GUINNESS

Global Innovators Fund

Innovation | Quality | Growth | Conviction

A high-conviction global growth fund managed by Dr. Ian Mortimer, CFA, and Matthew Page, CFA

Annual review

2018

GUINNESS
ASSET MANAGEMENT

About the Fund

The Fund is a global growth fund designed to provide exposure to companies benefiting from innovations in technology, communication, globalisation or innovative management strategies. The Fund holds a concentrated portfolio of large and medium-sized companies in any industry and in any region.

Fund size	$152m
AUM in strategy	$317m
Fund launch date	31.10.14
Strategy launch date	01.05.03
Managers	Dr. Ian Mortimer, CFA Matthew Page, CFA
Analysts	Sagar Thanki Joseph Stephens

Performance 31.12.18

Cumulative % total return (GBP)	1 year	3 years	5 years	10 years
Strategy*	-11.9	37.3	66.3	299.5
Index	-3.0	39.0	62.5	184.0
Sector	-5.7	32.6	45.9	150.9
Position in sector	**266** /301	**98** /269	**50** /237	**5** /165

Annualised % total return
from strategy inception (GBP)

Strategy*	11.51%
Index	9.23%
Sector	8.36%

Strategy	Guinness Global Innovators*
Index	MSCI World Index
Sector	IA Global

Past performance should not be taken as an indicator of future performance. The value of this investment and any income arising from it can fall as well as rise as a result of market and currency fluctuations. *Composite simulation of performance. Guinness Global Innovators Fund (UCITS) launched on 31.10.14. Performance data prior to this date is based on the actual returns of a US mutual fund managed by the same team using the same investment process as applied to the UCITS version. Source: Financial Express 0.99% OCF, bid to bid, total return, in GBP.

Annual review

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

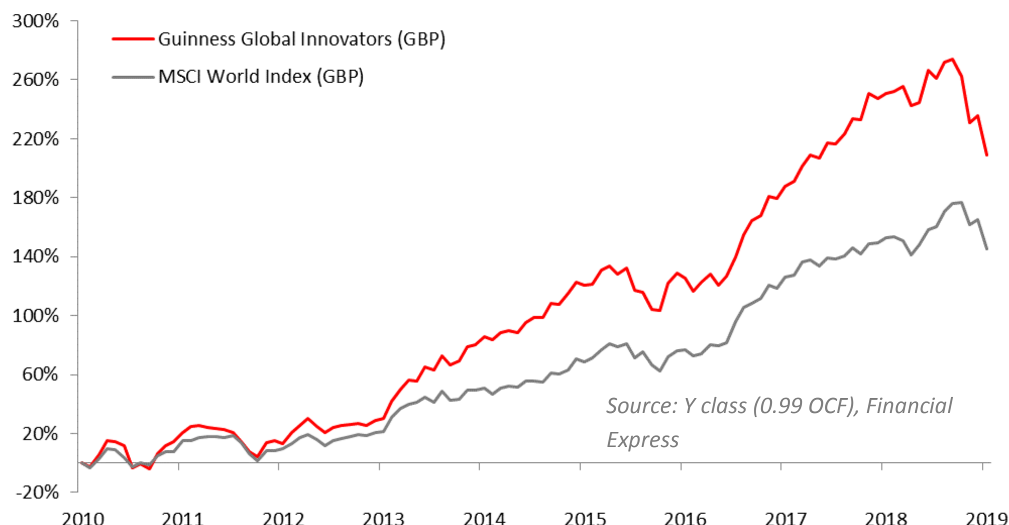
Global markets began 2018 where 2017 left off. Continued strength in corporate earnings allowed equities to extend further into their bull market, led by emerging Asia and the US. Their ascent was abruptly ended, however, by a sell-off in February, with fears surrounding heightened inflation the apparent catalyst. Amid the market volatility, the fund outperformed the benchmark due to strong idiosyncratic stock movements such as AAC Technologies' 19.1% (in USD) rise 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 caused our overweighting to IT become unfavourable. However, the portfolio's underweight exposure to Financials provided a positive contribution as our one stock in the sector, Intercontinental Exchange, produced positive returns while the sector was down. During the third quarter, semiconductor names and Apple supply chain companies – both areas to which the portfolio has exposure – 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 fund finished the year having underperformed the MSCI World.

Figure 1: Global Innovators strategy performance

Cumulative % total return (GBP)	1 year	3 years	5 years	10 years
Guinness Global Innovators Fund	-11.9	37.3	66.4	299.5
IA Global Sector average	-5.7	32.6	45.9	150.9
MSCI World Index	-3.0	39.0	62.5	184.0
Position in sector	265/300	97/268	49/236	4/164

Source: Y class (0.99% OCF), Financial Express

Figure 2: Global Innovators Fund performance (total return in GBP)



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. Whilst the MSCI World returned 5.4% (in USD) in the first three quarters of 2018, a sharp sell-off in Q4 left some equity markets in bear territory with the MSCI World Index returning -8.7% (in USD) over the full year.

Earnings continue to rise

The year picked up where 2017 had ended, with equity markets extending their surge driven by strength in corporate earnings helped in large part 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 aided the run, with growth stocks the main beneficiaries for the first three quarters. The Global Innovators Fund, which has overweight exposure to IT stocks, yielded some strong stock-specific returns over the period; Nvidia, for example, reported in early February its largest earnings surprise since 2011. Earnings continued their advance throughout the year, but as turbulence entered the market in Q4, earnings growth was not enough to stem the sell-off 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 Federal Reserve, 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 that the almost decade-long bull run was showing signs of ending. The fund outperformed the benchmark, aided by individual stock movements such as in AAC Technologies, which returned 19.1% (in USD) over the month. The volatility receded after February only to return in the last few months of the year as unprecedented turbulence caused stock prices to 'see-saw'. In the final quarter investors shifted away from IT companies and as a result 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. His administration also re-imposed on Iran economic sanctions which had been waived in 2015.

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Tensions between the US and China were high throughout the year, as a series of escalating trade tariffs was enacted. Donald Trump sought to reduce the trade deficit the US has with China – which exports around $370bn-worth more to the US than it buys from US producers – while addressing concerns over IP protection on US technology. The absence of concrete discussions left China with $250bn of the $500bn-worth it exports to US with tariffs of between 10 and 25 per cent. Slowing growth numbers from China throughout the year made it one of the worst-performing regions, taking -18.9% (in USD) off the MSCI China Index. The portfolio's overweight position to Chinese stocks – which are not counted in the MSCI World Index – therefore contributed negatively to the portfolio. The year ended with the US and China agreeing to a two-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 all steel and aluminium imports. The move was met with an outcry from trading partners and resulted in tit-for-tat retaliatory responses, in particular from Canada, which is key supplier of steel to the US. The US also negotiated a revamp of NAFTA, the North American Free Trade Agreement, into 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 investors' 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 programme initiated in the Financial Crisis, although it signalled caution on interest rate rises for the time being. The US, which has been steadily increasing interest rates over the last two years, continued on its rate-hiking path to the distaste of President Trump. When equities experienced sharp sell-offs in the last quarter of the year, however, Fed chairman Jerome Powell 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', which are most sensitive to interest rate changes, and hence the fund benefitted in relative terms 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 also due to the large volumes of EM debt denominated in US dollars, causing its relative value to increase. Not all the deterioration can be linked to the US dollar; domestic inflation spiralled (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 government's 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 through the year.

