Guinness Atkinson

Global Innovators Fund Update

October 2017

Quarter in review

World equity markets had another strong quarter, with all months showing positive returns, the MSCI World Index finished up 4.96% (in USD). This added to the positive first half of 2017.

In July, we saw much political infighting, wars of words between countries and displays of military might. There were positive signals from a strong US earnings season and overall US companies beat expectations. The Fed's Open Market Committee (FOMC) left interest rates unchanged. President Trump's administration continued to dominate headlines around the globe. It emerged that his eldest son enthusiastically welcomed a purported offer of Russian government assistance to undermine Hillary Clinton's campaign in the middle of the 2016 presidential race, according to an email exchange that was released. The Republicans' seven-year battle to repeal Obamacare appeared almost fruitless after party leaders lost a Senate vote. The President's lack of control over Washington undermines the hopes for tax cuts and fiscal stimulus. This resulted in broad downward pressure on the Dollar, with the dollar index hitting a 10-month low. Chinese president Xi Jinping acknowledged the recent cooling of the US-Chinese relationship, warning Donald Trump in a phone call of "negative factors" emerging in their bilateral relationship. Relationships were further strained by North Korea's claim of its first intercontinental ballistic missile test on the eve of America's Independence Day celebrations.

In August, President Trump was criticised for failing to specifically condemn white supremacists at the fatal Charlottesville clashes. As a result, three of the administration's business advisory groups were dissolved. Hurricane Harvey wrecked havoc in southern Texas and the Houston area. Preliminary estimates of the economic losses were between $70 and $190 billion. North Korea riled both its main ally, China, and foes alike as it continued to test ballistic and nuclear weaponry. Another terrorist attack brought grief to Barcelona, with a further attack thwarted by Spanish authorities. North Korea tested the world's patience by firing a ballistic missile directly over Japan. China says the North Korean missile threat is reaching 'crisis point'. As a result, haven assets such as the Yen, Swiss franc and gold were up. Stocks slid mid-month in US and Europe, with sharper falls in Asia, although there was some recovery by the end of the month. In the European Central Bank's July policy vote, there appeared to be concern over the strength of the euro and in August, the single currency hit a two-and-a-half year high against the dollar. The ECB is looking to decide on tapering its €2trn quantitative easing program. Emmanuel Macron celebrated his first hundred days as President of France amid an improving economy and decreasing approval ratings.

As September marked the end of the Summer, we saw President Trump announce his long-awaited proposal for cutting U.S. taxes. The plan aims to cut corporate tax to 20% (from its present 35%) and largely end taxation of non-US earnings. Since Trump's election, most of the expectation of tax cuts had faded. This month we saw a reversal, with the market pricing in at least a chance of a tax cut. With details still to be announced and a long road ahead before it is written into law, the market sees it as far from certain.

In Europe, Angela Merkel won her fourth term as German Chancellor, however, this was overshadowed by an increase in support for the AfD, a right-wing nationalist party. This has largely weakened her position as Chancellor and will see the first far-right party enter parliament for 60 years.

The UK Prime Minister, Theresa May, gave her third big speech on Brexit in Florence. In an attempt to progress talks she said Britain wanted a transitional period of around 2 years to help bridge the gap on trade and leaving the EU. To secure this transitional period, she offered to honor financial commitments already made, with estimates of this commitment coming in around €20bn. The British pound reached the highest point post the EU referendum against the dollar as the dovish Bank of England backed rate hikes. There were fears of a US-UK trade war as Washington imposed a 219% trade tariff against the Canadian aircraft-maker Bombardier, potentially risking thousands of jobs in Northern Ireland.

In Asia, China's ministry of commerce has ordered North Korean business to close within 120 days amid fresh UN sanctions imposed after the most recent North Korean missile tests. The equity markets have largely shaken off the worries regarding the ongoing North Korean crisis, but without wholly ignoring the situation.

Equity markets have continued through Q3 with an extension of the broad-based rally seen in Q2. Developed market equities all performed well, with Europe leading the pack (S&P500 +4.5% Q3, +14.2% YTD, FTSE100 +4.9% Q3, +15.7% YTD, Euro STOXX +8.4% Q3, 25.8% YTD, all total return in USD). Emerging market equities (MSCI EM +8.0% Q3, +28.1% YTD) and Asian equities (MSCI AC Asia-Pac ex Japan +6.1% Q3, +27.4% YTD) have continued to rally throughout 2017 after recovering from weaker performance in late 2016. The second half of September saw the Emerging Markets and Asia sell off as the dollar climbed on President Trump's reignited efforts for tax reform in the U.S. and hawkish comments from the Federal Reserve Chair Janet Yellen.

The sectors that did well this quarter were Energy, Industrials and Financials. The sectors that lagged were Utilities, Real Estate and Consumer Staples. Energy has now recovered nearly all its losses on a year to date basis. Utilities and Consumer Staples have generally continued the trend from last quarter, slightly underperforming the index.

Performance drivers

Chart 1 shows the over and underweight positioning of the fund by sector. Our overweight relative to the benchmark in Information Technology (c.30% overweight as of 09.30.2017) and our underweight positioning in Consumer Staples (c.9% underweight) were positives during the quarter. The largest sector underperformance was in Materials (representing a c. 5% underweight versus the benchmark) and Energy (c. 3% underweight). Energy has seen a turnaround in performance in September. Most of this year the Energy sector has suffered from cheap oil prices. The chart below shows the sector breakdown of the fund in absolute terms and relative to the benchmark to highlight any over/underweights.

