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HOW TO INVEST IN THE NEXT WAVE OF TECH

PLUS...

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THE BEST FUNDS AND TRUSTS FOR YOUR SIPP

INTERCONTINENTAL HOTELS

KING OF THE HOTEL FRANCHISORS

HIDDEN DEBTS

HOW TO UNDERSTAND LEASE OBLIGATIONS

BOUNCING BACK

FIVE RECOVERY STOCKS TO LOOK OUT FOR

WELCOME

Dear Reader,

The UK has long been looked upon by outside observers as a haven of stability, where the rule of law is paramount, individual rights and liberties are upheld and property rights are respected.

However, regardless of how you voted in the referendum, it is hard to avoid reaching the conclusion that Britain's international reputation for stability has been somewhat tarnished, while the recent shenanigans in Parliament and actions of the Prime Minister have sent shockwaves through the UK's constitution and legal system.

For now though, it seems that foreign investors still have enough confidence in the UK to go on a mini spending spree, with several big names falling prey to overseas bids of late, including aerospace firm Cobham and pubs group Greene King. UK stocks look cheap on a variety of metrics, especially in comparison to their UK counterparts.

But with the two main parties now having a distinctly populist tone, I fear that come what may, investors will have to contend with a higher-tax environment in future – and possibly even a government that confiscates private property arbitrarily.

While a Corbyn government still seems unlikely, it is hard to predict the result of any election against the backdrop of the Brexit kaleidoscope, which could feasibly see a minority Labour government propped up by the Lib Dems and the SNP.

No one should be in any doubt that a Corbyn government would be revolutionary by its very nature and entail a major threat to property rights. Plans for the summary and wholesale nationalisation of the economy would be combined with punitive taxation and the outright confiscation of certain assets (N.B. the plans for the redistribution of company shares to workers.)

But the picture is by no means a bed of roses under a BoJo government. Boris as PM appears to be as loose with the country's purse-strings as he is with his tongue. If the Tories are to maintain their reputation for fiscal prudence, taxes will have to rise in order to keep the deficit within target. You have been warned.

As always, I wish you the best of luck for the month ahead.

Best regards,

J Faulkner
Editor

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CONTENTS

ISSUE 55 – OCTOBER 2019

COVER FEATURE

010 **Frontier technology: the next wave...**

There is a cluster of new technologies in development right now that will transform the way we live – for both good and, if not effectively regulated, for ill, writes Victor Hill.

ON THE COVER

018 **Portfolio Intelligence – Recovery stocks to look out for**

Mark Watson-Mitchell looks at five companies that could be classed as 'recovery stocks', hoping for better times and higher share prices.

048 **Funds and Trusts in Focus – The best funds for your pension**

Nick Sudbury explores some of the best ways to invest for retirement using funds and trusts within your pension portfolio.

054 **Dividend Hunter – Shining a light on hidden debt**

John Kingham looks at lease obligations and why fixed lease obligations should be capitalised on the balance sheet.

064 **Quality Investor – InterContinental Hotels – King of the hotel franchisors**

Hotel franchisors offer investors an attractive combination of quality and growth. Andrew Latto, CFA, looks at InterContinental Hotels as an investment opportunity.

ALL OTHER TOPICS

006 **Mellon on the Markets**

Inside the mind of the Master Investor: influential British investor Jim Mellon reveals his latest thoughts on the markets.

026 **From Acorns to Oak Trees – What a result!**

Richard Gill, CFA, looks at three small-cap companies that posted strong results in early autumn.

032 **Why cash flow keeps you on the straight and narrow – PARTNER CONTENT**

Job Curtis, Fund Manager of the City of London Investment Trust, explains why cash flow is so important when investing in equities for the purpose of income, using two stock case studies.

036 **The Macro Investor – How to build a passive retirement portfolio**

Filipe R. Costa demonstrates how to create a simple and low-cost strategy using ETFs, to fund your retirement.

042 **Chart Navigator – Are major commodity markets on the turn?**

David Jones applies his charting skills to the commodities markets, to see which natural resources might be about to 'bounce'.

60 **Forensic Forex – Is the euro set to plunge further?**

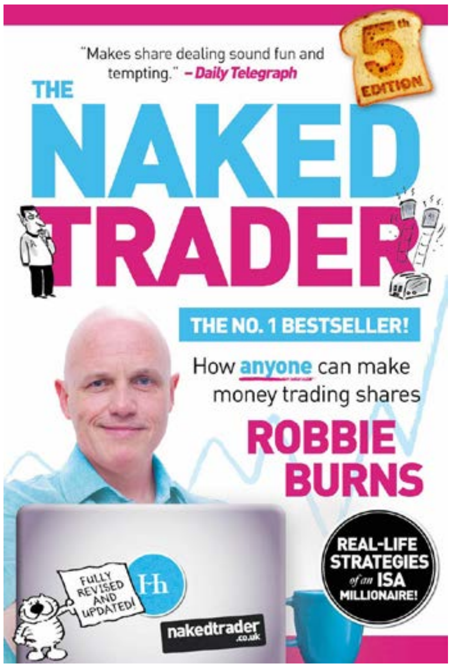
There are some big levels coming up for the EUR/USD exchange rate where we may actually see sentiment start to shift, writes David Jones.

072 **Stocks in Focus – Reckitt Benckiser – An undervalued business with an improving growth outlook**

Robert Stephens, CFA, discusses why Reckitt Benckiser's revised strategy could produce improving financial prospects despite the company's recent weak performance.

076 **Book Review – *The Naked Trader – 5th Edition***

Richard Gill, CFA, reviews *The Naked Trader (5th Edition)* by Robbie Burns, one of the UK's most successful private investors.



078 **The Final Word – The puritan gift**

In many respects, the global financial crisis was regarded as a crisis of morality. By way of solutions, we need better bankers, better central bankers and better politicians, writes Tim Price.

082 **Investor Events Diary**

All the hottest upcoming investor events in October and beyond.

084 **Markets in Focus**

Market data for the month of September.

BY JIM MELLON

MELLON ON THE MARKETS

Inside the mind of the Master Investor: influential British investor Jim Mellon reveals his latest thoughts on the markets.

I'm in Berlin at the moment, before setting off on yet another trek across the world in order to promote longevity. I'm not sure all these air miles are great for my own longevity prospects, though!

Yesterday, I went to visit the vast and chilling Sachsenhausen concentration camp, preserved as a memorial to the people who lost their lives there during and after the Second World War.

On my return to the city, the way to my flat was blocked by legions of polizei, as a demonstration against something or other was brewing. The police let me into my flat, where I remained stuck for the evening, barricaded in as thousands of agitated and angry people shouted slogans that in tone, if not in substance, would not have sounded out of place in 1936, the year of Sachsenhausen's foundation.

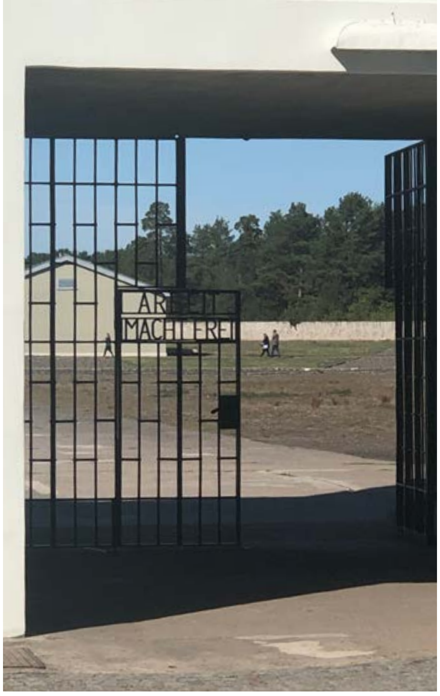
The fury and banging continued till the early hours, as it had the day before, when the protest for climate action took place. This morning, the police and demonstrators have gone, but the feeling that something is wrong has not.

All across Europe, and indeed, in parts of the US, in Hong Kong and Australia, metaphorical pitchforks are being bandied about, as angry, and mostly young people find a point to focus on – in the case of Europe, typically climate change (and in the UK, Brexit), and in Hong Kong, democracy or the apparent lack of it.

Perhaps what they are really protesting about is their frustrations in life: lack of opportunity, lack of money, lack of access to housing, the high price of education and the relative devaluation of degrees over the past two decades.

In case there is any doubt, the direct cause of this has been the wilful and persistent manipulation

"FISCAL POLICY IS NEEDED URGENTLY, INCLUDING HERE IN THE UK."



of the means of transmission of money by central banks just about everywhere, causing a widening gulf between the owners of assets and the vast bulk of the population, who own little if anything − and see no way out of their predicament.

This is why, in my opinion, fiscal policy is needed urgently, including here in the UK, to rectify some of this, before those metaphorical pitchforks turn into something much worse, and my nocturnal inconvenience becomes a more vicious long-term reality.

Governments should try to get their central bankers to normalise interest rates (or the central bankers should wake up and smell the coffee), to avoid 'Japanification' and the long-term destruction of capital and social equilibrium. Instead, governments that can – and this includes the UK and German governments – should immediately borrow hundreds of billions of pounds, euros or whatever, at hugely favourable interest rates, for the longest possible duration – money to be deployed into specific projects where the expected (and not fudged) returns are in excess of the cost of borrowing. This isn't that hard in the case of Germany, where just about every government interest rate is negative; it's not hard in the case of the UK either, where interest rates are derisory, compared to current and prospective inflation.

Yes, there will be a debt to repay, but as inflation rises (and it will), there will be a gradual erosion of its real value in terms of repayment obligations (think War Bonds).

Projects that could be usefully funded in this way, with government guarantees, include social-care housing; housing in general; new forms of agriculture and biosciences etc; and maybe even a Boris bridge between Northern Ireland and Scotland, which I happen to think is a good idea.

This will play well with electorates too, and will be largely redistributive if monetary policy is normalised, which it really needs to be.

Germany, where I started this letter, has huge capacity to do this, and such spending would be beneficial to the failing euro project, as it would serve to inflate domestic consumption, reducing the highly deflationary effect of Germany's enormous trade surplus on its neighbours.

Meanwhile, back to the grubby world of stocks and shares. I sent Tom Winnifrith (very good podcasts by the way) an article on WeWork, which he has been looking at as symptomatic of the excesses of the 'bro' culture in the funding of ludicrously overvalued companies.

I suggest readers take at look at this business as a textbook case of how hot markets can unravel.

I would be very surprised if WeWork gets its IPO away at any price – and if not, then what? Could this company get into serious financial trouble? Yes. And such a flop would have massive ramifications for commercial real estate on many markets, as well as for lenders.

With the continuing car crashes that are **Uber (NYSE:UBER)** and **Lyft (NASDAQ:LYFT)**, surely the market for these 'story' stocks, where the product is undifferentiated and the price is heroic, is over? I think so.

I would be wary of Airbnb as it seeks a listing, and indeed, more or less anything to do with the "sharing" or "gig" economy. The move by California to force Uber et al to recognise their drivers as employees might just spread elsewhere and would be a fatal blow to their business models.

In fact, as I have said before, the workers are going to get more and the companies less, and the tired old model of corporate buybacks, excessive executive compensation and jam tomorrow for the workers, is surely about to change.

This is why value stocks are much better than growth stocks, generally, at the moment − and those that have a decent and sustainable dividend yield even more desirable. Neil Woodford should have stuck to these and he would have come up smelling of roses. Instead, he tried to be a Silicon Valley man – and we know very well that that model is sick.

Meanwhile, I reiterate, buy gold and silver, buy dividend stocks and the pound sterling (notice how it's going up?) – and lock your door tightly shut every night.

Happy Hunting!

Jim Mellon

About Jim

Jim is an entrepreneur with a flair for identifying emerging global trends enabling him to build a worldwide business empire. He is amongst the top 10% in the "Sunday Times Rich List" (Britain's equivalent to the Forbes list). He is often described as the British Warren Buffett and he predicted the Credit Crunch of 2007-08 in a book entitled *Wake Up! Survive and Prosper in the Coming Economic Turmoil*. Jim followed this with *The Top 10 Investments for the Next 10 Years* (2008) and subsequently *Cracking the Code* (2012), *Fast Forward* (2014) and, most recently, *Juvenescence* (2017). His monthly "Mellon on the Markets" column in Master Investor Magazine has gained him cult status among investors. He holds a master's degree in Politics, Philosophy and Economics from Oxford University. He is on the Board of Trustees of the Buck Institute in California, a trustee of the Biogerontology Institute, and a Fellow of Oriel College, Oxford.

BY VICTOR HILL

COVER FEATURE

FRONTIER TECHNOLOGY: THE NEXT WAVE...

AUGMENTED REALITY, SENTIENT ROBOTS AND COGNITIVE SYSTEMS

There is a cluster of new technologies in development right now that will transform the way we live – for both good and, if not effectively regulated, for ill, writes Victor Hill.

This month I'm looking at technologies which have multiple applications and can all be used to expand our mental horizons. However, they can also be used for increased surveillance. Indeed, we may all find ourselves living in surveillance states where Big Brother is not only watching us but predicting our every next move. On the other hand, we shall have more leisure time which we can use for such things as virtual-reality vacations.

The future is bright – even if slightly weird. But investors who follow the technology curve judiciously will get rich.

Virtual reality: the latest thinking

While many people are hugely impressed by their first experience of virtual reality (VR), sales of VR headsets have been disappointing and many purchasers discard the devices quickly like last year's toys. If VR has not taken root as a form of home entertainment, it has been embraced in the commercial world; VR headsets can be excellent training tools for pilots and astronauts for example. One application, however, of VR technology that could make a huge difference to the way we live is virtual tourism.

Last month, Sir David Attenborough proposed that nature lovers should use VR to visit endangered ecosystems like that of Madagascar without generating carbon emissions or encroaching on the habitats of endangered species. Doug Allen, the BAFTA-winning freelance wildlife photographer who worked with Sir David on *Blue Planet* and *Frozen Planet* also suggested


mirror_mod.use_y = True
mirror_mod.use_z = False
elif _operation == "MIRROR_Z":
mirror_mod.use_x = False
mirror_mod.use_y = False
mirror_mod.use_z = True
#selection at the end -add back the de
mirror_ob.select= 1
modifier_ob.select=1
bpy.context.scene.objects.active = modifie
print("Selected" + str(modifier_ob)) # mod
return group_info;
outundo_partial_alloc:

"VIRTUAL TRAVEL WILL ALSO BE MUCH MORE ECONOMICAL THAN THE REAL THING, SO IT WILL BE GOOD FOR ONE'S WALLET AS WELL AS ONE'S CONSCIENCE."

that filmmakers should embrace new technologies so that people can experience the natural world without damaging it and littering it with plastic.

In a small way, this is already happening. Last year Sky VR (a subsidiary of **Comcast Corporation (NASDAQ:CMCMA)**) generated a hologram of Sir David and offered a VR headset experience which allows users to explore prohibited areas of the Natural History Museum.

The idea of virtual tourism is not entirely new. Many readers will be familiar with Philip K Dick's celebrated story, *Total Recall*, which was turned into a Hollywood blockbuster starring Arnie Schwarzenegger. In the story, the protagonist, played by Arnie, visits Mars on vacation – but it is never clear whether he literally undertakes the journey (and attendant adventures) or whether he just dreams it in a state of consciousness induced by a VR machine. (Dick's stories are nearly always ambiguous – you can take away what you want).

I agree that many people will react negatively to this concept: after all, VR is not real. But if, as I believe is likely, many people will take against flying in the near future on environmental grounds, it is quite possible that they will want to experience the marvels of the natural world like the Grand Canyon or Victoria Falls – not to mention man-made marvels like the pyramids of Giza – through VR headsets. Such virtual travel will also be much more economical than the real thing, so it will be good for one's wallet as well as one's conscience.

Robots who/which feel pain

Scientists in South Korea at the Daegu Gyeongbuk Institute of Science and Technology are trying to engineer robots that feel pain. The idea is apparently that robots which are capable of experiencing pain will be more empathetic to their human progenitors (and presumably to animals too). This might make intelligent machines less inclined to kill us; and conversely more inclined to be nice to us.

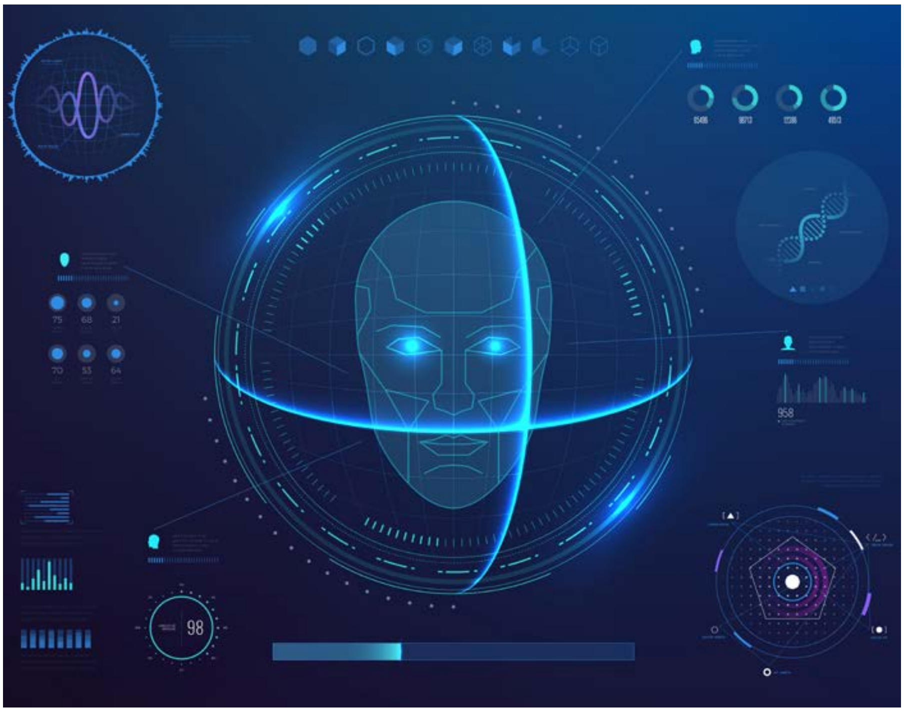
They hope to achieve this by giving robots an electric skin which would be covered in sensors replicating human and animal nerve cells. These sensors could replicate touch, for example by enabling the robot to tell the difference between a hot and a cold surface. If the surface is so hot that the 'skin' may be damaged, the robot would experience something akin to pain. Of course, whether that is really 'pain' or an electronic replication of a human pain response is a philosophical question to be considered elsewhere.

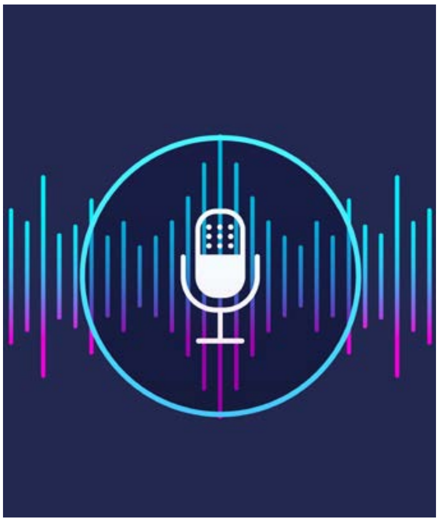
Robot surgeons

British robotics specialist CMR Surgical is planning to launch a robot surgeon called Versius before the end of this year. The machine will be able to perform keyhole surgery on NHS patients, for example to remove cancerous tumours from organs. The Cambridge-based firm is in the process of raising fresh funds, having raised $100 million last year including, from Chinese private-equity firm Zhejiang Silk Road Finance, as well as European venture-capital funds such as Escala Capital.

CMR Surgical has competition in this space. **Intuitive Surgical (NASDAQ:ISRG)**, a US robotics firm, has operated its da Vinci robot surgeon in NHS hospitals for years. The NHS now has 70 da Vinci surgical robots. The US pharma, medical equipment and consumer products giant **Johnson & Johnson (NYSE:JNJ)** is also working on a robot surgeon. It has partnered with **Alphabet/Google**

"LAST MONTH IT WAS ANNOUNCED THAT GATWICK AIRPORT WILL BECOME THE FIRST BRITISH AIRPORT TO USE FACIAL-RECOGNITION TECHNOLOGY ON EIGHT DEPARTURE GATES AFTER ITS MAIN RUNWAY EXTENSION IS COMPLETED IN 2022."





(NASDAQ:GOOG) subsidiary Verb Surgical on this project. Earlier this year JNJ acquired medical-robotics firm Auris Health. It seems that robots are better at keyhole surgery than human surgeons because they are better coordinated and can do several things at the same time.

Cambridge is the centre of what is now called 'Silicon Fen' which is home to an estimated 430 life-science companies as well as the internationally renowned teaching hospital, Addenbrooke's Hospital. Historically, Cambridge was a centre of excellence in therapeutics; but these days it is primarily a centre for medical research, combining engineering skills, materials sciences and life sciences. It is reported that Silicon Fen companies have raised over £500 million this year.

Voice recognition technology: enter the dragon

Amazon (NASDAQ:AMZN) is developing a voice-activated wearable device which can read human emotions and determine whether people are angry, happy or sad depending on their tone of voice. The device, code-named Dylan (which is being launched as a health and wellness tool rather like those which monitor athletic performance), might be adapted to offer people counselling on how they should interact with others.

Amazon is developing the device in collaboration with **Lab126**, the hardware research group which helped to develop Alexa, Amazon's virtual assistant, of which 100 million have been sold since becoming available in 2014. Speech analysis can even be used to determine if someone is ill even if they are not present (ie over the phone). We know that Amazon has been making inroads into the healthcare sector. Last year the tech giant bought PillPack, a US start-up which delivers medication through the postal system.

Facial recognition technology

Last month it was announced that Gatwick Airport will become the first British airport to use facial-recognition technology on eight departure gates after its main runway extension is completed in 2022. Heathrow is expected to make a similar announcement later this year.

The technology will allow passengers to walk through security control and to board their flight, potentially without queueing or scanning their boarding cards. Gatwick is already trialling iris-recognition technology which can detect the unique pattern of passengers' eyes from some distance. This technology has the potential to make passengers' airport experience smoother and more enjoyable.

Two years ago, Dubai International Airport replaced security screening with a VR aquarium tunnel in which 80 integral cameras scan passengers' faces. The top 20 airports in the US will use facial-recognition technology to allow passengers to board their flights by the end of 2021.

A survey of over 4,000 adults by the market-research firm YouGov on behalf of the independent research organisation, the Ada Lovelace Institute, reported last month that two thirds of people in the UK approve of facial-recognition technology by the police so long as it is regulated. There is far less tolerance of its use by private companies, however.

Computers that can read body language

Recently I've noticed a lot of online posts about the body language of political leaders when they meet. A good example was when UK Prime Minister Johnson met French President Macron on 22 August. Expert body-language analysts can read all kinds of significance into small, unconscious hand or facial gestures which, even if the humans involved are good liars, involuntarily betray what is really going on inside their heads.

Now consider if all of that expertise, exhibited by body-language specialists like Judi James, could be fed into a computer. Given that computers can capture information faster and process it more intricately than mere human experts, they could become extraordinarily effective tools for analysing human interactions. And it's already happening.

A team of researchers at Penn State University is investigating whether modern computer vision systems could match the cognitive ability of humans to interpret human body language. Such technology has many applications. Computers and robots in the future will be interacting constantly with people. Robots and computers will be required to act more like partners to humans and work together with them. To that end, they'll need to understand human emotions.

