

THE Review

Q4 2017

CISI.ORG/REVIEW

PROVIDING INSIGHT AND ANALYSIS FOR FINANCIAL SERVICES PROFESSIONALS

CISI
CHARTERED INSTITUTE FOR
SECURITIES & INVESTMENT

25
YEARS

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INSTITUTE OF
FINANCIAL
PLANNING

HOW ARTIFICIAL INTELLIGENCE
IS CHANGING INVESTMENT

MEET THE FINTECH DISRUPTORS

HOW STELLA COX CBE BECAME
THE MOST INFLUENTIAL
WOMAN IN ISLAMIC FINANCE

FINTECH

It won't make us obsolete; it will
improve our performance as
financial services professionals



What is MiFID II and how will it affect you or your firm?

Refer to the CISI's guidance to help fulfil the obligations set out under Articles 24 & 25 of MiFID II which come into effect in January 2018.

cisi.org/mifid



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A LOOK INSIDE

Fintech: what is it? Anthony Hilton FCSI(Hon) kicks off our fintech-themed Q4 2017 edition by debating this question, focusing on its transformative and disruptive power (p.13). Andy Davis, meanwhile, has a different take on it, saying the “threat [of disintermediation by fintech market entrants] has been exaggerated”, and presenting a case for the less “glamorous end of fintech” (p.38).

Woven through the edition is the question of how revolutionary fintech is. Our critical look at ‘How artificial intelligence is changing investing’ yields some surprising insights (p.25), and we speak to five fintech disruptors who have identified creative solutions to filling gaps in financial services (pp.28–31).

We also had the pleasure of speaking to Stella Cox CBE, managing director of DDCAP, about her role in the development of Islamic finance over the past three decades, for which she has earned many accolades.

And we’re pleased to announce our new section, ‘Investment Management Review’, featuring analysis of carefully selected articles in the asset management sector (pp.51–58).

We hope you enjoy the issue.

Jane Playdon
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 Review Editor, CISI

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What are you doing to meet your CPD requirements?

Find all the resources we offer to help you develop your expertise

cisi.org/newcpd

The CISI congratulates those named below on their successful completion of the summer 2017 narrative exams. These postgraduate professional level qualifications are internationally recognised and are designed by senior practitioners to meet the needs of the financial services profession. Completion of these qualifications leads to full Membership (MCSI) and, eventually, individual Chartered status either as a Chartered Member or a Chartered Fellow.

Qualification	Candidate Name	Grade	Qualification	Candidate Name	Grade	Qualification	Candidate Name	Grade												
Applied Wealth Management	Ross Anders ACSI	Merit	Global Operations Management	Kirsty Blyth, Chartered MCSI	Merit	Regulation & Compliance	Peter Wild	Distinction												
	Matthew Baldwin ACSI			Matthew Bonfield ACSI			Robin Williams		Merit											
	Daniel Baxter ACSI			Stuart Coppen, Chartered MCSI			Patrick Adam Ronald Bowen		Oliver Williams, Chartered MCSI	Distinction										
	Samuel Boot			Cathal Feeney			Stephen Brunt ACSI		Susan Wilson		Merit									
	Mark Brown ACSI			Ankan Kumar Mondal ACSI			Thomas Calland ACSI		Andrew Wilson ACSI	Merit										
	Archie Burt ACSI			Liam Palmer			Rory Patrick Chichester Campbell-		Henry Wilson ACSI	Merit										
	Thomas Canty ACSI			Prashant Raturi			Lamerton ACSI		Angus Wilson ACSI	Merit										
	Catherine Capocci ACSI			Paul Richardson			Jonathan Chandler		Nicholas Winning ACSI		Merit									
	Nathalie Connell ACSI			Diploma in Financial Planning (Financial Plan Assessment)			Portfolio Construction Theory in Wealth Management		George Clarke	Merit										
	James Coppell, Chartered MCSI								Lisa Anderson CFP™ MCSI		Alexander Cole ACSI	Merit								
	Nicholas Cunniffe ACSI								Jody Burns		Stefan Cooksammy ACSI		Merit							
	Elizabeth Davies MCSI								Craig Chapman CFP™ MCSI		Michael Craine ACSI			Merit						
	Thomas Elliot ACSI								Paul Dawson CFP™ MCSI		Andrea Dardi				Merit					
	Robert Finch Noyes ACSI								Chris Hill CFP™ MCSI		Anisha Dhillon ACSI					Merit				
	Daisy Franklin								Ben Kemmish CFP™ MCSI		Pauline Doherty						Merit			
	Peter Grant ACSI								Hazel Manlove CFP™ APP Chartered MCSI		Thomas Dupernex ACSI							Merit		
	David Gregson ACSI								James Theo MCSI		Simon Durrant ACSI								Merit	
	Giles Harwood ACSI								Financial Derivatives		Clement Fabre ACSI									Merit
	Joshua Herson										Ricky Shah									
	Adam Hilder ACSI			Financial Markets			Andrew Fitzgerald			Merit										
	Christian Hinderaker ACSI						Joseph Crehan ACSI				Anna Fumara	Merit								
	Susan Hoggarth, Chartered MCSI						Jonathon Crisp ACSI				Tatiana Fullick ACSI		Merit							
	William Hughes						Oliver Davies				Sophie Garforth-Bles			Merit						
	Jamie Hunter ACSI						Matthew Dawson ACSI				Sarah Garnett ACSI				Merit					
	Philip Kelly ACSI						Hugo Docx		Calum Graham MCSI		Merit									
Michael Kent ACSI	Maximilian Fakhre ACSI	Emma Grant ACSI	Distinction																	
Richard Killoran	James Flett	George Hancock ACSI		Merit																
Stephane Liot	James Fraser-Sampson, Chartered MCSI	Toby Harrison			Merit															
William Matthewman ACSI	Jodie Green ACSI	Duggie Hawkins ACSI				Merit														
Peter McCallum, Chartered MCSI	George Haggas ACSI	Sophie Hine ACSI					Merit													
Georgina Morgan	Richard Hall ACSI	Laurie Hogan						Merit												
Oliver Morrison, Chartered MCSI	Marcus Harrison	Steffen Hoyemsvoll							Merit											
Ethan O'Hagan	Ryan Harvison ACSI	Kobir Hussain								Merit										
Thomas Prusinski ACSI	Christopher Henderson	Megan Jennett										Merit								
Adrian Rafa MCSI	Camilla Hill ACSI	Paul Johnson											Distinction							
Nicholas Ramsay ACSI	Alex Horton ACSI	Neil Johnson									Merit									
Matthew Robinson ACSI	Carla Keenan	Christopher Jones, Chartered MCSI	Merit																	
Ben Rycroft ACSI	Martin Lane	Chris Judd, Chartered MCSI		Merit																
Toby Saunders ACSI	Jay Lawrence ACSI	Christopher Leach MCSI			Distinction															
Naeem Siddique, Chartered MCSI	James Leeming ACSI	Natasha Love ACSI				Merit														
Andrew Smillie ACSI	Christopher Lobo	Peter Lovelady ACSI					Distinction													
Samuel Smith ACSI	Calum MacLean	Sarah MacDonald ACSI						Distinction												
Anna Thomas ACSI	Eduard Mallia	Cameron MacKinnon							Merit											
William Vaughan ACSI	Edward Malone	Lewis MacKinnon								Distinction										
Rory Whitmore ACSI	Joseph Manners ACSI	Kapil Malhotra										Distinction								
Bronia Widdows, Chartered FCSI	Thomas McCord ACSI	Shalu Malhotra											Merit							
Katie Wilson-Brown MCSI	Scott McKean ACSI	Hamish McKenzie ACSI									Merit									
Bond & Fixed Interest Markets	Kirstie McQuarrie	Andrew McKinnon ACSI	Merit																	
	Jørgen Christopher Røsholm	Peter Murray ACSI		Haiytham Nori ACSI										Merit						
	Ze Wang	Nipuna Nanayakkara		David Norton	Distinction															
	Corporate Finance Strategy & Advice (Diploma)	Jack Norkett ACSI		Max Newman		Luke Oram									Merit					
Sarah Abrahams		Charlotte Nisbet MCSI		Michael Owens		Merit														
Ronan Brophy		Hideo Nishimatsu		Rebecca Page			Merit													
Christiaan De Lange		Joseph Noble		Andrew Parkes				Merit												
Benjamin Douglas ACSI		Sam Olley ACSI		Samir Parmar					Distinction											
Julian Ford		Charles Palin ACSI		Lena Patel						Distinction										
Nicholas Hawkins		Paul Phillips ACSI		Chioma Melanie Patrick								Distinction								
Paul Hollingshead ACSI		Jack Reed ACSI		Luke Phipps ACSI							Merit									
Omar Kaedbey		James Rennie ACSI	Ian Posgate ACSI	Merit																
Andrew Maloney		Myles Renouf MCSI	Anil Raindi										Merit							
James Melvin	Adam Robin ACSI	Robert Rajczewski	Merit																	
Daniel Molnar	Edward Rothwell ACSI	James Regan			Merit															
Rebecca Nicholls	Henry Silver ACSI	James Regan				Merit														
Thomas Taylor	Stephen Sowerby ACSI	Leanne Ribbans ACSI					Merit													
Corporate Finance Techniques & Theory (Diploma)	Bradley Werner ACSI	Private Client Investment Advice & Management						James Rose, Chartered MCSI						Merit						
	Tom Barford							Rakesh Sheimar	Merit											
	Aniruddh Chandrashekar							David Sloan		Merit										
	Claire Eggels							Timothy Stannard				Merit								
	Zoe Hiscock							Julie Stevens			Merit									
	Fund Management			Malith Jeewantha Gamage ACSI				Andrew Taggart MCSI							Distinction					
Scott Atkinson		Nicholas Thompson ACSI		Distinction																
David Blincoe		Andrew Waldron	Merit																	
Kamaldeep Bagga ACSI		David Watkins ACSI			Merit															
Laura Jane Bamford ACSI		Darren Watkins ACSI				Merit														
Kimberley Beauvillain	Dean Whitty, Chartered MCSI	Distinction																		
Karan Berry ACSI	Angela Winchester, Chartered MCSI						Distinction													
James Blashfield				Distinction																
David Blincoe			Distinction																	

City view



Opportunity knocks

September 2017 was the tenth anniversary of the global financial crisis, which not only impacted many millions of people directly, but also revealed previously unseen activities of large areas of the banking sector. These activities were indulged in by people who believed that they were not illegal and that there were no obvious victims.

The London interbank offered rate and related interest rate manipulation scandal is the most obvious example, and this, together with market abuse in many forms, has proved to be, if not endemic, then certainly widespread, leading to fines totalling \$375bn over the past five years alone, with the bulk of these related to wholesale banking activities.

Is it any wonder then, that the word 'banker' remains a pejorative term to many and that the banking sector is struggling to regain public trust?

Numerous enquiries, particularly that by the Treasury Select Committee, have sought to put in place remedial actions. These have included an enquiry to determine whether banking is a profession, followed by the Chancellor-directed Fair and Effective Markets Review (FEMR), which led to the establishment of the Fixed Income, Currencies and Commodities Markets Standards Board (FMSB), whose first annual report was published recently. The report makes interesting reading both for experts and the uninitiated, demonstrating the scope of the task in identifying all those areas and practices which require codification and agreement of what is and is not acceptable market practice. The failure in the prosecution of many of those involved in

the manipulation of rates and indices bears out the challenge in achieving this, and the following words from FEMR are extremely apt: "High-level principles, on their own, may provide insufficient practical detail; detailed rulebooks risk not being comprehensible to individual traders."

One of the interesting results of FMSB work is the discussion of behavioural cluster analysis and the observation that the market conduct patterns identified by the US Senate Committee in 1934, following the 1929 crash, are strikingly similar to those evident in conduct cases today. A not unreasonable question might be that if the financial services sector failed adequately to reform itself during the 75 years between the 'crashes', why should an observer have any more confidence that it will do so this time, particularly given the increased spread and complexity of the current financial system?

"High-level principles, on their own, may provide insufficient practical detail"

Another question might be whether, by its nature, the sector recruits the type of person who is always likely to test the boundaries of accepted behaviour and is encouraged, openly or tacitly, to do so. It is difficult to see that being likely to change, particularly against the background of the 200-year timeline of misconduct and consequent legislation contained in the FMSB report, demonstrating that the products may change, but the scams do not. How many readers are aware of the attempted 'corner' in the 1900 New York ice market?

However, what is absent from this valuable report is any mention of the word 'professional' or 'professionalism'.

This is slightly surprising, not to say disappointing, given that the Parliamentary Select Committee investigation into the banking crisis spent some time trying, albeit unsuccessfully, to establish whether banking was a profession, and there appeared to be a consensus that even if it is not, it ought to be.

Given that the FMSB is endeavouring to establish standards of market practice, to ensure that market participants are aware of them and adhere to them and, presumably, that if participants fail to do so they will be appropriately sanctioned, then the FMSB seems to be demonstrating most of the hallmarks of a professional body.

Professionalism, as accepted by the CISI's 45,000 members, involves the effective combination and demonstration of knowledge (the initial competence to do your job through professional qualifications), skills (undertaking continuing professional development and ongoing learning in order to maintain competence) and behaviour (upholding the highest standards of integrity by signing up to and abiding by a professional body's Code of Conduct).

So, the CISI would like to issue an invitation to all those who work in the financial market and are not members of a professional body to publicly embrace professionalism.

The CISI stands ready, willing and able to support you to demonstrate your professionalism. ●

60-SECOND INTERVIEW



The CISI has signed a Memorandum of Understanding (MoU) with the Capital Markets Association of Zambia (CMAZ) to promote continuing professional development (CPD), ethics and professionalism. Muchindu Kasongola, president of CMAZ and managing director at Madison Asset Management, explains the value of the arrangement

What does the agreement involve?
It sets the basis for collaboration on training and CPD for all members of the CMAZ. It recognises the relative strengths of the CISI in training and development, which the CMAZ intends to leverage for the benefit of its members in particular and the Zambian capital markets in general.

Please explain briefly why the CMAZ was formed and what it does

It was formed in 2016 in response to a need for various capital market players to speak with one voice on matters pertaining to the development of the market. It is a platform through which all matters concerning the development and well-being of the capital markets in Zambia can be channelled, with the CMAZ being the bridge between the

market on one hand and regulators, policy makers and other external stakeholders on the other.

How will CMAZ members gain access to CISI membership?

They can either attain Affiliate membership by demonstrating completion of the minimum prescribed CPD hours on an annual basis; or attain Associate membership by completing a CISI qualification.

The CMAZ has adopted CISI material for the mandatory CPD of its members.

Have you had any feedback from CMAZ members on this initiative?

We have received very good feedback. There has for a long time been few

structured learning programmes tailored for capital market practitioners in Zambia. Our partnership has enabled the provision of a structured pipeline of appropriate training and learning resources relevant to the capital markets sphere.

Do you have any CISI/CMAZ events planned yet for the Zambian capital market?

We recently had a signing ceremony to celebrate the agreement (pictured), witnessed by the Lord Mayor of the City of London, the Right Honourable Dr Andrew Parmley. We will recognise the first batch of deserving members that have met the CPD benchmarks at the end of the year and this will be done in collaboration with the CISI.

Member Privileges

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Our Membership Privileges portal is offering a huge saving on the Samsung Galaxy S7. Its sleek metal design, bigger battery with wireless charging, and dual pixel 12MP camera will keep you well equipped for business and leisure.

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Enjoy Samsung's other latest technologies at a discount. To view all the benefits, log in to MyCISI, click on Membership Privileges then View your Membership Privileges, which will take you to the shopping portal. Search 'Samsung' for more information.

The CISI disciplinary process

In the first of a two-part article on the CISI disciplinary process, Andrew Hall, CISI head of professional standards, explains why and how it is done

CISI membership brings with it important rights and responsibilities, which are governed by the terms of the Royal Charter, the bye-laws, the membership regulations (see cisi.org/regulations) and the Code of Conduct (see cisi.org/codeofconduct). A key point about membership of the Institute is that signing up to its ideals and expectations is a 24/7 obligation, as indicated by principle 8 of the Code: "To strive to uphold the highest personal and professional standards at all times."

Familiarity with our membership regulations is also important, as these govern members' day-to-day interactions with the Institute, and also the disciplinary process, although only a minority of members are likely to be personally affected by this.

Causes and effects

There are various ways in which the Institute can become aware that a member may have breached either the Code and/or the membership regulations. While a breach of the Code is a breach of membership regulations, the reverse is not automatically the case.

An important means of us monitoring membership behaviour and adherence to standards is through reports provided by fellow members, which may be via direct involvement in, or observation of, an event, or the provision of media articles referring to matters such as court proceedings involving a member. Complaints to the CISI by clients of members may also give rise to investigation by the Institute, including potential disciplinary action, although such complaints may involve the complainant being directed to the member's employer, in terms of FCA complaint handling regulation, or the Financial Ombudsman, if the complainant is seeking compensation or restitution.

Action taken by the FCA that results in the issuance of a Final Notice is made public by the regulator, and we monitor the FCA website, together with

appropriate media, to try to be aware of all such notices in case they affect our members. Another more recent and very important means of identifying possible infractions is through the Statement of Professional Standing (SPS) application and renewal process.

Firms and individuals are required to make the Institute aware of any disciplinary action they have taken involving an employee who is a CISI member. In many instances, firms and members appear to be unaware that such matters should be reported promptly and not only at the time of SPS renewal.

The Institute may seek further information to enable a potential breach to be referred to the CISI Disciplinary Review Panel (DRP), comprising senior CISI members and staff. The DRP

acts as a gatekeeper in determining whether the alleged infraction should lead to a disciplinary hearing.

A disciplinary hearing is not adversarial, but is structured to allow the CISI disciplinary secretary to present the case as to why it is considered that the member is in breach of CISI membership regulations and the degree of seriousness with which that may be viewed.

In response, the member is invited to speak about any written submission that they have made prior to the hearing and which has been provided to panel members. Panel members may ask questions of either party. The panel deliberates and, if it concludes that the member is in breach, will seek advice from the disciplinary secretary as to an appropriate level of sanction, based on precedent in similar cases.

The outcome may be that the member has no case to answer, or, for significant breaches, a member might be expelled, either temporarily or permanently, with a range of sanctions applicable to instances in between. A member will be advised in writing of the findings and has 28 days in which to appeal. This will only be allowed if there are new facts being offered, which were not available at the hearing.

Should an appeal be accepted, the matter will be referred to an appeal hearing, in which none of the original



panel members will be involved, and it will be conducted in a similar manner to the original hearing. In addition to an appeal by the member, as indicated above, the Board of the Institute may require the Appeal Panel to review a finding or penalty imposed if they believe that the penalty concerned is unduly lenient.

The process is designed to be fair and appropriately impartial, while demonstrating to members, the wider financial services sector and the public that being a member of a professional body comes with responsibilities and that failure to live up to these does have consequences.

A further article will appear in the next edition with examples of disciplinary cases that have been pursued, together with an explanation of the outcomes and how these have been reached.

CISI Integrity Debate 2017: Asset managers – profit before social responsibility?

CISI members had the opportunity to benefit from a second integrity debate this year on 13 September.

Nearly 500 people attended in person and online via a live webcast, listening to speakers debate the question of whether asset managers put profit before social responsibility.

The debate, chaired by Richard Charnock, Chartered FCSI, CISI Board member and CEO, Standard Life, began with a warm-up question, which asked the audience to vote on the FCA advertising campaign that features the head of a well-known movie strongman, which was generally greeted with disfavour!

The customary pre-debate vote on the motion saw a substantial percentage of the audience vote in support of the team of Anthony Hilton FCSI(Hon), financial journalist and *Review* columnist, and Leon Kamhi, head of responsibility at Hermes Investment Management, on what might be called the 'social responsibility' side. Votes

in support of the asset management sector were scarcer and only one person voted that they strongly believe this sector does not put profit before social responsibility.

Against that background, the asset management team of Philip Warland, special adviser to the Investment Association, and Jasper Berens, managing director at J.P. Morgan Asset Management (UK), might have seemed to be on the proverbial 'hiding to nothing', but the vote can have some unpredictable outcomes.

All the speakers combined a broad range of humour, fact and emotion to charm the audience and the final outcome reflected this – the majority, albeit somewhat smaller, of the audience still felt that asset managers put profit before social responsibility, there was a measurably positive swing towards the position of Warland and Berens who, on that basis, were declared the winners!

For those who were unable to attend, both debates are available on CISI TV.

Welcome to the IMR

Previously a separate publication for Chartered members and Fellows, the *Investment Management Review (IMR)* is now available in a condensed form in eight pages of *The Review* (pp.51-58), and available in full online at cisi.org/imrmagazine

Written and edited by Dr Arjuna Sittampalam, Chartered MCSI, the first seven pages feature critical analysis of a selection of interesting outputs relevant to the asset management sector. This analysis was rated as one of the highest valued sections of *IMR* in our readership survey conducted in June 2017. The final page provides a snapshot of other articles in the online *IMR*. We hope you enjoy the new section and please do get in touch with any feedback.

Events preview

The CISI offers many opportunities to help you meet your requirements for professional development. Below are just some of the highlights of the Institute's events programme, but for comprehensive details and to book, please visit cisi.org and click on the 'Networking & events' section.

CONFERENCES 5-6 DECEMBER CISI SCOTLAND CONFERENCE

Radisson Blu, Edinburgh, Scotland
The CISI will be hosting its Scotland Conference which will focus on best practices and new developments in financial planning, wealth and investment management. Attendees can earn up to nine and a half hours of CPD.

ANNUAL DINNERS

30 NOV Cotswolds branch dinner
30 NOV Southern branch dinner
2 FEB Guernsey branch dinner

OTHER HIGHLIGHTS INCLUDE

29 NOV A question of ethics (London)
5 DEC Referrals (Leeds)
5 DEC What to expect in 2018 (London)
6 DEC MiFID II (Cambridge)
12 DEC CIO view update (London)
22 JAN Alternative investments (Norwich)
25 JAN Review of China and client engagement (Guildford)

FELLOWS AND CHARTERED MEMBERS' MASTERCLASS

10 JAN Avoiding your 'level of incompetence' (London)

IN-HOUSE TRAINING

The CISI delivers in-house training courses for members and non-members, spanning a variety of skill areas. If you have a team that requires training, please contact Alex Xavier (assistant director, member services) on +44 20 7645 0725 or alex.xavier@cisi.org

- If you have an idea for an event or would like to contribute at one of our events, please email cpdevents@cisi.org
- For details of conferences, training courses, CPD and social events available to members, visit cisi.org/events

EDUCATION NEWS

The CISI has signed a partnership agreement with Birmingham City University (BCU), which will enable students to gain a competitive edge before finishing their degrees.

Students in three different finance programmes can now choose to incorporate a CISI professional qualification to help enhance their employability before entering the jobs market. The relevant degrees are shown in the table below.

BCU is sponsoring students on these programmes for the CISI exam registration fee, which includes CISI student membership. Students funding their own CISI workbook and exam can benefit from a 50% discount to the published CISI fees.

Kevin Moore, Chartered FCSI, CISI director of global business development, said that in addition to enhanced employability, students will

benefit from continuing professional development (CPD) workshops “which will offer them a unique opportunity to learn about current topics alongside our local CISI members already working in the profession”.

Rod Kelly, head of the accounting, finance and economics department at BCU, said: “CISI’s professional insights, together with Birmingham City University’s applied approach, will help our students think ahead, strengthen their knowledge and equip them for a better tomorrow.”

- For further information on this project, contact the education development team at educationdevelopment@cisi.org. CISI members can earn CPD hours by delivering a presentation/engaging with school, college and university students.

University programme level	University programme name	Eligible year	CISI exam
BSc/Mfin	Business Finance	Final Yr	L3 Corporate Finance (Technical Foundation)
BSc/Mfin	Finance & Investment	Final Yr	L3 Introduction to Investment
MSc	Finance & Investment	n/a	L3 Introduction to Investment

CORRECTION AND APOLOGY

In ‘Adding alternative assets to client portfolios’ in the Q3 edition of *The Review* (p.31), Nick Britton, head of training at the Association of Investment Companies, is incorrectly quoted as saying: “The benefit of an investment company is that you can get access to government guaranteed schemes, which often produce steady returns over many years.” Nick was referring to infrastructure investment companies, not investment companies in general. In addition, he spoke of “government-backed contracts”, not “government guaranteed schemes”.

In addition, HICL and John Laing are incorrectly described in the print version as “property investment companies” instead of infrastructure investment companies.

The CISI apologises for these errors.

IN THE KNOW

The Review’s quick quiz features questions from CISI Professional Refresher, an online learning tool. The popular product consists of more than 90 modules covering topics including anti-money laundering, the UK Bribery Act, information security and data protection. The answers are on page 13.

1. Technology that changes a product or service in ways that the market does not expect is usually described as:

- A Agile
- B Forward thinking
- C Market leading
- D Disruptive

2. In terms of the General Data Protection Regulation (GDPR), which of the following constitutes sensitive personal data?

- A An employee’s home address
- B A ‘sick note’ from an employee’s doctor
- C A photo of an employee, their spouse and minor children in the organisation’s staff magazine
- D The IP address of an employee’s home computer

3. What is the main difference between a lifetime mortgage and a home reversion plan?

- A You retain ownership of your home with a lifetime mortgage
- B You have to make payments if you have a lifetime mortgage
- C With a lifetime mortgage, the money you borrow is due to be repaid as soon as you go into care
- D Under a home reversion plan, you have to sell the whole of your property, not just part of it

4. What is the stamp duty charge for purchasing shares?

- A 0.25%
- B 0.5%
- C 0.75%
- D 1%

Access to Professional Refresher is available on an annual licence basis. The full suite of modules is free to CISI members or £250 for non-members. If you or your firm would like to find out more, visit cisi.org/refresher or contact the CISI on +44 20 7645 0777.



Financial planning news

A snapshot of financial planning news and events, from Jacqueline Lockie CFP™ Chartered FCSI, CISI head of financial planning

It has been a hectic quarter for the financial planning team at the CISI. Our Financial Planning Conference 2017 was a great success, with planners and wealth managers creating a positive and close-knit community. Our thanks go to the many who have come forward offering their support to enable the CISI to continue building on this success for the good of the profession, and our congratulations to all the award winners and the shortlisted finalists for the Financial Planning Gala Awards this year.

We also said goodbye to Campbell Edgar CFP™ Chartered FCSI, who has retired as the head of financial planning. I am the CISI's new head of financial planning, and the deputy head of financial planning is Christopher Morris ACSI.

I have a vision for the future of financial planning, which I shared at the conference. Here is an extract from my speech:

For the first time you 'feel' what financial planning really is. It is intangible but life-changing; life-changing for you as a planner and for your clients when you help them achieve their objectives by showing them how financial planning can help them get there. I believe everyone deserves to have affordable access to that 'lightbulb moment'. We can all say we are financial planners, yet the evidence shows me that most don't have a defined, robust and repeatable process. Those firms who do, differ

greatly from those who just say they do.

What defines us now is the six-step planning process, which can be applied to specific situations such as pension reviews, as well as more wholesale reviews of clients' circumstances.

You don't need to be a CERTIFIED FINANCIAL PLANNER™ professional to understand or to follow this process. Financial planning is not the preserve of the financial advice community – wealth and investment managers dominate the financial planning community in other CFP territories around the world. However, being a CFP professional gives you access to a large community of fellow professionals across the world who really believe in financial planning and who practice it. That globally recognised process is demonstrated in 26 countries around the world. For me, the CFP designation and the clear and simple planning process is a way of life.

For the public really to start to understand how financial planning is different to financial advice, and to raise the standards within our profession, we should come together to embrace the process and demonstrate to the public that we are working together to give them a consistent planning process so they know what to expect and what is not acceptable when they seek advice.

We can show the regulator that we can reduce the business risks and play our part in helping reduce client complaints and ultimately (with a bit of luck) the compensation scheme levies that you pay.

Our thanks to all of those who have agreed to help on the IFP Forum Committee, the Accredited Financial Planning Firms steering



group, the Financial Planning Editorial Panel for *The Review* magazine, financial planning branch meeting representation and the Professional Paraplanner Interest Group.

We welcome your feedback and support at whatever level you feel you can offer in helping grow the profession. If you have any queries or issues, please feel free to contact me or Christopher.

You may also have seen the announcement by the CISI CEO Simon Culhane, Chartered FCSI, that the CFP certification and assessment pathway will be altered in 2018. If you are currently going through the CFP certification process then nothing will change for you, so there is nothing to worry about. We will be announcing the formal changes and timescales in the next few months.

World Financial Planning Day, part of IOSCO's World Investor Week on 4 October, was a real success. Our thanks to all those who were involved on social media and our CFP professionals who are visiting schools to talk about it.



MULTI-FACTOR MODELS ARE MORE CONSISTENT OVER TIME



First Trust Global Portfolios Limited (FTGP) is a UK-based affiliate of First Trust Advisors L.P. (FTA) and distributes a range of First Trust US-registered exchange-traded funds and Irish-domiciled 'Undertakings for Collective Investment in Transferable Securities' funds managed by FTA. Our mission is to provide trusted, transparent and superior investment solutions and services that will contribute to the prosperity of our clients.

As a leader in fundamental indexing, we offer two flagship strategies, AlphaDEX® and Equity High Income. Similar to active management, the goal of a fundamental index is to identify those stocks from within a traditional broad-based index, which exhibit the fundamental characteristics that enable them to provide the greatest potential for capital appreciation. Fundamental indexing is itself inherently passive. No active judgement is made when evaluating stocks and every step in the process

is driven by a transparent, repeatable quantitative process.

While many single valuation factors can be useful in stock selection, we believe multi-factor models are a more prudent approach and generally more consistent over time. We believe the stability of a quantitative selection model over time is an important consideration when choosing the proper mix of valuation factors.

As at 31 August 2017, FTA had combined global assets under management and supervision of approximately \$109.548bn.*

**Includes assets in unit investment trusts available for investing in the US only and where First Trust Portfolios L.P., a US-registered broker-dealer and affiliate of both FTA and FTGP, is the sponsor and FTA is the evaluator.*

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CISI CORPORATE MEMBERS Q4 2017

Gold Members

Royal London
www.adviser.royallondon.com

Corporate Members

Aegon
www.aegon.co.uk

AIC
www.theaic.co.uk

Dimensional Fund Advisors
www.dfauk.com

First Trust Global Portfolios
www.ftglobalportfolios.com

Just
www.justadviser.com

NS&I
www.nsandi.com

Parmenion
www.parmenion.co.uk

Prestwood Software
www.prestwood-group.co.uk

Schroders Investment Management
www.schroders.co.uk/adviser

Standard Life
www.standardlife.co.uk

Transact
www.transact-online.co.uk

Vanguard
www.vanguard.co.uk

AEGON – SUPPORTING FINANCIAL ADVICE

We're delighted to continue our association with the CISI and its membership – working with the Institute to support its drive for continuing professional development, excellence and integrity within the financial services sector



At Aegon, we're focused on helping intermediaries

grow their business and profitability, while lowering risk and cost. Bringing Cofunds and BlackRock into our stable marks the next step of our journey of innovation and improvement, as we continue to deliver solutions to support intermediaries of all types.

The largest platform in the market

On 1 January 2017 Cofunds became part of Aegon to create the UK's largest investment platform. By combining the scale and experience of Cofunds with the innovation, financial strength and product know-how of Aegon, we're aiming to become the most trusted platform in the intermediated market.