Brexit

As the Brexit saga continues and with the looming March 29th 2019 deadline approaching, the outcome is still very uncertain. The year has seen fierce opposition to Theresa May and her negotiations with a divided cabinet, ministerial resignations and challenges to the prime minister's leadership. In July, the prime minister released her Chequers plan – the government's proposed Brexit withdrawal terms – 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 $100 a barrel discussed in the market once again. However, strong headwinds arose in the form of stronger-than-expected US

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oil output, weakening global oil demand growth and Iranian sanction waivers to select countries. Oil prices entered a bear market with prices falling more than 35% from their October peak. The fall was much to the delight of Donald Trump, who has been keen to keep oil prices low and has been putting pressure on Saudi Arabia not to 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 was largely unaffected by movements in oil prices over 2018.

Red October

After 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 no specific catalyst for the sell-off, bullish comments from the US Fed following 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 month. With the portfolio tilted towards growth stocks, it underperformed the benchmark over October. The sell-off also coincided with the largest change yet in sector classifications for MSCI with the introduction of the Communication Services sector – a fact not widely discussed but which may have caused significant turnover in portfolios linked or aligned to sector weightings within indices.

Figure 3: Sector performance in 2018 (Total Return in USD)

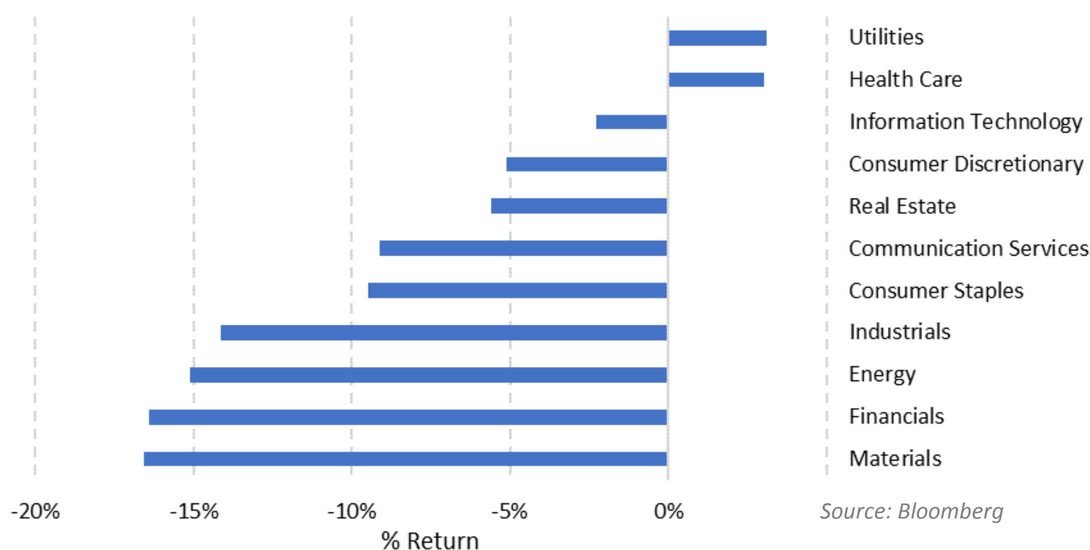

Figure 3 illustrates the individual sector performances of the MSCI World Index over 2018. The only sectors that produced positive returns over the year were Utilities and Health Care, returning 3.1% and 3.0% respectively. The 'risk-off' attitude from investors caused the more cyclical sectors, such as Financials, Materials, Energy and Industrials, to suffer. The most notable outlier among cyclical sectors was IT, which ended the year in the red but as a relative outperformer due to a very strong rally in the first three quarters of the year.

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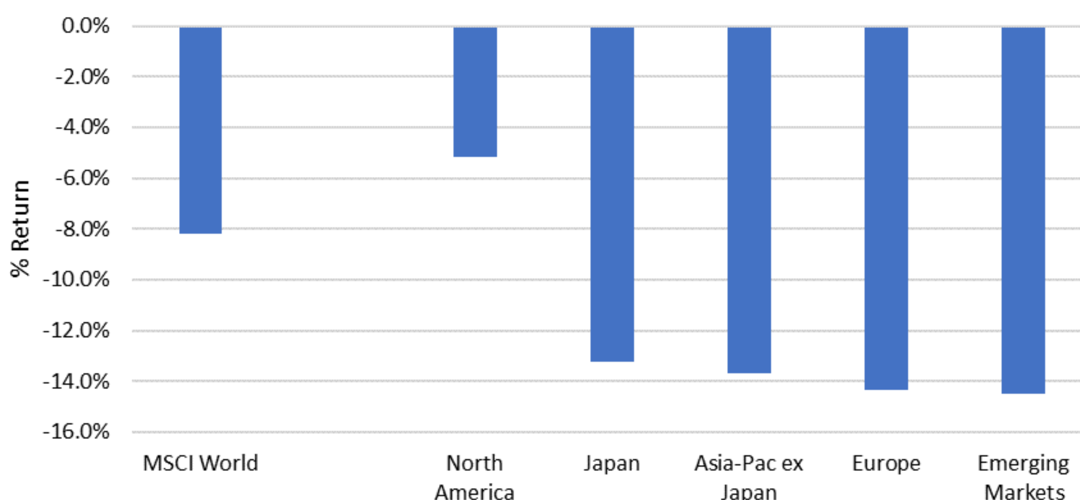
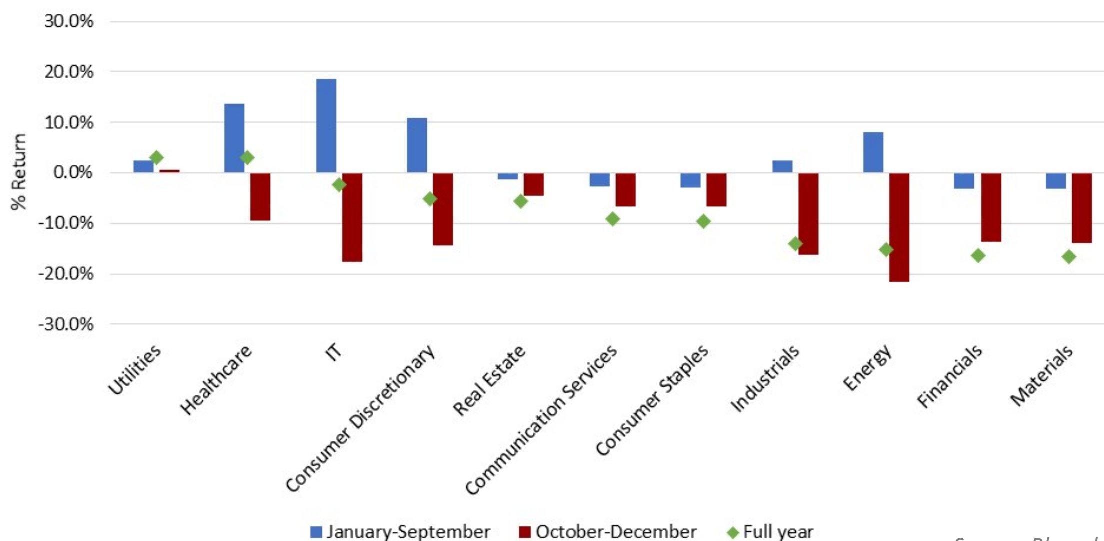
Figure 4: Regional performance in 2018 (Total Return in USD)