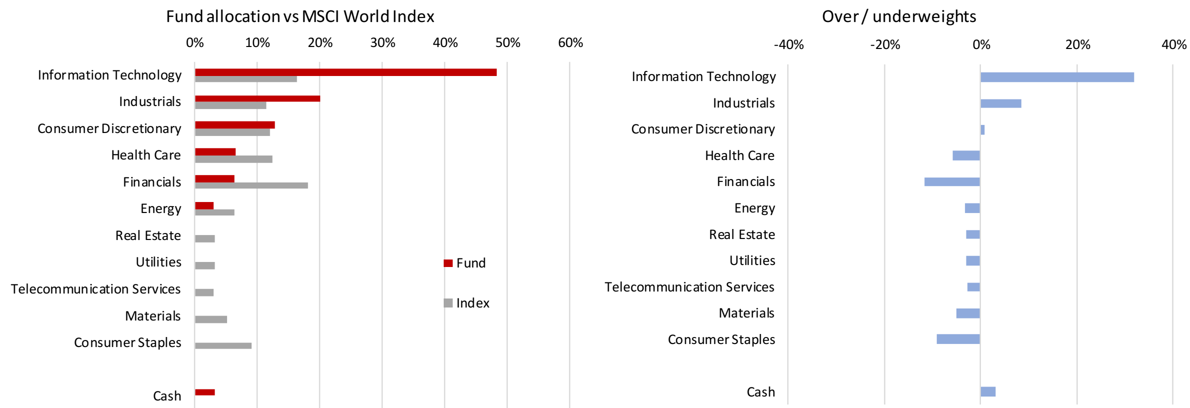


Chart 1: Sector breakdown of the fund versus MSCI World Index. Guinness Atkinson Asset Management, Bloomberg (data as of 09.30.2017)

In terms of US geographic exposure, the fund is in line with the benchmark (as measured by country of domicile). The fund had a c.62% weighting to the US (as of 09.30.2017) - this made no discernible difference to performance last quarter.

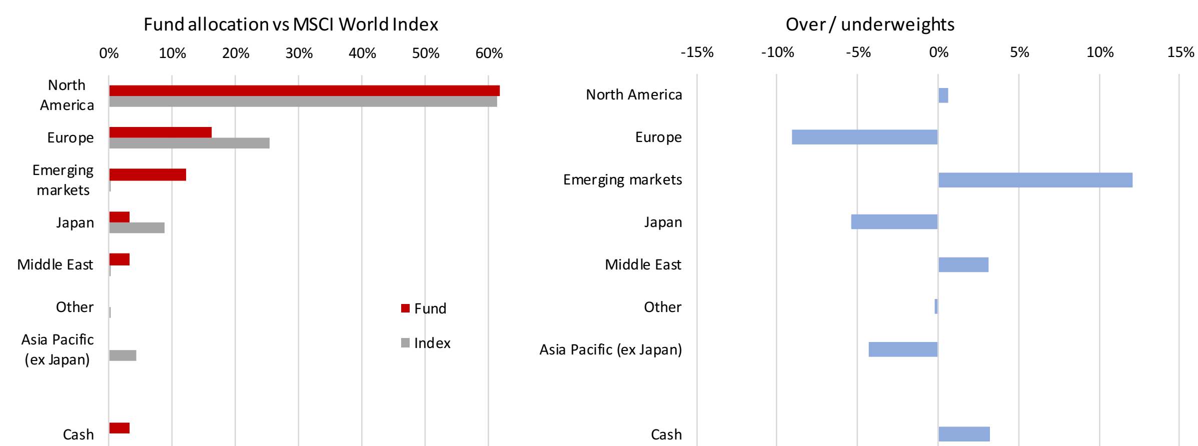


Chart 2: Geographic breakdown of the fund versus MSCI World Index. Guinness Atkinson Asset Management, Bloomberg (data as of 09.30.2017)

There was a recovery in small cap stocks in September, after initially underperforming mid to large-caps in July and August. In part this was due to renewed hopes of a corporation tax cut in the U.S. which would potentially help smaller more U.S. domestically focused stocks more than globally diverse businesses. The MSCI World Small Cap Index is heavily weighted to U.S. small caps, with a 55% weighting.

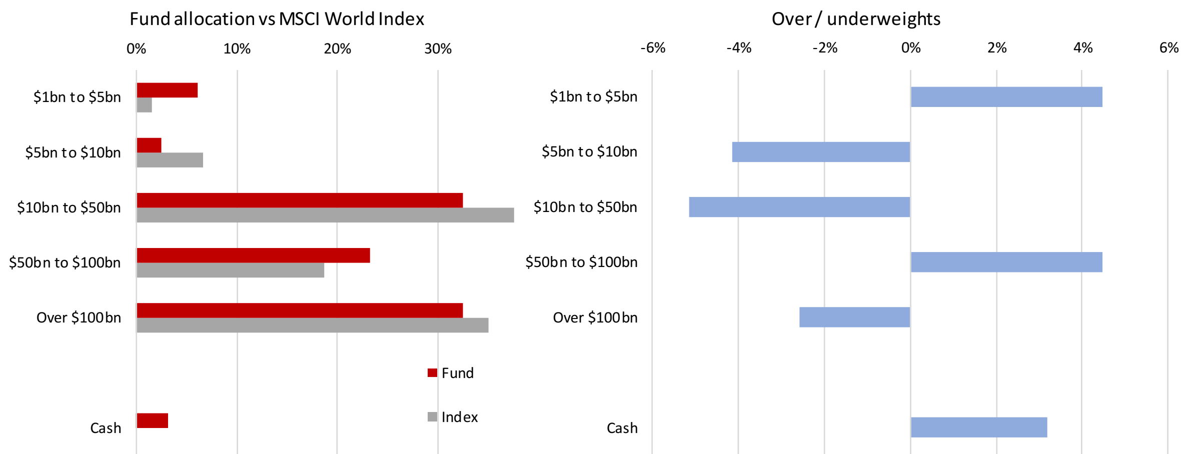


Chart 3: Market capitalization breakdown of the fund versus MSCI World Index. Guinness Atkinson Asset Management, Bloomberg (data as of 09.30.2017)