Users of our award-winning platform, Aegon Retirement Choices, benefit from:

- access to over 4,800 investment options, including Secure Retirement Income
- a workplace savings platform, providing access to multiple tax wrappers
- a pricing cap for larger investors, and
- two-way new business integration with major back office providers.

And, as we join Aegon and Cofunds together, users will benefit from the best of both propositions on a single platform.

Award-winning protection products

Our deep knowledge of protection means we're well-positioned to help you build comprehensive protection

solutions to meet your clients' individual needs.

- Our customer-centric underwriting approach means we could offer terms to 97% of applicants in 2016.
- If we can't offer your clients the exact terms they ask for, we'll offer alternatives.
- We paid £123.4m in life, critical illness and income protection claims in 2016.
- We were awarded a Gold Service Rating by Defaqto in 2017 and were named Best Service Provider at the COVER Excellence awards 2016.
- Our critical illness cover is 5 Star Rated by both Defaqto and Moneyfacts.

www.aegon.co.uk/advisers

ASK THE EXPERTS: DEMYSTIFYING THE 'SHORING' PROCESS

What is 'offshoring', 'onshoring', 'nearshoring' and 'farshoring'?

Offshoring is the process by which an organisation moves or relocates a business process or function from its home country to a different international location, while maintaining ownership and control over processes, work and function. It is very often confused with outsourcing, where work is transferred to a third party.

Nearshoring and farshoring are both types of offshoring: the first involves transferring to a country that is nearby and, very often, shares a land border with the company's domicile country, while the second involves moving work to a much more distant location. By contrast, onshoring refers to the relocation of a business process inside national borders.

Why are companies doing this?

One reason is the need to introduce cost-efficiency into the business. A cost differential of at least 30% is a key criterion set by most global firms that are shortlisting new business locations.

An EY report, *Centralized operations: The future of operating models for risk, control and compliance*, finds that firms that offshore risk, control and compliance into a centralised operating model (of which offshoring is an option) see cost savings of 30%–50%. The report also says offshoring to locations such as India, South America and Eastern Europe "provides the additional benefits of wage arbitrage".

What are the current shoring trends in financial services?

The increased requirement for audit, compliance and monitoring, and the widening risk remit has seen financial services firms rethink their compliance and risk processes and their ability to implement and manage this change. As a result, the size and overheads of risk and compliance teams have increased and, for many, become burdensome.

A recent Accenture survey finds that 89% of financial services executives

expect their compliance costs to increase over the next two years.

We have seen Poland winning new investment as a result of increased offshoring. Credit Suisse, for example, has set up in Wrocław, while HSBC and UBS have bases in Kraków.

Another key trend is the rise of fintech. Trading technology, cyber security and big data all require specialist skills, which are in high demand and for which supply is low. Access to robust pipelines of experienced and raw talent is driving investment to cities such as Belfast, which has established itself as a leading investment location for US companies requiring cybersecurity expertise.

California-based security-as-a-service company Proofpoint, web security specialist WhiteHat Security, also based in California, and Boston-headquartered cybersecurity solution Rapid7 have all invested in Belfast.

When considering the shoring cycle, what are the challenges most frequently faced by investment companies?

Unless a company has a dedicated location-monitoring function within its risk team, most will start out with three key challenges: what is the problem we are trying to fix? Where should we do it? How are we going to make it successful?

The best results are when the evaluation and selection process isn't narrowed too much, too quickly.

How is fintech using shoring?

The current growth of fintech is predominantly driven by start-ups in Europe and Asia-Pacific.

Fintech firms set up and grow in a given city or region, and then move in response to investor demands or to access new markets. The tight regulatory environment in China, for example, is driving some of its most successful fintech start-ups, including its first online-only insurer Zhong, to launch IPOs overseas, where they can access both capital and skills.

Zhong recently won approval for a Hong Kong IPO.

Initially they may take a more fearless approach to offshoring, but as they increase in size, we see them adopting similar approaches to offshoring as traditional financial services firms.

“Firms that offshore risk, control and compliance see cost savings of 30%–50%”

Take FIS™, which began as start-up Systematics™ and has grown, through acquisition and expansion, into a global provider of financial services technology. FIS has adopted a strategic approach to location selection, incorporating lower-cost regions where it can access quality skills in plentiful supply, with higher-cost locations offering niche skills and expertise, and global cities where it locates front-office teams.

What does the future of shoring look like?

Digital technology is enabling the financial sector to service customers on a global basis and scale. In the future, we will see a blurring of the traditional offshoring model to something much more flexible, responsive and dynamic. Consider Estonia's e-residency programme, the first of its kind offering the freedom to easily start and run a global business. Since its inception, 3,877 new companies have been established by e-residents, who are not physically based in the country. That could be a route to offshoring in Estonia.



Karena Vaughan is founder and managing director of Catalina Consulting, a specialist adviser in strategic business development and location selection. She has worked extensively for Northern Ireland entities over the years.

The revolution is coming

THE FINANCIAL SECTOR HAS EXPERIENCED TECHNOLOGY-DRIVEN CHANGE BEFORE, BUT FINTECH IS SOMETHING DIFFERENT; IT HAS THE POTENTIAL TO DISRUPT THE ENTIRE COMPETITIVE LANDSCAPE OVERNIGHT

✦ ANTHONY HILTON FCSI(HON) ✦ JOHANNA WARD

The financial sector was one of the first to embrace technology. In the 1960s, banks and insurance companies began to instal their first mainframes. These machines cost a fortune, were arranged like lines of large wardrobes, were instructed in what to do by reading holes in appropriately named punched cards and ran so hot they required their own pristine air-conditioned rooms. But they revolutionised record-keeping and the ability of these organisations to handle and communicate with vastly increased numbers of customers.

Then in the 1980s and 1990s, technology spread. Concepts such as end-to-end transaction processing brought change to middle and back offices. The application of technology to dealing and to the markets brought in the front office. Competitive advantage went to the trading room with the best, fastest and usually most expensive kit. There were good reasons why the struggle between securities houses to gain an edge became known as 'the arms race'.

Why fintech is different

But somehow fintech is different from what has gone before, and not just in the scale of the hype that surrounds it. Technology in financial services in the past was largely about internal efficiency; doing established things in quicker, better ways. If one were to attempt a definition of fintech, it is that it has the power to transform the business relationship with the outside world, on paper at least. It opens up the opportunity to do business in entirely different ways. The FCA's sandbox, in which companies can experiment with innovative approaches to financial sector business unfettered by current regulation, is a practical recognition of this.

We are not there yet, although there are some business models, such as peer-to-peer lending, the smart advice systems of investment platforms and savings apps to aid thrift, which can legitimately claim to be fundamentally different from what has gone before. Fintech is technology becoming airborne. Its only boundaries are those of the imagination.

This is partly because of cost, partly about power and partly about reach, but mainly about the combination of all these things. Access to more people, with more data, in different ways and at a fraction of the cost opens up entirely new routes to

market. But it is also about the power of disruption. The world's largest hotel company, Airbnb, does not own any hotels; and the world's largest publisher, Facebook, does not generate any content. Fintech is about the arrival of a Facebook in finance. It is the possibility that someone with no background in finance could change the competitive landscape overnight.

Established players respond

A 2017 survey by business consultancy PwC says that 88% of incumbent financial services firms are concerned that they are already losing revenue to innovators and three-quarters of them say they are going to try harder themselves to innovate, more likely by forming a fintech partnership with one or more of the new players.

But one should not underestimate how difficult it is for any Board to take a bold leap into the dark. Roger Jenkins, briefly the chief executive of Barclays, makes a distinction between incremental change and transformational change. In his view, too much of the spend on technology among the big established players is aimed at achieving incremental change, and he attributes this in part to risk aversion, having been burned in the past by technologies that failed to perform. Jenkins understands why Boards are reluctant, but he believes it is a challenge the sector has to face up to.

They will also have to accept that it will change the regulatory landscape. The arrival of the updated Markets in Financial Instruments Directive will require a step change in the volume and detail of reporting and monitoring demanded of firms. It is expected that the vast quantities of computer-generated data will be managed and analysed by equivalent technology on the regulatory side. A world where computers regulate computers is symbolic, but it also shows how far and how fast fintech is changing our environment.

Anthony Hilton FCSI(Hon) is the award-winning former City Editor of *The Times* and the *London Evening Standard*



A portrait of Stella Cox CBE, a woman with short brown hair, wearing a grey headband, blue-rimmed glasses, and a dark blue top with a multi-strand necklace of white and grey beads. She is looking slightly to the right of the camera with a neutral expression.

“To have been involved in seeing the footprint of the industry grow has been an extraordinary opportunity”

LEADING THE CHARGE

Stella Cox CBE has dedicated herself to the development of Islamic finance for more than three decades. Her contribution has earned her many accolades, but her entry into the sector wasn't easy

◆ EILA MADDEN 📷 CHARLIE SURBEY

When Stella Cox first applied for a job on the Middle East desk of Kleinwort Benson's corporate banking team, she was rejected. Subsequent applications were unsuccessful too. It was the mid 1980s and it was politely suggested to her that, for cultural reasons, it wouldn't be appropriate for a British woman to work with the desk's conservative client base.

But she persisted until she persuaded the desk to give her a six-month trial. That was 32 years ago and, today, Stella is one of the leading lights in the Islamic finance world. In February 2017, *Islamic Finance Review* ranked her number one in a top ten list of Women in Islamic Finance and Banking, and in June 2016 she was awarded a CBE for services to the economy and for championing the development of Islamic finance in the UK.

THE ATTRACTION OF ISLAMIC FINANCE

Her career in the sector has been, excuse the pun, stellar, but joining financial services in the first place wasn't a conscious decision. In the mid 1980s, jobs in the City were aplenty and, with two sisters already working for international banks, following in their footsteps seemed like a natural move. She found herself working as a junior administrator on the Japan desk of Kleinwort's corporate banking team. The Middle East desk was next to her.

At the time, it was unusual for a British merchant bank to be offering Islamic finance services, but Kleinwort, first established in 1852, had a long history of working with Middle Eastern merchant families and private groups. During the mid 1970s, those clients began to realign themselves with Islamic finance principles and, in order to continue working with them, Kleinwort was far-sighted enough to create specific products and services for them that did the same.

"It was quite interesting to see people working with something as specific as a faith-based finance and investment strategy," Stella says. She also liked the sound of some of the exotic Middle Eastern locations her colleagues were travelling to. A combination of these two factors prompted her to apply for a job on the desk. Her multiple rejections didn't offend her, because she knew that bureaucracy made it very difficult to travel to certain areas of the core marketplace.

ISLAMIC FINANCE PRINCIPLES

For the uninitiated, Stella describes Islamic finance as an interesting and subtle mix of economics, ethics and Sharia law – the religious law that relates to Islamic tradition. Its fundamental principles are the prohibition of interest, fairness in financial transactions, the avoidance of uncertainty and speculation, and the sharing of profit and loss. "In Islamic finance, money doesn't return money," Stella explains. "It's not a matter of taking a loan and paying interest or placing a deposit and returning interest. It's investing through the sale and purchase of assets to derive a fair return from the

productive use of money for the benefit of the wider economy, ultimately."

As an example of Islamic finance in practice, Stella points to trade finance transactions. Typically, a firm would procure a loan from its bank to purchase the assets it needs and pay interest on that loan. In contrast, an Islamic bank would purchase the assets, either as a principal or as an agent for its client, and sell them on to the client at a marked-up price. "It is effectively a deferred credit sale," Stella explains. "The goods are delivered immediately but the customer pays later, but rather than paying interest, the markup is worked out on the true value of those assets to generate a profit upon sale for the bank or investor." The point is that there is transparency in the transaction, an avoidance of interest payments and an alignment of interests – to get the best price – between the bank and its client.


"It was interesting to see people working with a faith-based finance and investment strategy"

In recent times, the ethics that underpin Islamic finance have been attracting interest from other parts of the responsible and sustainable finance sector. Stella believes they will begin to have a wider resonance as well, particularly in the wake of the global financial crisis when people are searching for ways to restore trust in financial services. As a result of this trend, DDCAP Group – Stella's own company – has become one of the first three Islamic financial sector firms to become a signatory to the United Nations Principles for Responsible Investment. Stella is also a trustee of the Responsible Finance & Investment Foundation, a think tank established by a number of leading figures in the Islamic finance sector to explore how it can collaborate with other parts of the financial services sector that are focused on responsible finance.

Stella believes Islamic finance is resonating with the secular market at a more practical level too. Using Sharia-compliant products and services gives companies the opportunity to diversify their funding sources and makes it easier to expand into markets such as the Middle East and South East Asia, where Islamic finance practice is more evolved.

LAUNCHING DDCAP

Contemporary Islamic finance has only really emerged over the past 40 years or so, and Stella says she feels privileged to have played a part in this process. "To enter the development of the market at a fairly early stage of its growth and to have been involved in seeing the footprint of the industry grow geographically, to see it spread across financial disciplines, across asset classes, across different sectors, has been an extraordinary opportunity."

In her 14 years at Kleinwort, she, along with her Islamic finance team, worked across every division of the bank, 

apart from the Private Client division. In 1998, she left Kleinwort to co-found DDCAP Group, a pioneer of Islamic finance intermediation services.

What attracted her to the DDCAP proposition was having a firm that would make connections, look at new structuring solutions, introduce fund managers and other best of breed financial sector firms to Islamic institutional clients and, conversely, to introduce those clients to the international marketplace and help them to grow awareness of what they were doing.

STELLA COX CBE, MD, DDCAP GROUP

2017 RANKED NUMBER ONE IN TOP TEN LIST OF WOMEN IN ISLAMIC BANKING & FINANCE, PUBLISHED BY THE *ISLAMIC FINANCE REVIEW*

2016 APPOINTED A COMMANDER OF THE ORDER OF THE BRITISH EMPIRE FOR HER SERVICES TO THE ECONOMY AND FOR CHAMPIONING THE DEVELOPMENT OF ISLAMIC FINANCE IN THE UK

2016 APPOINTED ADVISORY BOARD MEMBER OF THE ETHICAL FINANCE INNOVATION CHALLENGE AWARDS

2015 BECOMES A MEMBER OF THE BOARD OF TRUSTEES OF THE RESPONSIBLE FINANCE & INVESTMENT FOUNDATION

2014 APPOINTED CHAIR OF THE CITYUK'S ISLAMIC FINANCE MARKET ADVISORY GROUP

2013 INVITED TO JOIN THE UK GOVERNMENT'S FIRST ISLAMIC FINANCE TASK FORCE, WHICH RESULTS IN THE ISSUANCE OF THE COUNTRY'S INAUGURAL SUKUK (ISLAMIC BOND) IN 2014

2008 AWARDED FOR OUTSTANDING CONTRIBUTION TO ISLAMIC FINANCE IN THE UK AT THE INTERNATIONAL REAL ESTATE FINANCE SUMMIT

2007 BEGINS A TWO-YEAR APPOINTMENT AS NON-EXECUTIVE DIRECTOR OF GATEHOUSE BANK, A UK ISLAMIC BANK

2006 CO-AUTHORS THE CISI'S ISLAMIC FINANCE QUALIFICATION

1998 LAUNCHES DDCAP, TAKING ON THE ROLE OF MANAGING DIRECTOR

1986 INVOLVED IN STRUCTURING THE ISLAMIC FUND AT KLEINWORT, THE WORLD'S FIRST SHARIA-COMPLIANT GLOBAL EQUITY FUND

1984 JOINS KLEINWORT BENSON AS A JUNIOR ADMINISTRATOR AND WORKS HER WAY UP TO DIRECTOR OVER THE NEXT 14 YEARS

“The best way to do that was to establish an intermediary model and, in 1998, that didn't exist within Islamic financial practice,” says Stella. Under her stewardship, DDCAP has grown to a team of 45 people, serving clients and counterparties not just in Muslim majority countries, but across the world.

EVOLVING THE ISLAMIC FINANCE SECTOR

The sector's emergence has not been without its challenges and Stella has played an active role in helping to tackle them.

Working with the Central Bank of Bahrain, she was involved in developing the first ever procedures and documentation for Islamic commodity trading. She also sits on the Islamic Financial Services Board's Money Market Task Force on Markets and Instruments for Sharia-Compliant Liquidity Management and is a member of the Markets and Product Development Committee of the International Islamic Finance Market.

“We've really had to innovate and develop in parallel with the architectural and infrastructural requirements the system needs,” she says. That has meant developing regulation and legislation across separate markets because, even within a single close-knit region such as the Middle East, each country has evolved its own Islamic financial proposition. “As time has gone on and as critical mass has established from the point of infrastructure, it's been a matter of seeing where there is avenue for cooperation or consolidation.”

Stella was also part of the group of practitioners convened in Beirut in 2006 by Professor Rifaat Ahmed Abdel Karim, a globally renowned Islamic finance expert, to write the first Islamic finance qualification for new entrants to the market. Stella authored the asset management module for the exam, which was later picked up and expanded by the CISI. Over the past ten years, the CISI has updated the modules, brought in new tutors and developed its dissemination to a broader marketplace. Recent Reuters research suggests the CISI qualification now has more uptake than any other in the Islamic finance market globally.

“The work that the CISI has done has been invaluable because it has increased the programme's point of connection to the wider financial markets, and one thing that we all believe is very important is that Islamic finance is connected to global financial practice and that new entrants understand how the markets can link and work together appropriately,” says Stella.

ISLAMIC FINANCE IN THE UK

Closer to home, Stella has played an important part in the development of the UK's Islamic finance sector.

She credits the late governor of the Bank of England (BoE), Lord Eddie George, for putting Islamic finance on the map in the UK. In 2000, the central bank had been tasked with ensuring financial inclusion across the country and there was concern that British Muslims did



“It’s extremely important that the UK became the first non-Muslim majority sovereign to issue a sukuk”

not have access to financial services comparable to those available on the secular market.

Stella was involved in a task force that the BoE set up to address these concerns. Its work resulted in the UK financial regulator authorising the first UK Islamic bank – the Islamic Bank of Britain, which has now rebranded as Al Rayan Bank – and working to ensure a regulatory level playing field for Islamic financial practice in the UK. So, for example, the structuring process that was required to render a mortgage Sharia-compliant initially resulted in borrowers paying double stamp duty. But a revision of stamp duty rules eliminated the cost differential of the product while it still remained Sharia-compliant.

“It’s very important that Islamic finance is connected to global financial practice”

At the same time, there was a vibrant wholesale banking market that was focused on institutional Islamic finance requirements that had been developing since the late 1970s. “London, as a global financial centre, was an access point for emerging Islamic financial institutions that were looking for asset supply, financial restructuring advice and guidance, and related professional advisory services,” Stella says.

In 2008, the UK Treasury appointed a working committee to consider whether the UK should issue its

first Islamic bond, or sukuk. But then the global financial crisis hit and, at government level at least, attention had to move elsewhere. Although work within the UK’s Islamic finance community continued in the background, it wasn’t until 2013 that the UK government refocused its attention on the sector.

At the time, then Prime Minister David Cameron said he wanted London to stand alongside Dubai as one of the great capitals of Islamic finance in the world. Stella was invited to sit on the UK government’s first Islamic Finance Task Force, which was set up to revive the UK proposition for Islamic finance.

The work of the task force, on which Stella was the practitioner lead for the regulatory work stream, resulted in several new Islamic finance products listed on the London Stock Exchange, the most notable of which was the UK’s first sovereign sukuk.

“I think it’s extremely important that the UK became the first non-Muslim majority sovereign to issue a sukuk,” says Stella. “It showed that the UK is open for business, that we can issue Sharia-compliant instruments from the UK into the capital market and that in terms of inward foreign investment we have a range of solutions available should we have investors that want to come to the UK and invest in a Sharia-compliant way.”

But the development she is most proud of is the fact that the UK financial regulator has authorised a series of





Islamic banks in the UK, making it the first non-Muslim majority country in the world to do so.

THE ROLE OF THECITYUK

The UK government's Islamic Finance Task Force was convened to see what could be delivered ahead of London hosting the World Islamic Economic Forum at the end of 2013. Once the task force was dismantled, TheCityUK picked up the baton as the champion of Islamic finance in the UK. As the government's private sector partner in all matters relating to the City, it made sense for the organisation to convene a working group for the UK's Islamic finance sector – a group that Stella has chaired since 2014. Practitioners from all corners of the sector are represented on the Islamic Finance Market Advisory Group, which is tasked with maintaining an open dialogue with government and acting as a centre for thought leadership on Islamic finance in the UK.

Stella believes TheCityUK group has achieved a fair amount to date. As well as supporting the UK government through the process of issuing its first sukuk, it has ensured Islamic finance remains on ministers' agendas by raising concerns when legislation or regulation makes it challenging for the sector to develop. Student loans and real estate finance are just two areas where TheCityUK has lobbied government.

TheCityUK picked up the baton as the champion of Islamic finance in the UK

The group also works to raise awareness of the UK's Islamic finance proposition to overseas markets – a proposition that has its own unique advantages. “Not only have we been able as a secular country to accommodate Islamic financial practice within a single regulatory code; another advantage for the UK is our English common law, which is extraordinarily compatible with the demands of Sharia-compliant financial services. That has and will continue to give us

FINTECH IN ISLAMIC FINANCE

Financial technology is a core part of DDCAP's offering. Over the past decade, it has invested strongly in this, evolving a proprietary platform called Ethos Asset Facilitation Platform™, which offers, on a 24/7 basis, fully automated financial transaction support to the Islamic finance sector.

But this, says Stella, is just the tip of an exciting fintech iceberg that's emerging in Islamic finance, which she has witnessed as a judge of the Ethical Finance Innovation Challenge Awards. The awards, jointly sponsored by Abu Dhabi Islamic Bank and Thomson Reuters, invite submissions from newly established ethical and Sharia-compliant businesses.

“I've had the privilege of judging these awards for the past couple of years and one of the things it has done is open my eyes to the depth and extent of fintech capability that's emerging within Islamic finance practice,” says Stella.

Notably, she is seeing valuable business propositions dramatically extend their potential reach to people through the application of fintech. “It's so exciting for us in Islamic finance because we're just starting to engage with some of our frontier markets in Asia and Africa and financial technology is going to be an enabling factor.

“That's the direction that I think the market is going to take in the next ten years. It's very exciting, uncharted territory for us as a sector and I hope that, through our innovation with our Ethos platform at DDCAP, we're playing a very small part in doing that.”

an advantage over other international territories where civil code rather than common law applies.”

That said, TheCityUK group works closely with Islamic finance sectors in other countries to ensure practices and solutions are evolving in a globally consistent way and that knowledge about new trends and developments is shared.

There are still many exciting developments in the pipeline. For example, the Islamic finance sector is only just starting to explore how it can expand its offering into the asset management space. One driver behind this is a move among sovereign wealth funds to apportion a significant part of their allocation to Sharia-compliant assets. The Malaysian government, for example, recently passed legislation making it compulsory for its state pension fund to offer policyholders Sharia-compliant alternatives to existing investments. That has focused fund managers' attention on the range of Islamic finance products that might be on offer to them.

The potential for development across other areas of finance is endless, Stella says. “I'm just sorry that, as the years advance, I'm not going to see quite as much of that as I might want to do.” ●

UK FINTECH IN NUMBERS

A 2015 BENCHMARKING STUDY OF SEVEN FINTECH ECOSYSTEMS AROUND THE WORLD RANKS THE UK FIRST, MARGINALLY, OVER FOUR KEY ATTRIBUTES: TALENT; CAPITAL; PUBLIC POLICY; AND DEMAND. IT COVERS THE UK, CALIFORNIA, NEW YORK, SINGAPORE, GERMANY, AUSTRALIA AND HONG KONG

FAST FACTS



1,600
Number of fintech companies operating in the UK

£15m

Average investment, per company, to date



42%

The percentage of the digitally active population that are fintech adopters



6*

The number of fintech unicorns in the UK (there are 31 globally)



£6.6BN*
Market size

Average age of a fintech company

5.3 YRS

£61,000*
Number of people employed by the fintech sector



Who is using fintech?



(Figures indicate percentage of fintech companies serving this customer segment.)

50%
Consumers

57%
SMEs



56%
Financial institutions



48%
Corporates (non-financial institutions)



8%
Other (such as charities, financial advisers, government, landlords)

When are fintechs most vulnerable to cybercrime?

Fintech providers are more prone to cyber attacks than traditional financial institutions, according to ThreatMetrix, whose figures are global. Fraudsters are seeking to target vulnerabilities in emerging platforms to hijack accounts, sign up for fraudulent loans and make money from stolen credentials.

Attack surfaces where fintechs are most vulnerable – Q2 2017 (Q2 2016 figures in brackets)

8.8% (6.4%)
Identity spoofing

5.2% (3.2%)
Mitb (Man-in-the-Browser) or bot



3.8% (4.2)
Device spoofing

1.8% (3.4%)
IP spoofing

Which financial services subsectors are fintech companies targeting?

(Figures indicate percentage of fintech companies operating in this subsector.)

13.5%
Payments and remittances

8.2%
Online investments

6.9%
Analytics and big data

6.1%
Blockchain solutions

4.9%
InsurTech

4.1%
Capital markets data and technology

3.7%
Personal financial management

2.9%
Digital wallet and prepaid cards

2.4%
Cryptocurrency

10.2%
Financial software

7.8%
Lending – SME and corporate

6.9%
Regtech and digital identity

5.3%
Lending – consumer finance

4.1%
Online aggregator or broker

3.7%
Asset management solutions

3.3%
Digital banking

2.9%
Credit reference data and scoring

2%
Trade finance/supply chain solutions

Sources:

• UK Fintech census 2017 – The voice of fintech, HM Treasury, EY & Innovate Finance • UK Fintech – on the cutting edge: An evaluation of the international fintech sector, HM Treasury & EY, 2016 • EY Fintech adoption index 2017: The rapid emergence of fintech, EY • 2017 Q2 Cybercrime report, ThreatMetrix

While some financial planning firms are already using fitness data to complement their client service, it is yet to be harnessed by the sector. The benefits of doing so could bring greater precision to financial planners, but a lack of public trust is hindering take-up

◆ JAKE MATTHEWS ◻ IKON/JAMIE JONES

Your health is your wealth



The term ‘big data’ has eased itself into the lexicon of planner-client language with apparent ease. Now, ‘biodata’, the biological data of an individual, is set to do the same.

A report in October 2016 by the Financial Planning Standards Board, *Fintech and the future of financial planning*, collates the thoughts of 1,700 CERTIFIED FINANCIAL PLANNER™ professionals from 26 of its member organisations across 29 countries. The professionals are asked about the positive and negative implications of the biodata-client relationship.

Survey respondents say that this non-financial information will become increasingly relevant to financial planners, bringing greater precision to their client offerings and aiding in the formation of deeper planner-client relationships.

Such information will allow planners to track progress and positively reinforce behaviour that is beneficial to the client, and enable access to more accurate and complete financial information. Financial planners can also better understand how to guide a client towards their desired financial and life goals.

A client can give their planner access to their fitness information by linking the relevant fitness app or device to an online profile that their adviser can see. In practice, this means that a client who stops smoking and becomes fitter could see their premium on health insurance reduced. This would also increase their life expectancy, meaning a financial planner would have to modify their client’s financial forecast and, potentially, their investments.

However, with this increased information comes increased risk of theft, fraud and ever-evolving cybersecurity threats. Currently, the seventh principle of the Data Protection Act dictates that those who hold personal data must have the appropriate security to prevent it becoming compromised.

This legislative requirement hasn’t translated to consumer trust though. A 2017 YouGov survey finds that 12% of consumers are concerned their data might be stolen and a fifth are worried about their personal data being sold on.

This isn’t the only downside. Knowledge of pre-existing health conditions could lead to potential discrimination – for example, a premium increase – and give rise to

ethical or legal issues that may result from the interpretation of this data by non-healthcare workers.

Take US discount store retailer Target. In 2012, it was reported that it had analysed the shopping habits of a high-school student with an algorithm that determined that she was pregnant. She was sent pregnancy-related coupons before she even knew she was expecting, inadvertently notifying her father of the news. It is entirely possible for biodata to notify financial planners of news their clients may not be aware of.

PERSONALISED PENSION POTS

Despite the downsides, using biodata to personalise financial products can lead to improvements in health and levels of wealth for clients. Just, which specialises in retirement products and services, already uses medical data to inform its client offering.

The company says it has “positively disrupted” the market by personalising its Guaranteed Income for Life solutions with information about medical conditions the customer may have, their blood pressure and cholesterol levels, and lifestyle factors such as smoking and alcohol consumption. As a result, many customers receive a typical increase in income of over 20% – and, for some, it can be 50% or more.

Stephen Lowe, communications director at Just, explains how this works: “This additional information enables us to make a deeper assessment of how long the customer may live – and this underwriting assessment enables us to more accurately establish an offer to the customer.”

Insurance company VitalityHealth offers lower premiums for physically active policyholders who maintain or improve their levels of health. The company monitors customers’ healthy lifestyles via activity trackers such as an Apple Watch.

How much biodata is shared is entirely up to a customer and their financial planner

Scalable Capital is a digital wealth management firm that uses risk management technology to provide globally diversified and personalised portfolios which are determined by their investment algorithms. The user sets the risk level for the portfolio – which modifies the investment strategy accordingly – because, says founder Adam French, “everyone has a different risk tolerance”.

Adam says that this data-gathering process, via a questionnaire, can be replicated by fitness apps to deliver a tailored service to clients. “In the future, you could imagine this data being collected in the background via access to other data sources such as banking data, social media accounts and many more.”

How much or little biodata is shared with a financial services company is entirely up to a customer and their financial planner, but more data equals a more complete picture, and a potentially better financial outcome.

HOW DO CLIENTS FEEL ABOUT USING PERSONAL DATA TO TAILOR SOLUTIONS?

According to PwC’s 2016 study *Sink or swim: why wealth management can’t afford to miss the digital wave*, two-thirds of high-net-worth individuals (HNWIs) under the age of 45 have a positive attitude towards personal data from apps or websites being used to tailor information, products or services to their needs. However, 59% of older HNWIs feel negatively about this.

The study finds that the perception of personal data’s prevalence is underestimated – 91% are aware of apps using personal data, but only 61% of respondents think they use apps that utilise personalised data. In reality, 84% use at least one app that collects and uses personal data, but only 68% of respondents think they do.

BUILDING TRUST

As of May 2018, biodata and genetic information will be considered sensitive data under the new General Data Protection Regulation (GDPR).

Adam cites the findings of a recent PwC study, *Financial services technology 2020 and beyond: Embracing disruption*, showing that 69% of CEOs of financial services firms are either somewhat or extremely concerned about cyber threats. “Before embracing non-financial data – and, in particular, health data – it’s critical that the financial services sector has good security protocols in place.”

Customers are also reluctant to share their data. *Big data, artificial intelligence, machine learning and data protection* – a study from the Information Commissioner’s Office (ICO), an independent UK authority that upholds information rights – says that only 29% of UK adults trust the financial services sector to use their personal data responsibly.

“Getting data protection and privacy right is a vital part of building and protecting consumer trust and should be seen as an essential part of the solution for business success,” says Garreth Cameron, ICO group manager for private and third sector engagement, speaking on behalf of the ICO. This is especially important when the data concerned is sensitive. For example, if it relates to a person’s health or biometric information.

GDPR SHAKE-UP

As a result of next spring’s GDPR shake-up, the rights of individuals will be strengthened and a stronger emphasis will be placed on businesses to be transparent and accountable. Organisations must also ensure client consent is freely given; there must be affirmative and clear action – for example, a positive opt-in – from the individual and withdrawal of consent must be simple.