Source: Bloomberg

Geographically, as figure 4 shows, Asia and the Emerging Markets were among the greatest underperformers in 2018 as 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 5: Sector performance rotation (Total Return in USD)



Source: Bloomberg

As can be observed from figure 5, outperformance seen in the first three quarters of the year from sectors such as IT, Consumer Staples, Health Care 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 is held in the portfolio – weighed heavily on sentiment as the company struggled with data security disputes and the prospect of increased regulations.

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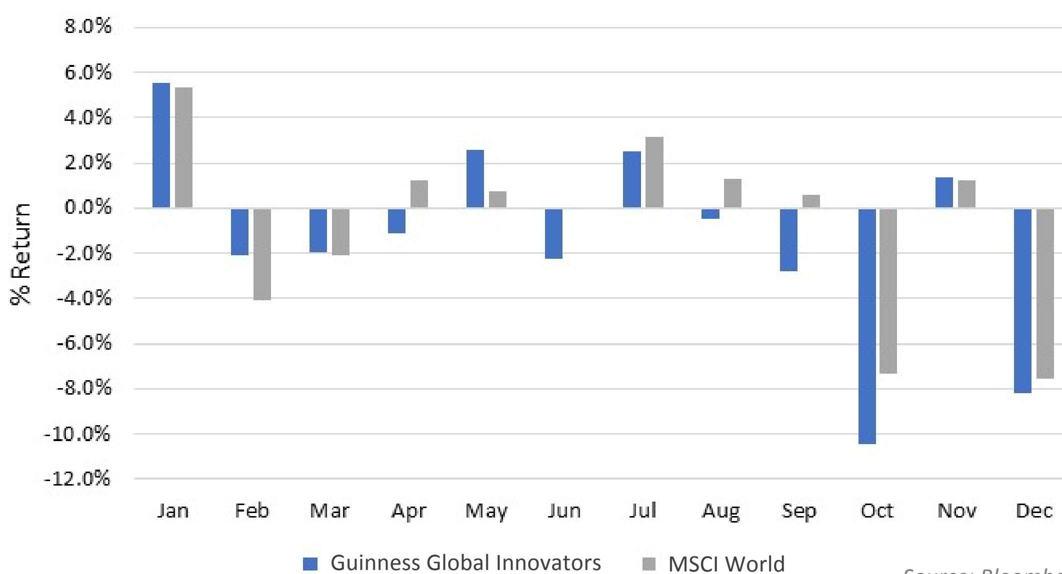
Fund performance

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 three quarters but suffered substantial losses in the last quarter, this 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 6: Monthly returns of Fund vs benchmark in 2018 (all Net Total Return in USD)



Source: Bloomberg

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

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

The fund underperformed the benchmark in the third quarter as a continuation of the sell-off in semiconductor stocks resulted in a substantial drag on the portfolio. Additionally, our underweighting to Health Care stocks proved to be a negative contributor as the sector produced the largest returns amongst the GICS sectors. The fund's position in Checkpoint Software – its 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, especially IT, in which the fund is overweight. The trade dispute between the US and China seemed finally to be having a negative impact on economic indicators coming through in China – to which the fund has an overweight exposure. Reports of slowing iPhone demand and growing fears that consumers are upgrading phones less frequently sent a sharp sell-off through Apple supply chain stocks. In addition, weakness in the automotive industry, primarily driven by falling sales in China, the world's largest automotive market, resulted in the German tyre manufacturer and auto components company Continental, which is held in the fund, selling off. On the other hand, with no Energy exposure and significantly underweight Financials, the fund was largely unaffected by two worst-performing sectors over the quarter.

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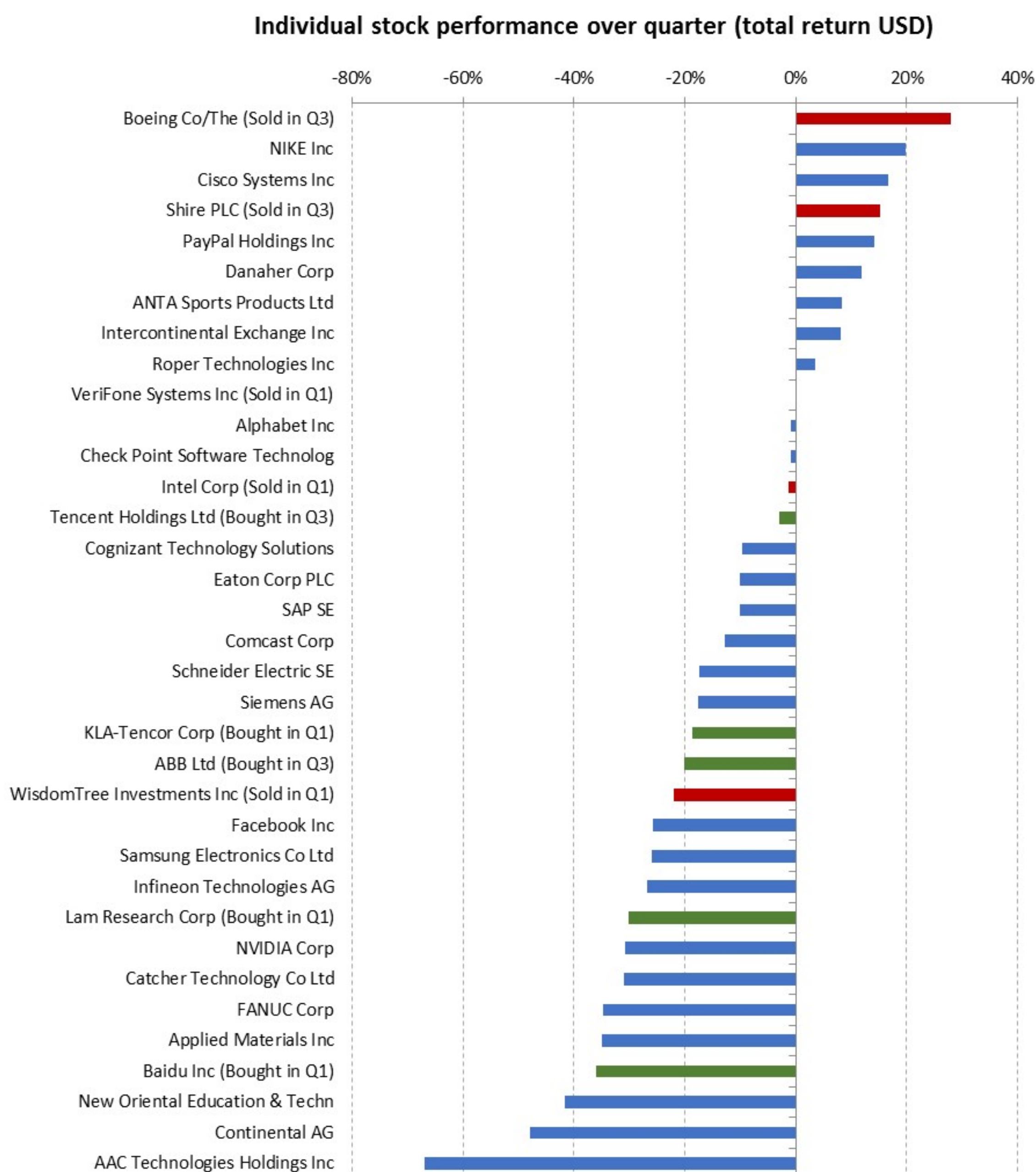
Overall, our overweighting to Asia Pacific stocks, and in particular Chinese stocks, resulted in over 5% of the fund's underperformance over 2018. This can be attributed to the large sell-offs in AAC Technologies, New Oriental Education and Baidu, as well as the zero exposure the benchmark has to Chinese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