It turns out that people are quite effective at manipulating their facial expressions, but much less effective at controlling their bodies. Researchers at Penn State used computer vision methods to track people's gestures. They were available to train the system to recognise a very wide and subtle range of emotions[i].

Surveillance, Chinese style

It is estimated that across the UK more than one million CCTV cameras have been installed which are made in China. These are now in place in hospitals and universities, as well as on buses and in trains. Most of these devices are manufactured by a few Chinese companies which are probably just as much a part of the Chinese state apparatus as Huawei. **Hikivision (SHE:002415)** has a market cap of $322 billion. An estimated 176 million of its video surveillance cameras are used on Chinese streets according to HIS Markit. All of these cameras are connected to its facial-recognition systems, not least in the province of Xinjiang where elements of the indigenous Uighur and Kazakh populations have been in near revolt. Dahua is a Chinese tech company which excels in surveillance, drones and thermal cameras. Lincoln City Council uses their equipment. SenseTime (private) produces software which underpins facial-recognition systems. CloudWalk has sold its facial-recognition software to the government of Zimbabwe.

More surveillance worries: digital 'fingerprinting'

'Fingerprints' are the digital traces that your laptop and smartphone leave behind as they browse the internet. These include, as well as your IP address, the make and model of your device, your screen resolution, operating system, browser settings, language and your time zone. Most of us resent the tech titans trailing us around the internet so as to "harvest" (horrible verb) our data for their own purposes. But you can be sure they are always at least one step ahead of us.

Fingerprinting is an undetectable technology that was first unveiled in 2010, since when it has become smarter and more subtle. All the data that you leave behind when you browse the web can be calibrated so as to create a unique online signature that identifies you and your personal profile in a much more precise way than advertisers' cookies which (have you noticed?) you have to approve before viewing most sites these days. Apparently, even installing an ad blocker, deleting cookies or enabling "do not track" on your browser can leave traces. What seems clear is that huge numbers of websites are collecting information from your system that will allow them to construct a fingerprint.

A study undertaken by Royal Holloway University of London and Manchester Metropolitan University found that some of the most enthusiastic collectors of personal data include Russian browser Yandex, DoubleClick (offered by Google, now known as GMP) and Skimlinks.

In May this year, Google's advertising and commerce supremo Prabhakar Raghavan, said that the company would make it harder for advertisers to use "opaque tracking techniques" such as fingerprinting. Last year, Apple said it would be cracking down on fingerprinting by updating its Safari browser such that it would supply websites with only generic data about MacBook users.

Apple up

Apple's (NASDAQ:AAPL) new iPhone 11 and iPhone 11 Pro, unveiled at Apple's Silicon Valley HQ in early September, have cameras fine-tuned for the age of **Instagram** (owned by **Facebook (NASDAQ:FB)**). It can take photos in minimal light, for example at concerts – and even slow-motion selfies (whatever they are). iPhone sales are now thought to account for less than half of the tech giant's revenues.

Cars that monitor their drivers

If we are being tracked by advanced face-recognition technology, do not imagine that you can escape surveillance while driving your car. Very soon, cars will be monitoring your driving habits and assessing your competence to drive.

Within the next few months the EU is likely to approve proposals that will make 15 in-car monitoring devices mandatory within the next three years. It calls these devices advance driver assistance systems (ADAS). Other parts of the world are considering similar measures.

Five of the monitoring devices are as follows: an intelligent speed assistant will recommend the appropriate speed for the road you are driving, given traffic and weather conditions and so forth; sensors will analyse your breath for its alcohol content and will stop you from starting the car if it determines that you have had a drink too many (or at all); then cameras will use eye-tracking technology to warn you if you are getting drowsy (one in five European drivers admits to having fallen asleep at the wheel in the past two years – in some cases causing accidents); cameras which monitor road markings will assist drivers to maintain better lane-keeping discipline; and black boxes will record all relevant data, which can be consulted in the event of an accident – just as black boxes are used to determine the cause of aeroplane crashes.

The EU estimates that the new monitoring technology will save over 7000 road deaths and nearly 40,000 serious injuries a year by 2030 (the current level across the EU is 25,300 road deaths and 135,000 serious injuries a year). If this estimate is correct, then the introduction of ADAS will have an equivalent impact to the advent of mandatory seat belts in the early 1970s. Most road-traffic accidents occur, so it is argued, because drivers either involuntarily or deliberately break the rules.

Driver-assistance systems are not entirely new. Automatic braking systems – which slow the vehicle down if it gets too close to another one – are already fitted to some new cars. One study in the US shows that automatic braking halves the incidence of rear-end crashes. Moreover, in the US, insurers have incentivised drivers to fit black boxes to their cars by reducing their insurance premiums accordingly.

The main concern about ADAS is that drivers might become complacent about their driving, thinking that the machines will always correct their mistakes. Another is that by adding more advanced technology to vehicles, they could become potential targets for hackers. A third concern is that drivers will be monitored by the government. But it's worth noting that the proposed EU rules require that drivers cannot be identified from any of their recorded data except in the case of an accident.

Self-driving cars: the problem of bugs (as in insects)

Last month the global car giant **Ford (NYSE:F)** announced that it was facing a new challenge in the development of self-driving cars: insects. Other operators, including **Uber (NYSE:UBER)** have developed systems to counter the problem of bugs (the American term for insects) which arises because the sensors can be splattered by dead insects adhering to their surfaces. One possible solution is to use tiny air jets to deflect the bugs from landing on the sensors.

New thinking about the rise of robots

Many people fear that the rise of robots will cause mass unemployment as robots displace people in the workplace, from unskilled labour to highly skilled professionals. Some people, including Bill Gates, the founder of Microsoft, have argued that robots should be taxed so as to finance the social consequences of this new wave of unemployment. Others, like the economist Roger Bootle in his new book[ii], think that this is the wrong way to look at the issue. He envisages that robots will empower people to do the work that they want to do and will give them more options in terms of weighing up their life-work balance.

The fact is that people are currently working as hard as they ever did – and many people would appreciate more leisure time. Roger Bootle cites the work of the Harvard historian Juliet Schor who estimated that in Europe around 1300 ordinary peasants took about one third of the year off on account of holy days (note the etymology of the word holiday) and feasts. People only started to work very long hours after the onset of the industrial revolution, though average hours worked have been in decline for about 150 years. Between 1870 and 1998 in the industrialised world, the number of hours worked per employee per annum almost halved (from 2,950 hours to 1,500). In the UK the average working week has declined from about 59 hours in the mid-19th century to about 32 hours today.

There is some evidence, however, that since the advent of the digital age (which can be dated to the mid-1990s) people have tended to work longer hours. This is because they are answering work-related emails from home in what is officially their leisure time and so forth. In the internet age the distinction between time at work and time at leisure has become blurred.

While it is true that many people in part-time work would welcome more hours of work and thus more income, there are also many people who crave more leisure time. Moreover, in some countries the working week is still extremely long. Danes work on average just 1,595 hours per year (200 hours fewer than the OECD average), while Koreans work 2,232 hours annually (473 hours more than the OECD average). It is not surprising then that social scientists report higher levels of happiness and well-being in Denmark than Korea. This is partly because countries with the shortest working weeks also have the largest number of volunteers (think of the charity-shop sector in the UK) and thus more social capital.

How will shorter working hours be reflected in work practices? The idea of a two-day weekend is a rather recent one. Most societies historically operated a six-day working week with a day of rest – the Sabbath – being observed for both religious and social purposes. Most workers worked on Saturday mornings in the UK until the mid-20th century and in Japan right up until the 1980s.

Now the idea of a hard and fast two-day weekend is being challenged. In 2018, the New Zealand estate-management company **Perpetual Guardian (ASX:PPT)** adopted a four-day working week with a three-day weekend. In the UK, The Wellcome Trust experimented with a four-day week for its 800 employees but eventually decided against it, citing disruption of work schedules. Glasgow-based marketing firm Pursuit Marketing switched to a four-day week three years ago, giving all employees Fridays off without cutting pay. The company claims that productivity has increased by 30 percent. TUC General Secretary Frances O'Grady is among those calling for a four-day week and it has been considered as a potential electoral promise by the Labour Party.

On 18 September the House of Commons Business, Energy and Industrial Strategy Committee reported that: "The real danger for the UK economy is not that we have too many robots in the workplace but that we have too few".

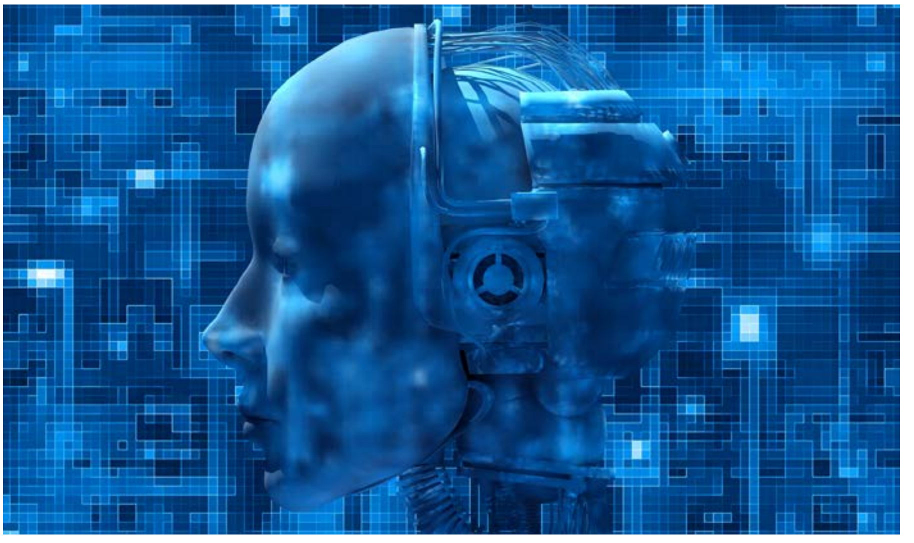
Robotics hubs: Bristol versus Boston

The city of the great engineer Isambard Kingdom Brunel (1806-59) is now one of the UK's most important tech hubs. Today, Bristol is home to giant British tech champions such as **Dyson (private), BAE Systems (LON:BA), Airbus (EPA:AIR)** and **Rolls-Royce (LON:RR)**. It is also home to Bristol University and the University of the West of England (UWE). Their symbiosis is proving highly effective. It has resulted in 3D-printed bionic limbs, robotic animals and futuristic wheelchairs.

The Future Space building at UWE is home to a number of tech start-ups such as Open Bionics (private) which manufactures mechanical arms for child amputees. Since offering its products in the US five years ago, the company has raised $8 million there in capital. Another player in town is Consequential Robotics run by designer Sebastian Conran, which makes animal-like robots. These can be used, amongst other things, to assist in the care of the elderly. Then there is Service Robotics which is also testing robot-carers. Other Bristol-based tech start-ups include Graphcore (semiconductors for machine learning), Ultrahaptics (which can create the sensation of touch in mid-air), Immersive Labs (cyber-security) and FiveAI (driverless cars).

In the US, the Massachusetts Institute of Technology (MIT) in Cambridge has developed the most nimble robot yet. It is a nine-kilogram mobile 'cheetah' which can cope with almost any terrain and, if not as fast as a real cheetah, it is twice as fast as a human. At the other end of the scale, MIT has been working on a micro-robot that could be put into a capsule and swallowed. Once it unfurls inside the body it could be used to perform internal surgery.

It is estimated that there are now about 200 companies working on robotics in the Cambridge-Boston



> **"IN JULY MR MUSK ANNOUNCED PLANS TO IMPLANT COMPUTER CHIPS INTO HUMAN BRAINS."**

area. [iRobot](#) has commercialised robots that can perform domestic chores such as vacuuming the carpets and mowing the lawn. Tenants at MassChallenge, a robotics accelerator in Cambridge, have developed prototype robots that can crawl through pipes to detect cracks and leaks; drones used in agriculture; and an interface that makes programming robots to perform tasks more straightforward.

Brain-machine interfaces

In the March edition of this magazine, in my article about emerging cyborg technology, I mentioned that Elon Musk, the founder of both **SpaceX** and **Tesla (NASDAQ:TSLA)** has an interest in the new field of brain-machine interfaces (BMI) It seems that his BMI start-up, Neuralink, has already been experimenting on rats and monkeys. Neuralink wants to start trials on humans next year. It has reportedly raised $150 million in capital (of which $100 million from Mr Musk) since its foundation in 2016.

In July, Mr Musk announced plans to implant computer chips into human brains. Let's be clear: Mr Musk is afraid that AI might surpass human reasoning very quickly. He has talked and tweeted about "summoning a demon". Therefore, he regards enhancing the human brain through computer science as an essential defensive strategy to ensure our survival.

Neuralink claims to have produced a 4x4 millimetre chip which would connect to about one thousand synapses through four holes drilled into the human skull. The chip would then be connected to a smartphone. All this would require the imprimatur of the US Food and Drug Administration (FDA), which is questionable. More significantly, critics suggest that the trials are entirely experimental: there is still no proof that intelligence can be enhanced by implants.

At the same time human beings' interaction with technology is already changing their performance. Most people use their smartphone as constant companions. So, we are already in a state of brain-machine interface without having intrusive surgery. How far it might go is a function of ethics and philosophy as much as of technology.

Action

The above is a brief and non-exhaustive overview of the welter of new technologies which are going to change the way we live quite soon – within the next five-10 years. Most of these technologies are well beyond the research phase and into the engineering and design phases.

Regarding VR vacations, it seems to me that **Netflix (NASDAQ:NFLX)** and its rival in subscription entertainment, **Apple (NASGAQ:AAPL)** are well placed to run with this particular ball.

Given that all of the start-ups cited in this article are unlisted entities, the only way to get exposure to the next wave of technology is through an investment fund which allocates to incubators. Or, for those with big enough wallets, this is a good moment to allocate to private equity firms with a frontier tech bias like Escala Capital Investments, based in Madrid. For those with smaller wallets, **Scottish Mortgage Investment Trust (LON:SMT)** invests in companies that are disruptors in their respective fields, with many of its holdings unlisted entities.

At the same time, Alphabet/Google and Amazon are increasingly acting as technology incubators. A good technology fund like the **Janus Henderson Technology Fund** allocates to all the usual suspects and was up in value by 8 percent to the end of August.

For more proactive investors with specialist knowledge, it might well be worth a visit to Silicon Fen.

About Victor

Victor is a financial economist, consultant, trainer and writer, with extensive experience in commercial and investment banking and fund management. His career includes stints at JP Morgan, Argyll Investment Management and World Bank IFC.

i See: https://techxplore.com/news/2019-09-body-language.html
ii The AI Economy – Work, Wealth and Welfare in the Robot Age, by Roger Bootle. See: https://www.amazon.co.uk/AI-Economy-Wealth-Welfare-Robot/dp/147369616X

BY MARK WATSON-MITCHELL

PORTFOLIO INTELLIGENCE

RECOVERY STOCKS TO LOOK OUT FOR

Mark Watson-Mitchell looks at five companies that could be classed as 'recovery stocks', hoping for better times and higher share prices.

Just what is a 'recovery stock'? Quite simply, it is a company whose shares have fallen in price, but are believed to have the ability to recover.

Delayed contracts, missed profit-performance targets, erroneous accountancy, over-hyping of corporate hopes and profit warnings are rarely singular events, and on many occasions they arrive in twos or even threes in market announcements of bad news, especially if management really has got it all wrong.

New management can often be flown into position to help repair busted balance sheets or re-energise sales activity. But those new managers often do not like the look of what they have to deal with, to remedy failing situations.

Furthermore, they do not like the thought that their own track records on their curriculum vitae will not look good if encumbered with a failing company.

So, swift action on the balance sheet is a quick but painful way to commence action. Get rid of all the dead wood, and the anchors pulling down corporate performance and write off as much as you can, to expunge the pain from your books. Such work, when announced to the markets, will inevitably see share prices collapse – thereby hurting both private and institutional holders alike.

However, if you are the new executive in charge, then how sensible it must be to seek some incentive rewards for the results of your actions, based upon progress from the very low price the shares were trading at just when your incentives were proposed. Build massive share options into the recovery exercise and the new person in charge could become seriously wealthy within just a few years, especially if the incentive targets are achieved. It is only fair that if you take on the responsibility of correcting previous mishaps, with the shareholders benefiting as their share prices recover – then exactly the same benefit should be available for the new, highly incentivised executives. For just one clear example of such occurrences, take a look at the record of housebuilders **Persimmon (LON:PSN)** over the last five years or so.

Alas, we are not incentivised new executives being dropped into problem corporates, but we can scour the market and search out some interesting companies that have fallen on hard times, for various reasons, to see whether we can glean any potentially profitable opportunities. However, we will need to be patient and wait for those companies to start to show their recovery potential.

There are several hundred quoted companies which have had their fortunes knocked of late. I have identified just a few of them here, and prepared some quick comments on what the companies do and what their future progress could be. Do they have 'recovery' written all over them? Yes, I think that these five companies are well worth watching and taking a view upon as their recovery process progresses, but there are obviously no guarantees.

IQE (LON:IQE)

This company is reckoned to be one of the global leaders in the design and manufacture of advanced semiconductor wafer products that are now driving connected 5G technologies. Its compound semiconductor wafers enable a wide range of applications across mobile handsets, the global telecoms infrastructure, connected devices and infra-red and sensing applications. The superior performance qualities of compound semiconductors help to handle higher power and frequency ranges, and they also have the ability to emit and detect light.

Over the last 30 years or so, IQE has been continually developing its products and increasing capacity to cope with the anticipated growth in the semiconductor markets. It sells its products to practically all of the companies in its marketplace.

It numbers amongst its institutional shareholders some top names like Oppenheimer Funds (15.5%), T Rowe Price (15.67%), Hargreaves Lansdowne (4.83%), TD Direct (4.40%), Schroder Investment (4.35%), AXA Investment (4.30%), Barclays Private (4.17%) and Herald Investment (3.79%). Considering the recent financial news, they do not seem to be disappointed enough to sell off their holdings, despite a collapsing share price.

In the last couple of years, the group's sales have been fairly steady at around the £150m annual level; however, profits before tax have collapsed from a restated £24.5m in 2017, to £14m in 2018, and they look to be still falling by this December year end to around an estimated £5m. But the coming year is expected to see a big pick-up in sales revenue to nearly £180m and a mega-recovery back up to £24.5m in pre-tax profits, generating around 2.5p per share in earnings.

The group, which is currently valued at around £396m, had some £21m in net cash at the end of last year, but by the June half-year end it had gone into net debt of just under £1m. That fall in funds was due to significant work being completed in its Welsh foundry, as well as expansion expenditure in Massachusetts and Taiwan.

The company considers that its market has the potential to expand at a minimum compound annual growth rate of 25% over the next five years. Growing into and supplying that market will really push the recovery in sales and profits for IQE. It will also help the shares, now at 50p, to recover back up to around their previous highs of 175p, reached in November 2017.

"OVER THE LAST 30 YEARS OR SO, IQE HAS BEEN CONTINUALLY DEVELOPING ITS PRODUCTS AND INCREASING CAPACITY TO COPE WITH THE ANTICIPATED GROWTH IN THE SEMICONDUCTOR MARKETS."

De La Rue (LON:DLAR)

How many times have we each handled products from this banknotes and currency company? It must be gazillions of times, which is not surprising really because for the last 200 years, it has been producing currency for use not just in the UK but also for some 140 countries across the world. It also produces items of 'citizen identity' such as passports – some 13.5m were sold in the 2017/2018 year. The company is involved in the whole process of producing currency, from the initial design straight through to the integration of security components and up to the printing and subsequent distribution and delivery of the currency.

For the 2018/2019 year the company sold over 7.5bn banknotes to customers around the world. It is even engaged in the eventual destruction of the banknotes as well. However, the recently introduced polymer notes, like the UK five-pound and ten-pound notes, extends the life of the notes, far beyond that of the previous paper pieces of currency. In the 2018/2019 year, the company also created and delivered 1.8bn secure labels and track and trace solutions for both government and commercial customers.

The company, which is now operating from some 20 locations across four continents, employs over 2,700 people globally. In fact, the company proudly claims that 68% of the world's countries partner with it in their currency production.

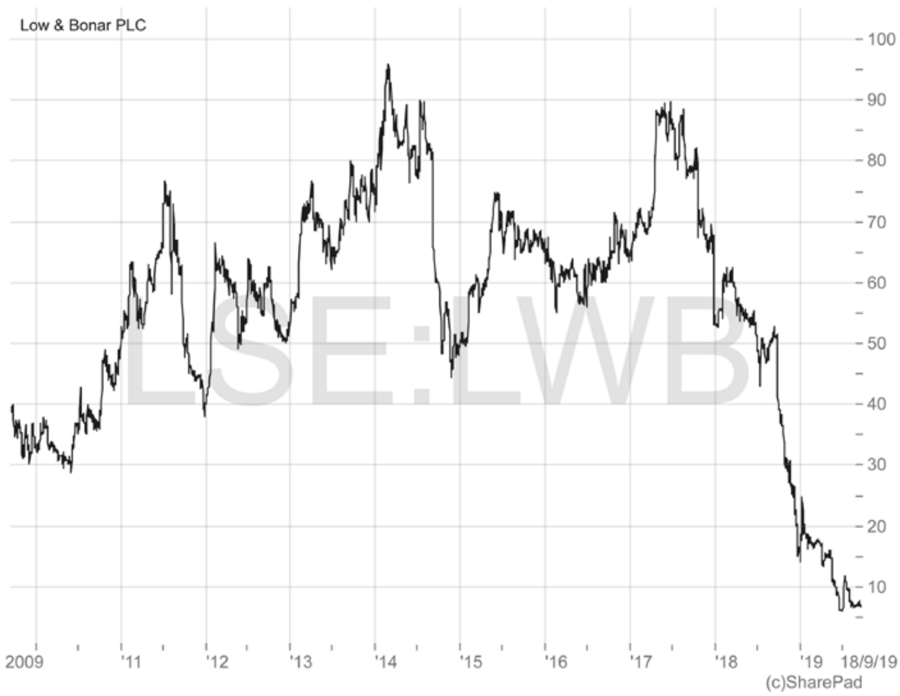
The company has been hit by a big credit loss on supplying currency to Venezuela and it also lost the UK passport business to a European producer. Over the last couple of years sales had increased from £461m in the year to end March 2018 to £517m for the last year. In the same time pre-tax profits improved from £47.5m to £54.1m. Earnings of 38.2p per share were boosted to 42.9p last year.

However, after various hits and allowing for the disposal of its international identity business, sales are expected to fall to £493m this year and then drop another £100m in the year to end March 2021 to £391m. Profits will fall £11m to £43m this year, with earnings collapsing by 10p to 32.9p per share.

Looking at the company's share-price fall, from over 500p a year or so ago to the current 210p, shows its cope for recovery. That price puts the shares out on a very low 6.4 times price earnings ratio. Nevertheless, what makes the shares appealing is the previous maintenance of the 25p a share dividend, which pumps the yield up to around 10%. I do not think that with such low earnings cover, that rate will be able to carry on without some swift adjustment. We will get a current year trading guidance at the end of November when the £200m valued company announces its end September interim results.

Institutional holders include Brandes Investment (9.91%), Aberforth (6.62%), Majedie (5.57%), Royal London Asset (5.22%), Neptune Investment (5.08%), Crystal Amber (4.99%), Schroder Investment (4.97%), Artemis (4.88%), Norges Bank (3.01%) and The Vanguard Group (2.48%). The company's shareholders seem to be staying fast for a while, awaiting the recovery that I think will soon become evident. If it doesn't then the company will be left wide open to US active investor funds pouncing on it in a takeover battle.

