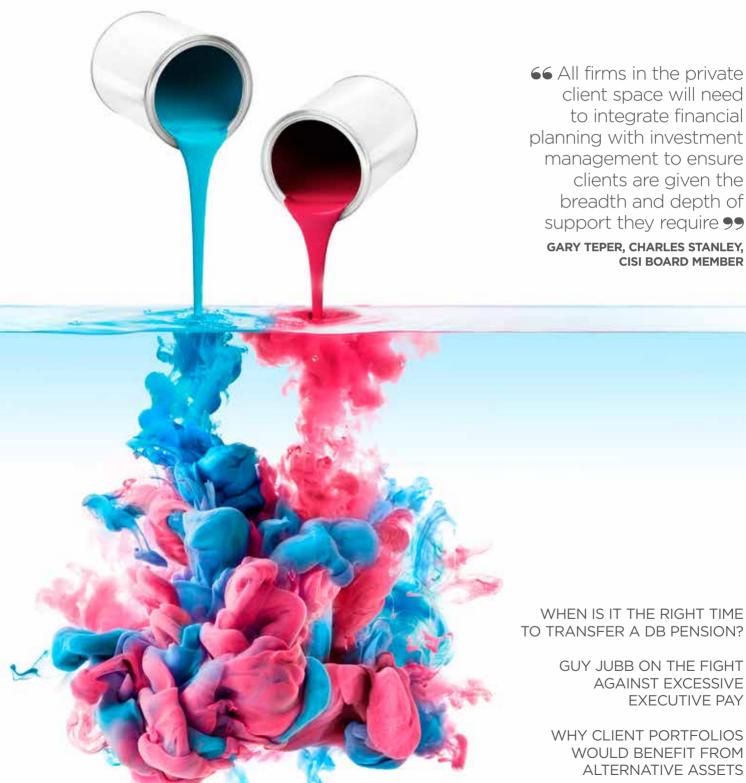
PROVIDING INSIGHT AND ANALYSIS FOR FINANCIAL SERVICES PROFESSIONALS







Focus on the Future

The Financial Planning Annual Conference 2017

Monday 25 – Wednesday 27 September Celtic Manor Resort, Newport, UK

Network with hundreds of leading professionals Enjoy a 10% discount using code 'REVIEW10'

This year's content streams

Wealth and Investment Management

Practice Management Investments and Advanced Planning

Legal Advice

Real financial planning case studies

Book your place at cisi.org/fpac17

Publications Executive, Chartered Institute for Securities & Investment

Jane Playdon 20 Fenchurch Street, London EC3M 3BY T: +44 20 7645 0648 jane.playdon@cisi.org

Wardour contacts

Print Editor Eila Madden Online Editor Rosalie Starling Group Art Director Steven Gibbon Account Director David Poulton Production Director Iohn Faulkner Claire Oldfield
Chief Executive
Martin MacConnol
Advertising sales enquiries
David Poulton
T: +44 20 7010 0915
Cover illustration
Hitandrun/Debut Art
Published on behalf of
the Chartered Institute
for Securities & Investment
by Wardour, Drury House,
34–43 Russell Street,
London WC2B 5HA
T: +44 20 7010 0999
Fax: +44 20 7010 0900
wardour.co.uk

ISSN: 1357-7069

Managing Director

Editorial Panel

Robert Merrifield, Chartered FCSI Chairman Helen Anderson

Chartered Institute for Securities & Investment

Joseph Chapman, Chartered MCSI Jupiter Asset Management

Professor Moorad Choudhry FCSI University of Kent Business School Simon Culhane, Chartered FCSI

Chartered Institute for Securities & Investment
Paul Dawson, Chartered FCSI

Fidelity International Scott Dobbie FCSI(Hon) Deutsche Bank

Peter Land, Chartered FCSI Walker Crips Stockbrokers Amy Lazenby, Chartered FCSI Close Brothers

George Littlejohn MCSI Chartered Institute for Securities & Investment

Jacqueline Lockie CFPTM Chartered FCSI Chartered Institute for Securities & Investment Gregor Logan MCSI

Tsitsi Mutiti, Chartered FCSI Charles Stanley

Claire Perryman, Chartered MCSI State Street

Frank Reardon, Chartered FCSI JM Finn

Patricia Robertson, Chartered FCSI Westport Global Ariuna Sittampalam, Chartered MCSI

Sage & Hermes Nigel Sydenham, Chartered FCSI CCL Academy Sir Alan Yarrow, Chartered FCSI(Hon) Chartered Institute for Securities & Investment

Financial Planning Editorial Panel

Janet Walford OBE

Simon Culhane, Chartered FCSI
Chartered Institute for Securities & Investment
Richard Gray CFPTM Chartered MCSI

Julius Lipner MCSI Consilia Wealth Management

Jacqueline Lockie CFPTM Chartered FCSI Chartered Institute for Securities & Investment

Ruth Sturkey CFPTM Chartered MCSI The Red House Consulting

The cover for this edition - with an accompanying quote by CISI board member Gary Teper, head of investment management at Charles Stanley – reflects a trend we are seeing of convergence of wealth management and financial planning to form an integrated wealth management service for clients. Similarly, the CISI has for the first time included a wealth and investment management stream in this year's Financial Planning Conference on 25-27 September, for which some features in this edition serve as a curtain_raiser

'Pensions swap shop' (pp.21-25) asks when to transfer from defined benefit to defined contribution pension schemes and 'Adding alternative assets to client portfolios' (pp.31-33) discusses access to complex, illiquid assets. These, and 'Key tasks for the countdown to MiFID II' (p.12), relate to talks at the conference, with relevant details signposted at the top of the page.

Other highlights include our interview with Guy Jubb, a pioneer of corporate governance (pp.14-17), and 'Grey matters' (pp.42-43), which asks you to decide whether an employee's career should go up in smoke.

We hope you enjoy the issue.

CISI Publications Executive Jane Playdon jane.playdon@cisi.org

The Chartered Institute for Securities & Investment (CISI), All rights reserved. Reproduction in whole or part prohibited without prior permission of the CISI. The CISI and Wardour accept no responsibility for the views expressed by contributors to *The Review*; or for unsolicited

manuscripts, photographs or illustrations; or for errors in articles or advertisements in *The Review*. The views expressed in *The Review* are not necessarily those held by the CISI or its members



CFP™, CERTIFIED FINANCIAL PLANNER™ and the CFP Logo are certification marks owned outside the US by Financial Planning Standards Board Ltd.

The Chartered Institute for Securities & Investment is the marks licensing authority for the CFP™ marks in the United Kingdom, through agreement with FPSB.



CITY VIEW How to tackle 'fake news'

CISI UPFRONT

News and views, plus a preview of the annual Financial Planning Conference

13 FIRST PERSON

Reputation is a mark of quality and businesses should beware of it slipping, says Anthony Hilton FCSI(Hon)

14 A FORCE FOR GOOD

Guy Jubb tells Eila Madden why corporate governance and stewardship matter

18 A CRUCIAL CONTRIBUTION

Neil Jensen explains why small stock exchanges are integral to the financial ecosystem

21 PENSIONS SWAP SHOP

More and more people are giving up their defined benefit pensions, writes Gill Wadsworth

26 HOW EMIR WILL IMPACT **CURRENCY HEDGING**

Richard Willsher reports on new rules on managing currency risk



29 MIND THE GAP

Online investment platforms are growing in popularity but investors and advisers need to be aware of what is and isn't on offer, Jess Unwin writes

31 ADDING ALTERNATIVE ASSETS TO CLIENT **PORTFOLIOS**

Alternative assets are moving into the mainstream. Trevor Campbell looks at how clients can benefit from them

34 IRRATIONAL BEHAVIOUR

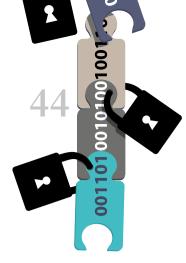
Nick Edwards CFPTM Chartered FCSI reveals 18 behaviours that affect the way we make investment decisions

37 DIVING INTO THE UNKNOWN

Roger Edmunds, Chartered MCSI on his love of diving to explore WWII wrecks of aircraft and merchant ships

38 FINANCIAL PLANNING CASE STUDY

Sam Whybrow CFPTM Chartered MCSI helps his client navigate her way through a divorce and a job resignation



40 HELPING FAMILIES PLAN FOR A SECURE FUTURE

Louise Norman CFPTM Chartered MCSI on how to pass your wealth on to the next generation

42 WARN OR WEED OUT?

UK-based Brandon and US-based Greg have taken a recreational drug in a US state where it is legal. How should their international firm respond?

44 BLOCKCHAIN ENTERS THE PREMIER LEAGUE

IBM's Keith Bear and Graham Biggart lift the lid on the major issues behind blockchain

46 COMMENT

Andrew Davis on who should educate pension holders

47 CHANGE

Christopher Bond, Chartered MCSI rounds up key regulatory changes for firms to prepare for

51 REVIEW OF FINANCIAL MARKETS

Our academic journal, edited by George Littlejohn MCSI



cisi.org/review Q3 2017 | 3



Join in the Live Webcast





Annual Integrity Debate 2017

Speakers include: Anthony Hilton FCSI(Hon), financial journalist

Chris Cummings, Investment Association Leon Kamhi, Hermes Investment Management

Wednesday 13 September 2017

6pm (UK)

Discuss #CISIdebate

Register online cisi.org/debate

Earn 1.5 CPD hours The financial services sector has lessons to teach society about how to tackle 'fake news'

he recent debate on fake news in the national media highlights the increasing divergence between laws and regulations for the financial services sector that our members are subject to and those that apply to society generally and to those in positions of responsibility.

Our sector plays a critical role in keeping the economy functioning efficiently and has been the subject of a torrent of legislation and regulation in recent years. For our many retail adviser members, the Retail Distribution Review (RDR) brought in new, more rigorous qualifications. It required all to requalify to continue in practice, to hold a Statement of Professional Standing issued by a professional body and to record at least 35 hours of relevant continuing professional development (CPD) annually.

More recently, the Senior Managers & Certification Regime has made crystal clear the high expectations placed on senior managers throughout the financial services sector and the high personal cost of failing to meet them.

And in financial services, where the impact of fake news can be measured instantly in hard cash terms, we have laws that have long made it a criminal offence for anybody to make a statement they know to be false or misleading in a material respect or to dishonestly conceal any material facts in their dealings with investors and markets. Regulations and procedures proscribing how companies and the authorities communicate with

the market and investors have long been in place.

Maybe it's time for everyone to be held to the same rigorous standards.

The substantial number of elections and referenda globally over the past three years have highlighted the relative ease, anonymity and ultra-low cost of creating and distributing fake news and misleading statements over the internet and, in particular, social media. While that ease may diminish in time as those news distributors voluntarily accept regulation and responsibility, the contrast with the regulation of financial news could not be starker.

Maybe it's time for everyone to be held to the same rigorous standards

Fake news comes in all shapes and sizes. Defining the exact point at which our natural tendency to be over-optimistic, to present evidence in a way that maximises our interests or indeed speaking in ignorance of the facts becomes deliberately misleading or outright lying has always been a challenge for the courts and for those who police financial markets. So, while legislation and high professional standards have been broadly successful and provide tough sanctions for offenders, we still do not have to go very far to find boundaries being tested.

For example, a 2016 CFA Institute paper suggests that 20% of US companies

deliberately overstated their results when reporting under Generally Accepted Accounting Principles (GAAP) and collectively that added 10% to their earnings. Commendably, the Securities and Exchange commission tightened its rules in May 2016 but non-GAAP measures, including 'pro-forma' and 'underlying', continue to appear regularly in US and UK company announcements, potentially misleading all but experienced, qualified investors. Is creative accounting any more victimless than insider dealing?

An article entitled 'Why we lie' in the June issue of *National Geographic* provides some useful insight and suggests that far from being an exception, being untruthful is far more widespread than we expect. Though based on a relatively small sample, it seems that circa 40% of those of working age will lie between one and five times a day and a further 10% rather more.

Generally this is to cover up personal transgressions (22%), for economic advantage (16%), for other personal advantage (15%) or for a host of reasons broadly defined as promoting yourself, defending yourself or impacting others, a category that includes pathological lies (2%). Arguably, fake news covers the whole spectrum.

The pervasiveness of fake news outside financial services highlights the very high standards that prevail within, in particular, retail financial services, where members can justly claim they operate to the very highest of professional standards in what is now one of the world's most highly regulated sectors.

cisi.org/review Q3 2017 | 5

60-SECOND INTERVIEW

The CISI will be offering a new level 6 exam, Pension Transfers and Planning Advice (PTPA), which will cover the FCA standards for undertaking the activity of a pension transfer specialist – Activity 11, in combination with other exams, pending FCA recognition. The first sitting will be in December 2017. James Stockdale, CISI global director of learning, explains its value



James Stockdale, CISI global director of learning

Why was the exam developed?

Longer lifespans and frequent job changes mean that the provision of financial advice will become more intricate, with pension transfer advice likely to be sought throughout a lifetime as part of the

general advisory relationship.

While mortgage advice will always be periodic, accumulation and decumulation of pensions and savings over a lifetime will require regular, high-quality advice ideally provided through a long-term professional relationship. The exam

will enable the new, complex landscape of retirement advice and planning to be put into fuller context.

What does it involve?

The syllabus is in five sections: Pension planning and advice; Pension transfer advice; Financial protection; Personal taxation; Retirement planning and advice.

The exam will assess candidates on these five areas through a level 6 narrative exam which will last three hours and we recommend a minimum of 200 study hours.

Who is it aimed at?

Candidates who have met the other FCA qualification requirements – dealing with regulations and ethics, investment and risk and retirement

planning – by achieving either the level 4 Investment Advice Diploma (Financial Planning & Advice) or the Chartered Wealth Manager qualification.

What is the value of achieving it?

Achievement of the exam provides progression from the specialist pathway of the Investment Advice Diploma (IAD) towards further study at level 6, or as an add-on to the Chartered Wealth Manager (CWM) examination.

What support does the CISI provide?

A workbook is now available. Candidates will also be able to access sample papers, study tips and exam information all in one place under My Study in MyCISI.

• See p.21 for more on DB pension transfers.

Member Privileges

Exclusive hotel savings: room upgrade, breakfast for two, welcome amenities and more

Looking for the perfect getaway? With Xexec's Travel Concierge, you have access to some exclusive benefits, including room upgrades, welcome amenities, vouchers, free WiFi and more. Sweep your family away to a global destination of your choice and stay at some of the best hotels in the UK and around the world.

Through its Luxury Hotel Collection, Xexec has exclusive partnerships with some of the top hotel chains globally. Whether you're after a stay at the Four Seasons, Starwood, Mandarin Oriental, Rocco Forte or more, the Travel Concierge can ensure you have a stay to remember.

Contact the Travel Concierge team on *travel@* xexec.com or call + 44 20 8201 6483 and one of our experienced agents will be able to help plan and book your perfect break, subject to availability.

 To view all the hotel benefits, log in to MyCISI, click on Membership Privileges then View your Membership Privileges, which will take you to the shopping portal. Search 'hotels' for more information.



A CONVERSATION WITH ANDREW BAILEY, CEO OF THE FCA



Andrew Bailey, CEO, FCA

Andrew Bailey, CEO of the FCA, was guest speaker at the CISI Corporate Finance Forum in London on 19 June 2017. He focused on public impressions of the FCA and its role.

Speaking to a packed room, he outlined challenges faced by the regulator which led to the recent mission statement (publication of which was eclipsed by Prime Minister Theresa May's announcement of the general election an hour later).

A big challenge the FCA has faced is how to be more transparent, and how to go about explaining what it does and how it goes about doing it, he said. Its remit includes a "pretty broad" statutory objective given it by Parliament of making relevant markets work effectively; and operational objectives around market integrity, consumers and competition.

The challenge lies in interpreting and explaining these objectives.

Big landscape

Additionally, the FCA has a "big landscape" of 56,000 authorised firms under its watch, which has more than doubled since the FSA, the previous regulator, split into the twin peaks of the PRA and FCA in 2013. Using a football analogy to illustrate the resulting challenge, he said: "You can't man-mark 56,000 firms."

This landscape means that "there are a lot more choices which have to be made" to use resources effectively. "The FCA has more tools or powers [supervision tools; enforcement tools; Competition Act tools] at its disposal than almost any other financial regulator in the world," he said. "We've got to be more transparent about how we go about using the tools and choosing which ones to use ... and why we do things and why we stop doing things as well."

A big challenge the FCA has faced is how to be more transparent

As an example, he referred to public perception in 2016 that the FCA had apparently stopped its work on culture in banks. This wasn't true; the FCA had just

decided to "move the work from one tool to another", but had not communicated its choices transparently. "My colleagues on the board at the time were left scratching their heads about how they'd managed to get into a situation where they thought they were continuing to do the work and the rest of the world thought they weren't!"

Mission statement

The mission statement was, therefore, intended to explain: "What we think the FCA's about, how we interpret the tools; objectives; and how we go about fulfilling our responsibilities."

Work on it brought about "big questions that got to the heart of what conduct regulation is" – questions that the FCA couldn't necessarily answer by looking to regulators in other countries, because "not that many countries have dedicated retail conduct regulators".

The session concluded with Andrew outlining what some of those questions were (the FCA's responsibility towards consumers and, conversely, the duty on consumers; whether it should focus on all consumers equally or emphasise protection of vulnerable consumers; and how to define what 'vulnerable' means), followed by answering some questions from the audience on the topics of trust; bankers' bonuses; conduct and culture; financial literacy; and tone from the top.

Cambridge Crime Symposium

Anthony Hilton FCSI(Hon), financial columnist for the *London Evening Standard* and *The Review*, and Nicholas Walmsley, until recently director of compliance & anti-financial crime training at Deutsche Bank, lead a strong CISI line-up at this year's Cambridge International Symposium on Economic Crime.

This world-leading event, now in its 35th year, attracted some 1,600 delegates in 2016. On Friday 8 September 2017, a special City day will focus on 'Big data: bad data, breaches and cyber crime'.

Other speakers in a star-studded line-up focused on the experiences and needs of practitioners include Ian Blair, global head of surveillance: trade/e comms/voice at Credit Suisse; Cheri McGuire, group chief information security officer at Standard Chartered; and Brendan Pickering, group head of financial crime technical strategy and group head of fraud risk at HSBC.



CISI members will receive a 20% discount. For full details, please visit *cisi.org/events* or email *info@crimesymposium.org*

CISI AGM 19 October

The Annual General Meeting of the Institute will be held on Thursday 19 October 2017, 2.30-3pm, at the County Hotel, 29 Rainsford Road, Chelmsford CM1 2PZ.

Fellows (FCSI) and Members (MCSI) of the Institute may vote on the resolutions by:

- voting online (available from Monday 18 September) using the link in the members' section of the Institute's website at cisi.org
- using Form A to appoint the chairman as your proxy

- using Form B to appoint a proxy, who need not be a member, to attend the meeting and vote on your behalf
- attending the AGM and voting yourself.

If you would like a copy of the AGM Notice & Voting Form emailed to you, please contact linda.raven@cisi.org +44 20 7645 0603 (you will need to provide your membership number).

Voting forms, whether completed online or sent by post, must be received by the company secretary no later than 11am on Tuesday 17 October 2017.

Disciplinary action taken by the CISI against members

Lvnda Jane Croome

As a result of press articles and a Final Notice issued by the FCA, the CISI became aware that Ms Croome appeared to be in breach of CISI membership regulations and the CISI Code of Conduct.

Ms Croome was invited to appear before a disciplinary panel which, having considered the matter and the member's submission, determined that the member should be suspended for the shorter of one year, or the acceptance by the FCA of the member's fresh application for CF30 financial adviser status. Ms Croome is also barred from using the CERTIFIED FINANCIAL PLANNER™ designation for the same period.

Richard Fellows FCSI

Mr Fellows was made bankrupt in October 2016 by HMRC because of personal financial matters not related to his professional activities as a corporate finance adviser. As a result, Mr Fellows was in breach of membership regulation 16.1 (c) inter alia. He was invited to appear before a disciplinary panel which, having considered the member's submission, determined that the member's Chartered status should be suspended for the lesser of one year or the satisfaction of the bankruptcy order against him. Mr Fellows remains a Fellow of the CISI.

- Read the membership regulations at cisi.org/regulations
- Read the Code of Conduct at cisi.org/codeofconduct

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 25-27 SEPTEMBER FINANCIAL PLANNING ANNUAL CONFERENCE

Celtic Manor, Newport, Wales

The CISI will be hosting its annual conference, which will focus on best practices and new developments in financial planning, wealth and investment management. Attendees will earn over 13 hours of CPD.

CPD WORKSHOPS

7 SEP Ethics and integrity (Liverpool) 13 SEP Investment planning (London) 11 OCT Estate planning (London) **16 NOV** Skills development: the prosperous adviser (London)

ANNUAL DINNERS

7 SEP Scotland branch annual dinner and awards 14 SEP Manchester and District branch dinner 14 SEP West Country branch dinner 12 OCT South East branch dinner

OTHER HIGHLIGHTS INCLUDE

3 SEP Thirty-fifth international symposium on economic crime (Cambridge) 5 SEP Bank of England update; Global economic and market outlook; and Blockchain, cryptocurrencies and you (Guildford) **7 SEP** Ethics and integrity workshop (Newcastle) 13 SEP Annual Integrity Debate: Asset managers profit before social responsibility (London) 14 SEP Behavioural economics: bulls, bears, are we all sheep? (Birmingham) 19 SEP Bank of England update (Belfast) 20 SEP Robo-advice & Behavioural finance bulls, bears, are we all sheep? (Cambridge)

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

INVESTMENT MANAGERS SEEK LIVERY STATUS

The Guild of Investment Managers is hoping to gain sufficient support to be granted livery company status, joining other financial services groups, such as the Chartered Accountants, International Bankers, Insurers, Actuaries, Tax Advisers and Solicitors. With its core

Guild of Investment Managers Ltd



objectives of promoting education and investment excellence, the group, formed by CISI member John Garbutt FCSI and Mark Henderson, is looking to create a modern, diverse livery company that will foster the profession and provide networking opportunities and fellowship for its members. Membership will be open to anyone who works, or has worked, for regulated investment management companies, in whatever capacity, or who has made a significant contribution to the sector.

• Email info@guildofinvestmentmanagers.co.uk for further details.

The Review wins award in global competition



Out of more than 5,000 submissions from 24 countries, *The Review* print edition, produced in collaboration with our publishing partner, Wardour Communications, scooped bronze in the Book/Journal/Magazine category at the Summit Creative Awards 2017 – a US-based global awards scheme that looks for creative excellence in small and

medium-sized agencies worldwide.

A Board of Judges selected *The Review* out of entries in 13 categories, in a two-phase blind process (company names withheld) during which they searched for innovative and creative concepts, strong executions and user experience, and the ability to communicate and persuade.

We would like to thank everyone who helped us win this award, including Wardour and the CISI marketing and communications team.

WMA MEMBERS VOTE FOR MERGER WITH APFA

The CISI's closest trade association, the Wealth Management Association (WMA), together with the Association of Professional Financial Advisers (APFA) became the Personal Investment Management & Financial Advice Association (PIMFA) on 1 June 2017.

WMA CEO Liz Field said: "PIMFA will be the voice of firms that provide a range of financial solutions including investment advice and private banking, as well as investment in execution only services and

financial planning and advice in the UK, to the private individual, families, charities and trusts.

"Through the new trade association, we will have a stronger, united voice that will lobby for the combined membership, while helping lead the debate and guide regulation as the UK promotes its personal investment management and financial advice sector as

key in the global arena."



IN THE KNOW

The Review's quick quiz features questions from CISI Professional Refresher, an online learning tool. This popular product consists of more than 100 modules covering topics including anti-money laundering, the UK Bribery Act, information security and data protection. The answers are on page 13.

1. What legal obligation, if any, applies to a firm that is asked for a modern slavery statement by a client?

- A The firm must produce a statement within 15 days
- **B** The firm must provide a statement if it meets the criteria under the Modern Slavery Act
- C The firm must produce a statement, but in doing so it must not disclose commercially sensitive information
- **D** It is under no obligation whatsoever

2. Since 6 April 2017, what has been the total amount an individual can contribute to an ISA?

- **A** £15,240
- **B** £20.000
- **C** £30,480
- **D** £40,000

3. Which of the following initiatives is intended to focus on the individual accountability of staff at all levels?

- A The Approved Persons Regime
- **B** The Senior Managers Regime only
- **C** The Senior Managers and Certification Regime
- **D** The training and competence regime

4. What is the name generally used for UK government bonds?

- A Gilt-edged
- **B** Bulldog
- C Sterling issue
- **D** Municipal

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 CFPTM Chartered FCSI, CISI deputy head of financial planning

EXCITING SPEAKER LINE-UP FOR 2017 ANNUAL CONFERENCE

The annual Financial Planning Conference runs from 25 to 27 September at Celtic Manor, South Wales. We have an exciting line-up of speakers for you, including Sophia Bera CFPTM from the US. Sophia runs her own financial planning business giving advice to millennials and will share her views on what the UK's financial planning firms should do to recruit younger people and to give advice to a younger audience.

Gerald Mwandianmbria CFPTM is flying in from South Africa to discuss what's happening over there – they are currently going through their own version of the Retail Distribution Review, but face different challenges to the UK. We have a wide variety of sessions, including more practice management as well as some technical update sessions, and we have eight of our own CFP professionals speaking too.

Our exhibition area will include a 'tech corner' where you can relax and take time to explore and review the profession's leading software, and our exhibitors have many different activities to get involved with during the welcome dinner on Monday 25 September. We also have the pleasure of hearing from one of the profession's most vocal advocates, former IFP CEO Nick

Cann, who will be sharing his journey since his stroke in 2013.

By the time you read this we will have held our first Accredited Financial Planning steering group meeting, giving the opportunity for all our accredited firms to offer their thoughts and opinions on the way forward for the brand. If you are a member of an Accredited Financial Planning Firm and would like to be involved, please contact me at *jacqueline.lockie@cisi.org*.



