AlphaQ

June 2017

FOR INSTITUTIONAL INVESTORS & ASSET MANAGERS

KEEP YOUR ALPHA GIVE ME DELTA
Measuring PE performance

TIMBER!
Turnaround in Phaunos timber fund

EUROPEAN DRIVE
Boston Partners opens in London

LUXURIOUS MEXICO
Real estate opportunities

CRYPTOCURRENCY
Bitcoin soars after Japan move

PE FUNDS GROW
Invest Europe reveals PE data



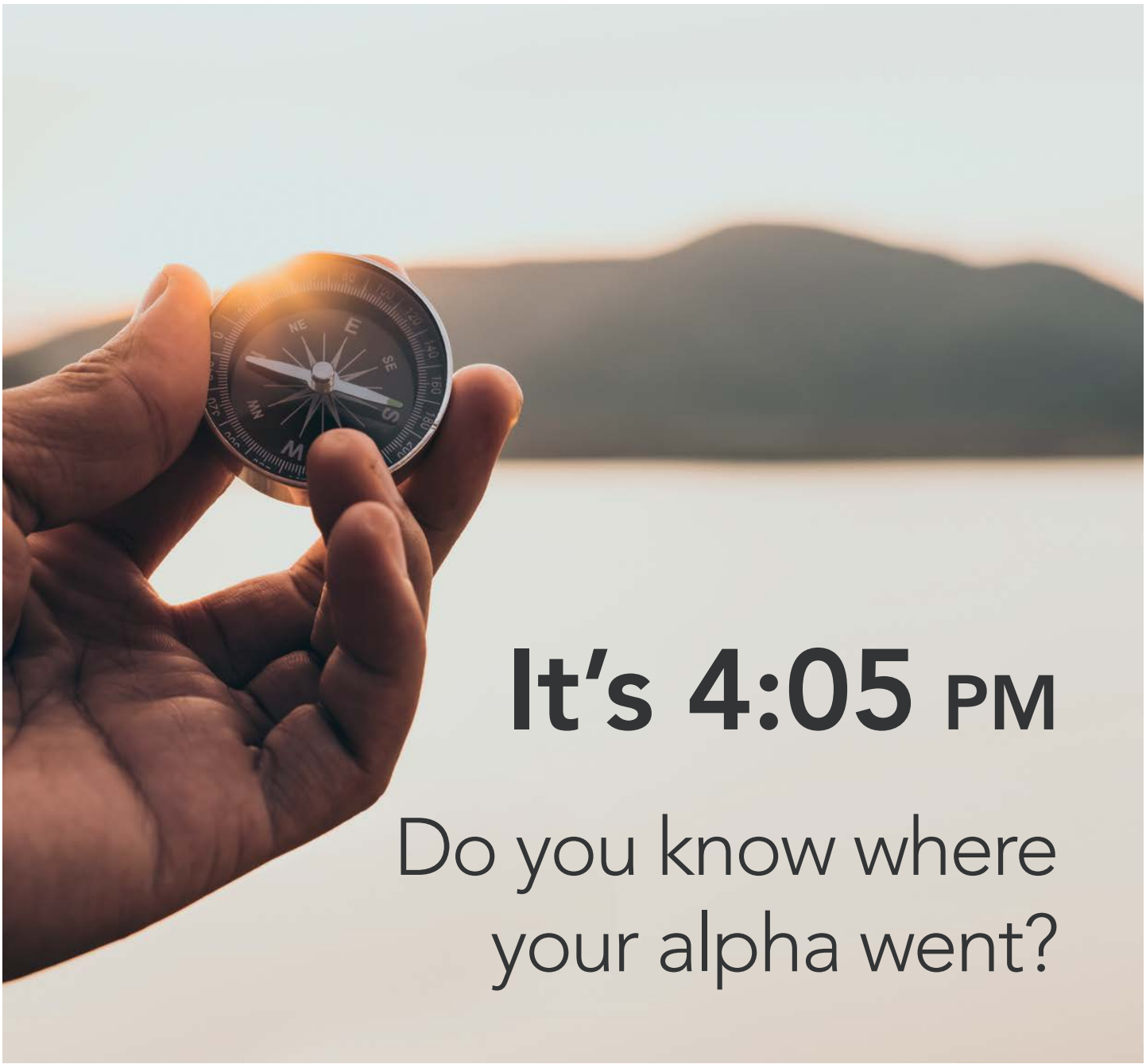
The art of making an impact

www.AlphaQ.world

Photo: Claudia Quiroz, Quiller Cheviot

tradeinformatics

MAXIMIZE PERFORMANCE. MINIMIZE COST.



(646) 658-3580 / info@tradeinformatics.com / tradeinformatics.com



ELEANOR ROSTRON

The last issue of AlphaQ saw a 3,000 per cent increase in Twitter activity for a perfectly reputable story on Jacob Ma Weaver of Cable Car Capital's approach to shorting, because there was a reference to recreational drugs in the headline.

Bearing that in mind, with the June issue, let me bring you the agony and the ecstasy of impact investing, a new term for investment which encompasses ethical investment, ESG and SRI. New players in the field believe that investors don't have to give up any return in favour of investing ethically.

The sustainable theme continues with news features on timber fund Phaunos which offers a turnaround story, and KBIGI which offers natural resources alongside its global equity offering.

In other news, James Williams examines why USD90.6 billion Boston Capital Partners has opened a London office, bringing the firm's value investment approach to Europe.

We also look at Mexican real estate and Dr William Charlton, Managing Director and Head of Global Research & Analytics at Pavilion Alternatives Group, LLC writes on measuring private equity performance.

Finally, our regular columnist, fund manager Randeep Grewal, takes a deep dive into car and car financing data in a frustrating and ultimately frustrated attempt to renew his wife's vehicle. What does it all mean for investors, he asks?

Enjoy!

Beverly Chandler

Managing editor, AlphaQ

Email: beverly.chandler@globalfundmedia.com

AlphaQ

Managing Editor
Beverly Chandler
Email: beverly.chandler@globalfundmedia.com

Contributing Editor
James Williams
Email: james.williams@globalfundmedia.com

Online News Editor
Mark Kitchen
Email: mark.kitchen@globalfundmedia.com

Deputy Online News Editor
Mary Gopalan
Email: mary.gopalan@globalfundmedia.com

Graphic Design
Siobhan Brownlow
Email: siobhan.brownlow@globalfundmedia.com

Sales Managers
Simon Broch
Email: simon.broch@globalfundmedia.com

Malcolm Dunn
Email: malcolm.dunn@globalfundmedia.com

Christine Gill
Email: christine.gill@globalfundmedia.com

Marketing Administrator
Marion Fullerton
Email: marion.fullerton@globalfundmedia.com

Head of Events
Katie Gopal
Email: katie.gopal@globalfundmedia.com

Chief Operating Officer
Oliver Bradley
Email: oliver.bradley@globalfundmedia.com

Chairman & Publisher
Sunil Gopalan
Email: sunil.gopalan@globalfundmedia.com

Published by
GFM Ltd, Floor One, Liberation Station,
St Helier, Jersey JE2 3AS, Channel Islands
Tel: +44 (0)1534 719780

Website: www.globalfundmedia.com

©Copyright 2017 GFM Ltd.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

Investment Warning
The information provided in this publication should not form the sole basis of any investment decision. No investment decision should be made in relation to any of the information provided other than on the advice of a professional financial advisor. Past performance is no guarantee of future results. The value and income derived from investments can go down as well as up.









Companies featured in this issue:

- Amundi Group
- Anavio Capital Partners
- Anthesis Consulting Group
- Athena Capital Advisors
- Boston Partners
- Crown Agents Investment Management
- Ethereum
- Hargreaves Lansdown
- IBIS Capital
- IFC
- Invest Europe
- KBI Global Investors
- Lyxor ETF
- Morningstar
- RG Niederhoffer Capital Management Inc
- OWLshares
- Pavilion Alternatives Group LLC
- Phaunos Timber Fund
- Quilter Cheviot Investment Management
- S-Network
- Sage Advisory
- SEB
- Smith & Crown
- Stafford Capital Partners
- Sustainalytics
- Thor Urbana
- TokenMarket
- Tribe Impact Capital
- World Bank Group
- Worthstone
- XBT Provider

NEWS FEATURES

05 Education technology offers investment appeal
Interview with Benjamin Vedrenne-Cloquet and Charles McIntyre, co-founders of IBIS Capital, a London-based investment manager in disruptive and educational technology

06 Dynamic fund brings three strategies together
2015 saw the launch of Anavio Capital Partners and their event driven fund, a launch which brought together three managers experienced in three styles

08 Cryptocurrencies enjoy dramatic run
Cryptocurrencies have had another extraordinary growth spurt, with bitcoin doubling in a month and then falling back to an early June figure of around USD2,800

09 Natural resources and global equities dominate KBIGI's portfolios
Interview with Geoff Blake, director, head of business development and client services at KBI Global Investors, a Dublin based institutional asset manager

11 Fund gets new energy from timber turnaround
Stephen Addicott is a partner in the timberland group at Stafford Capital Partners, with assets of USD2.3 billion in timber including the USD300 million Phaunos Timber Fund

FEATURES

12 Cover story: The art of making an impact
Beverly Chandler writes that sustainable or socially responsible investment has a new title, impact investing, and the sector is beginning to enjoy real growth

15 Boston Partners opens London office
James Williams writes that US value equity investment managers Boston Partners, with USD90.6 billion of assets under management, has established a footprint in the UK

17 Luxury real estate in Mexico set to grow
Mexico's retail real estate market presents compelling investment opportunities for international investors, according to Jimmy Arakanji, co-CEO of Thor Urbana

20 Keep your alpha, give me delta
Dr William Charlton, Managing Director and Head of Global Research & Analytics at Pavilion Alternatives Group, LLC writes on measuring private equity performance

22 Beware the unfettered machine
Roy Niederhoffer, graduated from Harvard with a degree in Computational Neuroscience in 1987 and has seen a lot of quantitative hedge funds come and go since 1993

24 US Treasuries could reach 3.25 per cent in 2018
Global bond yields are expected to fluctuate over the course of 2017 but should rise steadily with US 10-year treasuries breaking the 3 per cent barrier by early 2018 writes James Williams

27 European private equity investments exceed EUR50 billion
Latest figures released by Invest Europe show that private equity fundraising in 2016 reached EUR74.5 billion, a 37 per cent increase and the highest level since 2008

30 Driving data
Randeep Grewal deep dives into car and car finance data this month in a bid to replace his wife's vehicle and avoid the many pitfalls. What does this mean for investors, he asks.

Education technology offers investment appeal

Benjamin Vedrenne-Cloquet and Charles McIntyre are co-founders of IBIS Capital, a London-based investment manager split across various operations, partly investment and partly giving advice. But the whole focus of the firm is on media, health and education technology.

It is on the last that Vedrenne-Cloquet has focused, establishing the EdtechXGlobal platform, a whole 'ecosystem' play for EdTech globally, from which the firm not only produces research, thought leadership and networking events, but also originates and executes investment opportunities.

The platform and 'ecosystem' play mean that Vedrenne-Cloquet gains access to the decision makers and a proprietary deal flow in the EdTech space, he says, with recent news that he is linking up Google Education and nine other organisations to set up a new London EdTech Week (19-23 June).

