

Guinness Global Innovators Fund

Innovation | Quality | Growth | Conviction

INVESTMENT COMMENTARY – May 2020

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	£205m
AUM in strategy	£329m
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 30.04.20

Cumulative %	1	3	5	10
total return (GBP)	year	years	years	years
Strategy*	6.1	31.0	76.1	250.5
Index	-0.8	18.7	54.9	154.3
Sector	-0.8	16.5	44.2	113.8
Position	69	60	34	7
in sector	/326	/288	/253	/175

Annualised % total return from strategy inception (GBP)

Strategy*	12.28%
Index	9.25%
Sector	8.47%

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.

Summary performance

For the month of April, the Guinness Global Innovators Fund produced a total return of 10.69% (in GBP) against the MSCI World Index net total return of 9.04% (in GBP). Hence the fund outperformed the benchmark by 1.65%. Over the year to 30th April, the fund has produced a total return of -1.00% against the MSCI World's -8.03%. The fund has therefore outperformed by 7.03% this year (in GBP).

The fund continues to perform well in an environment of uncertainty owing to its core philosophy of investing in quality companies exposed to long-term innovative themes. Over the month, markets seemingly looked through inevitably bad economic data and more to a possible flattening of infection rate curves in many regions, lockdown easing plans being released by governments, and some positive commentary out of earnings season. The subsequent strong performance in Consumer Discretionary and IT stocks boosted the fund, although it was strong stock selection that led to the fund's strong outperformance as positive earnings releases were made by many of its constituents owing to their short-term resilience as well as their long-term demand drivers.

Over both the short and long term, it is pleasing to see that the Fund's strategy remains strong versus its IA Global Equity Sector peers.

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Guinness Global Innovators Fund

	YTD	1 year	3 years	5 years	10 years
Global Innovators	-1.00	6.10	31.02	76.10	250.58
Index	-8.03	-0.79	18.70	54.91	154.34
Sector	-7.14	-0.79	16.53	44.23	113.84
Position in sector	59/337	69/326	60/288	34/253	7/175
Quartile	1st	1st	1st	1st	1st

Source: Financial Express. Cumulative Total Return in GBP, as of 30th April 2020

The fund's philosophy has always been to invest in quality companies which are exposed to long-term innovative drivers such as cloud computing, ecommerce and content streaming. We believe these businesses may display faster profit growth, wider margins and might be less susceptible to cyclical pressures. On the latter, the current earnings season has given us an opportunity to assess whether these types of business have indeed been able to offset some of the inevitable slowdown caused by the coronavirus and subsequent lockdowns, with relatively robust demand for their products and services that are part of on-going transformations in many industries. Furthermore, industry leaders are looking through the short-term disruption to see the positive implications of the current environment.

“We’ve seen two years’ worth of digital transformation in two months,”- Satya Nadella, Microsoft

While the companies in the fund are by no means immune to a global slowdown, the short-term impacts of COVID-19 could give way to long-term opportunities for many of the businesses we invest in. Specifically, the current environment has forced companies into reevaluating their business models which could ultimately lead to an acceleration in global digital adoption. The main drivers include the following:

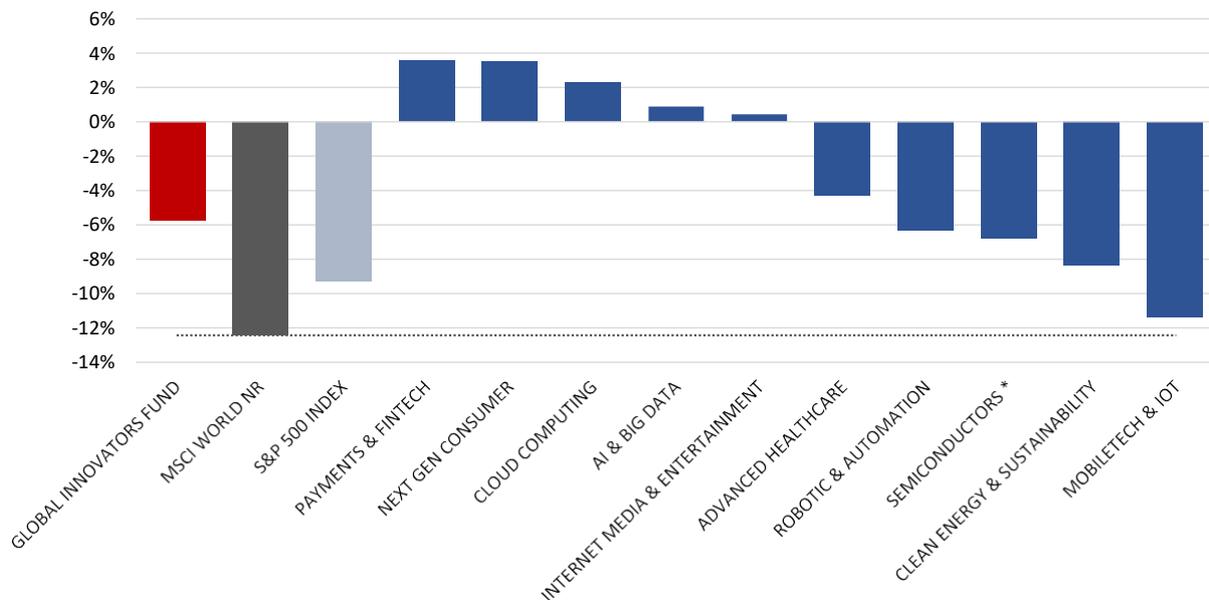
- Better online presence by businesses which now more than ever recognise the need to have continuous communication and distribution channels with consumers in all environments
- Businesses recognising the importance of being flexible regarding working conditions – accelerating the need for cloud-based remote working infrastructure
- A change in the psychological behaviour of the consumer, with increased demand for online classes from fitness to education.

We believe these innovative companies can not only show resilience in times of distress, but also be some of the best-placed businesses in the recovery and ultimately thrive thanks to their long-term demand drivers.

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Guinness Global Innovators Fund

Year-to-date performance by theme (TR in USD):



Source: Bloomberg, Guinness Asset Management (data as of 30.04.2020)

**Semiconductors is not one of our innovation themes but is usefully included because such companies fit into several innovation themes*

As can be seen above by using a basket of bellwethers (identified by us) for each innovation theme, all the themes have so far outperformed the broader MSCI World this year. Alongside our focus on strong balance sheets, we believe this has been the main contributor to the fund's 7.03% (in GBP) outperformance versus the MSCI World year-to-date.

Below we review each of the fund's innovation themes, how businesses have fared, and what some industry leaders are saying in their latest earnings.

Advanced Healthcare

Perhaps the most directly impacted theme, healthcare stocks have been seen as a relatively safe haven for many investors due to their business being deemed essential and their role in frontline defence against the COVID-19 pandemic. While areas of MedTech have seen a short-term negative impact as elective surgeries are deferred, businesses providing ventilators and developing testing kits are experiencing a huge boost in demand. Pharmaceutical and biopharmaceutical businesses have had to postpone clinical trials, but many are working hard to understand the virus and have drug candidates under review as possible vaccines.

- *"There are specific product categories [for which] we are seeing significant increases in demand. And I would point to things like ventilators, pulse oximeters... And we are seeing within our Diabetes Group a move for patients to want to increase their on-hand level of supplies." – Medtronic*

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- *“Based on this work, Johnson & Johnson announced on March 30th that we have identified a lead COVID-19 vaccine candidate, along with two backups...We plan to begin production at risk imminently, and our goal is to enable the supply of more than 1 billion doses of the vaccine globally.” – Johnson & Johnson*

Artificial Intelligence & Big Data

In AI, businesses are continuing to invest in order to stay ahead and not lose ground in these pioneering technologies. Chatbots, for example, are being used extensively to handle customer requests as well as being used to distribute important information. In addition, artificial intelligence is being used on the frontline to help develop therapeutics and vaccines for COVID-19.

