

November in review:

US Elections:

With an unprecedented number of mail-in ballots for the US Election, markets were made to wait as toss-up States counted their votes, but ultimately indicated that Joe Biden would become the next US President. However, President Trump was not without resistance, frequently voicing (unsubstantiated) claims of voter fraud, going as far to make (unsuccessful) legal attempts to stop the counting of votes. However, in the weeks that followed, President Trump went some way to eventually acknowledge the possibility that a new administration would be in office come the end of his term and that he would leave the White House peacefully should the electoral college confirm Mr. Biden as president on December 14th. Following his win, Joe Biden moved to announce a team to steer the US economy through and post the COVID crisis which included Janet Yellen, the former US Fed Chair, as the Treasury secretary. This news was taken positively by the market as the expectation of further economic stimulus rose as Yellen was seen as dovish in this respect. In the race for the US Senate, Democratic hopes to control both chambers of Congress looked unlikely as Democratic challengers failed to oust several Republican incumbents in the Senate, leaving a divided Congress as the most likely scenario. If indeed this is the case (we await the result of the two run offs in Georgia in January) it will make it more difficult for the Biden administration to pass proposals through Congress which has been taken as a positive by markets as the likelihood for proposed corporate tax increases and big tax regulation was dampened. Combined with the prospect of less aggressive trade discussions with China, the prospect of a Biden Administration, Democratic House, and Republican Senate was seen by many as supportive of equities and the market in general.

COVID-19 Vaccines:

Equity markets were greeted on three separate occasions during the month with very positive vaccine news showing drugs with high efficacy rates. The three developments consisted of a Pfizer/BioTech vaccine that showed a 90% efficacy rate, a Moderna vaccine that showed a 95% efficacy rate, and the Oxford University/AstraZeneca vaccine which showed an efficacy rate of 70% (or up to 90% with different dosage regimes). The news led to those stocks which had underperformed year-to-date to rebounded strongly – most notably Energy, Banks and Autos - as the prospect of a return to relative normality sooner than may have been expected increased. However, while the late-stage results are clearly very positive news, there are still several challenges ahead with approval, manufacturing, distribution and administration on a mass scale still required and some logistical challenges may exist as the Pfizer/BioNTech and Moderna vaccines both require cold storage (at -70C in the case of the former) and are relatively expensive (compared to the AstraZeneca/Oxford vaccine which is able to be stored at regular fridge temperatures, and comes at a fraction of the price). Ultimately, the news comes at a critical time when regions continue to implement national lockdowns and restrictions to battle rising infections coupled with a traditionally busy winter flu season.

Stock performances



Semiconductor equipment manufacturers: Applied Materials (up 39.7% USD over the month), Lam Research (up 32.3% USD), KLA (up 28.3% USD)

With KLA and Lam Research having already reported robust results in October, Applied Materials continued the trend in November by reporting better than expected results for their 4th quarter which showed, for the full fiscal year, revenues growing 18% and EPS growing 37% year-on-year. Indeed, Applied Materials pointed to an improving landscape, raising guidance despite US restrictions on SMIC, the leading Chinese semiconductor foundry, and noting leading-edge customers continue to build out their fabrication facilities and aggressively drive advanced R&D. This coupled with the possibility of with less aggressive IT regulations from a new Biden administration and the broader COVID vaccination results, led the fund's three semiconductor equipment manufacturers to outperform the broader IT index. It is worth noting that these stocks had performed relatively well before November (KLA + 12.3% to end October, Lam +18.5%, Applied -2.0%, MSCI World Index -1.0%) so the strong rally in November was not a "rebound from lows."

Tencent (down 4.7% USD):



Having reported strong results during the month which showed revenue growing 29% yoy – ahead of analysts' expectations – this was not enough for investors to feel upbeat as Chinese regulators showed a clear signal of their intentions to rein in their tech giants that have dominated multiple industries in order to foster better competition. Indeed, having suspended Ant Financial's initial public offering, the regulators then proceeded to post guidelines aimed at tightening a number of practices from uses of consumers data and promotional subsidies to the tightening of regulatory filings around acquisitions that may have previously been deemed anti-competitive. These guidelines would predominately affect China's big 3 tech giants, Alibaba, Tencent and Baidu, (of which the fund only owns Tencent) which control large portions of several industries. We continue to believe Tencent offers attractive growth opportunities in many different areas and we are cognizant that not all companies will be affected equally, however, an evolving regulatory landscape could provide headwinds and we will therefore continue to monitor the situation closely.

We thank you for your continued support.