Other investments from IBIS Capital include Primo Toys, which creates toys for toddlers to learn the rudiments of coding, where Vedrenne-Cloquet is chairman and invests alongside Randi Zuckerberg, Mark Zuckerberg's sister, and former development director of Facebook. Another investment in the portfolio is Learnlight, an online learning company, chaired by Charles McIntyre and backed by Beechtree Private Equity.

Vedrenne-Cloquet says: "We do the EdTech deals on a deal by deal basis and we are planning to create a specific listed vehicle which invests in both Education and EdTech. We think it is largely under invested by institutional investors, if you look at the USD5.2 trillion education market globally.

"In comparison, it is three times the size of the entertainments sector and growing at 8 per cent a year, driven by fundamental macro trends such as demographics, emerging markets growth and accelerated obsolescence that creates a need for upskilling and lifelong learning."


Benjamin Vedrenne-Cloquet


Charles McIntyre

"Within education, the sub-set of EdTech is 2.5 per cent, (ie USD130 billion globally), of this big market which is small compared with what we observe in other industries such as media, where digital spend is already 30-40 per cent. There is huge 15 times potential growth."

"I think education is one of the last content industries being disrupted by the digital revolution and tech reinvention. The takeaway is that everything that has happened in other content industries will happen in the education industry going forward, so it is all very predictable."

Vedrenne-Cloquet predicts that organising platforms such as Netflix and Amazon will move into education.

"Platform players will recommend personalised content," he says. "And another example is the globalisation of content and curriculum. With digitalisation comes global competition and the opportunities for brands to compete and expand globally, in the same way as we saw global brands merging in other industries. Education is embarking into an unprecedented phase of simultaneous consolidation, globalisation and digital reinvention. This creates a unique window for investment opportunities.

If the tip of the iceberg in digital education is the emergence of global online higher education platforms such as Edx or Courser, there is even deeper and more disruptive innovation happening in the primary/secondary school markets and in the corporate training market.

McIntyre says: "The profit comes in a number of different ways. Historically, there is always profit in education, but the modern version is the supply of tools supplying schools or universities, teachers or individuals. Digital mobile learning and distant learning are so much greater than it ever was. We have an environment where we will have an additional enrolment of one billion students in the world by 2035.

Vedrenne-Cloquet says: "What people don't see is if nothing is done to make education more fluid and personalised then the massive skills gap is going to impact the global economy. It could be a USD10 trillion threat to the global economy from lack of marketable skills and people now need lifelong training and are willing to pay for it."

He sees two segments of the market which offer early digital transformation opportunities. Firstly, the international school market is not only a large, fast growing and profitable global niche, but also an early adopter of EdTech on an international scale.

The international school market is a USD36 billion market, and fragmented, with much higher profit levels than any other segments, he says. This market will double in the next 10 years, driven by demand for international education in emerging markets and the globalisation of curricula. The spend in technology per student in this segment is 10 times more than in any other schools, so this is a good proxy to capture both stable earnings plus the upside potential of technology disruption in education, he says.

Secondly, he points to the technology bootcamp market. "Tech skills are hot and scarce skills everywhere in the world and so new generation training centres focused on those are blossoming everywhere," he says.

"Bootcamps focus exclusively on skills that are in demand in the job markets such as coding and digital marketing. They use a blended learning approach, combining a mix of short stay residential training with innovative digital delivery. They deliver a much higher ROI for students. Some of them have truly disruptive business models where the tuition fee is deferred and calculated as a percentage of the student's first job salary. This is a USD3 billion, fragmented and profitable global niche likely to multiply by three or four times in the next 10 years."

Dynamic fund brings three strategies together

2015 saw the launch of Anavio Capital Partners, and their event driven fund. The launch brought together three experienced managers in three distinctive and complementary sub-strategies, Special Situations, Arbitrage and Capital Markets.

The three founders, Daniel Horsley, Emiliano Leggieri and Dario Sacchetti run the strategies from a single book, allowing for an opportunistic approach which allows for optimum capital allocation.

Leggieri, who is Anavio's CIO, explains that his strength is in Arbitrage (Merger Arbitrage & Relative Value) but the three run the money in a fluid way. "Two portfolio managers are on each position at all times," he says. "Idea generation comes from our specialities but in terms of managing the positions, we work as a team."

Horsley and Leggieri had spent four years at BTG Pactual managing similar strategies, as part of the BTG Global Equity Opportunities fund, where strategy AUM peaked at USD1 billion

"After four years, we thought we could launch a business by ourselves and we also knew Dario, who was at Goldman Sachs, and thought he would be the right person for the team as an idea generator on the Capital Market's part of the portfolio". Sacchetti, had built a close relationship with Dan and Emiliano during his 14 years at Goldman Sachs, where he ran several groups within Investment Banking/ Financing group divisions.

"We also wanted to apply our skills in terms of managing positions to all the positions so we came up with the idea of the one book approach and a dynamic allocation of capital," Leggieri says.

"Our capital can be allocated to one strategy over another depending on where we are in the market cycle. It comes from our collective experience, that we learnt in the past as portfolio managers. We realised that more often than not allocation is static. In general, if you do well at the year-end you get a bigger allocation for your strategy, or smaller if you don't – it's very inefficient as the year end is a random point in time, and secondly, the way a strategy might perform three, six or nine months down the line is hard to predict. We wanted a totally dynamic allocation."

The team invests in a bottom up style so 2016 for example, full of big macro events like Brexit and the US elections, pushed them to focus on the Arbitrage book because that was the least sensitive to those kind of events. The fund is structured to provide investment opportunities across different risk cycles.

The fund has more than USD100 million under management plus a separate managed account and the team are confident their strategy is scalable to USD1-1.5 billion. They have achieved net performance of 25 per cent (founders' shares) and 29 per cent (ongoing A shares) since November 2015 inception, depending on the share class.

Within the portfolio, most positions tend to be 2 to 3 per cent in size, but if a second or third portfolio manager comes on board, the positions will grow with conviction levels, up to 10 per cent max.



Anavio Capital Partners founders: Daniel Horsley, Emiliano Leggieri and Dario Sacchetti

A good example of how the three portfolio managers work together is an investment in Sirius Minerals, a UK based fertiliser development company focused on the development and operation of a polyhalite project in North Yorkshire. This is the largest polyhalite mine in the world, others can be found in South America and Israel, but they are much smaller.

Leggieri had been familiar with the company since they pitched to him in 2011 when he was at BTG. "At the time, we researched and studied this company but decided not to invest as it was too early. We needed proof of concept and backing from others," Leggieri explains. Six months ago, some six years later, the company announced that it had all the approvals in place to launch their business, and that they had received a USD300 million investment from an Australian company to buy forward polyhalite.

The firm had also issued a convertible bond with a lot of protective features. Horsley examined the convertible bond; Sacchetti sourced the new offering and it was a coincidence that Leggieri already knew the company. The three researched the proposition, applied for the bonds and received a 7.5 per cent allocation. "Many others investors received allocations of the equity which is trading higher but with not many of the protective features of the bond," Leggieri says. The bond traded at 100 and a bit higher at the outset but is now trading at 125, while the equities went from 20p to 17p and are now trading at 28p.

"The big difference for us is that we never lost money on the trade," Leggieri explains. "We liked the long-term value story with Sirius Minerals, with multiple catalysts. The value can only be realised once all of the milestones are hit, but one thing we are looking at is if you have this type of project you can predict what analysts think after each milestone."

Anavio's investor base represents a broad mix. "As a start-up we were mostly family and friends, family offices gave us early support and in the last six to nine months we have seen larger institutional investors coming in as they like that we have very low net exposure and are uncorrelated to the markets. The book is tightly hedged such that net market exposure is limited and we have target returns in the region of the mid-teens but with low volatility of 6 to 7 per cent or even below, culminating in our current Sharpe ratio of 2.8. Pension funds like us because we have good returns with relatively low correlation and volatility."

Crypto currencies enjoy dramatic run

Since AlphaQ last covered the subject in the **April** issue, cryptocurrencies have had another extraordinary growth spurt. The price of bitcoin doubled in a month and then fell back a little. It currently stands at around USD2,800.

The big driver has been Japan's April announcement legalising bitcoin as a currency – the first time a cryptocurrency has received support from a G5 country. The result is that bitcoin can be used freely throughout the economy within Japan.

Ryan Radloff of bitcoin specialists XBT Provider, says: "So, this is a G5 economy that has seen the purchasing power over the last 15 years of their local currency decline and a huge amount of inflation and debt levels. They also have a tech savvy culture and population, so the new concept of making non-Yen money in Japan legal has made it absolutely explode.

"In the last month, 50 per cent of bitcoin transactions in daily volume have come from trading by Japan. The Japanese have woken up to the reality of bitcoin being legal tender and everyone wants it."

XBT Provider offers a bitcoin exchange traded note which is now on the Hargreaves Lansdown platform, alongside 13,500 other options including shares, investment trusts, funds and cash. The result is that assets in the ETN have risen from USD60 million to USD85 million on the back of the performance of the currency and new inflows, and the firm has received positive comments from self-invested pension scheme holders, investing through the Hargreaves Lansdown platform.

"Bitcoin is taking shape as digital gold," Radloff says. "By adding self-service, online dealing, the team at Hargreaves Lansdown is providing UK investors with professional and quick access to the bitcoin space in the UK and greater Europe.

"This is very exciting for any investors who have been thinking about buying bitcoin but did not want the hassle of security and regulation involved in buying bitcoin directly from exchanges. Now investors can quickly add bitcoin exposure to their portfolio via their brokerage account."





Another driver for cryptocurrencies is the development of initial coin offerings or ICOs, which see start-up companies raising funds through cryptocurrencies rather than crowdfunding. Investors own the asset that the company is releasing, not the corporation itself, so the process of listing can be swifter than the more usual IPO route.

Firms such as TokenMarket and Smith & Crown detail the ICO projects that are ongoing or closed.

Ethereum has also enjoyed a couple of months of growth as the whole crypto currency sector has floated up, although its market cap remains not even half that of bitcoin. ●

"Bitcoin is taking shape as digital gold. By adding self-service, online dealing, the team at Hargreaves Lansdown is providing UK investors with professional and quick access to the bitcoin space in the UK and greater Europe."

Ryan Radloff, XBT Provider



Natural resources and global equities dominate KBIGI's portfolios

Geoff Blake is director, head of business development and client services at KBI Global Investors, a Dublin based institutional asset manager, known formerly as Kleinwort Benson Investors.

The firm has two principal product ranges: Global Equity strategies and a suite of Natural Resources strategies, focusing on water, food and energy.

September last year saw the firm close a deal where the Amundi Group became the majority shareholder.

Blake says: "We had three main aims in the deal. The first was to maintain our investment and operational autonomy, which from both the clients' and consultants' perspectives, was imperative. The second was to find a buyer who would allow the staff to take equity participation within the organisation, which we achieved. 12.5 per cent of the firm is now owned by staff, which means we are fully aligned with our clients and the future direction of the business. The third aim was to find a strong parent like Amundi; this gives us stability and offers us distribution opportunities."

The sale process seems to have gone well. The firm had USD9 billion in assets when the deal was struck, that figure growing to USD10 billion* – and it has not lost any consultant ratings.