Figure 7 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 7: Individual stock performance over 2018 (total return USD)



Source: Bloomberg

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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 28/09/2018 when it was sold from the portfolio), which is discussed later in this review.

Having rallied strongly up to September after robust earnings reports, Nike lost some ground amid the PR fall-out after making Colin Kaepernick – the National Football league quarterback famous for his protest movement against police brutality – the face of its latest advertising campaign. Still, Nike posted 4th quarter earnings that surpassed analysts' expectations by around 13%, sending the stock price up some 7%. The continued strength of results points to Nike's on-going restructuring efforts which have seen it focus on direct-to-consumer sales, cutting out middlemen, and reducing the number of products sold by 25% in order to speed up product development. This has allowed it to increase its pricing power and improve gross margins by 80bps 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 its new strategic transformation is yielding results as the company moves from a focus on traditional hardware to software products. Cisco 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 it intended to acquire Duo, which provides identification and authentication solutions via the cloud, better allowing customers to connect securely 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 iPhone, 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 requirement for premium components, and so 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 which we believe does not reflect 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 signalled by management in August, citing lower expected sales and increased costs. It was an indication of softening demand in the automotive sector amid interest rate rises, trade tariffs, increased costs and changes in consumer in preferences to such vehicles as SUVs. Continental continues to be a quality company – returns on capital have been above 10 per cent for the last seven years – and we remain positive in our belief that its automotive segment, which includes braking, drivechains 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 three 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 favourable given the numerous innovation themes, attractive multiples and long-term growth

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rates they currently exhibit versus alternative IT companies; as of 31st December the Philadelphia Semiconductor Index traded at a 22% discount to the MSCI World IT index, but only implied a 2% slower earnings growth rate.

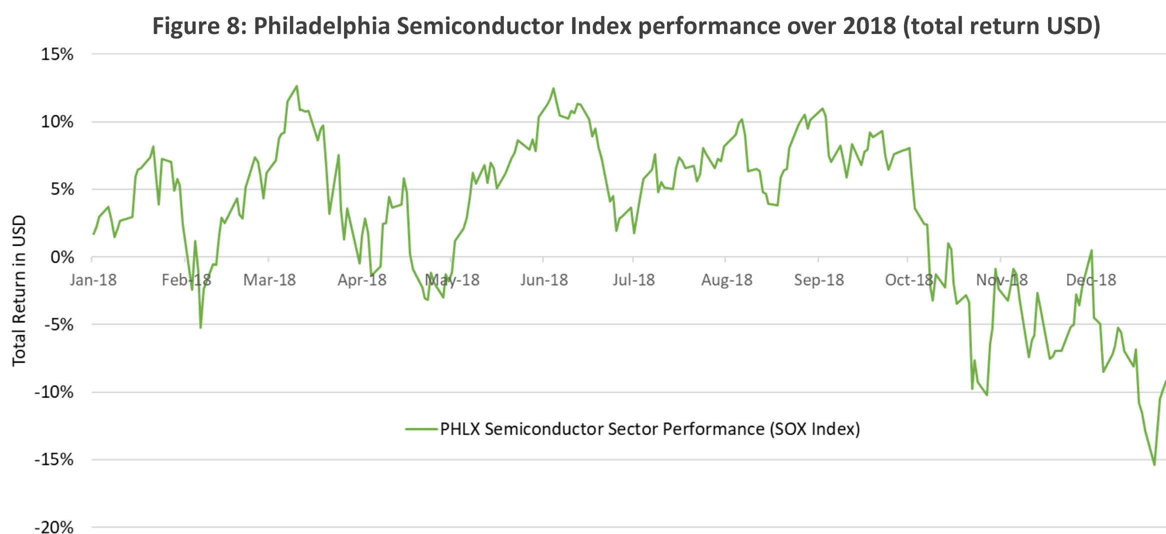

Figure 8: Philadelphia Semiconductor Index performance over 2018 (total return USD)

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 it in an attractive position. From figure 8 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, and in line with the fund's investment philosophy, the MSCI World IT Index also exhibits a superior 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 higher quality in a company.