These changes should help to build confidence among planners and clients about using fitness data to improve their financial health too. ●



A HELPING HAND

A second batch of fintech companies is preparing to enter Abu Dhabi's RegLab. How do such regulatory sandboxes help to foster innovation in the Middle East and beyond?

◆ DOMINIC DUDLEY

In October 2017, Abu Dhabi hit an important milestone in its quest to develop a fintech sector that can serve the UAE and the wider Middle East region, and perhaps even make a mark on the rest of the world.

The city's financial services hub, Abu Dhabi Global Market (ADGM), evaluated almost two dozen companies wanting to join its fintech RegLab, and on 22 October announced the names of the 11 successful applicants. They are the second wave of entrants into the scheme, which was launched in November 2016. A second cohort joining the programme is an important signal that it is no flash in the pan and suggests it could provide a foundation for a vibrant local fintech sector in the future.

THE REGLAB PROGRAMME

As with other regulatory sandboxes, the RegLab offers companies a controlled environment in which they can test services and products without being subjected to a

full suite of regulations. The programme is open to applicants both large and small, start-up or established, but there are a few criteria they have to meet to qualify: they must have a technological solution that is both innovative and ready for testing, and it also needs to contribute to the development of the financial sector in the UAE.

Those that are accepted will be given two years to test and develop their solution within the RegLab. The first five joined in May 2017, selected from a pool of 11 applicants.

They include two from the UAE: Now Money, which uses mobile technology to provide low-income migrant workers with banking and remittance services (and which is also a participant in the Central Bank of Bahrain's regulatory sandbox); and Titanium Escrow, an automated escrow service that aims to increase trust among counterparties. Also involved are two Indian



firms developing online loan services, CapitaWorld and Rubique, and US-based Finarytix, which has a robo-advisory platform.

Since May 2017, these companies have received guidance from ADGM's fintech team, as well as support from some of the programme's partners, which include KPMG and New York University Abu Dhabi. There are also mentors who offer help in areas such as legal services, PR and marketing, and compliance. It's early days, but Omar Rana, co-founder of Finarytix, says the experience so far has been "quite good" for his firm. "Abu Dhabi took the regional lead in developing policies to target the paradigm shift taking place in financial services via fintech," he says.

The RegLab offers companies a controlled environment in which they can test services

As the assortment of companies involved makes clear, the RegLab has a distinctly international flavour. This has been reinforced with the second group of applicants, with 22 companies from at least 11 countries, including Canada, Egypt, Saudi Arabia, Lebanon, Hong Kong and, naturally enough, the UAE.

BENEFITS ON OFFER

There are plenty of potential advantages for companies in the programme, but there are also a number of benefits for Abu Dhabi. The authorities have identified financial innovation as a key driver for economic growth in the future and this offers it a role in promoting that trend.

By bringing pioneering companies and products into its territory, it also gains an insight into the needs of the fintech sector, which will help it create the right environment to foster innovation and advance the fintech market more broadly.

"Fintech is going to be the future, so we need to embrace this innovation and think of how we can update our rules along the way, to make sure we can support the adoption of technology," explains Wai-Lum Kwok, executive director of capital markets at ADGM and the person in charge of its fintech strategy. "We need to have a platform for us to get near the fintech players."

Abu Dhabi is one of a growing number of cities around the world to have started a programme like this. Within the Gulf region, as well as Bahrain's regulatory sandbox there is also the FinTech Hive scheme at the Dubai International Financial Centre (DIFC).

The nature of these programmes varies. The Dubai scheme, for example, is targeted at early-stage companies still developing their solutions and services. It is based on a 12-week accelerator programme, which gives start-ups access to potential customers and partners in the DIFC.

PARTICIPANTS FEED BACK

"We've always been looking at ways to enter the [Middle East] market," says Gareth Lewis, CEO of Delio Wealth, a Cardiff-based developer of private asset platforms, which is enrolled on the DIFC scheme. "It would have taken us many years to gain access to the level of ➔

people and financial institutions we're able to get through this. It's been a fantastic opportunity to explore a highly exciting market quickly and effectively."

Preeti Bhambri, head of business development Middle East at robo-adviser solutions developer WeInvest, which is also enrolled on the FinTech Hive programme, offers a similar take. "The programme offers us an opportunity to connect with regulators and banks and get mentorship on how to implement digital wealth management solutions in the region," she says.

The Dubai Financial Services Authority (DFSA), which regulates the DIFC, has been "very impressed" with the start-ups involved in Hive, according to Peter Smith, managing director and head of policy and strategy at the DFSA and a member of the CISI's National Advisory Council for the UAE. It is anticipating some might stay beyond the 12-week programme. In the spring, the DFSA announced an innovation testing licence (ITL) – a sort of regulatory sandbox in which fintech firms are given a restricted licence to develop and test innovative concepts without being subject to the full suite of regulations that normally apply. "We expect to have a handful of firms from the Hive apply for an ITL or full financial services licence as the next step in their development," says Peter.

This is not a winner-takes-all environment – or at least not at the moment. The various financial hubs often work with – rather than compete against – each other. The DFSA has cooperation agreements in place with the Hong Kong Securities and Futures Commission and the Malaysian Securities Commission, for example, while Abu Dhabi has developed 'fintech bridges' with the Singapore Monetary Authority and the Australian Securities and Investment Commission.

The ultimate aim is to create a self-sustaining innovation ecosystem

"We believe collaboration [with other regulators] is key, especially when we are building up this ecosystem," says Wai-Lum. "We don't believe that we can do this alone. When it comes to developing the ecosystem, no one has a monopoly of wisdom."

PORTFOLIO OF INITIATIVES

As is the case in Dubai, ADGM's RegLab is part of a portfolio of initiatives by Abu Dhabi to establish itself as a hub for innovative companies. Among the other efforts is the FinTech Abu Dhabi conference, held in October 2017, which included, among other things, a fintech innovation challenge. This competition saw 11 finalists (out of 166 applicants) compete to find solutions to problems in areas such as financial and investment management, financial inclusion and trade finance.

ADGM has also been developing tailored regulatory environments for different sections, which could indirectly help more start-ups develop locally. For example, in May 2017 the hub's Financial Services

WHAT IS ADGM?

Abu Dhabi Global Market (ADGM) opened for business on Al Maryah island in Abu Dhabi, the UAE capital, on 21 October 2015. It is a zero-tax financial free zone, similar to the well-established Dubai International Financial Centre in the neighbouring emirate of Dubai. ADGM is run according to its own civil and commercial laws, which are aligned with international best practice. There are three independent authorities, which, between them, manage the zone: the Registration Authority, the Financial Services Regulatory Authority and ADGM courts.

Since it was set up, ADGM has registered more than 320 financial and non-financial companies, including the likes of Macquarie Capital and Aberdeen Asset Management, which use it as their Middle East and North Africa hubs. In addition, ADGM has been building up its range of regulations to cover more areas of activity, with legal structures in place for asset management, banking, corporates, family offices, institutional investors, insurance companies and professional services firms.



Regulatory Authority unveiled a framework for venture capital firms, and Wai-Lum says it is looking at other regulatory regimes.

The ultimate aim is to create a self-sustaining innovation ecosystem. But even once that happens, there will still be a need for a regulator that is alert and flexible to meet the changing needs of the financial services sector. "The sector may come up with new solutions that require some tweaks to our rules," says Wai-Lum. "So we see our job as continually renewing ourselves to make sure we are relevant to the sector and that business thrives."

There is also an important role for CISI members in all this. As Peter points out, fintech involves people carrying out financial activities via their phones, tablets or laptops and without face-to-face contact, which in turn necessitates great trust. "The commitment of CISI members to act in an ethical manner and with integrity provides a foundation on which trust in new ways of doing business – in fintech – can be built," he says.

This will be vital if the fintech sector is to make the most of the opportunity in front of it. ●

How artificial intelligence is changing investing

Using artificial intelligence for investment decisions is no longer the exclusive domain of ‘quant’ funds. Asset managers and financial advisers are also adopting the technology. But does it really introduce a new level of sophistication? And will it become mainstream?

◆ PAUL BRYANT



In 2017, it feels like the use of artificial intelligence (AI) is poised to accelerate, unhindered. Venture capital is flooding the sector. CB Insights reports that funding deals to AI start-ups increased from 150 in 2012 (\$559m invested) to 698 in 2016 (\$4.8bn invested). Investment in AI fintech and insurance leads the rankings by sector in Q1 2017. In June 2017, McKinsey ranked financial services first in ‘future AI demand trajectory’ – measured by the estimated percentage change in AI spending over the next three years.

AI might flummox the less tech-savvy among us but Jeff Holman, chief investment officer at Sentient Investment Management, based in San Francisco, says it is just a fancy set of algorithms that find non-linear patterns. “They can also find interactions between variables and, if constructed accordingly, you can automate them so they can learn as you go through time.”

So are recent applications of AI truly revolutionary or just a way of improving on an already existing process?

HEDGE FUNDS – EMBRACING AI BUT WIDE ADOPTION UNLIKELY

In the world of hedge funds, AI is nothing new. According to David Andre, who has a PhD in AI and is CEO of Cerebellum Capital in San Francisco: “[In the past] it has mostly been about fitting models to data ... what’s really changed recently are new machine learning algorithms, such as deep learning, and the improvements in computer power.”

Deep learning involves trying to model the brain, not the subject being analysed. The most quoted example of this is giving a system millions of examples of cats so that the system, on its own, can learn to identify a cat. In an investment context, a deep learning system would be given carefully defined ‘pictures’ of ‘attractive investments’ that it would then try and find.

New York-based Rebellion Research, a hedge fund that launched in 2007, has been applying these new techniques. In the early days of the fund, when

analysing the Australian economy, its systems automatically adjusted for the rapidly increasing importance of, and correlation with, Chinese industrial output. CEO Alexander Fleiss says: “[Today,] machine learning (ML) not only learns how the economy adjusts for things like commodity prices going up and down; its factors for rating individual assets change over time. So not only will its predictions be different [due to changes in inputs like prices], but the factors that create the prediction will be very different. These new factors are essentially examples of the changing business and economic landscape, such as which country trades more or less with the EU or which stock is now 40% Chinese that had no Chinese exposure ten years ago.”

The machines appear to have delivered. Rebellion reported a cumulative return of 157% between January 2007 and August 2017, compared with the 111% gain of the S&P 500. Other AI hedge funds have also performed well, but not spectacularly. Eurekahedge has constructed an index from the performance of 23 AI/machine learning hedge funds. This shows a cumulative return of 63% between 2011 and 2016, outperforming traditional ‘quant’ funds and hedge funds generally, but not the S&P 500, with a cumulative return of 97%.

Advances are about analytical capability *and* the sophistication of input data. Algorithms now scan the web, read and ‘understand’ text and speech, and extract sentiment and meaning. Satellite images of crops or shopping centre car parks are analysed to forecast yields or detect early patterns in consumer behaviour.

How quickly AI is embraced as a part of the investment process will depend on investor sophistication. At Rebellion Research, most retail investors work in hi-tech firms. “They are engineers or managers who have done ML work on their own; they believe in it,” says Alexander.

But David reckons that, for most traditional investors, trust and ‘understandability’ are going to be the biggest roadblocks to growth in the use of AI across the investment sector. “A lot of the relationships today are based on trusting a set of individuals to manage their money. Replacing that with complicated ML algorithms that are difficult to understand – it’s going to take some time. It’s definitely an impediment,” he says.

Even if that roadblock is overcome, a widespread boom in pure ‘quant’ funds is unlikely, David adds. “There’s only so much that can be gleaned out of higher frequency statistical arbitrage. The biggest space for disruption is traditional fundamental analysis. That’s where deeper understanding of the dynamics of companies, the markets and the forces that influence them is really required by the system.”

ASSET MANAGERS – AI COMPLEMENTING FUNDAMENTAL RESEARCH

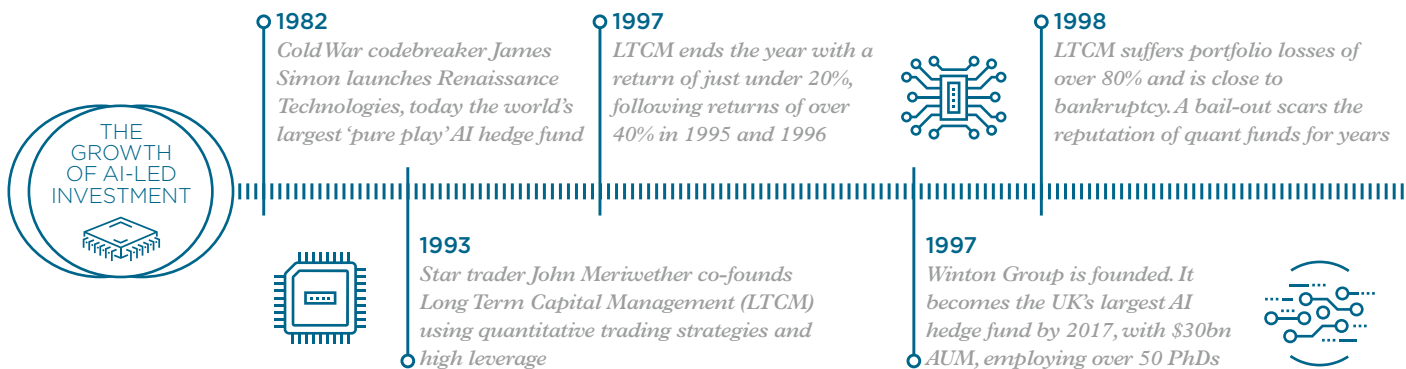
Cardiff-based technology firm Amplyfi is attacking this space. Algorithms access and analyse both the ‘surface web’ and the ‘deep web’. The surface web is smaller and accessible using standard search engines. The deep web has more information in richer datasets such as academic journals, government databases and financial records. It is less accessible and a vast, relatively untapped resource.

Amplyfi’s technology is used to find, analyse and discover weak signals and ‘unknown-unknowns’, correlations, trends and patterns that influence a market or investment. It enables new input metrics to be created for asset managers’ forecasting models that are often limited. Amplyfi’s chief technology officer Mark Woods suggests that many investors select model input factors based on “opinion or groupthink”.

In 2017, it feels like the use of artificial intelligence is poised to accelerate, unhindered

This is best explained by example. Amplyfi conducted a study to try to improve inflation (CPI) forecasting. A correlation was found between CPI and perceptions of water and wastewater mismanagement in the mining industry. These perceptions were driving increased government regulation that in turn increased costs for mines, downstream industries and, ultimately, the price of goods used to calculate CPI. Perception, tracked by previously ‘unmeasurable’ metrics such as the volume and content of newspaper articles in a local area, became forecasting model inputs.

Should researchers and analysts be worried? Probably not. But, according to Mark, some consultants should:



“We don’t doubt that you could pay a large consultancy to have 200 people locked away in a room for a few weeks and produce something like this. But then in a month’s time you need to repeat the exercise again. And again.”

For most, trust and ‘understandability’ are going to be the biggest roadblocks to use of AI

The acid test for many AI techniques used by hedge funds and asset managers will be the ability to demonstrate performance over longer periods and under different market conditions. Andrew Lo, Professor of Finance at MIT Sloan School of Management, in his ‘adaptive markets’ theory, has argued that investment strategies must change over time as markets are neither efficient nor inefficient but ‘adaptive’ and go through periods where the degree of efficiency varies.

Degrees of market efficiency can be influenced by human irrationality (bubbles and crashes) and by new technologies. Rapid smartphone adoption has resulted in the same information being available to all investors concurrently, boosting market efficiency. But advanced analysis of information from satellite images may only be affordable by a small group of institutional investors, resulting in information asymmetry and less efficient markets. Machines will need to ‘learn’ to cope with a range of such dynamic conditions.

FINANCIAL ADVICE - AI THREATENING SIGNIFICANT DISRUPTION

New York-based Pefin claims to be an AI financial adviser at “1/20th the cost” of a human adviser. The platform goes live in November 2017 after running in beta with 4,000 users since early 2017. Pefin automates client-adviser interaction, asset allocation and investment decisions.

Algorithms track individual clients’ income and spending patterns. They detect changes in these patterns and ‘learn’ about client behaviour. They also track factors like tax changes and the prices of goods affecting a client. This is used to generate a financial plan that is continuously and automatically updated. The system warns clients if they are overspending or if market conditions warrant a change to their behaviours.

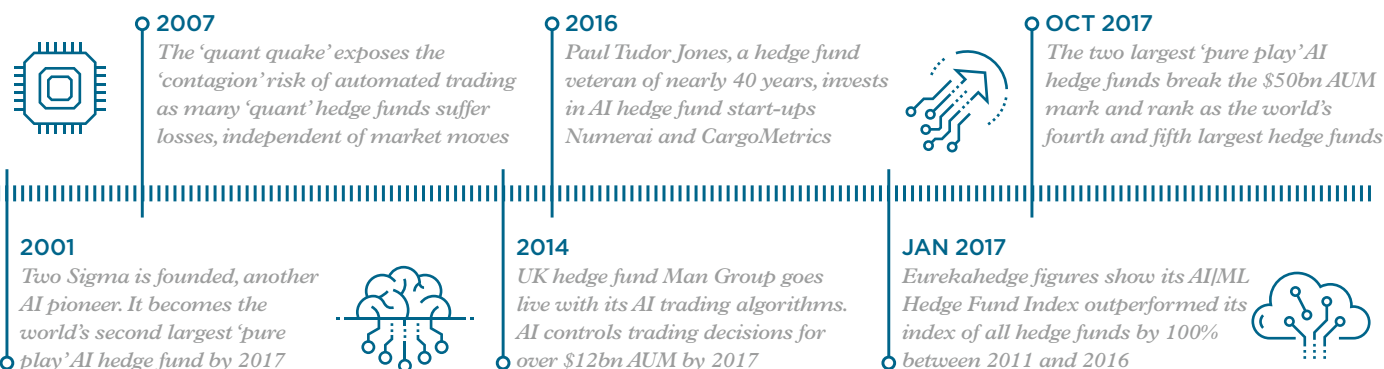
Founder Ramya Joseph thinks current practices are ripe for disruption: “You must bring all this paperwork and sit with some guy who crunches some numbers. The software itself is fairly archaic; it’s all from the 90s ... you get this financial report, this PDF, and as soon as you walk out the door the PDF is obsolete.”

Should financial advisers be worried? Probably. Pefin has its own direct-to-consumer offering but also has fast-track growth opportunities such as white labelling – where an incumbent advisory firm would pay to use Pefin’s technology but rebrand the offering as its own. “In the sector, people have been really receptive to this,” Ramya claims. “Banks and financial institutions know that technology like ours can be truly game changing even in their own business models.”

But Jeff McMillan, chief analytics and data officer of Morgan Stanley Wealth Management, sees a ‘humans versus machines’ argument as overly simplistic: “The reality is it’s the blending of the two that’s going to drive the model for the next ten years.” He stresses how good machines are at analysing large amounts of data and how machine learning can provide valuable insights, such as identifying when markets or clients are exhibiting unusual behaviour that doesn’t match past patterns. “That’s an opportunity; that’s a call to action for humans to come to the table and understand what is really going on.”

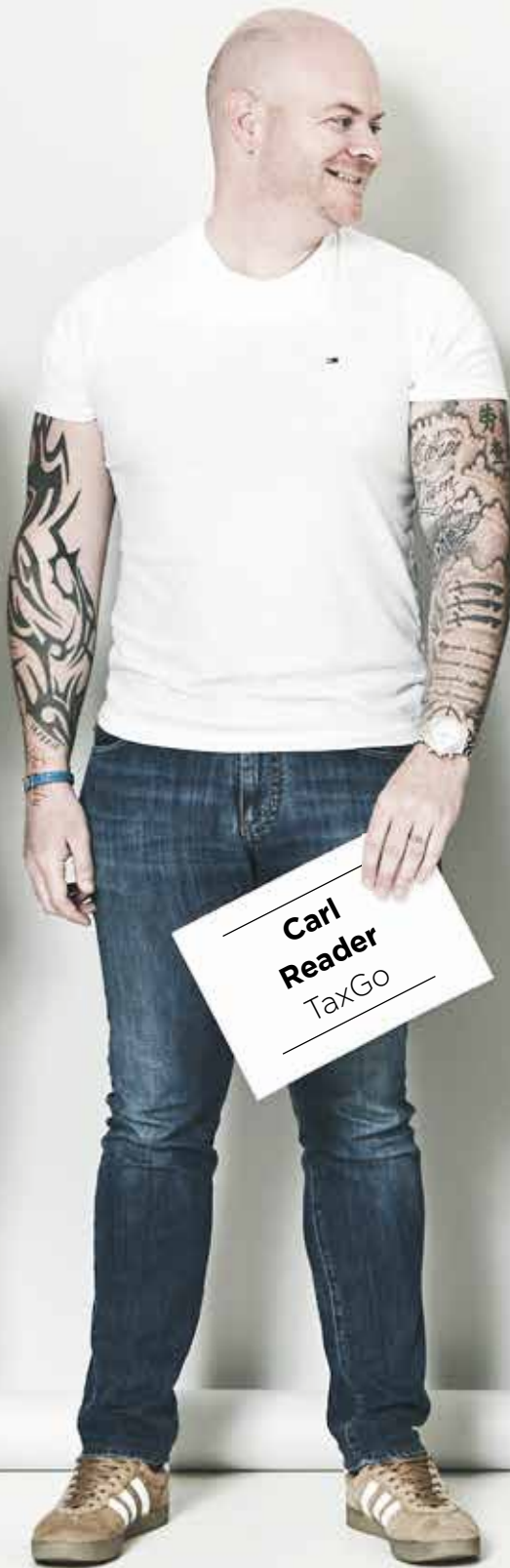
Jeff equates a strong AI capability to having advisers being supported by “800 people with expertise in every financial product in the entire world”, leaving advisers more time to think about complex client issues. “When you look at what clients want from a financial adviser, asset allocation is expected [but] they also want to know how to deal with an autistic child that has just been born, or deal with a parent that has early stage dementia, or how to navigate a divorce. AI is not there yet.”

Stories such as those of Rebellion Research, Amplyfi and Pefin start to clear some of the fog surrounding the future vision of AI. A new level of sophistication is being introduced. But quant hedge funds are unlikely to become mainstream. Mainstream asset managers are likely to use both humans and machines. And whether humans will be comfortable taking financial advice from machines remains to be seen. The picture is nuanced. ●





**Lex
Deak**
OFF3R



**Carl
Reader**
TaxGo



**Paresh
Davdra**
Xendpay

THE DISRUPTORS

From transferring money to raising capital, fintech is changing the way products and services are delivered across the finance sector. *The Review* spoke to some of the fintech entrepreneurs who are shaking things up

◆ DAN MATTHEWS 📷 ANTONIO PETRONZIO



Financial services and innovation (most often technological) are not always comfortable bedfellows. Heavy regulation can often inhibit new ideas and act as a barrier to their implementation. In 2015, the FCA consulted on this, putting out a call for input to regulatory barriers to innovation in digital and mobile solutions. Today, many governments are setting up ‘regulatory sandboxes’ that allow innovative start-ups to test out their ideas first in a controlled, lightly regulated environment.

Fintech start-ups are benefiting from this approach. In the UK, the FCA’s Project Innovate seeks to encourage innovation in the interests of consumers through a number of initiatives, including a regulatory sandbox and ‘Innovate: engagement’, which specifically encourages fintech innovation in firms based in the UK and internationally. Hong Kong’s regulatory sandbox is called the ‘Fintech Innovation Hub’; Abu Dhabi has the fintech ‘RegLab’, while Dubai has the ‘FinTech Hive’ (see page 22 for more on this).

Consumer appetite is increasing for the flexible solutions that fintechs offer. Figures from EY’s *Fintech adoption index 2017* show that 42% of adults in the UK now use fintech applications, compared with just 14% in 2015. Globally, the average adoption rate has risen from 16% to 33%.

A string of businesses have capitalised on this interest, blooming from spare-room start-ups into fintech unicorns – start-ups valued at more than \$1bn – in a few short years.

Some fintechs, such as crowdfunding platforms Crowdcube and Funding Circle, have become poster children for the sector and have had their stories well documented. We spoke to a group of fintech entrepreneurs whose stories are less well-known but who are making their mark by disrupting financial services, providing new opportunities to the companies they partner with and significantly improving customer experiences.

As a group, they represent a cross-section of financial services. All are tapping into markets with great potential, delivering services to the unbanked or those who are not large enough to access services from established players.

This is a new batch of UK businesses looking to follow in the footsteps of the country’s existing global success stories. ➔



LEX DEAK, CEO, OFF3R

PRODUCT: INVESTMENT COMPARISON WEBSITE

OFF3R, a web-based aggregator of wealth management and investment products, is designed to reduce complexity and improve access to the investment sector for people who are not finance experts.

The site has more than 50 product options to date and, since launching in 2015, has focused on alternative investments such as equity crowdfunding, peer-to-peer (P2P) loans and property investment platforms.

“At the high end, [the investment sector] is dominated by private banks with a high-net-worth focus,” says Lex. “The need for nurturing and managing wealth is vital given the pressure on pensions and social welfare.”

He says he was motivated to launch the business because of the lack of financial education aimed at consumers.

Products are generally created for advisers and investment professionals, he explains, so only intermediaries can fully understand what’s on offer.

“The key issue for me revolves around transparency, especially in relation to fees.”

Lex defines fintechs as any venture looking to innovate in finance. “There are very few new entrants that don’t require some element of technology in order to operate or scale,” he says.

“Within fintech there are aspects that are revolutionary. Clearly, blockchain and digital currencies qualify. On the other side, mobile and challenger banks feel evolutionary.”

STEVE POLSKY, CEO AND FOUNDER, JUVO

PRODUCT: FINANCIAL SERVICES FOR PEOPLE WITH NO BANK ACCOUNT



Juvo is working with mobile telephony companies to offer credit to the billions of people globally who don’t have a bank account. Aimed at prepaid mobile users, the model uses machine learning and scoring technology to build credit reports for individual customers.

“The service helps mobile subscribers who are creditworthy, but live in cash-based societies and therefore haven’t had the opportunity to access financial services or create a financial identity,” says Steve.

“Nearly 80% of the world’s mobile phone users are on prepaid mobile devices and more than two billion are currently excluded from financial services.”

In his view, mainstream financial services companies must innovate, but keeping up with consumer demand is costly and time-consuming. By partnering with smaller fintech firms, he says, they can provide relevant solutions in a fast-moving market.

When it comes to defining fintech, Steve says the threshold is about impact. “It’s more than just refining an existing process with technology. A ‘fintech’ company is one that’s driving change for millions of people.”



CHRIS MAULE, CEO AND FOUNDER, UK BOND NETWORK

PRODUCT: BOND FINANCE FOR LISTED AND PRIVATE COMPANIES

“The introduction of fintech to the financial services space was initially billed as ‘David versus Goliath’, but it has kindled as much collaboration as it has competition,” says Chris.

His business specialises in connecting growing companies with debt finance offered by private and institutional investors. The sweet spot is deals valued between £500,000 and £4m.

High-net-worth individuals, institutions and family offices can browse a suite of offer documents and move money via UK Bond Network’s online platform.

Chris says: “By distributing the bonds through an online



CARL READER, CO-FOUNDER, TAXGO

PRODUCT: LOW COST ACCOUNTANCY AND TAX PLANNING

Carl says accountancy services are “great for the largest million businesses in the UK”, for which they can repay their fees several times over in the form of shrewd planning advice. But millions more small businesses just want a cheap online service that gets the basics right.

The business uses automation and machine learning technology to provide the service quickly and “more consistently than any human could”. The plan for the start-up is to eventually provide an ‘always on’ virtual accountant for much less than a human one.

TaxGo is among a large number of services targeting the growing group of one-person businesses, known as ‘solopreneurs’ who must comply with government regulations but have neither the cash nor the resources to do so.

Carl says: “Eventually, our systems will be able to completely automate processes from a set of records through to tax filings and advice. It will become a lot like choosing an online travel agent over a physical shop.”

Carl defines fintechs as any technical innovation in the financial sector, adding: “I wouldn’t be surprised to see some of the most dated financial institutions adopting ‘fintech departments’.”

He believes the changes triggered by fintech have been incremental. “We’ve seen improvements in financial technology over many decades, and I’m sure we’ll continue to do so. The revolutionary part is simply the pace at which the incremental improvements are now happening.”

platform, we have improved the efficiency of the traditional bond-broking process while increasing the transparency of a transaction for all parties.

“We wanted to give individual investors the ability to invest in this type of instrument in a way that is more self-directed and transparent. There was a gap in the marketplace and we had the knowledge and experience to step into it.”

His definition of fintech: “If a company aims to use technology to create value during a financial process for their end-user, it can be deemed a fintech company from the moment it turns the lights on.”

He believes the role fintech has played in shifting the focus of financial services back towards the end customer, and improving the efficiency of their experience in terms of time, cost and ease, has been revolutionary.

PARESH DAVDRA, CEO, XENDPAY

PRODUCT: ‘PAY WHAT YOU WANT’ MONEY TRANSFER

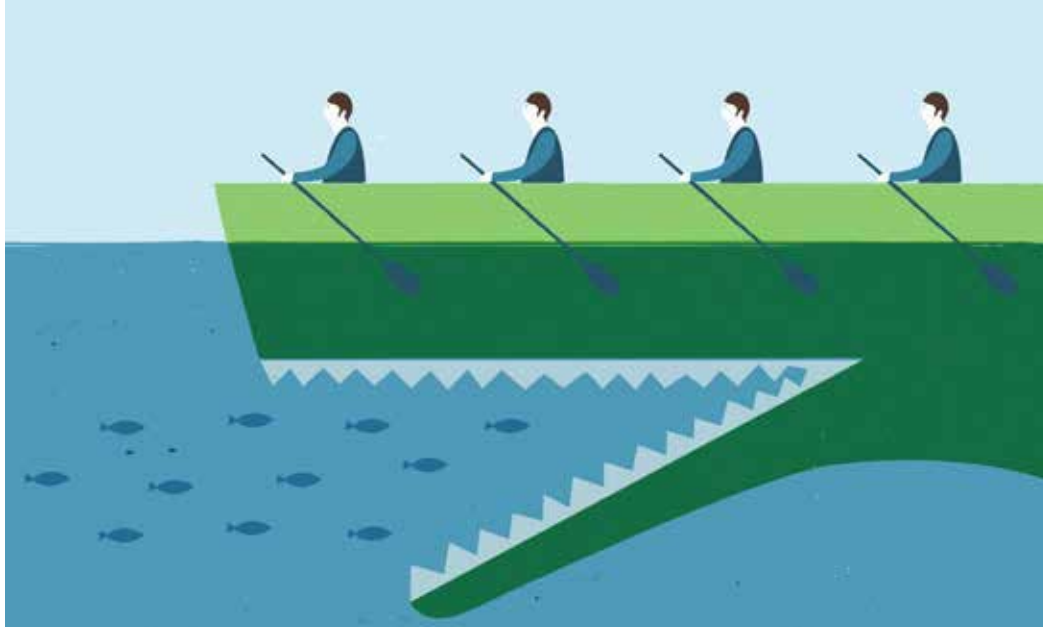
Xendpay, founded in November 2014, aims to streamline money transfers by reducing both red tape and cost for people sending money to each other around the world.

Co-founder and CEO Paresh says commissions and high rates shave around 9% off the value of money transfers every year. His company’s service is aimed at migrant workers looking for cheap means to send their pay home, but also at individuals and companies generally looking to reduce costs.

Charges are capped at £4,000 per year for businesses and £2,000 for private customers, while individual fees are decided by the customers themselves. Uniquely, instead of paying a set fee, customers can choose to ‘tip’ for the service. Xendpay works via intelligent, automated technology and bulk transactions, which bring down costs.