Individual companies that performed well over Q3 were AAC Technologies (+34.7% total return in USD), Boeing (+29.3% total return in USD), Applied Materials (+26.4% total return in USD), New Oriental Education (+25.9% total return in USD) and Nvidia (up 23.8% total return in USD).

AAC Technologies, manufacturer of acoustic components for smartphones, has seen a boost in sales following their Q2 2017 earnings release in late August. It also reported improved diversification across product lines and achieved a high gross profit margin of over 40%. AAC did see some pull back after the iPhone 8 went on sale in late September, as reports of fewer crowds at Apple stores fueled speculation over lower sales.

Boeing reported strong second-quarter results and boosted its core earnings per share forecast for the full year, with the new guidance exceeding the highest analyst estimate. Even though sales were lower than expected, the shares rose strongly. The profitability of its 787 Dreamliner contributed to strong cash flow. The world's biggest plane maker is focusing on streamlining production of the new 737 MAX models and finishing development of other forthcoming planes. The company also benefited from cost-cutting. September saw Boeing increase production expectations of its 787 Dreamliner to 14 planes a month in 2019, up from 12, which was positively received by the market.

New Oriental Education, a private education provider, made early gains in July off the back of a positive research note and positive sentiment. Later in the month the company reported fourth-quarter earnings, beating the average analyst earnings estimate by 4%. Despite this robust performance the stock lost some of its gains towards the end of the month due to slightly weaker revenue guidance, against investors' high expectations. As the quarter progressed, there was positive sentiment regarding enrollment rates and retention rates. This contributed to the expectation that New Oriental Education is accelerating its market share growth and utilizing the scalability of its online platform.

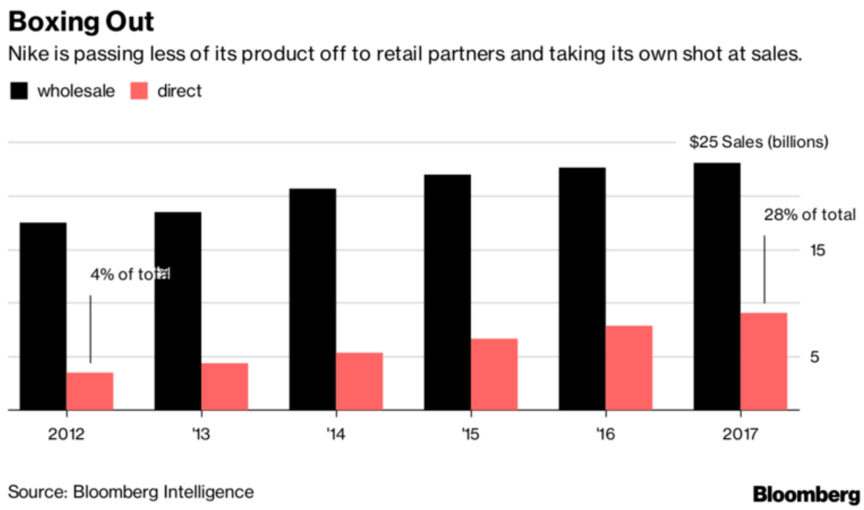
Applied Materials, the semiconductor equipment manufacturer, beat earnings expectations in the middle of August, without much reaction from the market. During September the stock rallied due to two positive analyst reports. The stock further rallied as Applied Materials announced a new $3bn share repurchase plan and outlined its growth plan through 2020, which was positively received by the market.

Nvidia continued to rally due to its exposure to several of the fastest growth secular end markets, which received positive news throughout the quarter. As cars become more complex there is increasing semiconductor sales to the auto industry. There has been strong computing demand from a resilient gaming sector and the new impact of cryptocurrency mining requiring intensive processing power. Tailwinds continue for cloud computing and the related impact on data centers. Several analysts increased their price targets for Nvidia on renewed expectation that their earnings will continue to grow.

Individual companies that underperformed over Q3 were Catcher Technology (-19.6% total return in USD), Nike (-11.8% total return in USD) and Shire (-7.6% total return in USD).

Catcher Technology, manufacturer of aluminium and magnesium casings for notebook computers and smartphones, had a weak July due to poor Taiwan tech sales. In early August, Catcher recovered July's losses and continued to rally as there was renewed expectation of strong iPhone demand, following positive earnings from Apple. Catcher reported earnings which failed to meet this expectation, and the rally ended. September saw sentiment turn negative as Apple released its latest iPhone suite. There was a general downward trend on Apple suppliers as previously high expectations turned to doubts over whether demand would meet market expectations. Catcher had risen 84% (total return in USD) in the first 8 months of 2017.

