Innovation | Quality | Growth | Conviction

INVESTMENT COMMENTARY – December 2021

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.

735m 10.14 05.03 r, CFA
10.14
735m
567m

This is a marketing communication. Please refer to the prospectus and KIID for the Fund before making any investment decisions.

Performance 30.11.21

Past performance does not predict future returns

Cumulative %	1	3	5	10
total return (GBP)	year	years	years	years
Strategy*	24.1	92.8	131.6	461.2
Index	22.9	54.0	86.8	276.6
Sector	19.0	52.2	80.9	224.8
Position in sector	76 /448	26 /382	30 /319	9 /214

Annualised % total return from strategy inception (GBP)

Strategy*

Sector

Strategy	
Index	10.72%
Sector	9.86%
Strategy	Guinness Global Innovators*
Index	MSCI World Index

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.









Summary performance

For the month of November, the Guinness Global Innovators Fund provided a total return of 4.26% (GBP) against the MSCI World Index net total return of 1.34% (GBP). Hence the fund outperformed the benchmark by +2.92% (GBP). Over the year to date, the fund has produced a total return of 20.86% (GBP) against the MSCI World's 20.71% (GBP).

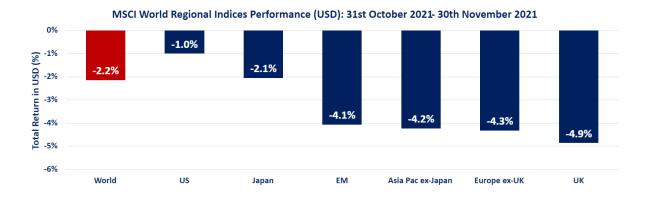
In USD terms, global equity performance was broadly negative over the month of November, with declines across all key regions. The month started strongly, continuing the positive performance trends of October when sentiment from a strong earnings season outweighed concerns over disrupted supply chains, inflation, and a hawkish-sounding Federal Reserve. Indeed, during November the S&P 500 and Stoxx 600 once again reached record highs. However, this positive momentum reversed in the last week of the month and the sharp falls left indices in negative territory for the month as a whole.

The World Health Organisation labelled the new Omicron strain as a "variant of concern" in the final week of the month, spooking the market and leading to one of the largest selloffs of the year. Governments rushed to respond, with the UK accelerating its booster vaccine program and tightening rules around mask wearing. EU member states and the US, among others, responded through banning travel from high-risk countries in southern Africa. Respite from Biden's announcement that no new lockdowns would be imposed was short-lived, as vaccine maker Moderna

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

IA Global

announced on the last day of the month an expected "material drop" in vaccine efficacy against Omicron variant.



Source: Bloomberg, Guinness Asset Management

From a factor perspective, growth and quality stocks outperformed their value counterparts in November, helping to drive fund outperformance. Technology, one of the biggest winners during the earlier phases of the pandemic, led the rotation and was the only sector to deliver positive performance over the month. However, it was a somewhat narrower group of tech stocks that led gains, with the more 'speculative' or 'hyper growth' tech companies underperforming over the period. Consumer Discretionary also outperformed, buoyed by strong Black Friday sales. Quality stocks continued to outperform both growth and value, showing investors' continuing appetite for companies with robust balance sheets and potentially steadier earnings in periods of uncertainty.

Over the month of November, fund performance can be attributed to the following:

- Stock selection was strong across a broad base of sectors, particularly in Industrials, Communication Services, Consumer Discretionary and Information Technology. Most notably, ABB and Schneider significantly outperformed their Industrials peers, and helped the Industrials sector offer the largest source of outperformance within the fund.
- From an allocation perspective, having a significant overweight position to the only positively performing sector during November, Information Technology, helped drive performance. In particular, a significant overweight position to Semiconductor names was a positive for the fund, as stock such as Nvidia (+28% USD) and LAM Research (+21% USD) delivered strong gains.
- Broadly speaking, the relative outperformance of growth stocks to value contributed positively to performance. Having limited exposure to value-orientated sectors, in particular Financials (one holding) and Energy (zero holdings) aided relative performance, with each sector underperforming the broader benchmark. Performance of the fund vs peers remains strong, with the fund ranking in the top quartile versus its IA Global Sector peers over 2021 to date, as well as over 1, 3, 5, and 10-year periods.