Paresh says that the shift to open banking will be a gamechanger for the sector: “Payment companies built upon APIs [application programming interfaces], combined with blockchain technologies, will drive an integrated banking framework that will speed up payments across the globe.” ●





SURVIVAL OF THE FITTEST

Fintech companies are generating a great deal of investor interest. As the sector undergoes a spate of consolidation and merger activity, who will be the winners and losers?

◆ NEIL JENSEN ◻ IKON/BEA CRESPO

The fintech sector, made up of companies classified as using technology to make financial systems more efficient, has exploded since the 2008 global financial crisis. In 2010, for instance, global investment in fintechs amounted to around \$9bn, but growing appetite for fintech peaked at \$47bn in 2015, according to KPMG's *The pulse of fintech: Q4 2016* report. This fell in 2016 quite dramatically to \$25bn, largely impacted by Brexit, fluctuating exchange rates and the perceived slowdown in China.

Despite the fall, there is little doubt fintechs are generating a great deal of interest among investors and that they are now an integral part of the financial services ecosystem. CB Insights' *Fintech 250* from June 2017 reveals that almost 10% of its list has now reached a \$1bn valuation. Although many fintechs have brilliant ideas and a culture of innovation, very few are currently generating profits.

Indeed, even high-profile names like TransferWise and Funding Circle have struggled to be profitable, with the latter posting a £35.7m loss in 2016, mostly attributable to continued investment in technology, marketing and staffing, according to BI Intelligence's *Fintech profitability report 2017*.

HURDLES TO GROWTH

What is holding them back? BI Intelligence says that, in order to become profitable, some fintechs may have to adapt business models and introduce diversification into their offering and funding. They might also consider becoming third-party suppliers to other companies or expanding on a global basis.

"It's true that many fintechs are providing a solution to a very specific problem," says Daniel Marovitz, former head of product management at Deutsche Bank and the fintech entrepreneur who launched Buzzumi – a video platform that helps contributors monetise their online communities. "While this means that they need scale to make money, it also makes them very attractive to financial institutions such as banks, who need the innovation and entrepreneurial spirit that the fintechs can bring to the table."

Banks have courted fintechs for some time. Multinational Spanish banking group BBVA has adopted a strategy of acquiring promising fintech start-ups and has purchased Mexico's Openpay, a B2B payments platform, US online bank Simple and Finland's Holvi, a digital bank for entrepreneurs. Other banks, such as JPMorgan Chase (MCX),

BNP (Compte Nickel) and Swedbank (Payex), have been acquiring fintechs too.

COLLABORATION MORE LIKELY

That said, not everyone is convinced banks will build a portfolio of fintech capability. Fintech experts like Matteo Rizzi and Udoyan Goyal believe that collaboration is more likely. “I see a lot of partnerships developing over the next few years rather than banks actually buying fintechs,” says Matteo, a co-founder of SWIFT’s innovation arm, Innotribe, and an active voice on the fintech scene for some years. Link-ups have already started, with JPMorgan forming partnerships with companies like Bill.com and On Deck Capital, to name but two. Deutsche Bank has also made a foray into this market, investing in Trust Bills, a Hamburg-based fintech for trade finance.

Udoyan, co-founder of financial services and fintech-focused private equity firm Apis Partners, says banks will only acquire if there is something significant to be gained. “If there’s a competitive advantage, they will buy it, but sometimes they will invest into something that has the potential to become a market standard as part of a wider consortium to ensure they can be a driver of change, and sometimes they will just become commercial partners,” he says. In the world of fintech, significant gains often mean access to transformational technologies such as artificial intelligence, blockchain and biometrics.

With the growing importance of big data, fintechs in that niche are attracting interest too. A group of US banks, including Goldman Sachs, Morgan Stanley, Citi, Wells Fargo and JPMorgan, have invested in data analytic company Kensho via the type of consortium Udoyan refers to. Another example of this approach can be found in Japan, where a group of banks is experimenting with a new fund transfer system based on blockchain technology.

Whether the banks invest in fintech alone or as a group, they are very much aware of the challenge posed by these start-ups, according to a survey of bankers by PwC, published in April 2017. More than 82% of respondents said they are planning to increase investment in fintechs over the next three to five years. At the same time, they said they are concerned that around a quarter of their revenues are at risk from the competition posed by this sector.

OTHER ACQUIRERS

Although banks are increasing their investment in fintech – JPMorgan Chase spent more than \$9.5bn on fintech in 2016 – and have created innovation labs and incubators that allow them to dip their toes into the water on their own terms, they are not the principal drivers of fintech M&A activity (see table, page 34).

Venture Capital (VC) is playing an increasingly influential role, with corporates/banks often teaming up with them rather than going it alone. According to ICON Corporate Finance, about a third of all VC-backed deals include the involvement of corporates/banks. Nicky Cotter, co-founder of ICON, says

corporates add something compelling to the equation: “They not only bring brand and financial strength, but also millions of potential customers to a fintech, and increasingly we are seeing partnerships such as between Funding Circle and Santander, and between insurance giant Aviva and Wealthify, which give the fintechs a platform to become leaders in their market.”

Corporate interest in fintech extends to large technology firms too. Google Ventures, the VC arm of Alphabet, has made multiple investments in fintech projects, one of their initiatives being the much-publicised Android Pay. Technology companies such as Google, Microsoft, IBM, Facebook and Apple could represent a bigger threat to the banks than fintechs, says Nicky. “These companies enjoy huge, loyal customer bases and have platforms through which they can engage customers, test and deliver new banking services.”

Venture capital is playing an increasingly influential role in fintech M&A activity

This is even more relevant given the EU’s forthcoming Payment Services Directive II (PSD2), which will create a more open banking landscape. PSD2 will allow banks’ customers to use third-party providers to manage their finances, and in this process, two new entity classes will be introduced: Account Information Service Providers, which can access banking customers’ account information; and Payment Initiation Service Providers, which can initiate payments on behalf of customers. In short, technology companies can enter this market as the barriers will be lowered. Hence, they might acquire payment-oriented fintech companies.

HERE TO STAY?

The changes in the financial system make fintechs an attraction and also underline that there is genuine substance and sustainability in the sector. While comparisons with the dot-com bubble are inevitable, fintech has grown in the aftermath of the crisis and is a result of the need for disruption in financial services. In addition, the emergence of the sector comes at a time when regulators are pushing for change – a push that is supported by most of the world’s financial hubs, which are doing their best to attract leading fintechs to their cities.

Moreover, investment continues to flow into the sector. Up to the end of July 2017, almost 500 new VC-backed start-ups had come to market, raising some \$8bn, compared with more than 900 raising \$13bn throughout 2016, according to CB Insights’ *Global fintech report Q2 2017*.

This could change if market conditions become more difficult. “We’re still on the positive side of the curve in terms of innovation,” says Daniel, who is also a former chief operating officer of Earthport, a fintech that powers payment transactions for some of the world’s largest financial services companies. “I see the creative momentum continuing for the time being, but if we

see a market correction, and the current cycle tells us that we may not be far from that, some fintechs could struggle to get VC support when their next stage of financing comes around. There's a lot of upside, mainly because of the lack of genuine innovation we have seen in financial services over the years."

And there is a certain degree of natural process about consolidation, acquisition or takeover. Between April and June 2017, fintech M&A activity topped \$5bn, but almost \$4bn was down to Vista Equity Partners' acquisition of DH Corp. Another \$1.2bn was due to the purchase of Vocalink by Mastercard. Interestingly, none of the big acquisitions between April and September 2017 involved a bank. Since the end of June 2017, the \$11.7bn acquisition of WorldPay Group by Vantiv has been announced.

PARALLELS WITH BIOTECH

Is fintech any different from other sectors? Certainly, there are parallels with other sectors that have started small and grown dramatically. Biotech, for example, has remarkable similarities in its behaviour. While so-called big pharma has dominated the sector for decades, biotech companies, like fintechs, are characterised by being small, highly focused set-ups that concentrate on a single product that is promising, problem-solving and – invariably – ground-breaking.

Large pharmaceuticals have played their part in the evolution of the biotech sector, where companies have moved from start-up to scale-up, thanks partly to the acquisitive nature of big pharma, as demonstrated in the August 2017 acquisition of Kite Pharma by Gilead Sciences for \$11.9bn. The purchase propels Kite Pharma into world leader position in the field of cell therapy, which uses a patient's own immune cells to fight cancer. Gilead's "demonstrated ability to scale complicated manufacturing processes to meet patient demand" is cited as one of the benefits of the transaction.

Companies that offer marketable and value-added products will attract investment

There are similarities with fintech in that large companies have acquired biotechs that are developing innovative products. Similarly, these bigger names are also happy to form partnerships in order to bring together a 'best in class' offering, such as the arrangement between AstraZeneca and Circassia, a company that has developed drugs for chronic pulmonary disease. Biotechs are equally enthused by teaming up with large companies in order to introduce their drugs to a global market.

In this market, just under half of all M&A transactions are biotech-biotech and the rest are pharma-biotech deals, according to EY's *Biotechnology report 2017: Beyond borders – staying the course*. One school of thought is that M&A has, to some extent, replaced research and

TOP 10 FINTECH GLOBAL M&A DEALS BY VALUE, 2017 TO DATE

	Target	Acquirer	Sector of acquirer	Acquisition value (\$bn)
1	WorldPay Group	Vantiv	Payment processing provider	11.7
2	Net A/S	Consortium	Private equity/ sovereign wealth fund	6.4
3	Beijing Jingdong	Undisclosed	-	4.9
4	Black Knight Inc	Existing shareholders	Fintech	4.9
5	PaySafe Group	Blackstone	Private equity	4.0
6	DH Corp	Vista	Private equity and venture capital	3.4
7	Bureau van Dijk	Moody's	Ratings agency	3.3
8	Bambora	Ingenico	Payment processing technology provider	1.7
9	Bankrate Inc	Red Ventures	Digital consumer choice platform	1.4
10	BluePay Process	First Data Corp	Payment technology solutions	0.8

Source: Dealogic

development (R&D) in some quarters, mainly because R&D costs have been high and return on investment has been lacklustre. Biotech mergers have, to some extent, enabled companies to fill product pipelines faster than R&D allows. Hence, investors are especially interested in biotech companies that can have an immediate or near-term revenue impact. It's a similar story in fintech, where the companies that offer the most marketable and value-added products will attract investment. The big difference is that fintech is styled as a disruption to the established way of doing business.

Consolidation comes to all markets and, like biotech, fintech will surely go through the same cycle, through mergers within and acquisitions from outside the sector. There will be something of a shake-out and not all companies will survive, but those that are able to diversify their product offering, and achieve critical mass and profitability – which may become a growing pressure – will take their place in the new business paradigm, either on their own, or with the help of larger, more resourced organisations. ●

With its proposals for clear and comparable all-in fee disclosures, the long wait for the FCA's spotlight to penetrate the opaque world of asset managers' fees may be coming to an end. The proposals hold clues to the direction of travel for financial planners too

◆ RICHARD WILLISHER ◆ IKON/MARK AIRS

In search of clarity and comparability

The asset management sector is the second largest sector in the world, managing £6.9tn of assets, including over £1tn of UK retail investment and £3tn of UK pension funds and other institutional investments, according to FCA figures.

In June 2017, the UK regulator published its *Asset management market study – final report (MS15/2.3)* and *Consultation on implementing asset management market study remedies and changes to Handbook (CP17/18)*. Its aims were to “ensure that the market works well and the investment products consumers use offer value for money”. It found “weak price competition in a number of areas” of the asset management sector. There was a disconnection between the charges levied and the gross performance of actively managed funds. Also, it has concerns about how asset managers communicate with their clients and how useful their communications are to investors.

Although part of a much wider investigation, the clarity of the fees charged by asset managers has been a particular area of concern for many ◆◆



years. In plain language, an investor, whether retail or institutional, cannot easily see the real cost of investing in a fund, largely because of lack of transparency around issues such as the cost of the turnover of fund holdings and fund manager costs when a fund outperforms against relevant benchmarks.

AN ALL-IN FEE

The opacity of fees damages investor confidence and stokes the fire of negative press coverage. So in MS15/2.3 the FCA proposes an all-in fee, which will take one of four possible forms in order to establish the right and transparent price for funds:

- ▶ The current ongoing charges figure (OCF) becomes the actual charge that is taken from the fund.
- ▶ The current OCF becomes the actual charge, with the managers providing an estimate of any implicit and explicit transaction costs.
- ▶ There is a single charge which includes all charges taken from the fund, including both implicit and explicit transaction costs, but with an option for ‘overspend’.
- ▶ There is a single charge which includes all charges taken from the fund, with no option for overspend.

The all-in fee concept is not new, but rather an affirmation of similar proposals set out in two key pieces of forthcoming European Union legislation: the Markets in Financial Instruments Directive II (MiFID II) and the Packaged Retail and Insurance-based Investment Products (PRIIPs) Regulation, both of which are due to come into force in January 2018.

The asset management sector is the second largest in the world, managing £6.9tn of assets

MiFID II requires that all costs and charges related to the services covered by the directive are to be fully disclosed. It says:

The information about all costs and charges, including costs and charges in connection with the investment service and the financial instrument, which are not caused by the occurrence of underlying market risk, shall be aggregated to allow the client to understand the overall cost as well as the cumulative effect on return of the investment, and where the client so requests, an itemised breakdown shall be provided. Where applicable, such information shall be provided to the client on a regular basis, at least annually, during the life of the investment.

PRIIPs also requires an upfront fee disclosure, but in essence the fee disclosure will appear in the key investor information document (KIID) made available to retail customers in advance of sale.

Andrew Bulley, a partner, and Sherine El-Sayed, a manager, in Deloitte’s Risk Advisory practice, have been following the FCA’s work on this issue closely.

They say the regulator is testing ways in which the effectiveness of MiFID II and PRIIPs disclosures could be enhanced through possible alternative or supplementary presentation of charges information. The aim is to encourage investors to focus on the impact charges have on their investments and so enable effective price comparison and competition across products and providers. The FCA’s proposals will look to supplement the changes brought in by the European regulation by asking fund providers to offer greater transparency and true comparability of costs for investors. One example of clearer comparability the FCA has mooted may include the wider use of pounds and pence disclosures as well as percentage charges.

The clarity of fees charged by asset managers has been an area of concern for many years

Bearing in mind that the FCA is looking at ways to implement EU directives, any proposals that get passed may take the form of official guidance, says Andrew.

ASSET MANAGERS RESPOND

Investment professionals are underwhelmed by the FCA’s proposal. Daniel Godfrey, co-founder of The People’s Trust and former CEO of The Investment Association, welcomes the idea of an all-in fee but says that is not what the FCA is proposing. “To my mind, you should say to the consumer: ‘This is the fee and we will pay for all the ongoing running costs.’ What the FCA is saying is ‘just carry on as you are and we will add it up into one number.’”

The issue here is that the FCA measures still allow asset managers to rack up transaction costs that they later charge to investors. An investor will not know for sure, in advance, what he or she has to pay.

David Norman, joint founder and CEO of fund manager TCF Investment, says the FCA’s proposals have been a long time coming and that it should drive change through the entire supply chain, from financial advisers – which it has done by means of the Retail Distribution Review – platforms and fund managers.

“[Investing in a fund] is a really big decision. So why isn’t the customer given the same level of transparency as when he or she makes a much smaller purchase, like buying a fridge or a car? This has been on the FCA’s radar for some time. I don’t understand why it hasn’t been dealt with,” David says.

“The customer needs to know in pounds sterling how much it will cost per £1,000 of investment. If a higher price were to be charged up front for a particular level of service, that would be fine. At least the client would know what the all-in charge is and they could vote with their feet if the result is disappointing.”

Mike Webb, CEO at Rathbone Unit Trust Management, agrees that the transparency and the uniformity of the calculation of costs that the FCA is proposing is a good

thing for the long-term confidence in the sector. This should foster competition, which should result in lower costs. But he raises concerns about the idea of stating a budget in advance for transaction costs, arguing that it would create some very dangerous conflicts of interest. “Managers of a firm might try to persuade fund managers to reduce transactions,” he says.

PLANNERS’ PERSPECTIVE

Financial planners welcome the greater visibility on costs that the FCA’s proposals will give to their clients. It will help, in particular, with keeping investment costs down.

Lee Glennan CFP™ Chartered MCSI, of Glennan Wealth Management, says this is one of the key drivers of his firm’s investment philosophy. “We only use low cost institutional investment funds and we set out to clients clearly the three elements of their overall costs: the total expense ratios of the funds; the platform costs; and our fees,” he says. “We summarise and quantify this in writing each time we advise.”

Different planners take different approaches, however. Andy Jervis CFP™ Chartered MCSI, of Chesterton House Group, explains that the financial planner’s fee for the services his firm delivers is set and agreed in advance and fund managers’ fees are in addition to that. The size of those fund management fees depends on which funds are selected. “We provide the data, but we don’t sit down and discuss why we’ve chosen this or that fund for a client on the grounds of cost,” Andy says. “I do think, though, that knowing a single fee upfront would be a great help to those people who buy funds directly, and they are increasing in number.”

David believes an all-in fee disclosure will enable planners, advisers and wealth managers to offer their clients a better service. “They are typically engaged with a much wider view of a client’s affairs than just

the investment funds that they recommend. Consequently, clients can see the charges involved with the funds and their advisers can add on their own charges, for example for annual reviews, to provide their clients with a clear and transparent cost.”

DIRECTION OF TRAVEL

While the FCA’s proposals are primarily an asset management initiative, Andrew says financial planners should take note. “The FCA is saying if they come up with a set of proposals that are accepted through the consultation process, the conclusion would be that financial planners should take that on board as well. The direction of travel is clearly towards increased transparency and comparability of charges, and the FCA would no doubt expect financial planners to take on board this objective in the presentation of their own charges.”

Uniformity of the calculation of costs is a good thing for the long-term confidence in the sector

The proposals may go through some iterations during the course of the consultation process, making it difficult to outline at this point how planners should prepare for the changes. For now, there is no immediate action to be taken, says Andrew, but it is important that financial planners respond to the FCA’s consultation when it is finally published. It is expected by the end of the year.

If investors are to have greater confidence in those they depend upon for their financial wellbeing – advisers, wealth managers, financial planners and investment managers – a single, comparable, upfront, all-in figure in terms that customers can easily understand is highly desirable. As it stands, despite the lengthy consultations, position papers and reports, this still seems to be a distant prospect. ●

THE FCA’S PROPOSALS ON ALL-IN FEE DISCLOSURES

What is the FCA proposing?

The FCA’s *Asset management market study – final report* and *Consultation on implementing asset management market study remedies and changes to Handbook* aims to “ensure that the market works well and the investment products consumers use offer value for money”. In particular, it calls for new guidance to ensure that all-in fees for investing in funds are disclosed (as required from January 2018 by MiFID II and PRIIPs) in a way that investors can easily understand, is not misleading and is comparable.

Why were the proposals issued?

The FCA is concerned that all-in fee disclosure information might be presented in a way that is not entirely clear to investors, preventing them from being able to truly compare fund charges.

This stems from a broader concern that investor awareness about, and focus on, charges is often poor or non-existent.

An FCA analysis of the behaviour of visitors to fund supermarket websites reveals that fewer than 9% of visitors

look at charges, under 3% look at documents related to charges, and just 0.1% sort funds by charges.

Who do they affect?

The proposals primarily affect asset managers, but, says Deloitte’s Andrew Bulley, the FCA will no doubt expect advisers and financial planners to “work with the grain of these proposals”.

What happens next?

An FCA consultation paper on its proposals is expected by the end of the year and will be open to financial planners for responses.

Hype versus reality

There is much excitement about fintech start-ups as disintermediators, but the area where they are likely to have the biggest impact is automation

◆ ANDREW DAVIS □ JOHANNA WARD



Fintech is a slippery term. Although on the surface it's a simple neologism born of the collision between finance and technology, scratch that surface and the meanings you uncover become more complex. As a result, it can signify a variety of things depending on who's speaking. In my experience, people who talk about fintech tend to mix two big concepts together that need to be understood and distinguished in order to see what's going on. These are 'disintermediation' and 'automation' – financial technology is central to both, but its effects are different depending on which you really mean.

The vast majority of the publicity generated by fintech has focused on its role as a disintermediator of traditional financial institutions. Market entrants that use digital technology to recreate financial services in faster, slicker and more user-friendly forms were initially hailed as a mortal threat to the technologically backward incumbents that dominate the market today.

Fintech start-ups are more likely to become collaborators

The threat has been exaggerated. The World Economic Forum recently concluded that fintech start-ups were more likely to become collaborators and suppliers to established financial institutions than to displace them. But in a few cases, at least, sustainable, independent

fintech players that offer a genuine alternative to traditional providers have emerged.

Even though many of these entrants have not achieved sustainable profitability, they have undoubtedly had a huge effect on customer expectations across personal and small business finance, expectations that are also being shaped increasingly by developments in other sectors such as ecommerce and social media.

CONSUMER VIEWS

By creating digital propositions that are faster, more flexible and less bureaucratic than traditional providers, they have significantly shifted people's views of how financial services should be delivered. This has not been lost on the big incumbents, almost all of whom are now releasing digital services that incorporate features pioneered by innovative start-ups. Among the latest examples is HSBC, which recently announced a service partly based on the personal financial management app Pariti. HSBC Beta allows users to bring together in one place information from current accounts, loans, mortgages and savings accounts with other banks, giving a much richer and more informative overview of their finances. Similar moves are also under way in areas such as robo-advice for smaller investment portfolios.

There is no doubt that consumers' appetite for digital delivery of financial services is growing. But even the most popular of the fintech entrants has

so far made only limited inroads into the UK's enormous financial services market – witness the struggle that online investment platform Nutmeg has had to scale up. Building mass market financial services brands from scratch is prodigiously expensive and continually comes up against the massed forces of inertia, caution and lack of financial knowledge among consumers and small business customers.

Consequently, for all the hopes of increased competition through disintermediation by fintechs, genuine examples of this are scarce. I suspect that automation resulting from innovations in the way technology is applied to financial services is going to have a much bigger and more noticeable impact over the coming few years than disintermediation of established financial institutions by tech-based entrants.

In part, this is because technology-based innovations that take the time and effort out of dealing with our existing financial providers will affect many more people than fintech entrants that will mainly appeal to early adopters and leave the mass market largely untouched.

REGULATION

But it is also because regulation will, in any case, force the pace of change in areas that fintech entrants have traditionally seen as part of their competitive advantage – especially things like price transparency (think, for example, of the FCA's moves on fund charges, or the Competition & Markets Authority's push to

make overdraft fees simpler and more transparent). The effect is to erode the distinctiveness of the entrants' propositions and improve service quality in the conventional sector.

Regulation will, in any case, force the pace of change

As a result, the biggest medium-term impact from fintech innovations will probably come from its ability to simplify and streamline mundane activities, such as assembling financial information from multiple sources (the big idea behind the Pensions Dashboard), verifying identity, monitoring compliance and improving anti-fraud systems. The potential to automate most, if not all, of the process of gathering the information necessary to process and price a mortgage application – saving hours of the customer's time – represents a genuine and valuable benefit to the entire market.

Ultimately, people may well be happy to let a machine decide their investments for them, but in the foreseeable future many more are likely to benefit from automating the laborious process of carrying out a fact find for financial advice, an efficiency gain that could make advice cheaper to deliver. It is hardly the glamorous end of fintech, but what most people really want is to spend as little time as possible dealing with their finances. Fintech automation is a compelling way to give them what they want. ●

Life's a ride for motorcyclist Colin Chalkly-Maber, Chartered MCSI, who has ridden vast distances from Russia to Route 66

◆ JANE PLAYDON

Turn right in 267 miles

When Colin Chalkly-Maber, Chartered MCSI, found himself on his back in India, looking up at the wheels of a bus after being thrown off his bike by a marauding donkey pursued by mangy dogs, he may have decided to quit motorcycling. But 63-year-old Colin, managing partner at Farley & Thomson, has been riding since the age of 12 and he's not ready to hang up his helmet any time soon.

Colin learnt to ride on his uncle's farm. "In those days one could ride a bike of any size with L-plates as long as one did not carry a pillion. The test involved turning up at the centre and riding a predetermined route until told to stop."

He took motorcycling up seriously later as a "matter of simple economics" when he was studying at King's College in Old Aberdeen, Scotland. Travelling to university in the 1970s from Poole, Dorset, where he has lived most of his life, Colin could take his motorcycle "in the guard's van of the train for half of a student fare, a quarter of a full fare. That compared well with running a car and was convenient".

Motorcycling allows Colin "to travel great distances effortlessly" on his 1,100cc Honda Pan European tourer, and he often rides from Poole to Cornwall or Snowdonia, or over the Severn Bridge and up the Wye Valley, which is a particular favourite. "Three hundred miles in a day is not remarkable," he says.

"Anyone who doesn't take protection seriously has never seen skin that has hit tarmac"

But 300 miles is nothing compared to his experience travelling through Russia with his wife Merolyn, who rides her own motorcycle. "We were at first dismayed to find that the satellite navigation system had no map, distances were vast and on one occasion, the machine said: 'Turn right in 267 miles.' Sure enough, that was the next turning off the roadway," he says.

MEMORABLE MOMENTS

Apart from being knocked off his bike by a donkey in India, Colin recalls getting lost in Russia and roads blocked by elephants in Botswana as noteworthy experiences, but the most memorable happened in South Asia. "We were crossing the Friendship Bridge between Nepal and Tibet, a task that took most of an afternoon, bringing us out on the Friendship Highway that we rode all the way to Lhasa.



Colin and Merolyn en route from Nepal to Tibet

Deviating from the main road, we travelled to Everest Base Camp and there was one heart-stopping moment when, coming around a bend, the Everest Valley, bare and rugged, opened before us and there at its end was Mount Everest rising to 26,000 feet in front of us."

Of course, any lifelong biker has to do what's left of Route 66 in the US. Colin and Merolyn have recently returned from this trip, which Colin did on a Harley Davidson. "Had it not been for its iconic status and the thought of explaining to people how I crossed America on something else, I would not have done so. The bike I rode was an 'Electra Glide Ultra' 1,690cc divided between two cylinders. It weighed 900lbs, nearly 50% heavier than my four-cylinder Honda; it supposedly has a top-speed of 100mph but I cannot imagine how long it would take to wind it up to that speed or what sort of hill one would need to descend to do it. The bike vibrated like a pneumatic drill and made it impossible to adjust the satellite navigation system without turning the engine off first. If we return to the US, as we may do, I will be hiring an Indian motorcycle as Merolyn did!"

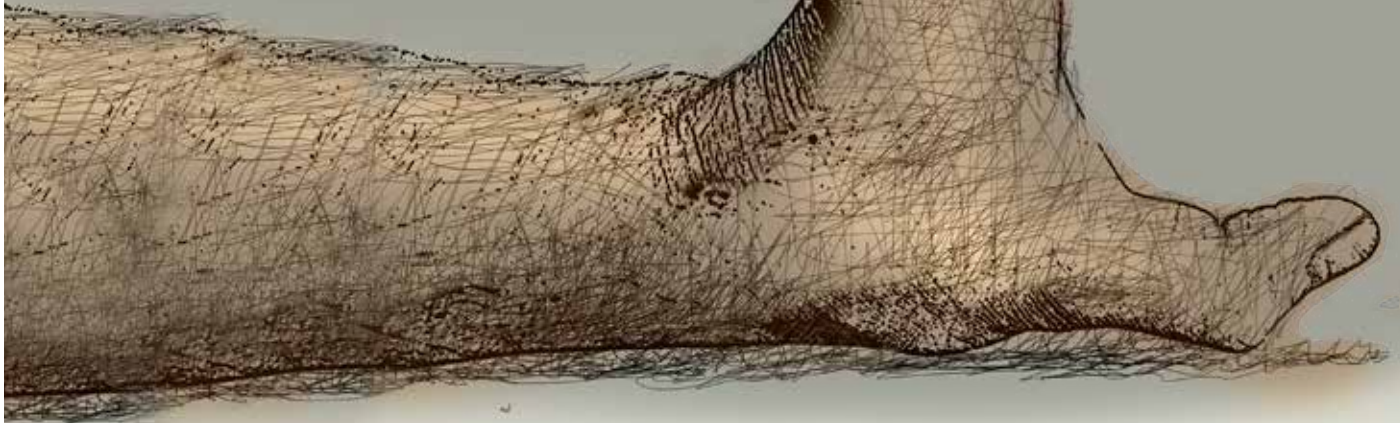
SAFETY FIRST

Safety is paramount when motorcycling, and Colin takes no chances. "We always ride in full Kevlar suits, with armour built in. We use purpose-designed boots to protect our feet and ankles and gloves with reinforced knuckles. It is true that it can feel hot and restrictive, but anyone who does not take protection seriously has never seen skin that has hit tarmac."

For anyone wanting to take up motorcycling, Colin says: "Undergo a proper course of training. Riding a motorcycle is not the same as driving a car. As well as requiring different motor skills, a rider must be extra vigilant and see the road slightly differently. Awareness of other road users and their possible foibles is important. Never skimp on protection. Hitting the road, even at slow speed, has very different consequences if you are not in the right gear." ●

➤ Contact jane.playdon@cisi.org if you have a hobby you think will interest other CISI members. You will receive a £25 voucher if we publish your story.

MANAGING FAMILY CONFLICT ARISING FROM A WINDFALL



Kevin Garfagnini CFP™ Chartered MCSI helps his clients ensure that their unexpected financial windfall can be shared as they want around the family, avoiding unnecessary inheritance tax through the use of trusts and tax efficient investing

◆ KEVIN GARFAGNINI ◆ IKON/GARY WATERS

THE BRIEF

Married couple Simon and Jean are retired and in their early 70s. They had always had a relatively modest lifestyle and had been living in rented property and managing on their state pensions, until they received an unexpected windfall of £3.8m. Naturally, this completely transformed their lives, and they needed guidance on what to do with their new-found wealth.

Simon and Jean had some ideas regarding where they could spend some of the money, including buying the property in which they currently live. However, as the windfall was considerably more than they needed personally, they were also keen to discuss how the remainder might be best put to use for the wider family.

They were especially concerned with the implications surrounding gifting the funds. They wanted to be smart with their fortune in order to achieve and maintain their desired lifestyle, while putting in place plans to help their extended family.

They were referred to Mazars Financial Planning by the Mazars Private Client Tax team for financial advice.

When Simon and Jean first came to see us for advice on managing their windfall, they brought with them their daughter and a cousin. It soon became apparent that they had a large extended family.

We worked with them in helping to decide how much they wanted to keep aside for gifting. However, when they were deciding how this should be distributed, it soon became clear that some family members were very keen to get involved in the gifting aspects of the planning and some conflicts of interest were developing.

KEEPING THE PEACE

As it was Simon and Jean who were our clients, we arranged to meet with them on their own and agreed with them that, while it was good to involve certain family members in the decision-making process, it was also important to avoid the conflicts which were starting to arise. We agreed that going forward, their daughter should be the only family member involved in the process as she was closest to her parents and had influence over the other family members. By the time of our next meeting, the family gifting issues had been resolved.

We also discussed other issues with Simon and Jean, which included the importance of providing cover for future financial liabilities, such as care home fees and the significant inheritance tax (IHT) liability that would result upon their death. They had not realised that the gifts they would be making to their family may become chargeable to IHT if they died within seven years of making the gifts. They did not want their family to be liable for any potential IHT charge.