Blake reports that over the last 10 years the client base has transformed from a domestic Irish pool of clients investing in a managed fund, to being 90 per cent global investing in their specialist equity strategies with, as Blake puts it: "Clients from the Shetlands Islands to Seoul and from San Francisco to Sydney. We really are global."

Clients split 60 per cent pure institutional and 40 per cent institutional in style, but with wholesale distribution relationships where KBIGI is appointed as a sub-adviser.

The two strategy groups, global equity and natural resource strategies, have been designed to be different and unique, Blake says.

"In our global equity portfolio, where many would invest, we look for companies which have a history and a management policy to pay dividends and to grow their dividends. We see the dividend characteristics of a company as a window into the future profitability of those companies. We feel



companies that operate a strong dividend policy leads to stronger earnings and ultimately share price appreciation over time."

The global equities portfolio is invested across all regions and all sectors in a diversified approach, which is very different. "Historically, investors who have sought yield typically do so only in certain sectors such as utilities and real estate, and regions like the UK and Europe," Blake says.

"We seek out those companies with the characteristics we like, in every country and sector – technology companies and pharma included – but only those which pay above average dividends."

Since inception in 2003, this strategy has enabled the fund to outperform its benchmark by 1.3 per cent a year (Gross of fees in USD as at 31 March 2017. The benchmark is MSCI World (NR) Index).

"This comes against a backdrop where the style of our strategy, particularly in terms of the value bias and yield bias inherent in it, hasn't been particularly helpful", says Blake. "However, we are very optimistic for the future because there is such a divergence in performance between value and growth right now. We expect that to unwind and return to the norm, allowing those style headwinds turn to tail winds, and we can do even better."

The natural resources strategy was launched in 2001 and has under USD1 billion under management (as at 31 March 2017). "We have three strategies in natural resources – water, energy solutions and agricultural businesses. In simple terms, they are all built around the growing long-term increasing demand for water, food and energy.

"We have three strategies in natural resources – water, energy solutions and agricultural businesses. In simple terms, they are all built around the growing long-term increasing demand for water, food and energy."

Geoff Blake, KBI Global Investors

"We believe there will be significant pressure on the world to produce enough water, food and energy, so we look to identify companies which will provide the solutions to those incredible imbalances, and therein lies the investment opportunity," Blake says.

KBIGI has launched a global resource solutions strategy which allocates across all of the three strategies, allowing an investor to access all three themes – water, food and energy.

"Many of our companies are supplying either environmental or social solutions across the water, food and the energy spectrum. In that context, the companies deliver a big impact in areas such as irrigation, water reuse, energy supply and food storage. As an example, they invest in one company focused on reducing the amount of water wasted when farmers are watering crops. This precision irrigation technique can save up to 70 per cent of water used in this process," Blake says.

A new product will focus on infrastructure. "A sustainable infrastructure strategy takes our three themes and invests in the global sustainable infrastructure around them," Blake says.

The firm works with sustainable investors group Ceres, an industry body which brings together some of the largest companies and asset owners in the world – 64 corporations, all Fortune 500 and investors controlling over USD13 trillion. "They are at the forefront of being more sustainable and impactful and we are part of that", says Blake. "We see a lot of momentum with groups like this. We are seeing growing numbers of consultants trying to find products in this space for people to invest in for the very first time. Two of the top five consultants have rated our products recently in the context of the search for more sustainable investments." ●

**This is the combined AuM of KBI Global Investors Ltd and KBI Global Investors (North America) Ltd as at 3 March 2017.*

Fund gets new energy from timber turnaround

Stephen Addicott is a partner in the timberland group at USD4.8 billion Stafford Capital Partners. The timberland assets within the firm total USD2.3 billion and within that sector is the revived USD300 million Phaunos Timber Fund.

Stafford's timberland assets have a global spread, with roughly 55 per cent in North America, 30 per cent in Australia and New Zealand, and 15 per cent in Latin America.

Addicott is an Australian forester with over 23 years of experience in the forestry industry, from managing operations and plantations to timber harvesting and tree planting, to evaluations and acquisitions. He spent the first five or six years of his career in operations and then moved into a consultancy role.

Stafford took over the management of Phaunos in July 2014 with a turnaround strategy that saw the board seeking to improve the position and performance of the underlying assets.

Addicott says: "We took the portfolio on and identified that the fund had 36 per cent of high risk assets, including green field investment in emerging markets – also manufacturing assets, timber processing and a timber harvesting company, all with greater levels of risk. At the time, only 64 per cent of assets were typical of the sort of timberland investments we want to see.

"We like lower risk investments, with mature timberland markets, preferably both domestic and export markets, with a good age spread and regular harvesting events taking place," he says.

Stafford's mandate in managing Phaunos was to sell the higher risk assets and convert the portfolio to a more standard timberland fund – and the result is that the higher risk element is now down to 13 per cent of the portfolio, with a target level of less than 10% expected to be achieved in the coming years.



Stephen Addicott

"As trees get larger their incremental value increases. Timber is known to have a strong correlation with inflation."

Investors drawn to Stafford's timberland portfolios, and Phaunos in particular, are dominated by pension funds, institutional investors, family offices, wealth managers and value investors. These last, the value investors, have come into Phaunos in the past couple of years, Addicott says, looking for an upswing in the share price that Stafford might be able to bring about by turning around the company.

And they haven't been disappointed. The July 2014 share price when Stafford took over was around 41 cents and following the revaluation of the net assets the price dropped further to 30 cents. It now stands at 50 cents. Stafford's performance explains the feedback received from many shareholders as the fund approaches a five-year continuation vote later this month.

Addicott explains that the returns from a timber portfolio include income yield from timber harvesting of 3-5% per annum and capital growth of 3-5% due to forest growth and a small component of land appreciation – giving total returns of between 8-10 per cent.

"As trees get larger their incremental value increases," Addicott explains. "Timber is known to have a strong correlation with inflation – it's often counter cyclical, so in times of poor economic growth you can continue to grow your stock on. In a mature estate, harvesting might vary from 80 per cent to 120 per cent of the annual volume growth depending on the strength of the market. This ability to maintain the asset value growth, even during down economic periods, helps it act as an important diversifier for investors."

The rise of ESG investing has also driven growth in the industry. "It has a strong conservation record proven through forest certification standards with most estates being managed in accordance with national or FSC standards," Addicott explains.

"And the management of these plantations helps reduce harvesting within native forests, alleviating the problem of native forest clearing."

Within the Stafford portfolio, 95-96 per cent is in certified forests, with the balance being sustainably managed assets that are generally too small to justify the costs of certification.

"The plantation and forest industry has been focused on certification for 10 to 15 years, but there has been a continuous improvement in stakeholder involvement and conservation benefits," Addicott says.

"Increasingly other parts of the land around the forests are set aside and valued by conservation groups, providing the forest owners with payment for good management of forests."

He also points out that a timber product embodies less energy than a steel framed structure.

"There is considerable upside for the timber industry if true carbon accounting was brought into global economics," he says.

The art of making an impact

Beverly Chandler writes that sustainable or socially responsible investment has a new title – impact investing – and the sector is beginning to enjoy real growth as investors increasingly choose to make a difference in the world, in addition to an investment return.

News came in April that IFC, a member of the World Bank Group, and Amundi, had agreed to create the largest green-bond fund dedicated to emerging markets – a USD2 billion initiative designed to deepen local capital markets and expand financing for climate investments.

May saw Nordic corporate bank SEB release research on the green bond market, forecasting 2017 year-end green bond market potential issuance figures at USD125 billion in a baseline scenario, but with an upside potential for issuance to rise to USD150 billion.

SEB believes the green bond market is maturing and diversifying, with new regional hotspots emerging, such as Australia, alongside new sectors, such as insurers and healthcare.

SEB's research shows that the first quarter of 2017 broke the previous year's Q1 record USD15.3 billion of green bond issuance, rising by 83 per cent to USD28.1 billion.

Key enablers and drivers continue to underpin heightened green infrastructure investment demand and green bond financing. Combined with increasing appetite from institutional investors, these factors behind the momentum from 2016 are continuing to propel green bond issuance in 2017, the SEB says.

Meanwhile, the United Nations' Principles for Responsible Investment, an association of institutional signatories that have committed to consider environmental, social, and governance issues in their investment processes, has recorded strong growth in the sector.

As of April 2016, the UN PRI had 1,500 signatories with USD62 trillion of assets under management (AUM), up from just 100 signatories and USD6.5 trillion of AUM at the organisation's founding in 2006.

This level of growth demonstrates real commitment to a sector that has previously been somewhat dismissed as at the 'fluffy' end of the investment world.

Jeff Finkelman, Research Associate, Impact Investments at Athena Capital Advisors says: "We define impact investments as investments made with the intention of generating some kind of positive social or environmental impact as well as a financial return. That may mean a market-rate of return or a below-market rate of return, but the financial return is always greater than zero."

"We define impact investments as investments made with the intention of generating some kind of positive social or environmental impact as well as a financial return."

Jeff Finkelman, Athena Capital Advisors




Nicky Chambers


Bob Smith


Ben Webster

Nicky Chambers, Director of Innovation at Anthesis Consulting Group, says: "Impact investing covers a wider range of things from ESG, which for me is how to do business as usual but with more responsibility, right through to charity and philanthropy which has a social element of doing good.

"It's everything from doing good for the hell of it to mainstream business which minimises risk by attending to ESG issues."

And the old belief that investing with principles means taking a hit on returns no longer seems to apply.

Finkelman's firm, Athena Capital Advisors, is a traditional investment adviser firm which has applied the principals of impact investing to Modern Portfolio Theory (MPT), publishing a white paper entitled Building Impact Portfolios.

"Like the rest of the industry, much of our work is rooted in Modern Portfolio Theory," Finkelman says. "The reality is that a lot of the attention in impact investing is focused on individual deals. Our motivation for writing the paper was to share our thoughts on how investors can build balanced portfolios out of those individual deals."

Finkelman's findings are that investing for impact does not have to have a negative effect on a portfolio's returns.

His white paper says: "The experience of seasoned impact investors suggests that earning a social return does not always require investors to accept uncompensated financial risk or lower expectations of financial return. A more realistic representation of the curve includes a flat section where the investor's willingness to sacrifice risk-adjusted return is irrelevant. Along this portion of the frontier, investors are able to find impact investments that deliver competitive, risk-adjusted returns."

Anthesis's Chambers says: "The spectrum of investments runs from, at one end, fairly risk free stable green bonds for renewable energy, which are quite stable and mainstream, to the other end where we have things like investment in social impact projects in Africa. These are poverty alleviation projects which traditionally wouldn't have been thought of as impact investment but which come under that banner and deliver returns."

The ETF world has adopted all things ESG or impact as well, as reported in AlphaQ's sister publication, ETF Express. Lyxor ETF recently announced a new set of ESG-based ETFs; **OWLshares** uses ESG to offer a data edge to portfolios; **S-Network** runs only ESG or SRI indexes and interviewed last year, USD12 billion **Sage Advisory** in the US reported an initiative that revealed that ESG ETFs do not underperform their not so PC peers.

ETFs lend themselves well to the screening and factor analyses that underlie the sustainable investment assessment process, the firm says, having adapted its ETF due diligence process to include an ESG selection process centred upon three primary considerations.