Many of you may have read the news that Campbell Edgar CFPTM Chartered FCSI, the CISI head of financial planning, will be retiring from October

2017. He came out of retirement to help co-ordinate the integration of the IFP membership post-merger. We thank him for his leadership and hard work on behalf of the financial planning members and the CISI. You will see Campbell again as he continues to help support the financial planning members in other ways. I will become head of financial planning and Christopher Morris will become deputy head. All three of us will be at the conference. It will be a great opportunity for members to say goodbye to Campbell.

Extraordinary paraplanner conference

The paraplanner conference in June, 'The league of extraordinary paraplanners', was an enormous success and everyone had a lot of fun. Dan Atkinson ACSI and Farida Hassanali CFP™ Chartered MCSI, in their joint chair role, dressed up as superheroes. We even persuaded some of the exhibitors, including our lead event sponsor, Just, to don capes for a competition. Attendees benefited from a variety of relevant sessions, which included advanced Excel training, simplified report writing and the power of cashflow modelling for clients. The conference closed with inspirational speaker Mandy Hickson, the UK's first female fighter pilot.

PLANNERS JOIN BRANCH COMMITTEES

The branches now have at least one financial planner on each committee. These committees agree the timetable and content of your branch meetings. If you didn't attend the recent half-day meetings on vulnerable clients, which included an in-depth review of the legislation and helpful sources of information and suggested actions to improve the way you service these types of clients, you missed a real gem. If you have an idea for a session and would like your local branch to host that event, please get in touch with your local financial planning representative or contact the events team at CISI. Don't forget about CISI TV and Professional Refresher too, which offer the opportunity to keep you and your staff up to date in over 100 areas. Log on to your MyCISI account to search for what you need.

FINANCIAL PLANNING WEEK

What a hectic but rewarding week it was! Our thanks go to the 87 financial planning firms who offered free financial planning surgeries to the public. We also had 300 calls from the public, plus more booked appointments directly with the firms; we answered a vast number of questions online and we held two Facebook live events. The great national press coverage included The Telegraph, FT Money and the Daily Mail to name a few. We hope that even more of you will get involved next year.

PUTTING FINANCIAL SCIENCE TO WORK



Dimensional Fund Advisors is a leading global investment firm that has been translating academic research into practical investment solutions since 1981. Guided by a strong belief in markets, we help investors pursue higher expected returns through advanced portfolio design and careful implementation. An enduring philosophy, strong client commitment, and a strong connection with the academic community underpin our approach.

Our investment approach is based on a belief in markets. Rather than relying on forecasting or trying to outguess others, we draw data about expected returns from the market itself – letting the collective knowledge of its millions of buyers and sellers set security prices.

We focus on adding value over indices with an investment style that is active and systematic, but different from conventional active management. We target higher expected returns by using the information

in prices and fundamentals in a sensible and transparent way. We also share many of the benefits of indexing – low cost, low turnover, high diversification, and transparency – but from the start, our goal was to improve on traditional indexing.

By taking what we believe are the benefits of indexing and active management and merging them with robust, innovative implementation, we aim to beat indices and the funds and investment vehicles that track them.

We strive to help advisers deliver a great investor experience to their clients: specifically, being well prepared for a range of possible outcomes; having an investment philosophy they can stick with; tuning out the noise and focusing on what can be controlled; and taking a long-term view of investing.

www.dimensional.com

+44 20 3033 3300

CISI CORPORATE MEMBERS Q3 2017

Gold Members

Royal London

www.adviser.royallondon.com

Corporate Members

Aegon

www.aegon.co.uk

AIC

www.theaic.co.uk

Dimensional Fund Advisors

Dimensional Fund www.dfauk.com

First Trust

Global Portfolios

www.ftglobalportfolios.com

Just

www.justadviser.com

NS&I

www.nsandi.com

Parmenion

www.parenion.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

WHAT MAKES LOS ANGELES A GLOBAL CITY?

Comfortably sitting in the top ten of the Schroders Top 30 Global Cities Index, Los Angeles boasts several positives regarding property investment. Here we outline some of the reasons why we think real estate investors should sit up and take notice

Schroders

The City of Angels has long been famous for Hollywood and the hub of entertainment jobs it has created. But it is other sectors that should catch the eye of a property investor.

The role of tech

Technology's rise has been demonstrated by Netflix's recent office expansions with the real estate company Hudson Pacific. There is also Google's development of Playa Vista, a new urban community on the west side of the city.

The role of infrastructure

Infrastructure has a huge role in making a global city, and Los Angeles boasts two of

the biggest ports in the world. This helps drive the need for distribution warehouses.

The role of tourism

Los Angeles is, of course, an attractive tourist destination. While the strength of the US dollar has been a recent headwind, long-run positives such as the rise of the Asian traveller keep West Coast cities like Los Angeles in a good position for the future.

Our verdict

In the near-term, the fundamentals of Los Angeles property remain strong while other parts of the US have seen a slowdown of late. The reason? Los Angeles

was one of the last markets to recover from the last recession.

As a result of a slower pick-up in demand, as well as more difficult development regulations relative to the rest of the US, new construction has been somewhat muted thus far, creating a favourable balance of supply and demand dynamic across most types of property.

To access the latest thinking around what's driving real estate growth, visit us at the address below.

www.schrodersglobalcities.com

+44 20 7658 6000

cisi.org/review

ASK THE EXPERTS: KEY TASKS FOR THE COUNTDOWN TO MIFID II

What should firms be doing in the final months before the updated Markets in Financial Instruments Directive (MiFID II) is implemented?

Firms should begin to implement the parts of MiFID II that they can, or make sure they are ready for the implementation date of 3 January 2018. For instance, in the retail space the main issues are around transaction reporting, costs and charges, product governance, best execution and information reported to clients.

Firms need to be checking what research they get, examining what transaction data will look like and considering any rewrites to their execution-only policy. Very little of a firm's activity is not touched in some way by MiFID II.

In general, though, you should be worried if you think your peer group is much further advanced with MiFID II implementation. Firms should be able to demonstrate that they have good project plans in place with a high level of senior management engagement. If you haven't, then you are likely to be challenged by the FCA.

How will transaction reporting requirements change?

Transaction reporting is one of a number of major projects but compared to other issues, such as costs and charges, good progress has been made. There are an additional 65 data fields to be reported and the scope of what needs to be reported has widened.

While we are still seeking clarification on certain issues, firms can start implementation work now. For instance, start populating certain data fields to make sure they have all the information required on decision-makers – both at a client level and within the firm.

What will the introduction of legal entity identifiers (LEIs) mean for investors and investment managers?

It means all investors who are deemed legal entities will have to obtain unique codes; otherwise investment firms will not be able to undertake investment activity on their behalf or submit a valid transaction report.

Broadly, each LEI costs around £120 to obtain and £70 to renew for legal entities applying directly to the UK issuer; additional charges may be levied if an investment firm obtains the LEI on behalf of the legal entity.

Legal entities include companies, charities and trusts other than bare trusts. For some, like charities, it will be relatively easy to be issued with an LEI. For others, such as some trusts, there may be more hoops to jump through.

The problem is there has been little education on the matter, with the obligation falling on the legal entity to obtain the code.

Also, no one knows how many LEIs there are. We just don't know how many applications issuing organisations will have to process.

Legal entities should consider applying as early as possible to ensure they have an LEI by the due date. There may come a point in the process where a cut-off point is introduced because a logjam has built up.

If this happens, discretionary managers for non-registered legal entities will be unable to take a decision to trade come January 2018, while advisory managers, who have an ongoing responsibility to the suitability and composition of a client's portfolio, won't be able to fulfil contractual obligations as investment firms will be unable to submit a valid transaction report.

Some of the text in MiFID II has yet to be agreed by the European Securities and Markets Authority (ESMA). How is this likely to play out?

It is frustrating, but there are areas in MiFID II that we do know and firms need to be able to address these issues now rather than sit back and wait for the complete picture. When ESMA releases new information, firms will just have to revisit it.

66 There are elements in MiFID II where it requires firms to make a judgment 99

Are we also still waiting on some low-cost vendors in certain areas to come to market to allow firms to achieve their cost objectives in terms of buying data and best execution?

Yes, firms should ensure they are aware of all data vendor offerings in respect of product data and categorisation of financial instruments to meet best execution reporting.

What should firms do in cases where it is unclear how to implement the new regulations?

There are elements in MiFID II where it requires firms themselves to make a judgment. Firms shouldn't be afraid of making these judgments as long as they document why they have taken that course of action. In this regard, flexibility in the rules will be beneficial to firms.



lan Cornwall is director of regulation at the Wealth Management Association, a representative body for the investment community. He is a chartered accountant and chartered wealth manager with almost 30 years' experience as a risk and compliance professional.

The CISI will be running a monthly series of live webcasts on MiFID II, chaired by Frank Reardon, Chartered FCSI, of JM Finn, a member of *The Review* Editorial Panel and chairman of the CISI Operations Forum. He will lead a panel of CISI experts to take questions from a live audience.

What is a reputation for?

REPUTATION IS A MARK OF QUALITY IN ALL ASPECTS OF BUSINESS, AND IT SHOULD SET OFF ALARM BELLS WHEN IT SLIPS

ANTHONY HILTON FCSI(HON) JOHANNA WARD

An unsung activity of the Quoted Companies Alliance is to use the polling firm YouGov to chart what small and medium-sized businesses think of the world around them, how confident they feel and what currently receives most attention.

A report published before the election says that 99% of executives believe corporate reputation matters, and 68% believe its importance is growing. Advisers to these companies reckon that virtually a third of stock market capitalisation is thanks to reputation.

This is a big number. A third of the market cap of the FTSE All Share index is roughly £,750bn while even on the Alternative Investment Market, reputation's worth, by this metric, is £20bn. Given the size of these numbers, it is no surprise that most executives confess to worrying about what they would do if they were suddenly hit by a reputational crisis.

Unsurprised markets

But should they worry? When British Airways was hit by its computer failure over the late May bank holiday weekend, it left over 70,000 passengers with cancelled flights and took the better part of three days to get its services back to normal. It was poor at providing up-to-date passenger information during the crisis, and seems to have been similarly poor after the event in compensating customers promptly for the inconvenience. But in spite of a huge amount of hostile publicity and widespread discussion about how far the airline had fallen from its previously high standards, the share price has barely moved.

More dramatic was the moment in June when the Serious Fraud Office announced it was charging four former senior Barclays directors with criminal fraud and bringing charges against the bank. Again, the share price barely moved. If reputation is so important, should there have been some reaction?

Well, apparently not. What the market's calmness shows is that Barclays has already lost its reputation - hence it trades at a massive discount to its peers, and similarly British Airways is no longer thought of as something special. The market cannot know when trouble will hit, but it is not surprised when it does. In contrast, companies like Talk Talk, whose shares were devastated after management mishandled a cyber attack, or BP, which also fell massively after the Deepwater Horizon drilling disaster, were both previously well thought of. They did have something to lose – and lost it.

Quantitative calculation

There is more science behind this than you might imagine. One of the pioneers in this field is Reputation Dividend, which for ten years has been publishing the Reputation dividend report. This assesses how much of a company's market capitalisation derives from its reputation and whether this has gone up or down over the past year.

For this analysis, the key indicators are the quality of leadership, the ability to attract staff, the talent for innovation, the quality of product, skill in marketing, financial soundness and the overall deployment of assets. It also includes the firm's impact on the community and environment.

Simon Cole, the man behind the project, emphasises that the calculation is quantitative. His computer model takes the financial results of companies, the reports produced by analysts and surveys of investor opinion as inputs, crunches the data and produces a score.

Different priorities

The analysis also adjusts for the fact that different things matter in different companies. In some it might be the ability to innovate, in others the ability to attract staff.

Roughly 30% of reputational value derives from perceptions of financial soundness and being able to survive for the longer term; 27% reflects the quality of leadership and the deployment of assets.

Interestingly, however, his analysis suggests that reputation matters more for bigger companies where it is indeed over the 30% mark but shades to just 16% in the FTSE 250. Again, this is logical - big companies are known to far more people and have a much wider shareholder and customer base. There is therefore more scope for a social media firestorm when something goes wrong.

So it does matter. Reputation is the public's perception of quality, the ultimate accolade and something to be cherished. Any sign that it is slipping must set off alarm bells in the boardroom.

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



Corporate governance and stewardship have transformed the reputation of UK companies over the past three decades, thanks in large part to Guy Jubb. The pioneer of good corporate citizenship says there is still much to do

A FORCE FOR GOOD

hen Guy Jubb left Standard
Life in March 2016 after 30
successful years with the
company, he boarded a cargo
ship to Brazil at the Port of Tilbury in
south-east England. Apart from the small
crew and one other passenger, picked up at
Le Havre in France, it was a solitary voyage.
Eight quiet weeks at sea gave him time to
reflect on a career dedicated to the financial
services sector, and what the next chapter of
his life should involve.

It's no surprise that he is at ease with solitude. In the role that he became most well-known for – global head of governance and stewardship at Standard Life Investments – he needed the courage to be a lone voice in the crowd. Having taken on the job almost 20 years ago, Guy is a corporate governance pioneer in the UK and globally. He was among the first investors to publicly hold high-profile companies to account for remuneration excesses, often being the only one to take this stand at annual general meetings (AGMs).

On his watch at Standard Life, corporate governance has gone from marginal to mainstream – a shift that he has massively influenced – but he says there is always more to do. A greater focus on appointing boards that are 'fit for purpose', more transparency around the pay consultation process and increased competition and choice in the audit market are just some of the things that he believes will help to consolidate the UK's position as a leader in the field of corporate governance.

FINDING HIS FEET

To become one of the country's pre-eminent voices on corporate governance is quite an achievement for someone who didn't know what he wanted to do when he left school. After graduating from the University of Edinburgh with a Bachelor of Commerce degree, he studied for his accountancy qualifications and worked within the professional financial accounting sector for several years after qualifying.

That role required a lot of business travel, which is how he met his American wife. Settling down in his personal life led to a similar move in his professional life. He joined merchant bank County Bank, later to become County NatWest, in a role that required less travel, and then did a spell with Deloitte predecessor Touche Ross, managing its then nascent M&A practice. In 1985 he had the opportunity to return to his hometown of Edinburgh to join Standard Life.

"My children were growing up and my parents were getting older so it was a fairly easy decision," says Guy. "I spent my first ten years at Standard Life setting up the smaller company investment team and what is now known as its private equity arm, Standard Life Capital Partners. At the time when the Cadbury Committee [on the Financial aspects of corporate governance] was coming to its conclusions, my then boss, somewhat ahead of his time, asked me to put down my cheque book and move into the area which we now know as corporate governance and stewardship."

It was a completely new role for Standard Life, which meant Guy could shape it how he wished. As appealing as that might seem, it brought its challenges. Although the Cadbury Committee, which reported in 1992, had called for better communication between companies and their shareholders,



achieving engagement with the businesses that Standard Life had invested in took time. Companies weren't geared up for having that conversation, says Guy. His questions would often get passed from the chairman to the company secretary to the legal director, who would come back with "wooden" responses.

Back then age was also a factor. As a young man in his 30s, putting sensitive questions about corporate governance to a chairman in his mid-60s wasn't always so well received, Guy remembers. Eventually, he took a different approach, inviting himself around for coffee with company secretaries and building a relationship. "The early days of engagement were not with chairmen or directors but for the first five or ten years with company secretaries."

Things are very different today. As a new generation of younger leaders has emerged, UK companies have witnessed a change in values and mindset at the top, Guy observes. Issues that make companies good corporate citizens, such as concern about climate change, are very much on the agenda now.

PUSHING ON PAY

One corporate governance issue that Guy has helped to propel high onto the board agenda is excessive executive pay. One of his earliest clashes over this was with Carlton Communications but there have been others, including Rio Tinto, Barclays, BP and, most notably, WPP. At the company's 2015 AGM, he famously not only registered Standard Life's concerns about the £43m pay package for CEO Sir Martin Sorrell but also pulled the directors up for their approach to Sorrell's succession planning.

It took a degree of corporate courage to go into battle with some of the biggest names on the FTSE but it also took a degree of personal courage to stand up and voice opposition at AGMs, says Guy. But, he adds, in all of those interactions there was always mutual respect. "I would never intentionally ambush companies at AGMs. They usually knew that I was going to pitch up and it would be quite obvious to them what I was going to talk about," he says.

Standard Life policyholders and clients benefited from Guy's work with boards to nudge them towards higher standards of governance, but so did others - notably index fund managers, some of whom had neither the time nor the mandate to be active on the corporate governance front. "So long as we were doing what was in our clients' best interests and we felt we were doing the right thing, then if others got a free ride that was just the way of life," says Guy. "We probably had a few free rides ourselves from others doing similar things so it was swings and roundabouts."

That said, he does believe more needs to be done to sort those investors who take their stewardship responsibilities seriously from those who simply do a tick box exercise on the Stewardship Code, which was released in 2010 by the Financial Reporting Council to encourage institutional investors who hold voting rights in UK companies to actively engage in corporate



governance in the interests of their shareholders. He advocates a kitemark scheme that would help savers identify fund managers who are actively engaged in investor stewardship from those who are not. He points out that this service differential could and should be reflected in fund managers' fee structures.

He also believes a trend towards consolidation among active fund managers - the merger between Standard Life and Aberdeen Asset Management being a case in point - will create a stronger combined voice. This will help to counter any public interest concerns about the impact a rise in index funds, and their passive approach to investing, might have on the practice of stewardship.

For all his work on executive pay, does he think companies' response to his concerns has been adequate? There is always more that can be done, he says. One thing he has called for is greater transparency around

the consultation process that remuneration committees go through with institutional investors when setting executive pay levels. On that point, he says it is not so much about excess but about inequality within organisations. "I would very much welcome serious consideration being given to the reintroduction, perhaps with fiscal incentives, of profitsharing schemes so that when the tide of profit goes up or down, everybody's pay goes up and down with it."

FIELDING CRITICISM

When you publicly pull people up on excessive pay, you of

On integrated reporting (IR):

"As a concept it has become a little tired and parochial. Investors need to have a more assertive view on it, auditing firms need to address the assurance they provide around IR, and the International Accounting Standards Board and the International Integrated Reporting Council need to collaborate more effectively than hitherto to bring IR principles into the

course run the risk of coming under the spotlight yourself. Guy points to Standard Life's framework of governance and stewardship principles as its compass when rewarding its own senior executives. "Clearly I was aware of the headlines that would arise from time to time. I was confident that it was pay for performance, that I could correlate it with the principles and as long as I stayed true to the principles that I applied, while the waters did get a little choppy in terms of the rhetoric, I was able to sail through them."

More frequent than criticisms over pay were criticisms – of the entire investor community – over lack of shareholder activism. Does Guy think these were fair? It is right, he says, that shareholders should hold boards to account but it is also important for shareholders to respect the boundaries that exist between them and directors, and to respect the legitimate authority of boards to determine the appropriate course of action.

That said, it is equally important to go up to the boundaries. "Part of my unwritten key performance indicators at Standard Life was to ensure that at least one or two people made a complaint about where [Standard Life] was actually pushing the envelope because if they didn't, that would imply I was being too soft about the views that I was expressing," he says. "I think corporate governance needs to be proportionate to the public interest risk," he adds.

He stresses that investors should not have to be a lone voice on corporate governance. Politicians and other actors, such as the church, also have a role to play to speak out. While acknowledging that politicians are now stepping up to the plate, he feels that it is too little, too late and that they should have done more at a much earlier stage to challenge inequality and other public interest issues. Their silence was deafening, Guy says.

There are some, however, who still remain to be convinced about the financial worth of investing in corporate governance. They point to a lack of correlation between corporate governance and share price performance as evidence of this. To counter this scepticism, Guy advocates the long view. Companies with low levels of corporate governance tend to be more entrepreneurial and, in bull markets, will outperform less nimble organisations with more stringent corporate governance practices in place. Conversely, he says, it is the former that fall by the wayside when the economic going gets tough.

"When you're an investor, you can deal with the peaks and troughs of share price performance but when a company's share price craters, that's a permanent diminution in value and that's the thing you don't want to have." However, Guy doesn't warn investors off companies not perceived as having good governance; he simply advises careful due diligence and caveat investor.

THE NEXT CHAPTER

On that boat to Brazil, one suspects Guy had plenty of time to reflect on his contribution to corporate governance and his next move. "When I left Standard Life, I didn't want to shut up shop entirely," he says. "I banned the 'r' word [retirement]."

His next chapter involves a busy portfolio of roles, which include advisory work and some writing for bodies such as TheCityUK and the Institute of Business Ethics. He also wants to deepen his relationship with the academic community, hence a return to the University of Edinburgh Business School to take up a new role as honorary professor at its Centre for

On the Big Four:

"The Big Four have become too big to fail. Audit tendering was meant to enable challenger firms to gain more market share but the syndrome of 'you don't get fired for hiring IBM' has prevailed and that policy objective has notably failed. The consequences of market concentration feel like an accident waiting to happen."

Accounting and Society. He has also joined the board of the European Corporate Governance Institute, which provides resources for academics to promote leading research with global impact.

"I'm looking forward to the opportunity of being professionally stimulated by those at the cutting edge but I also want to be able to share some of the experience that I have, assuming that it will be useful to tomorrow's leaders," he says rather self-deprecatingly. As he passes the baton on to a new generation of corporate governance advocates, that experience is likely to be very useful indeed.

GUY JUBB, FORMER GLOBAL HEAD OF GOVERNANCE AND STEWARDSHIP, STANDARD LIFE INVESTMENTS

2017 APPOINTED HONORARY PROFESSOR AT THE UNIVERSITY OF EDINBURGH BUSINESS SCHOOL'S CENTRE FOR ACCOUNTING AND SOCIETY

2016 RETIRES FROM STANDARD LIFE INVESTMENTS

2015 RECEIVES THE INSTITUTE OF CORPORATE SECRETARIES AND ADMINISTRATORS' OUTSTANDING ACHIEVEMENT AWARD

1992 PIONEERS THE DEVELOPMENT OF STANDARD LIFE'S CORPORATE GOVERNANCE TEAM

1986 JOINS THE INVESTMENT DEPARTMENT OF STANDARD LIFE TO SET UP ITS PRIVATE EQUITY AND SMALLER COMPANY TEAMS

1976 QUALIFIES AS A CHARTERED ACCOUNTANT IN EDINBURGH WITH WHINNEY MURRAY & CO; GOES ON TO PURSUE A CAREER IN ACCOUNTING, MERCHANT BANKING AND CORPORATE FINANCE IN LONDON AND NEW YORK

1973 GRADUATES FROM THE UNIVERSITY OF EDINBURGH AS A BACHELOR OF COMMERCE

| cisi.org/review | Q3 2017 | **17**

A CRUCIAL CONTRIBUTION

Small stock exchanges are an integral part of the financial ecosystem, helping to raise growth capital for small and medium-sized enterprises and providing investors with an alternative to low-interest asset classes

NEIL JENSEN



he vast majority of businesses in the UK are small or medium-sized – some 99% of them account for 60% of all private sector employment. How does an ambitious, growing company from this vast sector go public in search of investors? The London Stock Exchange (LSE), more used to courting financial services companies, energy giants and consumer institutions, is not always the most suitable home.

There are smaller alternatives to the LSE and other major stock exchanges – the New York Stock Exchange, the DAX, the Hang Seng – that have almost become part of common parlance. They are to be found in all corners of the world, from tropical locations such as Bermuda and the Cayman Islands, to small countries in Europe like Malta and Cyprus. There's even a securities exchange in the Faroe Islands.

It is not just companies wishing to list that might be casting their eyes in the direction of less well-trodden paths, either. Investors, tiring of the low interest rate regimes around the world and the uncertainty over regulation and geopolitics, are also interested in what the so-called small stock exchanges may have to offer.

DEFINING SMALL

According to the World Federation of Exchanges, a small exchange has a domestic market capitalisation of less than \$100bn. That may seem a big figure, but the definition of a mid-sized exchange is a market cap of between \$100bn and \$1,000bn and a large exchange has in excess of \$1,000bn. There are around 25 prominent small exchanges dotted around the globe. Some of these, such as Mauritius, Bermuda and Malta, have been used to provide a facility for sophisticated

structures such as special purpose acquisition companies or special purpose vehicles.

These are known as 'technical listings', which are primarily set up for the purpose of regulatory requirements or tax reasons in order to facilitate the distribution of these more complex products, legitimately plan for tax efficiency or to provide offshore domiciled securities with a more robust route to market.

The Channel Island Stock Exchange, founded in 1998, has recently rebranded to become The International Stock Exchange (TISE). On the face of it, this looks like an expression of global aspiration and the exchange's chairman, Jon Moulton, confirms that TISE is looking beyond its traditional hunting ground. "It is a reflection of our ambitions in terms of scale, geography and diversity of our business," he says. "Our exchange has developed well over the past few years and we have a more diversified flow of new listings. We've signed a memorandum of understanding with the Bermuda Stock Exchange, which expands our reach, and the rebranding includes a presence on the Isle of Man."

TISE has a market capitalisation of around £400bn. A typical TISE client could be a real estate investment trust, a high-yield issuer (Netflix was a recent example), a special purpose acquisition company or a small and medium-sized enterprise (SME).

As chairman of TISE, Jon is naturally an advocate of smaller exchanges. He believes that, generally, they play an important part in the financial ecosystem, and "offer a more flexible option to the larger exchanges".

HELPING SMEs TO GROW

Fundamentally, though, what makes the small exchange concept so compelling is the platform they provide for companies at a crucial stage of their growth trajectory. "Smaller companies wishing to make that first foray into public listing find small exchanges very compatible with their objectives," says Dale Acton, head of trading & market making at Channel Islands-based broker Ravenscroft, which works with TISE.

"Smaller exchanges offer a more flexible option to the larger exchanges"

It's a view shared by Frazer Thompson, CEO of English wine producer Chapel Down Group, which initially listed on the PLUS exchange, now known as NEX. "We listed back in 2003 – at that time, it was a way to attract small funds looking to invest under Enterprise Investment Scheme rules into small companies. As we developed, we wanted to add some financial discipline and rigour to the reporting and results – especially as wine can be a rather complex and long-term business."