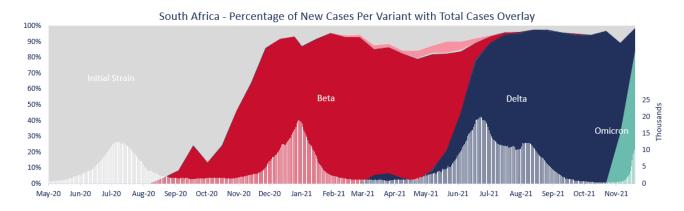
Cumulative % total return, in GBP, to 30/11/2021	YTD	1 year	3 years	5 years	10 years
Guinness Global Innovators	20.86	24.07	92.83	131.64	461.20
MSCI World Index	20.71	22.89	54.04	86.78	276.59
MSCI AC World Index	17.76	20.36	50.38	81.75	249.63
IA Global sector average	16.09	18.97	52.20	80.88	224.79
IA Global sector ranking	98/452	76/448	26/382	30/319	9/214
IA Global sector quartile	1	1	1	1	1

Source: Financial Express. Cumulative Total Return in GBP, as of 30th November 2021

November in review

Concerns over a resurgence in the Covid-19 pandemic fuelled the largest sell-off in over a year in late November. The emergence of Omicron, first found in Botswana before spreading rapidly in South Africa, led to the World Health Organisation designating the new strain a "variant of concern". Many countries banned flights from countries across southern Africa, including the EU, US and UK. The EU and the UK also stepped up their booster vaccine roll-outs, with the UK reintroducing strict mask-wearing mandates and travel testing.

The MSCI World sold off 3.1% (in USD) between Omicron's emergence and the end of the month. Primary concerns across markets focused on transmissibility, with initial data suggesting Omicron is more infectious than Delta, with some scientists also suggesting a level of vaccine resistance. Whereas it took the Beta and Delta variants approximately 50 days and 100 days respectively to account for 50% of cases in South Africa, Omicron had achieved this level within two weeks (*Financial Times*), despite starting from a lower level of initial cases. Whilst other countries continue to combat the Delta variant and many of these (including the US and UK) have yet to bring case numbers down significantly from peak levels, Omicron offers a potential further hurdle to overcoming pandemic-related headwinds.

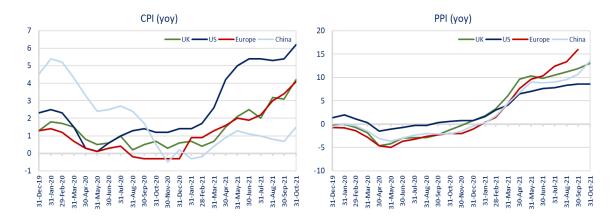


Source: Our World in Data, Guinness Asset Management

Omicron presents both upside risk to inflation and the potential for stunted economic growth. Combined, these two risks present central banks with a dilemma. As has been broadly the case since the beginning of the pandemic, central banks have tended to prioritise growth, offering dovish policies to encourage investment and stimulate economic activity. And whilst economic growth has bounced

back better than expected, disrupted global supply chains have led to shortages of goods across countries, driving inflation well above target levels.

In the US, Jay Powell told Congress in his first testimony since his re-appointment as Chair of the Federal Reserve that the central bank was now "retiring" the word "transitory". Powell's change of tack represents a significant turning point in central bank thinking – that inflation now takes top priority, acknowledging that price pressures are more broad-based than the Fed had originally anticipated and the need to stimulate the economy had "clearly diminished". During the month, the announcement that the Consumer Price Index had ticked up to 6.2% year-on-year in October, 0.9% ahead of September, gave further evidence that inflation may not be as transient as first suspected. Rising energy prices were a core driver, despite prices at the pump falling over the month. The US was not alone, with the CPI ticking up to 4.2% and 4.4% year-on-year in the UK and Europe respectively. The Producers Price Index, often viewed as a leading indicator for CPI, also rose across regions during the month.