First is developing a deep understanding of the methodology and mechanics of the underlying market index; second, evaluating the structure of the ETF, including the sponsor, its registered form and the effectiveness of the fund's risk management and thirdly, analysing the characteristics of the security itself, including the expense ratio, tracking error, premium/discount NAV trends and secondary market bid/ask spreads.

Sage president and CIO Bob Smith explains that the firm's research utilised Sustainalytics and Morningstar data to create a rating system across a wide array of ETFs and index funds to give investors an idea of what is the quality of the ESG orientation in companies within the funds.

Smith says that the dominant concerns about ESG portfolios is that while investors care about doing good in the world, they also want to do well for themselves.

"We asked, 'is there enough there for us to utilise our global economic outlook and come up with the goods?'" Smith says. "So, we did that and have gone back over the course of the last year and utilised them within our financial forecasts and found that our ESG portfolio came up with slightly better results than our non-ESG portfolio both in terms of growth and lower volatility. We are doing well by the planet and managing ESG needs."

"This development was internally

driven," he says. "We are fairly committed in Austin, Texas to be environmentally and socially conscious. We have three Millennials on the team and it fits with them and how they see the world. It's a generational issue."

Smith concludes: "If my clients can do well for themselves as well as the rest of the world then so be it."

Wealth management has also embraced impact investing. James Lawson is a partner, and one of the co-founders of Tribe Impact Capital LLP.

"We are the first impact wealth manager in the UK. While there are impact investors that exist already what we do is work on behalf of wealth holders to align their financial requirements with their individual values and the change that they want to see."

For Lawson, it's about infusing impact across the entire portfolio rather than as a specific asset class. "We have a sense of both frustration and tremendous opportunity, he says. "Frustration that many wealth holders haven't been able to engage with their wealth yet. The investment community knows this because their clients are rarely enthusiastic. But this is a tremendous opportunity – I've never seen a sector where there are so many positive factors at play."

Another AlphaQ sister publication, Wealth Adviser, recently saw Quilter Cheviot Investment Management's Claudia Quiroz, Executive Director for Sustainable Investing at Quilter Cheviot and Lead Fund Manager of their sustainable investment strategy, the Climate Assets Fund win **Best Wealth Manager** for a balanced portfolio. She has observed that clients are increasingly seeking out socially responsible investments.

"We developed this investment strategy because of increasing appetite from our clients and charities to look at the world in a different way; moving away from the traditional sectors of the economy like fossil fuels, gambling or tobacco," she says.



"We developed this investment strategy because of increasing appetite from our clients and charities to look at the world in a different way."

Claudia Quiroz, Quilter Cheviot Investment Management

Quiroz finds that investors mistakenly think they will be penalised in terms of returns if they invest sustainably. "But that is not the case," she says. "We have been consistently first quartile within the balanced sector peer group and have demonstrated that the strategy works."

And the trend continues for financial advisers. Worthstone, the impact investment hub for financial advisers, launched the UK's first social investment training manual and competency mark for financial advisers in May.

The Adviser Competency Training (ACT) offers advisers the opportunity to learn about all key elements of social investment needed to advise their clients successfully in this area. The training is endorsed as structured CPD.

Again, the development was driven by the gathering momentum of social impact investing. The firm writes: "Traditional asset managers are responding to investor demands by providing impact investment products and advisers are being approached by their clients to provide values-based investment opportunities and recommendations."

Eventually, OWLshares's CEO Ben Webster believes that everyone will invest for impact or ESG. "Investors will understand that ESG data can be materially relevant if applied correctly and as knowledge becomes more common place, then more will integrate ESG data in their data as they decide whether to invest or not," he says.

Boston Partners opens London office

James Williams examines why US value equity investment managers Boston Partners, with USD90.6 billion of assets under management, has established a footprint in the UK.

Joshua Jones, a portfolio manager on Boston Partners Global and International products, will oversee a small investment team in the newly opened London office, with William Pawson, a senior product specialist, overseeing distribution. Boston Partners was founded in 1995 and has a range of investment products including Value Equity, Long/Short Equity, Global and International Equity, Global Long/Short, Small and Micro Cap Equity, and Volatility Harvesting. In 2003, the firm became a part of the Dutch asset management Robeco Group, which itself is owned by Orix, a Japanese financial services group.

As Jones explains, the London office will bring Boston Partners closer to the European institutions for whom they sub-advise on more than USD14 billion of UCITS AUM across four Robeco funds, in addition to USD2.2 billion in separately managed accounts held by nine European institutions.

"We had quite sizeable client demand across Europe to service them closer to home, from a product specialist standpoint, and provide them with what they need, as we do with all clients globally. We decided it would therefore make sense to service these European clients out of London. We had been thinking of doing this for quite a while, before Brexit happened last year," says Jones.

The UCITS funds it currently sub-advises on include: Robeco BP European Premium Equities (co-managed by Joshua Jones and Christopher Hart); Robeco BP Global Premium Equities; Robeco BP US Large Cap Equities; Robeco BP US Premium Equities and Robeco BP US Select Opportunities Equities.

Boston Partners has always traditionally been a US value equities investor. With a London office, it will give the firm a chance to build its brand and gain greater visibility, although Jones confirms that the main focus for now is supporting its current client base; there are no plans to expand the team.



Joshua Jones, portfolio manager at Boston Partners

Jones himself joined Boston Partners in 2006. At that time it still had USD12 billion in AUM. "We had no international distribution. Our sales team was 100 per cent based in the US," says Jones. "Over time, our continental European clients have gotten to know us pretty well and what the Boston Partners brand stands for, despite the fact we only act as a sub-adviser to the UCITS funds, which are distributed as Robeco funds.

"That said, we haven't had a lot of presence in the UK so one of the office team will be working to build our brand in that market. We are looking to familiarise UK institutions to the Boston Partners name, but for the most part, the reason for establishing the London office was to better service our existing European clients rather than focus on expansion."

The most popular of the UCITS funds is Robeco BP US Premium Equities. This was the first fund introduced on to the Robeco platform and is a long-only all-cap investment strategy. The fund's AUM is USD6.163 billion, according to Morningstar, and has generated three-year annualised returns of 18.30 per cent.

Boston Partners' investment philosophy centres on investing in companies with attractive value characteristics and strong business fundamentals, where there is a catalyst for positive change. The firm refers to this as its 'three-circle' approach.

Used since day one, it is, says Jones, a time-tested and well-disciplined strategy that has proven to be consistent and repeatable.

"The best way to think about the three-circle approach is that it's a value fundamental equities strategy.

"We are trying to blend what we think are the three main exploitable characteristics of the stock market. These have consistently been shown to present an anomaly from an alpha generation perspective and include: value, momentum and fundamental quality. A lot of investors tend just to be value investors or momentum investors, or allocators to high-quality businesses. We try to incorporate all three of those attributes into the portfolio and what we've generally found is that if you can do that, you can generate a bit more consistency with respect to alpha generation," outlines Jones.

Boston Partners also uses quantitative tools to screen the universe of stocks, from which it then seeks to construct diverse portfolios imbued with value, momentum and fundamental quality characteristics.

"One of the points we explain to prospective investors is that for a deep value strategy, it might do well one or two years, but generally, over a five or six-year investment cycle, it will likely lag the market for two or three years. At Boston Partners, over a market cycle we might lag a little if there's a deep value rally but we will tend to do well during the middle of a cycle, and when momentum takes over, we might again lag a little, but perform better on the downside.

"We saw this in 2007 and 2008. We did better compared to a lot of other investment firms because of our quality bias," says Jones.

For the last few years, booming stock markets have been a boon for investors, but for active managers, the art of stock picking has proven quite a challenge. Jones is unperturbed.

"I'm a big believer in cycles, and active management is no exception," he says.

As Goldman Sachs has reported, the period between 1995 and 2000 was terrible for stock pickers. Then, from 2000 to 2008, markets traded on fundamentals and it was a good period for active managers, since when it has been another challenging period. But Jones believes one has to assume that at some point, the markets will once again mean revert. Certainly, the more central banks pull back from interfering in the global economy, the stronger markets will trade on fundamentals.

"If you break markets down, the cycles tend to be large and drawn out. Oftentimes, value markets within a cycle tend to be better for active managers, whereas a lot of growth markets, which tend to be multiple expansion-driven, such as we saw in the late 90s and even today, tend to be harder for active managers.

"In the late 90s, everyone wanted to buy the S&P 500 and tech stocks and didn't want to hire an active manager. From what we're seeing today, from a bottom-up basis in the market, ETFs are creating some interesting opportunities, but you have to be a bit patient; not everyone is just buying the broader stock market. A lot of ETF investors are looking to buy different sectors, different factors, and ultimately they are trying to trade on trends, which can create opportunities for active managers," suggests Jones.

Market cycles aside, one of the biggest developments in recent years that threatens discretionary active managers is the rise of machine-based systematic trading and robo-advisers. According to Business Intelligence*, robo-advisers will manage around 10 per cent of total global assets under management (AUM) by 2020; approximately USD8 trillion.

Such is the efficiency and speed of computers and their ability to absorb and process vast amounts of information, the challenge of discretionary fund managers when looking to generate smarter performance, is how to 'outsmart' the machine; a human might be able to think five moves ahead in a game of chess but a computer has the ability to assess all possible moves playing 100 games of chess.

Commenting on this trend, Jones says that while it is hard to draw true empirical conclusions, "I do get the sense that a lot of systematic trading strategies are trend following and momentum-orientated.

"There are actors in the market with a different objective to a pure-play fundamental investor but that's just the way the stock market has evolved. It still creates a lot of opportunities. Machines are very good at trading information rapidly but they're not necessarily very good at trying to discount what's going to happen 12, 24 months from now."

For now, by moving to London, Jones and his team are using good old-fashioned human relations to forge closer ties with Boston Partners' European investors. ●

**Source: http://uk.businessinsider.com/the-robo-advising-report-market-forecasts-key-growth-drivers-and-how-automated-asset-management-will-change-the-advisory-industry-2016-6?r=US&IR=T*



Luxury real estate in Mexico set to grow

Mexico's retail real estate market presents compelling investment opportunities for international investors, according to Jimmy Arakanji, co-CEO of Thor Urbana.

Mexico's retail real estate market is still underserved and currently presents compelling investment opportunities for international investors, according to Jimmy Arakanji, co-CEO of Thor Urbana. With tariffs removed, attracting international retailers, and tourism numbers booming despite the new US administration, there is cause for optimism, he says.

The firm's mission is to develop, lease, operate and acquire integral and innovative high quality real estate developments. Indeed, the investment philosophy is quite straightforward: to build new or acquire underperforming or undervalued retail, hotel and mixed-use properties in prime locations throughout Mexico's main urban markets and tourist destinations

"We are very optimistic on the long-term potential of Mexican real estate," says Arakanji. "Mexico has become increasingly sophisticated over the last decade, as evidenced by the creation of the Fibra market, Mexico's REITs industry. Mexico pension funds are now allowed for the first time to invest in real estate. There has been a steep evolution from a family-controlled real estate business, to a much more institutional industry where there is a lot more transparency and a lot more liquidity."