Low & Bonar (LON:LWB)



Using its proprietary technologies, this company produces advanced, high-performance materials, with exceptional strength and versatility, from polymer-based yarns and fibres. Its industrial customers are derived from a multitude of sectors, such as automotive, building, civil engineering, composites, concrete reinforcement, green roofs, filtration, interiors, print, sports and recreation, tarpaulins and tensile architecture.

Over the last few years, the company has failed to invest sufficiently in its key manufacturing areas. It also failed in its strategy to expand in the civil-engineering sector. It has been unable to pass on to its customers the significant increases in raw-material costs, at the same time as lower sales volumes were becoming evident. The combination of these various factors saw the sales and profits slipping away.

In the year to end November 2017, it recorded £446.5m of sales and made £30.7m in pre-tax profits. The 2018 year saw £431.9m of revenue and just £16.7m of profits. For the current year, estimates suggest that £402.9m of sales will see only £8.3m of profits, with earnings dropping to a mere 0.9p per share.

However, the measures that are now underway to cope with its manufacturing efficiency hassles will begin to show through in the coming year. Broker estimates for the 2020 year are pencilling in £412m of sales and £15.7m of pre-tax profits, which should generate earnings of 1.6p per share.

Major shareholders include Tito Tettamanti (17.00%), JO Hambro (10.60%), AXA Investment (8.71%), Luxempart Capital (8.08%), Aberforth Partners (7.62%), Schroder Investment (6.57%), Wellcome Trust (5.24%), Henderson Global (4.12%), Chelverton Asset (3.18%) and Legal & General (1.98%).

With its shares trading at around the 7.5p level, down from 55p a year ago, the company is valued at around £55m. Even though this current year will see flat sales and profits, I do see recovery now in progress; accordingly, the shares could well be bottoming out at these lower levels ahead of bouncing back up to around the 20p level.

> **"LAUNCHED WAY BACK IN 2006, GOCOMPARE WAS A 'DISRUPTOR' IN BEING THE FIRST COMPARISON SITE TO HELP PEOPLE TO MAKE BETTER-INFORMED DECISIONS WHEN BUYING THEIR INSURANCE."**

GoCo Group (LON:GOCO)

Although this company's name is not well known, I will take a bet that you would instantly recognise its major brand name of GoCompare – especially so with an Italian-looking Welshman breaking regularly out of our television screens singing about the virtues of the insurance-comparison website.

And being a user myself, I admit to a certain bias; it does help to aggregate the offers and criteria from any one of scores of insurance companies wanting to take on my risks.

This site, which gets over 5m hits every month, sensibly does not sell its customers' data.

It has now expanded away from just insurance products and its various websites now compare the features and pricing structures of several financial products, home services and energy tariffs.

Other brands in its growing stable of online activities include: 'MyVoucherCodes', which is a digital media and affiliate marketing specialist that connects consumers with money-saving offers from the world's leading brands; 'Energylinx', an established energy switching and comparison service with more energy-supplier relationships than any other UK comparison provider; and 'weflip', an innovative switching service that uses technology to automatically flip people onto cheap energy tariffs. A recent acquisition saw 'Look After My Bills', which operates an automated switching service similar to 'weflip', coming into the expanding service fold.

Launched way back in 2006, GoCompare was a 'disruptor' in being the first comparison site to help people to make better-informed decisions when buying their insurance, by focusing on displaying policy details rather than just listing prices. In helping people to choose the most appropriate products, rather than just the cheapest, the company has teamed up with Defaqto, the independent financial researcher owned by **The Simply Biz Group (LON:SBIZ)**, to integrate additional policy information into a number of its insurance-comparison services, thereby allowing people to compare up to an extra 30 features of cover.

Other interests include being an investor in 'Souqalmal.com', the leading comparison business in the Middle East and in a promising fintech start up 'MortgageGym', the mortgage robo-adviser.

For the end June first half of the current year the group saw revenue up fractionally at £76m (£75.8m); however, pre-tax profits were more than halved at £7.6m (£15.9m). It was hit by higher distribution costs, at the same time as investing from its cash flows into developing further in the offer of its various sites.

Overall revenues are continuing to increase from £153m in 2018, with £159m expected for this year to end December, before a jump up to £172m next year. The group, which made £33.8m pre-tax profits last year, should make only around £17.5m this year, with earnings almost halving from 6.30p to just 3.37p this year. Next year's estimated revenue should help profits to recover to around the £26.4m level, with earnings increasing to 5.18p per share.

Shareholders include Peter Wood, the founder of Direct Line, eSure and Sheilas' Wheels (29.9%); Artemis (5.05%); Jupiter Asset (3.17%); Toscafund Asset (2.99%); DWS Investments (2.99%); JP Morgan Asset Management (2.99%); Hargreave Hale (2.54%); Polar Capital (1.92%); Henderson Global (1.73%); and Legal & General Investment Management (1.52%).

With its shares now trading at around the 75p level, way down on the 138p peak reached in June last year, this £315m market-capitalised company looks to be a classic 'recovery' play. I see them trading back up to touch the previous peaks before the end of next year.

Walker Greenbank (LON:WGB)

Although this stock may not be as 'flashy' as others, I still like its products and consider it to have some lasting power. The company is an international, luxury, interior-furnishings designer, manufacturer, marketer and distributor of its fabrics and wallpapers. Sold in more than 85 countries globally, its products, which are not only sold to consumers, but also to contract and interior designers, are aimed at the mid-to-upper end of the premium market.

It has its own showrooms in London, Paris, Amsterdam, New York, Chicago and Dubai. The company also has partnership showrooms in Shenzhen and Moscow. Its brands include leading names such as Sanderson, Studio G, Clarke & Clarke, Morris & Co, Anthology, Harlequin and Zoffany. But it is not just into wallpapers and fabrics – now the company is building up licensing partnerships for ranges of products including ceramics, umbrellas, stationery and bedding.

Unfortunately, profit margins have been hit over the last three years. For the year end January 2018, sales of £112.2m produced £12.7m in pre-tax profits, equating to 14.7p per share in earnings. The 2019 year reported £113.3m of sales, profits down by £3.2m to £9.5m and earnings of 10.8p. For the current year, estimates suggest that a £4m drop in sales will see profits fall by £2.2m to just £7.3m, giving lower earnings of 8.4p per share.

Already estimates foresee a recovery coming next year, following some manufacture being switched overseas and sales efforts being intensified. Sales of £112m could see £8m pre-tax profits, worth nearly 9p per share in earnings.

Significant shareholders include Octopus Investments (12.42%), Schroders Investment Management (8.08%), Investec Wealth (%.68%), Ennismore Fund Management (5.59%), Killik Asset Management (5.14%), FIL Investment Management (4.56%), Revera Asset (4.39%), Charles Stanley (3.77%) and Brown Shipley (3.21%).

There are 70,983,505 shares in issue, which are trading at around the 80p level, valuing the company at just over £56m. Two years ago, the shares of Walker Greenbank peaked out at 242p and they have since dipped to as low as 55p, before the price started to show that some recovery is now on the way. This will continue into 2020 and I see them edging up still further, with 125p being in view.

About Mark

Director of SQC Research and Author of mw-m.com.

Mark, who has over fifty-five years' experience in the UK stock market, established SQC Research in 1993. He previously worked as a dealer for four stockbroking firms and an investment fund management business. Prior to SQC Research, which provides investment information and comment on smaller quoted companies, he published financial and investment magazines and newsletters.

BY RICHARD GILL, CFA

FROM ACORNS TO OAK TREES

WHAT A RESULT!

GREAT NUMBERS FROM THREE TOP-PERFORMING SMALL CAPS

Richard Gill, CFA, looks at three small-cap companies that posted strong results in early autumn.

After the traditionally quiet summer months, the London financial markets have sprung back into life, so let's get straight into what I consider to be some of the best small-cap numbers of the early autumn.

TEAM17

Video games are big business. According to a recent report from market-intelligence company Newzoo, the global games market is expected to be worth over $150 billion in 2019, growing to more than $196 billion by 2022. That makes it larger than both the music and cinema industries combined.

Taking advantage of the gaming boom is AIM-listed **Team17 (LON:TM17)**, a global games label, and creative partner and developer of independent, premium video games. It earns money by partnering with independent games makers around the world in the development and publishing of their content, across multiple platforms, typically earning a fixed revenue share after the game is launched.

Essentially, the business model sees Team17 reviewing the work of independent developers and commercialising what it considers to be the best ideas. That makes it a bit like an independent record label, although the company does also have its own intellectual property, some of which has been acquired and some developed in house. There is a strict review process to filter out the best third-party games, with only around 1.5% of games reviewed in 2017 eventually signed to the company's 'games label'.

In contrast with some of its peers, Team17 focuses on premium, rather than free-to-play games. The portfolio currently contains over 100 titles, with back-catalogue sales delivering a strong residual income stream. The company is perhaps best known for its popular turn-based strategy game *Worms*, which was developed in house, first released in 1995 and has gone on to be a successful franchise. Other popular games include cooking game *Overcooked* and prison strategy title *The Escapists*. Also, around 88% of revenues are generated from digital sales, meaning that the company has a high level of control over pricing and game-lifecycle management, with minimal additional development costs post launch.

> **"THE GLOBAL GAMES MARKET IS EXPECTED TO BE WORTH OVER $150 BILLION IN 2019."**

Team17 joined AIM in May 2018 and raised a total of £107.5 million at 165p per share in a placing described as "multiple times oversubscribed". Of this amount £42.8 million net was raised for the company itself and used to repay loans, with the remainder going to selling shareholders. These included chief executive Debbie Bestwick, who was awarded an MBE for services to the video- games industry in 2016; she retains a stake in the business of around 22%.

for growth and opportunities in the games market, I believe that this could be one for the long term.

As mentioned previously, the video-games market is forecast to grow strongly over the coming years, and with nearly £36 million on the balance sheet, Team17 looks well placed to continue its upward profit trajectory. This is a business with growth ambitions, with headcount increased to 164 from 154 in the first half of 2019 and a development studio relocation planned for H2 to a larger site with increased capacity. Underpinning potential growth is the solid back catalogue of games, which provides high-margin income and the opportunity for follow-on titles from existing franchises – *Worms* for example still makes the company around £5 million in revenues every year, almost 25 years after being launched.

While no dividend has been confirmed, the company has considered implementing a progressive policy in future years subject to sustained profits being generated. However, given current growth rates, I would prefer capital to be retained to take advantage of investment opportunities. Broker Liberum raised its target for the shares to 330p after the interims (implying 11% upside) but I think that could be conservative in the longer term if historic growth rates continue.

Game on

Team17 came to market with some good growth figures, showing revenues rising at a compound annual rate (CAGR) of 69% and an adjusted EBITDA CAGR of 80% for the three years to 31 December 2017. The strong growth has continued post IPO, with the company revealing perhaps some of the best results seen from an AIM company during this current results season.

For the six months to June 2019, revenues were up by a stonking 97% to £30.4 million. This was driven by a number of new releases during the period including farm-life simulator *My Time at Portia* which achieved a number one ranking on digital distribution platform Steam in January before a successful console launch in April. *Hell Let Loose*, a World War II military simulation, was the games label's first 100-person multiplayer game and also reached number one globally via Steam Early Access in June. In addition, there was a continued strong performance from the back-catalogue portfolio, which contributed 73.7% of revenues.

At the bottom line, pre-tax profits were £10.36 million, up from just £31,000 in H1 2018 and even ahead of the £8.7 million posted for the whole of 2018. On the balance sheet, net cash stood at £35.8 million at the period end, boosted by a £13.7 million net inflow from operating activities – this is highly cash-generative business. However, while there is said to be a "solid" line up of new releases due from partners, revenues in the second half are expected to be lower than in the first half due to the planned spread of releases over the year.

Hitting the right buttons

Shares in Team17 have performed extremely well since IPO, rising by 79% to the current price of 296p. That capitalises the business at £389 million and on a forecast earnings multiple for 2019 of 30 times. However, considering this excellent track record, and solid foundations

KAPE TECHNOLOGIES

I first covered the next company in the April 2018 edition of this magazine. AIM-listed **Kape Technologies (LON:KAPE)** is a consumer security software as a service (SaaS) business which changed its name from Crossrider last year to reflect a shift in strategic focus. While the shares are down from 86.5p to the current 78.5p since my initial report, they have surpassed 135p during that time and investors have also enjoyed a special dividend of 3.55p per share. But with two acquisitions recently completed and the business making strong operational progress, I believe the story is worth revisiting.

Kape currently develops and distributes a variety of digital products in the online-security space, offering products which provide online security and privacy. Since my last report, Kape has disposed of its non-core media division, leaving app distribution as the core operating segment. Key subscription-based products include; CyberGhost, an online privacy application; Reimage PC/Mac, which can fix a PC or Mac and restore peak performance via the internet with 24/7 support; and DriveFix, which scans computers for outdated drivers.

Expanding its suite of products, Kape made two complementary acquisitions in 2018, putting to use some of the £45.9 million it raised at IPO in 2014 but hadn't really touched since. July last year saw the $16 million purchase of **Intego**, a leading Mac and iOS cybersecurity and malware protection SaaS business, headquartered in Seattle. Then in October, the company bought **ZenMate** for €4.8 million. This is a digital privacy company, headquartered in Berlin, focused on encrypting and securing internet connections and protecting individuals' privacy and digital data.

Kape crusader

While Kape announced in July that its interim results would be in line with expectations, the shares oddly fell by around 20% over the next two weeks. Investors had nothing to fear, however, as the final numbers showed revenues up by 24% to $29.9 million for the six months to June.

Kape now has over one million subscribers across its product base, up 24% over the previous year, with the customer-retention ratio improving from 74% at the end of 2018 to 82% − one of the highest in the consumer SaaS space. Notably,

Kape®

"KAPE NOW HAS OVER ONE MILLION SUBSCRIBERS ACROSS ITS PRODUCT BASE, UP 24% OVER THE PREVIOUS YEAR."

recurring revenues more than quadrupled to $21.2 million, providing strong visibility of earnings. Elsewhere, both of the acquired businesses were said to be performing in line with expectations, with $1.7 million in annualised cost savings identified in ZenMate.

At the adjusted EBITDA level (relevant for Kape given high non-cash charges) profits grew by 21% to $5.8 million. The balance sheet remained strong with cash of $36.4 million as at 30 June and no debt. The outlook for the second half was positive, with management saying it remains confident in delivering year-on-year growth for the current financial year, in line with market expectations.

Hack into growth

The interim results showed how ambitious Kape is. Comments from chief executive Ido Erlichman, included: *"We have significant ambitions for Kape..."* and ...*"we firmly believe much more is possible."* With profitable operations and a large cash backing, I believe that the company looks very well placed for further growth in the personal digital-safety market, which was estimated to be worth $10 billion in 2018.

Kape is currently being valued by the markets at £116 million. For the 2020 financial year, broker Shore Capital is looking for revenues of $83 million, pre-tax profit of $16.3 million and earnings of 9.2 cents (7.33p) per share. It's worth noting that further earnings visibility comes from the sale of the media division, with Kape receiving a 50% share of EBITDA from the business for the next five years as consideration for the deal.

Assuming targets are met then the forward price earnings multiple is just 10.7 times for 2020. Strip out the cash balances and that falls to a very low eight times, at the bottom end of the wider software and computer-services sector.

AVATION

It's not been a good month for some investors in the airline industry, with beleaguered **Thomas Cook (LON:TCG)** finally being put into liquidation in late September, following its high-profile problems. Other companies in the industry, however, have been benefiting from strong profit growth. One of those is Main Market-listed **Avation (LON:AVAP)**, a firm well known amongst investors for having delivered very strong returns over the past decade or so. Initially listed on the old PLUS exchange and joining the LSE in October 2010, the shares have just about quadrupled since the market move.

Avation is a commercial passenger aircraft leasing company which owns and manages a fleet of aircraft which it leases to a range of airlines across the world. The company's approach sees it enter into long-term leases with airlines, and after the initial lease period the aircraft are re-leased or can be sold. Major costs to Avation include expenses related to the depreciation of the aircraft as well as financing costs and general administration.

avation PLC
COMMERCIAL AIRCRAFT LEASING

Borrowings to finance aircraft purchases are high, with Avation's net debt standing at just over $1 billion as at 30 June 2019. Nevertheless, this is a highly profitable business model, with costs reduced by airlines themselves being responsible for operating expenses like maintenance, insurance and fuel.

Current customers include a range of global and national airlines, such as Flybe, Virgin Australia, Air France and EasyJet. At the end of the last financial year, the fleet comprised 48 aircraft – with seven on finance lease, including ATR 72-600s, Airbus A321-200s and Fokker 100s. Reflecting further expansion plans, the company has orders for nine additional ATR 72-600 aircraft for delivery by 2022 and has purchase rights for a further 25 aircraft.

In order to keep the fleet up to date, Avation will typically sell mid-life and older aircraft and redeploy the

Air France Airbus A320-214

capital to newer assets. The current weighted average age of the fleet is just 3.4 years and the weighted average remaining lease term is 7.5 years. The company is also an active trader of aircraft and will consider the acquisition or sale of individual or smaller portfolios of aircraft if a decent profit can be made,

Plane sailing

Investors cheered recent results for the year to June 2019, which revealed a record set of numbers across the board. At the top line, total revenues increased by 8% to $119 million after 12 aircraft were added to the fleet during the year and airline customers increased from 13 to 17. Pre-tax profits, however, rose by a more pronounced 35% to $25.6 million after the figures were boosted by a $10 million gain on the disposal of aircraft, offset by finance expenses rising by 23% to $55.3 million. At the period end, fleet assets increased by 22% to $1.27 billion after $329 million was spent on tangible asset purchases. Impressively, total dividends for the year were increased to 10.5 cents per share, a rise of 45%.

Shortly after the full-year results were released, shares in Avation hit an all-time high of just over 300p before slipping back to the current 293p. Fortunately, exposure to Thomas Cook's demise is minimal, with just two Airbus A321 aircraft being leased to the collapsed carrier. Default notices have been issued, with repossession being carried out and the aircraft remarketed. Avation has stated it does not anticipate any material impact on operations from the events.

At the current share price, Avation is valued at £187 million, which for starters is a modest discount to net assets of $240.8 million (£193.7 million) as at 30 June this year. However, the true asset value could be higher, with management pointing out in the results that it believes, "...

"TOTAL DIVIDENDS FOR THE YEAR WERE INCREASED TO 10.5 CENTS PER SHARE, A RISE OF 45%."

net realisable value per share exceeds the reported net asset value per share." The historic earnings multiple is just over nine times, which looks incredibly cheap given the company's track record. Also, a modest historic yield of 2.9% provides income attractions and should rise in line with the firm's progressive payment policy.

Broker Canaccord Genuity confirmed a 350p target for the shares following the results, with analysts at WH Ireland going slightly higher at 352p. The higher of the two implies capital upside of 20% from current levels, but could prove to be conservative in my view, if growth rates continue at historic levels.

About Richard

Richard Gill is an investment analyst with over a decade's experience of analysing small/mid cap equities. He is the Head of Research at Align Research. Richard qualified with the Chartered Financial Analyst (CFA) designation in 2012 and was awarded PLUS Markets Financial Writer of the Year at the 2008 PLUS Awards. He has been a judge at the Small Cap Awards from 2013 to 2018.

BY JOB CURTIS

WHY CASH FLOW KEEPS YOU ON THE STRAIGHT AND NARROW

Job Curtis, Fund Manager of the City of London Investment Trust, explains why cash flow is so important when investing in equities for the purpose of income, using two stock case studies.

Estimating a company's future cash flows is a common method of share-price valuation. For investors seeking dividend income from shares, cash flow is crucial. In our view, successful income investing involves identifying companies with enough cash flow not only to pay their dividend, but also to invest enough to generate future profit growth. While it is possible to grow a dividend with debt, this is unlikely to lead to sustainable dividend growth and will leave a company poorly placed for a cyclical downturn. A company with a heavy burden of debt facing falling demand for its goods and services, leading to reduced profits, will inevitably prioritise interest payments to service its debt. Such an indebted company is more likely to cut its dividend compared with a company that has no debt or a low level of borrowings.

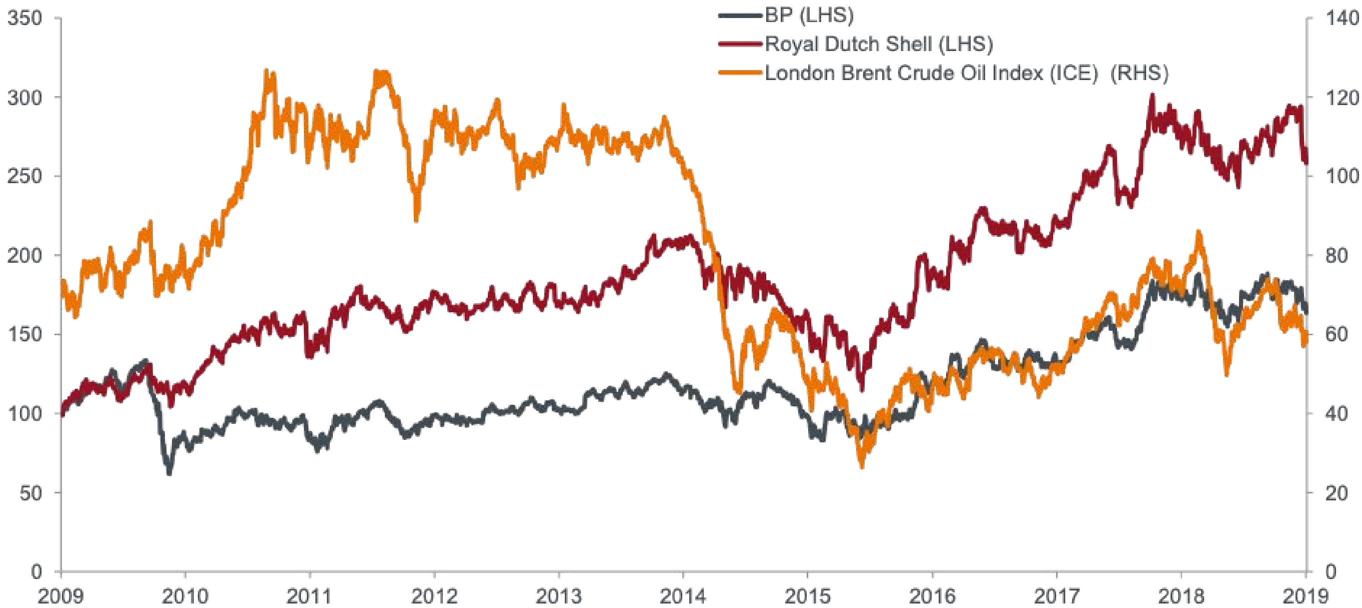
To illustrate some of the complexities in understanding cash flows and dividend sustainability, the oil sector offers a useful example. Royal Dutch Shell (RDS) is the largest company by market capitalisation listed on the London Stock Exchange and BP is the fourth largest. RDS has one of the best dividend records of any company, having not cut its dividend since World War II. BP's record is more volatile over the long term and it had to suspend its dividend for six months in 2010 after the Macondo oil-spill tragedy in the Gulf of Mexico.

> **“RDS HAS ONE OF THE BEST DIVIDEND RECORDS OF ANY COMPANY, HAVING NOT CUT ITS DIVIDEND SINCE WORLD WAR II.”**

The key determinant of cash flow for RDS and BP in the short term is the oil price, which will affect the profitability of their oil fields that are in production. It also has a significant bearing on their large natural-gas businesses, where long-term contracts continue to have high linkage to the oil price. The chart below compares the oil price over the last 10 years, with the total return from the shares of RDS and BP. Overall, it indicates a fairly close correlation, as well as showing the companies have responded well to the lower oil-price environment since 2015.