Portfolio Managers

Matthew Page, CFA

Dr. Ian Mortimer, CFA

Guinness Atkinson Global Innovators Fund Managers Update – December 2020



Summary performance

For the month of November, the Guinness Atkinson Global Innovators Fund provided a total return of 12.31% (USD) against the MSCI World Index net total return of 12.79% (USD). Hence the fund underperformed the benchmark by 0.48% (USD). Year to date, the fund has produced a total return of 29.50% (USD) against the MSCI World 11.19% (USD).

As we moved into the penultimate month of the year, two of the market's major uncertainties became a little clearer with Joe Biden winning the US Presidency (and with President Trump seemingly acknowledging it), and three COVID-19 vaccines were shown to be highly effective in Phase 3 trials making vaccinations by year-end a realistic possibility. All this made for a reversal in fortunes for stocks that had underperformed during the year as countries faced rising infection rates and national lockdowns. "Value" stocks and small caps outperformed over the month, areas that the fund has low exposure to, and as a result the fund underperformed the benchmark, albeit by 0.48% only.

Although we seek to invest in growth companies, we aim to apply a valuation discipline to avoid paying up too much for expected growth which is inherently uncertain. Pleasingly, over half the companies held in the portfolio outperformed the benchmark in November despite the underperformance of growth with notable positive returns from the companies held in the semiconductor industry (Applied Materials, Lam Research, KLA, Infineon, Samsung Electronics) and within the payment processing sector (Mastercard, Visa, PayPal).

Fund attribution

Investors appeared to begin rotating into more cyclical sectors that had been hardest hit up until the positive vaccine trial news at the beginning of the month with companies in the Energy (up ~30% in USD as a group), Financials (up +19%) and Industrials (up ~16%) performing best, with Banks and Autos dominating performance in the latter two sectors. This led to value outperforming growth and small caps outperforming their large cap equivalents in the month as the above sectors have a higher weight in these areas currently.

In summary, this had the following impact on fund performance vs the MSCI World Index:

- IT stocks provided the bulk of positive attribution for the fund vs the benchmark with semiconductor holdings Applied Materials (up 39.7% USD over the month), Lam Research (up 32.3% USD), KLA Corp (up 28.3% USD) and Infineon (up 26.7% USD), the fund's top 4 performers over the month.
- Not owning Utilities and Consumer Staples holdings provided positive asset allocation as investors rewarded more cyclical sectors.
- However, not owning any Energy, Banks or Auto holdings was a drag on performance.
- The fund's Healthcare exposure was also a drag on performance overall as investors rotated out of this more "defensive" sector. Stock-specific returns, particularly from pharmaceutical holdings not held in the fund including Moderna (up 126% USD over the month), created a drag from a stock selection perspective.

Guinness Atkinson
Global Innovators Fund
 Managers Update – December 2020



as of 11.30.2020 (in USD)	1 year	3 years annualized	5 years annualized	10 years annualized
Global Innovators, Investor Class ¹	33.60%	14.19%	15.98%	15.17%
Global Innovators, Institutional Class ²	33.93%	14.47%	16.27%	15.32%
MSCI World Index NR	14.52%	9.50%	10.86%	10.18%

as of 09.30.2020 (in USD)	1 year	3 years annualized	5 years annualized	10 years annualized
Global Innovators, Investor Class ¹	31.62%	12.82%	16.49%	14.88%
Global Innovators, Institutional Class ²	31.94%	13.10%	16.77%	15.01%
MSCI World Index NR	10.41%	7.72%	10.46%	9.37%

All returns after 1 year annualized.

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

¹ Investor class (IWIRX) Inception 12.15.1998 Expense ratio* 1.24% (net); 1.35% (gross)

² Institutional class (GINNX) Inception 12.31.2015 Expense ratio* 0.99% (net); 1.21% (gross)

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

*The Advisor has contractually agreed to reimburse expenses (excluding Acquired Fund Fees and Expenses, interest, taxes, dividends on short positions and extraordinary expenses) in order to limit the Fund's Total Annual Operating Expenses to 0.99% for the Institutional class and 1.24% for the Investor class through June 30, 2021. 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.

Guinness Atkinson
Global Innovators Fund
Managers Update – December 2020



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

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

Current and future portfolio holdings are subject to risk.

Top 10 holdings for Global Innovators Fund, as of 11/30/2020:

1. Applied Materials Inc	4.32%
2. KLA-Tencor Corp	4.04%
3. Lam Research Corp	3.96%
4. PayPal Holdings Inc	3.67%
5. Tencent Holdings Ltd	3.66%
6. Samsung Electronics Co Ltd	3.64%
7. Infineon Technologies AG	3.62%
8. Danaher Corp	3.61%
9. Alphabet Inc - A Shares	3.61%
10. NIKE Inc	3.61%

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

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

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

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

One cannot invest directly in an index.

Active share measures the extent of active management in a portfolio compared to the corresponding benchmark listed.

Distributed by Foreside Fund Services, LLC