With respect to retail real estate, retail supply square footage per capita in the US and Europe, and even in Latin America, is greater than Mexico, which is still in the early stages of development. Much of Mexico's retail real estate is old stock that was built 25 years ago. Over that time, Mexico has enjoyed a huge change in its fortunes as it has progressed economically, and pushed higher numbers of people into the middle-class, with higher disposable incomes – according to Euromonitor International, more than 14.6 million households fall into the 'middle class' category, up from 9.1 million 15 years ago.

"We are an anti-commodity real estate developer in Mexico. If you were



Jimmy Arakanji, co-CEO of Thor Urbana

in the real estate market in the early part of the century and wanted to build retail, you would only have thought of building power centres anchored with the likes of Walmart because that was the need 15 years ago.

"Before you can think about anything else, you need to provide basic needs – supermarkets, pharmacies, etc – to the population. It was a pure commodity retail market.

"Fast forward to today and Mexico is a much more connected and sophisticated society. People are demanding what they see in the US and Europe; they want beautiful spaces where they can gather and enjoy a sense of community; they want more of a lifestyle experience," explains Arakanji.

Bringing fashion and luxury lifestyle to Mexico is a big part of Thor Urbana's development strategy. It is, says Arakanji, an area that presents "real opportunities for a company like ours that is bringing institutional capital into the country for long-term investing". He says the plan is to bring Mexico's traditional approach to retail real estate to a more sophisticated level that adds lifestyle characteristics that modern countries demand.

"Retail is still a big market in Mexico with a lot of potential, and lifestyle and experiential retail in particular present a big opportunity.

Regarding the hotel industry it is starting to get a lot of momentum. Tourism is booming, despite what is happening with the new US presidency. Firstly, this is thanks to the currency having devalued, making it less expensive for foreign tourists to visit Mexico. Secondly, there's a growing national sentiment, which is fuelling domestic tourism within Mexico; Mexicans are travelling more throughout the country than they used to," says Arakanji.

Thor Urbana is not concerned by any political developments north of the Mexican border because the bottom line is: "We see our projects running longer than the Trump administration – regardless of the positive or negative consequences of the presidency," says Arakanji. "We are developing real estate based on fundamentals. When we do deals, they are backed by solid and rational fundamentals; where there's a clear need to build a new project and add more space to accommodate the changing needs of society."

Thor Urbana is a vertically integrated real estate company and captures institutional capital directly from source. This is mostly done through joint ventures with institutions, using separate accounts, as well as private equity funds. The capital allocated to Thor Urbana goes directly into financing the development and operation of the real estate, therefore providing scalable, long-term investment opportunities.

Thor Urbana is also able to bring together groups of family offices that wish to co-invest alongside these larger institutional investors.

"So far, we've raised and committed USD750 million of equity to 14 individual projects. Out of that USD750 million, around USD550 million is institutional money and the other USD200 million is family office money. The USD750 million figure translates into more than USD1.4 billion of total investments, as we are using leverage to optimise the way we allocate capital," confirms Arakanji. In total, those 14 projects equate to 11 million square feet. Besides these 14 projects, the company confirmed it is actively pursuing and analysing a growing pipeline of investment opportunities throughout the country.

Current Thor projects that are scheduled to be completed within the next 12 months include: The Landmark Guadalajara, a mixed-use development comprised of retail, class A office space, and luxury residences; Town Square Metepec, a fashion mall with approximately 900,000 square feet of leasable area; and The Harbor Merida, a lifestyle mall

located within Via Montejo, a new mixed-use project with luxury condominiums, class A office space, and a business hotel.

"In 2018, we are hoping to open five projects. Two of those are shopping malls – Town Square Metepec and The Harbor Merida – while one is a mixed project (The Landmark Guadalajara) including retail, residential and office space, and the other two are hotels. We are opening the Ritz-Carlton, Mexico City and the Montage Los Cabos, a seaside resort with 122 hotel rooms and suites, and 52 luxury residences.

The Ritz Carlton Mexico City is a seminal development and underscores the extent to which Mexico City is evolving as a leading cosmopolitan centre. It is set to become the most iconic hotel in Mexico City with unobstructed views of Chapultepec Park.

"It is a landmark deal and we are excited to complete it," says Arakanji. "It clearly demonstrates our investment philosophy, regardless of whether it is retail or hotels, where we are trying to elevate the standards by partnering with high quality international brands like Marriott, or the luxury and lifestyle space.

"For example we opened the first lifestyle-branded boutique hotel, the Thompson Playa Del Carmen. Before that, there were no such hotels in the country. We built fashion and restaurant retail space at the bottom and added a lifestyle hotel component on top.

"We aren't looking to build commoditised real estate but iconic real estate projects that can help differentiate us and increase our strength in the marketplace."

It would appear to be good timing. Mexico City, in particular, is a huge cosmopolitan centre with a vibrant restaurant scene, art scene, and has been a magnet for attracting Mexico's largest, most successful companies.

"A lot of firms who previously had their headquarters in Miami or other Latin American capital cities are relocating to Mexico City; it is definitely experiencing tremendous growth, from a business and tourism perspective," adds Arakanji.

He confirms that some of the additional projects that are planned over the next three years include: The Park Lomas Verdes, a lifestyle fashion mall with 490,000 square feet of leasable space; San Luis Potosí – a mixed-use project in San Luis Potosí will be built over a 1.2 million square feet site and include a lifestyle mall, two hotels, a corporate park, and more than 400 luxury apartments; Caye Chapel, a luxury resort to be built on a private island in Belize, and a new lifestyle centre in the city of Torreón, one of Mexico's most important economic centres.

San Luis Potosi is one of Thor Urbana's most recent projects. "It's a big project in the very heart of San Luis Potosi. Right now we are in the pre-development phase. We are looking to start construction in early 2018 and open it to the public by early to mid-2020. Beyond Mexico, one of the first international projects we got involved in was Caye Chapel, a private island off the coast of Belize. This will include a luxury hotel together with a high-end residential complex, a golf complex and a marina," says Arakanji.

A big boost to supporting Mexico's high-end retail real estate is the removal of trade tariffs back in 2011, which helped to attract more than 120 international retailers.

"Prior to this, we were limited by the availability of domestic retailers to create interesting projects. When tariffs were removed, all of a sudden there were international retailers coming here with expansion plans. H&M or Forever 21 for example, came here with aggressive expansion plans to open dozens of stores across the country in order to meet the demands of Mexico's younger generation," explains Arakanji.

In terms of investment objectives, he says that the range it aims for is an 18 to 24 per cent investment return.

"The aim is to create a high quality portfolio of assets that could eventually be sold or contribute to a public vehicle in Mexico – a Fibra – for Mexican investors. We will evaluate all our options when the time comes. Right now though, our focus is on building and scaling a quality portfolio of real estate in Mexico's main cities and towns."

Arakanji is confident that NAFTA will be renegotiated with the US and that the long-term stability of Mexico's real estate should be robust.

"It is a country with a young demography. The fundamentals are very favourable; demand will continue for office space, restaurants, retail and entertainment. There are few countries that offer the depth and scale of Mexico.

"My advice to investors is that Mexico's real estate market presents the brightest investment opportunity in the emerging world right now," concludes Arakanji.

Keep your alpha, give me delta

Dr William Charlton, Managing Director and Head of Global Research & Analytics at Pavilion Alternatives Group, LLC writes on measuring private equity performance.

It has become increasingly common to measure the performance of private equity fund managers against the performance of the public markets using Public Market Equivalents (PME).

A PME is calculated by taking the historical cash flows from a fund manager and simulating an investment in a public market equity index. The objective of doing so is to determine a private equity fund manager's 'alpha' which is the difference in return earned by the private equity fund manager and the simulated public equity investment.

'Alpha' is a public equity performance measurement concept that derives from the Capital Asset Pricing Model (CAPM). In the CAPM, only systematic risk (as measured by 'beta') is rewarded. If the CAPM is valid, then investors should not be compensated for taking unsystematic risk, which is the risk of an individual company that can be reduced through diversification.

A public equity fund manager that exceeds the expected return predicted by the CAPM and its beta is said to be have earned positive alpha. Alpha could be interpreted as the free return earned by a public equity fund manager for a given amount of risk. In most cases, public equity fund managers are generating positive alpha through superior informational analysis. Rarely will a public equity fund manager become directly involved with the management of a public company, with the primary exception being fund managers that employ activist strategies.

The level of direct involvement in the management of a company is a major differentiation between public and private equity fund manager investment strategies. While significant variation exists as to degree, most private equity fund managers are intimately involved in the direction and operation of their portfolio companies.

As a direct result of the high level of involvement, private equity fund managers have a smaller number of companies in their portfolios. For example, a prototypical buyout fund may would have between 10 and 20 platform investments which are made over a five-year investment period. To generate returns, private equity fund managers are directly involved in changing their portfolio companies in any number of value-generating dimensions (eg. pricing strategy, product mix, materials sourcing, mergers and acquisitions, etc). A significant proportion of the due diligence the team at Pavilion Alternatives Group performs when evaluating a fund manager is understanding what changes a fund manager has made in its portfolio companies and how those changes affect exit valuation. Thus, we are interested in a private equity fund manager's 'delta' – the Greek symbol used in mathematics to denote change.

Alpha and delta are fundamentally distinct concepts. The difference derives from the generally uninvolved public equity fund manager strategies (alpha) and the very directly involved private equity fund manager strategies (delta). Private equity portfolios are generally smaller and, as a result, a single loss can have a profound impact on the portfolio return. This makes it very important for private equity fund managers to analyse all available information on a company just as it is for public equity managers. However, it is also critical for private equity fund managers to be able to develop a realistic plan for generating value over the investment holding period which usually lasts several years. Consequently, to apply the 'alpha'



"However, it is also critical for private equity fund managers to be able to develop a realistic plan for generating value over the investment holding period which usually lasts several years."

Dr William Charlton, Pavilion Alternatives Group

concept to private equity fund managers ignores the key aspect of how private equity fund managers produce returns – by inducing value-generating change in their portfolio companies.

The 'E' in the PME concept is also problematic. The definition of equivalent is: "a person or thing that is equal to or corresponds with another in value, amount, function, meaning, etc." The PME can be calculated using various public market indices, with the S&P 500 a common choice. However, the companies in the portfolio of a USD400 million US buyout fund are highly unlikely to be 'equivalent' to 500 of the largest companies in the world across any number of dimensions.

It is likely that the buyout fund portfolio companies have higher levels of customer concentration, fewer product lines, and a smaller share of their respective markets. Thus, in general, small private companies can be significantly riskier than the benchmark companies. Even for very large buyout funds, there are differences since, by definition, companies in the S&P 500 are publicly quoted which can have significant impact on how the companies are run. Perhaps the largest difference between a private equity portfolio and the S&P 500 is in the risk dimension. Private equity portfolios tend to be relatively small in size and private equity fund managers are not attempting to diversify away unsystematic risk, rather they are attempting to generate returns through company specific risk.

The mechanics of the PME calculation and the lack of true market valuations for private equity investments give rise to two additional issues. Firstly, private equity investments are held close to cost for a period of time after the initial investment as it usually takes some time for private equity fund managers to generate the change which leads to increased value.