Chapel Down is described as a 'poster child' for NEX and small exchanges generally. Its share price has risen impressively since launch and Thompson says that listing on NEX has clearly benefited the growth of the company.

A DIFFERENT WAY

Following the financial crisis, responsible investment was a subject people increasingly focused on and in 2013, the Social Stock Exchange (SSX) was established. Launched by then-UK Prime Minister David Cameron, the SSX provides access to the world's first regulated exchange – a segment of NEX – dedicated to businesses and investors seeking a positive social and environmental impact. The exchange currently has 50 listed companies, ranging from early-stage ventures through to listed firms, with a combined value of £2.5bn.

Any company listed on this exchange has to pass a rigorous assessment test. CEO Tomas Carruthers explains: "We are a unique exchange and any company wishing to become a member has to prove it has a compelling social purpose and has to be publicly accountable. This is not about having a CSR policy, it is about demonstrating that the company fulfils a social purpose and will have a positive social impact." Based in London, the SSX provides access to the capital markets and access to a community of like-minded investors. The exchange's reach extends across all continents.

"The discipline of the results and reporting process are good preparation for an ambitious management team and we have not encountered any significant barriers from being listed on NEX rather than the Alternative Investment Market [AIM] – we have raised money successfully at every event."

COST BENEFITS

Patrick Birley, the chief executive officer of NEX, describes Chapel Down as the sort of "entrepreneurial company that he wants NEX to become synonymous with". He adds that economics are at the heart of the appeal of a small exchange. "The costs of being a member and listing on NEX are much lower than those associated with large exchanges like the LSE – around 75% lower. Obviously, this is an important consideration for smaller, growing companies."

AIM, which Patrick names as the main competitor for NEX, has established itself as the LSE's little brother. It has been in operation for 22 years and caters for smaller, expanding companies. While a German equivalent of AIM – the Neuer Markt – closed in 2002 after losing virtually all of its value between 1994 and 1997, largely due to the bursting of the dot-com bubble, AIM has been more robust and continues to grow.

Its big brother also plays a part in nurturing tomorrow's listed companies. The LSE's ELITE programme works alongside up-and-coming organisations and helps provide access to investors and funding from entrepreneurs. The programme, which has an alumni of around 600 companies, generally lasts 18–24 months, by which time cohorts have a better idea of the direction their company is taking.



One direction might be to list on AIM, which costs around £350,000. In comparison, listing on NEX is roughly a quarter of the price and Patrick wants it to be even lower than that.

NEX has a simple strategy in that it focuses on two things: issuers and investors. It is worth recalling comments made by economist John Kay in his book *Other people's money*, suggesting that most market activity today does not focus on raising capital for business but more on investors extracting capital from business.

Small stock exchanges can play a role in bringing global capital to a small market

What NEX aims to do goes back to the very roots of the stock market ethos; one that allows the exchange to understand precisely what its clients are trying to achieve. Patrick says: "We have what is very much a traditional structure, but this means we can intensify our efforts around these two areas. We are able to fit what we offer around the requirements of our clients, be they IT companies, old-style family companies or international organisations. In some cases, a company might not want to issue too much equity and might want tighter control – we try to make that happen as seamlessly as possible."

Chapel Down's Frazer adds that being listed on NEX has also given the company an interesting and loyal investor base, which includes high-profile businessmen in John Dunsmore and Nigel Wray. "Those I really cherish are more than just investors. In our crowdfunding adventure we found that we were recruiting investors who were wanting to be like pilgrims and ambassadors for our brand. As a result, we now have 5,000 pairs of eyes and ears sending us their views and information they feel we might find useful. It is. NEX is a good exchange for people like that!"

Small stock exchanges, which are not always representative of the local business environment, can also play a role in bringing global capital to a relatively small market. The Bermuda Stock Exchange, for example, works with the Bermuda Business Development Agency to attract more business to the country. Bermuda's remit appears to be quite broad and now includes instruments such as catastrophe bonds and insurance-linked securities.

Malta is also using its stock exchange to encourage business from international sources. As part of the country's National Capital Markets Strategic Plan, listing fees have been rebated for a two-year period and the exchange is trying to encourage listing of exchange-traded funds and real estate investment trusts. Malta has tried for some years to build a reputation as an alternative market, but limited opening hours (they have now doubled) have often stymied progress.

THE ROLE OF REGULATION

For exchanges such as Bermuda, Cayman Islands and other markets that provide offshore listing facilities, the

regulatory environment has traditionally been less draconian than in mainland markets. Although this may mean a more nimble operating space, it can also raise doubts about reputational risk. At the same time, too rigid a regulatory framework can frighten off potential investors.

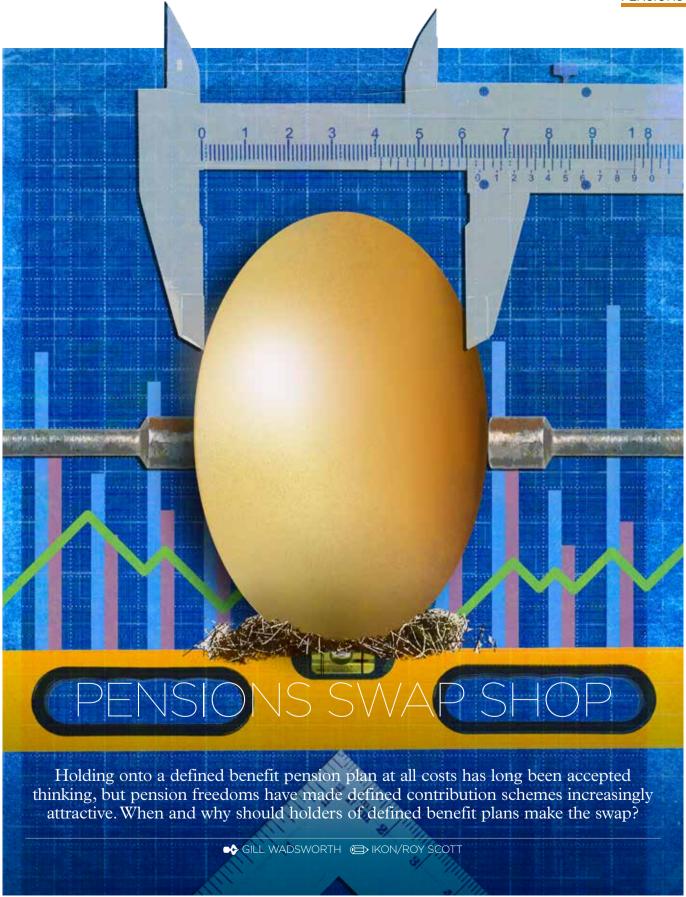
But since the financial crisis, investors and regulators, who may have eyed the sector with some scepticism, have demanded more transparency from smaller exchanges. Regulations such as the Alternative Investment Fund Managers Directive (AIFMD), the Foreign Account Tax Compliance Act (FATCA) and Dodd-Frank have certainly changed the landscape for offshore exchanges, notably in the case of the EU's AIFMD, which looks to place hedge funds, private equity and other alternative investment firms into a regulated framework.

In response, some offshore locations have implemented measures to improve transparency and the exchange of information, hoping that enhanced clarity will provide greater confidence around the suitability of smaller exchanges and their processes. Examples of this trend include the Barbados Stock Exchange signing the FATCA agreement with US authorities and the Cayman exchange agreeing a FATCA-style information exchange agreement with the UK.

Regulation is clearly an important element in the future development of the capital markets. While much stock market activity centres on secondary trading, the small exchanges still have the chance to reintroduce small companies and investors to the original idea of 'coffeehouse'-style stock markets. There have been various attempts down the years to provide an alternative to the behemoth exchange, but many have proved unsustainable or lacking the critical mass to keep costs realistic. Technology makes that easier to achieve today. Equity can provide a reliable source of finance, but it can also revive the process of re-engaging small and medium-sized businesses, and growth-hungry entrepreneurs, with capitalism and shareholders. Above all, small stock exchanges can demonstrate there is another way – without them, an important source of liquidity could go untapped.

COMPARISON OF SMALL EXCHANGES

	Market cap	No of listings
Alternative Investment Market (AIM)	£92.8bn	967
Bermuda Stock Exchange	\$2.5bn (£2bn)	56
The International Stock Exchange	£400bn	2,400
Luxembourg	\$61.5bn (£48.1bn)	180
Malta Stock Exchange	\$4.5bn (£3.5bn)	23
Mauritius	\$7.6bn (£5.9bn)	76
NEX	£2.44bn	85



| cisi.org/review | Q3 2017 | 21

t's been two years since retirees aged 55 or over have been able to spend their pension savings with impunity. Following then Chancellor George Osborne's unexpected announcement that – subject to certain tax regulations and their pension product supporting the new flexibilities – members of defined contribution (DC) plans are free to take control of their retirement pots, hundreds of thousands of people have taken advantage. DC schemes – also known as money purchase – are workplace or personal pensions where the individual takes the investment risk.

Figures from HM Revenue & Customs published in April 2017 reveal 176,000 individuals took flexible payments from their pension in the first quarter of this year compared to 84,000 in the quarter immediately after freedom and choice came into force back in 2015.

The number of DB to DC transfers increased by 166% in the first three months of 2017

Yet for defined benefit (DB) members, such emancipation was out of reach unless they took the controversial decision to swap their promised retirement income for the relative uncertainty of a DC plan, a self-invested personal pension (SIPP) or a standard personal pension. Unlike these other options, DB plans are only available in the workplace and are sponsored by the employer, who bears the investment risk and agrees to pay a set benefit at retirement.

Research from consultant Xafinity shows the number of DB to DC transfers increased by 166% in the first three months of 2017 compared with the same period in 2016. New figures from insurance company Royal London, released in June 2017, show that the most common transfer value is between £250,000 to £500,000 – outstripping the average UK house

OUTDATED ADVICE

price of £216,000.

The government insists that anyone transferring from DB to DC plans seeks independent financial advice. In June 2017, the FCA issued a consultation (CP17/16: Advising on pension transfers), due to close on 21 September 2017, which could see guidance updated to reflect the current savings regime.

The current FCA rules state: "When advising a retail client ... whether to transfer ... a firm should start by assuming that a transfer, conversion or opt-out will not be suitable."

The FCA goes on to say that advisers can only recommend a

transfer if there is clear evidence that taking this route is 'in the client's best interests'.

This seems sensible. Giving up the security of a DB plan – an irreversible decision – should not be taken lightly. DB schemes offer a promised income for life and part of the pension usually continues to be paid to a spouse on death. The member carries no investment risk and the benefits are based on final salary. It is no wonder they are described as gold-plated. By contrast, a defined contribution pension or a cash lump sum has no equivalent guarantees. It's also worth noting that not all DC schemes have allowed members to exercise their pension freedoms and they, the members, have had to move to a SIPP or standard personal pension.

REASONS TO TRANSFER

However, the current FCA position does not reflect the myriad reasons why individuals may look at this option today. Its proposed changes include replacing the current transfer value analysis requirement with a comparison showing the value of the benefits being given up; introducing a rule to require all advice in this area to be provided as a personal recommendation, which fully reflects the client's circumstances and provides a recommended course of action; and updating the guidance on assessing suitability when giving a personal recommendation.

This new position would acknowledge the benefits of transferring, which include:

▶ Flexibility – DB benefits can be very rigid. They are payable on a set date, paid at a fixed rate, with a particular pattern of survivor benefits. By contrast, taking a cash sum and investing it means savers can draw their money when they most need it in retirement. So, if you want to retire at 60 and live off your savings you can do this with a DC pension whereas you might have to wait until you're 65 – or

whatever the scheme's retirement age is – if you stay in the DB scheme. If DB policyholders do want to take early retirement, they need to accept reduced benefits. DC flexibility also means income can be turned up, down, on or off to suit particular income needs or manage income tax.

▶ Inheritance – When you die, a DB plan dies with you unless you have a spouse, civil partner, or, in some circumstances, dependents. Transfer to a DC scheme and if you die before 75, the cash balance left behind can be received by your successors completely tax free.

Even if you die over the age of 75, whoever inherits your pot only has to pay income tax in the usual way when they make withdrawals. If your successors do not draw on this inheritance then it can be passed on to subsequent generations.

- ▶ Ongoing investment It is possible to grow your pension if you remain invested in the markets, possibly over a series of decades. If the money is invested well, the overall outcome may be better than staying in a DB scheme. In many cases, to achieve a pension pot large enough to buy an income for life of equal value to the DB pension foregone will require a relatively high rate of return, which in turn would imply taking a high degree of investment risk.
- ▶ Risk of employer insolvency If your employer goes bust and the scheme moves to the Pension Protection Fund, the member will only receive 90% of their benefit. And, for those with the highest pension entitlements, the PPF applies a cap if you enter the fund below the scheme pension age. The standard cap in 2017/18 is £38,505.61, which equates to £34,655.05 when the 90% level is applied. The cap is reduced further if you start to draw your scheme pension early. Consequently, you may be better off taking a cash sum that can be invested, particularly if you are concerned about your employer's finances.
- ▶ Attractive transfer values DB schemes have been keener than ever to transfer members out of the scheme as liabilities which are discounted using government bonds have increased at a time of persistently low interest rates, although that may now be changing. Schemes offer increasingly generous transfer values, making them attractive, especially for high earners. Suppose you expect to live for 20 years and are giving up a pension of £250 a month or £3,000 a year. Over the next 20 years you would receive £3,000 times 20 or £60,000 in pension (excluding the effects of inflation). So if the DC scheme offers you a tax-free lump sum of more than £60,000 you could be getting a good deal.

Such generous incentives may change as interest rates start to rise.

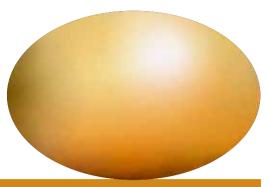
When you die, a DB plan dies with you unless you have a spouse, civil partner or dependents

WHO SHOULD SWITCH?

Bob Gordon, pensions consultancy manager at Standard Life, who will be speaking about the latest developments in DB and DC pension schemes at this year's CISI Annual Financial Planning Conference, says: "Most people, most of the time, will be best sticking with DB. It can give peace of mind that the bills will be paid in old age.

"But for a significant minority of (predominantly wealthier) DB members, where paying the bills isn't an issue and their focus is on tax management and legacy planning, flipping over into the new world of DC flexibility can give a better financial outcome for them and their loved ones than sticking with a large,





WHAT PRICE FREEDOM?

Relatively few, if any, in the pensions industry saw the freedom and choice regime on the horizon. Its surprise arrival meant some commentators were fearful that giving savers control of their retirement pots could lead to some rash spending decisions.

At first, figures suggested these fears were well founded; full cash withdrawals remain the most popular choice for those using freedom and choice. Yet in reality the majority of those taking lump sums had relatively small pensions to cash in and rather than this being an ill-considered path, it makes sense for many advisers.

Steve Webb, director of policy at Royal London, says: "Advisers report that people are more interested in pension saving because it is now seen as more flexible. Small pension pots have been taken as cash which probably makes sense for most people, especially if they have other pension income."

Tilney's head of retirement planning, Andy James, agrees freedom and choice has been a widely welcome development, but notes some savers make poor decisions when it comes to tax planning. "We've seen no horror stories but some people are paying more tax than they need to because they are taking out too much in one go."

However, looking to the future Steve would like to see less not more caution if the industry is to avoid storing up trouble. He says: "Probably my biggest concern is actually excessive caution. People who think they should take money out of their pension pot and put it in a current account or perhaps a cash ISA with negative real returns."

Advisers are also concerned that, given the FCA's changes to transfer advice, independent advice may get a lot more expensive.

Jim Stevenson, pensions technical manager at IFA Ascot Lloyd, warns the FCA's proposals are likely to increase the demands on qualified pension transfer specialists, who are now expected to be able to demonstrate relevant experience, up-to-date knowledge and the depth to which they review reports. "All of this can only increase the cost of advice provided to potential transferers," he says.

| cisi.org/review | Q3 2017 | 23

but inflexible, DB pension. Advisers can't ignore this.

Manna for the state of the stat "With demand for DB transfer advice overwhelming capacity, a key challenge for advisers is how to identify the right clients quickly. Time spent advising on DB transfers that have little prospect of going ahead is time that could be better spent. And no one wants to pay a fee to be told to do nothing. This is where an effective pre-advice triage process can pay real dividends."

Steven Cameron, pensions director at insurer Aegon, agrees that, today, the flexibility afforded by the government's pension freedoms is one of the main reasons for transferring out of DB schemes, whereas before the new rules, the main driver was attractive annuity rates. "When annuity rates were particularly generous, people used to transfer out of DB schemes in the hope of securing a higher retirement income through an annuity," he explains.

The flexibility afforded by pension freedoms is one of the main reasons for transferring

In light of clients' desire for flexibility, advisers need to explore wider objectives, such as choosing when to start taking an income, how to shape income year on year and leaving funds to loved ones, says Steven.

Increasingly, inheritance tax (IHT) planning is also a key reason to transfer. People are understandably keen to avoid a 40% tax bill and since pensions do not qualify as part of an estate, they are a neat way to keep expenses down.

"Eighty per cent of transfers are because of IHT," says Andy James, head of retirement planning at financial adviser Tilney. "If the member is not reliant on their DB scheme and can live off other assets that are subject to IHT it makes sense to leave the pension alone and only fall back on it if needed."

It makes sense to deplete your IHT deductible savings, such as ISAs, first, leaving the pension to pass to your descendants untouched if you die before age 75, after which you pay income tax rather than IHT, Andy explains. Using pensions in this way is tax efficient. For example, if one partner dies before age 75 and they leave their pension invested, the surviving partner can draw an income of £11,500 completely tax free. If that pension had been converted into cash before death it would form part of the estate and be taxed at 40%.

Recommending a transfer as part of IHT planning is relatively straightforward for advisers since it returns to cold hard figures. In other cases, the client's objectives are more subjective.

DIFFICULT JUDGMENTS

But this leaves the adviser to make a value judgment rather than one based on critical vield calculations.

In the absence of updated guidance from the FCA, advisers could find they are left open to compensation claims if the decision to transfer, while appearing right at the time, turns out to be a poor one further down the line. If the Pensions Ombudsman deems the transfer advice unsuitable, the adviser may face a fine and inevitable reputational damage. Failure to carry out the appropriate checks also leaves members vulnerable to scams and fraud.

This has led Steven to call on the FCA to define more clearly what constitutes 'suitable advice'. He says: "The surge in demand for DB transfer advice means advisers need urgent regulatory clarity from the FCA to allow them to support clients to achieve their objectives in this complex area."

Given the current lack of guidance, it is no surprise that advisers are worried about taking on transfer work. In a survey of 222 advisers conducted by Fidelity International in March this year, 70% say advising on transfers could form a greater part of advisory businesses in the future. However, of this group, 64% are worried about retrospective legislation and how this could impact on them in the future. Richard Parkin, head of pensions policy at Fidelity International, says: "Advisers need to be totally sure it is in the members' best interests to transfer."

Recommending a transfer as part of IHT planning is relatively straightforward

Understanding their clients' objectives and being sure that a transfer would meet those is crucial. This requires a detailed fact-finding mission. The FCA demands advisers make a comparison between the benefits likely to be paid under a DB scheme with safeguarded benefits and the benefits afforded by a personal pension scheme, stakeholder scheme or other pension scheme with flexible benefits.

When dealing with insistent clients, there are three key steps advisers must take: provide clear, suitable



advice for the individual client; be clear with the client what the risks of the alternative course of action are; and show the client is acting against advice.

"It is a lot of work and the advisers' final recommendation may not be what the client wants to hear," says Richard.

NEW EXAM

Ultimately advisers need to feel equipped to deal with the changing mood towards transfers and they need confidence in dealing with insistent clients.

Transfers are no longer seen as controversial; in some cases it makes more sense to switch

In response to a new education need, the CISI will offer a level 6 Pension Transfers and Planning Advice (PTPA) exam that will cover the FCA specialist exam standards for pension transfer specialist advice, in combination with other exams, pending FCA recognition. The first sitting will be in December 2017 (see our 60-second interview on page 6 with the CISI global director of learning for more information on this).

Transfers are no longer seen as such a controversial move; indeed in some cases it makes more sense to switch than stick. Yet advisers need more support in dealing with the new environment and ensuring that there are no regrets further down the line.



FLEXIBLE BENEFITS

Ruth Sturkey CFPTM Chartered MCSI, founder and managing director of financial planning firm The Red House, shares a real-life example of where a pension transfer has suited her client's need.

Richard, 51, is married to Sarah, with a son, Luke, and a daughter, Rachel. Luke is training to be an accountant and Rachel is about to graduate. Richard's parents both sadly died before they were 72.

Richard left corporate life about three years ago to follow his passion for cooking. He is planning to open an upmarket coffee shop/bistro in Dorset in 2017. He has found premises he wants to buy. Sarah works part-time as a physiotherapist but aims to leave in the next 12 months to work with Richard.

Richard's defined benefit (DB) pension gives him a lifetime index-linked income of £52,000 a year from age 62. If he dies and Sarah survives him, she gets a 50% widow's pension. Alternatively, Richard can trade in this promised pension and take a transfer value of £1.3m and invest it in his self-invested personal pension (SIPP).

With the assistance of our actuaries, we calculate that if Richard's aim is to replicate the lifetime income promised to him by his DB pension scheme, he needs to achieve an annual investment return of about 8% a year to age 62 - a big ask.

After a few months of discussions, Richard and Sarah decide to transfer. Although they accept that they might not replicate the promised index-linked income payable for life, the ability to take Richard's pension benefit flexibly, with the opportunity to draw cash tax free and/or any level of income they desire from age 55, is compelling. This will allow them to design a retirement income that reflects their definition of a good life, their view being: who wants an ever-increasing index linked income in their late 70s and 80s when their desire to travel, explore and be active decreases?

In addition to this, Richard can use the £300,000 from the transfer, via his SIPP, to buy the coffee shop premises, paying rent to himself rather than a third-party landlord. Finally, he finds comfort in the fact that if his family history plays out and he dies before age 75, any remaining pension fund can be paid tax free to Sarah or the children. And if the investment strategy falls short or they draw down Richard's pension too soon, they have other assets to fall back on in later retirement.

| cisi.org/review | Q3 2017 | 25



How EMIR will impact currency hedging

New regulation has begun to tighten the rules for hedging currency risk in investment portfolios, making life more complicated for fund managers and highlighting the importance of investors asking the right questions

RICHARD WILLSHER

he European Market Infrastructure
Regulation (EMIR) is targeted at reducing
risk in derivative transactions. Forward
foreign exchange (FX) transactions and
currency swaps fall within its scope and therefore
EMIR will have an impact on funds where such
hedging tools are used to reduce currency risk.

Investors have access to a wide range of unhedged and hedged funds in the market and depending on their objective or current view will select accordingly. Currency hedging is not new to the market and is widely used by professional investors but EMIR imposes more rigorous requirements – see our jargon buster on page 27. Traditionally passive or active funds with currency exposures, such as global bond funds or those containing equities or other assets denominated in currency other than the fund's base currency, are hedged using forward contracts or currency swaps.

Currency hedging is not new to the market but EMIR imposes more rigorous requirements

These typically involve two counterparties agreeing to exchange currencies in a given amount, at an agreed rate, on a value date in the future – perhaps 30, 60 or

90 days hence. Deliverable forwards (DF) are the most commonly used instruments for this purpose. They provide both parties with certainty as to the amount of currency they will receive on the value date. Such transactions have typically been agreed on a bilateral, over-the-counter (OTC) basis. Similar OTC arrangements can be agreed for non-deliverable forwards (NDF), where only the net amount of the trade would be exchanged on the value date.

IMPACT OF EMIR

EMIR supports the same hedging aims but requires that trades be reported to an authorised trade depository. Such reporting is already implemented. However, FX forward contracts and currency swaps are now becoming subject to collateral requirements.

NDF contracts were impacted as of 1 March 2017. It is likely that the start date for DF collateralisation will be 3 January 2018, to coincide with the implementation of the revised Markets in Financial Instruments Directive (MiFID II), though this has yet to be confirmed.

Collateralising a derivative transaction is designed to provide greater certainty to the counterparties that the (currency) asset will be delivered on the due date. If delivery should fail, the counterparty can have access to the collateral. "Collateral to the value of the unrealised profit or loss on the NDF must be taken," explains James Binny, head of currency for EMEA at State Street Global Advisors, and this raises the question of what collateral a counterparty – a bank, for example – would find acceptable.

ELIGIBLE COLLATERAL

"EMIR lays out what can be used as collateral," says James. "A pretty broad list includes equities, bonds and cash. However, counterparties to funds, such as banks, have a much more conservative list of acceptable collateral: essentially, it's cash and US, UK, German and French government bonds."

Collateralising a derivative transaction is designed to provide certainty to counterparties

If, for example, a global bond fund wants to launch a currency-hedged share class, the fund manager would have to be able to provide collateral for the currency forwards that would be used to hedge out the currency risk. The amount of collateral ready to be transferred must be enough to cover the same day movement in the currency hedged out versus the currency the investment is made in. So, if the fund manager is offering a US Treasury bond fund with a euro base currency, the collateral required would have to be enough to cover movements in euros/US dollars that day. Likewise, a similar fund involving bonds denominated in several currencies would require a series of hedges back to the euro.

The amount of collateral to be held ready to be transferred would be likely to be 5% of the value of the trade and the bonds in the fund could be held as collateral. Five per cent would be likely to be sufficient to cover any overnight movement between major currencies such as the US dollar, the euro, pound sterling, the yen or the Swiss franc under normal markets.

The collateral is posted with the counterparty and the economic benefit of the bonds remains with the fund, therefore the collateralisation has no impact on the fund's performance. The same process would be followed each day to cover the intraday currency movements that take place; this is termed providing 'variation margin'. Of course, depending on which way the exchange rates have moved, the fund could receive, as well as post, collateral.

