) 1.07% Subsidized 0.80% Unsubsidized

All returns after 1 year annualized.

[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).

MSCI World Index (Net Return) reflects deduction for withholding tax but reflects no deduction for fees and expenses

*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 .99% for the Institutional class and 1.24% for the Investor class through June 30, 2019. 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 may invest in derivatives which involves risks different from, and in certain cases, greater than the risks presented by traditional investments.

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 12/31/18:

1. NIKE Inc	3.65%
2. Danaher Corp	3.54%
3. SAP SE	3.52%
4. Alphabet Inc - A Shares	3.52%
5. Tencent Holdings Ltd	3.47%
6. Eaton Corp PLC	3.44%
7. Schneider Electric SE	3.43%
8. ANTA Sports Products Ltd	3.42%
9. Check Point Software Technologies Ltd	3.39%
10. Intercontinental Exchange Inc	3.39%

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

This information is authorized for use when preceded or accompanied by a prospectus for the Fund. Please visit https://www.gafunds.com/wp-content/uploads/2012/09/Global-Innovators-Fund-Summary-Prospectus.pdf

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

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.

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 Global Industry Classification Standard (GICS) is a four-tiered, hierarchical industry classification system. Companies are classified quantitatively and qualitatively. Each company is assigned a single GICS classification at the Sub-Industry level according to its principal business activity.

Basis points (BPS) are a unit of measure used in finance to describe the percentage change in the value or rate of a financial instrument. One basis point is equal to 1/100th of 1%, or 0.01%, or 0.0001 in decimal form.

The MSCI World Information Technology Index is designed to capture the large and mid-cap segments across 23 Developed Markets countries. All securities in the index are classified in the Information Technology sector as per the Global Industry Classification Standard (GICS®).

A cash flow return on investment (**CFROI**) is a valuation metric that acts as a proxy for a company's economic return.

Capital Expenditure (CAPEX) is an amount spent to acquire or upgrade productive assets (such as buildings, machinery and equipment, vehicles) in order to increase the capacity or efficiency of a company for more than one accounting period.

Free cash flow (**FCF**) yield represents the cash a company generates after cash outflows to support operations and maintain its capital assets.

ROE (return on equity) is a measure of a corporation's profitability that reveals how much profit a company generates with the money shareholders have invested and is calculated as Net Income/Shareholder's Equity.

Standard Deviation is a statistical measure of the volatility of the fund's returns. In general, the higher the standard deviation, the greater the volatility of the return.

Subsidized 30-Day SEC Yield is based on a 30-day period ending on the last day of the previous month and is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The subsidized yield is based on the net expenses of the Fund. The yield would be lower without the waivers in effect. Unsubsidized 30 Day SEC Yield is based on total expenses of the Fund. One cannot invest directly in an index.

Distributed by Foreside Fund Services, LLC