- *“In AI, customers are applying our comprehensive portfolio of tools, services, and infrastructure to address unique challenges, including those created by COVID-19. In healthcare, we are seeing compute, data, and AI come together to help speed up response, from testing to therapeutics and vaccine development. Healthcare providers have created more than 1,400 bots using our Healthcare Bot service, helping more than 27 million people access critical healthcare information.” – Microsoft*
- *“In general, most customers are still indicating that they are continuing relatively normal fab operations so far. Logic customers are currently continuing to ramp their 7-nanometer and 5-nanometer node in support of end market applications like 5G, AI and high-performance compute.” – ASML*

Clean Energy & Sustainability

With regions in lockdown, discretionary spending and car sales have fallen dramatically over the quarter, affecting electric car sales in particular (although Tesla showed some resilience as the top car seller in the UK over April). Airlines have also been some of the hardest hit by the outbreak, while the collapse in oil prices has exacerbated the pain for big oil companies. There have been calls for governments to not miss an opportunity to back a ‘green recovery’, including conditions on bailouts for heavy-emitting sectors such as airlines and car manufacturing that would require the companies to reduce their climate impact.

- *“[Y]ou never let a serious crisis go to waste . . . Let's try to use it [the present crisis] to take a step forward . . . How can you now use the kick-start of the global economy to make sure it becomes a much more sustainable economy?” Mr Henriksson, chief executive of lender **Swedbank***

Cloud Computing

As nations work from home, stream ever more video content and log on to online courses, the need for cloud computing has perhaps never been so great as people attempt to continue functioning as close to normal as possible. Companies such as Netflix and Zoom rely on cloud vendors such as Amazon and Microsoft in order to deliver their content on demand. The ability to deliver content remotely shows the importance for companies to leverage the cloud.

- “Now more than ever, organizations are relying on Azure to stay up and running, driving increased usage.” – **Microsoft**
- Microsoft’s Azure grew 59% this quarter while Amazon Web Services (AWS) grew 33% YoY
- *The World Health Organization is using AWS to build large-scale data lakes, aggregate epidemiological country data, rapidly translate medical training videos into different languages, and help global healthcare workers better treat patients.* – **Amazon** Quarterly Report
- *“Third-party estimates suggest that cloud capacity would need to increase tenfold to service the peak workloads seen as shelter-in-place rules went into effect. Although these heightened workloads are likely a short-term phenomenon, this event will underscore the need for companies to invest more in infrastructure and business continuity capabilities as the data economy and our dependence on technology continues to expand over time.”* – **KLA Corp**

Internet Media Entertainment

While spending more time at home, unable to socialise or pursue hobbies, consumers have filled the void by streaming more content, playing video games and using video calling to talk to loved ones. This has led to an increased demand for streaming services including Netflix and Disney+, gaming platforms such as Microsoft’s Xbox, and social media sites platforms such as Facebook. In addition, with schools closed, businesses providing educational courses have seen a surge in demand for online resources which has helped offset the collapse in offline classes.

- *“We saw all-time record engagement this quarter, with nearly 90 million active users of Xbox Live, led by strength on and off console. Xbox Game Pass has more than 10 million subscribers, and we are seeing increased monetization of in-game content and services.”* – **Microsoft**
- **Netflix** added almost 16m subscribers in the latest quarter – double its target
- *“Whether that's the Pope's weekly mass on Facebook Live or DJs hosting dance parties on Instagram, every day more than 800 million daily actives are engaging with live streams, across workout classes, concerts and more.”* – **Facebook**

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- *“In many of the places that have been hardest hit by the virus, messaging volume has increased more than 50% and voice and video calling has more than doubled across Messenger and WhatsApp.” – Facebook*
- *“In response to the outbreak of the COVID-19, New Oriental has immediately transferred more than 1 million students to online programs through New Oriental cloud-based classrooms.” – New Oriental Education*

Mobile Technology & IoT

While discretionary item spending such as smartphones sales has been deferred, mobile technology has become increasingly important as more businesses quickly pivot to using mobiles, laptops and tablets to work remotely. Smart watches can also play an increasing role in remotely tracking vitals and communicating that data to doctors if necessary. Furthermore, 5G spending has seen some resilience as nations continue to look to the future. While telecoms providers will face pressures from reduced business, they are arguably better placed than other industries such as airlines to continue their infrastructure upgrades.