CUT UP 5/4
SET
MC
Category 2
Category 3
2nd Qtr

Figure 1



Source: Datastream, Bloomberg, as at 19 August 2019
Note: BP and Royal Dutch Shell are total return in GBP, London Brent Crude Oil Index is in US$/BBL, rebased to 100 as at 14 August 2009

Both companies also have large 'downstream' operations, which encompass chemicals, refining and marketing (such as petrol stations). In general, these downstream operations are countercyclical and RDS and BP are able to earn a better profit margin on them during oil-price downturns.

A further feature to consider when predicting cash flow for both companies is their level of investment. Oil fields deplete and therefore it is necessary to replace production by

> **"BOTH COMPANIES HAVE BEEN MUCH MORE DISCIPLINED ON CAPITAL EXPENDITURE, ALTHOUGH THIS LEADS TO SOME QUESTIONS ABOUT WHETHER THEY ARE INVESTING ENOUGH FOR THE FUTURE."**

investing in new fields. During the oil-price boom of 2005-2011, the industry invested heavily, pushing costs higher, leading to disappointing profitability despite the supportive oil-price environment. Since 2014, both companies have been much more disciplined on capital expenditure, although this leads to some questions about whether they are investing enough for the future.

One alternative to investment is to make an acquisition. In 2015/2016, during the oil-price bear market, RDS agreed to buy and completed the acquisition of BG Group (BG) for £47 billion, which gave it high-quality oil fields off the coast of Brazil and enhanced its global leadership in natural gas. More recently, in 2018, BP acquired some US shale-oil assets from BHP for $10.5 billion. Disposals also complicate the picture, with RDS selling off assets to help pay for BG and BP doing likewise to pay for claims and fines arising from the Macondo disaster, of some $67 billion.

All in all, the above shows how difficult it is to judge the cash flows and profitability of these giant companies. The consensus of analysts is that RDS and BP have improved a lot from the dark days of 2015/2016, when cash coverage of their dividends was low and the dividends had to be paid partly by issuing new shares. The fact that both stocks yield over 6% indicates a degree of market scepticism about their dividend sustainability, which should be disproved as predicted cash-flow generation comes through.

Glossary

Dividend: a payment made by a company to its shareholders. The amount is variable, and is paid as a portion of the company's profits.

Cyclical downturn: a period of economic contraction during which certain industries are vulnerable to weaker cash flow, resulting from tight monetary conditions.

Volatility: the rate and extent at which the price of a portfolio, security or index, moves up and down. If the price swings up and down with large movements, it has high volatility. If the price moves more slowly and to a lesser extent, it has lower volatility. It is used as a measure of the riskiness of an investment.

Bear market: a financial market in which the prices of securities are falling. A generally accepted definition is a fall of 20% or more in an index over at least a two-month period. The opposite of a bull market.

About Job

Job Curtis is a Portfolio Manager at Janus Henderson Investors, a position he has held since 2006. He has managed the City of London Investment Trust since 1991 and is also co-manager of the Global Equity Income and Global Dividend & Income strategies. Job joined Henderson in 1992 following Henderson's acquisition of Touche Remnant, where he had served as a unit trust and investment trust manager since 1987. Prior to this, he was an assistant fund manager at Cornhill Insurance from 1985 to 1987 and a graduate trainee at Grieveson Grant stockbrokers from 1983 to 1985. Job holds an MA in philosophy, politics and economics from Oxford University. He is an associate member of the Society of Investment Professionals (ASIP) and has 36 years of financial industry experience.

Henderson Global Investors merged with Janus Capital Group in May 2017.

BY FILIPE R. COSTA

THE MACRO INVESTOR

HOW TO BUILD A PASSIVE RETIREMENT PORTFOLIO

Filipe R. Costa demonstrates how to create a simple and low-cost strategy using ETFs, to fund your retirement.

"If you want a thing done well, do it yourself."

— Napoleon Bonaparte

Investing for retirement is usually seen as a difficult task because it requires disciplined saving and a skilled investing approach. Living standards for retirees depend on their accumulated savings, which can make them averse to the idea of self-managing such an important asset. Long-term investing does require a sound strategy to be successful, but it can still be effectively self-implemented with a limited amount of effort and expertise. Investment is now, more than ever, less about picking skill and more about mechanical implementation.

Not that skill doesn't matter, but it comes with risks. Achieving market returns while keeping risk at bay is often what matters the most. The growth of the passive investment industry over the last 20 years means we now have all the tools to implement a good retirement plan on our own. Anyone can put a sound retirement strategy in place by allocating their monthly savings to just two different assets.

Investing by yourself

Investing for the very long term is all about maximising total return while preserving capital. We need a balance between potential return and risk incurred. As the theory goes, we should build a sufficiently large portfolio of assets in order to avoid the idiosyncratic risk that comes with each asset. For example, Purdue Pharma has just filed for bankruptcy despite pharmaceuticals doing well as a sector. Such an event represents an idiosyncratic risk that could have been neutralised by an investor holding a sufficiently large portfolio of pharmaceutical companies. Diversification across companies, sectors and asset classes is key to get the most out of investment. When we're investing for something as important as retirement, eliminating unnecessary risk becomes central. Unfortunately, achieving the necessary degree of diversification requires buying at least a few hundred assets. Such a task cannot be implemented by an individual investor due to the time and costs incurred.

The rise of the passive investment industry, in particular the expansion of exchange-traded funds (ETFs), has been a game-changer for individual investors. One single ETF can often be acquired with less than £100 and usually represents a share in hundreds, if not thousands of assets. An ETF is a portfolio of assets, thus offering diversification within its investment theme. Investors don't need to buy 100 different stocks to get exposure to the FTSE 100. These ETFs do it for a tiny fee. Some have ongoing fees of less than 0.1% per year.

With just two ETFs, an investor can gain diversified exposure to equities and fixed income, and build a classic 60/40 portfolio. More sophisticated investors can spread the funds over several layers: domestic and international equities; small stocks; short-term and long-term bonds; and commodities. This

"THE ODDS OF LOSING MONEY ON A WELL-DIVERSIFIED PORTFOLIO OF STOCKS IN A FIVE-YEAR INTERVAL ARE SMALL. IF WE INCREASE THE INTERVAL TO 10 YEARS, THE ODDS ARE VERY LOW INDEED. IF WE STRETCH THE INTERVAL A LITTLE FURTHER, STOCKS JUST LOOK LIKE SAFE HAVENS."

approach would require buying six or seven different assets but would still be attainable while diversification would remain at an optimal level. The ETF world goes even deeper, offering specific investment factors and styles. Investors can buy a conservative or aggressive ETF directly with no need to adjust the proportion of equities and bonds. In this case, an investor just needs to add funds every month to the same ETF and rebalance every year or so.

The simplest portfolio

The simplest retirement portfolio should have an equity component and a fixed income component. The first step before creating a portfolio is to decide on the proper allocation of funds between these components, or asset classes. While there is no perfect threshold, we know a few facts that may help us to decide. Stocks are usually seen as being riskier than bonds. They provide a higher total return than bonds, in the longer term at least. Bonds are safer and in particular better suited for shorter investment horizons. If we start saving early in life, we may wish to pursue an aggressive strategy – that is, to allocate a significant part of the portfolio to stocks. While stocks aren't free from large capital drawdowns like those experienced during the financial crisis of 2007-2009, these events are less significant for horizons of 20 to 30 years. As we have seen in the past, stock markets tend to recover quickly from their losses.

The odds of losing money on a well-diversified portfolio of stocks in a five-year interval are small. If we increase the interval to 10 years, the odds are very low indeed. If we stretch the interval a little further, stocks just look like safe havens. Thus, stocks aren't exactly risky over the longer term. But they are risky over the shorter term. The corollary of this is that, as retirement nears, investors should reduce exposure to stocks and increase exposure to bonds.

After deciding on the proportion of stocks and bonds to hold, investors may then opt for the simplest portfolio, purchasing just two ETFs and adding funds to them each month. Some good options are:

- **Vanguard Total World Stock ETF (NYSEARCA:VT)** – This ETF holds positions in more than 850 stocks from around the world. The largest complement is US stocks (58.7%), but it also holds stocks in Europe (18.3%), Asia (13%) and emerging markets (9.8%). Most holdings are large capitalisations. This is a broad equity fund, offering the widest international diversification possible. Vanguard also offers an option for those looking to separate US equities from foreign equities, in the form of the **Vanguard Total Stock Market ETF (NYSEARCA:VTI)** and the **Vanguard Total International Stock ETF (NASDAQ:VXUS)**. VT has an expense ratio of 0.09% while VTI and VXUS have expense ratios of 0.03% and 0.09% respectively.
- **Vanguard Total World Bond ETF (NASDAQ:BNDW)** – This ETF offers broad, diversified exposure to the global investment-grade bond market. It provides income above what is attainable from a Treasury bond portfolio but still with relatively low risk, as the holdings are high credit-quality issues. Again, there is an alternative approach which is to buy two ETFs: the **Vanguard Total Bond Market ETF (NASDAQ:BND)** covering the US market and the **Vanguard Total International Bond Market (NASDAQ:BNDX)** covering the rest of the world. The expense ratios for BNDW, BND, and BNDX are 0.09%, 0.035% and 0.09% respectively.

UK investors without access to these ETFs may trade the **Vanguard FTSE All-World ETF (LON:VWRL)** and the **Vanguard Global Aggregate Bond ETF (LON:VAGP)**. VWRL invests in more than 3,250 stocks around the world and comes with an expense ratio of 0.25%. VAGP invests in more than 1,700 different bond issues, including investment-grade and government bonds from around the world. Its expense ratio is 0.10%.

With just two assets, it's relatively easy to add more shares to the portfolio and to rebalance it, from time to time.

All-in-one allocation

For the investor who wants a diversified allocation across asset classes, iShares offers a group of multi-asset ETFs that are even simpler to allocate funds to than the above two-asset portfolio. One asset is all that it takes.

iShares offers four different ETFs: conservative, moderate, growth and aggressive versions, according to the exposure to equities and bonds. These ETFs are no more than funds of funds because they are composed of other iShares ETFs. Each ETF invests in seven other ETFs, but in varying proportions. They cover US equities, mid-and-small capitalisations, international developed-world equities, emerging markets, US bonds and international bonds.

- **iShares Core Conservative Allocation ETF (NYSEARCA:AOK)** – Consisting of a diversified core portfolio based on conservative risk considerations, this ETF allocates a large share of bonds to the portfolio and a small portion to equities. Its equity beta is just 0.25, which means this portfolio is a lot less exposed to market risk than the broad market is. This ETF might be best suited for someone looking for an equity-bond exposure around 30/70.
- **iShares Core Moderate Allocation ETF (NYSEARCA:AOM)** – This ETF is a diversified portfolio composed of bonds and equities to target a moderate level of risk. Its equity beta is 0.35, higher than AOK, as this ETF has a larger proportion of equities. Still, risk is moderate, if not conservative. The equity-bond exposure of this ETF is around 40/60.
- **iShares Core Growth Allocation ETF (NYSEARCA:AOR)** – The iShares Core Growth Allocation ETF consists of a diversified portfolio of bonds and equities similar to AOK and AOM, but with a higher proportion of equities. The equity beta of this ETF is 0.53. Its equity-bond proportion is around 60/40.
- **iShares Core Aggressive Allocation ETF (NYSEARCA:AOA)** – This ETF is the one with the highest risk. Its equity beta is 0.71. The equity-bond proportion is around 80/20.

Figure 2 shows the exact allocations of the above four ETFs.

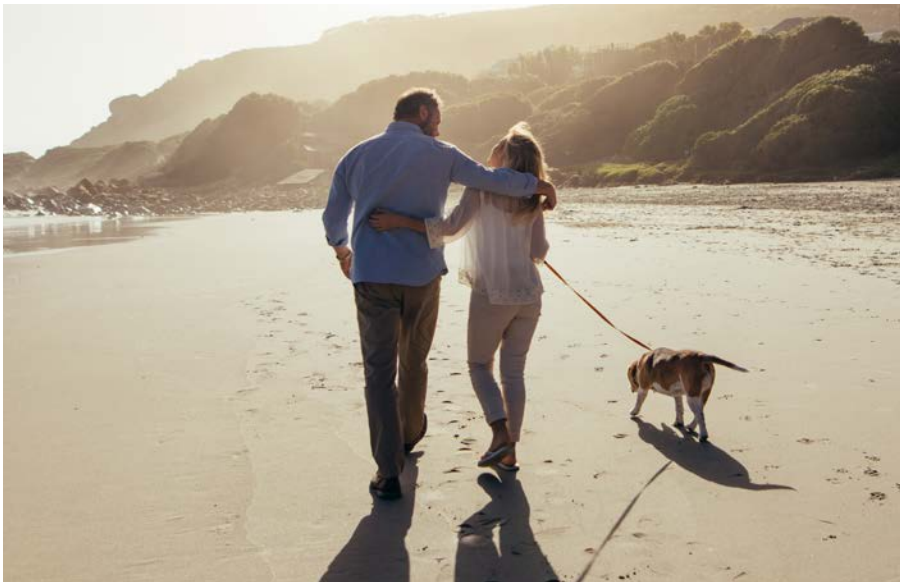


Fig. 2 – iShares Multi-Asset Strategy

iShares All-In-One Alternatives

		Percentage Allocation For Style ETF			
		Conservative (AOK)	**Moderate (AOM)**	**Growth (AOR)**	**Aggressive (AOA)**
Core S&P 500	**IVV**	14.53	19.36	29.21	39.21
Core S&P Mid-Cap	**IJH**	1.00	1.34	2.01	2.70
Core S&P Small-Cap	**IJR**	0.44	0.59	0.89	1.19
Core MSCI Int. Developed Markets	**IDEV**	10.51	14.01	21.15	28.38
Core MSCI EM	**IEMG**	2.94	3.92	5.92	7.94
Core International Aggregate Bond	**IAGG**	10.66	9.13	6.13	3.08
Core Total USD Bond Market	**IUSB**	59.85	51.28	34.40	17.31
Cash		0.07	0.38	0.30	0.18
Equity		**29**	**39**	**59**	**79**
Fixed Income		**71**	**61**	**41**	**21**

Source: BlackRock

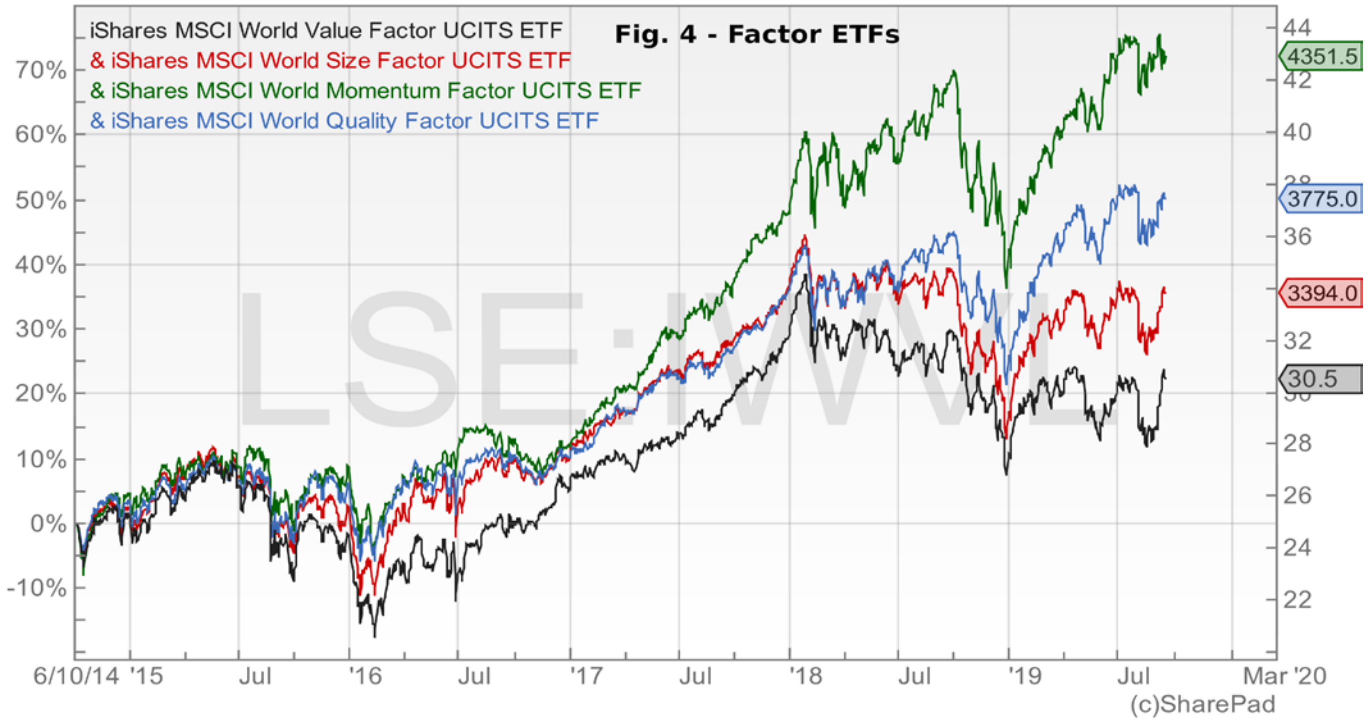
A factor portfolio

The latest financial crises have shown that equities, as a whole, do badly under stress. It doesn't matter whether you're exposed to the US market, other developed countries or emerging markets. The correlation between these asset classes is huge, such that the diversification achieved by a portfolio spreading its assets across these markets is limited.

Factor investing allows the investor to separate equities by core components that are uncorrelated with each other. This way, when a factor declines, others may still rise, which is often not the case with asset classes like US equities, developed countries and emerging markets. Just suppose that you go to your local supermarket and instead of buying meat, fish, rice, fruit and vegetables, you buy protein, carbohydrates, vitamin C and saturated fat. You're still buying the same products but you're looking at them from a different perspective.

Past research identifies five equity factors that are key drivers of returns: market beta, size, value, momentum and quality. Building these factors isn't an easy task for an individual investor but there are ETFs offering exposure to them. Investing in these ETFs is an alternative way of building the equity part of a retirement portfolio. An investor looking to build a 60/40 equity-bond portfolio, may split the 60% equity part across the five factors mentioned above. This portfolio may be built in the following way:

- **iShares Edge MSCI World Value Factor ETF (LON:IWVL)** – This ETF is for investors who want to focus on stocks that have relatively lower share prices relative to their fundamental values. It aims to track the value factor. An alternative is the **Vanguard Global Value Factor (LON:VVAL)**.
- **iShares Edge MSCI World Size Factor ETF (LON:IWSZ)** – The iShares Edge MSCI World Size Factor ETF is for investors who want to focus on stocks with smaller market capitalisations.
- **iShares Edge MSCI World Momentum Factor ETF (LON:IWMO)** – This one is for investors who want to focus on stocks with strong recent performance. Another option is



the **Vanguard Global Momentum Factor ETF (LON:VMOM)**.

- **iShares Edge MSCI World Quality Factor ETF (LON:IWQU)** – This is an ETF for investors who want to focus on stocks with strong fundamentals, which may include higher operational earnings and balance-sheet quality.

All of the above ETFs are exposed to market beta, so you don't need an ETF with a broad market exposure. The above four groups are just enough for the equity part of your portfolio. You may then add a bond ETF for the fixed income part. The BNDW ETF mentioned in the simple portfolio is an option. IAGG and IUSB mentioned in figure 2 are another alternative.

A few words on dividend income

There is a belief among investors that dividend-paying stocks, preferred shares, coupon-paying bonds and any other income-providing assets are better than non-income providing assets. In particular, for someone approaching retirement, there is a sense that keeping the principal untouched and living off the income is the best way to go. With this in mind, it's easy to understand why someone approaching retirement would prefer assets offering periodic disbursements. If these disbursements are enough to live on, the portfolio may be left unchanged.

Still, stocks should see their price decline when they turn ex-dividend, as the dirty price of a bond also declines when it turns ex-coupon. A stock that doesn't pay dividends should provide higher capital gains than a dividend-paying stock which splits total return between capital gains and income. The theory says that dividends and capital gains should be perfect substitutes. Thus, an investor can 'create' dividends by selling a few assets. The difference is merely psychological, as selling assets is sometimes seen as a kind of loss while taking dividends doesn't hurt.

In recent research about the factors that explain stock returns, dividends generally appear to be irrelevant. In other words, investors gain nothing by investing in dividend-paying stocks. The key reason why dividend-paying stocks usually provide good returns is not because they pay dividends but because most dividend-paying stocks are high-quality and profitable businesses. Quality and profitability explain higher returns. Those are the factors that really matter, not dividends.

Final remarks

Managing your own retirement funds is an easier task than many individuals think, mainly because of the rapid expansion of the ETF industry of late. Twenty years ago, it was difficult for an individual investor to build their own portfolio because it would mean hand-picking hundreds of assets. For a novice investor it was a near-impossible task. But, even if the investor in question possessed the necessary knowledge and expertise, it is unlikely they would have had the time and patience to manage such a long list of assets. Transaction costs were another obstacle.

Today, we can build a diversified equity portfolio with just £100 or £200. All we need is to purchase one share on the appropriate ETF. From this foundation, investors may build out more complex strategies while staying diversified. We can all manage our retirement funds, starting with a more aggressive strategy early in life and then switching to a more conservative allocation when the time for retirement nears.

About Filipe

Filipe has been a contributor to Master Investor since the earliest years. His specialisation is monetary policy, macro issues and behavioural finance where he allies the practical experience of several years of trading with academic credentials. Filipe in fact teaches courses on Financial Markets and Monetary Economics at the University of Oporto Faculty of Economics, helping traders maximise profits and better manage risk.

BY DAVID JONES

CHART NAVIGATOR

ARE MAJOR COMMODITY MARKETS ON THE TURN?

David Jones applies his charting skills to the commodities markets, to see which natural resources might be about to 'bounce'.