We worked with them to identify suitable IHT mitigation options, which included insuring against the



liability, making gifts directly and through trusts and investing into exempted assets. Simon and Jean confirmed that for personal reasons they did not wish to consider life cover as part of their IHT planning.

SETTING UP FOR LIFE

We carried out a cashflow modelling exercise to ascertain the level of funds which should be retained in cash, to allow them to maintain their standard of living throughout their life, allowing for the extras that such a windfall could provide, and to also ensure that there are plenty of funds available for care home costs should that be required.

Acting in conjunction with the Mazars Tax and Trust department, we then recommended that Simon and Jean establish two appropriate trusts. By each gifting £325,000 into a trust, there was no immediate tax charge as this fell within each of their IHT nil rate bands.

Family members were very keen to get involved in the gifting aspects of the planning

Having established their appetite for investment risk, we recommended that the trust funds be invested in a professionally managed investment portfolio, structured in line with their agreed attitude to investment risk, with the objective of providing growth over the longer term, while allowing capital distributions and/or income in future should it be required.

Although Simon and Jean's appetite for risk was not high, their large windfall meant that they had a high capacity for loss. Ensuring that they held sufficient assets readily available in cash to meet their short and medium-term requirements meant that we had scope to

KEVIN GARFAGNINI BIOGRAPHY

Kevin is a CERTIFIED FINANCIAL PLANNER™ and one of the directors of the multi-award winning firm Mazars Financial Planning, where he has worked for over 20 years.

Many of Kevin's clients have been with him since the start of his time with the firm, and he believes that it is by developing deep long-term relationships with your clients that you will provide them with the highest quality of financial planning, which truly caters to their long-term needs.

recommend that a smaller proportion of their surplus assets be invested in high-risk IHT efficient schemes, to meet their IHT mitigation objectives. The assets held would benefit from business relief, which is exempted from IHT after an initial two-year qualifying period. These investments would allow them to retain ownership and control of the invested funds.

We recommended four different IHT investment schemes to add diversity to their investment portfolio and to reduce the impact of any one manager underperforming. One of the schemes was an Inheritance Tax ISA, which meant that Simon and Jean utilised their annual ISA allowances.

They had never previously needed financial advice and the entire process was new and daunting to them. They said they really valued the time we had taken to meet with them and their daughter.

On our advice they also ensured that their wills were updated and appointed a lasting power of attorney. ●

WHAT HAPPENED NEXT

We met with Simon and Jean six months after our strategy was implemented. Further regular meetings have been arranged to ensure that they receive the guidance they require.

Simon and Jean were able to buy the house where they had spent the majority of their lives, using a portion of the money that they had received.

The gifts into trust mean that their extended family will also be able to benefit from the investment while leaving them with control over who should benefit and when.

Careful planning has helped to implement a tax mitigation strategy in order to reduce the IHT liability which they will eventually face.

LEAVE THE OTHER STUFF TO US

Robert Lockie CFP™ Chartered FCSI, investment manager and branch principal at Bloomsbury Wealth, explains how the comprehensive wealth management service the firm offers allows for a disciplined rebalancing strategy without needing clients' permission every time

When did you become an accredited firm? What has happened since that time?

We identified it as worthwhile when it was introduced by the Institute of Financial Planning (IFP) in 2011, so we were in the first wave. We've not made any massive changes since then but it's been a continual process of evolving so that we can serve our clients better. We have recently joined an international grouping of planners with a view to sharing best practice and to make it easier to refer clients moving overseas to another firm which shares the same philosophy, which is proving worthwhile.

What has accredited firm status brought to your firm and why should others seek to become accredited?

It provides a degree of recognition that we have a coherent and consistent process that applies to all clients irrespective of the individual with whom they initially engage. In a world awash with confusing individual qualifications and post-nominals which people outside the world of finance don't understand at all, it demonstrates that a third party has

independently assessed the firm's processes and that it does actually do financial planning across the business. Without that, we could just be a group of highly qualified individuals with the only thing in common being that we happen to work in the same office. However, firms do need to market their accredited status effectively, because it's unrealistic to expect the CISI to be able to do so with each firm having different market niches and characteristics. It is a way of differentiating from the mass of other businesses claiming to do planning, and it provides credibility when talking to other accredited firms.

What other accolades and awards has the firm picked up in recent times?

We have won a couple of the *New Model Adviser* regional awards for Greater London but our ability to enter most of the worthwhile awards has been somewhat constrained in recent years by the fact that most of those are judged by my wife which, not unreasonably, tends to bar us. However, in previous years several of the team won categories (and once the overall award) in the *Money Management* Financial Planner of the Year awards and others.

What sort of business is it and what services does it offer? What's your USP?

At its heart it is a financial planning firm which expanded its proposition in the middle of the past decade to incorporate investment management to become more of a comprehensive wealth management business. We operate as a branch of Raymond James, which provides our regulatory permissions and investment back office function, and thus we are one of the few planning firms with discretionary permissions. While we don't use this to be able to react rapidly to market movements (our philosophy is that all the known and anticipated information is in the current price so trying to second guess the market is pointless), it does allow us to follow a disciplined rebalancing strategy without having to obtain a client's authorisation each time. We tend to work best with people who want to get on with the things they enjoy and to leave the other 'stuff' to us; even though some



Robert Lockie CFP™ Chartered FCSI

Robert has worked in financial services since 1987 but discovered financial planning in 1993 and qualified as a CERTIFIED FINANCIAL PLANNER™ professional in 1997, which coincidentally is when Bloomsbury was founded. He has worked there since 2001 and now owns the firm jointly with Carolyn Gowen CFP™ Chartered FCSI, where he is responsible for portfolio model construction and maintenance and ongoing enhancements to the firm's financial planning process. Having previously served on the IFP's Education Committee and as a trainer and assessor for the CFP certification, he has recently joined the Financial Planning Editorial Panel for *The Review* magazine and is an occasional speaker at CISI events.

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The Bloomsbury Wealth team, clockwise from far left: Robert Lockie CFP™ Chartered FCSI, investment manager and branch principal; Carolyn Gowen CFP™ Chartered FCSI, investment manager and branch principal; Charles Wood FPPS CFP™ Chartered MCSI, wealth planning manager; Camilla Lees, business manager; Elaine McErlean, marketing and communications manager; Luisa Rua Estrada, wealth planning assistant; Tania Puente Rivera, wealth planning assistant; Martin Cannon, wealth planning executive; Emma Stalkartt, wealth planning executive; Myrren Wildman, financial controller

used to do their own financial planning, they recognised that it wasn't what they enjoyed and that they were unable to be their own 'critical friend' and challenge their thinking.

How did you get into financial planning?

I was sort of doing it (in a modest way) by accident and then one day I read an article about the late Tony Shepherd, who was then IFP Chairman, setting out a bold vision for the Institute which caused half of the members to leave and which he then described as "the best thing that ever happened to it" because they were the ones who weren't serious about planning. That sounded like the sort of commitment that was worth learning more about and I started attending meetings and getting as involved as I could for someone who knew absolutely nothing. I met and had the opportunity to learn from some of the pioneers of the profession in the UK and found that there was a great willingness to share with those who had 'seen the light' more recently.

Accreditation provides recognition that we have a coherent and consistent process

What's the best thing about being at a financial planning firm?

Making a real difference to people's lives and helping them to see that they can achieve what they want and how they might be able to overcome difficulties. We've had several instances where clients were worried about having no earnings and we showed them that they could meet their goals even if they never did paid work again.

Name one new thing you like at the CISI

In the past year or so it has started to demonstrate a willingness to support the profession of financial

planning and recognised at a senior level that it provides a sound foundation for providing advice to the public. It seems obvious to us that starting with a client's goals and a good understanding of their circumstances and then working with them to achieve those goals is something that people will value highly and pay for. But that message still has further to penetrate in some quarters and the CISI is well placed to help with that.

What was your involvement in Financial Planning Week this year?

We provided many free individual consultations with members of the public, most of whom would not have been on our radar normally as we could not serve them on an economic basis. They reported that it was helpful to them.

What does a typical day look like?

There isn't really a typical day but I usually start with reviewing any written client work that needs to go out. The rest of the day could include approving portfolio trades, a conference call with the team, working on tools to make our workflows more efficient, fixing issues with some of our tools or even meeting a client, although that isn't my primary role.

What are your key tips for other planners?

- ▶ It doesn't matter how long you've been doing it, there is always useful new stuff to learn, even if it's not what you expected initially.
- ▶ Don't limit yourself to the UK – there are loads of excellent planners around the world and they are generally willing to share best practice (and they aren't your competitors).
- ▶ Focus on what clients are really telling you and don't rush towards a solution until you have established that you are solving their most important problem. ●

TRUST IN CONFLICT

Philip must balance his role as a trustee and a financial adviser to the trustees, with the responsibility to act in the best interests of his long-standing client. How should Philip proceed?



Eva Bee/Getty

Philip has been a financial planner and adviser to the Evergreen family for several decades, having begun the relationship when advising the late Brian Evergreen on making provision for his wife and four children following his retirement from the armed forces. Brian had unfortunately died from cancer in his early seventies.

The disposition of Brian's assets included putting them in trust for his wife Eileen, who was anticipated to remain during her lifetime in the family home, funded by income from Brian's other financial assets and her pensions. Following Eileen's death, all the remaining assets will pass equally to their four children. Philip is both a trustee and acts as financial adviser to the trustees, for which service he makes an annual charge to the trust of £1,000.

Eileen is now 80 years old and, although physically quite robust, she is suffering increasingly from dementia. This is compounded by the fact that she recently fell at home and broke a hip, which necessitated a stay in hospital. Although Eileen's hip was successfully repaired, she was not able to walk

again immediately, and the hospital sought the Evergreen family's involvement in her rehabilitation.

Discussions about how to care for their mother focused the attention of her children both on how best to care for her and also on how to pay for the type of care that was felt most appropriate. As a trustee, Philip was involved in these discussions, which proved quite troubling for him in many ways.

Eileen is now 80 years old and, although physically robust, is suffering from dementia

When Brian Evergreen set up the trust, the invested assets had seemed adequate to provide sufficient income for Eileen to enjoy a relatively comfortable lifestyle, although the assets had been diminished somewhat by some essential but expensive work that had to be undertaken on Eileen's home. Use of the capital of the trust for this sort of purpose is permitted by the trust deed, but there are restrictions on its unfettered use.

The children had anticipated that on Eileen's death they would each inherit a reasonable sum of money, and two of them had entered into the expensive commitment of private education for their children, the provision for which appears to weigh on their minds as much as the need to protect their mother.

Philip is concerned by the apparently conflicting pressures on the trustees

At a meeting to discuss Eileen's future, the family suggested various options without much apparent thought for what they might cost, including an option to move Eileen to a highly regarded residential care home which also caters for residents with dementia. The current fees for this are £40,000 per year to care for Eileen in her present state, but the cost will almost certainly increase as her condition deteriorates. Alternatively, they might adapt her home and employ full-time care for their mother, while accepting that in either case they are likely to encounter resistance from Eileen. This course of action might involve depletion of both capital and income.

Philip felt that he should inject a note of caution into the discussion so that the trustees focused not just on Eileen's welfare, but also on the financial ramifications of the various courses of action. He pointed out the danger that the trust assets might not generate sufficient income to cover all the costs of looking after Eileen and that the longer she lives, particularly if assets are liquidated, the more rapid this liquidation will become.

Philip is concerned about the apparently conflicting pressures on the trustees in the matter of Eileen's care, conscious that while he is involved as a trustee, his is a minority view, and can be outvoted by family members.

HOW SHOULD PHILIP PROCEED?

- A) This is now a family matter. He has drawn their attention to the situation and it is now up to them to decide on a course of action.
- B) Regardless of the actual legal relationship between Philip and the trustees (Eileen's children), he has a moral responsibility to protect Eileen's interests.
- C) His duty of care to the trustees means he should consider the position of the remaindermen as well as Eileen, the life tenant, even though the remaindermen are also trustees.
- D) He should step down as a trustee. ●

WHAT WOULD YOU ADVISE?

Visit cisi.org/trustinconflict and let us know your favoured option. The results of the survey and the opinion of CISI will be published in the Q1 2018 print edition of *The Review*.

WARN OR WEED OUT: THE VERDICT

This popular dilemma, published in the Q3 2017 print edition of *The Review*, raises points about an employer's response to information obtained from social media, the monitoring of social media itself and enforcement of a firm's terms of employment. There were many well-considered comments, for which we thank you. A selection of these will be published online at cisi.org/warnverdict. Options offered and results are as follows:

- A.** Although contrary to Brandon's terms of employment, the 'offence' did not take place on company property and was not in itself illegal. It will not bring the firm into disrepute and a warning as to Brandon's future behaviour is sufficient. (50 responses)
- B.** Since Brandon is in breach of his terms of employment, he must be subject to the firm's formal disciplinary process. (40 responses)
- C.** Brandon was on holiday at the time and his firm should just ignore the social media posting. (16 responses)
- D.** The firm must ensure that whatever action is pursued must apply equally to both Brandon and Greg. (19 responses)

What is likely to be a key determinant by any employer in such a case is whether an employee's actions are in breach of their terms of employment. If not, on what basis can the firm respond? In this instance, a majority of respondents (90/125) said that action should be taken, from which a slight majority (50/125) said that as this is not a major offence, a warning would be sufficient. We believe that such an approach is the most appropriate.

A further 16 respondents said that as the potential offence took place while Brandon was on holiday, the whole matter should be ignored, and 19 respondents did not commit themselves to any specific action, beyond saying that Brandon and Greg should be treated equally.

Interestingly, no one suggested that Brandon's wife Izzy, who is also an employee, might be dragged into this, as she was also present when the potential offence took place. Did she have a responsibility to try to prevent it?

It is something of a moot point as to whether Brandon's actions might be deemed to breach Principle 8 of the CISI Code of Conduct.

NB: A recent (Sep 2017) ECHR ruling against firms 'spying' on employees' messages might also be considered when deciding on an appropriate response.



NEW UK CORPORATE TAX EVASION OFFENCE COMES INTO FORCE

The FCA has made it clear that financial crime systems and controls is a priority area of focus, stating this explicitly in its recent mission statement: “Our next focus is financial crime”

ALAN WARD

On 30 September 2017, Part III of the Criminal Finances Act 2017 entered into force, making companies and partnerships criminally liable for any failure to prevent the criminal facilitation of tax evasion.

The new offence operates similarly to the corporate offence of failing to prevent bribery, which was introduced by section 7 of the Bribery Act 2010. Companies and partnerships will be strictly liable for any act by an employee or agent which facilitates the criminal evasion of tax. However, the company/partnership will not commit an offence if it can show that, at the time that its employee/agent facilitated criminal tax evasion, it had in place “reasonable procedures” designed to prevent this.

This short article sets out how the new offence will work in practice, and provides some practical tips on the creation of reasonable prevention procedures, which companies/partnerships must now design and introduce, in order to avoid criminal liability under the new corporate offence.

THE NEW OFFENCE - LAW IN PRACTICE

A company/partnership will commit the new offence if each of the following occurs: in stage one, a taxpayer commits a criminal offence of tax evasion under existing law. At stage two, the criminal tax evasion was criminally facilitated by an associated person of the company/partnership. Then in stage three, the company/partnership failed to prevent the associated person committing the act of criminal facilitation.

The **taxpayer** in stage one can be either an individual or a corporate entity. The taxpayer must have committed a criminal offence of tax evasion. Non-compliance will not suffice. The criminal offence may be the common law offence of cheating the public revenue, or any statutory offence of **tax evasion**, such as being knowingly concerned

in the fraudulent evasion of income tax contrary to section 106A of the Taxes Management Act 1970. However, a taxpayer level conviction is not required for the corporate offence to be committed and prosecuted.

At stage two an **associated person** is an employee or agent of the company/partnership. An associated person **facilitates** the evasion of tax if s/he aids, abets, counsels or procures the evasion of tax, or is otherwise knowingly concerned in the evasion of tax.

For example, creating or helping to create a corporate or trust structure, in the knowledge that the purpose of the structure is to aid a taxpayer in evading tax, would amount to a facilitation of tax evasion. Facilitation must be deliberate and dishonest; negligence or recklessness will not suffice.

The new offence is one of strict liability, so if stages one and two are met, the company/partnership will be guilty of the new offence unless it can show it had **reasonable prevention procedures** in place at the time the facilitation occurred.

LAW WITHOUT FRONTIERS

Companies and partnerships outside of the UK can commit the new facilitation offence if the tax which is evaded is UK tax.

UK companies will also be caught if the facilitation offence relates to foreign taxes. Offshore companies can be caught in respect of foreign tax evasion facilitation if (a) the offshore company carries on business in the UK or (b) the facilitation takes place in the UK, either in whole or in part.

REASONABLE PREVENTION PROCEDURES

On 1 September 2017, the Government published final guidance on the new offence – *Tackling tax evasion*:

Government guidance for the corporate offences of failure to prevent the criminal facilitation of tax evasion (*‘the Guidance’*). The Guidance usefully sets out how companies/partnerships should go about creating reasonable prevention procedures.

There are six principles that should inform a relevant body’s approach to prevention: risk assessment; proportionality of risk-based prevention procedures; top level commitment; due diligence; communication; and monitoring and review. These principles are flexible and outcome-focused rather than being prescriptive, and should be proportionate to the level of risk.

RISK ASSESSMENT AND CONTROL

Prevention procedures must be “reasonable”. As the Guidance makes clear, reasonable procedures will not be one-size-fits-all, but will be risk based and proportionate. Fundamental to the creation of risk-based and proportionate prevention procedures is a risk assessment exercise. This exercise will identify and assess the tax facilitation risks faced by the business. The risk assessment must be documented, and act as a rationale and justification for the reasonable, proportionate and risk-based prevention procedures which flow from it. It may be that facilitation risk can be built into a pre-existing financial crime risk assessment.

Procedures must be proportionate to the risk the relevant body faces of persons associated with it committing tax evasion facilitation offences. This depends on the nature, scale and complexity of the activities the relevant body undertakes. Procedures which are proportionate to the risks faced by an international banking group are inevitably going to differ substantially from that which is proportionate for a smaller independent financial adviser or broker.

However, some prevention procedures that are likely to be proportionate for most companies/partnerships will include:

- ▶ A new Anti-Tax Evasion Statement/Policy, setting out the company’s zero tolerance approach to tax evasion.
- ▶ Reviewing/refreshing contracts with associated persons requiring them not to engage in facilitating tax evasion and to report any concerns immediately.
- ▶ Providing regular training for staff on financial crime detection and prevention.
- ▶ Creating a risk-based system of file review/supervision, to ensure that an associated person cannot hide acts amounting to facilitation of tax evasion.
- ▶ Creating/updating any external contractors/agents policy, to ensure associated persons are only engaged following an assessment of the risk of that Associated Person engaging in facilitation of tax evasion.
- ▶ Having clear reporting procedures for whistle-blowing of suspected facilitation.
- ▶ Ensuring pay and bonus policy/structure encourages reporting and discourages pursuing profit to the point of condoning tax evasion.

- ▶ Updating IT systems, to monitor and flag potential facilitation.
- ▶ Monitoring and enforcing compliance with prevention procedures.
- ▶ Having regular reviews of the effectiveness of prevention procedures and refreshing/refining them where necessary.

OUR FACILITATION RISK IS VERY LOW: CAN WE IGNORE THIS ENTIRELY?

In some limited circumstances, when the risk is extremely low and the cost of procedures would be disproportionate, it may be appropriate to have no procedures in place. However, it will rarely be reasonable not to undertake a risk assessment.

In such a case, risk should be reviewed regularly, and the company/partnership should be able to justify (with reference to a documented risk assessment) any decision not to implement procedures.

THE IMPORTANCE OF FINANCIAL CRIME COMPLIANCE

For financial services firms the importance of strict compliance with financial crime law and regulation has never been greater.

In the past 12 months the FCA could not have made it any clearer that financial crime systems and controls is a priority area of focus. In its recent mission statement the FCA says: “Our next focus is financial crime.” Supervision around financial crime controls is only becoming more intensive, and, where failings are particularly serious, the FCA has explicitly stated that enforcement powers, both civil and criminal, will be utilised to reinforce the importance of preventing and detecting financial crime.

Accordingly, the Criminal Finances Act must be viewed in the context of a clear regulatory imperative to improve financial crime controls across the financial services industry.

Early and meaningful engagement with the new offence – by way of risk assessment, and the creation of reasonable prevention procedures – will not only serve to avoid commission of the new corporate offence, but will represent good evidence that a firm, and its senior management, is meaningfully engaged in financial crime prevention.

Alan Ward is on CISI TV discussing some of the issues raised in this article. ●



About the author

Alan Ward is a Senior Associate in the Regulatory Litigation Practice Group at Stephenson Harwood. He has advised numerous financial services institutions on the implementation of the Senior Managers Regime, the Money Laundering Regulations 2017 and, most recently, the Criminal Finances Act 2017.

We are ten years from the run on Northern Rock and the start of the financial crisis – time to measure its regulatory consequences. It took a long time for governments and regulators to react, but now big changes have come. Some notable points in this tsunami of regulatory change are discussed here

◆ CHRISTOPHER BOND, CHARTERED MCSI, EDITOR

CHANGE: REGULATORY UPDATE

WHAT HAS CHANGED IN REGULATION IN THE PAST TEN YEARS?

REGULATORY ARBITRAGE IS BACK

The global commitment to reform the regulation of the financial sector in 2008 at Pittsburgh was unprecedented and brought about major changes, such as in central clearing of over-the-counter (OTC) derivatives and transaction reporting. However, the national will to coordinate rules is now reducing, such as in varying interpretations of bank capital requirements under Basel III. Regulatory arbitrage is back. A related recent step change has been the international cooperation in reducing tax evasion through sharing information between governments, sparked by such events as the disclosure of the Panama Papers, through the Common Reporting Standards. Firms and investors take note.

CONDUCT AND CULTURE

We've seen a rise in priority of firms and individuals' culture and ethics in regulators' supervision and the training and acceptance by many more employees that they must look outside the silos in which they work and consider the impact of their actions beyond these, including measures to limit employee bonuses – an ongoing debate. There is the related focus on conflicts of interest, such as preventing product providers from providing inducements to distributors and investor advisers.

'TOO BIG TO FAIL' LESS LIKELY?

There is much more prudential capital for deposit taking, and investment banks, asset managers, bank liquidity and stress testing are important innovations under Basel III. As a consequence, failure by systemically important firms may be less likely but the political will to pass the cost to bondholders under 'too big to fail' measures remains untested, as can be seen recently in Italy; and the related unresolved question of how a multinational group's assets are divided between cross-border creditors of subsidiaries in different countries.

REGULATION STRUGGLING TO KEEP UP WITH FINTECH

Technological innovations have left the regulators in all countries struggling to adapt rules designed for business in the previous century to the latest developments, such as crypto currencies and automated trading, and the extent to which they apply different rules to fintech services, eg, robo-advice. This has also created new areas of regulation, such as data protection and its nemesis cyber crime, and the expansion in the type of firms to be regulated to firms such as payments which operated outside it previously.

GEOPOLITICS

Geopolitical events have resulted in new rules for firms on counter terrorist funding and sanctions even on nuclear proliferation. There is now much more information required on payments. Retail banks and payment systems now require much more customer information.



Read about the Common Reporting Standard online at cisi.org/crs



COST AND COMPETITION

Anti trust and competition law is now an important regulatory driver. Some traditional practices are under threat, from the recent challenge to asset managers' fees to initial public offering charges. The gathering impetus to shorten the chain of intermediaries in investment transactions to reduce investor costs – the FCA investigation of asset managers and platforms and transparency under the updated Markets in Financial Instruments Directive (MiFID II) are only the start of this.

INCREASED REGULATION

There has been a loss of market share in equities by regulated exchanges leading to increased regulation of the OTC markets for stocks and derivatives and the rise of central clearing houses through the requirement to clear OTC trades through them in liquid securities (with the regulators' measures to mitigate the concentration risk this produces).

In wholesale – both sell-side and buy-side – firms are much more heavily regulated as a result of bad market practices being revealed by the crisis. Regulators can no longer assume that their only regulatory risk is market abuse, particularly insider trading. Senior managers in banks are responsible for taking reasonable steps to prevent regulatory breaches in their areas and nearly every individual in a firm must now follow basic conduct rules. This is a considerable move away from only shareholders paying the cost of penalties. Compliance and risk costs for all financial firms have risen dramatically and have become a major cost centre for firms as a consequence of the huge penalties – global fines on firms over the past ten years is £287bn – imposed since the crisis. Alternative asset managers such as hedge funds have become much more regulated – to the point where some will try to structure themselves out of regulation.

WHAT MAY CHANGE IN REGULATION IN THE NEXT TEN YEARS?

HERE ARE SOME SUGGESTIONS

LIGHTER REGULATION BECAUSE OF ARBITRAGE

The drive towards tighter financial regulation will peter out – indeed the pendulum will swing back internationally towards lighter regulation of firms, particularly in wholesale – because of the breakdown in the international consensus, giving rise to regulatory arbitrage, because clients will refuse to pay the resulting extra compliance cost and to spur economic growth.

FURTHER COST REDUCTION

The move for regulators to lower institutional and retail investors' costs will continue through price and costs transparency, as can be seen in MiFID II and in the FCA's plans for asset managers. Another consequence will be that brokers will no longer produce research on small and mid-sized listed companies, who will need to develop new ways of promoting themselves to investors.

Big established firms such as banks will embrace fintech to reduce their costs of handling data and to become the dominant providers in some areas such as robo-advice, overtaking or absorbing the first comers, such as some challenger banks, but banks and asset managers will become less profitable as their services become more

DO YOU HAVE TO BE FULLY MIFID II COMPLIANT BY 3 JANUARY 2018?

The FCA has given the clearest informal guidance on this yet in a recent speech by the head of enforcement, Mark Steward. The FCA expects all firms to make a real or genuine attempt to comply but is likely to be tolerant of firms whose preparations are incomplete by January. However, there are 'red lines' of what must be done before then. These include making the extensive new transaction reporting to the regulator, the best execution requirements for orders and transactions, and notification to the regulator of the firm's status, eg, organised trading facility or systematic internaliser.

automated. Related to this, firms will use social media as the mainstream method of client communication, replacing paper, websites and emails which will go the way of faxes. The big technology companies will consider but shy away from entering the mainstream financial sector because of the regulatory burden, but will focus on providing fintech services to it. They will however join the ever-increasing band of outsource providers to firms benefiting from new regulations.

The advice gap for those unable or unwilling to pay the cost of advice will be partially addressed through a mixture of the rise of passive investing, eg, through exchange-traded funds (which may well increase volatility in the next market crisis so regulators will regulate them more heavily), model portfolios and robo-advice.

CHANGING ROLE OF CENTRAL BANKS

Central banks will be tested in deciding whether to deliberately prick asset bubbles, which will be unpopular with their governments. There are several possible causes of this, such as a geo political event; misselling self-invested personal pensions; and in fixed income, failure of a central clearer or of a bank that is too big to bail out. The extent of the crisis may be increased by fewer liquidity providers for prudential reasons and algorithmic and high-frequency trading. The UK government will react to the next financial crisis (when it comes) by taking away firm supervision from the Bank of England and the FCA and establishing a single new regulator (son of the FSA).

WHOLESALE CHANGES

The wholesale sector will become more professional, with both detailed and high-level rules and international codes

of conduct. There will be a tussle between the regulators and certain sector elements on mandatory qualifications.

The sector's arguments that there is a limit on how much they should pay for regulators' costs will effectively limit the growth of the regulators and force them to accept that they cannot fully supervise 56,000 firms, resulting in spotty supervision and ever fewer enforcement actions. The huge loans to the Financial Services Compensation Scheme (FSCS), built up in the financial crisis, will be written off and firms' obligation to contribute to the FSCS will take riskiness of firms' business models into account.

And finally, on Brexit, there will be a passport for financial services firms between the UK and the EU after 2019. However, it will be more bureaucratic than at present, and give reluctant regulators more power to block cross-border services. Larger groups will avoid the need for a passport through having licensed subsidiaries in both the UK and the EU; smaller firms may stop doing cross-border business. The EU regulators will gain additional powers as the eurozone integrates, particularly the European Securities and Markets Authority, the European Banking Authority and the European Central Bank. The UK will have to decide, on a new EU Directive or regulation basis, whether to comply with it or not (risking losing equivalence and the passport).



I have pleasure in introducing this eight-page supplement drawn from the Autumn 2017 edition of the *Investment Management Review (IMR)*, which was previously available to Chartered Members and Fellows as a separate edition. The first seven pages consist of highlights from *IMR* which review the most interesting recent outputs from a wide variety of sources, including our own research. Articles are selected for their long-term significance, covering structural changes in the sector, investment practices and fierce controversies. On the final page you will find a snapshot of all other articles in the issue. For access to the full issue please visit cisi.org/imrmagazine

ARJUNA SITTAMPALAM, CHARTERED MCSI, EDITOR

INVESTMENT MANAGEMENT REVIEW

DEGLOBALISATION DANGERS FOR ASSET MANAGERS

Fund managers have thrived on the globalisation of the past three decades. If this powerful force is reversed, as is more than possible, it may not be good news for the financial services sector. But there is reason to be sanguine for now.

INCREASED PROTECTIONISM AND OTHER FORCES

President Trump's announcements have brought into sharp relief that populations and governments in an increasing number of countries have become protectionist and anti-global. But the threat to free trade did not start with Trump; it was already well established.

According to the World Trade Organisation (WTO), from the middle of October 2015 to the middle of May 2016, the G20 economies introduced protectionist trade measures at the fastest rate of five a week since the financial crisis. The US's withdrawal from the Trans Pacific Partnership and the renegotiating of the North American Free Trade Agreement is the manifestation of not just Trump's policies, but also reflects anti-global politicians becoming more popular worldwide.

GLOBAL CROSS-BORDER CAPITAL FLOWS

The prospect of restrictions on free trade is not the only globalisation story. What happens to capital flows is even more important for asset managers, and the recent evidence of the global picture is not reassuring.

Since the 2007 financial crisis, global cross-border capital flows have fallen by nearly two-thirds in absolute terms and by up to four times relative to world GDP.

BANKS' PROBLEMS

Half of the decline has been in cross-border bank lending, with foreign loans down by \$7.3tn since 2007, representing a 45% fall. A large part of this has been intra-eurozone lending.

Interbank borrowing showed the largest decline. Swiss, UK, and some US banks exhibited a decline in foreign activity.

Several reasons account for the retreat of global banks from lending abroad. There has been a new appreciation of country risk and foreign business has been less profitable than domestic.

Many banks, having overextended themselves internationally, learnt the hard way about the risks of going abroad without adequate investigation. The sub-prime crisis, Spanish real estate problems, and Turkey, were among the areas where international banks were hit. Partly because of this, and also with the growth of a new nationalism among politicians, policies in various countries tended to encourage domestic lending rather than sending money abroad. Politicians being naturally more concerned about economic sluggishness at home was a compelling influence.

It is not, however, bad news on all fronts. Though many global banks have backed off from the rest of the world, there are exceptions. Chinese, Canadian, and Japanese banks as well as some in developing countries have been increasing their operations abroad. Canadian banks suffering from a mature limited market at home have now put half of their assets elsewhere, particularly in the US. Their Japanese counterparts have also stepped up international lending, particularly in the US and South East Asia.

But the most dramatic transformation comes from China. Its top four banks have quadrupled the share of assets invested in foreign countries since 2007. But the total still is only \$1tn, just 9% of the asset base compared with the average 20% of advanced economies held in foreign investments. If Chinese move to this ratio there is still plenty of growth ahead.