- *“Doctors and medical professionals are making even greater use of Apple Watch and other health features to communicate with patients and to treat them safely from a distance when necessary. With new FDA guidance on non-invasive remote patient monitoring for example, the ECG app on Apple Watch is increasingly being used to facilitate remote ECG measurements and recordings for telemedicine usage, reducing patient and healthcare provider contact and exposure.” – Apple*
- *“We expect continued demand across Windows OEM, Surface, and Gaming from the shift to remote work, play, and learn from home.” – Microsoft*
- *“Moving into second quarter 2020, we expect our revenue to be flattish, as weaker mobile product demand is expected to be balanced by continued 5G deployment and HPC-related product launches.” – TSMC*

Next Gen Consumer

In ecommerce, although we have seen supply chain disruption, companies which have invested in their online presence have been able to show better resilience as high street stores close. This is illustrated by the contrast between Primark, which owns large bricks-and-mortar stores and no online infrastructure, and Nike, which has invested heavily in ecommerce and was still able to derive c.20% from these sales over the quarter. The importance of being able to communicate and sell to consumers through different channels has been starkly shown; Amazon hired an additional 175,000 employees for warehouses and raised wages to meet the increased online demand for goods (although this did negatively affect its bottom line). In healthy living, Nike again provides good insights

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as consumers stay fit with home workouts, buying new 'athleisure' wear and downloading more workout apps.

- *"From making sales of £650m each month, since the last of our stores closed on 22 March, we have sold nothing."* – **Primark**
- *"[O]ur weekly active users for all of our NIKE activity apps [in China] were up 80% by the end of Q3* versus at the beginning of the quarter[...] [I]n Q3 digital delivered 36% currency-neutral growth and it will continue to be a powerful driver of our deep consumer connections."* – **Nike**

*Nike's fiscal third quarter ran from 30 November 2019 to 29 February 2020

- Amazon Online stores revenue grew 24% YoY, the fastest rate since the company began disclosing.

Payments & FinTech

In payments, although a slowdown in general spending and a collapse in cross-border transactions has been negative for the likes of Visa and Mastercard, the current environment looks to be accelerating the move to cashless payments via a surge in ecommerce business in addition to a reluctance to use cash for essential instore spending.

- *"We've seen a dramatic increase in e-commerce in this time of low mobility, and we expect some of these behaviours to persist going forward. When we look at our switched volumes in April, card-not-present accounts for over 50% of volume, which is up from 40% last year."* – **Mastercard**
- *"We've seen over 40% growth in contactless transactions worldwide in the first quarter"* – **Mastercard**
- *"Crises bring with them both risks and opportunities, and this one is no different... It is very likely that this crisis could accelerate trends that were already under way, like the shift to e-commerce and the shift to digital forms of payment. It is speeding up tap-to-pay adoption, driving growth of new flow use cases"* – **Visa**

Robotics & Automation

Within robotics and automation, significant declines in the automotive sector – the largest end-market for robotics – created a challenging environment for many robotic arm manufacturers and enablers. However, as consumers' online demand for goods surged, many of these players benefitted from the increased need for automation in the logistics market. We believe many of those companies that had already invested in more autonomous workflows have been better equipped to manage this crisis with

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lesser need for manual tasks and more efficient use of resources – a trait we believe will be crucial in the long term.

- *“At the moment, yes, it’s short-term challenges for the Robotics side, which is, of course, very much related to the automotive industry that is more or less in shutdown.” – ABB*
- *“Particularly hard hit is the automotive industry, which was our largest end market last year. There is a long-term potential for growth as the market transitions from internal combustion engines to electric vehicles, but the near-term outlook has deteriorated significantly.” – Cognex*
- *“The best end market for us right now is clearly logistics, which was our third largest market in 2019. Online e-commerce sales are accelerating as a result of COVID related restrictions... Our technology has become even more valuable in this crisis as our customers are able to achieve higher throughput and are better able to maintain social distancing in their distribution centers.” – Cognex*

We thank you for your continued support.