NON-ELIGIBLE COLLATERAL

If, however, the fund is an equity fund – let's say a FTSE 100 or S&P 500 index tracker – the equities cannot be posted as counterparties do not currently class them as eligible collateral. The way this is addressed is by posting cash. However, to do so means holding cash in the fund or selling holdings to generate the cash. As returns on cash are likely to be lower than on equities, this would result in so-called 'cash drag' on the fund. One way of addressing this is to buy a futures contract based upon the index being tracked and this

would allow the fund to stay invested but also to generate a cash instrument.

"The further we get from eligible collateral," says James, "the harder we have to work to deliver a good index tracking return. Fund managers are having to wrestle with this problem as EMIR implementation draws closer."

ESMA OPINION

Meanwhile a further regulatory complication for fund managers is contained in an opinion issued in January 2017 by EU regulator the European Securities and Markets Authority (ESMA).

ESMA issued four principles that should govern different share classes within the same fund – funds falling within the scope of Undertakings for Collective Investment in Transferable Securities (UCITS) – that can be sold throughout the single market. They are:

- ► All share classes within a fund should share the same objective
- ► There should be no risk of contagion between different share classes in the same fund if they have differing features or risk profiles
- ► All features of a fund should be predetermined before the fund is set up.



JARGON BUSTER

Deliverable forward

Two parties agree to exchange currencies at an agreed rate on an agreed date in the future and both amounts, one in each currency, are paid - or 'delivered' - on the value date. Also referred to as a 'physically settled FX forward'.

Non-deliverable forward

Commonly found in the context of an exchange involving an illiquid (often emerging market) currency where there is a restricted on-shore market in it. Two parties agree to exchange currencies at an agreed date in the future but only a net amount in one currency is paid on the value date.

EMIR (European Market Infrastructure Regulation)

A piece of EU financial services regulation aimed at reducing the risks attached to derivative transactions. It requires that:

- derivatives trades are reported to an authorised trade repository
- derivatives trades above a certain threshold must be cleared
- ▶ risks are controlled by periodical reconciliations between counterparties that may involve posting additional collateral.

MiFID (Markets in Financial Instruments Directive)

MiFID II, the second piece of such regulation, is due to take effect on 3 January 2018. It aims to strengthen European financial markets and make trading in financial instruments more transparent, affording greater protection for investors.

▶ Differences in share classes within a fund should be disclosed to investors

It is important for investors to understand how the fund manager is coping with these challenges and what steps they've taken to ensure non-contagion.

In this context, it is useful to consider the potential effects on unhedged share classes of currency hedging of hedged ones.

First, share classes that are unhedged are exposed to currency risk and may profit or lose from their exposure. Second, the principle of 'no contagion', point two of the ESMA opinion, means that the costs of hedging or profits or losses from unhedged share classes must not spill over into other share classes.

A further potential risk to unhedged share classes is that of the exposure of the whole fund to currency derivatives that are taken out at the fund level. However, the principle of non-contagion must apply again. Where investors have concerns that their unhedged share classes could be impacted, they should seek clarification from their fund manager and/or seek a legal opinion on their potential risk position, especially if the fund is a non-UCITS fund not covered by the ESMA opinion.

INVESTOR QUESTIONS

Currency hedging reduces currency risk within a fund or portfolio. It is an important aspect of funds where the assets they invest in are denominated in a currency that is different from their base currency.

Investors are unlikely to be experts in currency risk and therefore they should consider asking the following key questions of their investment manager or product provider:

- ▶ How is your product or fund provider managing currency hedging? Are they already collateralising under EMIR? If not, when are they planning to?
- ▶ How is your product provider managing the collateral? Are they using cash? If so, what is the impact on portfolio performance? Or are they using derivatives and are investors happy with increased derivative risk? Does it fit with the overall ethos of the performance of the portfolio?
- ▶ How are they managing the risk of contagion?
- Are the hedging provisions likely to have an impact on performance for the hedged and unhedged share classes? If there is an impact on the return on the fund, an investor might make a different investment decision.

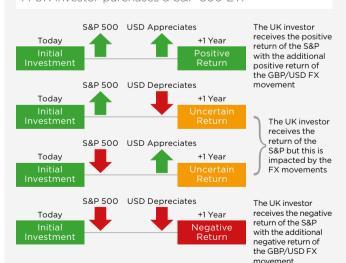
All in all, EMIR and other related regulation has made life more complicated for fund managers who manage currency denominated assets within a fund. However, it should give investors greater security and transparency as to how, and how well, their money is being managed.

HOW CURRENCY HEDGING WORKS

The following flow diagrams demonstrate how the performance of a hypothetical S&P 500 exchange-traded fund (ETF) can be affected by being hedged or unhedged.

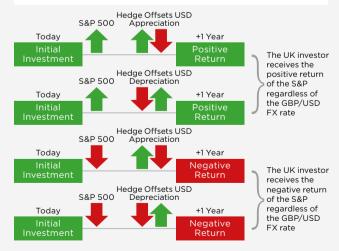
UNHEDGED ETF EXAMPLE

A UK investor purchases a S&P 500 ETF



HEDGED ETF EXAMPLE

A UK investor purchases a S&P 500 ETF hedged



The variation in FX rates used, FX forward transaction costs and the overall tracking error within a portfolio will also impact the performance of a hedged fund. In addition, the difference between the spot and forward exchange rate when the hedge is implemented is dependent on the difference in interest rates between the two currencies. Consequently, currency hedging does significantly reduce an investor's exposure to currency risk. However, currency hedging does significantly reduce an investor's exposure to currency risk.

Source: Courtesy of State Street Global Advisors



MIND THE GAP

Funds held by online investment platforms grew more than fivefold between 2008 and 2016. What are the options this market offers to investors and how can advisers get the best out of it for their clients?

■ JESS UNWIN

hen US fund management group Vanguard announced in May 2017 that it was launching a UK online investment product commanding a fee of just 15p for every £100 invested, it caused a stir. Vanguard's charges are less than half of the sector average, according to investment research firm Platforum.

This raises questions about why rivals need to charge more. Vanguard's cheapest mainstream fund – a FTSE All Share Tracker – will cost investors 0.23% a year versus 0.53% for the same fund with Hargreaves Lansdown, the UK's largest firm of financial advisers. One explanation for the difference may be that Vanguard only offers access to its own funds while more expensive platforms offer investors access to a range of providers.

Regardless, the spotlight on fees comes at a time when the FCA has launched a probe into whether the online investment platform market, which is largely DIY, is competitive enough. The *Investment platforms market study*, launched in June 2017 and reporting in summer 2018, will seek to do a number of things, including:

- exploring whether platforms help investors make good investment decisions, and if their solutions offer investors value for money
- looking at how platforms compete in practice and whether they use their bargaining power to get investors a good deal
- ▶ assessing whether relationships between investment platforms and other platforms, advisers, asset managers and fund ratings providers, work in the interests of investors.

Online investment platforms used to be beyond the reach of all but the wealthiest investors. Even Vanguard demanded a minimum investment of £100,000 from direct clients until launching its new, low-cost investment service, which requires a minimum lump sum of £500 or monthly contributions of £100. In recent years, however, the platforms have grown in popularity. According to FCA figures, they held around £592bn of investors' money in 2016 compared with £108bn in 2008.

This growth is down to several factors. The 2012 Retail Distribution Review, which requires independent financial advisers to charge clients directly instead of taking commission from product providers, has led many clients to take their investment activity into their own hands. Rock-bottom interest rates that make it almost impossible to grow wealth through cash savings have also piqued savers' interest in investing. But as with so many other aspects of our life, the internet is the real engine behind this investment revolution.

The FCA has launched a probe into whether online platforms are competitive enough

Before the late 1990s, buying or selling individual securities or investing in funds had to be done via a stockbroker. A cumbersome process of exchanging share certificates, contract notes and stock transfer documents often meant missing out on short-term investment opportunities. Investors had to pay commission to the broker, even if an investment lost money.

| cisi.org/review | Q3 2017 | **29**

Did that cumbersome process lead clients to stick their investments in a drawer and forget about them until the time came to sell? It's hard to say but a Wharton School study, conducted in 2000, suggests access to an online investment platform leads investors to increase their trading activity. In *Does the internet increase trading?* Evidence from investor behavior in 401(k) plans, researchers found that having access to a web-based trading channel doubled trading frequency and portfolio turnover rose by more than 50%.

Technology has grown in leaps and bounds since 2000 and today's investors can use a DIY investing platform or online broker and a wealth of online research at their fingertips to take control of their own investments – all at superfast speed.

Access to an online investment platform can lead investors to increase their trading activity

Investment platforms can be described to clients in one of three ways: do it yourself, do it with you and do it for you. The first category is self-explanatory, while the second covers providers that help investors choose from the array of securities available – this can include online brokers that have 'buy lists' of selected funds to help guide investors in picking the best option to suit their personal circumstances and risk appetite. These two categories are often described as DIY or business to consumer (B2C) platforms. The final category sees wealth managers and financial advisers make investment decisions on behalf of clients, matching investors with a portfolio and maintaining those investments. These advice - or business to business (B2B) – platforms are designed to be used by financial advisers and offer no, or very limited, access to clients.

A more recent service, offered by investment firms like MoneyFarm, Nutmeg and Wealthify, is so-called robo-advice. Investors select the level of risk they're prepared to take and then computer algorithms – the 'robo' element – manage the portfolio.

Not all platforms offer access to funds and individual equities – some only offer funds – which is worth bearing in mind if investors are looking for a diversified portfolio of products to hold.

On DIY platforms, individual equities are often a good option for investors who understand how to analyse the financial performance of companies and have the time to do so. Investing in funds – a basket of individual equities selected and managed by a fund manager – is the easier option. Even on advice platforms, a lot of advisers choose not to seek onerous regulatory permission to advise on investing in individual equities, says Danny Cox CFPTM Chartered MCSI, of Hargreaves Lansdown. They opt, instead, to just advise on funds.

On advice platforms, advisers must establish the same suitability requirements as they would with any other product. Those requirements centre around a client's financial situation, investment objectives and attitude to risk as well as the nature of the investment, its risks and benefits, and the suitability of the provider.

DIY platforms are a different matter. Here, investors make the investment decision themselves and must conduct their own due diligence. An adviser might have a duty of care to comment on the suitability of DIY investments, however, if he or she has been engaged to review a client's entire financial situation or a part of it to which the DIY investment has some relevance.

PLATFORM CHALLENGES

Online DIY platforms can significantly lower costs if investors make the right choice but they should be mindful of the differences in fees and charges. Hargreaves Lansdown charges an annual 0.45% administration fee for its DIY stocks and shares individual savings account (ISA) while iWeb asks for a one-off £25 payment and IG makes no charge. Fund dealing with a DIY stocks and shares ISA is free with Fidelity, Vanguard and many other providers, but others charge. For instance, Alliance Trust charges £9.99 and Share Centre charges 1% (£7.50 minimum).

Another possible disadvantage of DIY is quite simply trading inexperience. One more factor to consider is protecting investments from tax. Investors must decide if they can unlock the advantages of investment vehicles like stocks and shares ISAs and self-invested personal pensions (SIPPs) – or whether they'd be better off receiving guidance from qualified advisers.

"Investment platforms make investing easier and often cheaper for the investors," says Danny. "For the adviser, they allow them to focus their time on the advisory issues that really add the most value to the investor's situation."

CHOOSE CAREFULLY

If opting for an online platform, advisers need to ensure they are choosing suitable products and services to recommend to their clients, Danny says. "Platform due diligence is important and advisers will quite rightly take more care given the exposure to a larger number of investors. However, the administrative savings outweigh these additional compliance costs."

But Georgios Ercan, of investment firm Dolfin, says additional compliance costs are a factor for advisers, which makes it "almost impossible" for advisers to switch platforms – even if such a switch is to the overall benefit of clients.

He warns: "Planners and advisers should be very careful about which platform they choose to partner. Besides functionality, cost robustness and variety of products they should ensure the platform has aligned the regulatory capital held to the underlying risks presented by their business model."

Adding alternative assets to client portfolios

Investing in alternatives has long been seen as a privileged enclave for elite investors. Barriers to entry were formidable unless you had large amounts to invest or were part of an institution, such as an asset manager or pension fund. But now, more and more can join the club – and take advantage of the investment opportunities

◆ TREVOR CAMPBELL

rivate investors have usually found sanctuary in equities, bonds and cash. Although multi-asset funds have veered into offering more choice, most investors in the UK favour tried and tested ways of putting their money to work. This is typified by the ISA split in the country, according to the Office for National Statistics (ONS). The number of ISA accounts subscribed to each year has consistently been around or over 12 million since the start of the century. For the 2015–16 year, around £80bn was subscribed to adult ISAs, with almost 75% of this in cash. So there is no great swell, yet, of investors opting for more esoteric investments.

But increasingly, there are wider opportunities. Investing in alternative assets – investments not traded on stock markets – such as private equity, infrastructure, property, commodities, hedge funds and various forms of debt are becoming more accessible. A PWC report estimates that the overall market for alternatives (through funds, exchange-traded funds and direct) will almost double between 2015 and 2020: from \$10tn in assets to \$18.1tn (see chart right). Some of this growth is driven by need: the paltry returns from cash are not improving, and extra sources of portfolio diversification are often welcome.

As well as access, issues around liquidity have typically permeated the alternative assets class. If you have the ready capital it's easy to invest in property directly, but you can't get hold of your funds in a hurry if you need to sell that property. So one of the most uncomplicated (and efficient) ways for private investors to gain access to alternative assets is through a closed-ended investment company – also known as an investment trust.

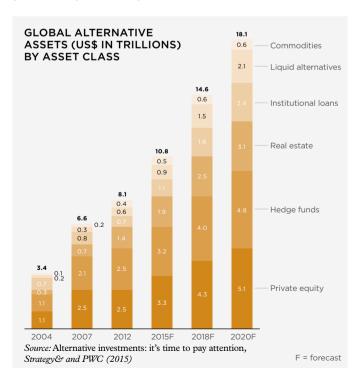
INVESTMENT COMPANIES

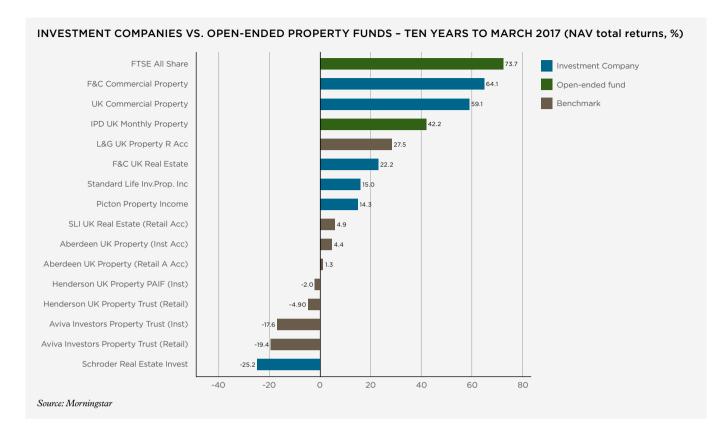
Investment companies provide fluid access to alternatives as they are companies in their own right, listed on the stock exchange, with their shares easily bought and sold. They can make direct investments in privately-listed companies and large infrastructure

projects. Investing in infrastructure, for example, would often mean prohibitive entry requirements for ordinary investors, perhaps £1m or more.

Figures from the Association of Investment Companies (AIC), released in June 2017, reveal that investment trust purchases by financial advisers and wealth managers hit an all-time high of £777m in the year ending 31 March 2017. That's 11% up on 2015. Trust purchases for Q1 2017 were up 85% on the year and 25% on the previous quarter.

"The benefit of an investment company is that you can get access to government-guaranteed schemes,





which often produce steady returns over many years," says the head of training at the AIC, Nick Britton. Whereas with an open-ended fund, a certain amount of investment has to be held in cash, investment companies can get much more exposure to an asset. This can produce decent long-term rewards. Closed-ended property funds, for example, have produced a total return of 48% over ten years, says Nick, while their open-ended counterparts have managed around 20%. The chart above, cited in Cannacord Genuity's May 2017 report on UK property investment companies, shows the performance of a number of open-ended funds and investment companies in the sector over that period.

Advances in energy storage could provide interesting opportunities for investors

The government's National infrastructure delivery plan 2016–2021 could offer attractive potential for investors in infrastructure. An event co-hosted by the professional accountancy association ACCA UK and the CISI in 2016 explored the opportunities and challenges that the sector faces (see cisi.org/rfmsep16, 'Infrastructure investment: the risks and benefits to investors'). The forum stated that government spending on infrastructure dropped from 11.5% of GDP in the 1970s to 3.5% of GDP today, but public sector net debt has hit £1.6tn. So there is little appetite for the government to get mired in further debt.

Increasingly, it is hoped the private sector will help fund infrastructure projects. In fact, the government's proposed plans – for £483bn of investment in over 600 infrastructure projects – needs more than half of the funding for these projects to come from the private sector.

SECTORS WITH POTENTIAL

Iain Scouller, a managing director with Stifel Funds, believes the scale of upcoming projects represents good potential for investors. "At the moment, we are seeing particular interest in funds that give a good yield," he says, citing renewable and infrastructure investment companies as two examples that may provide robust long-term potential.

It is this yield that is indeed attractive. The CISI/ACCA event highlighted that infrastructure is appealing to institutional investors as yields generally exceed those of both 20-year gilts and FTSE 100 companies, with 4–7% returns from yielding infrastructure assets. Equally, investors pursuing capital gains from assets yet to be built (known as 'greenfield' assets) could anticipate returns of 8%–12%. As an added benefit, the infrastructure sector is also attractive because it provides index-linked returns that do not correlate to volatility in the stock market. As Nick states: "There is little relationship between the fortunes of quoted companies and the government-backed income streams from the contract to maintain a motorway or build a hospital."

Iain also has faith in the potential for renewables. According to the Department for Business, Energy & Industrial Strategy, renewables' share of UK electricity generation was 25% in the third quarter of 2016. This is a tremendous increase from the 3% when the first wind turbines cranked into action in 2003 off the coast of north Wales. In particular, Iain thinks the advances in energy storage could provide interesting opportunities for investors who choose investment companies that target this area.

UNCORRELATED PERFORMANCE

Investment trends come and go, however, so should we think that investing in alternatives could go the way of sub-prime mortgage bundles? Robbie Robertson, head of investment companies at Canaccord Genuity, doesn't think so. "We don't believe that demand for alternatives is cyclical, we think it is secular. People were very disappointed with the performance of equities in 2008, and since then we have seen a more general surge for forms of income which are more stable."

Again, the demand for assets uncorrelated to equities is notable. Robbie cites 2008 as a watershed for alternative asset investing, not just for the events of that year, but for the frustration with events such as the technology boom and bust before that also coming to a head.

This frustration heralded the growth of property investment companies such as HICL and John Laing, among others. "They really changed the way the sector was viewed," says Robbie. "Delivering not just uncorrelated returns, but an interesting yield."

PRIVATE EQUITY

So what about private equity investing for retail clients? Historically, institutional investors and high-net-worth individuals usually provided the capital for private equity. This money was then used to help an unlisted company to develop quickly - whether by making an acquisition, investing in new technology or by boosting working capital or its balance sheet. Returns are often high to compensate for the extra risk.

The sector is still recovering reputationally, however, after a number of private equity firms (notably Candover) were badly hit from the fallout of the financial crisis. Many firms had been extremely highly geared and could not cope with elevated debt levels as the economy soured. Robbie believes there are still good private equity companies out there. "More are coming back to private equity," he says. "Many of the issues they faced are a decade old. We're seeing portfolios of very high quality and companies with fantastic management."

In fact, the sector appears to be thriving. According to a 2017 report by leading alternatives data provider Preqin, private equity assets under management hit an all-time high in 2016 at \$2.49tn – with investors no doubt attracted to annualised returns of 16.4% in the three years to June 2016.

Robbie also points to numerous other interesting opportunities in the alternative asset space: social infrastructure funds for those seeking inflation-proofed income, niche property sectors such as student property and doctor surgery estates, peer-to-peer lending opportunities and specialist debt.

VOLATILITY AND LIQUIDITY

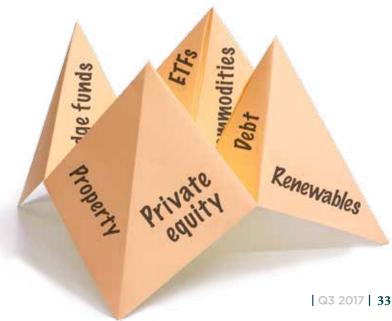
As with all investing, there are traditional concerns surrounding the investment potential of certain alternative assets. Yet Iain believes that by taking the investment company route you at least negate some of the concerns around volatility and liquidity. "Compared to other listed companies, volatility is much less than the mainstream. And because you don't own the assets directly, liquidity is also not an issue, especially when some of these companies are worth billions."

Private equity assests under management hit an all-time high in 2016 at \$2.49tn

Of course, you don't have to go the investment company route. Open-ended investment companies also invest in property, infrastructure and private equity. But these funds do have to deal with the "inefficiencies of managing inflows and outflows, which are often sentiment driven and usually at the wrong point in the cycle," says a report on property investment by Canaccord Genuity.

You can also invest directly in the shares of companies like 3i Group and The Blackstone Group, as long as you are aware that these listed companies will often move in line with the rest of the market - thereby dampening the diversification benefits of alternatives you sought in the first place.

Access, liquidity and volatility have traditionally been barriers to the alternative investment world for mainstream retail investors. The shared risk of investment trusts, which are becoming increasingly popular, mean wealth managers can give a wider group of clients exposure to this higher-return environment, creating a more diversified portfolio for them.



cisi.org/review

This article features edited highlights of a research paper by Nick Edwards CFPTM Chartered FCSI on behavioural finance, and is the second in a series of peer-reviewed papers written by former IFP Fellows to be published by *The Review*

■ NICK EDWARDS CFP™ CHARTERED FCSI

Irrational behaviours

ost people understand how their emotions can affect the decisions that they make on a day-to-day basis, and also that different emotions may apply in different ways at different times.

By contrast, traditional finance theories tend to assume that all investors will act in a careful and consistent manner when making investment decisions.

The study of behavioural finance, which has developed over the past 30 years or so, looks at the psychology and emotional factors behind making investment decisions and, by using these, identifies mismatches between how investors are assumed to behave, based on traditional finance theories, and how they behave in practice.

While it cannot prevent investors from making ill-advised or emotionally driven investment decisions, a firm understanding of its principles may help investors and financial planners to identify the impact that emotions and biases can have when investing.

Behavioural finance research has identified 18 client behaviours that financial planners should be aware of:

1) ANCHORING AND ADJUSTMENT

Anchoring involves using a known amount as a starting point for estimating an unknown amount. As an example, if a survey of radio station listeners asks you to estimate the numbers of hours the average listener spends tuned in each day, your starting point (anchor) may well be the number of hours that you spend listening. Where the anchor is lower than the true

ABOUT THE AUTHOR

Nick Edwards CFP™ Chartered FCSI has over 35 years' experience in the financial services sector, working as an adviser, in product management, development and marketing for providers, and as a consultant. In 2006, he established Consultniks Limited, providing financial services, marketing and technical consultancy services to advisory companies, product providers, support companies and professional bodies. He is also a chartered wealth manager and an examiner for the CISI.

answer, there is generally a tendency to underestimate the answer and, conversely, where the anchor is higher, there is a tendency to overestimate.

2) AVAILABILITY

Decision-making is often based on how individuals process readily available information. Most people would see the chance of being struck by lightning as very low. However, if you have recently read or heard of someone locally being struck, you may well see the chance as being significantly higher.

3) REPRESENTATIVENESS

When an individual judges new situations against experiences that they have already had, this often results in the use of stereotypes that are based on past learning and experiences.

4) GAMBLER'S FALLACY

Following on from the previous example, the gambler's fallacy relates to an individual's misunderstanding of what a random sequence looks like. If you toss a coin five times and come up with a head each time, what would you expect to come up with on the sixth toss? Many would say a tail but the probability of a head is still (just under) 50%, as is the probability of a tail. There is also a slight probability that the coin may land on its edge!

5) OVERCONFIDENCE

Psychologists have found that individuals tend to have an unwarranted confidence in their own decision-making, leading to an inflated confidence in their own abilities. This often results in investors overestimating their ability to select winning investments, leading to overconcentration of particular stocks in a portfolio and a lack of diversification.

Overconfidence can, therefore, lead to the effects of systematic (market) risk being ignored, as the investor believes that his or her stock-picking skills are critical to the portfolio's performance. A knock-on effect can also be that investors trade too frequently, further eroding portfolio returns through dealing charges.

6) SELF-ATTRIBUTION

Self-attribution can fuel the overconfidence bias when investors view any positive outcome in portfolio

66 Psychologists have found that individuals tend to have an unwarranted confidence in their own decision-making, leading to an inflated confidence in their own abilities 99



performance as a reflection of their own ability and skill. Planners should also be careful that they do not fall prey to overconfidence and self-attribution biases when client portfolios perform well.

While risk-taking is a factor of life in general, and an essential part of investing to achieve longer-term real returns, it must be carefully analysed and managed. When positive outcomes are achieved, it must be given its true attribution to the portfolio return.

7) PROSPECT THEORY AND LOSS AVERSION It is unlikely, if not impossible, that investors will always achieve positive returns in all market conditions. When

the expected levels of return are not achieved, it is important to understand how the investor will behave. Prospect theory and loss aversion suggest that investors are more sensitive to investment losses than to gains, with some studies suggesting investors are twice as sensitive.

8) THE DISPOSITION EFFECT

Taking loss aversion one stage further, consider this situation: you are holding two different investments, with $f_10,000$ invested in each. One has grown to be worth £13,000, the other has fallen in value to £7,000. You are now faced with the situation where you need to realise £5,000 from these investments. Which one would you sell down to realise £5,000?

Behavioural finance looks at the psychology and emotional factors behind making investment decisions

The disposition effect shows that investors in such a situation would tend to sell down the investment showing the gain and continue to hold the losing investment, and that this behaviour also has an adverse effect on portfolio returns. The disposition effect should, however, be contrasted with other portfolio management techniques, such as rebalancing, where selling high and buying low is the norm (especially in a passively managed portfolio).