FINANCIAL GLOBALISATION

Despite the massive fall in cross-border capital flows, McKinsey Global Institute¹ remains sanguine by concluding that financial globalisation is not dead, but still alive and kicking and in fact, could emerge in better shape with greater stability and more inclusiveness worldwide. Globally, foreign investment relative to GDP has not changed much since

2007, though the rapid growth prior to the financial crisis has come to a halt. The proportion of global equities owned by foreigners has increased to 27% as of 2015, compared with just 17% in 2000. It is the same picture in global bonds, with corresponding figures of 31% in 2015 versus 18% in 2000. Only lending and other investment has fallen.

Foreign direct investment (FDI) and equity flows have risen to 69% of cross-border flows, having increased from 36% in 2007. FDI being of a strategic long-term nature is much less volatile than bank lending and adds stability to financial globalisation.

Furthermore, more countries are now contributing to financial globalisation. According to McKinsey's new Financial Connectedness Ranking, while the advanced economies and the international financial centres are the most integrated in the world's financial system, China and various developing countries have become more connected. China's connectedness in particular has been on a sharp upward trajectory. Its outward stock of bank lending and foreign direct investment has trebled in the past ten years.

Though the biggest global banks have drawn in their horns, financial markets are still strongly interconnected. As of now, it is the advanced economies who are the most integrated in the global financial system. According to McKinsey's ranking, the US, Luxembourg, the UK, Netherlands and Germany are in the top in this order of interconnection, reflecting partly that they have deeper financial markets.

However, China's role is expanding fast, with its ranking jumping from eighth position in 2015, from sixteenth in 2005. It is now a significant investor worldwide, including the emerging areas of Africa and Latin America. Its much-publicised determination to advance the international use of its currency also indicates that it is set to further increase its international role.

International financial centres play a critical role in the interconnectedness of the financial system. McKinsey defines such centres as those with assets and liabilities exceeding 10% of their GDP, and it has identified ten of these centres, including newcomers such as Bahrain and Mauritius. These have the advantages generally of low tax rates, favourable regulation, and well-developed banking sectors. A characteristic they all share is that they are hubs for attracting foreign capital and then allocating this abroad. Since 2007, they have produced a third of the total global growth in foreign investment.

Another source of foreign capital represents remittances from immigrants to developing countries. This has remained stable at nearly \$500bn in 2016, representing more than 50% of private capital flows to these countries. A manifestation of globalisation spreading wider is that in 2005 the US received about 67% of capital invested abroad, and this figure fell by half by 2016.

So, overall, McKinsey concludes that financial globalisation is in good shape and will actually be more stable. But there are risks. Cross-border lending remains volatile and can lead to large fluctuations in currency rates and economic growth, possibly adding to political problems.

It is argued that banks need to adapt to digital and fintech developments, and review their global strategies. And

regulators should find new tools to deal with volatility and to keep pace with rapid technological change. In the future, digital platforms, blockchain, and machine learning, hold promise as new channels for cross-border capital and to further widen participation among countries.

EDITOR'S COMMENT

McKinsey is right in saying that if things stand as they are, financial globalisation is in decent shape. But it partly depends on how far the reverses in free trade go. If the latter becomes so bad that it threatens economies as it well could, then capital flows also could acquire whipping boy status. Then, fund managers have to sit up and worry.

Furthermore, banks' prosperity and fund managers' futures are interconnected in several ways. In many parts of the world, banks control distribution. The franchises possessed by banks are an easy route to asset management.

Having said all this, already there are signs that it is not just global banks, but global fund managers and private banks that are finding it harder in many parts of the world to establish a local presence. It's not politics here. Everywhere, localisation is gaining as companies closer to the customer find it easier to keep up with fast-moving changes in local preferences. Another relevant development is the onshoring phenomenon in the West, partly due to advances in robotics reducing the benefits of cheap labour elsewhere. Transport costs and increasing wages in developing countries are also encouraging manufacturers to make things closer to home.

As of now, there is no need for fund management houses to worry too much but they need to be watchful of how far populists will go in reversing globalisation.

1. *The new dynamics of financial globalisation*, Susan Lund, Eckart Windhagen, James Manyika, Philipp Härle, Jonathan Woetzel and Diana Goldshtein, McKinsey Global Institute, August 2017.





LONDON LONG-TERM WINNER FROM BREXIT

In spite of Brexit, the City of London has enormous strengths and advantages and the evidence is growing that it might actually emerge as a big long-term winner from Brexit.

INFRASTRUCTURE

London's much vaunted pools of skills and expertise constitute an unrivalled human infrastructure which no other city in Europe comes anywhere close to. Already well known but much less appreciated is its irreplaceable position in terms of physical trading infrastructure.²

Within 30 miles of the City, there are various technological sites that enable highly computerised trading in the various asset types, equities, bonds, currencies, commodities and derivatives. Brexit is not going to change this indispensable technology backing the financial markets. It is suggested by Hirander Misra, CEO of GMEX, a trading and technology services group, that London's influence might even increase in the future. It remains a highly desirable location for price-matching engines in data centres,³ with connectivity to Chicago and New Jersey, homes of US exchanges. In the forex area, London is out in front. Data providers such as Bloomberg, Thomson, Interactive Data, and Dow Jones all have engines near London.

In Basildon, a data centre owned by Intercontinental Exchange caters for the needs of Euronext exchange services with strong connections to Frankfurt. Microwave networks connect London to the European centres in the same way Chicago and New York are connected. It is believed that Euronext, for instance, will encounter strong resistance from its big customers if it leaves the UK.

FOREIGN ASSET MANAGERS

Notwithstanding all the talk about fund managers in London having to cut down their operations, asset managers elsewhere are actually voting with their feet by expanding or setting up in

London as their hub for the rest of the world, including Europe. DBS in Singapore, South East Asia's biggest bank and Asia's fifth largest private banking group, has announced its intention to quadruple its London wealth management operation as a destination for rich Asian clients.⁴ The leading Swiss private bank Julius Baer is also looking for an acquisition in the UK.

The CEO of Citigroup's European, Middle East and African operations asserts that London will remain the financial hub for Europe, the Middle East and Africa⁵. It is possible that it might transfer some of the less important functions to venues elsewhere, but London will remain the primary location while Dublin's headcount could increase.

The most telling evidence comes from the US. Quite a few fund managers from across the Atlantic have been reaffirming their intentions to grow their operations in London despite Brexit. Eaton Vance has doubled the headcount in its London office to 40 in the past two years, and intends to expand further, ignoring Brexit.

Smead Capital Management, based in Seattle, also says that its plans to open a London office would not be affected by Brexit. It highlighted language, culture, and business-friendly employment laws as key attractions. Other US groups that have opened offices in London include Oppenheimer Funds, Thornberg Investment Management, and Boston Partners.⁶ Oppenheimer is also set to increase its London staff numbers in late 2017.

LONDON'S ROLE AS A TECH HUB

London is beating Paris, Milan, and Berlin as Europe's top city for fast-growing companies, emphasising its role as a centre for innovation in the EU. A new *Financial Times* 1,000 list⁷ of European companies with the strongest sales growth between 2012–2015 shows that 78 of these companies are London-based, leaving Paris (45), Milan (34) and Berlin (32) behind. Country-wise, the UK and Germany together dominated with 47%, followed by Italian, French and Spanish companies with 19%, 14% and 10% respectively. The ranking was compiled by Statista, a market research company, jointly with the *Financial Times*.⁸

To counter Brexit, most established fund groups in the UK are expected to expand their Luxembourg and Dublin operations to satisfy local regulators, but don't feel the need to shift wholesale from London.

THE FUTURE

It is strongly suggested by Richard Saunders, a consultant and former CEO of the Investment Association, the UK fund managers' trade body, that London could actually gain heavily in the long term from Brexit.⁹ He pointed to London taking off in the 1970s with the euro-dollar market following the US's tight regulation. Also, American depository receipts (ADRs) enabled the trading of US securities outside of the US, despite the authorities' endeavour to stop it.

Saunders feels that the same could happen with London outside the EU. For instance, it may not follow the Markets in Financial Instruments Directive (MiFID) closely but tweak it. There is already a concern that the EU has ignored valid market opinions in applying a rule covering equities in MiFID to bonds inappropriately.

EDITOR'S COMMENT

Saunders has a point. Take the financial transactions tax still to be agreed in Europe despite years of attempts. If it ever comes into being, London based players could run circles around it in innovative way.

2. 'City confident of keeping infrastructure edge', Philip Stafford, *Financial Times*, 23.03.2017.
3. 'Data centres help London retain cachet', Philip Stafford, *Financial Times*, 24.02.2017.
4. 'DBS boosts private banking in London', Jeevan Vasagar, *Financial Times*, 10.04.2017.
5. 'Citigroup's Europe chief says 'London will remain our hub'', Lucy Burton, *Financial News*, 20.02.2017.
6. 'Coming from America: managers look to grow in London', David Ricketts, *Financial News*, 15.05.2017.
7. FT1000: Europe's fastest growing companies.
8. 'London emerges as European growth hub', Owen Walker, *Financial Times*, 07.04.2017.
9. 'UK can prosper after Brexit, but not with equivalence', Richard Saunders, *Financial News*, 13.03.2017.

INTERNET GIANTS BOTH FEARED AND WELCOME IN WEALTH MANAGEMENT

While the wealth pool of global high-net worth individuals (HNWIs) continues to steam ahead, the sector is confronting some big uncertainties about the prospective invasion of internet giants into wealth managers' territory, according to the *World Wealth Report 2017* by Capgemini, the information technology consultancy based in France.

GROWTH PROSPECTS

Assets under management (AUM) in the sector, currently standing at about \$65tn, are set to hit \$100tn by 2025, from a much lower \$17tn in 1996. Previously, Asia-Pacific, the largest geographical region, was the fastest growing, but in 2016 the other two big markets exhibited faster rises while Asia-Pacific slowed down somewhat. The HNWI population increased by 7.5% and the overall wealth level went up by 8%. Some markets, particularly Russia, Brazil and Canada, enjoyed an upswing, reversing their declines a year earlier. The ranking by size of different countries changed significantly, with the UK being supplanted by France in the number five spot.

RELATIVE SIZES

The top four markets, US, Japan, Germany and China, once again represented over 60% of all HNWIs globally. However, new HNWIs came from a broader list of countries in contrast to 2015. In that year, more than 80% of new arrivals came from the top four while the proportion was a little less than 60% in 2016.

The US and Japan are still the largest markets but China has been the fastest growing since 2010.

SATISFACTION STANDARDS

Overall trust and confidence in the wealth management sector among HNWIs increased over the year but satisfaction levels still remained muted at levels below 60%. In North America, the satisfaction rating hit nearly 70%, while in Japan the figure was in the low 40s. The younger HNWIs under age 40 were less happy, with less than 50% being satisfied, while the corresponding figure for those more than 60 was over 60%. It is felt that the satisfaction level could be improved with a broader range of services as well as reductions in fee levels.

About 90% of the HNWIs considered investment management and financial services as of value but in addition, they estimate highly other services such as tax and legal advice, estate and trust management, retirement solutions, banking and insurance and philanthropy.

For the first time, Capgemini carried out an extensive investigation of their clients' likelihood to refer their wealth managers to others using a scoring system, and globally the results were satisfactory. Two negative spots, however, emerged in Japan, with a very low level, and among the population aged over 60.

There is a big gap in satisfaction of the ultra-HNWIs having more than \$20m compared with the group in the bracket \$1–5m. This is disturbing as these less wealthy comprise about 90% of all HNWIs.

An explanation might lie in banks increasingly going for the top level of wealth in terms of clients with corresponding services. Standard Chartered Private Bank and J.P. Morgan have both boosted their minimum requirement for private banking clients to \$5m and \$10m respectively. This high level of satisfaction might be a consequence of this move towards exclusiveness in favour of the ultra-HNWI. Conversely, the less wealthy HNWIs may feel unhappy about the growing trend to shift them from the private banking client pool into more commoditised wealth management services.

ULTRA HNWI VS HNWI

The ultra-HNWI group, defined as those with more than \$30m in investable assets, made short strong growth in wealth and population, with wealth gains of over 9% compared with just about 3% in 2015, while the population of the segment increased by about 8%, doubling the 2015 rate.

The ultra-HNWIs have played a traditional role at the main source of HNWIs' growth rates and account for about 35% of all HNWIs' wealth, though their population size was only 1% of the overall size.

In the case of ultra-HNWIs, it is suggested that they may have benefited from exclusive access to sophisticated investment solutions, such as private equity funds and facilitating initial public offerings, thus providing them with 10% additional return compared with those in the \$1–5m group.

INTERNET GIANTS' ENTRY

A large shadow is looming over wealth management firms in the form of the potential entry by internet giants. To date, only Alibaba and Amazon have indicated any interest in invading the sector, but a host of others are already in financial services, including payment systems.

Wealth managers are alarmed by the fact that more than half of HNWI's have indicated the willingness to become a client of internet giants. They feel that they would benefit from the speed, convenience, efficiency and innovation that they could expect but are anxious about privacy, security and the lack of a human interface.

Many wealth management firms are divided in their expectations of the internet threat. While a small minority feel that the tech groups would not be interested at all, some feel that disruption might be caused. Others believe that a partnership might be pursued by the internet giants. The fear here, however, is that they could come in, gain the expertise and do it themselves. Alternatively, they might just build their own wealth management companies, hire the necessary people and set up as fearsome competitors.

EDITOR'S COMMENT

Where internet giants could play a big role is in distribution and brand awareness, and they could be valuable as partners. This possibility touches not just wealth management but asset management as a whole. If they do come in, they could play a major role in expanding the industry worldwide, but whether incumbents will benefit from this is another matter. If particularly the younger HNWI's favour their entry, current players in the sector have every cause to worry.

GROWING POWER OF FAMILY OFFICES

Some of the largest family offices are now joining forces to increase their already considerable clout in global asset management, disrupting Wall Street in the process.¹⁰ Their increasing influence in the investment world was given a leg-up by an informal gathering in October 2014 near Dallas in the US at billionaire Ross Perot's ranch. The exclusive get together was attended by managers investing the fortunes of luminaries such as George Soros and Michael Bloomberg.

That get together led to a network of 150 families who have since jointly participated in more than ten deals. The number of wealthy families bypassing investment managers and looking for their own opportunities is shooting up, partly motivated by the high fees and erratic performance of traditional investment firms.

In fact, instead of using Wall Street firms, they have actually begun to rival them on several fronts. They are building up their own expert teams by competing for talent with investment firms. Recently, Thomas Pritzker, the billionaire heading up Hyatt Hotels, recruited a senior banker from Goldman Sachs' private equity division to help manage his family office.

The family offices also compete with private equity firms, though sometimes partnering them to grab investment opportunities. The activities include lending to companies, buying distressed debt and seeding hedge funds.

In general, family offices work behind the scenes and can preserve complete secrecy. They don't have to register in the regulatory system provided they give advice only to relatives and key employees. For this reason, more than 30 hedge funds have returned their clients' money from 2011 and transformed themselves into family offices.

These include Soros Fund Management, where Soros gave increased regulation as the main reason. For instance, in the US, hedge funds with more than \$150m in assets have to disclose their strategies and the amount of money they manage. John Arnold, the energy trader, closed his hedge fund, Centaurus Energy Master Fund and focused on his family office and philanthropy some time ago. His family office partnered a Goldman Sachs division and some pension funds in a \$4.5bn buyout of the sports firm Cabela's.

Family offices come in all sizes. For the biggest ones with over \$250m, running their own office has become a clear first choice. Famous people having gone this route include Sergey



Brin, the co-founder of Google, William Ackman, the well-known hedge fund manager, Oprah Winfrey, the TV celebrity, and the billionaire brothers Charles and David Koch, who between them are estimated to have over \$80bn of wealth.

Though it is difficult to count the family offices in view of their not needing to register, it is estimated in a study by EY, the top accounting firm, that there are more than 10,000 worldwide, about half of which were established in the past 15 years. In the US alone, 3,000 family offices have assets exceeding \$1.2tn, according to Robert Casey, senior managing director of research at Family Wealth Alliance, a Chicago consultancy. In 2015, the number of billionaires worldwide rose by over 6% to nearly 2,500, with their combined wealth over \$7.5tn, according to Wealth-X, data provider. Dominic Samuelson, CEO of Campden Wealth which brings wealthy families together, pointed out that the process of making big money has been sped up. Campden's research has found that family offices hold more than \$4tn of assets, not far from the combined \$5.7tn held by hedge funds and private equity firms, according to figures provided by Preqin, the well-known data provider.

Family office networks, including the one set up by Perot following the 2014 gathering, are now vastly expending the power of mega-rich families in snapping up very good investment deals, particularly private equity type club deals. The Perot network mostly has families with at least \$1bn, including the family offices of Bloomberg and Soros. Perot's executives have stated that they got the idea after having to skip an opportunity which needed more money than they were willing to put up on their own.

Another big network is connected with the family office of the McNally's, who are descended from Andrew McNally, the co-founder of Rand McNally, the publisher of atlases. Ward McNally, great-great grandson of Andrew, has established McNally LLC that draws upon money from his family and a network of about 800 families worldwide to invest in companies. McNally states that he met with about 300 families in 2016, and that every one of them were interested in doing this.

Some family offices have even started activist campaigns contrary to their usual modus operandi of maintaining privacy and secrecy. In May 2016, the family office of David Bonderman, founding partner of TPG Capital, a buyout firm, exerted pressure on the management of Sorrento Therapeutics, a cancer drug company in which the family office had a holding.

Investment banks and private equity firms have now begun to recognise the increasing importance of family offices. Goldman Sachs, after losing out on merger deals involving these offices, established a list of 750 target families. They later cut down to 27 who, they believe, to be interested in and to have the money to buy companies outright.

Firms that have caught the attention of Wall Street are Quadrant Capital Advisors and Fremont Group that invest money belonging to the Santo Domingo family in Colombia and the Bechtel family in the construction industry respectively.



Blackstone and KKR, the giant private equity groups, have managers who specialise in approaching families with investment opportunities. Some of the buyout groups offer funds that invest on a longer-term horizon than the typical private equity fund, suiting very much the long-term horizons spanning generations of the wealthiest. KKR from having virtually zero in 2010 now have several hundred wealthy families as clients.

EDITOR'S COMMENT

Family offices used to be considered a backwater in the investment management sector and found it difficult to employ talented people, for whom the sector was a dead end. It is now very different. Family money is considered to be among the smartest. They can afford to employ top quality talent by paying up, so establishing their own expertise is no big problem. Recruitment is easier given the offices' power and flexibility to make high quality investments, though not being able to build up a public profile can be a disadvantage for the most talented.

Where the families really score is their ability to make long-term investments which require patient capital for the best returns. Their ability to operate in secrecy removes any short-term pressure of temporary setbacks in their investments catching the public eye and causing embarrassment. Moreover, many potential sellers of lucrative assets also prefer to operate behind the scenes as public knowledge of the potential sale could damage the business.

Overall, the powerful families are set to increase their weight and importance in asset management just as the sovereign wealth funds, another long-term investor group, is beginning to cut back owing to cashflow pressures.

10. 'New force on Wall Street: the family office', Anupreeta Das and Juliet Chung, *The Wall Street Journal*, 09.03.2017.

BIG BOND MANAGERS SQUEEZING OTHER PLAYERS

Market makers, mostly the big banks, used to set prices in global bond markets. No longer so. It is the giant bond management groups that now call the shots at the expense of both the investment banks and smaller fund management firms.¹¹

The banks' decline in the field owes much to pressure from increased regulation following the financial crisis in 2008, severely limiting their capacity to take risks. Their much-diminished role is shown up by stark statistics. In 2016, bank bond dealers held only \$8m in stock for every billion dollars of bonds outstanding in the US markets, compared with three times the amount they had back in 2008, according to the Federal Reserve and the Securities Industry and Financial Markets Association.

This reduced capability has made trading more difficult. For instance, Jay Sommariva, portfolio manager at Pittsburgh-based Fort Pitt Capital Group, used to sell a bond within a few hours of contacting several banks before the crisis and now, according to him, at least two days goes by before he can complete the order, and even then with the dealing cost much higher. The balance of power has shifted away from banks towards the giant fund managers such as BlackRock, Pimco and PGIM. Nowadays, banks would only buy from the smaller bond funds if they had somebody else on the other side of the deal lined up. This other side is invariably the big fund managers.

Before 2008 it was different. Banks fulfilled their market making role by immediately buying a bond and then waiting till somebody was willing to pay their price for buying it off them. Now, however, the big groups consider taking the bond from the banks as a service provided to the latter and only at a price set by the bond firm.

The losers from this power shift are the banks as well as the smaller fund managers. The banks have lost flexibility and also suffer from lower levels of business, particularly because the big asset managers, with more analysts, data and electronic tools, are able to trade directly with each other. The banks' reduced activity in trading hits the other group of losers, the smaller fund managers. They are more dependent on banks as they don't have the capability to build up a stock of bonds unlike their much larger counterparts.

Even previously, banks favoured the larger managers with better prices because they dealt in large amounts providing more fee income, whereas smaller deals with the other fund managers could be much more expensive.

However, matters are much worse now. Some smaller funds claim that the cost of buying and selling can be as much as 15% of the money they make in trading a bond, which is about 20% higher since 2008.

The structural handicaps of lesser firms allow the larger bond funds to outperform their smaller counterparts. For instance, US dollar corporate bond funds, with assets under management of more than \$1bn, had a cumulative return of more than 60% between 2008 and 2016, whereas those with less assets gained only 48%, according to the Morningstar research group.

Disadvantages apart from dealing problems bedevil the smaller fund managers who, lumbered with more regulation after the financial crisis, find it a costlier burden for them than their larger counterparts. They are also being hit by the move towards low-cost index funds which are 88% held by the larger firms, according to Morningstar.

EDITOR'S COMMENT

The Dodd-Frank legislation in the US reduced banks' market making capacity and some feel that a post-Trump reversal of this law might restore banks' capacity to make markets in bonds. But this legislation is not the entire story. Banks also suffer from capital shortages arising from other restrictions which has hit their capacity to take risks. Furthermore, asset managers have now developed the power and the taste to control bond markets and it is much more difficult for banks to prise it off them. So, it looks like the big fund managers' dominance is here to stay.

11. 'Bigger is better in bond world', Jon Sindreu, *The Wall Street Journal*, 22.06.2017



The articles you have seen in the preceding pages have been taken from the Autumn 2017 edition of the *Investment Management Review (IMR)*. Some of them appear in the magazine in a more expanded and detailed version. You might like to read the other articles in the magazine which are listed in the snapshot below. To access the full edition please visit

cisi.org/imrmagazine

BENCHMARKING OBSTACLES TO HIGH QUALITY INVESTMENTS

Enterprising institutions are striking out in favour of esoteric investments with high return prospects, such as a blueberry farm. But the lack of an appropriate performance yardstick hampers their selection and subsequent assessment in the asset allocation process. There are deficiencies with possible solutions.

LEAKAGE OF OFFICIAL DATA PROFITING SOME PROMPTS INVESTIGATION

Evidence of some players trading on leaks of UK Government statistics and moving markets prior to publication is sparking serious international concern.

NEW GLOBAL FOREX STANDARD FOLLOWING LARGE SCALE CURRENCY SCANDALS AND FRAUD

Leading central banks have promulgated a new code of conduct to prevent the recurrence of scandalous and illegal behaviour that resulted in fines and penalties imposed on several global banks.

CHINESE SHARES INCLUDED IN GLOBAL INDICES DESPITE CONTINUING CONCERNS

The MSCI admitted Chinese A-shares to its global indices but only to a cautiously limited extent, reflecting unresolved doubts of fair and freely functioning financial markets and about the quality of corporate governance.

TOP CHINESE FUND MANAGER BREAKS GROUND BY LAUNCHING A FUND IN LONDON

Harvest Fund Management, one of China's largest managers, signalled progress of Chinese asset management towards international standards by establishing a fund targeted to European investors.

FUND WITH NO ASSETS GETS A BLANK CHEQUE FOR \$1bn

Investors have contributed a huge amount of money to a special purpose acquisition vehicle (SPAC). Although they had no foreknowledge of what the shell company might acquire as its holdings, they had good reason to step into the unknown. Several other SPACs are in the pipeline with a resurrection of interest in this sector.

NEW TYPES OF FUNDS WITH UNUSUAL AND INNOVATIVE FEATURES

Mainstream active asset managers have been getting a lot of stick but there is still room for funds with new ideas to gain acceptance and proliferate.

FUND MANAGERS OF THE FUTURE

The Standard Life Aberdeen and Janus Henderson mergers have indicated bad times for the fund sector but a few are steaming ahead and look like strong candidates to reach the very top ranks in the next decade or so.

PRIVATE FUNDING WANTED WORLDWIDE FOR INFRASTRUCTURE

Though the need for private sector involvement is undisputed, the terms available and acceptable to the sector needs to be identified by the authorities.

GREEN BONDS KEEP GROWING DESPITE PROBLEMS OF DEFINITION

The issuance of green bonds is expected to hit a new record this year. What qualifies as 'green' is still not universally agreed, creating greenwash risk. However, safeguards against exploitation of the label are multiplying.

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INSIDE THIS ISSUE

The case for post-Brexit shared EU/UK regulation	59
The perfect storm – navigating the sustainable energy transition	60
Are profit-based incentives compatible with a risk culture?	67

Storms across the world of finance?

This issue of *Review of Financial Markets* spans much of the world, from London to Sydney. Anthony Belchambers, one of the most balanced City voices in the quest for a worthwhile Brexit, starts us off with a consideration of regulatory equivalence as a basis for UK access to the EU markets – and vice versa.

Then we turn our attention to the world of sustainable energy, and its impact on the great resource-rich nations of the world. Our guides here are Kairat Kelimbetov, Governor of the Astana International Financial Centre in Kazakhstan (and former governor of that huge Eurasian country's central bank); and Professor Alexander Van de Putte from one of Europe's very top business schools, IESE in Barcelona. Last but far from least, Professor Elizabeth Sheedy and colleagues from Macquarie University in Australia shed light on a fascinating experiment on incentives and risk culture.

For background on our contributors, and to give your own view and join the conversation, please visit cisi.org/rfmq417. And as ever, any comments and contributions are most welcome; do get in touch.

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THE CASE FOR POST-BREXIT SHARED EU/UK REGULATION

Anthony Belchambers, Chairman of the Legatum Financial Services Forum
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Back in January, in her "no bits of membership" speech, Britain's Prime Minister rejected the notion of UK membership of the single market on the basis that, while a "passport" would have maximised continued UK access to the EU market, the conditions of membership were politically unacceptable. The only option now is for the UK to negotiate access based on continuing regulatory equivalence with the EU – either as part of a pre-Brexit tailored agreement or in the context of post-Brexit third country mutual recognition.

Whether the UK has regulatory equivalence with the EU is not in question. Under the European Securities and Markets Authority's (ESMA's) own definition, it clearly has. As an EU member state, it is more equivalent than any other third country and – as envisaged in the EU (Withdrawal) Bill – that will continue post Brexit.

Indeed, some believe that equivalence could be extended to provide the same 'passporting' rights as if the UK were still in the EU. Unfortunately, not all business lines are covered by equivalence and, even if they were, 'having cake and eating it' is not a negotiating option, otherwise half the member states could be serving their own Article 50 notices! Others believe their particular business lines do not need any bestowed rights of

EU access, in some cases, relying on characteristic performance or reverse solicitation. However, both these alternatives carry real legal risks and the EU may well close off what it perceives to be post-Brexit regulatory 'loopholes'.

The fact is, absent any special arrangements, access based on equivalence is likely to be less reliable and narrower in scope than passported access. The Commission intends to make the process of measuring and monitoring equivalence more robust, but it has to be seen whether that will make it more reliable or more restrictive.

One real option for strengthening equivalence could be shared regulation. International compliance with the G20 objectives, the Basel prudential requirements and the International Organization of Securities Commissions' (IOSCO's) conduct and market standards may have significantly reduced regulatory differentiation; strengthened Memorandums of Understanding have improved information flows between regulators; and globalisation is clearly forcing the pace on cooperation. As against that, IOSCO's Task force on cross-border regulation (FR23/2015)¹ finds that regulators lack the confidence to delegate their regulatory and supervisory responsibilities to their counterparts. Even if that were not the case, the IOSCO standards lack the detail to provide, in themselves, a basis for equivalence sufficient to enable regulators to safely outsource their regulatory responsibilities.

What does shared regulation mean?

Share regulation would include inter alia retaining regulatory colleges in the case of market infrastructures and systemically important institutions; enhancing information-sharing gateways; enlarging cooperation protocols; facilitating shared supervision; and collaborating more closely on regulatory policy. The underlying issue for the UK is how much cross-border cooperation could be demanded and how much may be conceded. Sharing regulation in this way will be to the advantage of both the EU and the UK (and to wider Europe) in that it should:

- (a) reduce compliance complexity for firms and enhance/clarify investor protection rules for customers when carrying on EU/UK cross-border business
- (b) reduce the risk – and therefore political concerns – regarding possible anti-competitive consequences in facilitating inward access
- (c) strengthen confidence in regulatory 'equivalence' as a basis for access and reduce concerns over the importation of foreign-sourced systemic and investor risk
- (d) facilitate efficiency by reducing concerns over the outsourcing of key functions instead of requiring their duplication.

All this may call for a new consensual, pan-European 'IOSCO', ie, without the rule-making mandate of ESMA to, for example:

- strengthen and future-proof EU/UK equivalence, eg, by providing a mechanism for early notification and discussion of rules changes in advance of notification
- approximate standards in market regulation to the point where CMU for the EU27 could (possibly!) be extended to non-EU European countries, including a post-Brexit UK, and so enlarge the pool of market liquidity and the sources of capital and investment
- ensure the even-handed pan-European implementation of international standards
- facilitate multi-regulatory information sharing
- provide an independent mechanism for dispute resolution for pan-European regulatory issues.

CONTINUED ON PAGE 70

1. <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD507.pdf>

THE PERFECT STORM – NAVIGATING THE SUSTAINABLE ENERGY TRANSITION

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INTRODUCTION

The Petroleum Age, the era dominated by petroleum and other fossil fuels, has driven economic growth initially in Organisation for Economic Co-operation and Development (OECD) countries and increasingly in emerging markets, resulting in a commodities supercycle. Global climate change, slower economic growth globally and in China, an acceleration in the deployment of renewable energy technologies, and resulting persistent lower oil prices, put natural resource-rich countries at a significant disadvantage compared to countries with a well-diversified economy.

Since April 2014, oil prices have come down from levels above \$100 per barrel and have stayed at roughly half that price. Now that oil prices are low, and will likely stay low, the question has become: How can these countries achieve sustainable development?

Most oil-rich countries have built their economic model on extracting and depleting natural capital to grow financial capital, without much attention to the other types of capital. Environmentalists tend to consider only natural capital, while economists tend to focus only on financial capital, and social scientists tend to focus on social capital and reducing inequality. These unidimensional approaches to economic development do not work. Instead, a comprehensive approach to sustainable development is needed. Sustainable development is concerned with balancing and growing or maintaining all five types of capital – financial, natural, manufactured, social and human.

Although oil-rich countries will continue to depend on natural resources for the next few decades, they need to create the foundations to develop sustainable economies that are not dependent on natural resources. Here, we lay out a four-pronged strategy about how this can be achieved, now that the energy transition away from oil is already underway.

THE ENERGY TRANSITION AWAY FROM OIL IS ALREADY UNDERWAY

Something which ten years ago would not have been considered plausible is actually happening, and the conventional wisdom is moving away from a world of resource scarcity to a world of peak demand for oil and one that is increasingly driven by natural gas and by renewable energy. Not the end, but the gradual decline of the oil era is fast approaching.