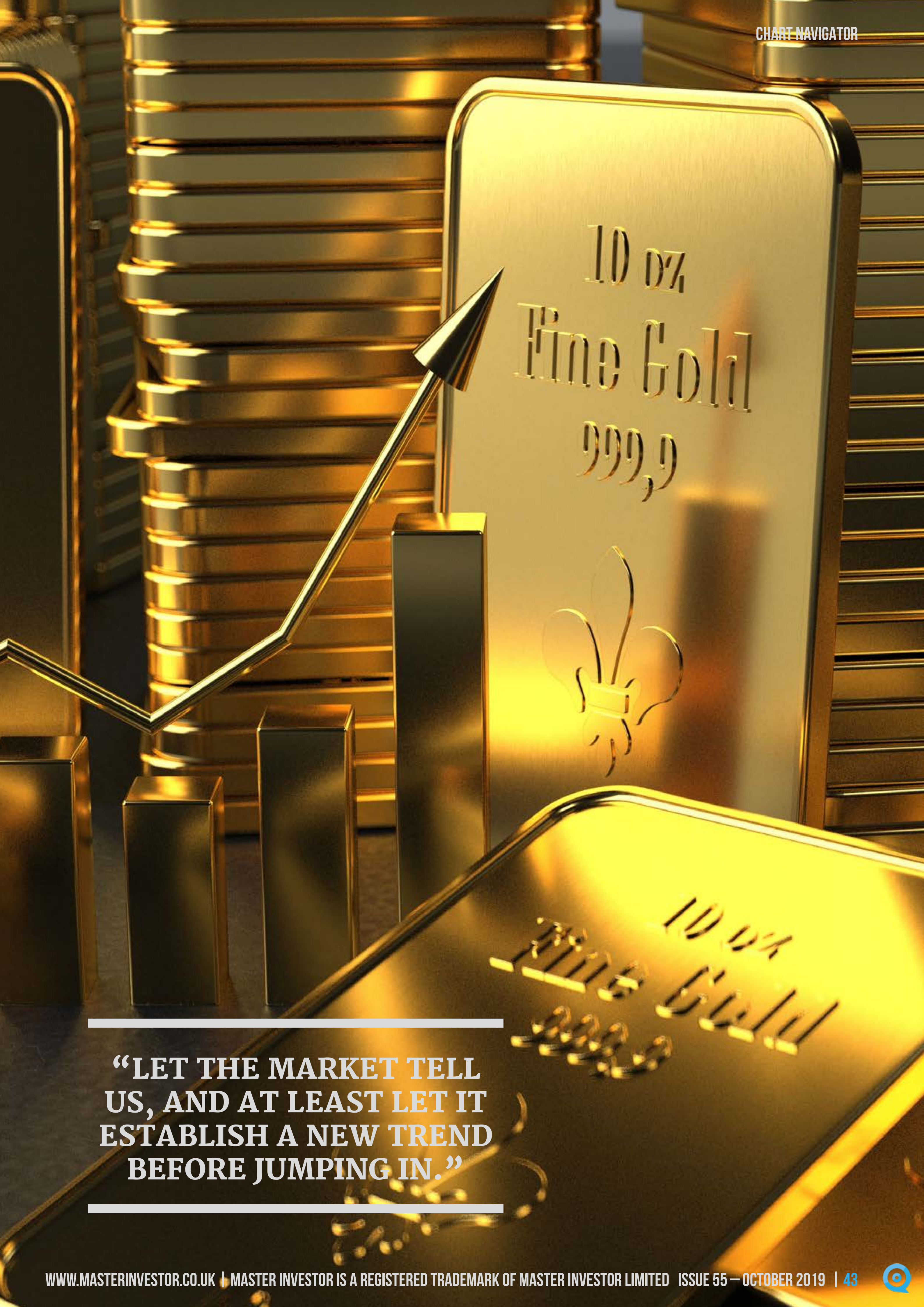
Like a lot of chartists, I tend to follow a mix of different markets, and I think something interesting has been happening with the trends in some major commodities in recent months. Markets that had been consistently losing ground are showing sustained strength, suggesting that there could be some new trends getting underway in these assets. So, this month I thought I would focus on some of the more interesting commodities for those investors and traders with a more medium-term bias.

Does charting work for commodities?

I am going to use a broad-brush term when it comes to defining commodities. For me, it can encompass agricultural commodities such as cocoa and coffee; livestock such as cattle and pigs; metals such as copper and silver; and of course, energy commodities like oil and natural gas.

The simple answer as to whether charting works in these markets is, as far as I am concerned: yes. I have been a technical analyst for 25 years and have mentioned in previous articles that I am not a fan of the more esoteric approaches to market analysis, such as Fibonacci for example. But all markets do trend – whether that is up, down or sideways – and there comes a point when a downtrend stops, positive sentiment returns and a recovery gets underway. If you are looking at price charts, for any market, these turning points are always easier to spot in hindsight than in real time. But they *do* happen – and here are some markets that I think are worthy of attention in the months ahead.

“REGARDLESS OF THE MARKET, IF AN INVESTOR IS TRYING TO SPOT A TREND REVERSAL JUST BY FOLLOWING PRICE, I THINK THE SIGNS TO WATCH OUT FOR ARE UNIVERSAL – AND RELATIVELY SIMPLE.”



"LET THE MARKET TELL US, AND AT LEAST LET IT ESTABLISH A NEW TREND BEFORE JUMPING IN."

The signs a market is turning

Regardless of the market, if an investor is trying to spot a trend reversal just by following price, I think the signs to watch out for are universal – and relatively simple. Gold in the last quarter of 2018 is a great example of this.

I think this is a really clear example of the sort of 'set-up' that can indicate a market is reversing a major trend. The gold price had been in decline for more than four months, losing more than 15% along the way. In August 2018 there was nothing to suggest that this trend was over, so no reason to buy.

But it can be seen that in early October, it broke out of this trend, which was the first sign that perhaps the positive sentiment was coming back – and then the sell-off in November set up another higher low. We now had the makings of a new trend. It is worth noting that by August 2019 the price of gold had hit $1,550, so this has proved to be quite the turnaround so far.

What we can take from this gold example is that major turnarounds usually take time to play out. As investors and medium-term traders, we need patience to see if a new trend forms. Sitting on hands is an important quality here and one that plenty will struggle with. The idea is not to buy into a falling market and just cross your fingers hoping the price will change direction. Rather, let the market tell us, and at least let it establish a new trend before jumping in.

Should I cocoa?

I have to hold my hands up here and admit to knowing next to nothing (or probably more accurately, nothing) about cocoa. But I did buy it during September as I wondered whether we were seeing a shift similar to that in gold.

This is a much longer-term chart for cocoa when compared to gold, but the sentiment principle is the same. The price has been in decline for 18 months from the end of 2015 through to May 2017. There is the sharp move towards 3,000 in 2018 – which is then retraced by the last quarter of the year. But price has formed a new trend over the past couple of years, which makes it an interesting market to watch.

Gold (US$) March – December 2018

"IT IS WHAT IS GOING ON WITH PRICE THAT IS ALL IMPORTANT FOR THESE MAJOR REVERSALS – AND WHETHER AS INVESTORS OR TRADERS WE WANT TO GET INVOLVED. THE FUNDAMENTALS CAN TAKE CARE OF THEMSELVES."

Perhaps this is a good opportunity to talk a little about the fundamentals behind the rise. While I have bought cocoa, I don't really know why it has been recovering over the last few years – and I am also not that bothered. A quick search suggests that demand remains particularly strong in developed markets such as Europe – and perhaps emerging markets such as China will increase their taste for chocolate and further raise demand. But I would argue again that it is what is going on with price that is all important for these major reversals – and whether as investors or traders we want to get involved. The fundamentals can take care of themselves.

The price of copper is one that has historically always been closely watched. Due to its use in so many areas – for example, in electrical wiring – it has often been seen as a barometer for the overall health of the global economy. Since the summer of 2018, the price has declined by around 20% and it is fair to say we have seen a slowing in the global economy – and fears of a much sharper contraction. But looking at the price of the metal in isolation, it is another market that is interesting at these levels. Over the last couple of years, the $2.50 per pound level has proved to be a strong floor for the copper price and we have regularly seen buyers willing to step in at these levels and stop a decline.

In recent weeks this has proved to be the case again, setting up the potential for a major revision in the trend. This is where patience is key. While the aggressive trade would be to jump in now on the assumption that the level is going to hold once more, that's not the approach I favour for these longer-term turnarounds. That downtrend for the $3.00 area is still holding and the price really needs to crack $2.70 to show signs of shaking that off. Even then, waiting for that new trend to be established would be the more disciplined

Cocoa ($US) November 2015 to present

Copper ($US) December 2016 to present

Coffee August 2014 to present

approach. But the price continuing to hold above those historical $2.50 lows is an important first step for this potential major reversal.

A commodity that does not appear to be on the turn is coffee. The price has more than halved over the last five years and although there is the occasional rally, that longer-term downtrend remains unthreatened for now.

Historically, the level where a pound of beans costs $1 has been an important one – but recent months have seen the price oscillate around here. To try to establish a new trend along the lines of the gold chart highlighted at the beginning of the article would initially mean a move through that trend line – around the $1.10 mark. But I think caution is again the watch word here. It has been in decline for so long that I think the prudent investor would want to see at least a few weeks of a new trend forming, rather than just blindly buying a trendline break in the hope there are greener times ahead for coffee beans.

I hope these examples illustrate that there is more to life than foreign-exchange and stock-market indices. The basic principles of charting apply across all sorts of heavily traded markets – after all, what we are doing is looking at the actions of those involved in that market whether it happens to be the euro, the Dow or frozen concentrated orange juice. Major trends can be found in all these different markets – and the price action of reversals often does not differ from one asset type to the next.

Chart of the Month

Silver December 2015 to present

Continuing the theme of commodities, the chart of the month shows one that has been particularly hot recently – and which I have written about in my past foreign-exchange articles in this magazine.

The price of silver has enjoyed some explosive moods since early July. Back then it was trading around $15 an ounce – but in early September had briefly pushed above $19.50. The basic principles outlined for the trend reversal had been met – since October last year, silver has been making higher lows and has broken out of that downtrend that had been in place for the past three years. The volatility recently has admittedly been somewhat off the scale, but it doesn't change the fact that the recovery is still intact. it is perhaps not a market for the meek just yet – but assuming things calm down to more normal trading, for now at least any weakness in the price of silver looks to be a buying opportunity.

About David

David Jones qualified as a technical analyst in 1995 and started his City career as a currency analyst. He then went on to work for trading companies CMC Markets and IG Group as Chief Market Strategist. Since leaving the industry in 2013 he has been a presenter on BBC Radio 5 Live's Wake up to Money programme and the Chartist for Shares magazine. He is an active trader and private investor.

BY NICK SUDBURY

FUNDS AND TRUSTS IN FOCUS

THE BEST FUNDS FOR YOUR PENSION

Nick Sudbury explores some of the best ways to invest for retirement using funds and trusts within your pension portfolio.

A pension is far and away the most tax efficient way of saving for your retirement, but unless you are lucky enough to have a defined benefit scheme, the final income will depend on how much you contribute and the performance of the investments that you hold within it. This is particularly the case if you are one of the growing number of retirees who opt to take their benefits via income drawdown rather than as an annuity.

Before the introduction of pension freedoms in April 2015, most people used the money in their retirement fund to buy a fixed or inflation-linked income for the rest of their life. Annuities offer security of income, yet the rates have plummeted in line with gilt yields to the extent that a £100,000 fund would only buy a 65-year old a fixed annual income of £4,654.

Annuity rates are now 14% lower than at the start of the year and are close to their all-time lows. Fears of a no-deal Brexit and a slowdown in the global economy have increased the cost of buying the secure investments that insurers use to underpin the monthly payments.

The low rates have put many people off, which is why a growing number have opted for the more flexible alternative of income drawdown. This enables them to withdraw up to a quarter of their fund tax-free with the remainder staying invested, from which they can take an income.

In the second quarter of 2019, a record 336,000 people withdrew money from their pensions in this way, with the average amount taken out per person being £8,200 for the three-month period. In total, over £28bn has been flexibly withdrawn from pensions since the changes were introduced in 2015.

Pension portfolio

How you invest your pension fund will depend on what other savings and financial commitments you have, your risk appetite and how long you have to go until retirement.

When you start saving you will be in the accumulation phase where you are able to top up your investments using your regular pension contributions. Gradually, however, you will start to move to a position where you need to rely on the money you have built up for your retirement and all of your spending.

Adrian Lowcock, head of personal investing at Willis Owen, says that this is a big shift and has a huge impact on investing:

"The inability to add extra money when markets or an investment falls means that the volatility is much more important; every fall in value is likely to be keenly felt as it can impact the long-term income you get from your investments. Capital preservation is therefore absolutely critical the closer you get to retirement."

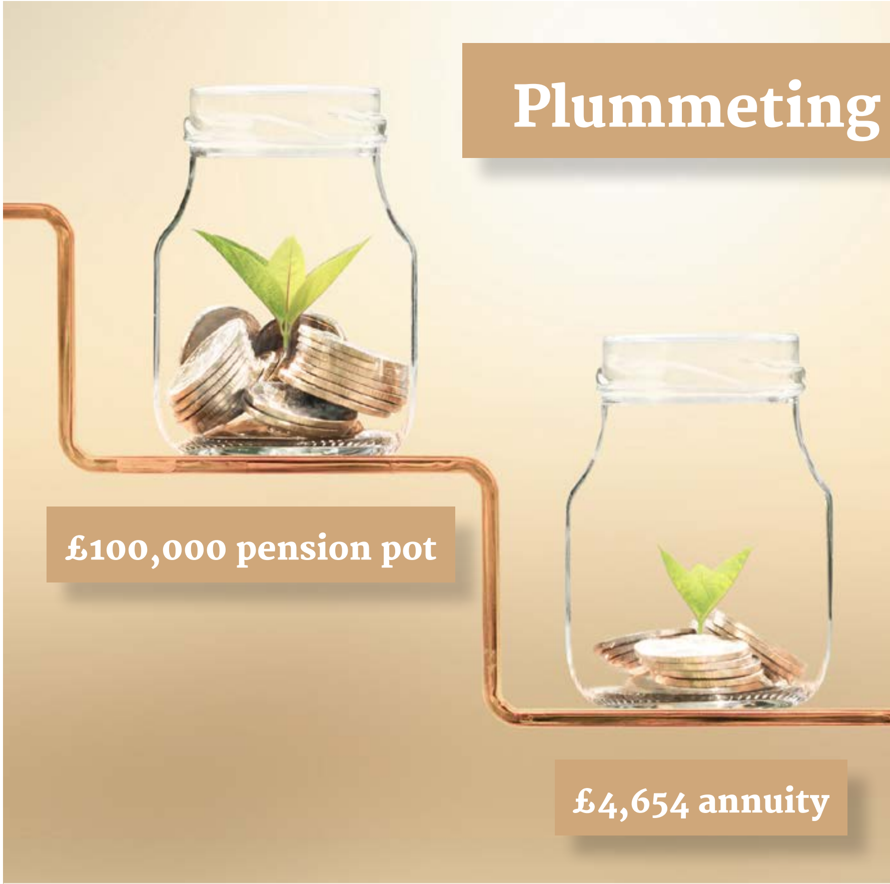
The other key factor is the impact of inflation, as this will affect your standard of living. It is now perfectly possible to be retired for more than 30 years, in which case even low inflation would halve your spending power – hence the need for your investments to achieve capital growth and a rising level of income.

Just starting out

For someone who is just starting a pension in their twenties, retirement may seem like a long way off, but the sooner they start

"ANNUITY RATES ARE NOW 14% LOWER THAN AT THE START OF THE YEAR AND ARE CLOSE TO THEIR ALL-TIME LOWS."

Plummeting annuities



A £100,000 pension pot would buy a 65-year-old a fixed annuity of £4,654

saving, the easier it will be to provide themselves with a more comfortable lifestyle once they stop working.

Patrick Connolly, a chartered financial planner at independent financial planners, Chase de Vere, says that if they're prepared to accept the risks, younger people can take a fairly aggressive approach to their investments:

"This means holding most or all of their money in equity funds, as they will be investing for a long time and so are able to ride out any market volatility."

Young people in this age group who are making regular payments into their pension, will find this helps to negate the risks of market timing over the long term. Adding to holdings on a monthly basis enables them to benefit from pound-cost averaging, with the normal price fluctuations being evened out by the slow drip feeding of new money into the market.

It is also important to appreciate the significant impact of fund charges on the potential returns when investing over such a long timeframe. For example, a monthly investment of £500 for 30 years into a fund that grows at seven percent per annum with an annual fee of one percent would produce a lump sum of £484,000. If the fee was 0.1%, which is more akin to a passively managed tracker fund, the final figure would be £577,000, assuming it can generate the same high return.

Funds to get underway

For a pension saver in their twenties, Connolly recommends the **HSBC FTSE All-Share Index**, a tracker fund that aims to replicate the performance of the All-Share index. It offers a low-cost way to gain broad exposure to the UK stock market, with charges of only 0.07% per annum.

For those who would prefer an actively managed fund he suggests **Rathbone Global Opportunities**, which he says has been managed by James Thomson since 2003, and in that time has established a strong track record. The fund invests predominantly in the US and Europe with the manager adopting a flexible approach, as he searches for under-the-radar and out-of-favour growth companies.

Thomson has put together a concentrated 60-stock portfolio that represents his highest conviction, best ideas. Two-thirds of the fund is currently invested in the US and it is a first-quartile performer over one, three and five years, comfortably outperforming its global sector peer group.

Connolly also likes **Liontrust UK Smaller Companies**, which is a higher-risk fund with a strong investment team and an excellent track record. The fund seeks to invest in companies which have a sustainable advantage that is difficult for its competitors to replicate. This could be having high recurring income, distribution networks or intellectual property such as brand and culture.

It is on the large size, with £1bn of assets under management and has a concentrated 68-stock portfolio with 72% of the assets invested in AIM-listed companies. Since the fund was launched in 1998, it has generated twice the return of its smaller companies peer group and five times the return of the FTSE Small Cap benchmark.

Ten years to go

Someone who is 10 years away from going into income drawdown should still have a high element of growth in their portfolio as there is plenty of time to grow the pot further.

Darius McDermott, MD of FundCalibre, says that they may want to consider starting to take some of the risk out slowly over the decade: "We would suggest a portfolio could be as high as 80% equity at this point and maybe reduce a little more each year in the run up to retirement."

One of the funds he recommends for someone in this position is **JOHCM Global Opportunities**, which gives some good geographical diversification and has a manager who thinks first and foremost about capital preservation.

"IF YOU OPT FOR DRAWDOWN, IT IS IMPORTANT NOT TO BE FORCED TO SELL INVESTMENTS AT A BAD TIME OR TO LEAVE YOURSELF VULNERABLE TO A CUT IN DIVIDEND YIELDS."

It is a high conviction, benchmark-unconstrained, stock picking fund that currently consists of just 33 different holdings. Since it was launched in June 2012, it has generated annualised returns of 14.6%, compared to the 13.4% achieved by the MSCI World benchmark.

Another of McDermott's top picks is the £1.6bn **City of London Investment Trust (LON:CTY)**, which has been managed by Job Curtis since 1991. The shares are yielding 4.4% and net gearing is a modest nine percent. As McDermott explains:

"City of London mainly invests in larger UK companies and has raised its dividend each year for the past 52 years. It has the scope to dip into its revenue reserves to continue raising dividends even when times are bad."

Alternatively, he suggests the **VT Gravis UK Infrastructure Income** fund, which invests in infrastructure investment trusts. This has a low correlation to the state of the economy and produces a solid income that can be reinvested.

The aim of the fund is to preserve investors' capital throughout market cycles, while offering the potential for capital growth and protection from inflation. It provides exposure to a varied range of UK infrastructure assets including solar and wind farms; electricity and water; healthcare; properties; housing; and accommodation. Since it was launched in January 2016, it has returned 31% and has achieved a historic yield of 4.6%.

Preparing for income drawdown

Ben Yearsley, a director at Shore Financial Planning, says that the most important thing to remember is that the majority of people entering drawdown will probably have longer to live than they think, which means that they will need to rely on their pension for longer:

"It could be up to 30 years that you need your pension pot to sustain you. This means that for many people they need to keep growing their capital into old age and therefore have to take a higher risk than they would think is needed – in other words, a higher percentage of equities."

In the 'old days' when annuities were the norm, most people significantly reduced the risk in their pension in the run up to retirement in order to safeguard the value of the fund prior to the annuity purchase:

"This is no longer the case, as the level of equities you need is determined by how much you need your pension to grow, but at least half of the fund, if not a much higher proportion will need to be invested in equities," explains Yearsley.

If you opt for drawdown it is important not to be forced to sell investments at a bad time or to leave yourself vulnerable to a cut in dividend yields. The best way to avoid this is to have a healthy cash balance to live on and top it up with the natural income from your drawdown portfolio and state pension.

Drawdown portfolio

Retirees will want as high an income as they can get from their pension fund, but the trade-off is that the more they take out, the less chance that their remaining money has to grow. The safest compromise is to withdraw the natural yield of the portfolio, which if fully invested in equities is currently equivalent to about four percent.

Yearsley says that equity income makes a good core for a drawdown portfolio as it offers a high natural yield, with the money invested in companies that are generating cash and trying to grow both their dividends and capital.

His first pick in this area is **Franklin UK Equity Income**, which he describes as a core UK equity income fund that is mainly invested in large-cap stocks. The £760m portfolio aims to generate an income that is higher than that of the FTSE All-Share, together with investment growth over a three-to-five-year period.

Since it was created in October 2011, it has generated an annualised

Flexible retirement strategy

Nathan Long, senior analyst at Hargreaves Lansdown, says that when people finish work for good they'll generally benefit from having sufficient secure income from the state; a defined benefit pension and an annuity to cover their essential spending needs; and that the flexibility of drawdown can be used to provide for the retirement nice-to-haves:

"An alternative approach is to remain invested while drawing only the natural income produced and buy several smaller annuities using tranches of your pension as you get older. This allows gradual de-risking of your overall pension, reduces the risk of using all your money to buy an annuity at one point in time and allows you to shape your retirement based on your changing circumstances."

FUND OF THE MONTH

One fund that would be suitable for most pension pots is **Fidelity Global Dividend**. It has been managed by Dan Roberts since its launch in 2012 and he is well supported by six other regional income specialists, as well as Fidelity's extensive analytical research resource.

Roberts' philosophy is to focus on quality companies that offer a good degree of capital protection during market downturns. This means that the fund can lag in roaring bull markets, but it has still successfully outperformed during the manager's tenure.

By conducting a detailed examination of the investable universe, he is able to identify companies with stable finances and strong cash flows that underpins the reliability of their dividend pay-outs. The fund targets 125% of the yield on the benchmark MSCI World Index.

Roberts has put together a concentrated 43-stock portfolio that provides exposure to all the main investment regions. He currently favours Europe ex UK and the UK, while being substantially underweight in the US. Since it was launched it has returned 148%, which is 10 percent more than its benchmark.

Fund Facts

Name:	Fidelity Global Dividend
Type:	OEIC
Sector:	Global Equity Income
Total assets:	£1.3bn
Launch date:	January 2012
Historic yield:	2.62%
Ongoing charges:	0.92%
Website:	www.fidelity.co.uk

return of 8.8%, which is pretty much the same as its benchmark, but has produced a higher historic yield of 4.6% with quarterly dividends.

Yearsley also recommends the £193m **Troy Global Income**, which focuses on quality global companies with predictable cash flows and strong balance sheets.

The manager looks for high-quality income at the right price, which should help to ensure that the fund is able to achieve long-term income growth, while avoiding the permanent loss of capital. Since it was launched in November 2016, it has slightly lagged behind the MSCI World Index, albeit with lower volatility and it is currently yielding 2.7% with quarterly dividends.

His other suggestion is **First State Global Listed Infrastructure**. This is a long-term fund that owns real assets that are often essential to the economy and which have some element of inflation linking in their income streams.

The £1.9bn portfolio currently has positions in 49 different international infrastructure companies that provide exposure to everything from electric utilities to highways and railroads. Since it was launched in October 2007, it has generated an impressive cumulative return of 232% and is yielding 2.8%.

A pension is the most tax-efficient vehicle to save for your retirement, but it is essential to invest in the right mix of funds if you are to get the best out of it. Your investment objectives will change as you get older, yet it is important to appreciate that you will still need to grow your capital and income even after you've gone into drawdown.

About Nick

Nick Sudbury is an experienced financial journalist who has written extensively for a range of investment publications aimed at both private and institutional investors. Before moving into journalism he worked both as a fund manager and as a consultant to the industry. He is a fully qualified accountant and has an MBA with finance specialism.

BY JOHN KINGHAM

DIVIDEND HUNTER

SHINING A LIGHT ON HIDDEN DEBT

CAPITALISING LEASE OBLIGATIONS

John Kingham looks at lease obligations and why fixed lease obligations should be capitalised on the balance sheet.

Unless you're an accountant or an experienced and well-read investor, the chances are you either haven't heard of capitalising lease obligations or, if you have, it's something you don't do because it can be a lot of work.