9) REGRET

Regret provides one reason for holding on to losing investments. The investor may feel regret due to the error of judgment that has allowed this investment to 'fail'. Regret can also lead to a tendency to select investments whose returns are well-documented and obvious, over other investments where the potential outcome is more vague.

10) INERTIA

Inertia also plays on the investor's emotions, especially in situations where an investor is suffering regret or is subject to loss aversion. Rather than taking an unpalatable decision today, it may be easier to put off taking any action until tomorrow.

Inertia can have a devastating effect on portfolio returns, both through delaying selling an investment and through failing to buy an investment. Inertia

can be countered by the use of 'automatic' systems and processes, that are unconscious and fast, but uncontrolled, actions and decisions.

Again, planners can beneficially affect investors' behaviour to counter inertia by using these techniques, as well as others, such as automatic portfolio rebalancing and stop loss/stop gain arrangements.

11) STATUS QUO BIAS

Even when inertia has been overcome, there can remain a tendency for investors to stick with what they already have. There can be a number of reasons for this, including:

- ▶ the extra effort that may be involved in making a change
- ▶ the additional uncertainty that a change could bring by placing a greater weight on potential losses than potential gains
- ▶ the endowment effect.

12) ENDOWMENT EFFECT

The endowment effect identifies an individual's tendency to place a higher value on an asset that he or she already owns than he or she would be prepared to pay to acquire it. This can also be closely bound up with the anchoring effect – the investor uses the purchase price of the investment as their anchor and becomes unwilling to sell the investment for less than this amount plus the expected profit.

13) FRAMING

The way in which information is presented can affect decision-making, even when faced with identical choices. Presentation of financial information and statistics can have a significant effect on how investors process it.

However, investors (and their planners) may still focus on and pay disproportionate attention to assets (or groups of assets) within the portfolio that may be showing a loss or poor performance. This focus on past performance in specific parts of the portfolio may mean that insufficient attention is paid to best positioning the whole of the portfolio for the future.

14) MENTAL ACCOUNTING

The framing effect can also be taken a stage further, using mental accounting. Many investors will identify specific investments – or parts of a portfolio – with specific needs, objectives or time horizons. If investors carve their wealth up into such 'pots', instead of using a single 'bucket', there is a tendency to treat each pot differently – in terms of perspective and performance analysis of the assets within the different pots. While the use of pots and specific product wrappers can lead to seemingly illogical outcomes, mental accounting can also be an important factor in providing investors with discipline.

15) NARROW FRAMING AND MYOPIC LOSS AVERSION

Narrow framing and myopic loss aversion involve placing an undue short-term focus on long-term investments. Checking the value of the assets making up the portfolio too frequently can lead to the investor (and planner) becoming overly sensitive to short-term volatility. In some cases it can lead to knee-jerk reactions, which can have a detrimental effect on long-term performance.

16) NAIVE DIVERSIFICATION

Naive diversification can manifest itself in different ways. A cautious investor may feel comfortable placing all their assets on deposit or in defensive assets. This may shield them from short-term volatility in the portfolio, but the asset allocation may have significantly increased the overall risk of the portfolio when other risks such as inflation risk, interest rate risk, reinvestment risk and credit risk are considered. Planners have an important role to play in portfolio management to ensure that portfolios are sufficiently diversified (and non-correlated) and not overconcentrated in any areas.

Many humans prefer to 'go with the flow' rather than do something different

17) THE CERTAINTY EFFECT

The certainty effect manifests itself in two forms – one for gains and one for losses:

- ► Gains: investors will tend to avoid risk when thinking about the possible gains that they can make.
- ► Losses: when faced with the option either to accept a definite loss or to gamble for a better outcome, investors will tend to opt for the latter.

The certainty effects further demonstrate the general tendency to be more sensitive to losses than gains, as discussed earlier.

18) THE HERD

The herd instinct is probably the behaviour trait that is most prevalent in all walks of life. Many humans prefer to 'go with the flow' rather than be seen to be doing something different. While breaking out of the herd may take individuals out of their comfort zone, albeit temporarily, it can allow investors and their planners to take a step back and take decisions more dispassionately.

Behavioural finance is a constantly evolving concept and new studies will introduce new ideas and principles. While the psyche means that investors are likely to continue to behave irrationally, an understanding of the principles underlying behavioural finance can help planners and investors to understand the rationale used when they take investment decisions. Behavioural finance complements traditional finance theories and helps to overcome their individual shortcomings.

This paper was reviewed by: Jacqueline Lockie CFP[™] Chartered FCSI; Howard Gannaway CFP[™] Chartered FCSI; Carolyn Gowen CFP[™] Chartered FCSI; and Ian O'Connor CFP[™] Chartered FCSI.

Diving into the unknown

Roger Edmunds, Chartered MCSI, loves getting into deep water

LORA BENSON OR ROGER EDMUNDS/CLIP PIXEL PHOTOS

wimming through the depths of a natural underwater museum, Roger Edmunds,
Chartered MCSI, is privileged to see a part of the planet few have seen in real life. His hobby of closed circuit rebreather (CCR) diving has taken him to deep trenches and open seas around the world to explore WWII wrecks of aircraft, merchant ships and warships, and brought him up close to an amazing array of sea life, including dolphins, barracuda and octopuses.

This exotic pastime is far removed from his role as freelance finance director of his own firm of chartered accountants, which acts for regulated financial small and medium-sized enterprises (SMEs), mainly in the City. CCR diving allows Roger to escape to another world and "access wrecks that are often pristine or rarely visited", in relative silence compared to an open circuit unit.

LONGER, DEEPER DIVES

Roger explains that CCR diving recirculates the gases used. Carbon dioxide is scrubbed and oxygen added to top up the amount of oxygen used. No gas is expelled, unlike in open circuit diving, which means the silence allows the diver to hear what is going on in the ocean, and not disturb the sea life.

"It allows for longer and deeper dives and an improved ability to photograph animals who would otherwise flee the noise of an open circuit diving unit," says Roger.

Roger's love of rebreather diving began in September 2009: "I borrowed a rebreather off an instructor on a Red Sea dive while on a wreck diving holiday. I found it quite different from the open circuit experience. My dive on this occasion was to a depth of about 15 metres, followed by another at about 37 metres. This sold me on the system. Learning the technology,



computer systems and attending the training courses took roughly three years."

Roger was 66 when he completed his first course in 2012 in Lanzarote, renting his equipment to see how well it dived – a good tip, as buying a unit and discovering that it does not suit you can be an expensive mistake.

While "Chepstow, Vobster in Somerset and Stoney Cove in Leicestershire are the closest deep water quarries used for training," Roger prefers "warmer, open water for training, such as Malta, the Red Sea or the Caribbean".

"You need to have good attention to detail and an awareness of your surroundings"

His favourite diving spots are the "Cayman Islands for critters and Chuuk Lagoon for wrecks. The Cayman Trench is deep, which attracts the Pelagic species, including tuna, sharks and large rays. Chuuk has over 70 WWII wrecks of aircraft, merchant ships and warships at all depths, including many around 70 metres."

Safety is paramount and Roger services, rebuilds and tests his rebreather unit each season, working through from pool testing to quarry dives, shallow open water English Channel dives and deeper diving.

The deepest dive Roger has done is to 71 metres off Malin Head, and the longest amount of time he has dived for is two hours and 31 minutes, exploring the Japanese Kamikaze-Class destroyer Oite inside the north pass to Chuuk Lagoon. "She was blown into two by Avenger aircraft from the US Fleet during Operation Hailstorm. Chuuk is an underwater museum with a no-take policy, except for photographs."

The risks of deep sea diving include decompression illness, disorientation, hypothermia, oxygen toxicity and equipment failure. "On the HIJMS Oite the silt got stirred up, reducing the visibility in the semi-darkness to nil while I was inside the bow section," Roger says. "I could not see the way out. The few minutes for it to settle seemed a long time. At that depth every minute adds more than a minute of decompression time!"

To those who might be interested in taking up Roger's hobby, he has this advice: "You need to have good attention to detail, an awareness of your surroundings and preferably be immune to seasickness."

Contact *lora.benson@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.

THE CALM AFTER THE STORM

Sam Whybrow CFPTM Chartered MCSI helps his client navigate through divorce and job resignation and sets her on the path to a secure early retirement

SAM WHYBROW

THE BRIEF

Andrea, aged 54, highly successful and earning a six-figure salary in London, was disillusioned with her high-pressured job. She sought a better work/life balance so that she could devote time to pursuing her own passions. She wanted to split her time between London, where she lives, and being with her son and grandchild who live some miles away.

She and her husband were also divorcing, but wanted to do so amicably. Andrea and her husband had accumulated assets over the years and had repaid their mortgage. However, she was unsure about her financial capacity to change her life so dramatically, especially as she was approaching retirement age. She was worried about both her immediate financial position and the effect these changes would have on her overall financial position.

ndrea had major decisions to make. It was vital that I understood Andrea as a person before we started talking about financials, and we therefore took time to establish how she had achieved her present position; what vision she had for the future; what her past experiences with money were; what was important to her; and what expectations she had.

I was also interested to know what her husband's expectations were for the divorce settlement. This insight would help me to assist Andrea and her solicitor to resolve the divorce as amicably as possible and make mutually acceptable financial decisions. The aim was to put a strategy in place that reflected what Andrea wanted from her life. I therefore needed to know what she expected from her money.

We helped Andrea move to a life and financial position that had clarity, focus and structure

The initial conversations I had with Andrea focused on helping her to be positive so she believed that her goals were achievable. The obstacles would be discussed later, but at that point it was important that Andrea did not limit her beliefs before the divorce was finalised, or before she knew what possibilities were available to her.

Andrea placed significant importance on ensuring that her "capital lasted as long as she did", especially as she was still some way from her retirement age (65). However, she didn't want to fear using some of her capital immediately to help fund her new life. In her words: "Why live life tomorrow, when you can live it today?"

She was keen to split her time between "her London life" and her "life as a mother and grandmother". However, she was conscious that this could affect her earnings potential, especially if she spent considerable time away from London, which was where her new consultancy business would have the best opportunity to thrive. Her consultancy earnings were an important part of the financial transition between full-time employment, semi-retirement and retirement.

In-between our meetings and conversations, I established that Andrea had assets of some £250,000 in ISAs, £300,000 in shares and unit trusts, £650,000 in pensions and £350,000 in bank deposits. The jointly owned, unencumbered UK property had already been sold for £1,650,000 and both parties had bought their own property with an equal share of the proceeds. Andrea had retained some £75,000 in bank deposits after buying a property for £750,000. The residual amount was earmarked for home improvements. Her husband had independent assets of some £,200,000 in ISAs, a business valued at some £500,000, a deferred final salary pension with a cash equivalent transfer value of £450,000 and bank deposits of £175,000. Her husband was keen to retain his business and final salary pension whereas Andrea was keen to have flexibility of capital and income.

IDENTIFYING EXPENDITURE

Andrea completed an expenditure questionnaire which identified that she was spending all of her income. I also asked her to imagine what expenditure might look like for her new life. The questionnaire showed that her expenditure dramatically reduced from some £100,000+ pa to some £40,000 pa. We agreed to cease pension contributions for the time being, and for ISAs

to be funded from her share portfolio rather than from her own savings.

From my understanding of her husband's position I was confident that Andrea had sufficient assets, based on an initial equal split of matrimonial assets, to help her transition from her highly pressured life to the one that she dreamt of. It was also apparent that Andrea could achieve her required amount of income, a flexible lifestyle and longer-term security, all while she built a new business and transitioned into retirement.

It was important that Andrea visualise this too, especially as so much of her life was susceptible to change. We therefore agreed that I would create an overview of her potential future financial position (cashflow plan) based on various desired outcomes. This would help her to plan for tomorrow, today, while incorporating provision for obstacles and unknowns.

We arranged to meet every two weeks over an initial two-month period to help us/Andrea to maintain momentum, allow both parties time for reflection, build Andrea's confidence and adjust our planning accordingly.

During that eight-week period we built various financial plans using many assumptions to stress test her financial position in various divorce scenarios. Andrea was subsequently fully informed and knowledgeable about her current and future financial position and we were also able to liaise with her solicitor so that the divorce could be settled at the earliest opportunity.

Shortly after our work together, Andrea created an amicable financial agreement with her husband.

Over the course of a few months, we managed to help Andrea move from a state of flux to a life and financial position that had greater clarity, focus, structure, and also flexibility.

SAM WHYBROW BIOGRAPHY

Sam has multiple qualifications, including the CERTIFIED FINANCIAL PLANNER™ designation, and is a Registered Life Planner. He works at multi-award winning Cervello Financial Planning in Essex.

Sam is passionate about financial life planning and how people connect with money, their life and others to make money work for them, not the other way round. Planning is first and foremost about his clients, their future and then their money, which he believes delivers better outcomes.

Sam is also intent on combining digital solutions with the best parts of financial life planning to further enhance his clients' financial planning experience.



WHAT HAPPENED NEXT

TAKEAWAYS:

- Andrea resigned from employment, confident in the future. She sees her son more, enjoys a less stressful life and has more than enough income to satisfy her needs.
- 2. We implemented several recommendations that have improved her position and met her needs. We regularly meet to ensure she is fully abreast of her financial position and that every financial decision she/ we make is meaningful.
- 3. So far Andrea has not needed to access her pension as her consultancy business is thriving.
- 4. Her holiday home is being let and, as expected, the income varies but is mainly consistent. She is considering stopping the holiday let, such is her overall income position. She is continually making home improvements from the money we set aside for her

She has so far been delighted by the planning we have put in place for her and has appreciated that we have acted in her best interests at all times. She is surprised by the relationship we have built and by how we worked together to achieve her goals. Her finances now have meaning and have given her life purpose.

Louise Norman CFPTM Chartered MCSI, director at HC Wealth Management, helps clients at or near retirement not only plan for their own futures but also consider how they may pass on their wealth to the younger generation

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

We were amongst the first to become accredited in 2011. We saw it as a method to assess and validate our work as professionals and a way of standing out from other financial planning firms. The process was relatively straightforward, because most of our planners were already level 6 qualified as CERTIFIED FINANCIAL PLANNERTM professionals.



Louise Norman CFP™ Chartered MCSI

Louise is a CERTIFIED FINANCIAL PLANNER™ professional and director of HC Wealth Management. She looks after several clients, with a focus on lifetime cashflow planning and investment

management. Louise is also responsible for the day-to-day running of the business and overseeing the support team.

Following attainment of an LLB Hons Law degree at Nottingham Trent University in 2001. Louise trained as a paraplanner and took on the role of head of professional services within the wealth management division at Bluefin, where she had responsibility for an award-winning team of paraplanners. She also worked with other departments to introduce standard processes, documentation and procedures across the business and develop the financial planning and investment propositions.

Louise joined HC Wealth Management in 2010 and concentrated on a more client-focused role with a more hands-on approach to running the business. Although now a financial planner, in May 2011 Louise received the designation of Accredited Paraplanner from the Institute of Financial Planning in recognition of the work she has done and support she has given to the paraplanning profession.

louise.norman@hcwm.co.uk + 44 1276 853 669

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

We were listed in the New Model Adviser top 100 firms in both 2014 and 2015. Since 2016 we have been focusing on reviewing our services and have undergone a period of restructuring.

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

We offer a wealth management service to clients either approaching or at retirement. We design a financial plan and long-term implementation strategy with them to help position them towards achieving their financial goals. What we aim to do for all clients is work with them to deliver their objectives with as much predictability as possible; using a disciplined approach to asset allocation and disaggregation.

As we have worked with many of our clients for years, an increasing number are now considering how they may pass on their wealth to future generations, having reached a point where they can afford to do so. In addition, with new clients we are increasingly finding that the discussion often becomes more related to intergenerational planning and the types of strategies that may involve.

This means that we also have some involvement with the younger generations of families, and over time, as they have either inherited assets or assumed control of funds accumulated on their behalf, we have seen the number of vounger clients increase, which opens up a rather different discussion around the benefits of financial planning.

Linked to the clients we help, we do also work with many trust clients to design and oversee strategies to help deliver the trust objectives.

How did you get into financial planning?

I joined Hayward Chambers as a graduate recruit, training to become a paraplanner with Ian Shipway CFPTM Chartered FCSI and Geoff Matthews in 2001, after completing my law degree. I became a $CFP^{\rm TM}$ professional in 2006.

The firm was sold to Thinc Financial Planning in 2004, which later became Bluefin. In 2010 I joined HC Wealth Management as general manager. The firm was part of a network at that time. We now have seven financial planners, which include three directors and four planners. We also have four back office staff, including one paraplanner.

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

Helping clients realise what they can achieve in their retirement with the assets they have accumulated during their lifetimes and easing some of the pressure of making big life-changing decisions. It is a delight to give clients a meaningful structure; to help them and see the fruits of years of hard work put in by both them and us. Seeing them being able to enjoy life after working hard for so many years is a real pleasure.

What does a typical day look like?

Within the business I wear two 'hats': I look after my own clients and oversee operations. This means that there are often days where I must deal with urgent issues that crop up, and not one day is the same as the other.

The day could involve meetings with new clients to discuss our services or drafting and presenting a financial plan and strategies. The team oversees all the administrative tasks but the planner is responsible for bringing each client into the business and managing that element of the process, which can prove time consuming.

We have a structured business process, so every client knows when their review is due and we contact them in the preceding month to begin preparing for the annual planning meeting. For some clients this will involve a face-to-face meeting, while others are happy to catch up via telephone or Skype. We subsequently prepare their annual report, which includes confirmation of our recommendations for action, all of which require my involvement.

We were listed in the New Model Adviser top 100 firms in both 2014 and 2015

What do you think about Financial Planning Week?

We didn't get involved in Financial Planning Week this year because of our continuing restructuring but have enjoyed it in the past and see it as a valuable thing to do, helping the wider public understand what financial planning is.

What legislative change has had the biggest impact on your business?

The Retail Distribution Review didn't have a huge impact on us as we were already charging fees and all our planners were already at least level 4 qualified. The changes to VAT changed the way we charged VAT and

we de-registered for VAT. But aside from all that, I think the pensions simplification and freedoms have increased the options we can offer to our clients. Decumulation has certainly changed the way we advise but we have always dealt in drawdown and disaggregation portfolios.

We offer a wealth management service to clients either approaching or at retirement

How do you see your business's future?

I think we will continue to grow organically and continue to give high-quality advice to clients. We also have one eye on the fact that we have an ageing client base but continue to receive referrals from our existing clients, so at the moment we don't have any issues, but it is something we continually monitor and are mindful of.

What do you think about the CISI?

I think the CISI is a very professional organisation and is much larger than the IFP that I am used to. I understand the decision behind the merger and think it is good to have the backing as long as the message of financial planning continues to be delivered.

What are your key tips for other planners?

- ▶ Have good governance in place to run your firm.
- ► Follow and implement it many firms often have a process but do not actually implement anything.
- ► Think about things from your clients' perspective. Be clear and write in plain English. If you don't understand things easily, then your clients won't!
- ➤ Try to put the client at the heart of everything you do. •

To find out more about becoming an accredited firm, see cisi.org/afpf

To find out more about becoming a CFP professional, see cisi.org/cfp





WARN OR WEED OUT?

Brandon and Greg's firm has become aware of a photo they have shared that shows them indulging in a recreational drug while on holiday at a location where the drug is legal. How should the firm deal with this?

randon and Izzy met at the UK branch of a major international financial services firm where they both work. After a few years they decided to get married. For the honeymoon, they chose to spend time in the US, starting with a week in Las Vegas, then followed by a week skiing in Vail, Colorado – a place they had always wanted to visit.

All went as planned and the wedding lived up to their hopes and expectations – the flight to Las Vegas even departed on time! The attractions of five nights in Las Vegas meant that by the time the couple got to Vail they were feeling ready for a rest. But the desire to explore got the better of them and they were soon itching to hit the slopes.

CHANCE MEETING

While strolling about the village the couple were surprised to hear Brandon's name being called. A man came hurrying towards them with his hand outstretched in greeting. "Hi Brandon, what a surprise to see you here – and this lovely lady you are with must be Izzy?" Turning to Izzy, he introduced himself as Greg, a colleague from their firm's Chicago office, whom Brandon had met on a couple of business trips to the US.

Greg explained that he was also on holiday in Vail, where his family owned a timeshare apartment, and he insisted that Brandon and Izzy should join him and his partner for dinner before they returned to the UK at the end of the week. Unable to say no to Greg's generous invitation, the couple agreed that they would meet for dinner in a restaurant and then go on to Greg's apartment for a nightcap.

After five days of exhilarating skiing and accompanying nightlife, Brandon and Izzy returned home feeling that they had achieved their dream holiday. As an added bonus, Greg had invited them to join him in Vail for a future visit. Returning to work was a struggle but sharing photos of the trip with colleagues kept the memories fresh for a while longer.

"Wonderful end to the vacation with Brandon; can't wait for this to be legal in New York!"

Three weeks later, Brandon is called into his manager Karl's office, where Karl tells him that Carol in the HR department has asked to see him at 4pm that day, although she has not said what it is about. Brandon tries to draw Karl on what it could be, but Karl insists that he knows nothing. Mystified, Brandon returns to his desk and spends the next hour imagining all the things that HR might want, before making his way there for the 4pm appointment.

Brandon is shown into Carol's office and is somewhat surprised when her opening comment is that she enjoyed his photographs from Vail, and that it looks as though he had a very good time. This leaves Brandon feeling slightly alarmed and wondering how Carol has seen his pictures. However, he is unconcerned about the content, which he believes is quite innocuous. Carol then passes her iPad across the desk and Brandon sees a picture of himself and Greg leaning back on a sofa in Greg's Vail apartment, wreathed in smoke, with the caption under the picture saying:

"Wonderful end to the vacation with Brandon; can't wait for this to be legal in New York!"

Brandon asks whether he should be accompanied by someone before answering

Seemingly innocent, Carol asks Brandon what "this" might be, to which Brandon responds by asking the nature of her enquiry and whether he should be accompanied by someone before answering.

The dilemma: Brandon has gone on holiday to a state of the US where the use of cannabis in private is legal.

A BREACH OF CONTRACT TERMS

From a photograph posted on social media, Brandon's employer has become aware that he appears to have used a drug which is illegal in the UK. Furthermore, the use of the drug is in breach of the terms of his contract.

Another employee of the firm, who is employed in the US, has also apparently used a recreational drug, the use of which is legal in the state where it was consumed, although not throughout the US. Accordingly, it does not constitute a federal offence. But it is against his firm's term of employment.

HOW SHOULD THE FIRM HANDLE THIS?

- 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.
- B) Since Brandon is in breach of his terms of employment, he must be subject to the firm's formal disciplinary process.
- C) Brandon was on holiday at the time and his firm should just ignore the social media posting.
- D) The firm must ensure that whatever action is pursued must apply equally to both Brandon and Greg. •

WHAT WOULD YOU ADVISE? Visit cisi.org/warnorweedout and let us know your favoured option. The results of the survey and the opinion of CISI will be published in the Q4 print edition of *The Review*.

MARGINALLY EVASIVE: THE VERDICT

This dilemma, originally published in the previous print edition of *The Review*, was the top read in the online *Review*. Perhaps not surprising as in several recent surveys on public attitudes to corporate behaviour, 'paying their fair share of tax' has been respondents' top concern. There were many well-considered comments, for which we thank you. A selection of these will be published online at *cisi.org/taxverdict*

In this dilemma, the company has already taken an action and so the question asked of readers is to determine what Jonathan should do when he becomes aware of the actions of his employer, but only after the event. Options offered and results are as follows:

- **A.** Contact the BBC to tip them off about his bank continuing to offer aggressive tax planning to clients and undertaking similarly questionable schemes for its own benefit. (2%)
- **B.** Contact H_, the bank's counsel, to confirm whether he had the conversation with R_, and whether the content of the note is accurate. (4%)
- **C.** Contact the bank's Speak Up line to report his concerns about the bank providing tax solutions that appear to be unacceptable and about his treatment by R when he tried to discuss his concerns with her. (68%)
- **D.** Seek to discuss his concerns with the senior independent director. (26%)

While it may be tempting to contact the BBC (option A), this is not an appropriate choice, as those who have attended a CISI Speak Up presentation will be aware. Contacting the media is very much a last-resort action. There is no evidence that this point has yet been reached.

Contacting the bank's counsel (B) is only slightly more popular and, in terms of the CISI's recommendations, this may be considered under the heading of 'do not become a prosecutor'.

Because contacting the whistleblowing line is offered as an option (C), most respondents chose it as the most appropriate action but, given the nature of the concern, this might be characterised as a 'protest vote'. However, if the line properly records and reports on calls made, then the firm's whistleblowing champion might communicate this dissatisfaction to the executive in an effective manner, if he or she thinks it appropriate. Whether that influences matters in the future is a moot point.

Option D is the second most popular course of action and that which we would recommend. The advantage of this over (C) is that it provides Jonathan with the opportunity to share his views directly with someone of influence, rather than through the filter of the whistleblowing line.

Blockchain has finally appeared on big financial institutions' board agendas – and those of their regulators. Why this sudden surge? Keith Bear and Graham Biggart of IBM lift the lid on some of the major issues, from Hyperledgers to trust, that will be covered during a major event on this theme in London – to be broadcast on CISI TV – in September 2017

◆ KEITH BEAR & GRAHAM BIGGART

BLOCKCHAIN ENTERS THE PREMIER LEAGUE

here is no doubt that blockchain is about bringing trust to transactions. For almost any supply chain – be it food, medical records, precious gems and minerals, real estate or credit default swaps – success depends on the promise of transparency and auditability for all participants. In this sense, we can view financial products as supply chains of primary and secondary markets – a supply chain of cash in one direction and of shares, certificates of deposit or derivatives in the other.

TRANSPARENCY THAT ENGENDERS TRUST

Jessi Baker, founder and CEO of UK start-up Provenance, which uses technologies like blockchain and works with suppliers, brands and certifiers to ensure an open, secure record of products' journey and creation, recently said: "At its heart, a blockchain is a system that allows people who don't trust each other, to trust each other."