Portfolio Managers

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Matthew Page, CFA

Analysts

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Data sources

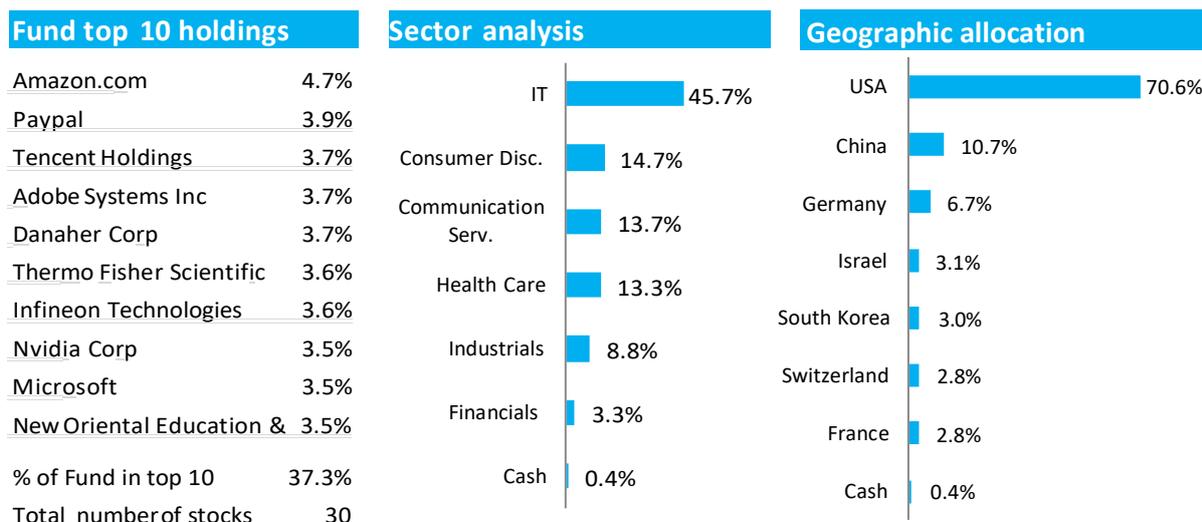
Fund performance: *Financial Express, Total return in GBP*

Index and stock data: *Bloomberg*

Guinness Global Innovators Fund

PORTFOLIO

30/04/2020



30/04/2020

Annualised % total return from strategy inception (GBP)

Guinness Global Innovators strategy*	12.28%
MSCI World Index	9.25%
IA Global sector average	8.47%

Discrete years % total return (GBP)

	Apr '20	Apr '19	Apr '18	Apr '17	Apr '16
Guinness Global Innovators strategy*	6.1	9.8	12.5	39.1	-3.3
MSCI World Index	-0.8	12.5	6.4	29.8	0.5
IA Global sector average	-0.8	8.9	7.9	26.8	-2.4

Cumulative % total return (GBP)

	1 month	Year-to-date	1 year	3 years	5 years	10 years
Guinness Global Innovators strategy*	10.7	-1.0	6.1	31.0	76.1	250.5
MSCI World Index	9.0	-8.0	-0.8	18.7	54.9	154.3
IA Global sector average	9.7	-7.1	-0.8	16.5	44.2	113.8

RISK ANALYSIS

Annualised, weekly, 5 years, in GBP	Index	Sector	30/04/2020 Strategy*
Alpha	0	0.06	2.61
Beta	1	0.80	1.07
Information ratio	0	-0.23	0.43
Maximum drawdown	-24.58	-21.61	-22.23
R squared	1	0.82	0.86
Sharpe ratio	0.33	0.25	0.46
Tracking error	0	6.59	6.66
Volatility	15.41	13.68	17.71

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Source: Financial Express, bid to bid, total return, in GBP. Fund Y class composite (0.99% OCF): *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.

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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) Limited, 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.

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

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.

GUINNESS

ASSET MANAGEMENT

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