Until recently I fell into the second group. I knew what lease capitalisation was (don't worry if you don't; I shall explain all shortly) but I didn't do it because a) none of my investments so far have had problems with crippling lease obligations and b) it was a lot of work.

However, the argument (or excuse) that it's all too much work is about to become null and void, thanks to a new accounting standard known as IFRS 16: Leases.

This new standard is about to shine a light on what was previously a dark and largely hidden debt, so now seems like a good time to review the basics of lease obligations.

Why renting often makes sense

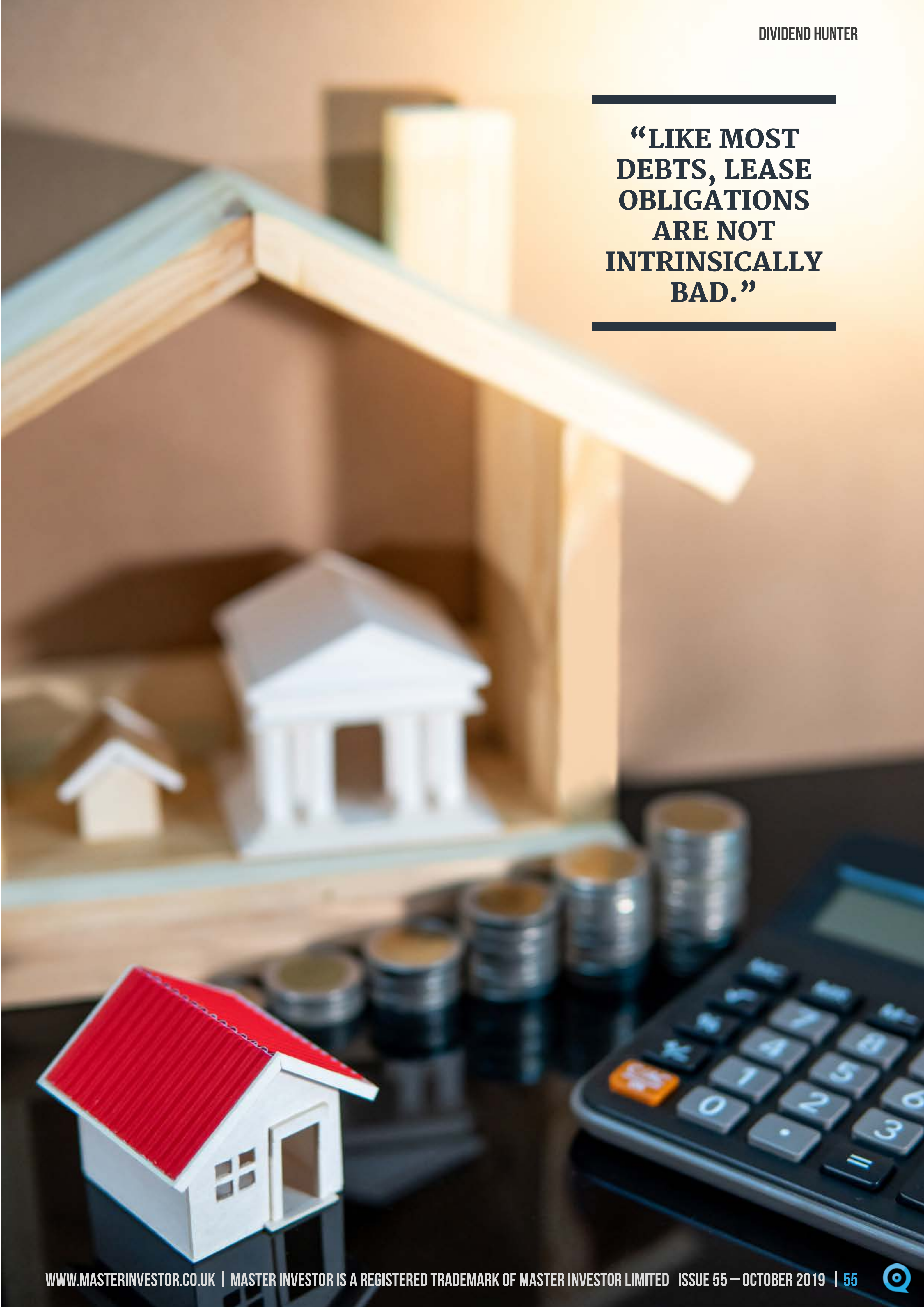
Like most debts, lease obligations are not intrinsically bad. For example, let's say you wanted to start your own retail business. You go to a bank, take out a 20-year interest-only loan for £1 million and use it to buy a large store on your local high street. After five years of hard work the business isn't doing well, and you blame the location. You want to move to a nearby high street, so you decide to sell. Unfortunately the economic environment is weak and the best offer you get for the store is £700,000.

You now have a dilemma. You either stay where you are in a suboptimal location, or you take a £300,000 capital loss on the chin. Either way, your business is being affected to an enormous degree by commercial-property price movements, and that's unfortunate, because your core skill is retail and not property speculation.

However, in contrast to buying, leasing can give retailers (and other companies which depend on expensive capital assets, such as those operating in the travel and leisure or industrial transportation sectors) the right to use a property or other asset for a fixed period of time for a more or less fixed fee. This removes most of the risk associated with asset ownership, but there are downsides as well.

Why fixed lease obligations are a form of hidden debt

The main downside is that a fixed lease obligation is almost exactly the same as a debt obligation. You have regular fixed payments to make, and if you miss payments, the leasor (eg the landlord) can take you to court. I wouldn't say that leasors can't be bargained with, can't be reasoned with or that they absolutely will not stop, ever, until they get their payments, but you get the idea.



"LIKE MOST DEBTS, LEASE OBLIGATIONS ARE NOT INTRINSICALLY BAD."

"IT'S TRUE THAT LONG LEASES ARE TYPICALLY CHEAPER THAN SHORT LEASES, BUT THE ADDITIONAL RETURNS ARE OFTEN NOT WORTH THE RISK OF TAKING ON SUCH A LONG AND INFLEXIBLE OBLIGATION."

In fact, you can take the debt analogy even further. Let's say you leased a shop for a fixed monthly rent for five years. However, instead of paying the rent monthly, you decide to borrow enough money from the bank so you can pay all the rent upfront. Now you have the same right to use that property for five years, but you're making monthly payments to the bank rather than the landlord. In terms of cash flows, these two scenarios would be virtually identical, so thinking of lease obligations as a form of hidden debt really does make a lot of sense.

One caveat is that debt-like lease obligations have fixed payments. If lease payments are variable, perhaps being paid as a percentage of revenues or some other variable factor, then the lease isn't a debt obligation; it's just an ongoing expense. For example, a revenue-based lease might see lease payments fall by 10% if your revenues fell by 10%. That's great for the leasee as it's much more flexible, but it isn't how debt works, so for now we'll ignore variable or contingent lease liabilities.

Why fixed lease obligations should be on the balance sheet

The balance sheet is where we record the assets of the company (eg cash, stock, equipment, property) and its liabilities, ie those who have a claim on the assets (eg shareholders, debtholders, suppliers and governments).

With an operational lease, the company doesn't own the thing it's leasing, so no asset is recorded on the balance sheet. And if there's no asset, there can be no related liability. But if a fixed lease obligation is effectively the same as having borrowed money today to pay for a multi-year lease up front, then the obligation should be on the balance sheet.

This might sound like a load of accounting minutiae, but it isn't. And here's why: fixed lease obligations can

have a major impact on a company's risk profile and profitability.

How fixed lease obligations increase risk

Excessive debt is a common cause of dividend cuts and corporate decline. It's why I have strict rules about how much debt a company can carry, and it's why Warren Buffett generally prefers companies with "little or no debt".

As a relatively fixed expense, large debt interest payments amplify small changes in revenue into large changes in profit. So companies with lots of debt often do well when revenues are going up, but when revenues go down those debt interest payments can quickly become unaffordable.

The same is true of fixed lease obligations. If rental payments are large relative to profits, small declines in revenue can become large declines in profit.

The length of the lease is another risk factor. Long leases (typically more than five years) lock the leasee into fixed payments far into an uncertain future. If a retail store starts to struggle and it has 15 years until the lease expires, getting out of the lease early can be extremely difficult and expensive.

Contrast that 15-year lease with a store that has a couple of years until the lease is up for renewal. With such a short lease the retailer only has to suffer weak profits for at most two years before it can either exit the lease at little or no cost or renegotiate the rent downwards.

It's true that long leases are typically cheaper than short leases, but the additional returns are often not worth the risk of taking on such a long and inflexible obligation.

How fixed lease obligations flatter profitability

Return on shareholder equity (ROE) is arguably the best measure of a company's performance over the long term. However, the problem with ROE is that it's easy to boost with borrowed funds.

For example, a company could borrow millions to buy factories, machinery, computers, software and who knows what else. Somewhat simplistically, the value of the assets and the outstanding loan liability will negate each other on the balance sheet, so there is no change to shareholder equity. But any profits those assets generate above and beyond the cost of the loan and the depreciation of the assets will flow straight into the return side of the ROE ratio.

It's a bit like buying a house. If you pay for the house out of your own money and its price doubles then your gain is 100%. But if you buy a house and borrow 90% of the value (leaving you with 10% equity) and the price doubles, then you have a 1000% return on your investment (ignoring costs).

So, if we look at ROE and ignore debt then we're at risk of buying companies with exceptional ROE but only because they have mountains of very risky debt.

We can get around this problem by looking at return on capital employed (ROCE), where capital employed is the sum of shareholder equity and interest-bearing debt (usually called borrowings). Since companies that increase their debts will also increase their capital employed, ROCE is much less affected by debt than ROE.

You can also think of ROCE as the risk-adjusted version of ROE. It's basically asking what the ROE for this company would be if it raised new capital from shareholders to pay off all of its borrowings and become debt free. It effectively levels the playing field as far as borrowings are concerned.

However, ROCE doesn't take the hidden debt of fixed lease obligations into account, and I think it should. Why? Because there's effectively no difference between taking out a 10-year lease and paying for it upfront with borrowed money or paying monthly rent where the rent payments are the same as they would be for the loan. And if that's true, then the present value of those future lease obligations should be added to the ROCE figure along with shareholder capital and debt capital.

This would give us a return on lease-adjusted capital employed figure (ROLACE), or as I like to think of it, a debt-adjusted lease-adjusted return on equity figure. It tells us the returns a company would produce if it raised enough cash from shareholders to pay off its debts and also pay for all its leases upfront.

Why almost nobody lease-adjusts capital employed

If turning a company's fixed lease expenses into a debt obligation on the balance sheet is so sensible, why do so few investors do it?

The answer is that it's a lot of work to calculate an estimated present value for future lease obligations (otherwise known as capitalising lease obligations). It's a lot of work because most companies don't provide very usable data on their leases. What you'll find is current rental payments, which is a bit like having monthly repayment numbers for a loan but little or no information on the repayment term of the loan.

What most investors do is take historic rental figures (usually called minimum lease payments in annual reports) and multiply that by an industry standard multiplier. 'Rent times eight' used to be a widely used rule of thumb, but recently that seems to have shifted to six-times. Either way, it's an estimate and a ballpark estimate at that. But it's better than nothing, so I'm going to start using a multiplier of six-times minimum lease payments to calculate ROLACE for lease-heavy stocks on my stock screen.

This isn't perfect, because a fixed multiplier overstates lease obligations for companies with very short leases (eg less than five years) and understates them for companies with very long and potentially much riskier leases (eg 10 years or more). But a stock screen is by its nature a blunt tool, and capitalising leases in this way will still provide much more accurate profitability numbers than not capitalising them at all.

Once you start analysing a company in detail it will be a good idea to have more accurate figures. Fortunately, it is possible to do better than using a simple six-times rent multiplier, but it's even more work and it's still just an estimate.

You start off by getting the total minimum future lease payment figures from the company's annual reports, which are usually buried somewhere in the notes at the back. This sounds like exactly what we need, but the amounts are lumped together based on the remaining lease length, ie "£500 million due in less than one year", "£750 million due in one to five years" and "£900 million due in more than five years". So, the data is coarse rather than fine, and on top of that you have to estimate a reasonable discount rate (say 5%) to calculate the present value of future obligations.

It's a very time-consuming way to get what is essentially an estimate, and that's why almost nobody does it even though the end result is worthwhile.

A few examples

To make all this a little more concrete, let's take a look at a few real examples to see just how much impact lease-adjusting returns on capital employed can have. These are mostly examples of retailers and other lease-dependent companies I own at the time of writing, and the lease capitalisation is done using the simple six-times minimum lease payments rule:

Burberry (LON:BRBY): I've owned Burberry for a few years. It's generally regarded as a quality retailer and it's been a very successful investment so far. Over the past decade it produced average returns on equity of 24%, which is very good. If we add in the company's relatively small debt pile then we get average ROCE of 21%, which is also very good. If we take the next step and add in estimated capitalised lease obligations then we end up with a 10-year average lease-adjusted ROCE of 12%.

A 12% return on capital, including lease obligations, is very good, but it's a long way short of the company's 24% return on unadjusted equity. Just to clarify, what I'm saying here is that if Burberry had carried out a rights issue to pay off all its debts and pay all of its fixed leases upfront, then it would have produced ROE of about 12%.

As a general rule, I'm aiming for at least a 10% annual return, so if a company can produce annual returns of more than 10% on its debt-adjusted, lease-adjusted equity (ROLACE) then I'm reasonably confident that earnings retained within the company are likely to benefit shareholders.

The Restaurant Group (LON:RTN) (which I'll refer to as TRG): I've owned TRG for a few years; many investors now wouldn't touch it with a bargepole and it's been a pretty bad investment so far. Pre-2016 (before the company recorded a loss and before its shares fell off a cliff), it produced average ROE of 27%. That's very impressive and even beats Burberry's ROE figure.

Add in TRG's then relatively low debts and that pre-2016 ROE figure turns into a very high 20% ROCE figure. So far so good, and at this point TRG is looking like a very profitable business, which makes sense because pre-2016 it was growing rapidly. However, TRG is a heavy user of leased restaurants; so heavy in fact that its capitalised lease liability typically exceeds debt capital and equity capital. Once we factor in these lease obligations, lease-adjusted ROCE falls to just 9%.

There's a big difference between a 20% ROCE and a 9% ROLACE, and at this point TRG begins to look a lot less attractive. With hindsight, I think it's likely that I wouldn't have invested in this company had I realised just how dependent its returns were upon large fixed lease obligations.

Next (LON:NXT): here's another retailer which I've owned for a while. Like Burberry, it generally has a good reputation, although like most retailers its reputation has taken a hit in recent years. Next generated average returns on equity over the last 10 years of 161%, which is, quite frankly, ridiculous. A more sensible (but still very high) value for profitability appears when we add in debts, giving Next an average ROCE of 51%. That is still extraordinarily high, largely because it ignores the hidden debt of lease obligations.

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"NEXT GENERATED AVERAGE RETURNS ON EQUITY OVER THE LAST 10 YEARS OF 161%, WHICH IS, QUITE FRANKLY, RIDICULOUS."

Willy Barton / Shutterstock.com

"ALL WE HAVE TO DO IS LOOK AT THE LEASE OBLIGATION ON THE BALANCE SHEET AND ADD THAT TO SHAREHOLDER EQUITY AND BORROWINGS TO GET A LEASE-ADJUSTED CAPITAL EMPLOYED FIGURE."

It's only once we factor in leases that Next's profitability starts to look more reasonable, with the company's average ROLACE coming in at 22%. That is still exceptionally high, but it's far more representative of Next's true risk-adjusted returns than either 161% or 51%.

Marks & Spencer (LON:MKS): I used to like M&S as a customer, but I've never owned it as an investor. The company has been struggling for many years and from 2017 onwards its earnings have basically collapsed. If we look at pre-2017 earnings (when things were going relatively better) we see a company with ROE declining from around 24% in 2010 to 12% in 2016. That isn't a confidence-inspiring trend, but at least it was producing double-digit returns on shareholder equity.

However, take debt into account and M&S's pre-2017 profitability falls to an average 10% ROCE. That's about average for UK companies and just about passes my minimum threshold. But we're still ignoring lease obligations at this point. Once fixed lease obligations are capitalised and added to capital employed, we get an average pre-2017 figure for ROLACE of just 7.4%.

A 7.4% ROLACE isn't horrendous, but it isn't great either. It's below average and it shows that M&S just wasn't earning sufficient returns once debt and lease obligations were accounted for.

In addition to these four companies, I've looked at other lease-dependent companies and there's a clear pattern: robust companies tend to have higher returns once debts and leases are factored in, while more fragile companies tend to have weaker returns. I'm not sure this would stand up in court or in a PhD thesis, but it's more than enough to convince me that I should be looking at ROLACE rather than ROE or ROCE.

Why calculating ROLACE is about to get a whole lot easier

Fortunately, the good people at the International Accounting Standards Board agree that the current situation is not ideal, and that fixed lease obligations should indeed be on the balance sheet.

Their solution is International Financial Reporting Standard (IFRS) 16: Leases. This new standard makes it obligatory for companies to calculate a single figure for the present value of all future fixed lease obligations, with a few exceptions such as very short or small leases.

This rule comes into effect this year, and companies will have to start doing the hard work of capitalising fixed lease obligations themselves. As a result, we should start seeing a 'right of use' asset on the balance sheet along with a more or less equal lease liability in upcoming annual results.

This is excellent news and it will make calculating ROLACE a doddle, more or less. All we have to do is look at the lease obligation on the balance sheet and add that to shareholder equity and borrowings to get a lease-adjusted capital employed figure. Hopefully some data providers (Morningstar, ShareScope, SharePad etc.) will make this even easier by extracting the relevant figures for us and perhaps also calculating the ratio for us.

It isn't quite one giant leap for mankind, but it is a significant step forward for investors and balance-sheet transparency.

Return On Capital Employed (ROCE)

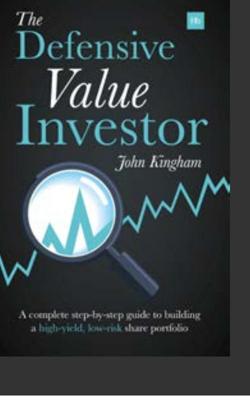
The technically correct way to calculate ROCE is to remove interest expenses from the returns side since we're effectively measuring debt-free profitability. For ROLACE, fixed lease expenses should also be removed because we're measuring profitability as if all fixed leases had been paid upfront. However, I calculate both ROCE and now ROLACE using profits net of interest and lease payments because a) it's easier and b) it makes heavily indebted, heavily lease-dependent companies look even less profitable, and that's fine by me.

About John

John Kingham is the managing editor of UK Value Investor, the investment newsletter for defensive value investors which he began publishing in 2011. With a professional background in insurance software analysis, John's approach to high yield, low risk investing is based on the Benjamin Graham tradition of being systematic and fact-based, rather than speculative.

John is also the author of *The Defensive Value Investor: A Complete Step-By-Step Guide to Building a High Yield, Low Risk Share Portfolio*.

His website can be found at: www.ukvalueinvestor.com.



BY DAVID JONES

FORENSIC FOREX

IS THE EURO SET TO PLUNGE FURTHER?

There are some big levels coming up for the EUR/USD exchange rate where we may actually see sentiment start to shift, writes David Jones.

With the Brexit discussions and the subsequent fortunes of the pound hogging the limelight for far too long, the euro has perhaps received less coverage than normal in financial commentaries. It has not had the best of times, losing around 7% versus the US dollar over the last 12 months – and reaching levels not seen in more than two years. This month, I thought we would take a look at the single currency in more detail to see whether this ongoing gloom is actually an opportunity for the contrarian trader and investor.

What's gone wrong with the euro?

We will take a look at the euro rate versus the pound later, but for now the benchmark in the foreign-exchange market is to quote the euro versus the US dollar.

As can be seen, it has been a poor performer over the past 18 months or so. Back in February 2018, one euro would buy $1.25, but now that exchange rate is more like $1.10. The euro has lost ground and has slipped back to levels last seen in May 2017.

EUR/USD November 2016 to present

"THE ECONOMIC SLOWDOWN IN EUROPE DOES NOT DESERVE ALL THE BLAME, BUT IT IS HAVING AN EFFECT."

In my opinion, it would be incorrect to apportion all the blame at the door of Europe and its various financial and business policies. Importantly, the US dollar has enjoyed a resurgence in recent years. The currency had a dreadful 2017 – its worst performance in more than a decade and that helped lift the value of other markets quoted against it, such as the euro. But this dollar pessimism changed and in September of this year the US Dollar Index, the greenback against a basket of other currencies, hit a two-and-a-half year high. Currency markets do not move in isolation, so when one is rising then something has to be falling. This US-dollar strength has clearly weighed on the euro.

Eurozone economy slows

The economic slowdown in Europe does not deserve all the blame, but it is having an effect. In the second quarter of the year so far, its economy grew by just 0.2%, citing a slowdown in global demand as the catalyst. This particularly hit the traditional economic powerhouse that is Germany, which earlier in the year narrowly avoided going into recession. The ongoing trade war and tariff threats between the US and China has done little to help business sentiment in Germany.

Currencies are often seen as a reflection of the health of an economic area, so this reduced level of growth is clearly taking its toll on the euro. Brexit is playing its part too of course; the lack of clarity about when it will happen, whether it will happen and what UK/EU trade will look like afterwards is also not helping business confidence. This has resulted in something of a tug of war between the euro and the pound (EUR/GBP) in recent years with the odd burst of excitement but little in the way of net change.

EUR/GBP July 2016 to present

Start the printing presses!

September saw the European Central Bank (ECB) announce a fresh package of stimulus to aim to kick start the economy. This saw the return of an old friend – quantitative easing (QE) – which had been put on hold since last December, and also an interest-rate cut to boot. Interest rates in the eurozone are now at a record low of minus 0.5%, which means it costs banks to have money sitting with the ECB. The hope is that this will give the commercial banks more of an appetite to lend to individuals and business, and that this filters through to an economic uptick.

What does the market think?

If you have read anything about QE in the past you are probably aware that it has been widely criticised, for the extra funds generated end up staying within the financial system and not finding their way out to the wider world. Perhaps in a nod to this, the ECB President, Mario Draghi, said it was time for individual governments to do their bit too, to try and stimulate their own economies.

Why the weakness could be an opportunity to buy the euro

When markets experience a prolonged trend, it is easy to think

"I DO NOT THINK WE ARE QUITE THERE YET IN TERMS OF 'PEAK-BEARISHNESS' FOR THE EURO."

that this will persist forever. When this is backed up by news supporting the trend it can further enforce that bias, and I think that might be the risk with the euro and eurozone at the moment. I have been wondering all year whether the euro would be the surprise performer in 2019, but I have to admit that I am running out of time for that particular nugget of market insight.

Nevertheless, trends do change, and I think there are some big levels coming up for the EUR/USD exchange rate where we may actually see sentiment start to shift – and the euro could start to look like a relative bargain.

Going back more than four years, there have been some significant turning points in the euro's fortune. Over this period, it has not spent a lot of time in the 1.04 to 1.08 region before starting a major turnaround. When it drops back to here, financial commentary normally steps up a level in hysteria with many calling for the euro to hit 'parity', where one euro has the same value as one dollar. It is precisely this moment when the market exhibits the quality of doing the opposite to what everyone is expecting, and rallying.

I do not think we are quite there yet in terms of 'peak-bearishness' for the euro; it is after all a currency that is still in decline. Over recent years these have been significant turning points, so trying to nail the absolute bottom in EUR/USD has not been that important. My expectations for the euro this year have gone unfulfilled, but I do think it's a very interesting market to continue to watch for the potential of a major turn as it approaches these significant historical lows.