Blockchain is designed to deliver on that promise, and to do so transparently. For financial markets, the 2008 global financial crisis was a nadir for market opacity and trust. As a result, the financial services sector still carries the sting of increased scrutiny and regulation. And while digitalisation has made a difference to the client interface,

PIONEERING LARGE-SCALE BLOCKCHAIN IMPLEMENTATION

The Depository Trust & Clearing Corporation (DTCC) has brought together many of the world's largest participants in the credit default swap markets to collaborate on selection and implementation of blockchain-based approaches for its Trade Information Warehouse, which will be built on DTTC's leading role in the Hyperledger project. We see this as not only an industry standard for an 'at scale' deployment of blockchain in financial markets, but a major statement of confidence to the market for the value that blockchain approaches can bring to such critical market infrastructure.

it has not changed the supply chain. So participants are increasingly looking at distributed ledger technology to become an open, secure, scalable, transparent way to imbue transactions with trust and confidence.

BLOCKCHAIN AS A CONVERGENCE POINT FOR REGULATION AND TECHNICAL INNOVATION

In financial markets, there has been significant momentum behind a blockchain project known as Hyperledger to create a blockchain standard. The project is an open source, open governance global collaboration including leaders in finance, banking, supply chains and manufacturing, among others.

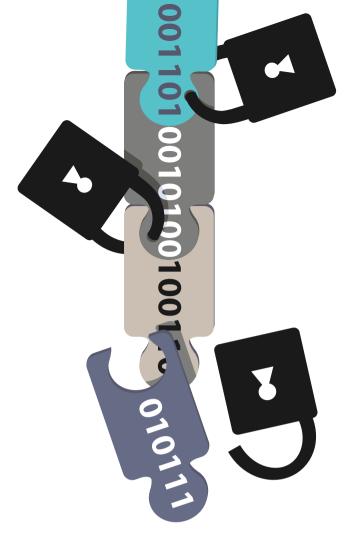
"Blockchain is a system that allows people who don't trust each other, to trust each other"

According to a recent study by the IBM Institute for Business Value (IBV) that surveyed 200 financial markets executives, blockchain adoption is being led by just 14% of firms surveyed – we call them Trailblazers. That group expects to implement commercial solutions at scale this year. More than twice as many, 30%, have no plans to have a commercial solution until at least 2020.

Among the reasons for the deliberate pace of commercialising blockchain are the considerable tasks of designing databases, methods, services and governance approaches. Nonetheless, judging by the number of proofs of concept, social chatter, and even firms joining multiple initiatives, interest and confidence in blockchain are rising.

The Trailblazers are not merely interested in technology research. They intend to disrupt the status quo for powerful competitive advantage. And Trailblazers may not be whom you expect (see sidebar, 'Pioneering large-scale blockchain implementation').

Similar to the DTCC example noted in the sidebar, CLS Group is working on a Hyperledger Fabric blockchain

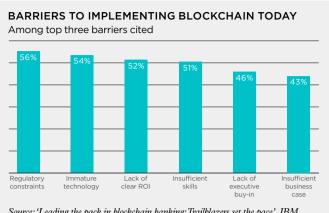


bilateral foreign exchange (FX) trade netting service (a way to hedge currency risk). It will be for buy-side and sell-side institutions' FX trades settled outside the regular and major CLS settlement service. The company expects its wide customer base of 21,000 institutions worldwide and its global presence to give it an edge in bringing a new blockchain-based solution to the market.

Indeed, you would be hard-pressed to find a major financial services firm that is not experimenting with – or joining a consortium testing on – blockchain. Still, for such a promising technology, the financial services sector seems to be tiptoeing forward rather than leaping ahead. In the IBV study, 56% of respondents cited regulatory constraints among their top three barriers (see chart). Once regulators believe a change will support or extend their core security and transparency mandate, we believe they will support change. Of course, the cost drivers have to be clear and the cost of change has to be well understood.

Moreover, except in cases where an enterprise owns a significant network, such as CLS or DTCC, there should be consensus on standards. Regulators are not inclined to arbitrate between competing standards. They would prefer open or multi-mode approaches that allow users to move at their own speed.

So regulators are rightly nervous of exercising their power, but see merit in allowing greater trust and



Source: 'Leading the pack in blockchain banking: Trailblazers set the pace', IBM Institute for Business Value and the Economist Intelligence Unit

transparency. They walk a narrow path, trying to make rules that are technically sound, but vendor-neutral.

HEADING TOWARDS MARKET IMPACT IN FINANCIAL SERVICES AND BEYOND

If regulators and participants can come to a consensus on the use of blockchain, it could be a cost-saving boon to worldwide financial markets. And, with cost savings and reduced operational risk as shared desires of both regulators and participants, no longer would each firm require its own archaic ledger system.

On six continents, regulated firms are bringing forward multiple proofs of concept. Regulators are engaging in the testing, selection and application of blockchain with unprecedented ardour so the solutions that emerge are robust, tested and scalable.

Commercial blockchains and shared regulatory burdens are expected to usher in an era of innovation in business, operating and revenue models. Trailblazers are getting ready to launch commercial solutions to scale within the year. It's time to choose: will you be a disrupter or be disrupted?

For more information on the September 2017 event, visit cisi.org/hyperledgers



About the authors

Keith Bear is vice president, global financial markets, IBM. He works extensively with global clients on their major transformation programmes, and with financial markets

infrastructure firms and leading global banks on their plans for deploying blockchain. keith_bear@uk.ibm.com

Graham Biggart is regulatory and compliance solutions lead at IBM.



Educating pension holders

In the wake of auto-enrolment, employers could be best placed to teach a new generation about the importance of saving for their future

ANDREW DAVIS JOHANNA WARD

Providing financial education is rather like paying tax or doing the ironing: most people agree it needs to happen but they'd rather someone else did it. So far, so typical of human nature. But ask who should take responsibility and it seems opinions remain remarkably fluid, according to an annual survey of employers.

The survey, commissioned by advisory firm Chase de Vere, reports that in 2017, 35% of businesses believe it is the government's job to provide their staff with financial education - a huge turnaround from the result in 2016, when 65% of employers thought so. That sounds promising, until you see the next line in the results. Last year, just 4% of employers thought it was their employees' responsibility to provide their own financial education. Fast forward a year and now 29% think so.

ENCOURAGING NEWS

There is, however, one mildly encouraging piece of news in this survey to offset the impression that people are being left to fend for themselves in the financial services jungle. The proportion of companies who feel it is their responsibility to provide financial education for their staff is rising, from 14% in 2016 to 20% this year.

Admittedly, this is no landslide but it is a step in the right direction and one that must be related to the fact that auto-enrolment into workplace pension schemes is spreading fast and has already resulted in eight million new members. By 2040, these people are forecast to have built up a vast pot of pension savings: some £500bn in the National Employee Savings Trust alone. Where will they naturally look first for information and advice as their pension pots grow? Their employers, in all likelihood. Thankfully, it seems that a growing proportion of these companies are acknowledging their central role in helping their staff to make sense of the pensions system and get the most out of it: Chase's survey finds that 58% of employers plan to help their staff make more informed choices about their retirement.

This is both encouraging and important. Of course, the

to help them put schemes in place say there is a widespread view that they do indeed have a duty of care to their staff where pensions are concerned, although the survey finds that only 36% of respondents have budgeted to pay for financial advice this year.

BUILDING TRUST

In the long campaign to ensure better financial education, finding a willing provider is half the battle. The other half is building trust among those who need the information. Research repeatedly shows that people who do not have a financial adviser tend not to trust them as a breed. By contrast, they are generally happier to trust the company they work for and are therefore more open to receiving financial education and guidance in this context than from most other sources.

Providing financial education is rather like paying tax or doing the ironing: most people agree it needs to happen but they'd rather someone else did it

days are gone when old-style paternalism meant your company shouldered all the financial risks involved in providing you with an index-linked final salary pension for life. But the instinct among employers to do right by their people has not died out entirely and some, at least, are still showing a welcome willingness to take responsibility. In fact, those that work with smaller employers

Among many larger companies, access to professional financial advisers is now a standard part of the employee benefits package, a trend encouraged by changes to tax allowances. This makes sense as employers can bulk-buy advice at better rates than employees could get for themselves and so deliver a service that people want in a context that makes

sense: where better to talk about your occupational pension than at work?

Thanks to the spread of autoenrolment through smaller companies, the workplace is becoming a more important channel through which to access financial education and guidance. It is still early days, however – the experience among specialists is that employees don't generally start to take an interest in their pension until it is worth more than their car. But as that pool of workplace pension savings climbs towards £,500bn and beyond over the coming decades, we're likely to see an increasing flow of requests to employers for financial guidance.

Provided enough companies are willing to accept some responsibility and find ways to respond, it's possible that many more people will gain an improved level of financial understanding from a source they are generally inclined to trust.

If a system of this kind can indeed emerge as a byproduct of auto-enrolment, it should offer an effective way to help millions of people gain the knowledge they need to get the most out of their savings. Perhaps we can see in it the contours of a replacement for the old-style paternalism that gave us the final-salary system: employers not as providers of pension guarantees, but of pension engagement.

CHANGE: REGULATORY UPDATE

We live at different levels simultaneously. We have to block out the uncertain political future to focus on day-to-day business. For regulation this means preparing for the revised Markets in Financial Instruments Directive (MiFID II) in all its many applications to firms, from the significant changes to markets, investor protection and how it will affect our very business models. And this focus must take account of changes in 2018 in corporate governance under the extension of the Senior Managers and Certification Regime (SMCR), under Basel II for Capital Requirements Regulation (CRR) firms and for all firms in the handling of personal data under the EU General Data Protection Regulation (GDPR). Beyond that there is Brexit. There are also positives. For example the FCA's softer tone on enforcement. There is no let up in regulatory change and compliance costs in sight yet. Eyes down ...

Children M. Bond

Christopher Bond, Chartered MCSI, Change editor

Christopher Bond, Chartered MCSI is a senior adviser to the CISI. He has extensive experience in financial regulation, both as a lawyer and as editor of the CISI's well-regarded regulatory magazine, *Change*, which he edited for ten years. He gives presentations on many EU and UK regulatory subjects in the UK and Europe, and writes for a number of regulatory publications. He also supports the CISI's Compliance and European Regulation Forums and advises on Professional Refresher modules. He is a commodities derivatives board director and editor of *The International Banker*, the magazine of the Worshipful Company of International Bankers.

Top ten regulatory developments

Can the regulators catch up with fintech?

What is fintech? Financial firms have been innovating since long before this word was invented. Remember 'end-to-end' transaction processing? The number of staff in the back and middle office has been reducing for many years. So what is the new fintech paradigm? Here are some suggestions about the 'third industrial revolution'.

- It is a communications sea change. The ability to contact a lot of people quickly using the internet is new.
- The rapid increase in the memory of computers enables them to analyse huge volumes of data much quicker than humans can, eg, in creating portfolios or monitoring their performance.
- The low cost of some new technology has reduced the entry barriers to many activities, eg, in setting up new trading platforms.
- Regulatory changes require new technology, eg, in transaction reporting in milliseconds or in robo-advice filling the 'advice gap' after the Retail Distribution Review (RDR).
- The impact of these developments on markets now more than half the trading volumes of exchanges is automated trading.
 This has developed its own momentum to ever faster speeds of servers at exchanges.
- The genuinely new concept of the 'distributed ledger' or blockchain which enables transactions to be recorded and settled without the conventional exchanges between firms, markets and clearers.

UK and EU regulators have reacted in different ways to these trends – mainly trying to adapt rules designed for existing technology with mixed success, eg, whether the suitability approach can survive while encouraging robo-advice to fill the 'advice gap'; insisting that firms are responsible for tough transaction reporting knowing full well that most of them will use an external provider to report on their behalf; refusing to take a view upon whether automated trading and high-speed trading should be encouraged or discouraged; the related question of whether to make conditions for direct customer access to markets so onerous that they would choke its development; their ambivalent position on platforms including wraps (do they benefit or disadvantage investors?) and how light a touch should peer-to-peer services, which use new technology to make credit decisions, have in competition with banks using conventional lending models? Above all, how do you square encouraging new disruptive technologies and products while protecting investors and managing systemic risk?

The main difficulty is that the time it takes to change rules is always longer than it takes to innovate. New rules address yesterday's changes. The FCA has wisely decided to look ahead through its regulatory 'sandbox' – enabling firms to obtain early regulatory feedback on new products and services. However this will always be too little until regulators make the big decisions on some of the issues described earlier. Some of these are political. They require the establishment of a new influential body to co-ordinate policies between the Treasury, the Bank of England and regulators in the UK. To avoid regulatory arbitrage there should also be

an international financial non-sectoral equivalent body on the lines of IOSCO or Basel. Otherwise regulators will continue to be dragged along behind the fintech chariot.

2. Preparing for MiFID II

The EU's MiFID II starts on 3 January 2018 – less than six months to go. The FCA published its final rules on conduct of business changes (Policy Statement 17/14) on 3 July 2017, having consulted on their drafts, and these have been supplemented by trade body guidance. So by now most firms have not only made a gap analysis of its impact on their business but are well advanced in their project plan implementation. Any that have not done so have little time to lose given its radical IT, compliance and business changes. The FCA is aware of the wholesale change to firms' business models and has informally suggested that it may not expect firms to be completely ready on 3 January. However, there must be wider and more comprehensive transaction reporting, and firms must be able to show that they know what other changes to make and have started to make them. Relationship managed firms have had to give progress reports to their regulators and some contact centre firms have had a detailed questionnaire. A thematic review of MiFID II implementation is likely in mid-2018 with the subsequent report giving an overall picture. The slowest changers may expect a referral to the enforcement division.

The position of UK firms with non-EU activities is particularly interesting. What parts of MiFID II apply to these? And what parts may be adopted voluntarily for consistency purposes? Some suggestions include transaction reporting, research payments and equity and derivatives trading rules.

Action

The impact of MiFID II varies a lot on each financial sector. Here are some key points for these. Please see also the online article in *The Review:* 'MiFID II: Are you prepared?' for more detail. Here are some key points from the final FCA Conduct of Business (COB) rules:

- Costs and charges disclosure. Firms will decide how to do it there will be no template. Asset managers must also consider the separate FCA proposals (see point 8: 'The FCA's asset management report is out', p. 50).
- **Best execution.** Fund managers have a duty to give sell-side firms information on sub fund allocations.

- Inducement ban on fund providers. RDR rules remain intact, including on fee rebating to client; 'restricted' firms in scope; definition of 'independence' narrowed.
- Unbundling research and transaction costs. No extension of the requirement to services to non-EU firms; discussions with the US continues on 'free' research to EU firms from US firms.
- Taping. Corporate finance exempted unless underwriting or in secondary markets.
- Duty of 'appropriateness' and investment trusts. The FCA has refused to provide guidance, leaving firms to judge the riskiness of each trust.
- Client money. Lots of detail on this, including the need for new client consent in agreements and on title transfer collateral arrangements.
- Knowledge and competence. Confirming that it is for the firm to judge fitness and propriety against the qualification definition (exam or training or test complying with European Securities and Markets Authority (ESMA) guidelines). However, firms should take this into account in making SMCR staff assessments.
- Product governance. The FCA is reconsidering its application to non-EU producers, although EU distributors should try to find their intended target investors.
- Non-MiFID firms. A mixed bag. Some MiFID rules apply, eg, best execution, but others do not, eg, client reporting.

3. Firms' culture again and the SMCR

The strong warnings from the regulators on changing firms' culture after the global crisis have softened – but not disappeared. Andrew Bailey, CEO of the FCA said: "We recognise culture change takes time and there is still more to do. So we have to keep a watchful eye on the progress firms are making." There are four areas: accountability and how the SMCR should create a positive compliance culture; how promoting the role of ethics encourages good conduct; how pushing diversity can improve business performance; and conduct risk – firms to decide what 'good conduct' is and the importance of customer outcomes for firms. What steps have you taken to promote these four points among staff?

Looking ahead, the start of the SMCR regime for all firms during 2018 should be seen as a big change in regulators' expectations



1. https://www.cisi.org/cisiweb2/cisi-news/the-review-article/mifid-ii-are-you-prepared

of the individual conduct of all levels of staff. The FCA has promised to create a "clear, simple and proportionate" regime for smaller firms which do not have complex businesses. This is likely to mean that all firms will have to have management responsibility maps with written individual manager responsibilities, but that only larger more complex firms will have to meet all the requirements, such as the tougher reference giving and receiving. The FCA has said that a consultation paper is expected in Q3 2017 which will give the detail.

Action

For now it is sufficient that senior managers are aware that the responsibilities map may change their management structure and that individual responsibility will change committee responsibility, matrix structures and overseas head office powers.

4. Firms gear up to meet the cyber challenge

The very disturbing statistic that half of all financial firms have been the victim of a cyber attack in the past year has alerted the other half - and the regulators - that this problem will not only not go away but also that it can be devastating - WannaCry is a sad example. For the loss of personal data, the Information Commissioner's office will have new powers under the GDPR to fine firms up to 4% of their turnover. For other breaches affecting clients, markets or clearing, the regulator's thoughts are moving beyond exhorting firms to protect themselves (the FCA recommends the guidelines issued by the National Cyber Security Centre and is using its new technology 'sandbox' – see point 1: 'Can the regulators catch up with fintech?' p.47), to imposing penalties on top of losses suffered (some research finds that 82% of clients would terminate their relationship if it became public that they had been hacked). The GDPR (see point 6 on this page: 'What do you know about the new data protection rules?') makes firms' duties to protect data clear - with penalties from the Information Commissioner's Office as well as the FCA.

Action

Trade bodies are encouraging firms to treat cyber risk in the same way as regulation – with all staff trained in it; inclusion in firms' overall disaster recovery plans, which should map the steps that need to be taken in the event of an attack or breach and allocate responsibilities; how a breach is communicated to staff and to those whose data might be compromised, and how to deal with regulators and the press.

5. Planning for Brexit

We will not know until much closer to the UK leaving date of March 2019 whether there will be a long-term or transitional agreement on access between the UK and the EU and what form this may take. Most firms cannot wait until close to that date since it can take at least a year – and sometimes longer – to obtain the necessary regulatory licences and to transfer IT and other resources to a new office. So, during 2017 many firms' contingency plans will start – and may develop irreversible momentum, eg, for firms continuing to offer services to EU customers after March 2019. Research suggests that between 20,000 to 230,000 jobs will move to different locations in the EU.

The UK regulators are in a dilemma – they need to know that firms have contingency plans for a 'hard Brexit' but do not want to encourage them to relocate staff or to leave. They have sent out detailed questionnaires to some firms covering contingency plans' effect on capital and IT systems and also whether they have decided or will decide on their own, or are watching and waiting on their peers. On the EU side, ESMA is concerned about firms setting up 'letterbox' offices in the EU which collect orders and send them to the UK. It has set out nine relocation conditions for national regulators to apply. These vary from their refusing applications where the new passporting entity is "essentially performing all substantial activities or functions outside the EU27" to stopping firms 'evading' stricter rules in other EU countries.

Action

All firms with relationships in the EU should have a contingency plan. Many are choosing a wide variety of outcomes – from continued full access to none at all – with up to seven variations in between. Plans should contain a gap analysis of the different outcomes with a project timetable for each of them, including dates for the start and full commitment dates and for communications with staff and customers. Clearly IT is critical too.

6. What do you know about the new data protection rules?

If the answer is nothing, or little, read this carefully.

The EU's GDPR makes big changes in all businesses' responsibility for the personal data they collect. This includes financial firms. It substantially strengthens individuals' rights through their knowing who will have their data and how they will use it. Further 'opt-in' clauses will replace 'opt-out' ones. Firms must be able to meet individuals' requests for access at all times; implement the 'right to be forgotten'; and make arrangements for data 'portability'. For financial firms, the main practical impact is likely to be in identifying what personal data they hold (including on staff which applies to wholesale firms too); how it is protected (see point 4 on this page: 'Firms gear up to meet the cyber challenge'); which third parties have access to it or process it, and disclosing this to the individuals so that they can consent to it. Difficult problems may include finding out the onward chain which outsource providers to the firm may use, and if these are outside the EU, what regulatory protections there are for it, including the right of audit by the firm. For all firms which outsource, this is a problem, including in groups. The GDPR starts in May 2018.

7. What are the latest enforcement trends?

Here are some stand-out ones:

- A distinct change in tone on penalties. Mark Carney, the Governor
 of the Bank of England, has said: "In the view of UK authorities,
 we must move from an excessive reliance on punitive, ex post
 firms of firms to greater emphasis on more compelling ex ante
 incentives for individuals, and ultimately a more solid grounding
 in improved firm culture."
- Does the FCA take account of Approved Persons' criminal convictions? This remains a black hole with anecdotal stories of

these being ignored. The FCA refused a Freedom of Information request on how many there are on the basis that there is no central record and that the information is 'sensitive' for data protection purposes. Practically it may rely on firms to notify it since they have a duty to do so on hiring, although not continuously.

- On what conditions should firms qualify for the full 30% deduction from fines for early settlement? Some politicians are proposing that this should be conditional upon the firm taking proper remedial action against the relevant individuals. (This discount is worthwhile – it is estimated at £4.2bn between 2013 and 2017.
- The FCA has taken action against someone breaching client confidentiality (outside insider trading) even though there was no client detriment. Beware boasting to third parties! (Christopher Niehaus).
- Can a complainant require FCA officials to be witnesses? Probably not, based on the decision in the latest Keydata case. Only the FCA can choose witnesses.

8. The FCA's asset management report² is out

It has been a long wait for asset managers since the publication of the interim report in November 2016. The FCA has retreated from some of its radical ideas but it will be a sea change. Here are some headlines:

- Fund managers using intermediary distributors will have to disclose to investors an all-in figure for costs, including an estimate for transaction charges.
- There is strong encouragement for economies of scale to be identified and either shared with or passed to investors.
- The FCA speaks approvingly of aligning fees with performance although there are no regulatory steps on this. Yet.
- 'Box' profits (the spread between buying and selling to new investors) to be banned as risk free profits.
- The remaining pre-RDR 'trail' commission payments by fund providers to distributors to end.
- Promoting the role of independent directors to protect investors' interests
- The manager's choice of benchmark to be explained to investors.
- Fund managers to assess and explain why some investors are in more expensive but similar classes.
- The FCA is to investigate whether vertically integrated structures enable providers to influence retail choice.
- The FCA wants to regulate investment consultants, and is considering a competition enquiry.

The FCA has not followed up its criticism of performance of the active fund managers with regulatory changes favouring passive investments. It focuses on cost disclosure. For this, active managers are grateful. However, investors and IFAs, not the FCA, are driving this trend.

9. Do you know about the recent money laundering changes?

The EU's Fourth Money Laundering Directive started on **26 June 2017**. It is an important change. Some key points:

- A move away from dividing clients on a tick box approach between low and high risk – instead firms should make case-bycase assessments.
- UK individuals who are politically exposed persons (those in public positions and their close family) are now covered equally, like non-UK individuals.
- Firms to make a firm-wide money laundering and terrorist financing risk assessment.
- The firm's policies, controls and procedures to apply to all subsidiaries, including non-UK ones.
- Customer due diligence extended to apply to signatories acting on behalf of customers.

In the close future there will be a Fifth Money Laundering Directive resulting from recent terrorist attacks in Europe, which will require bank transfers to contain detailed information on the sender and recipient.

10. What's important for retail firms

The most important event, outside preparing for MiFID II, is the FCA's advice review report.³ The good news is that it finds most advisers provide suitable advice – the first time ever. The bad news is that only half of firms provided acceptable costs disclosure – and this before the more demanding MiFID II requirements. See table below. The FCA focused on the need for hourly-rate charging firms to estimate the number of hours for each service – and to avoid wide range figures. It also wants firms to give clients an indication of the costs in the early stages. However, there are no examples of good and poor practice and the FCA is not proposing to prescribe a charging disclosure template. There are many interesting statistics in the report, including that most clients prefer charges to be deducted from their portfolios rather than paid separately, and the trend towards discretionary management rather than advisory services.

Observed result		Lower confidence interval limit	Upper confidence interval limit	
Suitable	93.1%	91.2%	94.7%	
Unsuitable	4.3%	3.1%	6.0%	
Unclear	2.5%	1.7%	3.8%	

Source: FCA Assessing suitability review, p.8

^{2.} https://www.fca.org.uk/publication/market-studies/ms15-2-3.pdf

^{3.} https://www.fca.org.uk/publication/multi-firm-reviews/assessing-suitability-review.pdf



REVIEW OF FINANCIAL MARKETS

RESEARCH INTO WEALTH MANAGEMENT, CAPITAL MARKETS AND BANKING ISSUE 14 Q3 2017

INSIDE THIS ISSUE

Speaking truth to power on pensions	52
Security and sustainability in defined benefit pension schemes	53
Hinkley Point C – potential alternative financing options	59

Thinking the unthought

Donald Rumsfeld was 13th and 21st US Secretary of Defense, the youngest and second oldest person to have served in that position. A Princeton graduate and a former naval pilot, his brain power, agility and candour, coupled with that wide span of years covering the same beat, gave him unique insights. He will be remembered best for his offhand "known unknowns" remark to journalists in 2002 while discussing Iraq and weapons of mass destruction.

His words were: "Reports that say that something hasn't happened are always interesting to me, because as we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns – the ones we don't know we don't know. And if one looks throughout the history of our country and other free countries, it is the latter category that tends to be the difficult one."

This issue of Review of Financial Markets spans some of those unknowns – and unthought thoughts – in the world of finance. On this page, Professor Moorad Choudhry, Chartered FCSI, considers some of the deep thinking that senior managers and directors – executive and non-executive alike – including most senior and aspiring CISI members in the UK, will have to bring to play when the Senior Managers and Certification Regime takes force next year.

Next, Con Keating and his estimable team bring their formidable brainpower to the issue of defined benefit pension schemes. They are apparently dead in the water, but is a Dunkirk-style redemption and rescue just over the horizon?

Finally, and with some similarly big numbers involved, Gregor Botlik, a CISI member and corporate finance expert at the National Audit Office, thinks some unthought and disturbing thoughts on what our political masters have signed us up for on Hinckley Point C, Britain's first nuclear power station since 1995.