If public equity markets are flat during that initial period, the alpha generated by the PME for a private equity investment will not be negative. However, if public markets are robust, the alpha could be strongly negative. Interestingly, the perception of the performance of two private equity fund managers making similar investments but at different times could vary dramatically solely based on the performance of public markets over the respective time period. While the managers may be generating equivalent value in their portfolio companies, the perception of the managers' performance will be dependent on public market conditions. A second and related issue on the mechanics of PME's, is that private equity fund managers invest capital over several years.

As a result, a fund's overall PME is diluted as additional capital is deployed in new investments and the valuation of those is held close to cost. On a PME basis, a manager who has been aggressive in deploying capital during a quiescent public equity market would be viewed as superior to a manager that executed a more conservative investment program during a public market rally. Which manager is actually superior would ultimately be determined by the manager's ability to create value and sell its companies at a profit.

In summary, PME calculations do provide valuable insight as to the alternative uses of the capital that is allocated to private equity. For the larger buyout funds, the PME may approach the definition of 'equivalency'. However, when interpreting PME results it is important to be mindful of the issues discussed above. As the investments made by most private equity fund managers are not truly 'equivalent' to public market indices, it is probably more appropriate to view the PME as a measure of opportunity cost rather than performance. ●



Beware the unfettered machine

James Williams interviews Roy Niederhoffer, who graduated magna cum laude from Harvard with a degree in Computational Neuroscience in 1987 and has seen a lot of quantitative hedge funds come and go since 1993.

It was 1993 when Niederhoffer established RG Niederhoffer Capital Management Inc, a quantitative trading adviser that employs a short-term contrarian investment strategy taking its inspiration from the field in which Niederhoffer studied.

In Niederhoffer's view, while it is clear that in some domains machine learning and artificial intelligence are starting to make a big difference, the key is to understand which domains are appropriate and which domains are potentially problematic. Some domains, like object and speech recognition, linguistic analysis, and credit analysis are perfect for machine learning and particularly, deep learning algorithms. But in Niederhoffer's experience, making short term market predictions using machine learning is perilous, though possible.

"We began exploring neural networks in the early 1990s, and we've continued to make forays into these areas over the years. We are a heavy user of one particular machine learning technique since the mid-2000s and another, which we are very excited about, entered our research program about two years ago. By now, it is becoming a significant piece of our investment strategy. We are using various technologies, but there are always caveats in terms of where you can use them and how you can use them. You have to be extremely careful. Machine learning is not the Holy Grail in terms of trying to forecast the direction of price in the markets," explains Niederhoffer.

Given its automated, quantitative investment strategy, the firm has a natural affinity toward advanced computing techniques. Broadly speaking, the RG Niederhoffer flagship Diversified Program, is designed to do its best during periods of stress, volatility and emotional arousal such as equity market declines, rising interest rate periods, and moments of illiquidity.

These are the conditions, says Niederhoffer, in which market participants (both discretionary and systematic) are most susceptible to behavioural biases, markets

become more predictable, and where the RG Niederhoffer Diversified Program has succeeded.

"Since we started back in 1993, we have tried to avoid the common path of being long equities, long fixed income, short volatility, all three of which have been fantastic for the last eight years. Our strategy has always been designed to work in harmony with portfolios that already contain those exposures," says Niederhoffer. Because of this, the firm tends to take non-consensus, contrarian views more often than not.

"When thinking about the sophistication of quantitative funds over the last decade, it is fanciful to think that we could set the computers free and let them trade the markets without any human intervention.

"The thing is, computers are very good at figuring out what works most of the time.

"For example, it is easy to find strategies that appear to predict bull markets effectively based on bullish sentiment. This can, however, easily lead to machine learning models producing spurious predictors of future market direction. One only has to point to the market crashes of October 2000 and October 1987 to underscore this point."

What this has led to at RG Niederhoffer is a conviction that one needs to know in advance what the key independent variables are, to put into the computer model, rather than letting the computers identify the variables.

"Our experience is that computers aren't best at identifying predictive variables. Our research has shown that it is more effective to screen variables, using prior knowledge, before you begin a machine learning process," comments Niederhoffer.

A large price movement can be caused by one event, representing one observation of many. A computer algorithm that attempts, for example, to find the "reason" in the data that the Brexit vote won through by 52 per cent to 48 per cent may end up barking up the wrong tree, so to speak, and find a spurious variable that "explains" a completely exogenous event.

Niederhoffer's cautious utilisation of machine learning techniques does not mean that the firm uses human discretion in running its investment strategy. Theirs is a fully systematic quantitative approach that uses human intelligence "to guide our machine learning strategy, rather than setting the computers free on the data with no constraints."



Machine learning is not the Holy Grail in terms of trying to forecast the direction of price in the markets."

Roy Niederhoffer, RG Niederhoffer Capital Management

Recently, Elon Musk spoke of his concerns over the machines taking over in a film by Werner Herzog called Lo and Behold, Reveries of the Connected World (2016). He gives an example of what could happen were a hedge fund to leave it up to AI to maximise the returns of a portfolio. The AI system might determine that the best way to do that would be to short consumer stocks, go long defensive stocks and start a war.

This is just one example of where AI could create inadvertent crises, whether planned or otherwise, if unplugged entirely from man.

"It is difficult to predict what the power and influence of computer algorithms could be over the next 30 to 50 years," states Niederhoffer. "We are only just starting to scratch the surface. Take the current issue of fake news and how algorithms dictate search results and the stories one is shown. We are only beginning to look at the impact of AI on our access to information."

"One technology that we are particularly excited about is virtual reality. VR, when combined with AI and realistic simulations of humans, is going to create a new way of experiencing the world."

In terms of navigating global markets, 2016 was unique in that it was both tumultuous and at the same time surprisingly tranquil. The three-month period leading up to the US Presidential Election, for example, was one of the least volatile periods in the S&P 500's history.

"We do not take the view that the markets' tranquil state last summer or early this year is predictive of what will happen for the remainder of 2017 and beyond. As a short-term systematic quantitative strategy, we refrain from predicting catalysts. We believe that there are many ways for volatility to rapidly return to markets creating challenges for traditional and alternative portfolios. We intend to be there for our clients when volatility returns," concludes Niederhoffer.

For now, as long as human intelligence remains vital to identifying key indicators of future market moves, computers will be kept on a leash.



US Treasuries could reach 3.25% in 2018

Global bond yields are expected to fluctuate over the course of 2017, but should rise steadily with US 10-year treasuries breaking the 3 per cent barrier by early 2018, writes James Williams.

As a result, fixed income investors will be relying on active managers to manage duration risk in their portfolios and look for ways to protect against rising interest rates.

"President Trump's fiscal policies come to about USD5.3 trillion over 10 years; even if only a fraction of this is passed by Congress, that is still a massive fiscal stimulus, not just for the US economy, but for the global economy," comments Neil Michael, Chief Investment Strategist at Crown Agents Investment Management (CAIM). "If the full amount is implemented, it is basically 10 times the fiscal stimulus that was delivered by the US authorities during the financial crisis in 2008/9."

Last November, following the US election result, US 10-year Treasury yields jumped from 1.77 per cent to 2.59 per cent come mid-December. By the end of February, bond yields subsided somewhat as inflationary pressures subsided, falling to 2.3 per cent.

"This year, there has been some uncertainty as to whether Trump will come good with those fiscal promises, especially following the debacle over Obamacare. We saw inflation rising at the beginning of the year on the back of lower oil prices last winter when Brent fell to below USD30/barrel. The higher oil price in early 2017 fed into the headline rate of inflation globally. However, those inflationary pressures are now subsiding as the sharp increase in oil price begins to drop out and, as a result, bond yields are coming back down," explains Michael.

Michael joined Crown Agents Investment Management, a specialist fixed income and



"As we are seeing an improving global macroeconomic environment, this is good for corporate bonds as it means that companies are generating cash flows, thereby reducing the probability of default."

Neil Michael, Crown Agents Investment Management

multi-asset manager based in London, at the start of the year. In his role as Chief Investment Strategist, Michael is responsible for macroeconomic and market analysis, as well as the design, management and communication of investment strategies.

Previously, Michael spent nine years at London & Capital Asset Management, serving as Executive Director of Investment Strategies and prior to that, he was a portfolio manager at West End Capital Management, a Bermuda-based multi-asset investment house where he managed money for Warren Buffet.

Michael's macroeconomic analysis forms the foundation for discussions within CAIM's investment committee, where consensus on the house view is built based on the prevailing market conditions.

He says that while there is evidence of a synchronised increase in global economic activity, it is softer than perhaps people were hoping for. In Q1 2017, the US economy lost a little bit of momentum. Last week, the Commerce Department confirmed that GDP grew at a 1.2 per cent annual rate. This follows a 2.1 per cent rate of expansion in the fourth quarter of 2016.

"It is still expanding, but not as fast as it was," says Michael. "We have seen a number of interest rate increases over the past 18 months and that is slowly beginning to impinge on its economic activity. You can see that by the amount of credit being delivered by the financial system, which has slowed down."

Political uncertainty, softer economic growth and a stabilised oil price (and inflationary landscape) have conspired, therefore, to bring bond yields back down again as investors adopt a flight to safety policy.

Michael believes that falling bond yields is a temporary situation, noting that the Federal Reserve mentioned in its last meeting that the soft patch in economic activity was transitory:

"We think the US economy will come out of this soft patch and accelerate again. Unemployment is continuing to fall – it is now down to 4.4 per cent. We are seeing underlying inflationary pressures rising, earnings are increasing, and the US housing market continues to be robust. We can see that translated in consumer confidence indices, which are at historic highs.

"We think for those reasons, the US economy will continue to do well and as inflationary pressures pick up, US bond yields will start to rise."

From a safe haven perspective, some of the political concerns have passed by without too much damage. In Europe there remains the potential for further political risk and there have been concerns over North Korea, "but by and large we've gone through most of the perceived global political risks", suggests Michael.

In his view, the general trend, from a macroeconomic perspective, is for global bond yields – not just US bond yields – to rise; especially in the Eurozone, where a number of macroeconomic indicators would suggest that the economy is accelerating. The European Central Bank continues to print money like there's no tomorrow, pumping EUR60 billion a month into the Eurozone economy to support lending and growth.

Whether it commences scaling back on this program will be clear when the ECB has its next meeting on 8 June.

"Even in Japan we are seeing signs of life in its economy. In the first quarter of 2017, GDP on an annualised basis rose by 2.2 per cent," states Michael. "For the past few quarters, what

we have seen is sustained quarter-on-quarter increases in global economic growth for the first time in more than 10 years.

"The only fly in the ointment is China. Moody's recently downgraded its credit rating (to A1 from Aa3) but we don't think it's too serious. The economy continues to grow at a strong rate and the level of debt in the Chinese economy is internal rather than external debt. Also, China still has plenty of policy levers to make sure it maintains a strong level of economic activity, especially in a year when we are seeing changes in the leadership of the Communist party. Economic stability will be at the top of the agenda for the rest of the year. The recent weakness in the Dollar is also helping Chinese exporters as the Yuan is pegged to the Dollar, and this makes Chinese exports even more competitive in international markets."

Against this moderately upbeat macroeconomic outlook, if bond yields do indeed rise over the next 12 months, building the right investment models and strategies for investors is critical as they look to protect against inflationary risks.