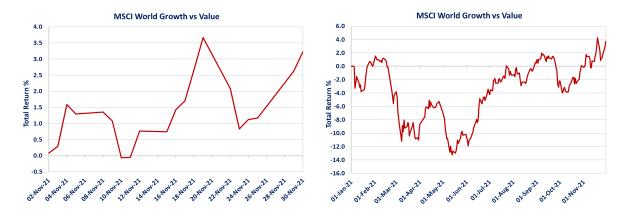
Source: Bloomberg, Guinness Asset Management

Paired with a greater focus on inflation, Powell also outlined intentions to accelerate the Fed's tapering programme and is likely to bring the reduction in asset purchases forward by "a few months", whilst also opening the door for the Fed to implement earlier rate hikes. The last couple of months have seen the market pricing in more and earlier rate rises and the market continues to expect more aggressive hikes than projections made by the Fed. As a result, shorter-dated bond yields rose over the month from 0.50% to 0.57%. Yet despite more hawkish rhetoric, the US 10-year treasury yield fell from 1.56% to 1.46% over the month, indicating that while the market expects more rate rises in the near future, by hiking rates aggressively now, the Fed will not need to raise too far in the long term, implying a lower terminal Fed funds rate (the highest rate in a given rate increase cycle). This combination caused the yield curve to flatten to a similar level last seen in January 2021.

Low bond rates have been a boon for growth companies. These not only rely on lower borrowing costs to fund their growth, but also enjoy a lower discount rate in which to measure the present values of their future cash flows. 'High-duration' stocks are typically more sensitive to movements in bond yields as most of their cash flows are generated far into the future, meaning a low-rate environment is therefore a tailwind for valuations. In November we saw a stark difference in performance between the 'higher-duration' hyper-growth stocks — which had seen very strong price rises in 2020 — and 'quality growth' stocks where current valuations have a lower weight on future growth prospects. The

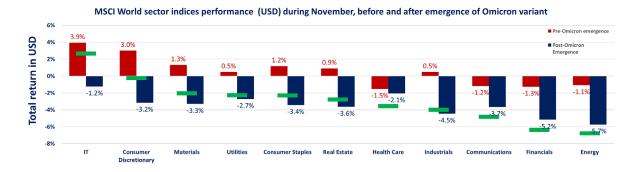
potential for higher interest rates clearly can have an impact on these two broad groups, but we also saw in November a re-rating of expectations for earnings in many more speculative companies where continued high levels of growth (as seen in the early part of pandemic, for example) had been 'baked in' to valuations which the reality of reported results did not match. We therefore saw 'hyper-growth' underperform the broader benchmark. In the fund, we continue to apply a valuation discipline to stock selection and monitor carefully the valuation we are ascribing to future growth vs that of the current business. We believe the secular growth trends and innovation themes that our companies are exposed to are unlikely to be slowed down significantly by higher levels of inflation and we believe the fundamental outlook for our companies remains robust.

The graphs below show the difference in performance between the MSCI World Growth Index and MSCI World Value Index in November and over the first 11 months of 2021. In November, growth significantly outperformed value, continuing the trend seen since October.



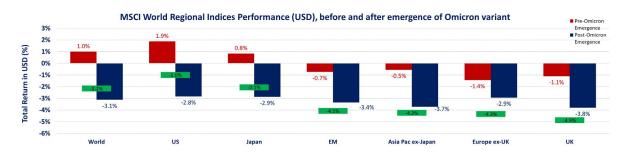
Source: Bloomberg, Guinness Asset Management

Strength in growth was led by the Information Technology and Consumer Discretionary sectors, with value being driven downwards by Energy and Financials. Again, this proved to be a source of relative outperformance for the fund, with its overweight to Information Technology and underweights to Financials and Energy. The chart below shows sector performance pre (red) and post (blue) omicron emergence, alongside overall performance during November (green). Many sectors performed well prior to the Omicron discovery, before all falling significantly over the final week of the month, with more economically sensitive areas underperforming the most. As was the case in the earlier stages of the pandemic, Information Technology outperformed, with Semiconductor names performing particularly well, fuelled by a robust demand outlook alongside pricing tailwinds. Areas reliant on reopening such as travel and leisure performed particularly poorly, weighing heavily on the Consumer Discretionary sector, offsetting outperformance from Retail and Consumer Durables & Apparel, which benefitted from a strong Black Friday. In the US, consumer spending increased for the third consecutive month.