We hope you enjoy this thought-provoking issue. Comments as ever welcome.

George Littlejohn MCSI, senior adviser, CISI Editor, Review of Financial Markets, george.littlejohn@cisi.org

INDEPENDENT DIRECTORS AND THE SMCR: LESSONS FROM A YEAR SPENT RUNNING THE REGIME

Professor Moorad Choudhry, Chartered FCSI, lectures on the MSc Finance programme at University of Kent Business School, and is author of *The Principles of Banking*

mooradchoudhry@gmail.com

What imperatives arise for non-executive directors as we head into the Senior Managers and Certification Regime (SMCR) in 2018? A good place to look for insight is in the banking sector, which has operated under the

Senior Managers Regime (SMR) for over a year now. The underlying driver of the SMR was to assign direct personal responsibility for the continued good governance and sustainability of a bank to specific named senior executives and board directors.

In itself this is logical, given that it merely codifies into law what was always supposed to be understood, if not necessarily always practised. But in today's regulatory environment the practical impact of this, particularly for non-executive directors, is not trivial. A firm's board must approve a wide range of excessively technical documents, ranging from recovery and resolution plans to asset-liability management stress scenarios. As members are signing off on these papers in effect in their individual capacities, they will wish to understand the detailed nuances behind them. This is not always straightforward, because of the distance between those drafting the processes and those approving them.

All corporate entities, particularly the larger ones, have always operated on an element of board-delegated approvals. Prior to the SMR, a board could in practice, if not in theory, rely heavily on the approval granted by a firm's asset-liability committee (ALCO) and management committee (EXCO) to imply adequate technical review and challenge of many board papers. But in the formal arrangements that characterise the SMCR, clearly this would be lax at best and personally ruinous at worst. The level of technical scrutiny that a board must apply to all aspects of the firm's operations, business model, customer conduct and regulatory relationships needs to be at least as detailed as that undertaken by the executive committees.

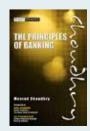
Balance sheet-related submissions that are submitted as board-approved statements to the regulator, such as the internal capital adequacy assessment (ICAAP) and the internal liquidity adequacy assessment (ILAAP) are detailed documents with complex tests, analyses and outputs. They are genuinely firm-specific, because the regulator requires stress scenarios to be tailored and not follow the standard template profiles that were the norm in the pre-crash era. Understanding these processes requires a detailed knowledge of the shape and structure of the balance sheet, with respect to capital, liquidity and operational risk, and its sensitivity to a wide range of internal and external factors. The larger the firm, and the wider the customer franchise, the more complex the review parameters and the more onerous the review and challenge process will be.

The problem that firms under the SMCR face is two-fold: first, guaranteeing that board members possess the technical and firm-specific knowledge required to scrutinise all management information adequately, and second, ensuring that they are able to devote the time required to become familiar with the firm at the same level of detail required of full-time executives. These are not insurmountable issues of course: regulatory bodies have long stressed the importance of firms appointing NEDs who are sufficiently competent with the arcane properties of balance sheets, capital and liquidity. Addressing the second issue will take longer to achieve however, and requires board members to devote more time to understanding the firm's properties, risks and culture.

It is almost a paradox, but one that has to be worked through: in the era of Basel III and the SMCR, NEDs need to be at least as intimately familiar

with the balance sheet shape, structure and risk sensitivities as the full-time executives have to be. There is no other route to effective firm governance and sustainability.

Professor Choudhry can be seen on CISI TV, fronting a new series of programmes on the SMCR. He will also be addressing a masterclass for Fellows and Chartered Members of the Institute in London on Monday 25 September 2017.



Speaking truth to power on pensions

The recent UK Government Green Paper¹ on defined benefit pension schemes, launched in February 2017, has not attracted the rigorous academic analysis this important topic deserves. Until now. Con Keating, chairman of the Bond Commission of the European Federation of Financial Analysts Societies (of which CISI is a member) has worked with lain Clacher of Leeds University Business School and Andrew Slater of RisCura to develop the fascinating thoughts on the coming pages, part of the exciting Long Finance project run by Alderman Professor Michael Mainelli, Chartered FCSI, of Z/Yen.

In the best tradition of speaking truth unto power, the authors respond forthrightly to the questions posed in this Green Paper consultation. From fundamental first principles, they analyse, review and discuss the paper's narrative framework, which supports and gives rise to the paper's questions. They conclude that a major public policy debate over member security has never taken place, and should. They also conclude that it is possible and highly desirable to reinvigorate the provision of occupational defined benefit (DB) pensions – to this end, they make 13 principal recommendations.

Here, Clacher, Keating and Slater outline some of the basic principles by way of preamble.

Retirement risk is insurable

A risk is simply a future event that is uncertain to occur. Sometimes the event's magnitude, suitably measured, is also uncertain. The risk that pensions seek to mitigate is retirement or, more specifically, the event of a person living past the age at which he is able to sustain himself financially through labour. Usually in insurance, risks are unpleasant, even catastrophic, events. Not so here. This person receives a pension to replace his labour income until he eventually expires.

Retirement is a quantifiable risk. Future lifespan distributions can be estimated from public data on births and deaths. Estimates can also be made of the future incomes required by people who live past working age, based on estimates of future inflation rates from historical data. Or they can simply be defined in advance, as is done under the defined benefit scheme. But these estimates are the work of actuaries, and we won't dwell on them here. The point is that the probability and loss associated with retirement are quantifiable, which gives us a basis for insuring or otherwise collectivising the risk.

Defined contribution prohibits insurance

The move towards defined contribution (DC) schemes is a move towards 'self-insurance' – or, more truthfully, non-insurance – of retirement risk. In the DC setup, an individual pays a fraction of her labour income into a pot of money with only her name on it (and possibly those of her beneficiaries, should she die young). The pot is handed over to a financial professional, to be invested in risky assets. The hope is that, by the time the individual can no longer sustain herself through work, her pot will contain sufficient resources to provide an ongoing replacement income. Usually this is done through the purchase of an annuity, which converts the lump sum into a series of guaranteed future cash flows.

Annuitisation is a form of insurance, in that it collectivises the longevity risk that still exists after the retirement event has occurred. Annuity sellers, in effect, make retirees cooperate by using the money of those who die sooner after retirement to pay the incomes of those who die later. However, we should be clear that this is only a partial insurance of the retirement risk, since it is contingent on retirement having occurred and on the retiree having accumulated a sufficient lump sum to that point.

Prior to annuitisation, the reservation of pension contributions for the benefit of the individual who made them renders DC a fundamentally non-cooperative method of pension provision. Theory tells us, therefore, that DC must be more expensive than other schemes in which individuals cooperate – through insurance or other types of collectivisation, including general taxation – to provide income in old age. This is because uninsured individuals suffer from larger relative fluctuations than those whose risks are insured or collectivised. With pensions this happens in two ways: individual investments can have large fluctuations because they lack the scale to be diversified well; and individual contributions can fluctuate due to illness and unemployment.

These fluctuations create a population of winners and losers. In the DC setup, there are two types of winner. The first is the retiree who gets lucky with his investments and retires with a large pot providing an income exceeding his needs. The second 'winner' is the contributor who does not reach retirement and whose funds, therefore, are not needed to cover the insured risk. He 'wins' because he declined to insure an event that did not occur. In both cases, the individuals or their beneficiaries receive funds surplus to the intended requirements of the scheme, ie, to provide a replacement for labour income. In a cooperative setup, these funds could have been used to fund the incomes of other participants, reducing costs for everyone involved.

The losers belong to the majority who have realised the volatility drag and retire with insufficient pots. Since the taxpayer implicitly underwrites a minimum standard of living for citizens, the maintenance of these retirees is collectivised, albeit in an uncosted and uncontrolled manner.

In theoretical terms, the DC approach by construction prohibits cooperation and leaves individuals largely uninsured with respect to their retirement risk. This is expensive because it increases wealth-depleting fluctuations and fails to allocate efficiently funds that could be shared to reduce overall costs.

Defined benefit allows risk to be collectivised

In the DB setup, future replacement incomes are defined at the outset. This makes the retirement risk easy to quantify, since it depends only on the well-researched lifespan distribution. A DB scheme manager simply calculates the cost to insure the retirement risk and then requests the proportionate share of this cost from the scheme's participants. The greater the number of participants, the closer this cost can approach the minimum expected-value price. This is because the effect of fluctuations disappears as the number of cooperators grows.

Indeed, a well-run DB scheme may not even require the annuitisation step. If sufficiently large, it could collectivise all of its retirement and longevity risk to operate on an ongoing basis, with participants joining as they enter employment and leaving on death. Indeed, since annuity rates are contingent on the uncertain health of the pensioner at retirement age, removing this step would have the additional benefit of collectivising this health risk. For a DB scheme so constituted, the only residual risk would be the bankruptcy of the scheme or its sponsor. There seems no reason why this default risk could not be insured in the re-insurance market.

Framing this in terms of economic theory, the DB approach allows the cost-effective possibilities of insurance and cooperation by defining only the deliverables of the scheme. It is agnostic to the contribution levels and the way in which retirement risk is managed. In other words, it does not prescribe how the deliverables are delivered. This is the opposite of DC, where the contributions are defined and effective risk management is hamstrung by the partitioning of funds into personal pots. By allowing risk to be spread, DB can reduce the cost of pension provision to providers, participants, and the taxpayer, who underwrites income in old age.

1. Department for Work & Pensions, Security and sustainability in defined benefit pension schemes, Green Paper, February 2017.

SECURITY AND SUSTAINABILITY IN DEFINED BENEFIT PENSION SCHEMES

lain Clacher, associate professor of accounting and finance, Leeds University Business School

Con Keating, chairman, Bond Commission, European Federation of Financial Analysts Societies

con. keating @brighton rock group. co. uk

Andrew Slater, managing director, RisCura aslater@uk.riscura.com

ABSTRACT

"It is difficult and probably wrong to caricature Government thinking on regulation. However, if we did, it would be that successive administrations have been cautious, prescriptive, fearful of EU infraction, and possessive of implementation. As a result, in many instances we have become slaves to the process of regulation and lost sight of the outcomes we have been trying to achieve ..."

Independent Farming Regulation Task Force, May 2011

INTRODUCTION

Occupational defined benefit (DB) pensions are, in our view, highly efficient, and substantially superior to other institutional forms of pension provision, such as individual defined contributions (DC). This superiority arises from the risk-sharing and risk-pooling structures that are inherent in the design of DB pension schemes. Subject to being properly designed, managed, and regulated, we think that occupational DB pensions are both sustainable and secure.

This view has not been the direction of travel for a long time, amongst sponsors, regulators and the schemes themselves. Underlying this is the rationale that occupational DB pensions are too expensive and that if history were to be rerun with 'what we know now', then this would not have been the path followed. Consequently, the job now is one of running off these schemes by securing member benefits. To achieve this, there has been widespread de-risking, with a goal, whether explicit or implicit, of getting the scheme into a position of self-sufficiency or buyout. Moreover, where the sponsor cannot meet their obligation, the aim is to get the scheme into the Pension Protection Fund (PPF). The problem with this view is that it is self-fulfilling.

The recent UK Government Green Paper, Security and sustainability in defined benefit pension schemes, however, creates the ideal space for the debates to take place. We do not subscribe to the current view of the pensions industry at large. However, given the current state of pensions and the various grand challenges that face government, it is our hope that we will have an honest and forthright debate about the issues set out in the Green Paper. Ideally, we would like to see substantive change, but in the near-term this is unlikely to occur. That said, having a debate on the major issues presented in the Green Paper should get us some way along the road to a better understanding of the relative costs and benefits of the DB structure. To date, there has not been anywhere near enough debate and discussion of the DB pension as an organisational form. Debate is more often than not hijacked by a small number of high-profile failures

extrapolated to all DB pensions or by issues of measurement, rather than the secure and sustainable pensions that the DB structure affords us.

OUR VISION

The analysis of UK pension arrangements often slips into the polarised debate of individual DC versus collective DB. There is however, a multitude of possible arrangements between these two extremes of the distribution. Ultimately, this distribution reflects variations in the risk-sharing and risk-pooling arrangements. Defined ambition and collective DC are examples of intermediate arrangements.

In looking at the current approach to DB pension regulation and management, the solvency-based approach is not appropriate. The balance sheet test in insolvency has proved contentious since its introduction over 100 years ago, and has been roundly criticised, with the recent Supreme Court judgment that Lord Neuberger's "point of no return" test "should not pass into common usage as a paraphrase of the effect of section 123(2)" being a case in point.

Crucial to this are the different perspectives on risk and uncertainty as understood by the insolvency courts and The Pensions Regulator. In the judgment referred to above, liabilities, some of which had terms of 30 years, were subject to "imponderable" factors, such as interest rates, currency movements, and the state of markets. As such, the court "should proceed with the greatest caution in deciding that the company is in a state of balance-sheet insolvency". This test differs in another regard, as the court must be satisfied, on the balance of probability.

In contrast, pension regulation refers to the level of technical provisions, and in practice to even more excessively conservative valuations, such as buyout. Underpinning this is the idea that the valuation is correct and that none of the aforementioned "imponderables" are uncertain. As such, the treatment is wholly different and leads to perverse outcomes.

The multitude of resultant issues that arise from the existing regulation and practice, if this were in the realm of physical sciences, would result in a wholesale rethink of the basis on which we operated, as it would be taken as evidence of an incorrect model. As such, we have taken such an approach and started from first principles to consider the purpose of the scheme and its fund in the provision of occupational pensions to former employees.

In looking at the underlying drivers and rationales that we see in current pension legislation and regulation, the core of The Pension Regulator's modus operandi is that the scheme and its fund exist to pay pensions in all circumstances, including after the insolvency or cessation of business of the sponsor employer. However, in returning to first principles and asking what is the purpose of the pension fund as initially conceived, we see the purpose of the scheme and its fund as being twofold. First, the pension fund is there to provide security to members for their benefits. Second, the pension fund is there to offset or fully defease the obligation of the sponsor to pay pensions.

As such, it should be managed in ways that reflect these two purposes. A consequence of this perspective is that pension scheme management becomes analogous in many regards to cash flow based insolvency. The difference between the two views of purpose is not trivial. This shift in perspective results in a major issue of public policy. We would note, however, that schemes pursuing either of these different objectives could co-exist in the pension marketplace.

1. This section of the Insolvency Act 1986 is otherwise known as the balance sheet test.

 If the approach of the current pension legislation were to be accepted and followed, whereby members' pension benefits are paid after the sponsor has ceased to exist, the involvement of some independent continuing third party is necessary. If this were to be the fund for example, then this would have to be capitalised prior to sponsor closure, as if the fund were an independent insurance company. This is both individually expensive for sponsors and collectively a clear folly, with significant consequences for long-run corporate investment in the real economy.

The obvious alternative is for the sponsor employer to contract with an independent insurance company. Here the contract would insure against employer solvency and where insolvency occurs, the insurer would step in and pay the members' benefits in full. This class of insurance business is known as pension indemnity assurance and is, we believe, the first best solution to many of the perceived issues around the risks and affordability of DB pensions. We make a series of further recommendations:

RECOMMENDATIONS

- 1. The precise role of DB pension schemes, and their funds, to be debated and determined, and,
 - a. if it is deemed socially desirable for these to function as institutions capable of providing previously promised pensions after the demise of their sponsor, explicitly write this into UK pensions law
 - accompany this with prudential regulation for schemes which is similar to that applicable for insurance and assurance companies.
- 2. A Royal Commission to be established to investigate and report on the operations, accountability and role of The Pensions Regulator.
- 3. Remove The Pensions Regulator's statutory duty of reducing the risk of pension schemes ending up in the PPF.
- 4. Add a new statutory objective for The Pensions Regulator: to promote the provision of high-quality occupational pensions.
- Require the PPF to pay the full pensions entitlements of scheme members.
- End the monopoly of the PPF, at the same time as requiring compulsory pension indemnity insurance for occupational scheme sponsors.
- 7. Require schemes to hold pension indemnity insurance/assurance.
- 8. Privatise the PPF.
- 9. Limit corporate liability for scheme funding to performance of the contract created by the pension award.
- 10. Eliminate the section 75 valuation and its applications, while introducing a statutorily overriding negative pledge which requires the company not to offer security or priority in status to other debt obligations without offering equivalent to the scheme trustees.
- 11. Eliminate the section 179 valuation. If the desire for change is limited at this time, there are a number of technical improvements to valuation and security estimation procedures which may be made.
- 12. Encourage a diversity of liability valuation viewpoints.
- 13. Introduce legislation enabling defined ambition and collective defined contribution scheme structures.

Other context specific recommendations are made in the responses to the consultation questions.

We are concerned that the tax concessions enjoyed by DB schemes are excessively expensive under current arrangements. Funding a scheme at anything higher than best estimate under the employer contract terms really does not merit favourable tax treatment, such as deductibility.

FINAL THOUGHTS

We welcome the publication of the Green Paper as the UK pension sector finds itself at an interesting junction. There is a multitude of perspectives that prevail on the current state of DB pensions, as well as what the best routes forward may be. However, over the past 25 years and more, we have witnessed the destruction and degradation of what we believe to be the most efficient institutional form for providing good incomes in retirement for the majority of people. We hope that the Green Paper will lead to a full, frank, and honest debate about the way forward. Since 2004, there has been little meaningful discussion and a series of well intentioned, albeit incremental and short-sighted decisions has resulted in the current system. If this is the system that we want to have tomorrow, then that should be decided in an open and transparent way. If the current system is not what we want tomorrow, then it is our hope that the Green Paper creates a platform for a thoughtful and robust debate on how to structure retirement savings in the UK to the benefit of both the economy and millions of pension savers.

The rewards to getting this right are enormous. Less than 20% of current DB regulation and guidance would be needed, bringing vastly greater simplicity and clarity. Costs would decline to around half of those currently perceived and incurred, and with that greater member security. The management incentives of both trustees and employer sponsors would be well aligned. Scheme investment policy would pursue their economically and financially optimal long-term allocations and lead to greater societal well-being and wealth. But the greatest gain would be its legacy for future generations, continuation of sustainable and secure occupational DB pension provision.

We are indebted to numerous people for helpful comments on earlier drafts of this document. Specific thanks are due to: Alex Adamou, Ole Peters, Anna Tilba, Derek Scott, Mark Tennant, Robin Ellison, Jon Spain, and Thomas Aubrey.

FUNDAMENTAL PENSIONS REFORM IN THE UK

This section considers and responds to three of six specific questions posed in the Green Paper. Extracts from the Green Paper are in italic, with responses in normal text; and, as there are two frameworks informing our responses, we show those applicable under our vision in white boxes.

OUESTION 1

Are the current valuation measures the right ones for the purposes for which they are used?

No. Both measures are prospective, meaning that they bring the projected future values of benefits accrued to the present by discounting, and this discounted present value is then compared with the market value of assets to estimate the solvency position of the scheme. This is inappropriate for liabilities which have already been incurred, but would be appropriate if we were pricing the acquisition of new liabilities today. In other words, the prospective approach is suitable for an insurance-type institution such as the Pension Protection Fund (PPF), when pricing new business. However, even for such institutions, it is inappropriate to value the accumulated book of business in this manner.

There are also issues associated with the solvency approach. The measures being used for assets and liabilities differ. Using different measures constitutes a fundamental measurement error. It introduces

the possibility of bias and error into the resultant solvency estimation. It is clear that this has been substantial in recent years. The discussions among European regulators over the ultimate forward rate applicable to insurers is a reflection of this, though the 'solution' of that issue is a compromise which addresses symptoms rather than cause.

Basing cash equivalent transfer values on valuations derived in this way introduces a real cost to the scheme. In essence, the member has been awarded an option (for free) on the long-term performance of discount rates, with a lesser, and regulatorily discouraged dependency upon the accumulated value of the scheme asset portfolio, and this is extremely costly to the scheme. Not the least aspect of this is the extent to which it will shorten the investment time horizon of the fund.

Both methods are time inconsistent. This introduces material costs into the management. Portfolios of assets and liabilities are acquired over time on terms which remain largely fixed; these are intrinsically smooth processes, with only marginal changes arising from actions at points in time. However, it should be recognised that the aggregated change(s) may be substantial. But the smoothness is a symptom, or feature, rather than cause, and for this reason we do not support the use of smoothed discount rates in valuation.

There are alternate measures and approaches. For example, we may estimate the required rate of return on scheme assets necessary to achieve payment of the benefits projected. This is a form of solvency measure.

Another method would be cash flow based and rely not on today's market prices, but on the adequacy of the asset portfolio (and any other contracted contributions) to generate sufficient cash to pay benefits as they fall due. This was in fact the standard actuarial method prior to the millennium. From around 2000 until 2006, there was an ever-increasing move towards the FRS17'market consistent' approach. The Inland Revenue excessive surplus requirements still smoothed the assets until March 2006, and market consistent became obligatory from the end of 2006. It should be recognised that corporate cash flow projections are inherently an order of magnitude more stable (and therefore simpler) than market return projections. Indeed, cash flows and cash flow projections are the most powerful predictor (factor) of listed equity returns.

Let us emphasise this point: the existing methods are appropriate for pricing new business. This means that they are suitable for pricing new awards, though very few schemes remain open to further accrual. However, as contributions are usually fixed for long periods of time, this is largely academic. The value of the discount rate used is also material. When this is based upon gilts or similar bonds it can result in grossly exaggerated apparent costs to new awards.

The framework in use is implicitly one of scheme primacy, with the sponsor a remote adjunct. As these are occupational schemes, this is a strange and significant transposition of responsibility.

The question unasked in all of this is that which is relevant in a broader context: has the company performed in accordance with its contractual promises? This would be the test applied in securities markets. These are a useful counterfactual; a world in which owner security is a material concern but without any pension legislation applying. The valuation is simply a matter of determining the degree of progress expected to have been achieved at the point in time of the valuation. This looks backwards. It considers the terms on which the security or pension promise was made by the company.

In the case of a security, say, a secured ten-year zero coupon bond issued five years previously at a 5% compound yield, the calculation is the sum of the amount originally advanced plus the accrued five years of compound interest (£61.39 plus £16.96) and the total security required would be £78.35. Note that this valuation process is time consistent. If the company continues to perform as required in this manner then the bond will be fully discharged at maturity. It is worth noting that similar maturity proceeds will, if they were issued on differing terms, have different values today. If the ten-year bond above had been issued yielding 10%, then its value (and security) at year five would be £62.09 – (£38.54 plus £25.53). This would constitute the distribution available in a voluntary liquidation of the enterprise and the admitted claim in insolvency. It would also be the basis of taxation by HMRC as to income and capital gains.

Section 75 of the Pensions Act 1995 (section 75, PA 1995), Employer Debt, is profoundly problematic in this regard.

The methods specified in pensions legislation do not recognise these differences. The contractual accrual rate for a DB pension award should be no different. The contribution and the projected benefits determine a unique rate of accrual. The scheme is simply the accumulated aggregate of these awards. The rate is time consistent. It is the rate of return on investment promised to the employee on their voluntary contributions. It is the gross cost of the award and scheme to the sponsor employer; the income of the fund simply serves to defray or defease this gross cost.

It is this gross cost which is the prime determinant of the cost of the scheme, and with that the sustainability of the scheme and employer.

In our opinion, many of those who complain that pensions used to be provided on a "best endeavours" basis are reflecting in part, and somewhat inchoately, this shift from performance due to performance expected.

a) Are the flexibilities in setting the Statutory Funding Objective discount rate being used appropriately?

Under our vision, no.

And this question would not arise in our contractual accrual rate view.

• If not, why, and in which way are they not being used appropriately?

The bond discount rate basis is still being widely used even though these rates are extrinsic random variables. Somehow, but inexplicably, the myth persists that these represent the use of a 'risk-free' discount rate.

The expected return on assets is in all too many cases based upon a 'gilts plus' vision of the future world. This apparently relies upon a discredited academic hypothesis. To quote Hyun Shin of the Bank for International Settlements (BIS): "Long-dated yields may be overrated as a forward indicator of economic conditions. Far from being a window on the future that reveals insights that no individual market participant has, low yields may, instead, reflect very ordinary motives of individual investors that have only a limited bearing on forecasts of the distant future." This is hardly new: in 1983, Bob Shiller, John Campbell and Kim Schoenholtz noted: "The simple expectations theory, in combination with the hypothesis of rational expectations, has been rejected many times in careful econometric studies. But the theory seems to reappear perennially in policy discussions as if nothing had happened to it ..."

We are reminded of Tom and Jerry cartoons that precede feature films at movie theatres. The villain, Tom the cat, may be buried under a ton of boulders, blasted through a brick wall (leaving a cat-shaped hole), or flattened by a steamroller. Yet seconds later he is up again plotting his evil deeds." It reappears yet again in UK pension valuation.

Until recently The Pensions Regulator promoted gilt type approaches, presumably in support of its objective of protecting the PPF. In addition, the use of similar bond-based approaches in accounting standards may weigh on particular trustee choices.

What evidence is there to support this view?

The most obvious is the prevalence of liability-driven investment. Invariably this involves the hedging of interest rates, when these discount rates are irrelevant to the risks of a scheme. This is a case of hedging the measure, not the substance. Obviously hedging may be effected by use of either derivatives or bonds – the increase in bond holdings by pension funds is well known.

It is intrinsically short-term in nature. The consequence has been a marked decline in the income and return performances of funds. Indeed, the activity has been sufficiently great that index-linked gilts now offer RPI minus 1.85% when they are owned as to more than 80% by UK pension funds.

How could sponsors and trustees be better encouraged to use them?

We believe that it is necessary to first remove The Pensions Regulator's statutory obligation to protect the PPF. The flexibilities are quite limited. If a scheme is invested in gilts, it will have only the expected return of gilts as a basis for its discount rate.

We wonder as to the extent that accounting standards and the company position are driving this lack of take-up. We recommend that a research survey be conducted to resolve this question.

These flexibilities are irrelevant in our vision.

b) Should we consider shorter valuation cycles for high-risk schemes, and longer cycles for those that present a lower risk?