EUR/USD February 2015 to present

About David

David Jones qualified as a technical analyst in 1995 and started his City career as a currency analyst. He then went on to work for trading companies CMC Markets and IG Group as Chief Market Strategist. Since leaving the industry in 2013 he has been a presenter on BBC Radio 5 Live's Wake up to Money programme and the Chartist for Shares magazine. He is an active trader and private investor.

BY ANDREW LATTO

QUALITY INVESTOR

INTERCONTINENTAL HOTELS

KING OF THE HOTEL FRANCHISORS

Hotel franchisors offer investors an attractive combination of quality and growth. Andrew Latto, CFA, looks at InterContinental Hotels as an investment opportunity.

Listed hotel operators are increasingly becoming franchisors. This offers a capital-light and low-risk business model. The sector benefits from growing business and leisure travel, with demand from emerging markets a key driver.

In the movie *The Founder*, Ray Kroc told the McDonald brothers: "There should be McDonald's everywhere ...franchise, franchise, franchise." The hotel industry has taken this message to heart. Franchising frees up capital and delivers a reliable income stream. Revenue is driven by franchisee activity rather than franchisee profitability.

InterContinental Hotels (LON:IHG) is a leading franchisor, with brands that include InterContinental, Crowne Plaza and Holiday Inn. US-listed hotel chains have also gone down the franchising route.

Marriot International Inc (NASDAQ:MAR) generated the majority of its revenue from franchise operations in 2018. Three quarters of **Hilton Inc's (NYSE:HLT)** total fee income is franchise driven.

The top five hotel chains (IHG, Wyndham, Hilton, Marriott and Accor) have seen their market share increase from 19% in 2012 to 24.9% in 2018. They also account for 58% of the global hotel-development pipeline.

Quality investors

Quality-focused investors like to invest in franchisors. The Fundsmith Equity Fund owns a 5.6% stake in InterContinental Hotels Group. Cedar Rock is the largest shareholder with an 8.2% stake. Cedar Rock says that it seeks to invest in quoted companies that it believes capable of compounding in value indefinitely.

“INTERCONTINENTAL HOTELS (LON:IHG) IS A LEADING FRANCHISOR, WITH BRANDS THAT INCLUDE INTERCONTINENTAL, CROWNE PLAZA AND HOLIDAY INN.”

WATimmer / Shutterstock.com

IHG share price since listing in March 2003

Source: SharePad

Wyndham Hotels & Resorts (NYSE:WH) was added to the Blue Whale Growth Fund in June 2018 and is now a top 10 position. The company franchises hotels in the economy and midscale segment, principally in the US and China.

The aeroplane and the automobile

Demand in the hotel sector is driven by travel and tourism. The 1950s saw car ownership take off and the jet engine make international travel affordable.

In 1958, there were 67 million cars registered in the US − more than twice the number at the start of the decade. In Europe, the package-holiday market came to life in the 1960s and 1970s.

The post-World War II hotel market, though, was very different to the one we have today. It was in large part made up of high-end establishments and independent operators of varying quality.

The rise of Holiday Inn

Kemmons Wilson founded Holiday Inn in 1952 to provide: "travelling families with comfortable and affordable accommodation they could trust." He had experienced poor-quality lodgings on a family road trip to Washington D.C.

The brand was franchised in 1954 and became the first hotel company to reach 300,000 rooms in 1956. In 1977, Holiday Inn introduced the first hotel reservation system, Holidex, which connected airlines and travel agents.

The group introduced the first loyalty programme in the 1980s and was the first international hotelier to open in China in 1984. Holiday Inn launched the Crowne Plaza brand in 1983 to cater to the business traveller and convention market.

The rise of chain hotels

John Willard Marriot opened "the world's first motor hotel" in 1957 in Arlington, Virginia. J.W. Marriott, Jr became chief executive in 1972 and led the company until 2012, at the age of 80. He currently serves as executive chairman.

Hyatt was started in 1954 with Hyatt Robert von Dehn and Jack Dyer Crouch opening a hotel near Los Angeles International Airport. The initial strategy of the business focused on opening high-quality hotels near major airports.

French hotel group Accor started when two businessmen opened a Novotel motel in Lille in 1967. The American motel concept inspired them to offer an alternative to independently operated hotels.

Pan American World Airways opened the first InterContinental Hotels in 1949. Pan Am president, Juan Trippe, and US president, Franklin D. Roosevelt, believed that hotels in key Latin American cities would help the region develop.

Boutique and niche hotels

Inspired by his travels in Europe, Bill Kimpton founded Kimpton Hotels & Restaurants in 1981, to offer something more "beautiful, liveable and stylish." Kimpton was the world's largest independent boutique-hotel chain in 2014.

An early Holiday Inn

Source: Marriott

Marriot opened the "first motor hotel" in 1957

Source: Marriott

Travel and leisure drive demand

The drivers of hotel demand are set to remain in place. The International Air Transport Association forecasts that airline passenger numbers could double to 8.2 billion by 2037, which equates to 3.5% compound annual growth.

More than half of the new passengers over the next 20 years will come from the Asia-Pacific region. China is expected to displace the US as the largest aviation market in mid-2021 and India is set to take third place by 2024.

While there has been a backlash against globalisation, the long-term trend has been towards increasing travel and trade. An important milestone was Chinese membership of the World Trade Organisation in December 2001.

Disruptive threats

The booking service Airbnb enables landlords and homeowners to directly rent out their properties to travellers. Airbnb can offer better value than hotels because users are able to avoid the costs facing hotels.

Some cities are now imposing rental taxes on Airbnb properties and limiting the rental days per year. Businesses are reluctant to use Airbnb because of the duty of care to employees (the majority of IHG's guests are business travellers).

The rise of booking platforms like Hotels.com has made hotel pricing and availability more transparent. Hotels have countered this with loyalty schemes and extras available on direct bookings, eg a free drink at the bar.

The number of hotel rooms worldwide has increased from 16.4 million in 2014 to 17.8 million in 2018: hotels are here to stay.

InterContinental Hotels (IHG)

InterContinental Hotels (LON:IHG) is the UK's largest-listed master franchisor. It was created in March 2003 when Six Continents was split into two companies: IHG and restaurant group Mitchells & Butlers.

The most significant brands held by IHG are InterContinental Hotels, Crowne Plaza and Holiday Inn. IHG purchased the Holiday Inn family of brands in 1990 and bought InterContinental in 1998.

Kimpton Hotels & Resorts was bought in 2015 and a 51% stake in the premium chain Regent Hotels & Resorts was bought in 2018. IHG opened its 5,000th hotel in January 2016 and at the end of 2018 had 5,603 hotels.

IHG's main market is the Americas at 54% of 2018 revenue and 61% of hotel rooms. China was 7% of 2018 revenue and Europe, Middle East, Asia and Africa (EMEAA) provided 30% of revenue.

IHG brand innovation

Shortly after purchasing Holiday Inn, IHG launched the Holiday Inn Express brand to cater to "smart travellers with a new service style." Staybridge Suite was launched in 1997 to cater to long-stay travellers.

The EVEN Hotels brand was launched by IHG in 2012 to attract wellness-minded travellers. The hotels offer in-room workout facilities and health-oriented food.

IHG launched HUALUXE as the first hotel brand designed for Chinese guests in 2012. The avid hotels brand was lunched by IHG in 2017, as a less expensive option than Holiday Inn, and the Atwell Suites brand will be launched in 2021.

New brands fill gaps in IHG's portfolio and offer exposure to faster growing market segments where the group can build scale. IHG remains focused with a smaller brand portfolio than rival Marriott, which has 30 hotel brands.

IHG's brands

Source: IHG

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Hotel market outlook

Global spending on the luxury-hotel segment is forecast to increase by 58% from US$60bn to US$95bn by 2025. Spending on the upscale segment is forecast to increase by 50% from US$40bn to US$60bn in 2025.

Spending on the mainstream segment is forecast to increase by 56% from US$115bn to US$180bn in 2025. A global downturn would interrupt rather than stop the growth in hotel demand.

IHG is the market leader in the mainstream segment and is second place in luxury hotels. IHG's rewards programme has over 100 million users and the group was the official hotel loyalty partner for the 2019 US Open Tennis Championships.

The group's IT infrastructure also appears to be ahead of the industry. IHG recently rolled out a "pioneering cloud-based Guest Reservation System", which was developed with Amadeus.

IHG market share

	Mainstream	Upscale	Luxury
IHG's industry system share	16% / 1st	5% / 4th	12% / 2nd
IHG's industry pipeline share	23% / 1st	8% / 4th	10% / 2nd

Source: IHG

IHG's hotel portfolio

Luxury brands				
	2003	2018	Pipeline	% Change
InterContinental	135	204	60	28%
Kimpton Hotels	-	66	27	41%
Regent Hotels & Resorts	-	6	3	50%
Wyndham Hotels	$55.4	$5.4bn	NYSE	1981
Upscale brands				
Crowne Plaza	202	429	79	18%
Hotel Indigo	-	102	92	90%
Voco Hotels	-	2	8	300%
Hualuxe	-	8	21	162%
EVEN Hotels	-	10	18	805%

Source: IHG

IHG's luxury and upscale brands

IHG owns the largest luxury brand, InterContinental Hotels, which has seen a 51% increase in the number of hotels since 2003. IHG's other luxury brands are Kimpton Hotels, Regent Hotels and the recently acquired Six Senses.

In the upscale segment, IHG has doubled the number of hotels and rooms at Crowne Plaza from 2003 to 2018. Its first boutique hotel, Hotel Indigo, was opened in 2004 and there are now 102 Indigo hotels.

Voco Hotels, Hualuxe and EVEN Hotels are all set for rapid growth from a relatively low base. Crowne Plaza is set for modest expansion, while Hotel Indigo is set to see a 90% increase in the number of hotels.

IHG's mainstream brands

IHG states that it is "the clear global leader within the mainstream segment, with 16% of existing global market share by rooms and 23% of the pipeline."

The growth driver of the mainstream segment has been Holiday Inn Express with an 87% increase in hotels from 2018 to

IHG's luxury and upscale brands

Source: IHG

IHG's mainstream brands

	2003	2018	Pipeline	% Change
Holiday Inn	1,529	1,251	288	23%
Holiday Inn Express	1,455	2,726	784	29%
Holiday Inn Club Vacations	-	27	0	-
Staybridge Suites	71	276	182	66%
Candlewood Suites	109	396	102	26%
AVID Hotels	-	1	171	-

Source: IHG

2003. The two hotel suite brands – Staybridge and Candlewood – have also seen robust growth.

AVID Hotels is set for strong growth, with a pipeline of 171 more hotels, in comparison with only one in 2018. The brand opens up a new lower-cost segment for IHG and has been popular with hotel owners.

IHG's franchising

Franchising has always been part of IHG's story with Holiday Inn franchising in 1954. Since listing, the group has sold off its hotels, with 171 owned in 2003, down to 23 in 2018.

With franchised hotels, the owner pays fees to use the brand. IHG receives a fixed percentage of room revenue and is responsible for marketing and driving guest bookings.

Managed hotels are where the hotel owner pays third-party managers and potentially hotel brand fees. Revenue is a percentage of hotel revenue and a proportion of hotel profit – the latter to align interests with the owner.

IHG's Chinese hotels are 91% managed, while in mature markets like the US and Europe, over 90% of IHG's hotels are franchised. The Holiday Inn Express brand, which is popular in China, signed 71 hotel franchisees in 2018, taking the total to 143.

Who are the franchisees?

Sovereign wealth funds and other long-term investors have been eager to become franchisees. It allows them to invest in a real-estate asset that is underpinned by a leading hotel brand.

InterContinental Park Lane was sold for £301 million in 2013 to the Middle Eastern investment group constellation hotels. InterContinental Hong Kong was sold for US$938m in 2015 to the investor consortium Supreme Key.

IHG will continue to run the Park Lane hotel under a 30-year contract and has an option to extend for another 30 years. IHG's brands should enable franchisees to earn a reasonable return on investment.

IHG's returns and valuation

Selling hotels has increased IHG's return on capital employed (ROCE) and the cash flow return on capital invested (CROCI). It has also made the business

IHG sells off its hotels

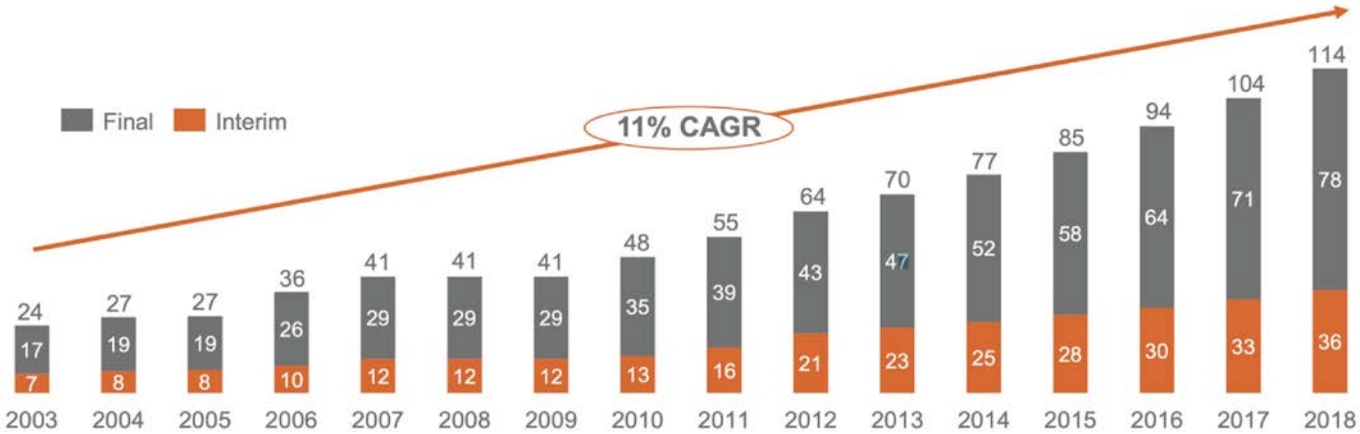
	2003	2018	% Change
Owned hotels	171	23	-87%
Franchised hotels	2,926	4,615	+58%
Managed hotels	423	965	+128%
Total hotels	3,520	5,603	+59%

Source: IHG

The franchising model

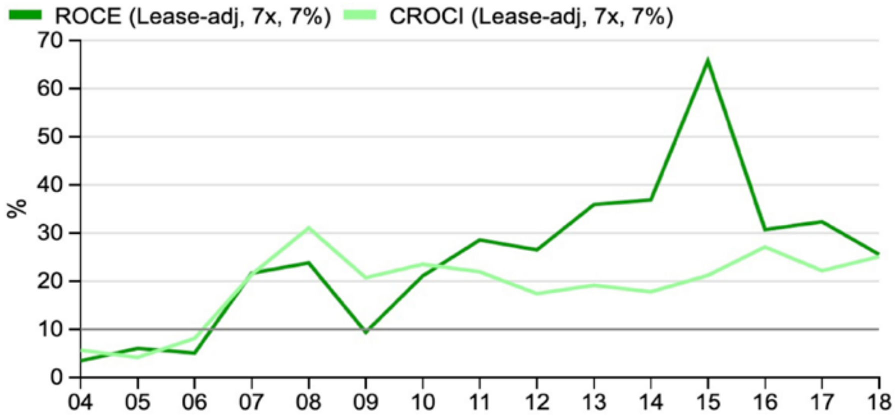
Source: IHG

IHG's dividend payments held up well



Source: IHG

IHG's returns have improved



Source: SharePad

more resilient because it no longer has the fixed costs of hotel ownership.

IHG was the only major hotel group to not cut its dividend during the global financial crisis. The ordinary dividend has increased by a compound annual rate of 11% from 2003 to 2018.

IHG remains cyclical with short-term hotel industry revenue driven by economic trends. But IHG's bottom line should hold up well in the next downturn, given the 52.4% fee margin in 2018 (operating profit as a percentage of fee revenue).

IHG currently trades on a forecast price to earnings ratio of 20.3x for 2019, 19x for 2020 and 17.3x for 2021 (based on a 19 September close share price of £50.15). The forecast free cash flow yield is 5.4% in 2020 and 6% in 2021.

Summary and valuation

Hotel franchisors offer investors an attractive combination of quality and growth. IHG owns the leading luxury hotel brand InterContinental and is the market leader in the mainstream segment with Holiday Inn.

The group is well placed, given its strong position in the US and a first-mover advantage in China. IHG offers an attractive way to buy into the industry's long-term growth prospects.

About Andrew

Andrew Latto, CFA, is an independent analyst and the founder of www.fundhunter.co. Fund Hunter's mission is to identify the best investment funds. The Fund Hunter model portfolio has meaningfully outperformed the All-Share index since inception. Andrew previously worked for an investment management company and a research company. He also contributes to www.cube.investments.

BY ROBERT STEPHENS, CFA

RECKITT BENCKISER

AN UNDERVALUED BUSINESS WITH AN IMPROVING GROWTH OUTLOOK

Robert Stephens, CFA, discusses why Reckitt Benckiser's revised strategy could produce improving financial prospects despite the company's recent weak performance.

Stating that a stock which trades on a price-earnings (P/E) ratio of 19 offers good value for money may sound rather dubious to some investors. Furthermore, if the stock in question recently posted a meagre 4% rise in earnings per share (EPS) in its most recent update, many investors may be dissuaded from buying it.

However, global consumer-goods company **Reckitt Benckiser (RB.)** could prove to be cheap relative to its sector peers. Its refreshed strategy may catalyse its financial performance following a period of slow growth. As a result, it could provide investment appeal, as it embarks on a period of major change that will ultimately more closely align its future product offering with changing consumer tastes.

A changing business

Key to the company's long-term growth prospects is a reorganisation of its operations. As part of this, it acquired infant and children's nutrition business, Mead Johnson, for $16.6 billion in 2017 in order to enhance the growth opportunities within its consumer-health division.

Following the acquisition, Reckitt Benckiser is now in the process of creating two structurally independent business units, Health and Hygiene Home, as part of an overarching strategy called 'RB 2.0'. Its reorganisation is expected to be completed by mid-2020, and to provide the business with a clear growth focus and greater scope to innovate.

The completion of the company's restructuring, though, will be overseen by a new chief executive. After eight years in the role, Rakesh Kapoor stood down at the start of September 2019. He has been replaced by former PepsiCo executive Laxman Narasimhan.

A change in chief executive at a time when the company is conducting a major restructuring, which could lead to calls for

Zoltan Kiraly / Shutterstock.com

"HAVING GENERATED 25% OF ITS REVENUE IN EMERGING MARKETS IN 2010, 40% OF RECKITT BENCKISER'S SALES ARE NOW FROM THE DEVELOPING WORLD."

a split of the business into two separate parts, may cause a degree of uncertainty. However, it has the potential to create a more profitable entity in the long run.

Growth potential

As well as strengthening its position in consumer healthcare, the acquisition of Mead Johnson also enhanced Reckitt Benckiser's exposure to the developing world. Having generated 25% of its revenue in emerging markets in 2010, 40% of Reckitt Benckiser's sales are now from the developing world.

This could enable it to achieve an improving growth rate, since demand for its range of health, hygiene and home-related products is likely to rise as incomes across the emerging world increase. In fact, wages in China are forecast to increase from around $1,000 per month to around $2,200 per month over the next two decades. This means that the company's total addressable market is set to increase at a fast pace, which could enhance its growth potential.

In tandem with rising wages across the emerging world, Reckitt Benckiser is seeking to gradually increase the price points of its products through further innovation. In particular, the Hygiene Home product portfolio is becoming increasingly weighted towards the premium segment, with the company raising prices when it is able to improve its products and create a better solution for its customers. This could lead to higher sales, as well as greater margins, with premium consumer-good segments forecast to outpace value segments over the long run.

In terms of innovation, the business is investing heavily across its product portfolio. Its current product pipeline includes a new specialist surface cleaner in India, where a large proportion of consumers have cement floors, as well as smaller format varieties of its cleaning products that are expected to resonate with

David Cardinez / Shutterstock.com

middle-class consumers in emerging economies. Since the business had free cash flow of £2.1 billion in its 2018 financial year, its capacity to invest in its product portfolio in order to gradually raise prices seems to be high.

Sustainable growth

Of course, consumer tastes are rapidly changing in all of the markets where the company operates. A key example of this is the ongoing pivot towards a greater focus on sustainability, and specifically in the environmental impact of the products which consumers use. For example, 87% of consumers have a more positive image of a company that supports social or environmental issues. Furthermore, 68% of millennials bought a product or service with a social or environmental benefit in the last year.

Reckitt Benckiser is investing heavily in its sustainability credentials. A key focus for the business is intertwining its brand message with sustainability, so that its brands gradually become synonymous with positive environmental or social actions.

Dinendra Haria / Shutterstock.com

For example, its Harpic and Lysol cleaning brands launched the 'More than a Toilet' campaign to support World Toilet Day last year, while its Durex brand is contributing to The Global Fund's fight against HIV. Reckitt Benckiser has also put in place a 'Plastics Pledge', to reduce the amount of plastics used in the manufacturing of its products. Over time, the company's marketing has the potential to focus, to an increasing extent, on environmental and social issues, which could resonate with consumers.

Digital opportunities

The company is investing heavily in its digital growth capabilities in order to strengthen its competitive advantage. For example, it tripled the number of people who work in e-commerce in its Health segment between 2017 and 2019, while last year it invested £100 million in an R&D centre in the UK.

Reckitt Benckiser is using China as an incubator for its global e-commerce strategy. This plan is proving to be highly successful, with 9% of its global Health revenue now being derived from e-commerce channels.

In addition, the business is continuing to make progress in creating tailored solutions across a variety of e-commerce and social-media platforms in order to remain relevant in an increasingly digital global economy. With global e-commerce sales as a proportion of total retail sales expected to rise from 12% in 2018 to 22% by 2023, Reckitt Benckiser's direct-to-consumer strategy could pay off over future years. This may allow it to communicate directly with consumers in order to build a greater sense of brand loyalty, as well as benefit from potentially higher margins across its stable of products.

Investment prospects

Since the company generates its revenue in a wide range of economies and has significant exposure to China and the US, the uncertain prospects for the world economy is a risk facing its near-term outlook. Tariffs may mean that consumers trade down to cheaper alternatives in order to reduce their spending levels. This could put pressure on the company's financial performance over future months, and may cause investor sentiment towards the wider consumer-goods industry to decline to some degree.

Reckitt Benckiser, though, appears to be undervalued relative to some of its global consumer-goods peers. Although its P/E ratio of 19 may not seem to offer a margin of safety on an absolute basis, it is significantly lower than the P/E ratios of FTSE 100 peers such as Unilever and Diageo. They currently have P/E ratios of 23 and 26, respectively, while their forecast growth rates in EPS are comparable to Reckitt Benckiser's 9% guidance for the current financial year.

This suggests that Reckitt Benckiser could offer good value for money on a relative basis. Furthermore, it has a wide variety of products that are sold across a range of economies. This provides a degree of diversity for UK-based investors who are concerned about the outlook for the domestic economy during a period of significant change.

With the company's brands enjoying significant degrees of customer loyalty, they may prove to be relatively resilient in terms of their sales performance in a variety of operating conditions. This may provide the business with at least some defensive credentials should the global economy experience a downturn as a result of the trade dispute between China and the US.

“RECKITT BENCKISER, THOUGH, APPEARS TO BE UNDERVALUED RELATIVE TO SOME OF ITS GLOBAL CONSUMER-GOODS PEERS.”