The commodities supercycle has ended, and is unlikely to return.

Although oil wells had been drilled in China during the 4th century, the Modern Petroleum Age, the era dominated by petroleum and other fossil fuels, began with the first modern-day oil well drilled in Baku, Azerbaijan in 1846. Colonel Drake in Pennsylvania, on the other hand, drilled the first commercial oil well in 1859 using a steam engine. Drake

1. <http://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>
 2. <https://www.eia.gov/tools/faqs>
 3. An oil barrel contains 42 US gallons or 159 litres.

was under contract by the Seneca Oil Company whose oil products were initially used for kerosene and oil lamps. Large petroleum discoveries in Sumatra, Persia, Peru and Mexico, combined with the 1908 launch of the Ford Model T, the first mass produced car by Ford Motor Company, dramatically accelerated the demand for oil and oil products.

Rebuilding Europe following World War II, followed by an acceleration in trade, eventually led to globalisation that resulted in rapid economic growth and the shift in economic gravity from west to east. This led to a commodities supercycle, primarily driven by China and other BRICS (Brazil; Russia; India; China; South Africa) countries.

Today, the top three oil producing countries are the US, Saudi Arabia, and the Russian Federation, each producing more than 10 million barrels per day (mmbd). The other oil producing countries produce less than 5 mmbd, less than half of the three production leaders. Only since 2013 has the US joined the ‘club of 10 mmbd’ and this is primarily because of the shale revolution. Iran’s oil production, currently at 3.9 mmbd, is likely to increase given that sanctions have been lifted and Iraq, despite the ongoing instability in the country, has been able to increase oil production from 2 to 4 mmbd since 1996 (Table 1). As a result, it is unlikely that we will see a shortage of oil in oil markets any time soon.

Table 1: Top ten oil producing and consuming countries, 2015 (mmbd)¹

Producing countries		Consuming countries	
Country	Production	Country	Consumption
US	12.7	US	19.4
Saudi Arabia	12.0	China	12.0
Russian Federation	11.0	India	4.2
Canada	4.4	Japan	4.2
China	4.3	Saudi Arabia	3.9
Iraq	4.0	Brazil	3.2
Iran	3.9	Russian Federation	3.1
Kuwait	3.1	South Korea	2.6
Venezuela	2.6	Germany	2.3
Brazil	2.5	Canada	2.3

Oil was historically considered to be the most versatile of fuels and is today consumed in a variety of ways, such as: 1) transportation fuels (kerosene for aviation, diesel and gasoline to power cars, and marine fuels for shipping); 2) fuel oils for electricity generation and heating; 3) feedstock for plastics and chemicals; and 4) asphalt, mainly for roads.² In 2015, global oil consumption exceeded for the first time 95 million barrels per day, or more than a thousand barrels per second.³

Until the 2008 global financial and economic crisis, China and the US were the growth engines of the world. For more than two decades, the Chinese economy grew at more than 10% in real terms, something that has been referred to as the ‘Chinese miracle’. This growth was driven by an export-led strategy and very rapid urbanisation towards the coastal cities, such as Shanghai, Hangzhou, and Shenzhen. Investment in urban cities, factories, and transport infrastructure led to a commodities boom or supercycle never seen in human history. However, since the global financial and economic crisis and the economic slowdown, especially in China, the demand for commodities and oil is growing more slowly. Several Chinese ghost cities have emerged as a result, with empty apartment blocks and manufacturing facilities, conservatively estimated to be the size of a large European city. While China was growing at double digits, India was growing at 5–6% during most of the 1990s and the early

part of the 21st century. It is only recently that the Indian economy has been growing at 7–8%. But even with India growing faster, it is unlikely that the world will see another commodities supercycle.

GLOBAL ACTION ON CLIMATE CHANGE AND ACCELERATION IN RENEWABLES DEPLOYMENT WILL LEAD TO PEAK DEMAND FOR OIL

A theory that is still used in the oil and gas sector, and by policy makers globally, is the 'Hubbert peak theory' developed by Dr MK Hubbert in 1956. He predicted that oil production of the US Lower 48 states – the contiguous US – would peak by the year 1970.⁴ This view challenged the consensus view that US oil production would continue to rise until at least the end of the century.⁵ Hubbert reasoned that since oil is an exhaustible resource, the rate of discovering new reserves would eventually reach a peak. Cumulative discoveries will therefore follow an S-shaped curve over time. Although the theory has its limitations, it proved to be initially very accurate for the US Lower 48 states as the initial peak year turned out to be 1970, the date predicted by Hubbert's theory.

Since the 1970s, the world has frantically looked at this, and given that natural resources are finite, it was deemed logical that this could also happen one day at the global level. The late Mathew Simmons, author of *Twilight in the desert*, fueled much fear during the late 1990s and early part of the 21st century with claims that the world was running out of oil before a viable alternative would be able to replace it.⁶ What Simmons and others did not include in their projections was that advances in technology (such as 4D seismic combined with big data analytics), ultra-deep-water exploration, the prospects to economically develop the Athabasca oil sands in Canada and in the Orinoco basin in Venezuela, and the emergence of hydraulic fracturing would change all that. As a result, the peak oil theory has now been debunked.

Another reason why the peak oil theory has fallen by the wayside is that energy transitions did not happen because of resource scarcity – wood fuel gave way to coal because of "energy density, ease of use and the rise of personal mobility," and coal gave way to oil because of "ease of use, versatility and universal appeal."⁷

Instead of peak oil, several organisations are starting to see another phenomenon. Royal Dutch Shell in its New Lens Scenarios (2013),⁸ OPEC in its World Oil Outlook (2016),⁹ and the World Energy Council (WEC) in its World Energy Scenarios (2016),¹⁰ see peak demand for oil happening within the next five to 15 years. What is driving the anticipated peak demand for oil? There are five factors to consider:

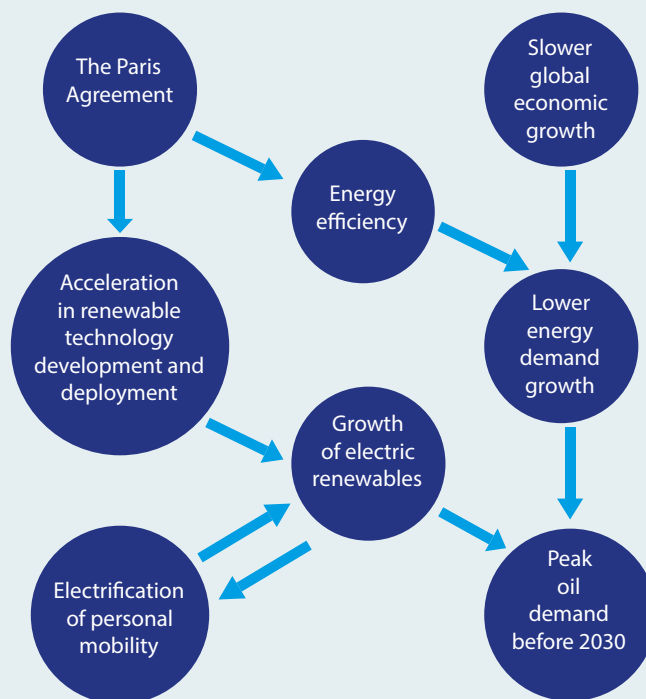
1. The first is sluggish global economic growth, especially since the 2008 global financial and economic crisis. World Bank data shows a gradual decline in global GDP growth from more than 5% during the 1960s, to less than 3% over the past 5 years.¹¹ GDP growth has also become more volatile and has proven to be highly vulnerable to exogenous shocks, such as the oil price shocks of 1973 and 1979, and the 2008 global financial and economic crisis. Slower and more volatile global economic growth translates directly into less demand for natural resources, including oil and oil products, even when we account for the shift in growth of oil demand from OECD to developing countries.

2. Second is the acceleration in technology development and deployment clock speed has become apparent, leading to a renewables 'revolution'.¹² This combined with lower costs, especially of solar, has translated into dramatic growth in electric renewables.
3. Third is the unprecedented global climate deal following the Paris Agreement. The Paris Agreement, which came into effect on November 4, 2016, provides a framework to reduce carbon emissions globally and reduce our addiction to hydrocarbons.
4. Fourth is the expected electrification of the personal mobility sector, which will eat directly into the demand for oil.
5. Finally, the focus on energy efficiency, such as better insulation, smart devices that monitor energy use, and efficient lighting (such as light-emitting diodes or LEDs), also points to a coming peak in demand.

Three of these factors – growth of electric renewables, electrification of personal mobility, and energy efficiency – have now reached a point of no return, implying that demand for oil will likely peak over the next five to 15 years, providing little time for oil-exporting countries to diversify their economies and capture value-added (instead of exporting) commodities.

Figure 1 provides a simple systems diagram illustrating the non-linear relationships between these five factors, ultimately leading to peak oil demand. While other scenarios are possible, it is striking that several organisations independently arrived at a similar outcome.

Figure 1: Simple systems diagram leading to peak oil demand



4. MK Hubbert, 'Nuclear energy and the fossil fuels,' Shell Development Company, Publication No. 95, 1956.

5. Jean Laherrère, 'Learn strengths, weaknesses to understand Hubbert curve,' *Oil & Gas Journal* 98: 63-76, 2000.

6. Matthew Simmons, *Twilight in the desert: the coming Saudi oil shock and the world economy*, Hoboken: John Wiley & Sons, 2005.

7. Subhes Bhattacharyya, *Energy economics: concepts, issues, markets and governance*. London: Springer, 2011.

8. <http://www.shell.com/energy-and-innovation/the-energy-future/scenarios.html>

9. http://www.opec.org/opec_web/en/publications/340.htm

10. <https://www.worldenergy.org/news-and-media/press-releases/world-energy-scenarios-2016-report-global-energy-demand-growth-set-to-fall/>

11. <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2015&start=1961&view=chart>

12. US Department of Energy, 'The future arrives for five clean energy technologies – 2016 update,' September 2016.

Peak demand does not imply that soon all primary energy will be derived from renewable sources, such as wind and solar. It implies that oil demand peaks during the next five to 15 years, followed by a gradual decline, and that wind and solar gain significant share over the next 40 to 50 years. Another factor that is often not considered when exploring the future of oil is that petroleum is used not only as a transportation fuel, but also as a feedstock for plastics and chemicals. To provide a viable alternative to oil, renewable biofuels will need to scale faster and breakthroughs in second-generation biofuels are needed. Today, all the oil majors have major investment programs and operations in first- and second-generation biofuels, because they see it as the logical evolution of their current business model – only the feedstock will be different.

MANY RESOURCE-RICH COUNTRIES HAVE FALLEN VICTIM TO THE RESOURCE CURSE AND STILL NEED TO EXPLORE THE CONCEPT OF SUSTAINABLE DEVELOPMENT

When economic rents come relatively easy because of the exploitation of natural resources, countries and their citizens often lack the desire to consider the long term and explore ways to diversify their economies, capture value-added, and distribute wealth evenly. This phenomenon is often referred to as the 'resource curse' and very few countries have been able to avoid it. Evidence shows that natural resource-dependent countries that have implemented a proper diversification strategy are able to grow faster, are less exposed to economic volatility, and have a proven track record of job creation compared to those countries that have not.

Most oil-rich countries are less diversified today than during the 1990s, resulting in reduced global competitiveness

Sachs and Warner (2001) conducted an extensive study covering a 20-year period from 1970 until 1989 to test whether the resource curse phenomenon is actually true. They found that during this period, economic growth in natural resource-dependent countries stagnated, implying that the natural resource curse holds.¹³ The driving forces behind the stagnation of economic growth are the result of ineffective local institutions, prevailing bureaucracy, and in some cases corruption.

To illustrate the challenges that natural resource-dependent countries face in avoiding the resource curse, consider the following example. In natural resource-dependent countries, governments levy taxes on the extraction industry, which they then use for public expenditures. In this context, taxes levied on the citizens are a small portion of the total government funds and, as a result, the citizens are less incentivised to

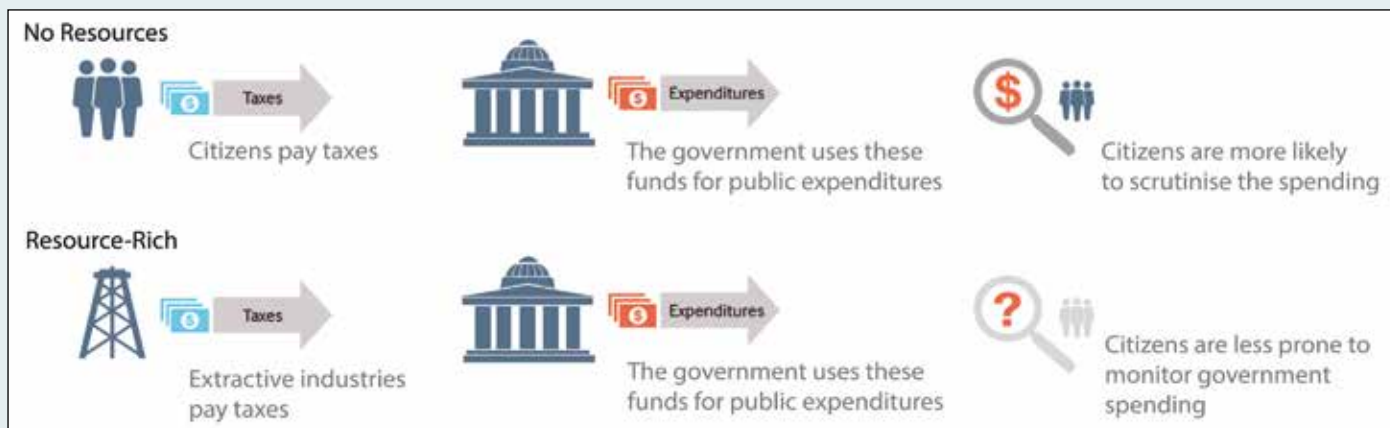
challenge government spending, potentially leading to the inefficient allocation of resources, or corruption. In a natural resource-poor country, on the other hand, an important share of government funds comes from the taxes paid by its citizens who are thus more likely to scrutinise government spending. Figure 2 contrasts citizens' incentives for oversight of government spending in natural resource-dependent and resource-poor countries.¹⁴

A related phenomenon is 'Dutch disease'. When the Netherlands discovered the Groningen natural gas field in 1959 and subsequently started developing the field to export natural gas to neighboring countries, they observed an important appreciation of the Dutch guilder, the national currency at the time. Although the Netherlands was already a diversified economy, the currency appreciation artificially increased the export price of Dutch agricultural and manufactured products, making them uncompetitive in international markets. The Netherlands could address the challenges related to Dutch disease, but it was a lengthy and painful process of readjustment. For natural resource-dependent countries, the Dutch disease phenomenon makes it even more difficult to diversify the economy away from natural resources and implement an export-led economy.

Infrastructure investment – roads, rail, ports, power and telecommunications – generally has a strong economic multiplier. The same applies to supply infrastructure – drilling rigs, pipelines, refineries, retail stations, and export terminals – needed to develop natural resources. However, natural resource-dependent countries tend to underinvest in all types of infrastructure and do not pay much attention to developing support services and local content. The insufficient investment in infrastructure and local content reduces a natural resource-dependent country's capacity to effectively compete and many countries find themselves in a poverty trap.

The Observatory of Economic Complexity at the Massachusetts Institute of Technology media lab measures a country's economic complexity. A higher economic complexity score implies a higher degree of multiplicity of know-how encapsulated in the economy of a country. The resulting Economic Complexity Indicator (ECI) measures the degree of complexity and variety of goods produced in each country. ECI measures the degree of diversification of a country's economy and how complex its export products are.¹⁵ Table 2 provides a summary of the economic complexity of several natural resource-rich countries. Note that the US is among the largest oil producers in the world yet it is not considered a natural resource-dependent country given the diversity and dynamics of its economy.

Figure 2: Oversight incentives of government spending in natural resource-dependent and resource-poor countries
Source: Natural Resource Governance Institute (2015)



13. Jeffrey Sachs and Andrew Warner, 'The curse of natural resources,' *European Economic Review* 45(4-6):827-838, 2001.
 14. Natural Resource Governance Institute, 'The resource curse,' NRG Reader, March 2015.
 15. <http://atlas.cid.harvard.edu/about/glossary>

Among the natural resource-dependent countries, only Norway ranks among the top 20 (out of 141) in terms of economic complexity, with Mexico, Canada, Malaysia, and Saudi Arabia scoring relatively well. In other words, natural resource-poor countries take the top 19 positions. The five countries with the highest ECI are: Japan (2.30), Switzerland (2.14), Germany (2.09), Sweden (1.85), and the United States (1.83) claiming the top spots.

Table 2: Economic complexity of selected natural resource-dependent countries in 2015¹⁶

Country	Rank	ECI	Country	Rank	ECI
Mexico	21	1.20	Kazakhstan	48	0.40
Canada	22	1.18	India	49	0.39
Malaysia	23	1.15	Colombia	57	0.28
Russia	26	1.08	Australia	58	0.29
Qatar	28	0.89	Chile	60	0.23
Saudi Arabia	29	0.88	UAE	60	0.22
Brazil	34	0.73	Oman	63	0.16
Kuwait	45	0.51	Algeria	98	-0.65
South Africa	46	0.45	Nigeria	140	-2.07

The McKinsey Global Institute's study, *Reverse the curse: maximising the potential of resource-driven economies*, plotted the world's natural resource-dependent countries based on the compounded annual growth rate of per capita GDP against per capita GDP, and the results are startling (Figure 3). Based on data from 2011, and before the oil price decline, only 5% of the 58 countries assessed have both a compounded annual growth rate higher than the 2.5% average, and a GDP per capita higher than the \$10,900 average, while 77% have below average GDP levels, implying that most natural resource-dependent countries are stuck in the middle.¹⁷

But not all prosperous countries have a high ECI. Qatar is a good example. Although Qatar has amongst the highest GDPs per capita in the world, it ranks 60th in the world based on ECI and behind Mexico, Brazil, Kazakhstan, and Colombia. There are several reasons to explain this apparent discrepancy: 1) Qatar has some of the largest natural gas reserves in the world and is the largest liquefied natural gas (LNG) exporter, 2) Qatar has a very small population of about 2.2 million, and 3) its economy is too dependent on a single commodity. The key question is how Qatar will be able to turn resource rents into long-term prosperity given that its economy is overly dependent on the export of a single finite natural resource.

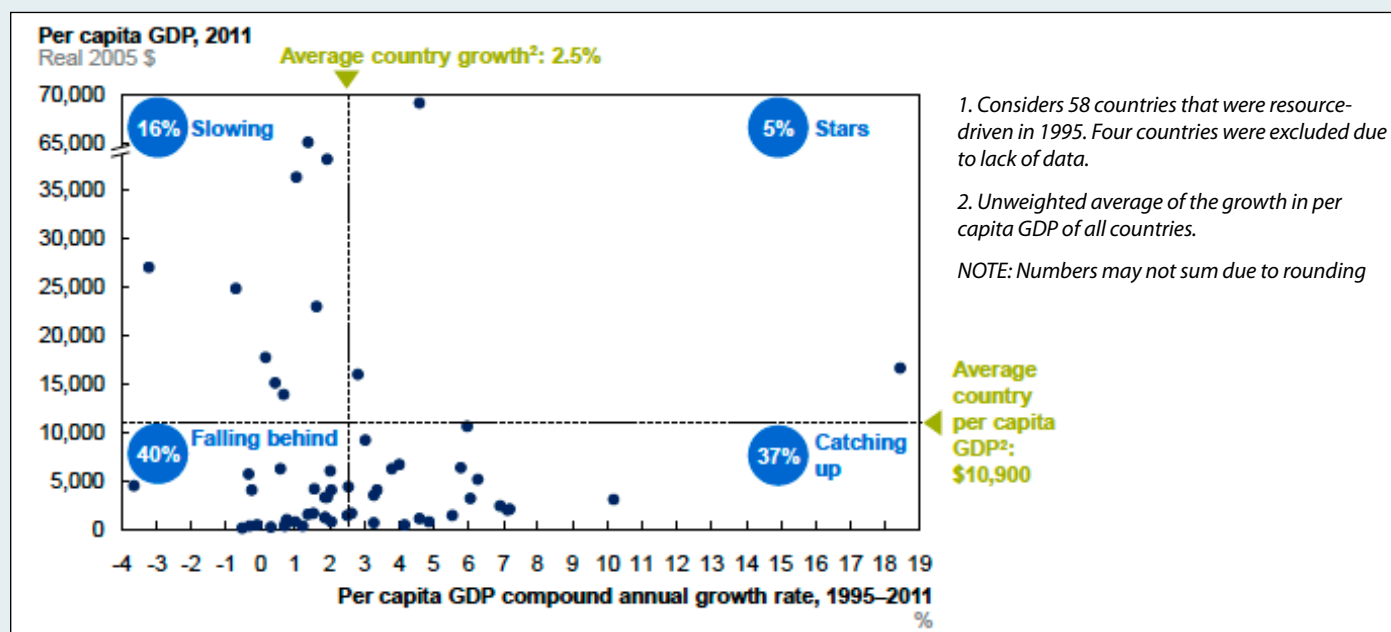
Economic complexity (and not GDP per capita) as a predictive tool for economic growth tends to indicate that natural resource-rich countries will grow slower compared to the global average, making it difficult to avoid the resource curse.

THE HIGH FIXED COST OF DEVELOPING NATURAL RESOURCES AND LACK OF ECONOMIC DIVERSIFICATION HAS RESULTED IN INTRINSICALLY HIGH VOLATILITY

As discussed, most resource-dependent countries have not been able to benefit economically from monetising natural resources, and they tend to share three characteristics: 1) a per capita income below the global average, 2) growth slower than the global average, and 3) more volatile growth.

To illustrate how resource dependency amplifies the volatility of growth, consider four resource-dependent countries: Iraq; Kazakhstan; Nigeria; and Saudi Arabia. In 2013, the average oil price reached \$96 per barrel, while two years later, in 2015, it averaged \$45 per barrel or a 53% reduction in the oil price. In 2013, given the high oil price, the real growth rate in all these countries was high, but after the halving of the oil price, real GDP growth in these countries was significantly reduced. Table 3 overleaf shows that a 53% reduction in the oil price led to a 68% reduction in GDP growth for Iraq, a 79% reduction for Kazakhstan, a 69% reduction for Nigeria, and a 65% reduction for Saudi Arabia.

Figure 3: Economic performance of resource-dependent countries, 2011. Source: McKinsey Global Institute



16. <http://atlas.media.mit.edu/en/rankings/country>

17. McKinsey Global Institute, *Reverse the curse: Maximising the potential of resource-driven economies*, December 2013.

Table 3: Volatility of growth following an oil price collapse¹⁸

Country	2013 GDP growth (%)	2015 GDP growth (%)	2013–2015 GDP reduction (%)
Iraq	6.6	2.1	68%
Kazakhstan	5.8	1.2	79%
Nigeria	11.8	3.6	69%
Saudi Arabia	10.0	3.5	65%

Although there may be other factors that have played a role in the sharp decrease of the real GDP growth of these four resource-dependent countries, such as lower demand for oil, it is clear that the consequences of a change in an exogenous factor have a multiplicative impact on economic growth.

What adds to the volatility is that international oil companies (IOCs) and national oil companies (NOCs) alike will tend to delay investment in exploration and production during periods of low oil prices. And when expectations about an albeit modest oil price increase emerged following, for example, the November 2016 OPEC production cut, the IOCs restarted exploration activity and the shale producers scaled up production. Exploration and shale production have become the two levers for IOCs to manage costs and future production depending on the oil price, which further increases oil price volatility and the volatility of economic growth of resource-dependent countries.

To manage volatility, the governments of several countries, including Azerbaijan, Chile, Kazakhstan, Russia, Saudi Arabia, Turkmenistan, and the United Arab Emirates, have used stabilisation funds to help them offset cyclical fluctuations. Although stabilisation funds have helped to smooth government spending in the short term, they have not been able to offset the fluctuations in economic output.

It is important to keep in mind that these stabilisation funds are not a solution. Instead, they provide further incentives for natural resource-rich countries to focus on the short term, instead of developing tangible sustainable development solutions, such as exploring ways to diversify their economies, capture value-added, and distribute wealth evenly. At best, stabilisation funds allow natural resource-rich countries to buy time for their diversification strategies to work.

As has been discussed, natural resource-dependent countries also tend to have low economic complexity and need to import value-added products, such as cars, delivery trucks, appliances, planes, pharmaceutical

products, and even food. Because of the dependence on oil exports, value-added goods imports, and social welfare programs, these days the fiscal break-even prices of oil-exporting countries are above the current oil price¹⁹ and despite spending cuts in many oil-exporting countries, fiscal challenges remain. Since the sharp oil price decline, OPEC countries have lost over \$2tn in revenues and investments, and many countries are tapping into their sovereign wealth funds, stabilisation funds, and foreign-exchange reserves at central banks to continue to finance welfare programs and support energy subsidies. For example, Saudi Arabia's foreign reserves shrunk by 16% to \$555m during the September 2015 to August 2016 period, and this despite a recent reduction in welfare spending and modest energy subsidy reforms. Saudi Arabia is, generally speaking, in a better position than other natural resource-dependent countries to reverse the curse and this is primarily for three reasons: 1) Saudi Arabia already has a relatively high ECI, indicating that its export basket is quite diverse and not fully dependent on oil; 2) welfare and energy subsidies are relatively easy to reform; and 3) the country has one of the largest sovereign wealth funds in the world and it has started the partial (5%) flotation of Saudi Aramco, by far the world's largest oil company.

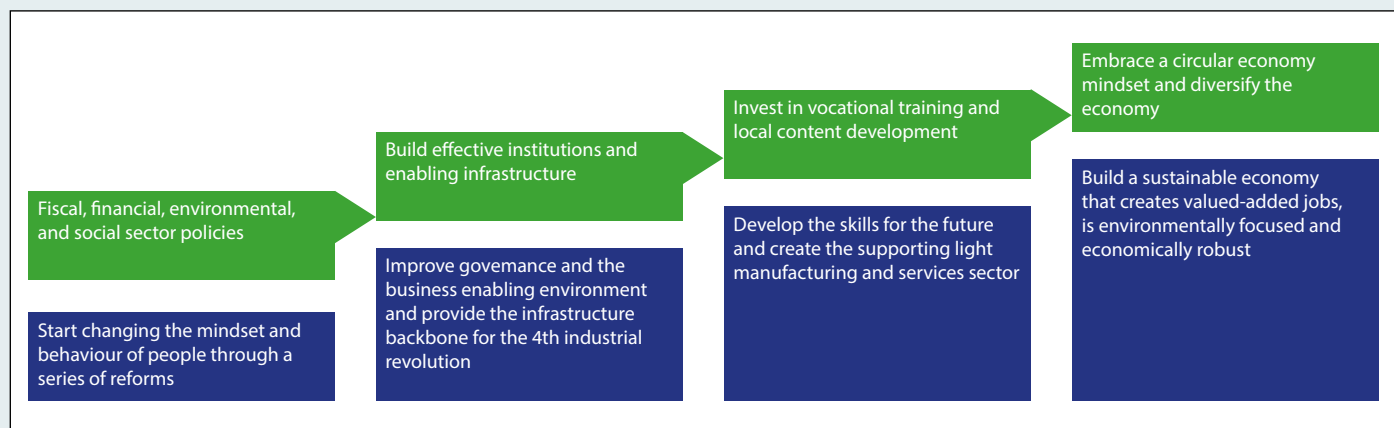
If Saudi Arabia can address these issues, its economy will become much more competitive and resilient to external shocks. It will also set the benchmark for other natural resource-dependent countries to follow.

RESOURCE-RICH COUNTRIES NEED TO EXPLORE AN ALTERNATIVE AND MORE SUSTAINABLE DEVELOPMENT MODEL

Historical attempts to diversify the economies of oil-rich countries have, apart from a few exceptions such as Norway, typically not worked. Economists argue that resource-rich countries are different and that they will continue to be more extractive and tend to suggest implementing fiscal reforms and managing volatility as an alternative to economic diversification. Unfortunately for natural resource-rich countries, the current realities are fundamentally different and continuing to rely on short-term and unbalanced solutions would be irresponsible and will not lead to balanced sustainable development. While fiscal reforms and volatility management are needed, this will not lead to long-term sustainable development, but merely provide a short-term patch without addressing the pressing issues needed to balance and grow or maintain all five capitals.

This final section provides a four-pronged strategy to develop sustainable well-balanced economies that depend less and less on natural resources.

Figure 4: A four-pronged sustainable diversification strategy for natural resource-rich countries



18. <http://data.worldbank.org>

19. <https://knoema.com/esilckb/imf-fiscal-breakeven-oil-price-forecasts?country=Saudi20Arabia>

A SPECTRUM OF MONETARY, FISCAL, FINANCIAL, ENVIRONMENTAL, AND SOCIAL SECTOR POLICIES REQUIRES PRIORITY

Now that the energy transition away from oil is already underway, which is resulting in sustained low oil prices, it is creating both problems and possibilities for policy makers in oil-dependent countries. There are some immediate measures that governments can take that span the spectrum of monetary, fiscal, financial, environmental, and social sector policies. The most important are fuel subsidies, energy taxes, financial spillovers, and macroeconomic frameworks.²⁰

Reducing fuel subsidies: During the boom years, resource-dependent countries enjoyed periods of high government income which was spent on generous welfare programs and energy subsidies. According to the International Energy Agency (IEA), the global value of fossil fuel subsidies amounted to \$493 billion in 2014²¹ and almost half of the public expenditures on energy subsidies are by governments in the Middle East and North Africa. A large part of these subsidies goes to the non-poor. It is estimated that 15% of this spending goes to the bottom 40% while the richest 40% corner over 70% of the subsidies.

The price decline presents a rare opportunity to reduce fuel subsidies that have been documented to be costly, distortionary, and environmentally irresponsible. There have been some encouraging developments, as when Indonesia, Iran, and Malaysia implemented reductions in fuel subsidies in 2013 and 2014.

Taxing energy use: The coincidence of low oil prices and high unemployment rates creates a favorable climate for shifting the tax burden from labour and savings to energy and consumption. So far, the picture is mixed. Some countries are taking advantage of low international prices to raise domestic prices. Kuwait plans to triple both diesel and kerosene prices, for instance. Lower fuel prices provide benefits to consumers but, unless accompanied by other policies, will inevitably weaken incentives to invest in energy efficiency and clean energy.

While building short-term resilience, policy makers should stay focused on longer-term realities. To do this, they can:

- Move to market-based pricing, rational taxation of fuels, and institute mechanisms for automatic price adjustments when oil prices change.
- Prepare for volatile fuel prices by strengthening social safety nets.
- Continue to pursue renewable energy policy targets.
- Support improvements in energy efficiency, the cheapest and most readily available source of energy.

Limiting financial spillovers: Low oil prices hurt the financial sector of oil exporters through standard macro channels. Persistently low oil prices will decrease consumption, investment, and external balances as balance sheets and income positions deteriorate. This reduces both the capacity and resilience of the financial sector, leading to poor lending practices and weakening asset prices, thereby creating a vicious economic cycle. For example:

- In Malaysia, asset quality and earnings in banks with loan portfolios concentrated in the energy value chain have weakened, reducing liquidity and funding for exposed banks and corporations.