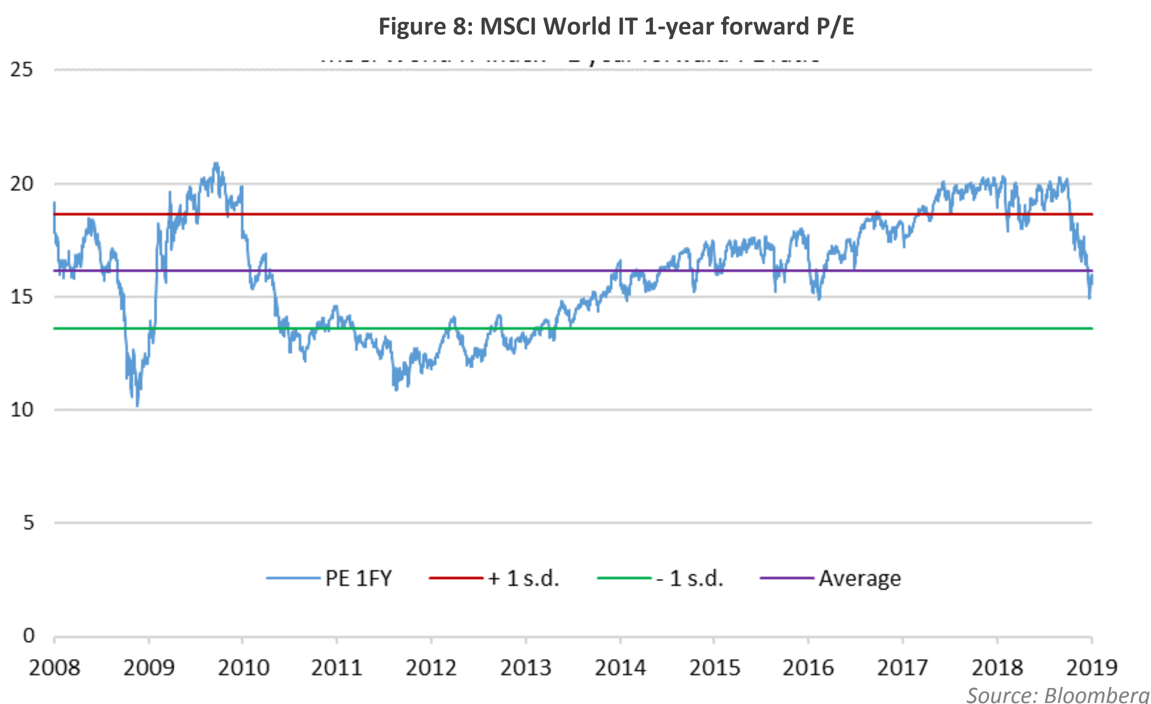

Figure 8: MSCI World IT 1-year forward P/E

Source: Bloomberg

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Changes to the portfolio

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

Figure 9: Number of changes to the portfolio by year

	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 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 provides the technology and infrastructure which allows merchants to offer a variety of payment methods including chip and pin, contactless card payments and features such as Apple Pay and Google Wallet. The company was bought on the thesis that it would benefit 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 chip and pin. Adoption was slow, however, and demand for Verifone's payment terminals has slowed alongside softer card network rules on fraud liability for non-chip terminals, reducing the urgency to upgrade in certain merchant segments. Combined with a declining cash flow return on investment profile and increasing debt on the balance sheet, this resulted in 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. The 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 US 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 systems. We see potential for the industry overall to expand, with the key market drivers being data centres, high-performance computing, autonomous driving and artificial intelligence. At the time, KLA Tencor offered an attractive valuation of 14.4x PER with a strong cash flow 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 is a leader in 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 cash flow return on investment while maintaining a strong balance sheet. The company has continually invested in R&D to help preserve its competitive edge. Recent earnings and margins have been trending upwards. When looking at the company on a valuation basis, it is

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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. Its margins are expected to improve with the sale of non-core business and a focus on investment in core products; the recent spin-off in the US of iQiyi, its streaming platform, is 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 favourable entry point to a company with a strong balance sheet, a high level of return on capital, a reasonable valuation and 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 which researches and develops medicines for rare diseases, was bought in September 2016. We had previously owned the stock in 2013, selling after the bid for the company by AbbVie which ultimately failed. Shire operates in a highly lucrative industry and displays strong margins. Having sold off around 25% to lows in March 2018, Shire was subject to M&A 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 as there were still additional regulatory hurdles to still to overcome, we took the opportunity to sell.

Boeing was a very strong holding for the portfolio, returning c.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. The valuation of the company had increased significantly, however, and this ultimately drove our decision to sell.

ABB is one of the leading manufacturers of industrial robots and provides 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 it should benefit from the announced splitting off of its power grid business. After the stock sold off around 14% from record highs in January, we saw 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. Tencent 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 its e-commerce holding JD.com. Tencent may still not appear cheap relative to the market, but with returns on capital around 20 per cent and growth prospects above 20 per cent per annum, we believe the higher valuation is warranted and Tencent is set to benefit from continuous R&D in its new and existing channels.

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

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Portfolio characteristics

The charts below show the sector and geographic breakdown of the portfolio at the end of each quarter since the strategy's inception. The breakdown for 31.12.2018 is enumerated on the right.

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

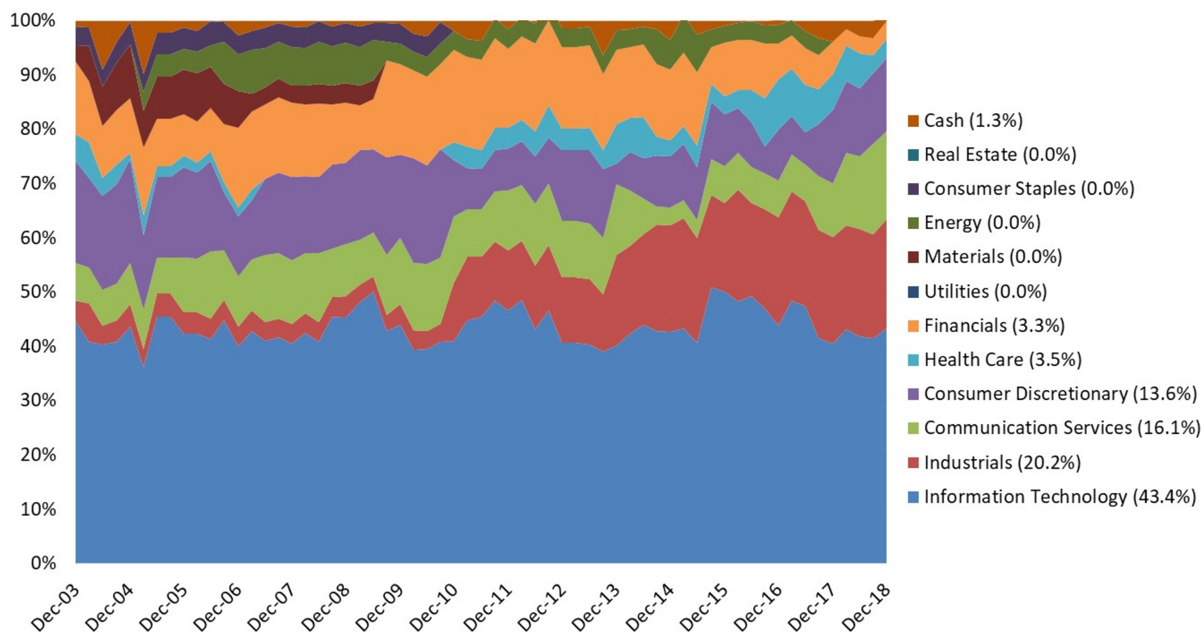
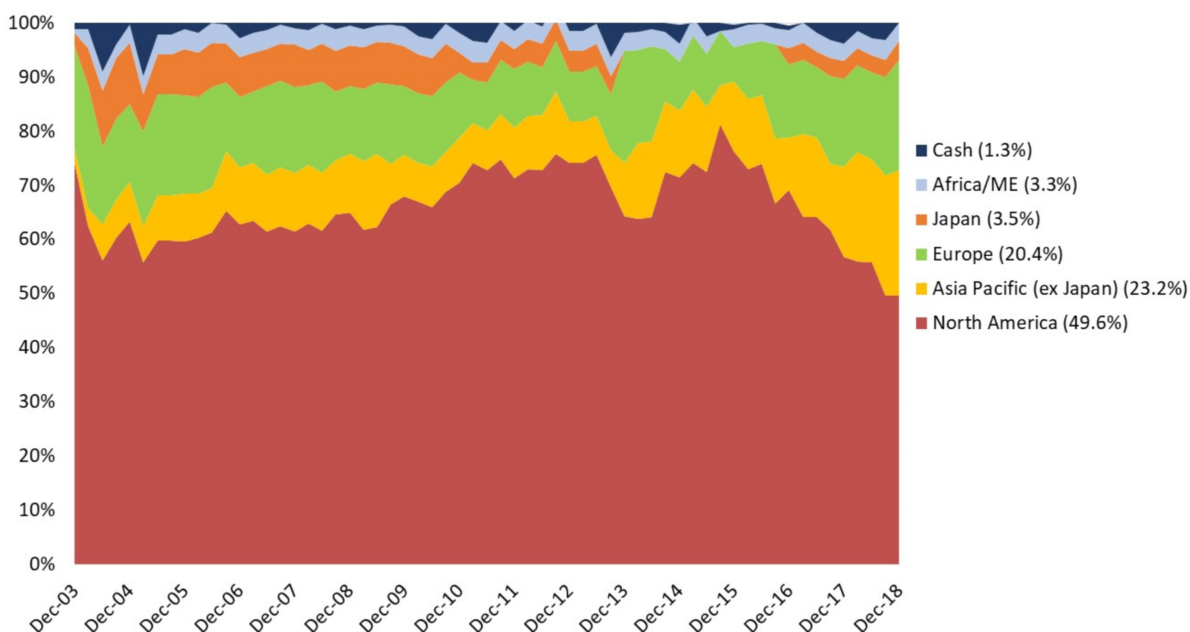