Nike, reported its slowest quarterly sales growth since 2010. More positively, Nike has been attempting to cut out the middleman and sell direct to customers. It reported web store sales increasing by 19%, while its retail shops increased like for like sales by 5%. As you can see from the chart below, Nike has increased its direct sales from 4% of total sales in 2012 to 28% in 2017.



Nike seem focused on price segmentation. At their high-end flagship stores, such as a studio in New York, you can have a customized pair of shoes made onsite in about an hour. They feed their less-popular shoes into their outlet stores and onto Amazon. So far, the market has not been convinced, as reflected in their short-term performance.

Shire, the UK-listed biopharmaceutical company, beat 4Q revenue estimates. However, the share price suffered with negative sentiment, staff dissatisfaction and the loss of its CFO and Head of Research. Shire continues to face challenges over its merger with US-based Baxalta.

Changes to portfolio

We made two changes to the portfolio in the quarter: we bought Facebook and Continental and sold Gilead and Qualcomm.

Gilead, the US-based biopharmaceutical company has been held in the fund since October 2010. It has done well from its innovative Hepatitis C and HIV drugs, but is losing market share due to competition and pricing from generic products, in part due to the expiration of a patent for an active ingredient in some of its key drugs. This has started to erode revenues and earnings and the amount of debt has been rising albeit alongside a large cash pile. We therefore decided to sell our full position in Gilead. Gilead has been one of our most successful holdings rising almost 400% over our holding period, in a time the market "only" rallied around 100% (total return in USD).

Qualcomm, the US multinational semiconductor and telecommunications equipment company, designs chips for 3G and next-generation mobile technologies. The company has been held in the Global Innovators Fund since October 2013. Qualcomm's sales may be impacted by lawsuits against its royalty model from Apple and stressed by a falling share of the smartphone chip market. Qualcomm also faces revenue pressures as smartphone shipments slow and prices for its chips drop amid rising competition among the chip manufacturers. In addition, we believe over the next few years we will see more in-house chips from the major smartphone manufacturers. For these reasons, in combination with a declining cash flow return on investment, we decided it was time to sell our entire position in Qualcomm.

We bought Facebook, the social media company, on the prospect of continued strong earnings growth which we believe the market is not appreciating. The company generates revenue through targeted advertising to over 2 billion users who regularly use its social media platform. There is significant earnings potential in Facebook's unmonetized apps such as WhatsApp and Messenger, which each have significant user bases. There is upside potential in the average revenue per user (ARPU) growth in the US, as Facebook still accounts for a relatively small percentage of the total revenue spend per person in the US. There is also upside potential in ARPU in the rest of the world, especially Europe and Asia. In our upside case we note that user growth could accelerate in Asia, especially in India. Facebook's cash flow return on investment has grown considerably over the last few years. Combined with a strong balance sheet (with no debt) and stable-to-growing margins, we think this makes Facebook a good addition to the portfolio.

In the quarter we also bought Continental, the German automotive manufacturing company traditionally known as a tire manufacturer. Today, over half its revenue comes from automotive systems, which cover a range of innovative technologies set to improve the automotive industry. Continental has expertise in safety technologies, efficiency improvement in internal combustion engines, battery management systems, comfort and security. It is well positioned to take advantage of a shift towards smarter, connected cars and autonomous driving. Continental has a stable and high cash flow return on investment, low debt and margins which are higher than its peers, indicating its leading position in the tire and automotive industry.

Positioning

The below chart highlights the geographic weighting of the portfolio both in terms of where the companies are domiciled and where their revenues come from – which can often be more illuminating.

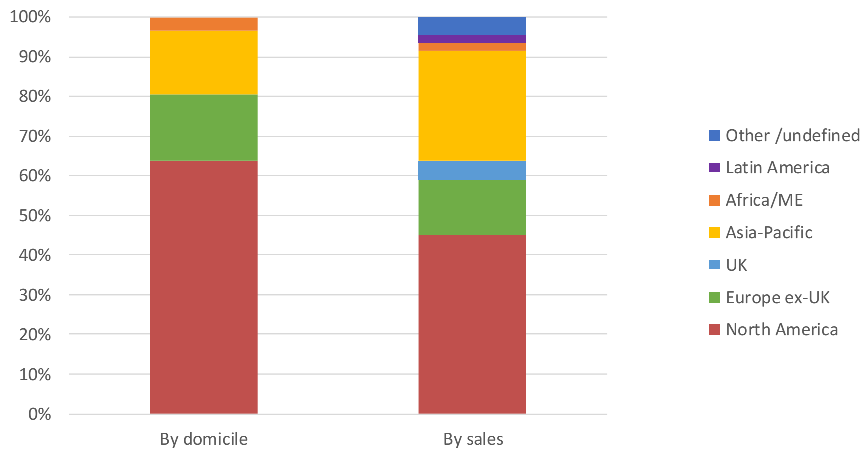


Chart 4: Geographic breakdown of the fund. Guinness Atkinson Asset Management, Bloomberg (data as of 09.30.2017)

We would note two main points; (i) the lower exposure to the US the fund has when considered by revenues (c.45%) versus by domicile (c.62%), which arises because some companies are domiciled in the US but have large global exposure (such as Applied Materials); and (ii) the larger exposure to Asia by revenues (c.28%) than by domicile (c.15%).

In terms of sector weightings, the fund has zero weighting to Utilities, Materials, Telecoms, Consumer Staples and the newly created Real Estate sector (previously included in Financials but now counted separately by MSCI). The largest overweight positions are in Information Technology and Industrials. On the large overweight position to Information Technology it is worth noting that it is split between the three different subsectors of semiconductors (c.14% of the portfolio), software and services (c.20%), and technology hardware (c.15%).