To that end, Michael says that the house view is one that is broadly negative on government bonds.

"With this outlook, we would look to have a shorter duration in our bond portfolios than the benchmark to try and protect our clients' money from a rise in interest rate risk as spot yields climb. Another focal point for us is to look at corporate credit. We think investment grade corporate bonds are more attractive in this kind of environment because they have more credit risk embedded in them; not just interest rate risk (like government bonds).

"As we are seeing an improving global macroeconomic environment, this is good for corporate bonds as it means that companies are generating cash flows, thereby reducing the probability of default. The carry opportunity in corporates is also quite attractive," outlines Michael.

He says that the majority of CAIM's mandates with clients will only consider investment grade corporates. One or two mandates allow the team to invest in high yield bonds, and as Michael points out, the high yield bond environment is favourable and provides an even bigger carry opportunity compared to government bonds.

"However, my only concern at the moment is that the spread between high yield bonds and government bonds is very narrow; the extra yield on offer right now probably doesn't justify the extra risk. If spreads widen, that might present an opportunity for us, but our clients' mandates are mostly focused on investment grade bonds," confirms Michael.

In terms of countries, CAIM is underweight the Eurozone. In the US, the house view is that yields are higher and have already adjusted to an improved macroeconomic environment. That, says Michael, is not the case in the Eurozone.

"In the Eurozone, economic momentum is picking up rather than slowing down. We think there is a bigger disconnect between the strong macroeconomic environment in the Eurozone, and, in some cases, negative yields compared to the US, where, to some extent, yields have already adjusted.

"We believe it is important to be active from a duration management point of view. If we do think bond yields are going to rise, we have to shorten the duration of our clients' portfolios. The overall message we are giving to our clients is not to worry too much. Bond yields are going to rise this year, but we don't think they are going to run away," states Michael.

In many respects we are, he says, living in a different economic paradigm to in the past. Some might refer to this as the 'new normal', where interest rates remain relatively subdued compared to historic levels.

This is to do with the natural rate of interest level. The average level is much lower than it was in the past simply because nominal economic growth is much lower than it was in the past. Labour and productivity levels have been falling, capital formation and investment has been falling.

"If you look at the trends in the working population, capital formation and productivity growth, the average is about 1.25 per cent. If you add inflation at 2 per cent, which is what most central banks are targeting, that brings nominal economic growth to 3.25 per cent. And that is where we think the yield for US 10-year treasuries is heading. We are currently at around 2.2 per cent. It rose to 2.6 per cent following Trump's election victory, but we think it will break through 3 per cent at some point next year," says Michael in conclusion.

European private equity investments exceed EUR50 billion

James Williams writes that Europe's private equity market appears to be in rude good health.

The latest figures released by Invest Europe, in its 2016 European Private Equity Activity Report, shows that private equity fundraising in 2016 reached EUR74.5 billion, a 37 per cent year-on-year increase and the highest level since 2008.

Invest Europe is a non-profit organisation that represents Europe's private equity, venture capital and infrastructure managers as well as their investors.

The report reveals that private equity investments amounted to EUR53.7 billion, the second highest level since 2008. In the last four years, European private equity funds have raised over EUR240 billion to invest into companies in Europe – more than twice the amount raised in the four years following the financial crisis, 2009 to 2012.

Michael Collins, Chief Executive of Invest Europe, says that the data demonstrates "high investor confidence" in European private equity, in an otherwise "low-yield global investment environment".

"A few years back, we decided to launch a project to better coordinate the collection efforts carried out by national venture capital and PE associations to improve the quality of data and improve the experience of our members. Those who were members of national associations were effectively submitting four or five times so we came together with a large number of national associations and we created a corporate structure that is the owner of the European database (EDC). This is what we used to produce the 2016 report" explains Collins.

The joint initiative that Invest Europe created with national associations is known as the European Data Cooperative (EDC). Using one platform with a standardised methodology, it allows Invest Europe to have consistent, robust pan-European statistics that are comparable across the region.

The EDC is helping to provide transparency into Europe's private equity and VC marketplace.

"Given that we cover around 90 per cent of the European private equity industry, we provide a pretty good level of transparency," says Collins. "People can see how much capital is raised, where it is coming from, where it is being invested, and they can see what exits have taken place.

"We act and operate on a certain level of confidentiality so we never reveal the names of firms and you can't divine any information on them; it's just an aggregate picture that we provide."

In total, the database has information on 3,000 firms, 7,000 funds, 60,000 portfolio companies and 200,000 transactions.

Cornelius Muller is Research Director at Invest Europe. He says that one area Invest Europe is keeping a close eye is Europe's VC market, which has enjoyed quite a bit of uplift in recent years. Fundraising has increased from EUR3.8 billion in 2013 to EUR6.4 billion in 2016.

"It is important for European companies to remain competitive globally that they have the opportunity to receive later stage financing



"The shift away from bank finance does create some opportunities in certain sectors, but we don't envisage PE investing replacing bank financing, other than in specific cases."

Michael Collins, Invest Europe

to scale up their activity, by attracting growth capital from VC managers. I think there is still room for European VC funds to grow further and become better capitalised to ensure that later stage financing is available to European SMEs, rather than being bought out too early by international competitors," says Muller.

Venture capital investment increased by 4 per cent to EUR4.4 billion compared to 2015.

Over 3,000 companies received investment, a reduction of 7 per cent, which indicates a trend towards larger financing rounds. ICT (communications, computer and electronics) was the largest sector at 45 per cent of total venture capital investment by amount, followed by biotech and healthcare (27 per cent) and consumer goods and services (9 per cent).

With respect to private equity activity, mid-market buyout funds dominate the landscape. Of the EUR53.7 billion invested last year, buyout funds accounted for EUR37.3 billion.

By investment amount, mid-market transactions increased strongly by almost 30 per cent. Large buyouts (between EUR150 million and EUR300 million in equity invested) fell by 14 per cent, while mega buyouts (more than EUR300 million in equity invested) decreased by 34 per cent, the report shows.

"I think Europe is always defined by its mid-market buyout opportunities and smaller market buyout opportunities," comments Muller. "The vast majority of European companies are SMEs, so it's no surprise that the biggest proportion of deal flow for the buyout segment happens in the mid-market space. It could be a family-owned business going through a succession phase, going through a strategic realignment and looking to scale up its activities to become more competitive. Investments correlate closely to the business structure in Europe."

Consumer goods and services in Europe received the largest amount of private equity investment last year, at 28 per cent of the total – a 23 per cent year-on-year increase for the sector.

Given that investment activity is strong, there is a suggestion that this could be the sign of Europe's capital markets becoming more institutional, as is the case in the US, where SMEs find funding through institutional investors as opposed to going down the traditional bank financing route.

"The European Commission is fond of quoting the statistic that around 70 to 80 per cent of finance comes from the banks and the rest from non-bank sources, whereas in the US, roughly speaking the opposite is true. That's why they launched the Capital Markets Union. And private equity is part of that story.

"However, we are realistic about the extent to which our industry is going to be able to step in to fill the banks' shoes. Even on the back of high levels of private equity fund raising, we are still dwarfed by the banking sector. The private equity industry is only ever going to invest in certain types of companies with certain profiles and characteristics, so there will always be a long tail of SMEs and larger companies that will not be suitable for PE managers.

"The shift away from bank finance does create some opportunities in certain sectors, but we don't envisage PE investing replacing bank financing, other than in specific cases," comments Collins.

One interesting statistic from the report is that 40 per cent of capital raised by European private equity in 2016 came from non-EU investors, while one third of investments made into companies were cross-border. Collins says that connecting global investors with local fund managers and working with policymakers to facilitate such cross-border flow of capital is an ongoing priority.

"It is consistently the case that somewhere between 30 and 40 per cent of the capital raised by European private equity comes from outside Europe," confirms Collins. "Our industry is very successful at fundraising globally and putting pools of capital, from North America in particular, to work here in Europe. It is one of the reasons why we are always keen to explain to the European Commission that when they are thinking about things like the CMU, they have to have global ambitions not just European ambitions.

"That interest from global investors is, I think, testament to the attractiveness of European private equity, but also the attractiveness of the European portfolio companies that global investors want access to. They know that there are some great mid-sized engineering companies in Germany, for example. They know there are some fantastic fashion businesses in Italy that they want to get access to. And so on. But they know that getting that access, other than through private equity, is difficult."

One might argue that a strong fund raising environment is a double-edged sword. It has the potential to push up asset prices and make it difficult for PE managers to source deals and effectively put their funds' dry powder to work.

However, Collins is quick to point out that fund raising and investment levels in Europe over the last eight years have matched up pretty well.

"The amount raised each year has been more or less matched by the amount invested, there hasn't been a large disparity. There are probably some big trends that account for that; for example, we know from LP surveys that there is a growing appetite for private equity among pension funds, SWFs. They like the returns on offer in an otherwise low yield environment.

"If you have a couple of large fund managers capital raising in Year X and not in Year Y, the fund raising numbers can be quite heavily impacted, so one shouldn't read too much into a single year's data. In Europe, a small number of managers make up the majority of fund raising so it's probably best to wait and see what the numbers look like at the end of 2017, before we determine if there has been a significant shift in the amount capital coming into Europe private equity."



"It is important for European companies to remain competitive globally that they have the opportunity to receive later stage financing to scale up their activity, by attracting growth capital from VC managers."

Cornelius Muller, Invest Europe

Over 3,500 European companies were exited in 2016, representing former equity investments (divestments at cost) of EUR38.9 billion.

"You can see from the divestment levels that the amount of capital returned to LPs is also quite well balanced. A lot of which is reinvested again, which can create some froth in the fund-raising numbers.

"However, as long as we have a relatively balanced environment of fund raising, investment and divestment, I think it should be fine (for PE managers to operate)," concludes Muller.



Driving data

Randeep Grewal deep dives into car and car finance data this month in a bid to replace his wife's vehicle...

Sid's Café: Trigger, Del, Rodney, Sid and Boycie are in Sid's café. Trigger has just received an award from the local council for saving it money by using the same broom for 20 years.

Trigger: And that's what I've done. Maintained it for 20 years. This old broom's had 17 new heads and 14 new handles in its time.

Sid: How the hell can it be the same bloody broom then?

Trigger: There's the picture. What more proof do you need?

[Fools' and Horses episode: Heroes and Villains (1996)]

My wife's car is about 10 years old. Over the last couple of years or so it has had several investigations for odd noises and had various parts replaced. Indeed, if this carries on, the car will soon become the automotive equivalent of 'Trigger's broom'. (Incidentally classicists will recognise this as Theseus's paradox, Americans as George Washington's Axe, and the Japanese as a Shinto Shrine which is rebuilt every 20 years)).

Trying to buy a new car

So, last autumn we went to our local car dealership to consider buying a new car. Once I had recovered from sticker shock (the basic model of the equivalent car is 43 per cent more expensive than we paid a decade ago – admittedly for a pre-registered car with delivery mileage) we sought to haggle, then negotiate and then cajole. We offered cash. We offered a part-exchange. We offered not to part-exchange. We offered to take a pre-registered car. Of any colour the dealer chose. For reasons that I am particularly hazy about, my wife was generous enough to also throw in my clapped out 14-year-old 'station car' as a second part-exchange!