Source: Bloomberg, Guinness Asset Management

The fund also benefited from its high exposure to the US, with its larger exposure to Information Technology, helping it to outperform both before and after the emergence of Omicron.



Source: Bloomberg, Guinness Asset Management

Stock Specific News:



Nvidia (+27.8% in USD over the month):

For the second month running, Nvidia was the fund's top performer, taking the share price to all-time highs. Following October's +23.42% in USD, Nvidia delivered +27.8% over November, taking year-to-date performance past +150%. Strength in growth stocks and a stellar Q3 earnings release drove performance, despite regulators in the US, UK and EU all raising concerns during the month over Nvidia's proposed acquisition of ARM. The UK government initiated a phase 2 investigation into the transaction on public interest grounds, putting further strain on the initial proposed deadline of March 2022. This did not dampen investor appetite, however, as even on the day the US government announced concerns over the deal, the stock rose +4.1%. The company kicked off the month with a one-day increase of +12% following analyst upgrades, with optimism over opportunities in the Metaverse driving excitement. The firm itself spoke about the Metaverse opportunity, its own software platform Omniverse (used to create 3D spaces) giving it a head-start. The stock jumped further following a set of earnings results that saw a surprise to the upside across revenue (+4.3%, +50.3% year-on-year growth), gross profit (+1.7%, +56.5% year-on-year) and basic EPS (+8.9%, +83.3% year-on-year). Performance was driven by gaming and expansion into data centre semiconductors,

which helped bolster the firm's Q4 sales forecast to \$7.4 bn (+7.9% above analyst estimates). Nvidia remains poised for years of growth, with strong demand stemming from key innovation themes such as Artificial Intelligence and Internet of Things, alongside gaming and the Metaverse.







LAM Research (+20.6% in USD), KLA Corp (+9.8%), Applied Materials (+7.9%)

The fund's semiconductor equipment manufacturing names all performed strongly during the month, with LAM Research, KLA Corp and Applied Materials all featuring in the top four holdings. The global chip shortage had prompted chip manufacturers such as TSMC and Samsung to spend more than ever on capacity expansion, with the industry as a whole forecast to spend a total of \$146 billion in capital expenditures this year – 50% higher than pre-pandemic levels. Upstream of this trend, and its natural beneficiaries, are the semiconductor equipment manufacturers. Billions of dollars of subsidies and tax breaks are being offered in Asian countries such as South Korea and Japan, with China pouring billions into bolstering its local semiconductor industry, providing strong visibility for future growth in equipment manufacturer revenues. LAM, KLA and Applied Materials all carried strong momentum from October into November, fuelled by solid earnings results (strong and broad-based demand but supply constrained), analyst upgrades to expectations and the general strong outperformance of growth. Applied Materials missed consensus and gave disappointing guidance (from hits to supply) at the end of the month, but this was not enough to dispel investor enthusiasm, as all three stocks continued to climb late in November. Demand for chipmaking tools continues to outweigh supply, giving all three firms strong pricing power. Whilst the chip shortage provides a short-term tailwind, we continue to like the long-term outlook for chip equipment manufacturers, with complex chip designs (e.g. 3D NAND Structures), 5G chips going mainstream, data centres, Internet of Things and autonomous driving all requiring higher chip performance and complexity.