Outlook

The changes being made to Reckitt Benckiser's structure and strategy could produce improving financial and stock-price performance in the long run. Although change brings uncertainty, and a new chief executive may mean that the business refines its strategy to some degree, its investment in a range of areas could enhance its investment appeal.

Notably, an increasing digital presence may align it more closely with evolving consumer tastes. Likewise, its investment in social and environmental causes could strengthen customer loyalty and allow its brands to gain market share. Furthermore, with its presence in emerging markets increasing at a time when there is scope to raise prices through a faster pace of innovation, the business seems to be in a strong position to generate relatively high top-and-bottom-line growth over the long run.

Clearly, risks such as a global economic slowdown could hold back its share-price prospects in the near term. But, with a valuation that suggests it offers a larger margin of safety than some of its sector peers and a wide range of products that provide the business with a varied geographical spread, Reckitt Benckiser could offer long-term investment appeal.

About Robert

Robert Stephens, CFA, is an Equity Analyst who runs his own research company. He has been investing for over 15 years and owns a wide range of shares. Notable influences on his investment style include Warren Buffett, Ben Graham and Jim Slater. Robert has written for a variety of publications including The Daily Telegraph, What Investment and Citywire.

BY RICHARD GILL, CFA

BOOK REVIEW

THE NAKED TRADER (5TH EDITION)

HOW ANYONE CAN MAKE MONEY TRADING SHARES

BY ROBBIE BURNS

Richard Gill, CFA, reviews *The Naked Trader* (5th Edition) by Robbie Burns, one of the UK's most successful private investors.

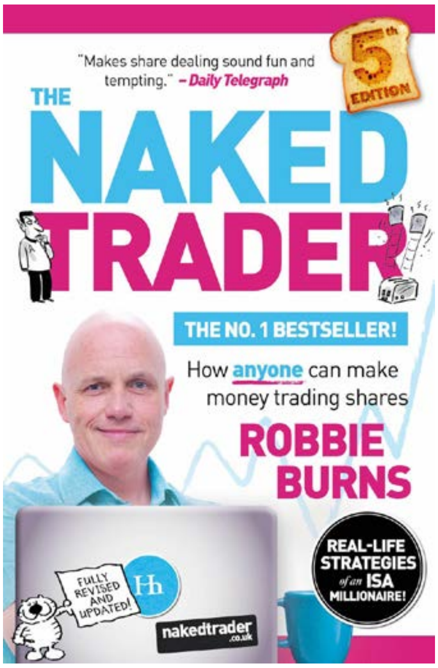
When a book runs to a fifth edition, you know it must be a classic. That is exactly the case with *The Naked Trader*, an entertaining and informative beginners' guide to investing in shares, written by the inimitable Robbie Burns (aka the Naked Trader).

For anyone who has not heard of him, Robbie Burns is one of the UK's most successful private investors, having made several million pounds, tax free, by trading shares through ISAs. He is one of only a handful of ISA millionaires in the country and has admirably made a profit every year since he began trading, even during market downturns. Also an established author and blogger, he quit the rat race in 2001 to run a café and now trades shares full time while wearing just his pants. Or less.

The Naked Trader was first published in 2005, with Burns seeing a gap in the market for an easy to understand book on how to make money from buying and selling shares, written by someone who had actually done it. While there have been many imitators since, the book's popularity means that it has been updated around every three years since then to take into account stock-market developments and pack in more trading advice. This updated and expanded fifth edition (coming after a five-year gap) contains more exclusive tips and ideas; more on Burns' winning trades shown from start to finish; and more real-life trader tales of triumph and disaster.

Trading exposed

The Naked Trader is divided into six parts, progressing from the basics of share trading and how to research ideas, on to some more advanced techniques. Burns himself is not really a "trader" as the book title suggests but more of a medium-term investor, spotting trading opportunities and holding on to them until he thinks it's time to exit. That means the book is ideal for those who only want to spend a few hours a day looking at the markets rather than use up all their



"THE BOOK IS IDEAL FOR THOSE WHO ONLY WANT TO SPEND A FEW HOURS A DAY LOOKING AT THE MARKETS."

time staring at a computer screen examining charts.

The first few chapters of part one look into Burns' "job" as an investor and his philosophy on life, before looking at what readers should ask themselves before beginning to trade the markets. We then move on to trading basics, including the equipment and facilities you need to trade, how to set up a brokerage account and where to find information. Chapter five is the longest and most in depth of part one, looking at the crucial things you need to know about shares including spreads, trading costs and different types of shares.

Part two examines trading psychology. While the brain can lead you on the way to riches it can of course go 'rogue' at times. So, to help you develop the mindset of a successful investor, Burns gives examples of how you should, and should not, be thinking, using characters from TV classic Dad's Army to illustrate these. For instance, Corporal Jones is the panic seller, Private Walker the greedy spiv and Sergeant Wilson the lazy trader. The model trader however comes from Star Trek. Burns argues that the best traders treat their investments just like a business, making rational, efficient and logical decisions totally unaffected by emotion – exactly like Mr. Spock.

A brief part three looks at a few things to be wary of when investing, such as boiler-room scams, dodgy tipsters and bulletin-board 'lunatics', then part four gets into the real business of how to look for winning shares. Burns advises on the best places to gather information for investment ideas, including of course Master Investor magazine, before discussing his own approach to deciding if individual shares are worth buying. He may have a laidback attitude to life in general, but he takes research very seriously, arguing that investors should find out everything they can about a company before they consider buying a stake. Burns provides a detailed list of questions to ask about a company and how to use the answers to make your final decision. Giving more practical advice, chapter 13 provides no less than 14 trading strategies to get your teeth into.

Part five takes a look at some more advanced trading techniques, with a whole chapter dedicated to spread betting, which Burns is a fan of, one on shorting shares and another on what to do when the markets go down. Part six contains a cornucopia of concluding comments, including several stories from a number of traders who have seen the markets go against them. Burns examines all these situations then points to advice given previously on how they could have been avoided. In line with many investment books, Burns also provides his own list of key rules, selecting 39 points from the book, as a guide to successfully making money.

Bare necessity

The Naked Trader (5th edition) is just under 400 pages long and is packed full of jargon-free information and practical advice. This is no "get rich quick" book however, with the emphasis on building wealth slowly and steadily over the long term. Burns' wit and humour oozes out of the book, with a number of laugh out loud moments. As the byline to the books suggests, anyone can make money trading shares, even if you're not great at maths and like to be lazy – some of Burns' self-admitted characteristics. What he is very good at however is providing readers with discipline, determination and proven trading strategies. For novices and experienced traders alike, even if you own a previous version, the fifth edition of *The Naked Trader* is essential reading.

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About Richard

Richard Gill is an investment analyst with over a decade's experience of analysing small/mid cap equities. He is the Head of Research at Align Research. Richard qualified with the Chartered Financial Analyst (CFA) designation in 2012 and was awarded PLUS Markets Financial Writer of the Year at the 2008 PLUS Awards. He has been a judge at the Small Cap Awards from 2013 to 2018.

BY TIM PRICE

THE FINAL WORD

THE PURITAN GIFT

In many respects, the global financial crisis was regarded as a crisis of morality. It now appears to be morphing into a fully-fledged eurozone banking crisis. By way of solutions, we need better bankers, better central bankers (or perhaps none at all) - and better politicians.

"The duration of the slump may be much more prolonged than most people are expecting and much will be changed both in our ideas and in our methods before we emerge. Not, of course, the duration of the acute phase of the slump, but that of the long, dragging conditions of semi-slump, or at least sub-normal prosperity, which may be expected to succeed the acute phase."

— The economist John Maynard Keynes, writing in 1931.

Much as I dislike given Keynes credit for anything, in this case, he happens to have been right about the global financial crisis, more than 70 years before it happened. Or, as the economists Rogoff and Reinhart put it, financial crises are long-drawn-out affairs and their aftermath tends to linger dangerously, for years rather than months. With roughly $15 trillion of government debt around the world now trading on a negative yield, and with deposit rates at zero or negative across the eurozone, the "new normal" increasingly feels like a 1930s-style "distinctly unnatural".

Facing significant, but as yet somewhat intangible financial crisis, human nature is not helpful. We can only stand so much grief, and then after a sufficient period, sunny optimism kicks in, whatever the objective reality. And let's not forget that for many equity investors, especially in the US markets, there has been no crisis since 2009 – rather, one of the longest bull runs in history. Another problem facing the modern investor above and beyond the groupthink inspired by effortlessly rising markets is the mob-like status of modern communications. The internet has given a voice to millions with nothing to say. Finding meaningful and relevant (investible) signals within the relentless barrage of noise is an ever-growing challenge.

This would seem to be the case as regards the ever-expanding sovereign-debt crisis. Most

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governments are, to a greater or lesser extent, functionally bankrupt. And yet bond investors are rushing to lend them more money at those negative rates. The only way to account for this seeming madness is to look at it through the prism of a crisis in money. As the financial analyst and historian Russell Napier points out, government bonds even on negative yields (eg those issued by Germany) make sense if the alternative is negative-yielding bank deposits that also leave you exposed as a creditor to those same banks, but without any hope of a positive nominal return for incurring that risk. This problem has been exacerbated by the EU's introduction of the BRRD, (the Bank Resolution and Recovery Directive), in 2014. This time round, if you are unlucky or unwise enough to be exposed as a depositor to an insolvent EU commercial bank, they don't get bailed out – you get bailed in. The ghoulishly inclined can see the recent history of Cypriot and Portuguese banking for further details.

How did we get into this extraordinary mess? As I argue in my book *Investing Through the Looking Glass,* just about everybody played a part, but I would single out bank executives, politicians and central bankers for special credit in the debacle. Bank executives horribly mismanaged their businesses, but rather than have those businesses painfully restructured and lose their jobs in the process, they pleaded innocence and got politicians and central bankers to bail them out instead. Central bankers then ran with the ball in a game that politicians professed to ignore (namely fiscal stimulus, as opposed to wild monetary experimentation), and brought interest rates to where they sit today. The free market essentially got mugged, twice.

We can use a more delicate phrase than an outright mugging, namely 'market failure', which puts in an appearance in Yale University Endowment chief investment officer David Swensen's excellent guide for individual investors, *Unconventional Success.* The title is an allusion to Keynes' famous observation that fund managers, courtesy of endemic groupthink, tend to prefer (and to deliver) conventional failure over unconventional success. Swensen himself is famous for steering the Yale endowment through many years of impressive investment returns. He uses the term 'market failure' in the context of a managed fund industry that involves the interaction between sophisticated, profit-seeking providers of financial services and naive, return-seeking consumers of investment products. The drive for profits by Wall Street and the mutual fund industry overwhelms the concept of fiduciary responsibility, leading to an all too predictable outcome: except in an inconsequential number of cases where individuals succeed through unusual skill or unreliable luck, the powerful financial-services industry exploits vulnerable individual investors. According to Swensen:

"The ownership structure of a fund management company plays a role in determining the likelihood of investor success. Mutual fund investors face the greatest challenge with investment management companies that provide returns to public shareholders or that funnel profits to a corporate parent – situations that place the conflict between profit generation and fiduciary responsibility in high relief. When a funds management subsidiary reports to a multiline financial services company, the scope for abuse of investor capital broadens dramatically. In contrast, private for-profit investment management organizations enjoy the option of playing the role of a benevolent capitalist, mitigating the drive for profits with concern for investor returns."

The financial crisis of 2007 to date as yet unknown has taken the role of investment banks to new levels of surrealism, quite beyond the realm of satire. Not content with ripping off clients, banks − not limited in the scope of their operations to pure investment banking − have now shown themselves quite adept at ripping off taxpayers too. If deficit exists, it is not in free market terms, because as we have seen, no such free market exists. The deficit is rather a political and regulatory one. It has taken 10 years or so for the waves of popular anger at the banking bailouts to wash onto the shore of popular opinion, but they have now finally landed. Brexit and the election of Donald Trump are just two of the belated consequences to date.

The remedy would be to return to the sort of managerial culture cited in the Hopper brothers' magisterial study of the American economic golden age, *The Puritan Gift* (I.B. Tauris & Co, 2009). Such a return would largely banish consultants and supposed experts from the body politic and corporate, and reintroduce the concept of personal responsibility. The Hopper brothers' Principle Seven for good corporate practice states unequivocally: one man, one boss − no sheltering amongst multiple co-heads and amongst collective (lack of) responsibility.

In *The Puritan Gift,* the Hopper brothers also identify the proximate cause for the crisis as:

> "...an excess of borrowing by government, businesses and individuals. Increasingly, reckless lending and borrowing – two sides of the same coin – have characterized most aspects of American [and western] society for the last thirty years..."

This abuse of credit across the whole of society coincided with, and could not have occurred without, a deterioration in corporate culture occurring in the last third of the 20th century. In the 'golden age of management (1920 – 1970), executives had learned the craft of management 'on the job' from more senior colleagues. As they progressed up the ladder of promotion, they would also absorb "domain knowledge" about the activity for which they were responsible – to borrow a term favoured by Jeff Immelt, [the now discredited] chairman and chief executive of General Electric. Starting in the late 1960s, however, a new concept appeared on the corporate scene: that management was a profession like medicine, dentistry or the law, which people were 'licensed' to practise at the highest level if they had studied the subject in an academic setting. Business-school graduates and accountants started the trend; others would follow in their footsteps."

Whether considering the managers of listed businesses or the managers of discretionary funds, investors should be well served by identifying those conforming to a moral as opposed to a purely self-interested approach. Decent moral behaviour is to a degree subjective, but to paraphrase what Justice Potter Stewart famously said of pornography, we know it when we see it. Reforming banking-sector pay will only be the start of an overdue cleansing of the Augean stables. When banks compete properly for business and run the risk of genuine failure in so doing, the market will be on its way to being fixed. But as things stand, banks in collusion with central banks are distorting the term structure of debt markets (and through inflationism, all other asset markets too) and giving investors a delusional sense of safety with regard to sovereign bonds.

Both financial signals and financial signalling are all wrong. When monetary-policy rates and supposedly market-led interest rates are as low as they currently are it is not a sign of confidence, but a reflection of absolute terror on the part of the crippled institutions that have been buying them in preference to any form of more constructive lending. It is a moot point as to whether the next financial crisis is now upon us, in the form of imminent financial failures by eurozone banks and German insurers and pension funds. I would argue, rather, that the last financial crisis was never resolved in the first place.

About Tim

Tim Price is manager of the VT Price Value Portfolio (www.pricevaluepartners.com) and author of 'Investing Through the Looking Glass: a rational guide to irrational financial markets'.

OCTOBER 2019

INVESTOR EVENTS DIARY

EVERY WEDNESDAY | 12:30

Event:	SR Live webinar
Organiser:	SyndicateRoom
Place:	Webinar
Tickets:	www.syndicateroom.com/events/sr-live

TUESDAY, 8 OCTOBER | 08:00-17:00

Event:	Responsible Asset Owners Global Symposium
Organiser:	Responsible Asset Owners Global
Place:	Church House, Westminster, London
Tickets:	35% complimentary code for tickets: MI35 www.raoglobal.org

TUESDAY, 8 OCTOBER | 18:00-20:30

Event:	Ready Steady Grow!
Organiser:	EISA
Place:	Spaces, Edinburgh
Tickets:	https://eisa.org.uk/events

THURSDAY, 10 OCTOBER

Event:	Female Leaders in EIS
Organiser:	EISA
Place:	Kin Capital, East Side, King's Cross, London N1C 4AX
Tickets:	https://eisa.org.uk/events

WEDNESDAY, 16 OCTOBER | 18:00-20:30

Event:	Ready Steady Grow!
Organiser:	EISA
Place:	PwC, 19 Cornwall Street, Birmingham
Tickets:	https://eisa.org.uk/events

THURSDAY, 17 OCTOBER | 14:30-18:00

Event:	Ready Steady Grow!
Organiser:	EISA
Place:	The Mac, Belfast
Tickets:	https://eisa.org.uk/events

WEDNESDAY, 23 OCTOBER | 13:30-18:30

Event:	The Northern Women Angel Investment Forum
Organiser:	UKBAA
Place:	TechManchester, 1 Archway, Birley Fields, Manchester M15 5QJ
Tickets:	www.eventbrite.co.uk/e/northern-womens-angel-forum-tickets-68783572517

FRIDAY, 25 OCTOBER | 09:30-17:00

Event:	London Investor Show
Organiser:	UK Investor Events
Place:	Novotel London West, 1 Shortlands, London W6 8DR
Tickets:	https://www.eventbrite.co.uk/e/london-investor-show-2019-tickets-53471905910

TUESDAY, 12 NOVEMBER | 08:00-10:30

Event:	Ready Steady Grow!
Organiser:	EISA
Place:	Clarion Solicitors, 13-19 Queen Street, Leeds
Tickets:	https://eisa.org.uk/events

WEDNESDAY 13 NOVEMBER | 10:00-17:00

Event:	Investing in the age of Longevity
Organiser:	Master Investor and Longevity Forum
Place:	Science Gallery, Great Maze Pond, London SE1 9GU
Tickets:	50% discount using code: MIF071 https://milongevity.eventbrite.co.uk

THURSDAY, 21 NOVEMBER | 08:00-10:30

Event:	Ready Steady Grow!
Organiser:	EISA
Place:	Engine Shed, Bristol
Tickets:	https://eisa.org.uk/events

FRIDAY, 22 NOVEMBER | 08:30-19:00

Event:	MoneyWeek Wealth Summit
Organiser:	MoneyWeek
Place:	Etc. Venues, St Paul's, 200 Aldersgate, London EC1A 4HD
Tickets:	Code: Master20 www.moneyweekwealthsummit.co.uk

TUESDAY, 26 NOVEMBER | 08:00-10:30

Event:	Ready Steady Grow!
Organiser:	EISA
Place:	Tramshed Tech, Cardiff
Tickets:	https://eisa.org.uk/events

WEDNESDAY, 27 NOVEMBER | 14:00-21:00

Event:	Future Forward: UKBAA Winter Investment Forum
Organiser:	UKBAA
Place:	CMS, Cannon Place, 78 Cannon Street, London EC4N 6AF
Tickets:	www.futureforwardukbaa.org

WEDNESDAY 27 & THURSDAY 28 NOVEMBER 10:00-18:00

Event:	Going Global
Organiser:	PRYSM Group
Place:	xCeL London, Western Gateway, Royal Docks London E16 1XL
Tickets:	www.goinggloballive.co.uk/tracker.asp?code=MasterInv

THURSDAY, 5 DECEMBER

Event:	Plan to Grow: The essential event to bring you up to date on trends in the EIS & BR markets
Organiser:	EISA
Place:	The Great Hall, ICAEW, One Moorgate Place, London EC2R 6EA
Tickets:	https://eisa.org.uk/events

SATURDAY, 28 MARCH 2020 | 09:30-17:00

Event:	Master Investor Show
Organiser:	Master Investor
Place:	Business Design Centre, 52 Upper St, London N1 0QH
Tickets:	50% discount using code: MAG08 https://masterinvestorshow.eventbrite.co.uk

MARKETS IN FOCUS

SEPTEMBER 2019

GLOBAL EQUITIES

Index	Last Month %	YTD%	52-Week Strength
Nikkei 225	5.1	9.4	
DAX Xetra	4.1	16.3	
CAC 40	3.6	18.4	
Bovespa	3.6	19.2	
Euronext 100	3.3	18.4	
Russian TSI	3.1	24.4	
FTSE 100	2.8	9.5	
FTSE All-World	2.0	13.6	
Dow Jones	1.9	14.5	
Swiss Market	1.9	18.0	
S&P 500	1.7	18.1	
Hang Seng	1.4	1.0	
S&P/ASX 200	1.3	19.4	
NASDAQ 100	0.8	22.1	
CSI 300 Index	0.4	26.7	

COMMODITIES

Commodity	Last Month %	YTD%	52-Week Strength
Sugar (No. 11)	13.6	5.2	
Iron Ore	13.0	29.4	
Cocoa	9.9	1.1	
Palladium	7.0	37.6	
Coffee	4.4	-0.7	
Natural Gas	2.0	-21.3	
Cotton	1.3	-17.1	
Copper	1.1	-1.9	
Palm Oil	-0.2	1.3	
Crude oil (Light Sweet)	-1.9	18.0	
Gold	-3.7	14.6	
Crude oil (Brent)	-4.3	2.7	
Platinum	-4.6	11.0	
Silver	-7.3	9.2	
Bitcoin	-13.6	128.0	

FOREX

Pair/Cross	Last Month %	YTD%	52-Week Strength
USD/JPY	1.5	-1.7	
GBP/USD	0.9	-4.1	
USD/CHF	0.8	1.2	
GBP/AUD	0.6	0.9	
AUD/USD	0.3	-5.1	
EUR/JPY	0.0	-6.4	
EUR/CHF	0.0	-3.4	
USD/CAD	-0.5	-2.6	
EUR/USD	-0.8	-4.8	
EUR/GBP	-2.3	-0.7	

CENTRAL BANKS – RATES & MEETINGS

Central Bank	Key Rate	Next	After
Bank of England (BoE)	0.75%	Nov 07	Dec 19
European Central Bank (ECB)	0.00%	Oct 24	Dec 12
Federal Reserve System (FED)	2.00%	Oct 30	Dec 11
Bank of Japan (BoJ)	-0.10%	Oct 31	Dec 19
Bank of Canada (BoC)	1.75%	Oct 30	Dec 04
Reserve Bank of Australia (RBA)	0.75%	Nov 05	Dec 03
Swiss National Bank (SNB)	-0.75%	Dec 12	---
Banco Central do Brasil (BCB)	5.50%	Oct 30	Dec 11
Central Bank of Russia (CBR)	7.00%	Oct 25	Dec 13
Reserve Bank of India (RBI)	5.40%	Oct 04	Dec 05

FTSE 350 TOP RISERS

Company	Last Month %	YTD%	52-Week Strength
Hammerson PLC	24.9	-14.7	
Saga PLC	22.8	-49.5	
JD Sports Fashion PLC	21.8	115.0	
easyJet PLC	19.4	5.8	
NewRiver REIT PLC	19.1	-8.3	

FTSE 350 FALLERS

Company	Last Month %	YTD%	52-Week Strength
Sirius Minerals PLC	-61.5	-82.5	
Metro Bank PLC	-25.6	-89.4	
Ferrexpo PLC	-20.3	-15.5	
Indivior PLC	-19.6	-52.7	
CYBG PLC	-18.7	-37.4	

FTSE 350 SECTORS RISERS

Sector	Last Month %	YTD%	52-Week Strength
Automobiles & Parts	13.3	-34.2	
Life Insurance	9.6	4.4	
Food & Drug Retailers	8.4	21.6	
Leisure Goods	7.8	56.7	
Electricity	7.6	10.6	

FTSE 350 SECTORS FALLERS

Sector	Last Month %	YTD%	52-Week Strength
Industrial Metals	-8.4	-6.7	
Personal Goods	-5.0	19.0	
Beverages	-4.3	18.6	
Forestry & Paper	-2.4	-3.5	
General Industrials	-2.0	14.1	

IA SECTORS RISERS

Sector	Last Month %	YTD%	52-Week Strength
Japan	3.6	15.8	
UK Equity Income	3.4	12.1	
Japanese Smaller Companies	3.2	14.8	
UK All Companies	2.7	14.3	
UK Equity And Bond Income	2.3	12.0	

IA SECTORS FALLERS

Sector	Last Month %	YTD%	52-Week Strength
UK Index Linked Gilts	-1.8	16.8	
Global Bonds	-1.1	8.5	
China/Greater China	-0.9	16.6	
North American Smaller Comp	-0.6	24.2	
North America	-0.5	22.9