To put this data into a historical context (for the fund at least) the two charts below show how the exposure of the fund has evolved since we launched the strategy back in 2003.

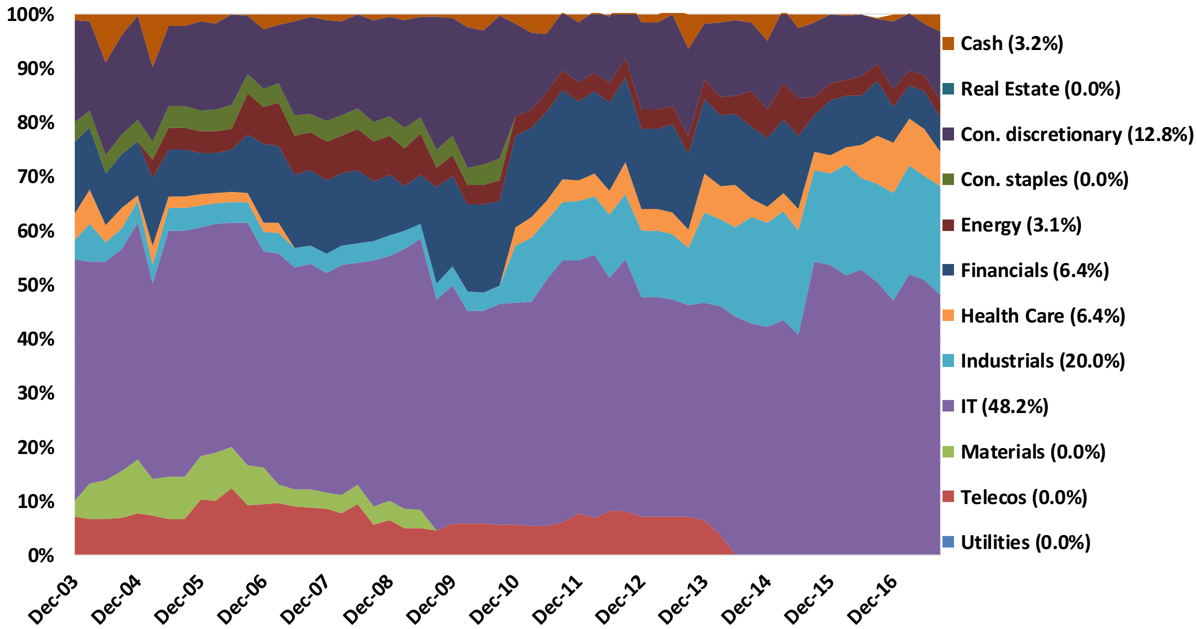


Chart 5: Sector breakdown of the fund since launch. Guinness Atkinson Asset Management, Bloomberg (data as of 09.30.2017)

From a sector perspective, we made two changes last quarter. Therefore the exposure of the fund to Health Care decreased with the sale of Gilead and increased our exposure to Consumer Discretionary through Continental AG. We sold Qualcomm and bought Facebook, which are both within the Information Technology sector.

From a geographic point of view, we increased our European exposure and decreased our U.S. exposure.

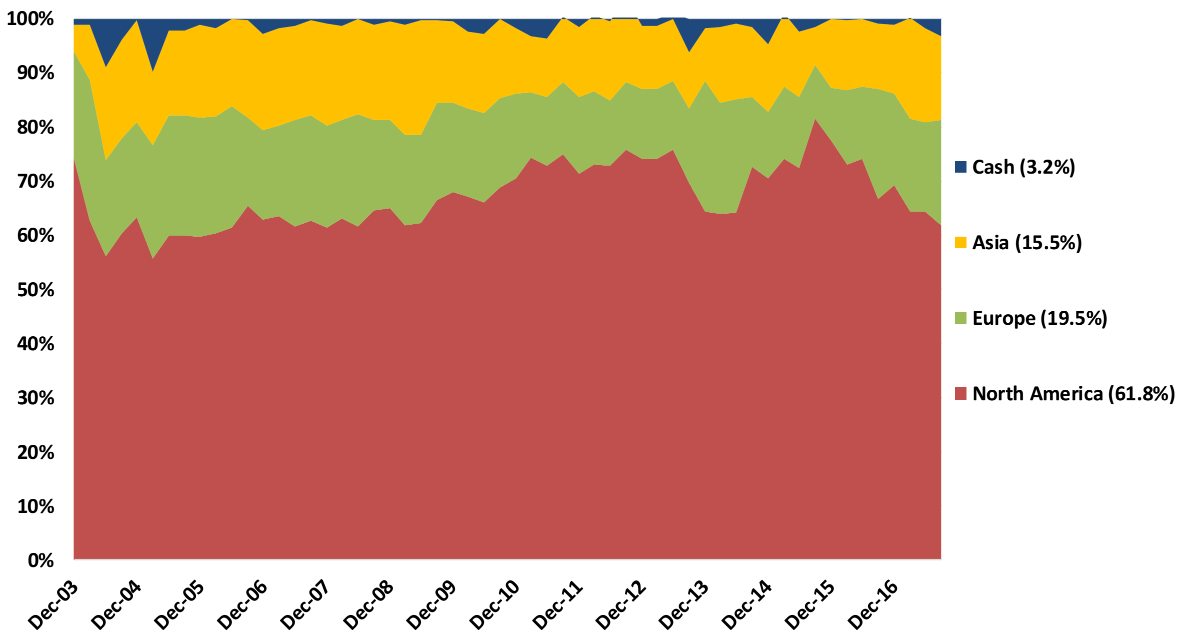


Chart 6: Geographic breakdown of the fund since launch. Guinness Atkinson Asset Management, Bloomberg (data as of 09.30.2017)

Key fund metrics today

The four key tenets to our approach are innovation, quality, growth, and conviction.