I was surprised to find that there was no discount for cash. And we were, ever so gently, guided to consider a PCP (personal contract purchase). This essentially is a UK form of autolease with the option at the end of the term to either buy the car for a pre-defined amount (a balloon payment), return it to the dealership and walk away, or use the pre-defined value of the car as a deposit for a new car. Interestingly, though

there was no discount for cash, we were offered a 'dealer's contribution' if we chose a PCP.

Hacking the model

My wife had banned me from taking a laptop with me; so when I got home I tried to reverse engineer the numbers. Often when I am looking at a company (or an industry) I find it useful to try to build a model that someone sitting inside that company would be seeing; and then try to find 'holes' in the assumptions (I call it 'hacking the model').

For anyone following our footsteps, I would strongly recommend building a very simple payments calculator in Excel. Holding the monthly payment constant, it soon becomes obvious that extending the duration and raising residual value assumptions substantially changes the price of a car that can be purchased (ie apparent 'affordability' increases substantially).

Residual value assumptions

Of course, any such calculation depends on the residual value assumption. The finance company (in this case owned by a major auto OEM) is taking on the risk of the residual value. As with most lads growing up, I used to covet car magazines. Some of them used to have data tables at the back listing every available new car model in the UK. Like my peers, my main interest used to be in 0-60mph times and maximum speed. One column used to appear mysterious – the estimated percentage value at year three for each model. What I did note was that it was only rarely above 50 per cent – and often hovered around 40 per cent.

In our case however it was clear that the assumed residual value at year three for the PCP was substantially above 50 per cent. In this case, even though the interest rate of the loan was positive (about 5.6 per cent – the exact amount depending on the deposit); once I modelled in the dealer's contribution and adjusted the residual value to a more realistic value, the implied interest rate was negative.

The 'dealer contribution' is technically not a price cut but a 'contribution' via the finance company to the dealer so I included it in the financing rather than the purchase price. This raises the interesting question of whether price cuts are hidden in the financing arm of an automotive OEM and amortised over several years. I have tried discussing this with various analysts, but never been entirely convinced of the answers.

Of course, customers are also receiving a free European-style put option and a call option with a relatively high strike price given the choices at the end of the term. (My wife's eyes had started to roll up by this stage so I did not model the value of the implied options!)

Earlier last year our team had been looking at Tesla and I recalled that Elon Musk had, at one stage, offered a 'resale value guarantee' for Teslas at three years. This guarantee was for 50 per cent of the base value of a 60kWhr Model S plus 43 per cent of the value of all options/ upgrades to higher models. What I found interesting was that our local dealership's (not a Tesla) offer on the residual value was for the whole car – ie including options.

Hedging diesel risk

My wife's current car is a diesel and one of the debates we had was whether to buy another diesel or switch to petrol. We regularly have to drive into London, and like a number of other major cities there is talk of City Hall banning diesels. Additionally, there has been talk by politicians of scrapping old diesels nationwide and increasing annual taxes on new ones. Thus, by selecting a PCP we would effectively also hedge out any regulatory and political risk if we chose a diesel.

In the last few months concern about automotive residual values has started to hit the market's consciousness. Even prior to the visit to the dealership, our team had been looking at this area. The main bear arguments have become well-known – (a) car sales are nearing all time high unit sales in several countries of which the US is the most prominent, (b) a fall in car sales in 2008 – 2010 led to a shortage of second hand cars subsequently leading to high second-hand prices – this is now reversing, (c) loose finance led to a build-up of subprime customers – tightening lending conditions are now excluding some customers, and (d) duration of loans has extended over the last few years.

The bull case for autoleases

Before we discuss the above further, I think it is always also worth considering the bull arguments and the counters to those arguments – (a) that the average age of the car on the road is high (11 years is commonly quoted for the US) – this is indeed true but is also due to a lot of two/

three car families, the durability of modern cars and the low cost of 'carry' (ie once a car has been bought, the cost to continuing owning depends on taxes, insurance and fuel); it does not necessarily negate the bear case, and (b) that in the last recession consumers continued to pay their autoleases even while defaulting on mortgages as they need cars to get to work – this is fair, but the issue arises whether consumers have positive or negative equity on their cars and the terms at which they had borrowed. If, as looks likely, this time consumers have longer duration loans with negative equity the default rates are likely to be higher than in the past.

The growth of SUVs

Recently in the US, the sales of SUVs have overtaken the sale of sedans (this also happened just as the Great Financial Crash started) – my suspicion is that the ability to finance a larger vehicle with the same monthly payments is behind that. (As a general rule SUVs are more durable than smaller sedans so it is likely this will, over time, also impact the average age of cars on the road). In addition, it is likely that better 'affordability' has probably meant that consumers have added options which fatten manufacturers' margins but depreciate even faster than the base model (recall the Tesla resale guarantee was 43 per cent on options versus 50 per cent on the base model).

Not your dad's auto ABS

'Traditionally' autoleases had a large customer contribution (say 30-50 per cent) so that, hopefully, the finance company would always maintain some 'equity cushion' throughout the loan. However low initial customer deposits plus 'dealer contributions' mean that, in some cases, the moment a car is driven off a dealer's lot it has immediately gone through its 'equity cushion'. Thus, in the case of default some lenders face much lower recoveries than they would have in the past. Negative equity on a product that has high depreciation and is been leased to subprime customers seems rather a 'toxic' proposition. Securitised automobile loans may look the same as those of yesteryear – but like Trigger's broom, all the essential components have been replaced, in this case by items of less quality than the securitised automobile loans of yesteryear.

Innovation, obsolescence and impact on profit pools

Having covered the technology sector for many years, it has always seemed to me that rapid innovation leads to rapid obsolescence. And currently the automobile sector is entering a period of particularly rapid innovation (self-driving cars, shared mobility, electric vehicles, increasing use of electronics for entertainment, driver assistance and fuel economy). Some data tables I have reviewed suggest that some lesser known electric cars have had some of the worst price depreciation of all cars over the last few years. (For example, the AutoExpress website carried an article in November 2016 showing that the worst depreciating electric car in the UK, the Peugeot iON, retained only 21.7 per cent of its value after three years. However, it is important to acknowledge that one of the complications with electric cars is that government subsidies distort their depreciation calculations).

In October 2016, Bloomberg reported that in Q3 2016, the Tesla Model S had gained 32 per cent market share of the US large luxury sedan market – beating the Mercedes S-Class, the BMW 7-Series, the Audi A7 and the Lexus LS amongst others. The high end (luxury sedans and luxury SUVs) of an automaker's range generates a disproportionate amount of its profits – and gives a 'halo-effect' to the brand. In the luxury SUV market in the US (on which the Detroit 3 are particularly dependent) Tesla's Model X captured 6 per cent in Q3 2016.

There are clearly lots of questions that can be raised about the data but I think the key issue for investors is to look forward. If multiple new electric cars are launched in the remainder of this decade the impact might be faster depreciation for conventional ICE (internal combustion engine) cars. If the aggressive entry of multiple OEMs into the electric vehicle market includes disruptors such as Google or Apple as well, then the pace of innovation will rise rapidly. It is fairly easy to paint a scenario where the desirability of electric cars leads to falling interest in second hand ICE cars; and innovation also leads to falling second hand prices for electric cars.

Repeat customers?

Longer leases have other consequences. In the short term, of course better 'affordability' allows manufacturers to sell cars loaded with lots of options and so improve their average selling price and margin. However, the customer is likely to take five to seven years (say) before he returns for a new car rather than three previously; so, the 'life time' value of the customer can actually fall. For investors, any price cutting can be hidden in 'dealer contributions' which are amortised (as part of the finance) over several years; while the sales price is realised up front. And of course, the 'put option' that the customer has received is not recognised right until the end of the loan. In addition, not all second-hand price indices properly capture the depreciation of optional extras, so such indices mislead how fast used car prices are currently falling on a like-for-like basis.

Regulation and taxation

It is also important to recognise that exogenous actions impact automotive sales – for instance a delay in IRS refunds earlier this year impacted the footfall at some US dealerships. The issue that really intrigues me, however, is the impact of 'business use' on autoleases. It appears that leasing a car is particularly attractive for the self-employed and small business user in the US; particularly if it is over 6,000 pounds Gross Vehicle Weight Rating (GVWR). I am

sure it is pure coincidence that a number of luxury SUVs weigh just over 6,000 pounds (one SUV we have found appears to have a GVWR of 6,003 pounds).

Such issues are not restricted to the US – in Europe Denmark's regulatory framework encouraged sales of electric cars in the last few years – changes coming in over the next few years are likely to severely impact such sales. Historically the company car market in the UK was a significant share of the new car market, but tax changes ('benefit-in-kind' tax) reduced this.

When comparing car ownership in different countries it is important to understand all the inputs to the 'total cost of ownership'. In Denmark for instance the Registreringsafgift (Vehicle Registration Tax) can be as high as 150 per cent. In Singapore COEs (Certificates of Entitlement) are required to own a car – these certificates last 10 years and have to be bid for in monthly auctions; and on first registration owners have to pay 150 per cent of the car's open market value to the government – thus car ownership is prohibitively expensive for the ordinary citizen. In the UK, the cost of fuel duty makes Britons envious of US fuel prices. Combine it with ever increasing insurance costs, and running a car is becoming a luxury item for more people.

In some places, for instance in the Mid-West in the US, distances are such, however, that a car is essential. Even in Europe the same applies – the village I live is within London's M25 yet we still would not be able to function without both my wife and me having cars. But even in such places, regulation can impact whether there is a second or third car on the drive.

Who is at risk?

For investors, the question arises which companies are most at risk in any downturn in the car market. It seems clear that those OEMs that have rapidly increased the proportion of their sales driven by leases are worthy of investigation. The growth of the SUV market has led to various new models being launched in the US and those companies whose SUV products look outdated are also susceptible to a downturn. Those finance companies which have a heavy exposure to diesel in their 'back book' might find their residual value assumptions are particularly hard to achieve. In addition, it is clear that some finance companies/banks have had looser lending standards and weaker verification of evidence of earnings than others (indeed some have recently been alleged to have failed to verify incomes for many of their customers). And going forward it is clear that those companies that are failing to invest enough in innovation might find by the end of the decade that their products do not command a premium price.



Randeep Grewal is a portfolio manager for the Trium Multi-Strategy Fund. This article is written in a personal capacity; the views and opinions are those of the author and do not necessarily reflect those of Trium.

Cyclical or secular

In my view, the issues faced by the automotive industry and the associated financing companies is a combination of a cyclical downturn with a much longer secular trend driven by innovation. The impact of the secular trend is likely to ripple into the energy sector (impact on oil), the mining sector (demand for rare earth minerals, lithium and graphite), the utility sector (electricity generation) and the financial sector. An electric car is estimated to require 200 moving parts versus over 2,000 moving parts for an internal combustion engine – this could lead to massive ramifications throughout the automotive supply chain.

As good as new...

We never did get around to replacing my wife's car – however looking online while writing this article, I find that the equivalent car is being offered by franchised dealers in the UK with zero to 500 miles for about 10 per cent less than last autumn. However, after the latest visit to the workshop and some more parts having being replaced, my wife's car now appears to be going smoothly again. In fact, it is just like new and I have a picture to prove it... ●