Figure 11: Portfolio geographic breakdown (all dates at quarter end)



Under the new GICS sector reclassification, effective 1st October 2018, the Telecommunication Services sector was renamed as Communication Services. As part of the changes, Comcast was reclassified from Consumer Discretionary to Communication Services. Tencent, Baidu, Alphabet and Facebook were reclassified from Information Technology to Communication Services. Changes in sector exposure as a result of new positions

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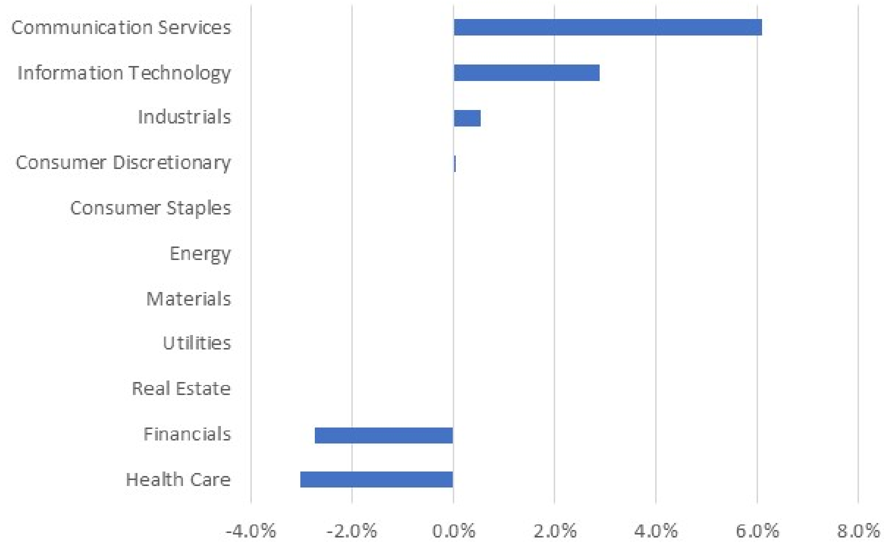
(excluding reclassification changes) led to an increase in IT, while reducing our exposure to Financials and Health Care.

Figure 12: Change in portfolio sector allocation (31.12.2018 vs 31.12.2017)



In terms of the portfolio's geographic breakdown, the portfolio continues to have a bias to the US, although this was reduced 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 13: Change in portfolio geographic allocation (31.12.2018 vs 31.12.2017)

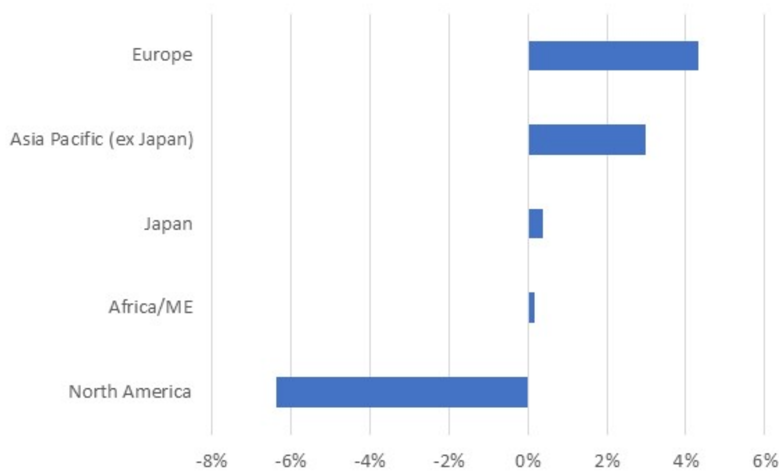


Figure 14 shows the over and underweight positioning of the fund by sector. Our overweight position relative to the benchmark in Information Technology (c.28% overweight as at 31.12.2018) was a drag on the portfolio over the year. Similarly, our overweight position to Asia Pacific ex-Japan contributed negatively to the portfolio. However, our underweight positions to Materials, Financials and Energy all provided positive contributions to the fund over the year.