		Fund	MSCI World Index
Innovation	R&D / Sales	8%	6%
	CAPEX / Sales	7%	9%
Quality	CFROI (2016)	18%	11%
	Weighted average net debt / equity	-7%	74%
Growth (& valuation)	Last 3 year sales growth (annualised)	11%	4%
	Estimated earnings growth (2018 vs 2017)	13%	9%
	FCF yield	4.7%	4.8%
	PE (2017e)	19.6	17.9
Conviction	Number of stocks	30	1652
	Active share	94%	-

Chart 7: Portfolio metrics versus index. Guinness Atkinson Asset Management, Credit Suisse HOLT, Bloomberg (data as of 09.30.2017)

As the table above shows the fund still has superior characteristics to the broad market, higher spend on intellectual property, less capital intensive, far higher cash flow returns on investment, net cash, with higher growth prospects, at only a modest premium in terms of valuation.

Is the Information Technology Sector overvalued?

A question that has been asked over the last few months is: are IT stocks overvalued? To address this, it is key to look back at the IT sector versus the broader market and versus its own history. Below we compare the US IT sector to the S&P 500, as the US is where most people are worried about valuations and the sustainability of the growth that we've seen through the year so far.

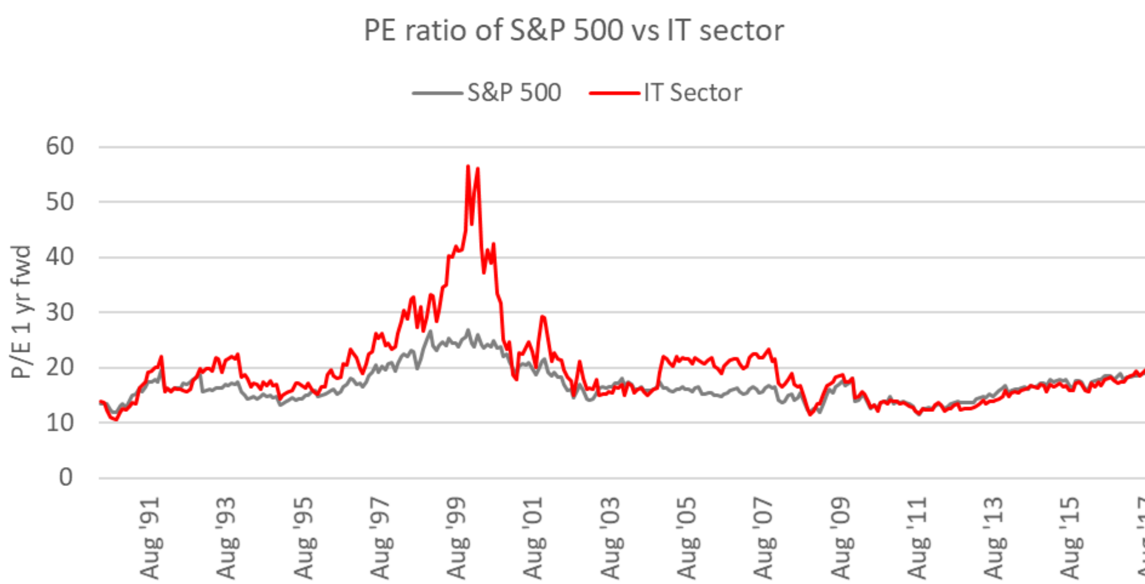


Chart 9: US IT Sector is not expensive relative to the S&P 500

From Chart 9 you can clearly see from the not too distant past, how overvalued the US IT sector was during the dot-com bubble in 2000. And to a lesser, but significant, extent from 2004 until the Financial Crisis. Noticeably, IT Sector valuations on a P/E 1 year forward basis have been fairly stable and in line with the S&P 500 since 2009, with only relatively minor divergences.