PayPal (-20.5% USD):

PayPal was the fund's bottom performer during November, falling -11% in a single day following its Q3 earnings results. While remaining strong in absolute terms, growth in the third quarter slowed, leading the company to lower earnings and revenue guidance for the full year, prompting a wave of analyst downgrades. PayPal had initially benefitted from a surge in online spending during the pandemic, but as consumers returned to the high streets, a slowdown in growth was inevitable. eBay's transition to its own payments system offered an additional headwind. Despite reducing guidance, PayPal was up against a difficult comparator year and the new guidance still implies +19% year-on-year growth. Total payment volume for the year increased +24%, helping to drive revenue growth of +13% year-on-year for Q3. eBay now accounts for just 3% of PayPal transaction volume (down from 7% last year), so the largest impact of this headwind has already passed. PayPal retains a strong runway for growth, particularly in electronic payments, as it continues to add net new active accounts

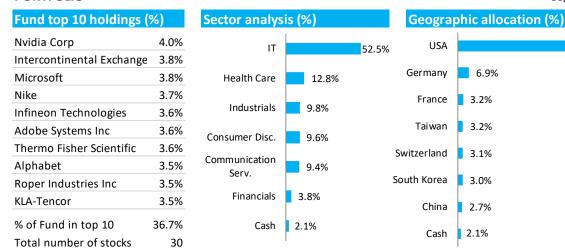
significantly ahead of pre-pandemic levels (+13.3 million Q3). Its Venmo platform continues to grow rapidly and the acquisition of Curv, a cloud-based infrastructure for digital assets, allows greater exposure to the growing cryptocurrency space. Global cash payments are continuing to fall versus electronic payments and, in our view, PayPal retains strong strategic positioning in the payments space.

We thank you for your continued support.

Portfolio Managers	Analysts	Data sources
Dr Ian Mortimer, CFA Matthew Page, CFA	Joseph Stephens Sagar Thanki William van der Weyden	Fund performance: Financial Express, in GBP unless otherwise stated Index and stock data: Bloomberg

PORTFOLIO 30/11/2021

75.7%



Performance 30/11/2021

Past performance does not predict future returns

Guinness Global Innovators strategy*

IA Global sector average

Annualised % total return from strategy inception (GBP)

MSCI World Index	10.72%					
IA Global sector average	9.86%					
Discrete years % total return (GLP)		Nov '21	Nov '20	Nov '19	Nov '18	Nov '17
Guinness Global Innovators strategy*		24.1	29.4	20.1	-3.3	24.3
MSCI World Index		22.9	10.9	13.0	6.2	14.1
IA Global sector average		19.0	13.6	12.6	2.7	15.7
IA Global sector ranking		75/447	42/412	27/381	301/342	19/318
IA Global sector quartile		1st	1st	2nd	4th	1st
	1	Year-	1	3	5	10
Cumulative % total return (GBP)	month	to-date	year	years	years	years
Guinness Global Innovators strategy*	4.3	20.9	24.1	92.8	131.6	461.2
MSCI World Index	1.3	20.7	22.9	54.0	86.8	276.6

RISK ANALYSIS			30/11/2021
Annualised, weekly, 5 years, in GBP	Index	Sector	Strategy*
Alpha	0	1.59	4.21
Beta	1	0.83	1.06
Information ratio	0	-0.09	0.67
Maximum drawdown	-24.58	-21.61	-22.23
R squared	1	0.86	0.84
Sharpe ratio	0.69	0.72	0.90
Tracking error	0	5.67	6.98
Volatility	14.78	13.33	17.12

16.1

19.0

52.2

80.9

224.8

0.8

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 investment team using the same investment process as applied to the UCITS version. The past performance of the US mutual fund is not indicative of the future performance of Guinness Global Innovators Fund. Fund returns are for share classes with a current Ongoing Charges Figure (OCF) stated above; returns for share classes with a different OCF will vary accordingly. Source: Financial Express, bid to bid, total return, in GBP.

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 in English from www.guinnessfunds.com or free of charge from:

 the Manager: Link Fund Manager Solutions (Ireland) Ltd (LFMSI), 2 Grand Canal Square, Grand Canal Harbour, Dublin 2, Ireland; or,the Promoter and Investment Manager: Guinness Asset Management Ltd, 18 Smith Square, London SW1P 3HZ.

LFMSI, as UCITS Man Co, has the right to terminate the arrangements made for the marketing of funds in accordance with the UCITS Directive.

Investor Rights

A summary of investor rights in English is available here: https://www.linkgroup.eu/policy-statements/irish-management-company/

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

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

This is an advertising document. 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.