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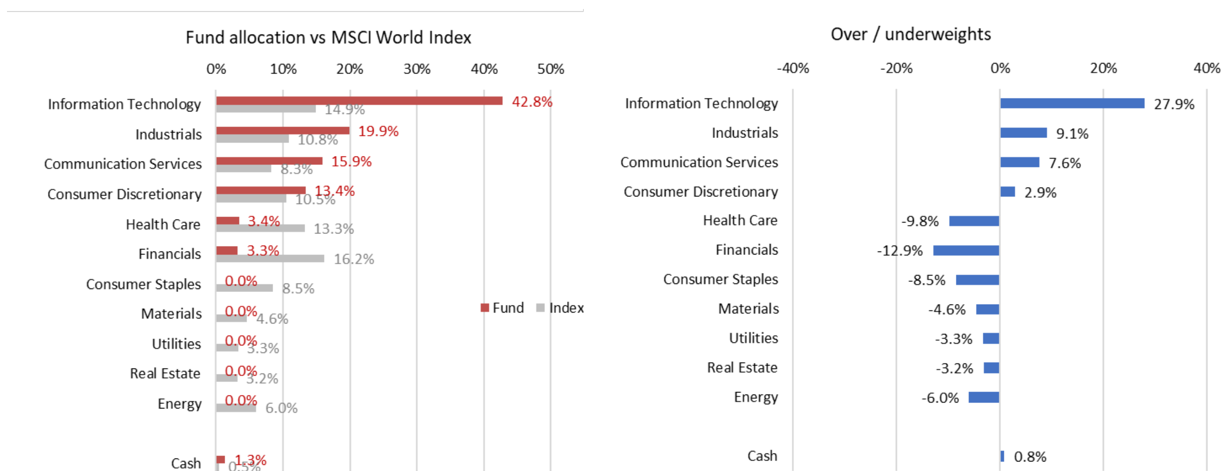
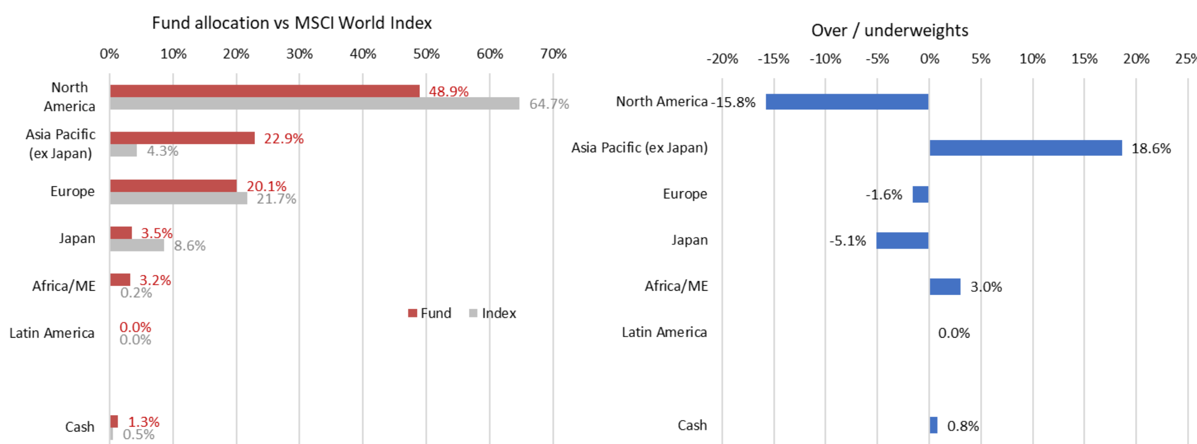
Figure 14: Sector breakdown of the fund versus MSCI World Index. Guinness Asset Management, Bloomberg (data as at 31.12.2018)



Source: Bloomberg

Figure 15: Geographic breakdown versus MSCI World Index. Guinness Asset Management, Bloomberg (data as at 31.12.2018)



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 all came in stark contrast to the 'unified global growth' consensus of 2017 which fuelled 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-year and 10-year valuations based on rolling 1-year forward P/E ratios, creating better prospects for higher future returns despite current headwinds.

Figure 16: MSCI sector P/E valuations relative to long-term history. Bloomberg (data as at 31.12.2018)

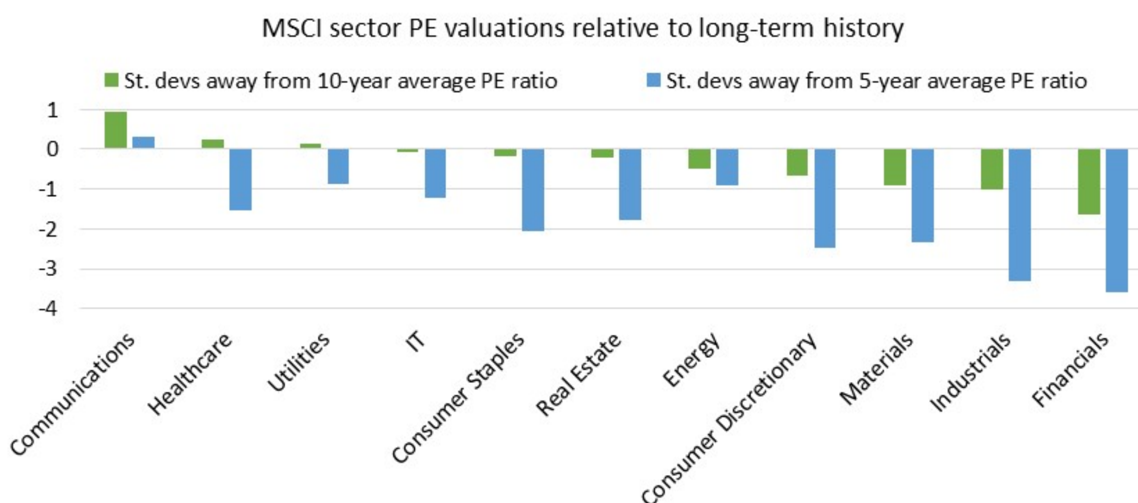
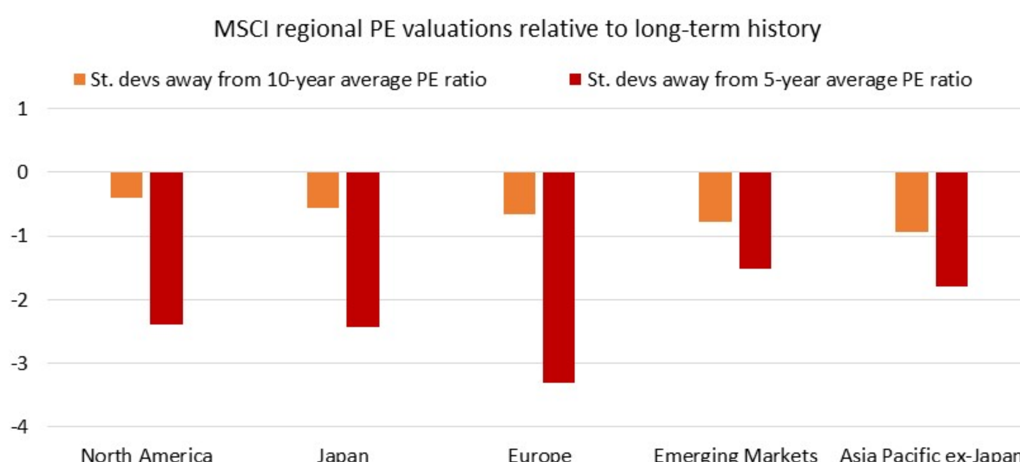


Figure 17: MSCI regional P/E valuations relative to long-term history. Bloomberg (data as at 31.12.2018)



The Guinness Global Innovators Fund seeks to invest in quality innovative companies trading at reasonable valuations. We look for companies that are experiencing faster profit growth and larger margins and which are less

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susceptible to cyclical pressures. On a long-term view, the recent pullback in equity markets could well provide an attractive entry point for new investments.