- In Russia, the loss of fiscal capacity and creditworthiness has weakened economic prospects, deteriorating export earnings and possible capital outflows.
- In Nigeria and Russia, higher policy rates may be necessary to stem outflows and defend the currency, which would lead to interest rate risks.
- In neighboring countries, there are cross-border spillovers from commodity price declines and evaporating 'petro-dollars', affecting the emerging market asset class.

Other sectors also experience spillovers. Recent work points to the indirect impacts of fiscal and currency risks and exposures to energy-sensitive sectors such as agriculture, construction, and transport.

Recalibrating macroeconomic policy frameworks: The fall in inflation expectations in high-income countries and oil prices globally will affect monetary policy in developing economies. The traditional view is that central banks need not react to temporary price shocks that do not affect core inflation. But the disinflationary tendencies in many countries may make it essential for policy makers to balance the immediate effect of oil price fluctuations with expansionary monetary policies. Since June 2014, for example, the US Federal Reserve has signaled that it would not adjust policies to counter what it assesses to be a temporary drop in inflation. In the Euro Area and Japan, where it is feared that falling prices may alter inflationary expectations, central banks have loosened policy since mid-2014. Central banks in developing countries with low inflation rates may need to do the same.²²

In some large oil-importing developing countries, the combined effect of declining current account deficits and inflation moving back in line with policy targets has allowed several central banks to cut interest rates. In oil-exporting countries, however, policy considerations are different. Monetary authorities have been trying to balance the need for growth against the need to stabilise inflation and investor confidence in the face of pressures on their currencies. While orderly exchange rate depreciations can help oil exporters adjust to adverse terms of trade shocks and limit the decline in demand, unruly movements will strain balance sheets and could lead to a toxic combination of inflation and recession.

Many oil exporters such as Russia have run large non-oil fiscal deficits, and they should adjust spending to prepare for the energy transition away from oil. Even countries with low debt and sizeable stabilisation funds should start gradually adjusting their fiscal frameworks to avoid eroding these buffers. Simulations suggest also that Angola, Ecuador, Ghana, Kazakhstan, and Nigeria are vulnerable because of the magnitude of the shock and the size of their fiscal buffers.

These measures, while important, are not enough to help natural resource-rich countries to achieve sustainable development.

NATURAL RESOURCE-RICH COUNTRIES NEED TO BUILD EFFECTIVE INSTITUTIONS AND AN ENABLING INFRASTRUCTURE

The World Bank, the McKinsey Global Institute, and the Boston Consulting Group²³ argue that in addition to the absence of a proper diversification strategy, one of the key reasons why natural resource-dependent countries have so far underperformed compared to those without

20. This sub-section was written by Indermit Gill and Dean Storelli of the Duke Center for International Development at the Sanford School of Public Policy at Duke University and updates the analysis in 'The economic consequences of cheaper oil' paper prepared for the IMF-World Bank Development Committee, Indermit Gill et. al., March 2015.

21. <http://www.iea.org/weo/>

22. John Baffes, M. Ayhan Kose, Franziska Ohnsorge, and Marc Stocker, 'The great plunge in oil prices: Causes, consequences, and policy responses,' Policy Research Note PRN/15/01, World Bank Group, 2015. <http://pubdocs.worldbank.org/en/339801451407117632/PRN01Mar2015OilPrices.pdf>

23. <https://www.bcg.com/pl-pl/expertise/industries/public-sector/alexandre-gorito-diversifying-for-quality-growth-in-oil-rich-countries.aspx>

significant resources is due to their institutional foundations. These include ineffective governance, a lack of openness and accountability, and weak rule of law that often impede the transition to sustainable growth. Institution building and effective governance of the resources sector is based on two key pillars:²⁴

- **A stable regulatory regime with clear rules and clear roles for private sector participants:** The oil and gas sector is prone to external discontinuities, making it a risky business. A stable regulatory regime with clear rules could help reduce the underlying uncertainty of the business and improve a country's FDI attractiveness. Publicly traded companies hate uncertainty and will allocate resources to those markets with the clearest and most transparent rules.
- **Exposure to competition:** This is often lacking in natural resource-rich countries because of the various barriers that exist for foreign companies to conduct business in these markets. However, a study covering two million companies conducted by Burke and Hussels (2013) shows that exposure to competition, especially during its early years, helps improve a startup's survival prospects.²⁵ SMEs in natural resource-rich countries could thus benefit from exposure to especially foreign competition, making them more competitive and further helping to develop local content. Over time, as has been the case with Norwegian SMEs supporting the oil and gas sector, they in turn will start competing for business abroad. For example, Aker Solutions, a Norwegian oil and gas services company, is active in the US Gulf of Mexico, which is often considered to be the most competitive environment in the world.

In addition to building effective institutions, natural resource-rich countries should invest in infrastructure, which has a high economic multiplier and is a key enabler for sustainable economic development.²⁶ Here, a distinction needs to be made between physical and digital infrastructure. Physical infrastructure relates to the oil and gas supply infrastructure: the ports, road and rail networks that provide the foundation for industrial development and economic diversification. The United Arab Emirates (UAE), for example, has invested extensively in seaports and airports, and related logistic services, making it one of the largest product and people transit hubs in the world. Digital infrastructure, on the other hand, refers to the advanced telecommunications infrastructure necessary to enable the transition to the Fourth Industrial Revolution. In 2016, both the Netherlands and South Korea launched a nationwide Internet of Things (IoT) network that will provide the critical backbone for driverless cars, additive manufacturing, robotics, artificial intelligence, advanced logistics services the global energy internet and digital trade. In the 2016 report *Digital globalisation: the new era of global flows*, McKinsey Global Institute shows the evolution of global trade since 2005, illustrating that digital trade is not only a reality but it also grows much faster than physical trade because it is much more scalable.²⁷

Every sector is going digital, including the natural resources sector. Without advanced digital technologies, such as shale wells, big data, and advanced seismic imaging, the shale revolution would not have become a reality in the US. BP, the British oil major, has partnered with GE to launch offshore digital technology to improve reliability, reduce costs and environmental impact of BP's oil and gas production operations.²⁸

INVESTMENT IN EDUCATION AND DEVELOPING LOCAL CONTENT ARE THE KEY BUILDING BLOCKS OF SUSTAINABLE DEVELOPMENT

Natural resource-rich countries are facing a more complex world, now that we are at the advent of the Fourth Industrial Revolution. Speed, agility, technology, and entrepreneurship – not resources – are of the essence to be successful in this next industrial revolution, and this applies to natural resource-rich countries as well.

As Bank of England economists Mauricio Armellini and Tim Pike put it: "Economists looking at previous industrial revolutions observe that none of these risks have transpired." By risks in this context, they mean disruption to companies, industries and countries that could make the way we currently do things obsolete in a short period of time. They add: "However, this possibility underestimates the very different nature of the technological advances currently in progress, in terms of their much broader industrial and occupation applications and their speed of diffusion."²⁹

Therefore, in addition to the physical and digital infrastructure discussed previously, natural resource-rich countries need to invest in technical and vocational education and training (TVET). Often, the focus of many governments is on university-level training, but most jobs do not require a university level education. Switzerland and especially Germany have built their economies based on what is often referred to as 'the dual system'. They argue that vocational skills are best learned under a training contract with a company, where apprentices combine formal training with practice within a company department/factory.³⁰ The skills learned at these vocational training schools are continuously updated based on what is needed in the marketplace. This has allowed German companies to stay at the forefront of industrial competitiveness. Technical and vocational skills are diverse and include welders, electricians, mechanics, accountants, laboratory technicians, computer programmers, dental hygienists, and commercial pilots. Boston Consulting Group (BCG) argues that TVET is one of the critical missing links in the economic development strategy of many countries, especially for natural resource-rich countries.

In addition, and equally important, the skills and SMEs needed to make the extractive industries more sustainable are also needed in other sectors and are critical to diversify the economy away from a dependence on natural resources. For example, big data centre employees are also needed in the pharmaceutical sector, for advanced logistics services, and in the automotive and telecommunications sectors. Similarly, oil and gas laboratory technicians can easily be retrained to occupy similar positions in biotechnology and hospital laboratories. There are many potential skill synergies yet to be harnessed.

Following the examples of Germany and the US, some other advanced economies are coming to realise the importance of investing in the development of a vibrant vocational talent pool which meets the needs of the future. The UK's largest reform effort of post-16 education since A-levels were introduced in 1951 brings more streamlined and technical qualifications (the so-called 'T-levels') to students in the UK. In March 2017, the UK's senior budget official announced significant new funding to train and 'upskill' British technical students through more rigorous training programs, with clearer qualifications³¹ (for both students and industry), to further enhance national productivity in a post-Brexit world.

24. See note 17.

25. Andrew Burke and Stephanie Hussels, "How competition strengthens start-ups," *Harvard Business Review*, 91(3): 24-25, 2013.

26. Indermit Gill, Ivailo Izvorski, Willem van Eeghen, and Donato de Rosa, *Diversified Development: Making the Most of Natural Resources in Eurasia*, Washington: The World Bank, 2014.

27. <http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/digital-globalization-the-new-era-of-global-flows>

28. <http://www.worldoil.com/news/2016/11/15/bp-and-ge-launch-offshore-digital-technology-designed-to-improve-reliability>

29. <https://www.bloomberg.com/news/articles/2017-03-01/economists-may-be-underestimating-how-fast-the-robots-are-coming>

30. <https://www.bmbf.de/en/the-german-vocational-training-system-2129.html>

31. British vocational education offers 15,000 technical education routes which under 'T-levels' would be pared down to focus on 15 key sectors.

EMBRACE A CIRCULAR ECONOMY MINDSET AND DIVERSIFY THE ECONOMY

With proper governance, an improved environment for doing business, proper physical and digital infrastructure, and a properly trained workforce, resource-rich countries will be well prepared to capture the upside, diversify the economy, and achieve sustainable development.

A circular economy (CE) is one that is restorative and regenerative by design and was popularised by the Ellen MacArthur Foundation and McKinsey & Company.³² According to McKinsey, the circular economy has the potential to create €1.8bn of incremental value in Europe by 2030.³³ In natural resource-rich countries, the potential (as a percentage of GDP) is much larger and estimated at up to 2% of incremental annual GDP growth.³⁴ This is because there are many opportunities to reduce, reuse and recycle waste in the extraction industries value chain by leveraging skills, enabling infrastructure and SMEs. The circular economy in natural resource-rich countries will create skills, jobs, maintain and improve or at least help maintain natural capital, and create financial capital that is not dependent on the volatility of the demand of natural resources.

The physical and digital infrastructure, technical/vocational skills, and SMEs created in the process are well positioned to capture not only value added across the natural resources value chain, but also to develop other product and service sectors that do not depend on natural resources.

32. <https://www.ellenmacarthurfoundation.org/circular-economy>

33. <http://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/europes-circular-economy-opportunity>

34. Estimate based on the Ellen MacArthur Foundation Circularity Indicators. <https://www.ellenmacarthurfoundation.org/programmes/insight/circularity-indicators>

CONCLUSION

Sustainable development is not solely concerned with managing economic volatility in the short term. The argument that oil-rich countries are 'different' and that as a result they should not focus on diversifying their economies is not only a short-term one, but also dangerous as it sends the wrong message to policy makers. This message does not lead to change and given the more complex world of which they are part, with 'permanent' low oil prices and the need to consider the planetary boundaries in which we all operate, this message leads to a vicious downward spiral one that is not sustainable from the perspective of any of the five types of capital. This is because the resultant policies lead to short-termism, boom-bust cycles, huge skill gaps among the population, rapid depletion of natural capital, high levels of unemployment, and high levels of inequality. Finally, the resulting policies are not aligned with the objectives of the SDGs and the 2016 Paris Agreement, which both emphasize the need to balance and grow or maintain all five capital stocks simultaneously, nor are they aligned with the realities of the Fourth Industrial Revolution.

Instead of focusing on short-term and unidimensional measures, we provide here what we believe is a compelling argument why oil-rich countries need to aggressively pursue an economic diversification strategy based on a four-pronged strategy. Those that fail to act now will eventually have to face the consequences of declining prosperity and civil unrest.

ARE PROFIT-BASED INCENTIVES COMPATIBLE WITH A RISK CULTURE?

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This paper provides a summary of research conducted in early 2017. A more detailed paper with full statistical analysis, sample details and reference list can be obtained by contacting Elizabeth Sheedy. Connect with the authors to receive ongoing research updates.

SUMMARY AND RECOMMENDATIONS

Our study is focused on compliance with risk policy – the minimum standard required of finance professionals.



1. Risk culture is an important determinant of compliance behaviour, which is in turn affected by incentives and the behaviour of managers/co-workers. When managers/co-workers are profit-focused, and when incentives are linked to profits, rates of compliance fall. The effect is felt via risk culture.
2. Profit-based incentives are often used in financial services to encourage effort and boost profits. In our study, profit-based incentives did not significantly boost the number of profitable investments. Given the significant adverse impact on compliance noted above, the study supports the elimination of profit-based incentives currently being debated within the financial services industry.
3. When we reduced the burden of calculations on participants, we noticed an increase in compliance with risk policy – probably because people are less able to resist the temptation to breach policy when they are tired. This suggests that to increase risk compliance, the sector should take better account of cognitive load, ie, automate analysis where possible and design work patterns in such a way that staff are not unduly depleted when making crucial decisions.
4. Personal attitudes to risk management/compliance are a significant determinant of compliance behaviour. This finding has implications for the screening of job candidates, such as considering candidates' attitudes towards risk management in recruitment/promotion decisions.
5. Workers from the superannuation sector were less likely than others in financial services to comply with risk policy. This finding should be treated with caution due to the small sample, but it warrants further investigation. If confirmed, it may mean that additional work is needed to improve risk culture in this sector.
6. The research project has demonstrated that 'culture' experiments can be usefully conducted in the lab. Subject to obtaining funding, we hope to extend the research to investigate how risk culture may be improved in financial institutions.

INTRODUCTION

In financial services, there is broad agreement that risk management is the responsibility of all staff, not just senior leaders and risk specialists. The first and primary risk management responsibility lies with those who trade securities and derivatives, manage assets, issue loans, advise clients, underwrite insurance and provide brokerage services. Their job is to take risk on behalf of their employer, subject to certain constraints or risk policies/limits.

For example, a proprietary trader or loan officer is allocated limits or boundaries constraining the amount and type of trades/loans (s)he can make. Financial advisers may be required to follow procedures designed to reduce the risk of selling products that are not well matched to customer needs, thus reducing the risk of future customer complaints, fines, legal consequences and reputational damage. All staff are expected to comply with policies designed to protect against cyber attack, such as not opening the attachments of suspect emails. While the importance of compliance with risk policy is clear, little is known about compliance behaviour, and how this interacts with culture and incentives.

THE EXPERIMENT

We designed an experimental study to mimic investment decisions taken by bank executives, eg, buying securities, granting loans, underwriting insurance. The participants had to do some simple analysis (with a calculator) and then decide whether to invest. During the one-hour lab session, they could invest in up to 60 transactions.

To reflect the industry context, the participants were given a risk policy/limit to follow. The risk policy/limit was set in terms of the maximum allowable loss on the transaction; so very risky investments (as defined by the risk limit) were forbidden, even if highly profitable. Of the 60 transactions, 20 exceeded the risk limit. Participants could choose whether to comply or not, but they knew they would be penalised if they were caught investing in non-compliant transactions. They were also informed that 20% of transactions would be checked for compliance.

With assistance from FINSIA (a professional membership body), we recruited finance professionals to participate in this study. We provided cash payments to participants immediately following the experiment, depending on their decisions. In the fixed payment groups, participants received \$120, less any penalties for non-compliance. In the incentive payment groups, participants received a 'commission' based on the expected value of all investments made, less any non-compliance penalties. In all cases we guaranteed a minimum payment of \$50 for one-hour participation. Overall the maximum payment was \$193 and the average payment was \$115.

Table 1: Experiment groups

	No framing	Profit framing	Risk framing
Fixed payment (\$120) less any compliance penalties	1	3	Not included
Incentive payment based on the expected profits from investments, less any compliance penalties.	2	4 and 6	5

In recent years there has been a lot of discussion about the culture within financial institutions and how it might affect behaviour. By culture we mean the norms of behaviour – perceptions of what is expected. It is important to distinguish between what actually happens and policy statements: the 'is' versus the 'ought'. When new staff members join an organisation, they don't study the procedure manual to learn how to behave; instead they

learn from those around them. People look to the words and actions of managers and co-workers, especially when the team is under pressure to perform. Previous research suggests that staff discern the norms based on what gets rewarded, the words and actions of those they respect and admire in the workplace, what kind of behaviour builds status, the extent to which 'bad' behaviour is excused. All of this information creates a perception of the norm (culture) which then influences behaviour.

To mimic these influences in the laboratory we used two types of framing: profit-focused or risk-focused. Participants who were assigned to the culture treatments received a short paragraph of text and a picture at the beginning of the experiment. This was repeated at regular intervals.

Profit framing	Risk framing
In your workplace, compliance with risk policy seems to have a low priority compared with meeting profit targets. Non-compliance is common. Your manager rarely mentions the risk policy but talks often about the need to meet budget. She is always giving you motivational messages to encourage you to boost profits. You notice that colleagues who breach policy are excused if they are top performers.	In your workplace, non-compliance with risk policy is taken very seriously and is extremely rare. Breaches are not excused or tolerated, even if they produce high profits. Your manager is an excellent role model of risk management behaviour and talks frequently about the need to comply with risk policy, even when the team is behind on profit targets.
The risk policies are often criticised by staff because they can interfere with meeting profit targets. Risk managers have low status compared with people who have great profit figures.	It is clear from what colleagues do and say that compliance with risk policy is regarded as essential for the firm to survive and prosper. Risk managers are highly respected because they are seen as adding value to the organisation.

Example:

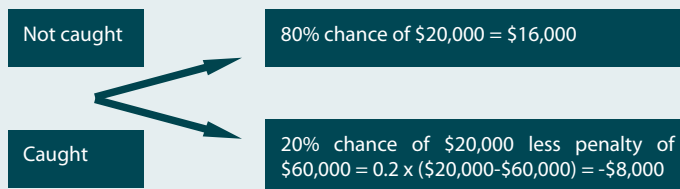
This example illustrates the treatments with incentive payments. The risk limit (for the loss amount) is \$200,000.



The investment has 60% chance to gain \$200,000 and 40% chance to lose \$250,000. So, the expected profits can be easily calculated: $60\% \times 200,000 - 40\% \times 250,000 = 20,000$

This investment violates risk policy (the loss amount of \$250,000 is more than the specified limit of \$200,000). If you invest, then total expected profits will increase by \$20,000. If you are caught (20% chance) then you will be penalised by $3 \times \$20,000$ or \$60,000.

So, the overall expected value on the deal: $\$16,000 - \$8,000 = \$8,000$



At the end of the experiment we asked participants to complete a short survey so we could understand and control for demographics and attitudes. We also asked them a crucial question about their perceptions:

Perception question:

In the experiment you just completed, several investments were outside of risk policy because the loss amount exceeded \$200,000.

In your opinion, what percentage of participants in the experiment would ALWAYS follow risk policy (ie, not invest if outside the risk policy)? (Enter X%)

The answer to this question is a good measure of workplace culture because it measures perceptions of workplace norms regarding compliance with risk policy. This captures very well what is meant by the term 'risk culture'.¹ We expected that this measure would predict how individuals behaved. In other words, people tend to behave in a way that they believe will be socially acceptable.

RESULTS

Comparing groups 1 and 2, we expected that group 2 (having profit-based incentives) would complete more transactions but would be less compliant with risk policy. As shown in Table 2 below, the proportion of people who always complied with risk policy decreased (from 68.6% to 42.3%) when incentives were introduced. Also, fewer 'bad deals' were rejected (78.4% of the bad deals vs 85.9%). The average number of total investments increased from 28.4 to 30.3 but this was not enough to be statistically significant. This is a bit surprising, especially since the whole point of incentives is to encourage staff to work harder and benefit shareholders. But it is consistent with a recent report² which finds that reducing profit-based incentives in the UK has not adversely affected business outcomes. It is also consistent with the possibility that

finance professionals are intrinsically motivated to work hard so pay-for-performance (outside motivation) is not essential.

In groups 3–6 we introduced other elements into the equation, ie, risk and profit framing. Remember that these are statements provided to participants with information about the behaviour of peers and managers.

We found that the profit framing had a powerful effect when combined with profit-based incentives. You can see this in Table 2 row (d). For Group 2 (incentives but no framing) the compliance rate per deal is 78.4%. When profit framing is combined with the incentives (Group 4) the compliance rate drops significantly to 63.7%. When risk framing is combined with the incentives (Group 5) the shift in the compliance rate to 82.9% is much smaller. The results suggest that the signals from managers/peers are most powerful in influencing behaviour when they are consistent with the incentive program.

The final row of Table 2 (row e) displays perceptions of compliance. We treat this as a measure of risk culture because it measures expectations of compliance (with risk policy) by participants – the extent to which people in this group believe that compliance is 'the norm'. Notice that the highest perceptions of compliance occurred in Group 1 (fixed payment and no framing). The lowest perceptions of compliance related to Groups 4 and 6 (incentive payment and profit framing). All the groups with incentive payments had perceptions of compliance below 70%; we can infer that a culture that values compliance is fundamentally inconsistent with profit-based incentives. In regression analysis (not reported here) we were able to demonstrate that the effect of incentives was felt through the channel of culture.

Comparing row (e) with row (c), notice that perceptions of compliance were always better than the reality (i.e. actual compliance in the lab)!

Finally, we decided to check whether the task of performing the calculations had any impact on the outcomes. Group 6 is a variation of

Table 2: Group analysis

	Group 1 Fixed payment, no framing	Group 2 Incentive payment, no framing	Group 3 Fixed payment, profit	Group 4 Incentive payment, profit framing	Group 5 Incentive payment, risk framing	Group 6 Incentive payment, profit framing, no calculations
a. Number of Participants	51	52	51	50	65	34
b. Average total investments per participant	28.4	30.3	31.0	32.3	30.5	41.2
c. Compliance rate by person. What proportion of people were fully compliant ie, never invested in any 'bad' deals?	68.6%	42.3%	60.8%	38.0%	55.4%	35.3%
d. Compliance rate by deal. Of the 'bad' deals considered, what proportion were rejected?	85.9%	78.4%	85.3%	63.7%	82.9%	72.7%
e. Perceptions of compliance. What proportion of people do you think would always comply with risk policy?	81.9%	65.0%	68.2%	57.3%	68.0%	45.4%

1. You could argue that risk culture also captures norms regarding other types of risk behaviour like speaking up, but compliance with risk policy is a crucial aspect of risk management behaviour and arguably the minimum standard for finance professionals.
2. Independent Review into Retail Banking Remuneration for the ABA conducted by Mercer. Remuneration Practices in the UK – Detailed Review, April 2017, p. 19. <http://retailbankingremreview.com.au/wp-content/uploads/2017/04/Independent-study-into-UK-rem-practice.pdf>

group 4 where participants were not required to calculate expected value; instead the expected value was given and participants had only to decide whether to invest. Not surprisingly, people in that group were able to enter into many more investments. What is particularly interesting is that compliance rates in this group were significantly improved. In row (d) we see the compliance rate jump from 63.7% (Group 4) to 72.7% (Group 6). This is consistent with previous research that has shown that people are better able to regulate themselves (resist temptation to cheat or break rules) when they are not tired or depleted. For example, people are much more likely to break a diet when they are tired.

Several people in groups 1–5 told us that they found the experiment quite tiring even though the calculations themselves were simple. This may have made them less able to resist the temptation to earn extra cash by breaching risk policy. Note the similarity with financial services workplaces where people are under time pressure to complete analysis or other tasks while simultaneously making compliance choices.

OTHER FINDINGS REGARDING COMPLIANCE BEHAVIOUR

Incentives (through risk culture) seem to influence compliance behaviour, but we also checked to see if other factors might be important. Characteristics of the individual (such as age, personality, attitudes) were considered, along with characteristics of the investment (expected profit, risk) and characteristics of the workplace

that each participant is drawn from. For example, if an individual works in an environment where compliance is not taken seriously, then this may have influenced his or her behaviour in the experiment.

Visit cisi.org/rfmq417 to see our table that lists several other influences on compliance behaviour. It shows that one of the few additional variables that explains risk behaviour is individual attitudes to risk management/compliance. We established that individual attitudes are not significantly linked to other variables such as age, gender, individual risk tolerance or workplace. We did find, however, that participants with South-East Asian ethnic background (14% of our sample) are more likely to have favourable attitudes to risk management/compliance.

The finding relating to workers from the superannuation industry (10% of our sample) is intriguing. The fact that this group is less likely to comply with risk policy may be consistent with concerns expressed by some³ that risk culture is less mature (or at least more variable) in the superannuation sector compared with other segments of financial services. We note that this finding should be treated with caution due to the small sample.



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3. APRA (2016) Risk Culture. <http://www.apra.gov.au/CrossIndustry/Documents/161018-Information-Paper-Risk-Culture.pdf> at p. 22.

THE CASE FOR POST-BREXIT SHARED EU/UK REGULATION – CONTINUED FROM PAGE 59

The advantages of shared regulation are self-evident, but there are also red lines! Shared regulation must not overturn the primacy and lead role of licencing authorities or become a back-door route to rule-taking. Equally, it must not restrict the UK from developing a more proportionate framework of regulation for domestic SMEs; or negotiating its own access/recognition arrangements in financial services with third countries.

Shared regulation could, for example, provide a workable interjurisdictional compromise to the controversial proposal of the European Central Bank (ECB) to restrict euroclearing to the eurozone.

The European Central Bank (ECB) is (understandably) concerned over the level of potential systemic risk posed by large volumes of euro-denominated business being cleared in London outside the Eurozone and now, post Brexit, beyond the reach of the EU authorities. At the same time, its proposal to restrict euroclearing to the eurozone also carries significant economic, legal and risk-related consequences (see the FSNF Forum² paper *Euro-clearing and Brexit: the practitioner's view*)³. These include undermining the euro's role and reputation as an internationally traded currency, damaging market liquidity and distorting the economics of market participation by increasing the costs of raising capital, trading, investing and managing portfolio and commercial risks. Even the risk of a 'tit for tat' response from affected countries cannot be discounted.

Of course, all EU central counterparty clearing houses (CCPs), including those licenced in the UK, are regulated to the same high standard and

that will continue post Brexit. Shared regulation could, however, provide an additional degree of regulatory enhancement sufficient to satisfy the ECB's systemic risk concerns and avoid the market disruption of relocation. It could include the continuation of the EMIR regulatory colleges, enhanced supervision and a more shared approach to oversight similar to the US conditions in place for recognising non-US CCPs. It is, of course, a decision for the UK authorities as to how much 'consent to jurisdiction' they are prepared to concede in the wider market interest.

All this suggests that one of the first and protracted negotiation priorities of the EU and the UK should be to decide on how they are going to collaborate on regulation post-Brexit – and this is yet another reason for a transitional arrangement.

CONCLUSION

As markets and risk go global, regulatory harmonisation through the development of more granular international requirements should take on a higher degree of urgency. In the interim, shared regulation will help to balance the trade-off between, as the IOSCO report put it, "increased cross-border market access and financial activity, on the one hand, and maintaining appropriate levels of investor protection and managing the importation of potentially harmful risk, on the other". On that basis, a high degree of post-Brexit shared regulation must be in the best interests of the EU, the UK and the wider Europe.

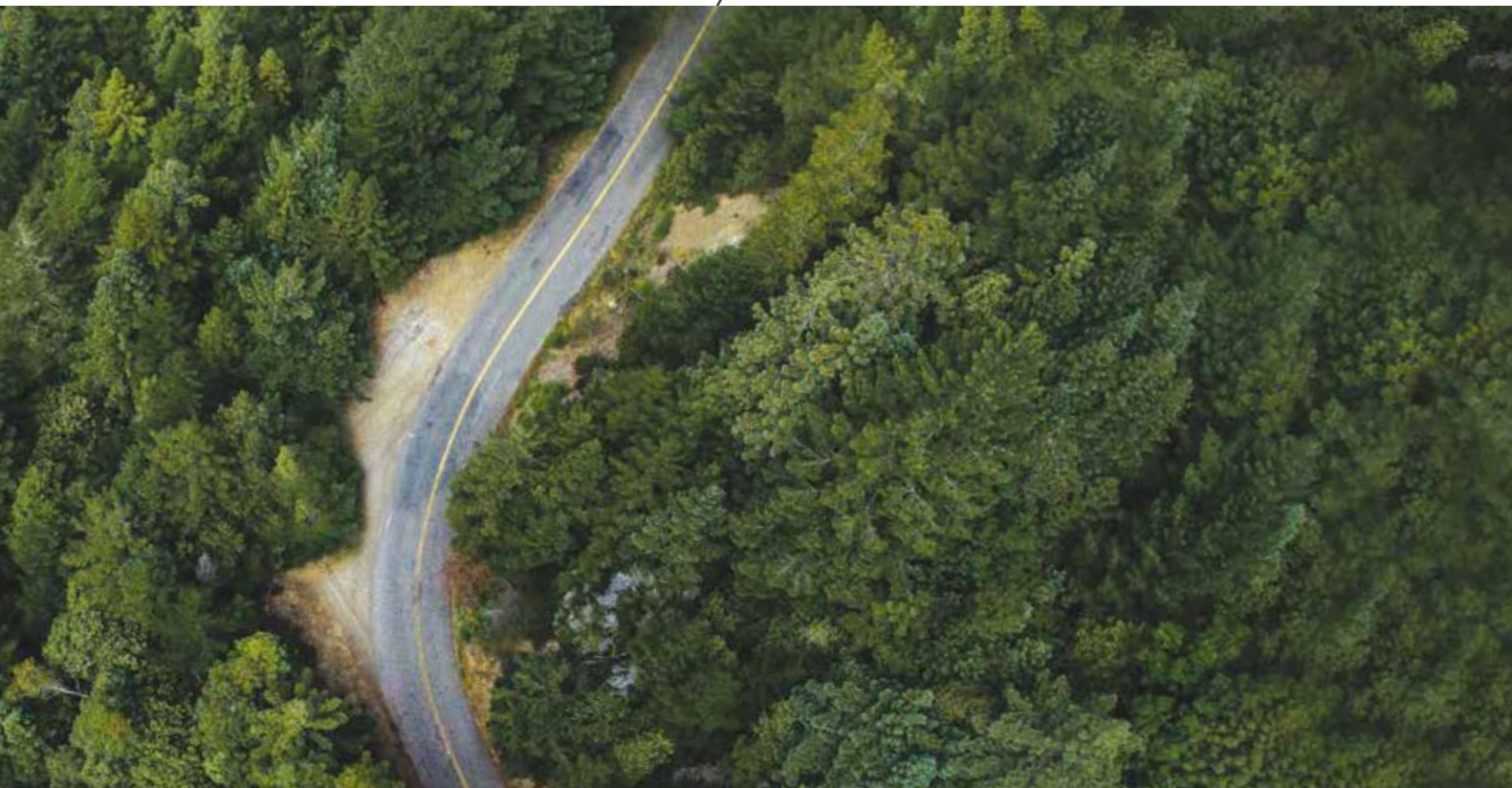
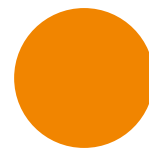
To see Anthony Belchambers' full paper, including his views on the development of transitional arrangements and an interview on this theme on CISI TV, please visit cisi.org/q42017review.

2. The FSNForum has since merged with the Legatum Institute and is now the Legatum Financial Services Forum
 3. <http://www.fsnf.uk/2017/01/euro-clearing-and-brexit-practitioners.html>

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