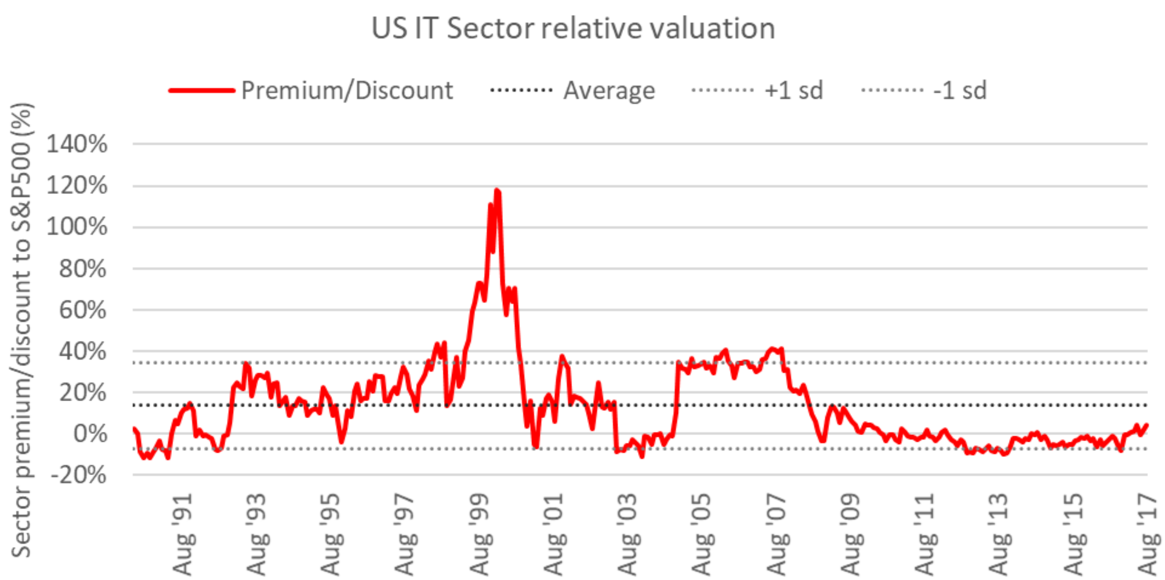


Chart 10: US IT Sector is looking relatively cheap relative to its historic average

If we look at the US IT sector relative to the S&P 500, you will notice that the historic average has traded at a slight premium. Current valuations indicate that the US IT sector is around half a standard deviation below this long-term historic average.

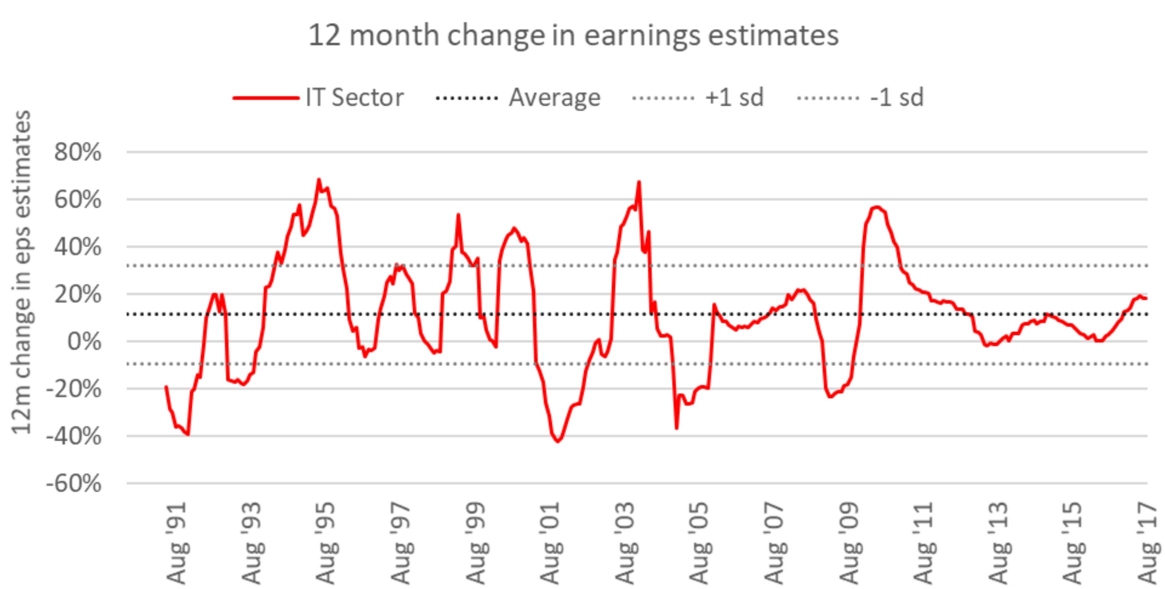


Chart 11: Earnings growth is above historic average

Taking the long-term average of the 12 month change in earnings estimates, Chart 11 positively indicates that earnings growth is above historic average.