The four key tenets to our approach are innovation, quality, growth, and conviction. As shown in figure 18, this philosophy is reflected in the metrics of the fund. The fund has superior quality characteristics to the broad market, higher spend on intellectual property, less capital intensiveness, higher cash flow returns on investment, with higher growth prospects, net cash, 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, we believe, presents a compelling opportunity.

Figure 18: Portfolio metrics versus index. Guinness Asset Management, Credit Suisse HOLT, Bloomberg (data as at 31.12.2018)

		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 (annualised)	14%	6%
	Estimated earnings growth (2020 vs 2019)	13%	8%
	FCF 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

January 2019

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PORTFOLIO

31/12/2018

Fund top 10 holdings

Holding	%
Infineon Technologies	3.6%
Fanuc Corp	3.5%
Lam Research	3.5%
Nike	3.5%
Catcher Technology	3.4%
Danaher Corp	3.4%
Tencent Holdings	3.4%
Samsung Electronics GDR	3.3%
Anta Sports Products	3.3%
Schneider Electric	3.3%
% of Fund in top 10	34.3%
Total number of stocks	31

Sector analysis

Sector	%
IT	42.8%
Industrials	19.9%
Communication Serv.	15.9%
Consumer Disc.	13.4%
Health Care	3.4%
Financials	3.3%
Cash	1.30%

Geographic allocation

Country	%
USA	48.9%
China	16.1%
Germany	13.5%
Japan	3.5%
Taiwan	3.4%
South Korea	3.3%
France	3.3%
Switzerland	3.3%
Israel	3.2%
Cash	1.30%

31/12/2018

Annualised % total return from strategy inception (GBP)

Guinness Global Innovators strategy*	11.51%
MSCI World Index	9.23%
IA Global sector average	8.36%

Discrete years % total return (GBP)

	Dec '14	Dec '15	Dec '16	Dec '17	Dec '18
Guinness Global Innovators strategy*	18.9	2.0	27.6	22.0	-11.9
MSCI World Index	11.5	4.9	28.2	11.8	-3.0
IA Global sector average	7.1	2.8	23.3	14.0	-5.7

Cumulative % total return (GBP)

	1 month	Year-to-date	1 year	3 years	5 years	10 years
Guinness Global Innovators strategy*	-8.0	-11.9	-11.9	37.3	66.3	299.5
MSCI World Index	-7.4	-3.0	-3.0	39.0	62.5	184.0
IA Global sector average	-6.7	-5.7	-5.7	32.6	45.9	150.9

RISK ANALYSIS

31/12/2018

Annualised, weekly, 5 years, in GBP	Index	Sector	Strategy*
Alpha	0	-0.16	-0.18
Beta	1	0.80	1.13
Information ratio	0	-0.35	0.13
Maximum drawdown	-14.03	-17.08	-19.65
R squared	1	0.80	0.86
Sharpe ratio	0.51	0.37	0.47
Tracking error	0	5.97	6.13
Volatility	13.11	11.78	15.97

Past performance should not be taken as an indicator of future performance. The value of this investment and any income arising from it can fall as well as rise as a result of market and currency fluctuations.

***Composite simulation**: Guinness Global Innovators Fund (UCITS version) launched on 31.10.14. The returns stated above are a simulation based on the actual returns of Guinness Atkinson Global Innovators Fund (a mutual fund for US investors) until the launch of the UCITS version on 31.10.14. Both funds are managed in accordance with the same investment process and with the same portfolios. Guinness Atkinson Global Innovators Fund is not included in the IA Global sector. The sector's performance is included for a comparison of the Fund with the average performance of global equity funds available in the UK. Source: Financial Express & Guinness Asset Management, bid to bid, total return (Y class, 0.99% OCF.)

Important information

Issued by Guinness Asset Management Limited, authorised and regulated by the Financial Conduct Authority.

This report is primarily designed to inform you about Guinness Global Innovators Fund. It may provide information about the Fund's portfolio, including recent activity and performance. It contains facts relating to the equity markets and our own interpretation. Any investment decision should take account of the subjectivity of the comments contained in the report.

This document is provided for information only and all the information contained in it is believed to be reliable but may be inaccurate or incomplete; any opinions stated are honestly held at the time of writing, but are not guaranteed. The contents of the document should not therefore be relied upon. It should not be taken as a recommendation to make an investment in the Fund or to buy or sell individual securities, nor does it constitute an offer for sale.

Risk

The Guinness Global Innovators Fund is an equity fund. Investors should be willing and able to assume the risks of equity investing. The value of an investment and the income from it can fall as well as rise as a result of market and currency movement, and you may not get back the amount originally invested. Details on the risk factors are included in the Fund's documentation, available on our website.

Documentation

The documentation needed to make an investment, including the Prospectus, the Key Investor Information Document (KIID) and the Application Form, is available from the website www.guinnessfunds.com , or free of charge from:-

- the Manager: Link Fund Manager Solutions (Ireland) Ltd, 2 Grand Canal Square, Grand Canal Harbour, Dublin 2, Ireland; or,
- the Promoter and Investment Manager: Guinness Asset Management Ltd, 14 Queen Anne's Gate, London SW1H 9AA.

Residency

In countries where the Fund is not registered for sale or in any other circumstances where its distribution is not authorised or is unlawful, the Fund should not be distributed to resident Retail Clients.

NOTE: THIS INVESTMENT IS NOT FOR SALE TO U.S. PERSONS.

Structure & regulation

The Fund is a sub-fund of Guinness Asset Management Funds PLC (the "Company"), an open-ended umbrella-type investment company, incorporated in Ireland and authorised and supervised by the Central Bank of Ireland, which operates under EU legislation. If you are in any doubt about the suitability of investing in this Fund, please consult your investment or other professional adviser.

Switzerland

The prospectus and KIID for Switzerland, the articles of association, and the annual and semi-annual reports can be obtained free of charge from the representative in Switzerland, Carnegie Fund Services S.A., 11, rue du Général-Dufour, 1204 Geneva, Switzerland, Tel. +41 22 705 11 77, www.carnegie-fund-services.ch. The paying agent is Banque Cantonale de Genève, 17 Quai de l'Ile, 1204 Geneva, Switzerland.

Singapore

The Fund is not authorised or recognised by the Monetary Authority of Singapore ("MAS") and shares are not allowed to be offered to the retail public. The Fund is registered with the MAS as a Restricted Foreign Scheme. Shares of the Fund may only be offered to institutional and accredited investors (as defined in the Securities and Futures Act (Cap.289)) ('SFA') and this material is limited to the investors in those categories

Telephone calls will be recorded and monitored.