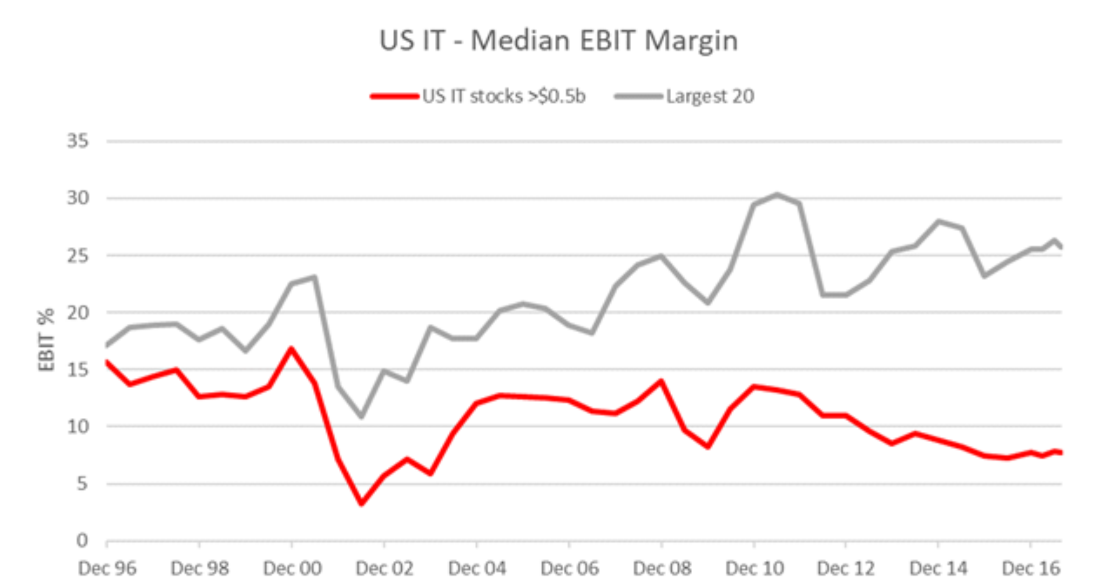


Chart 12: Larger IT companies are generating the best margins

Not all companies are created equally and quite often averaging a sector can cloud interesting and useful observations. When looking at the largest 20 IT stocks, their median EBIT margin has increased or at least remained around 25%. Whereas, US IT stocks with a market capitalization of more than $0.5bn, have diverged from a similar starting point in 1996 to less than 10% this year.

Within the Global Innovators fund we look for companies with moderate growth, strong balance sheets and often high margins. However, we don't wish to pay *any* price for the growth of these high-quality growth companies. We believe you should be careful how much you pay upfront for future expected growth; therefore, we employ a value discipline. This is reflected in the portfolio, which today trades at only a small premium to the broader market (as indicated in Chart 7).

Outlook

Generally speaking, the fund has outperformed in periods of rising markets and underperformed slightly in periods of falling markets. It is oriented towards growth, but not at any price. Therefore, its recent outperformance is what we might have expected as the more cyclical parts of the market, and in particular Information Technology, have performed well.

As we noted above, and as a result of the outperformance seen this year, the fund is now trading at a 9.6% premium to the broad market on a PE ratio basis (fund 19.6x 2017 expected earnings vs MSCI World Index 17.9x) after trading at a discount for much of 2016. The longer-term premium of the fund versus the broader market has been in the 10-20% range, and so we still believe the portfolio offers good value relative to the market today. Moreover, when we look at the portfolio on an expected earnings growth basis the portfolio is expected to have good growth prospects relative to the index (with 13% vs MSCI World Index at 9%).

We thank you for your continued support.

Guinness Atkinson

Global Innovators Fund Update

October 2017

Portfolio manager

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Analysts

Joshua Cole

Sagar Thanki

Guinness Atkinson
Global Innovators Fund Update
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GUINNESS ATKINSON FUNDS

Performance

In September, the Guinness Atkinson Global Innovators Fund produced a total return of 3.54% (investor class) versus the MSCI World Index return of 2.27%. The fund therefore outperformed the index by 1.26%.

as of 09.30.2017 (in USD)	YTD	1 year	3 years annualized	5 years annualized	10 years annualized	Since inception annualized
Global Innovators, Investor Class[1]	26.82%	29.58%	11.50%	17.88%	8.49%	8.00%
Global Innovators, Institutional Class[2]	27.04%	29.88%	11.67%	17.98%	8.54%	8.03%
MSCI World Index	16.53%	18.85%	8.34%	11.65%	4.86%	5.78%

as of 06.30.2017 (in USD)	YTD	1 year	3 years annualized	5 years annualized	10 years annualized	Since inception annualized
Global Innovators, Investor Class[1]	16.60%	30.77%	8.08%	17.13%	8.15%	7.63%
Global Innovators, Institutional Class[2]	16.72%	31.08%	8.22%	17.22%	8.19%	7.65%
MSCI World Index	11.01%	18.89%	5.87%	12.05%	4.60%	5.58%

Investor class (IWIRX) Inception 12.15.1998 Expense ratio* 1.24% (net); 1.35% (gross)

Institutional class (GINNX) Inception 12.31.2015 Expense ratio* 0.99% (net); 1.38% (gross)

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 or call (800) 915-6566.

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 reduce its fees and/or pay Fund 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, 2018. To the extent that the Advisor waives its fees and/or absorbs expenses to satisfy this cap, it may seek repayment of a portion or all of such amounts at any time within three fiscal years after the fiscal year in which such amounts were waived or absorbed, subject to the 0.99% for the Institutional class and 1.24% for the Investor class expense cap.

Total returns reflect a fee waiver in effect and in the absence of this waiver, the total returns would be lower

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 9/30/17, are:

1. Samsung Electronics Co Ltd	3.92%
2. Cognizant Technology Solutions Corp	3.74%
3. New Oriental Education and Technology Group Inc	3.70%
4. Infineon Technologies AG	3.61%
5. Continental AG	3.49%
6. Applied Materials Inc	3.43%
7. Check Point Software Technologies Ltd	3.42%
8. Eaton Corp PLC	3.40%
9. The Boeing Co	3.39%
10. NVIDIA Corp	3.37%

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

Cash flow return on investment (CFROI) is a metric developed by Credit Suisse HOLT that seeks to calculate cash flow return on investment adjusted for inflation and on a standardized global/industry basis.

In accounting and finance, EBIT is earnings before interest and taxes. It is a measure of a firm's profit that includes all expenses except interest and income tax expenses. It is the difference between operating revenues and operating expenses.

Opinions expressed are subject to change at any time, are not guaranteed and should not be considered investment advice.

This information is authorized for use when preceded or accompanied by a prospectus for the Guinness Atkinson Global Innovators Fund. The prospectus contains more complete information, including investment objectives, risks, charges and expenses related to an ongoing investment in The Fund. Please read the *prospectus carefully before investing. The prospectus may be obtained by calling 800-915-6566 or visiting* https://www.gafunds.com/resource-insight-center

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.

One cannot invest directly in an index.

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