- What should constitute a high or low risk?
- Or should a risk based reporting and monitoring regime be considered?

We do not believe that there is evidence to support any change to the valuation cycle. We note that many schemes in fact operate systems which extrapolate earlier results between valuations.

Moving to a shorter cycle will tend to exacerbate problems of short-termism. We do not believe there is any reliable method of identifying the riskiness of company or scheme. We would also be greatly concerned that this is then subject to the 'Minority Report' critique. Would it really be possible for regulatory interventions to be based upon probabilistic assessments, and indeed, where wrong, if that ever becomes evident, without liability?

Risk based regulation brings with it further concerns. To quote Professor Roger King: "While at the level of abstract general principles it is hard to cavil with a regulatory approach that seeks to be selective, focused, and proportionate, and which promises to relieve a number of institutions of unnecessary central control and bureaucratic impositions, risk based regulation can be a risky business, not least for the regulators. Risk based regulation principles are set to provide major operational challenges ...

Nor is it clear that the principles ... sit easily with established democratic beliefs of equality before the law and associated ideas of fair treatment and accountability, based on bureaucratic impersonality, the application of the same rules and processes to all."

As risk simply means that more things may happen than will, we are much exercised by the possibility that trustee concern with prudence will result in expensive and unnecessary 'risk' interventions. There would doubtless be an army of advisers recommending just this.

We do not believe that any part of this question should be pursued.

Risk concerns are self-evidently a prospective view. In our vision, such concerns would arise only if the sponsor was delinquent, that is to say that scheme funding was below best estimate. It is a matter of fact, not guesswork, no matter how sophisticated that guesswork is. The only significant source of uncertainty here is variability of the asset portfolio. Deficits tend to become smaller and are more foreseeable.

c) Should the time available to complete valuations be reduced from 15 months?

• What would be an appropriate length of time to allow?

We have no experience of the 15-month term being problematic. Where we have seen timescales challenged, it has been because of the complexity of the situation combined with a need to investigate options and approaches to resolution fully. We are not convinced that there is an issue in general.

In our view, the valuation process is far simpler. The (contractual accrual rate) discount rate and liability valuations are matters of fact. Trustee debate reduces to consideration of the required degree of prudence to be exhibited in technical provisions.

d) Should other measures or valuation approaches, for example stochastic modelling, be mandated or encouraged?

If so, which ones and for what purpose?

We believe that a range of approaches, of different viewpoints, would serve to break the tyranny of the current mixed attribute prospective solvency regime. Accordingly, we would like to see additional techniques utilised. These would include:

- Cash flow projection for both assets and liabilities this would, among other things, deliver a time to failure metric, for those schemes in deficit.
- 2. The required rate of return on assets the likelihood of this return being achieved may also be estimated.
- A solvency approach using the contractual accrual rate this may be reported to scheme members as the rate of return on their investments.
- 4. Publication of the best estimate of scheme liabilities.

We are not convinced that stochastic modelling of assets and liabilities would add to our comprehension. Stochastic modelling is complex and usually expensive, and very difficult to do well. For example, with the prices of assets and liabilities modelled as log-normal processes, their ratio, the surplus or deficit, would be Cauchy distributed, a process which lacks even a defined mean. A further issue with many such models is that,

as iterations are increased in number, the results merely converge to the properties of the original assumptions.

The further risk with stochastic modelling (indeed, for any complex model) is that it throws out results which are not likely to happen in the real world, and may even be impossible. This is especially true at the tails of a distribution, which is the very area of most interest. It is the tails of a distribution which are information-rich. A major issue for such models is that they are not adaptive, in the sense that they tend not to recognise that the authorities and other market participants will change their behaviour, and with that, the observed behaviour of market processes in extreme circumstances.

One can be misled into thinking the problems of the scheme are greater than they really are; becoming fixated with risk and losing sight of the fact that more things may occur than will. One can end up managing the problematic output of a model, rather than managing real world problems of the scheme. The use of stochastic modelling should neither be mandated nor encouraged.

Modelling of the scheme is in our view, modelling of the wrong institution. The primary risk to pensions is not scheme failure, but sponsor failure, which carries the consequence that it should be the sponsor being modelled. Under the contractual accrual rate approach cure of deficits may be achieved in relatively short time frames. Such short periods do not lend themselves well to stochastic modelling approaches.

 How would the information provided to the regulator to explain the agreed recovery plan differ from that at present?

With a range of viewpoints, the regulator would be far better informed. For example, cash flow modelling delivers a time to failure metric. The required rate of return on assets is a metric which may be assessed as to feasibility by the regulator. The Best Estimate valuation immediately reveals the degree of prudence baked into technical provisions. Further, with publication of the best estimate, alongside the already published buyout and section 179 (from the Pensions Act 2004) valuations, the true level of risk of a scheme to the PPF may be estimated. The contractual valuation is a baseline measure, from which the load on the sponsor due to regulation may be estimated. It is a measure of the relative efficiency of the regime in force.

• What would the costs be, and would they outweigh the benefits?

The benefits would far outweigh costs. The most important costs are indirect, the pursuit of inappropriate investment strategies under existing approaches. This is likely to be compounded by the one-way nature of contributions made into schemes which are closed to new members and future accrual.

The direct costs of estimation of the required rate of return are trivial. Publication of the best estimate would require some minor systems modification, but the ongoing costs would be trivial. Cash flow projection would be somewhat more challenging from a systems standpoint, but is again a one-off cost.

However, we believe that these changes would reinvigorate competition among actuarial advisors and be absorbed by them. Their one-off systems costs would be spread across all clients.

The contractual accrual approach requires, as an input, the contribution histories of members. This may be difficult and expensive, or even impossible to extract from poor prior records. In the one instance, where we have conducted the exercise, a scheme with reasonable records, albeit in paper form prior to 1973, and with just 3,700 members, the one-off cost was approximately £250,000. However, there are approximations which may be applied that obviate the need for prior records to be compiled, and have trivial costs.

OUESTION 2

Do members need to understand the funding position of their scheme, and if so what information would be helpful?

a) Should schemes do more to keep their members informed about the funding position of their schemes?

With the advent of widespread defined contribution (DC), a tendency has developed to believe that investment performance (together with cost and fee disclosure) is a prime and relevant concern, when defined benefit (DB) scheme members actually have fixed claims.

Members should understand that:

- a) As long as their employer remains solvent, their benefits will be paid in full.
- In the event of their employer's insolvency, their benefits may be reduced to PPF levels and this is not, for the majority of members, a disaster

The contractual accrual rate of contributions made to the scheme should be quoted to members. This is a value for money statistic, and its publication would allow comparison with DC and other investment opportunities.

In our view, there are two possible scenarios. If we adopt the view that the protection of members should not be different from that of a secured creditor or DC investor, then it should be made clear to members that all they will receive is the value accrued to the date of sponsor insolvency, and that this may or may not be sufficient to purchase equivalent benefits at that time. It should also be pointed out to them that this was due to performance by the sponsor of the promise made. In the second scenario, where the PPF or private sector insurers step in and pay full benefits, there is no need for any caution over sponsor insolvency.

- b) Do we need government communications to provide information to the wider public and media about the degree of certainty and risk in the regime?
- What difference could this make?

We do not believe there is a role for government here. Such communications would run the risk of creating a liability for government, in much the same way as trustee statements that lead to or encourage particular expectations may lead to the trustees being held by members to delivery of those expectations.

Members receive scheme information but often do not read it. Any campaign targeted at DB members would be open to the criticism that these are the people already best provided for and could easily become a focus of discontent among DC scheme members and the entirely unpensioned.

If on the other hand, Government wishes to resurrect DB pensions from their near-death, and is prepared to undertake the revisions to pensions and accounting regulation necessary, a campaign of communication to employees and their sponsor employers would be appropriate. This would be particularly relevant if defined ambition and collective defined contribution arrangements are to be facilitated.

OUESTION 3

Is there any evidence to support the view that current investment choices may be sub-optimal? If yes, what are the main drivers of these behaviours and how could they be changed?

There is overwhelming evidence of the sub-optimality of investment choices and asset allocations. An entire industry has sprung up promoting liability-driven investment and 'solutions'. Portfolios are heavily driven by the hedging of the so-called 'risk' arising from the discount rate measure. This is a direct consequence of the pension and accounting regulation. Pensions 'freedoms' and cash equivalent transfer values have added to these pressures. As noted earlier, index-linked gilts, which are owned as to greater than 80% of the outstanding, now offer returns of RPI minus 1.85%.

The performative nature of such large-scale asset allocation shifts has to an extent mitigated the immediate cost of these actions; bonds and interest rate derivatives have performed as well as they have in recent years precisely because of the purchases by pension funds and insurance companies. Such herding typically ends in tears, with a systemic issue. Equivalents of the 'taper tantrum' become likely endings.

Not only have falling gilt yields resulted in higher present values of liabilities on all current measures, but the more conservative, less volatile strategies being followed have lowered the volatility of published results. This would imply that technical provisions should now be lower relative to best estimate than previously under equity dominated strategies. But we have in fact seen the reverse of this; technical provisions are larger not smaller.

In addition, portfolios are overwhelmingly invested in highly liquid marketable securities, when the timescales to which they operate and generate liability cash flow payments are far longer and smaller.

The use of a wider range of valuation metrics will moderate this.

In our view, the asset allocation followed by a fund would reflect the sponsor employer's needs and desires for income or cash flow to offset their payment liabilities, in the context of their business capacities and expectations. It seems highly unlikely that, in the absence of the pressures of the current prospective 'market-consistent' standard, this would approach that allocation now seen.

a) Do trustees/funds have adequate and sufficient investment options on offer in the market?

In general, it is true that trustees have too many rather than too few options choices. We are, though, concerned that the almost universal advice from investment consultants is intrinsically short-term in nature – 'risk' hedging and the Beebower, Brinson² result, that asset allocation dominates all other return properties. This result derives from the simple

fact that in the short-term, returns are dominated by changes in price, while in the long-term, it is income and to a lesser extent changes in income which dominate returns. We are hopeful that the current FCA work on asset management will address this issue.

There are issues in the government bond markets.

Is there anything government could do to address any issues?

Yes. The Debt Management Office should issue a higher proportion of debt in index-linked form. It should also undertake debt maturity extension operations, retiring issues with five years or less to redemption while issuing actively in the 20 to 50 year range. It may also make sense for the government to issue term annuities, though this may be better organised through NSI for individuals.

It is also currently the case that fund managers may contract around all but the most egregious examples of breach of fiduciary duty in the investment management agreements for segregated mandates. Government could intervene to limit and restrict the possibility of such behaviour.

b) Do members need to understand the investment decisions that are being made?

• If yes, are there any specific decisions that need articulating?

No, they do not. The DB pension claim is a fixed claim in the sense that it would not participate in the upside of strong investment returns.

If the PPF coverage is extended to full benefits, the investment aspect of DB is entirely immaterial. In any event, in our view, this is relevant only to the sponsor company. There is value to members in disclosing the contractual accrual rate as this is the return they are being promised on their investments.

c) Would it be appropriate for the regulator to take a lead in influencing or determining an acceptable overall level of risk for a scheme in a more open and transparent way?

As long as the regulator has a statutory obligation to protect the Pension Protection Fund, absolutely not. The result would be 'regulator's quality' schemes, and further damage to the use of DB by sponsor employers in recruiting, retaining and rewarding staff.

In our view, if schemes are fully insured, by the PPF or private sector coverage, there is no need for the regulator to intervene in any way. This is a matter of private contract. In general, the question of the overall risk of the scheme is one for the sponsor to assess in the context of their operations and planned development.

d) Would asset pooling or scheme consolidation help schemes to access better investment opportunities?

Asset pooling may lower the costs of particular segregated mandates. It may also allow some further economies of scope. However, the case for these advantages is still very far from proven. There is also the potential problem, commonly seen, that large schemes or pools tend to underperform small ones. Schemes already have access to a very wide range of pooled products. It is already feasible but not widely used. It may be that the preferences of sponsors are sufficiently diverse or that other asset allocations are sufficiently scheme specific, that common funds are not an efficient solution.

We see asset pooling as being driven by the capacity and preferences of the scheme sponsor.

We do not see consolidation as being either necessary or desirable.

e) Is regulation (including liability measurement requirements) incentivising overly risk-averse behaviours/decisions that result in sub-optimal investment strategies?

 If yes, which regulations and how do they impact on these decisions?

There are numerous examples, but to pick just one: the regulator's duty to protect the PPF. We would like to see this repealed and an obligation to promote the provision of high quality pensions substituted. Many others, such as the prospective mixed attribute solvency nature of the valuation rules, are discussed elsewhere in this response.

f) Are you aware of evidence of herding or poor advice from the intermediaries and advisers?

Yes. The use of gilts plus under the expected return valuation variant is one example. The use of model portfolios which derive from the Beebower asset allocation result and the promotion of Liability Driven Investment are further examples.

g) Are measures needed to improve trustee decisionmaking skills, such as enhanced training, more regulator guidance, or the professionalisation of trustees?

No. Our research suggests that trustees are sensible decision-makers. Guidance and professionalisation will merely serve to embed and spread the regulator's narrative. We should not forget that the risk to any regulator lies in failure of its regime to prevent disaster; it will therefore be conservatively, and expensively, biased.

In our view, most of the complexities advocated and advanced by the regulator, such as integrated risk management, are unnecessary; it is these aspects which trouble many trustees... In our view, trustee duties are rather light; they consist of ensuring that the scheme liabilities are adequately secured under the terms of award at the valuation.

Con Keating and Ian Clacher will be running a special symposium at CISI in October 2017 on the implications of this paper. See cisi.org/events for details



HINKLEY POINT C – A REVIEW OF POTENTIAL ALTERNATIVE FINANCING OPTIONS

Gregor Botlik, Corporate Finance, National Audit Office gregor.botlik@nao.gsi.gov.uk

INTRODUCTION

In September 2016 the UK's Department for Business, Energy and Industrial Strategy (the Department) reached a deal to support construction of the first nuclear power station in the UK since 1995: Hinkley Point C (HPC).¹ This deal is part of the Department's strategic aim of managing the energy 'trilemma': providing a supply of electricity that is secure, is affordable for consumers and contributes to the UK's statutory decarbonisation targets. The National Audit Office published a full review of the deal in June 2017 and concluded that "the Department has locked consumers into a risky and expensive project with uncertain economic benefits".² One of its key findings is that the Department did not assess the potential value for money implications for bill-payers of using alternative financing models. This paper provides a brief overview of the deal and discusses the potential alternative funding models and impact it may have had on the cost and risk involved.

BRIEF OVERVIEW OF HPC

The Department reached a deal with Électricité de France (EDF) and China General Nuclear Power Group (CGN) to support the construction of HPC, which will comprise two European pressurised water reactors of 1.6 gigawatts capacity each and can produce some 26 terawatt hours of low-carbon, baseload electricity a year. This is equivalent to around 7% of Great Britain's anticipated requirement for electricity in the mid-2020s. A special-purpose project delivery company, NNB Generation Company (HPC) Limited (NNBG), will build and operate HPC. NNBG is owned 66.5% by EDF and 33.5% by CGN.

NNBG expects it will cost £18bn³ to build HPC, financed in full by its two investors through equity and shareholder loans. EDF expects that HPC will start to generate electricity from 2025 to 2085 followed by a decommissioning and waste disposal period until 2151. NNBG forecasts that the project will cost £45.5bn in total over its lifetime, including construction, operating and net contributions to the decommissioning fund. The investors expect to generate £79.7bn of net cash flow by the end of HPC's operation.

BRIEF OVERVIEW OF THE KEY CONTRACTS

The department enabled the construction by agreeing the following key contracts with the investors:⁴

- 1. Government's announcement of the transaction https://www.gov.uk/government/collections/hinkley-point-c
- 2. Comptroller and Auditor General, Hinkley Point C, Session 2017-18, HC 40, National Audit Office, June 2017.
- 3. All prices are in 2016 prices unless stated otherwise.
- 4. The government's contractual documents (CFD, SOSIA, Exchange of letters on the guarantee), https://www.gov.uk/government publicationshinkley-point-c-documents and (FDP) https://www.gov.uk/government/publications/hinkley-point-c-funded-decommissioning-programme

Contract for difference

The Department has agreed that NNBG will receive a 'strike price' of £92.50 (in 2012 prices) for each megawatt hour (MWh) produced⁵ and this will increase with inflation. The average price of electricity on the wholesale market in Great Britain has been around £45/MWh since 2010. The contract for difference (CFD) will last 35 years from generation starting and thereafter market rates will prevail.

The CFD is the main mechanism supporting the expected returns for investors. This contract also includes additional mechanisms to adjust the risk and reward between investors and consumers/taxpayer if the actual performance on items like construction or operating cost, tax receipts or capital structure differ to what was expected when the deal was agreed.

The government has provided similar contracts to other low-carbon electricity generators like wind or solar, though typically they last for 15 years. The strike prices for these contracts range between £80/MWh and £150/MWh. The costs of fixing the price of electricity that HPC generates through the CFD will ultimately be borne by electricity consumers. In the case of HPC, NNBG will receive top-up payments for the difference between the wholesale price of electricity and the strike price. Conversely, if market prices are above the strike price, NNBG will be required to pay the difference.

Funded Decommissioning Programme

NNBG expects decommissioning and waste management and disposal operations to cost £7.3bn and end by 2151. To meet this future cost, NNBG is required to set up a funded and ring fenced plan – the funded decommissioning programme (FDP). NNBG plans to set aside £4.5bn (in 2016 prices) during the operations, which will be reinvested following an agreed investment strategy to generate a return that will cover the entire cost.

HM Treasury debt guarantee

HMTreasury has agreed an initial guarantee of up to £2bn if NNBG decides to issue bonds to finance construction. NNBG must meet a number of conditions by December 2018 to be able to benefit from the guarantee and the bonds must be repaid by the end of 2020. Following this, and subject to meeting an additional number of conditions as well as further ministerial approval, a guarantee of up to £13.1bn may be considered thereafter.⁶

Secretary of State Investor Agreement

The Secretary of State Investor Agreement (SOSIA) regulates the relationship between the government, the generator and the project's investors. Among other things, it enables NNBG to be compensated if there is a change in government policy resulting in the shutdown of HPC. If this were to occur, the Department estimates it could cost the government up to £22bn (in 2012 prices). The SOSIA also includes an equity gain share clause, which means consumers share the benefit if returns by NNBG and their investors is higher than a certain threshold.

NNBG'S RETURNS AND RISK ALLOCATION

Based on the expected costs and cash flows on the project and the key contracts above, investors expect to achieve a post-tax nominal rate of return of 9% over the 60-year operating life of HPC. Assuming no drawdown or default under the guarantee arrangement, the investor fully bears the construction and financing risk of the project. Operational and some other risks are shared to a certain extent with consumers via the adjustment mechanisms under the CFD. As a result, the tax payer bears no risk, and consumers bear the full cost of the CFD, which at the current expected market price forecast, could amount to £30 billion.⁷

ALTERNATIVE WAYS OF FINANCING HPC

We have summarised potential alternative financing scenarios in Figure 1, p.61. This is a simplified analysis which calculates the changes in the CFD strike price based on changes to the return for investors. In addition we have illustrated the changes to the risk exposure for consumers and taxpayers different scenarios would entail. This analysis should only be used to give a high-level picture across the different options.⁸ We have looked at the following scenarios:

- HPC deal-type structure this scenario replicates the agreed deal structure and only changes the returns for investors. The extremes represent a transfer of all risks to either a private or public investor.
- Public-private partnership in this scenario government participates with equity capital in the project, similar to projects like Thameslink or Eurostar.
- Hybrid regulated asset base model this is a theoretical model, combining a regulatory asset base type model used in the utility industry with payments during construction phase similar to the recent Thames Tideway Tunnel arrangements.
- Engineer, procure & construct this scenario calculates theoretical strike prices where government is not exposed to any construction risk.
 This was an aim in HPC and is similar to transport or defence projects.

The chart presents the strike price necessary for investors to achieve different levels of return based on two sets of electricity wholesale price projections. The higher the level of risk private investors bear, the higher the strike price. In the summary table (Figure 1), we show three different scenarios:

- '100% private risk' assumes private investors carry all risks. The
 Department has estimated that the hurdle rate for nuclear projects is
 about 12% (post tax nominal). To achieve this return, the market price
 would need to be between £135 and £137 per MWh during the first
 35 years of generation but at the same time private investors would
 also assume all operational risks;
- 'HPC' scenario replicates the current deal. The difference between the hurdle rate and agreed 9% return is as a result of key contracts which transfer risk away from the private sector; and
- '100% public risk' assumes all risks are transferred to the public sector and the taxpayer would have to pay the full project cost (£18bn). In this case the strike price for 35 years would range from -£6 to £28
- 5. This equates to £100.38/MWh in 2017 prices. The 2012 strike price would reduce to £89.5 should EDF pursue their proposed nuclear power project at Sizewell C.
- 6. The government has recourse to the shareholders of NNBG in case of a default. NNBG has paid the government an upfront fee of £10 million for the guaran tee and is paying an annual commitment fee of 0.25%. Draw-downs would pay an annual fee of 2.95%. EDF indicated that it will not draw under the initial guarantee.
- 7. The £30bn estimate is a present value discounted to 2015 in 2015–16 prices. The uses the discount rate (0.7%) that HM Treasury requires departments to use when valuing liabilities in their annual accounts.
- 8. We have not assessed the feasibility of applying these models for HPC, nor whether they would comply with HM Treasury guidance or receive State Aid clearance. We also have not assessed how changes to the delivery method (scenario) or changes to the investors' return would impact on the deal's struc ture beyond changes in the strike price. The scenarios are based on the financial mode the department used to assess the investors' returns from HPC. As a result, the scenarios do not reflect any changes to the cost or revenue an alternative scenario may entail.

Figure 1 – Summary table: alternative financing options and implications

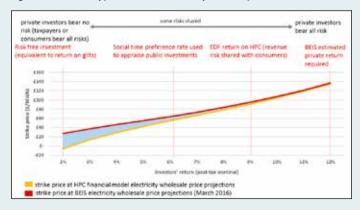
	Case	Investor's return (post-tax nominal)	Cost to taxpayers during construction	Risk sharing			Strike price (£/MWh)	
				Construction	Operational	Financial	Low	High
HPC deal-type structure	100% private risk	12%	£0	No	No	No	135.00	137.00
	HPC	9%	£0	No	Shared	No	91.00	95.00
	100% public risk	2%	£18bn	Yes	Yes	Yes	- 6.00	27.50
Public-Private	Partnership return (WACC)	Government equity share	Cost to taxpayers during construction	Construction	Operational	Financial	Low	High
	7.25%	25%	£4.3bn	Shared	Shared	Shared	69.50	76.00
partnership	5.50%	50%	£8.8bn	Shared	Shared	Shared	48.50	59.50
	3.75%	75%	£13.1bn	Shared	Shared	Shared	25.00	44.00
Hybrid regulated asset base model	Government return	Private investor return	Cost to consumers during construction	Construction	Operational	Financial	Low	High
		9%	£9.3bn, an average of £5.50 per household per year during construction	No	Shared	No	63.50	67.50
		7%	£7.3bn, an average of £4.50 per household per year during construction	Shared	Shared	Shared	51.00	58.00
	Government return	Developer return	Cost to government in 2025	Construction	Operational	Financial	Low	High
Engineer, procure & construct ('EPC' or 'turnkey')	2%	14%	£34.7bn (2016 prices)	No	Yes	Yes	11.50	45.00
o. wilkey j	2%	17%	£42.0bn (2016 prices)	No	Yes	Yes	19.50	52.00

NOTES

- 1. The returns shown are post tax nominal. The options presented assume government's return is 2%, which is a proxy for its long-term borrowing rate. More detailed assumptions for each scenario can be found in Figures 2–5.
- 2. Strike price is the price for the electricity for the CFD period (2025 to 2060). We kept this period constant to make it as comparable to the actual HPC case as possible. The market price for electricity is assumed to converge with the CFD price in 2060 and continue to grow with inflation thereafter. The range depends on different electricity market forecasts. The low end reflects wholesale price projects in the HPC financial model and the high end BEIS projections as per March 2016. The negative strike price in the 'HPC deal-type structure 100% public risk' is an anomaly and a theoretical price see Figure 3 for additional explanations.

Source: NAO analysis

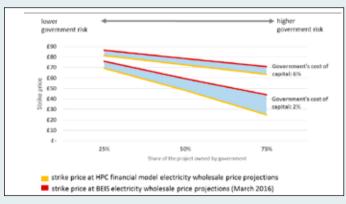
Figure 2: HPC deal-type structure. Sensitivity of strike price to investor's return



per MWh depending on the electricity price forecasts. The negative strike price is an anomaly as a result of a combination of low discount rate and the high future electricity prices expected in the HPC model which make the present value of the cash flows post CFD so high that it compensates for the negative strike price during the CFD period. Such strike price is a theoretical price and not commercially viable.

Figure 3 represents the strike price depending on different levels of equity participation by the government. In addition, it differentiates between the government's current long-term cost of funding (2%) and nominal social time preference rate (6%). The government would be exposed to all types of risks in the project proportional to its share of the overall investment. The strike price would decrease when the government's share increases, but risks for the taxpayer would increase with the

Figure 3: Public private partnership



government's investment. The reduction in strike price is as a result of the lower cost of capital of the government relative to the private sector.

Taking the mid case of 50% government participation as an example, taxpayers would have to assume £8.8bn of investments. At the same time, it would reduce the strike price to a range of £48.50 to £59.50 per MWh assuming the government's current cost of funding.

Figure 4 (overleaf): Hybrid regulated asset base model.

Strike price sensitivity to investors' return and total consumers' contributions during construction.

Providing investors with a return during the construction phase would decrease the strike price by at least £20/MWh.

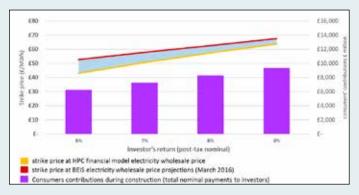


Figure 4 shows a theoretical scenario which has not been tested in the nuclear industry before, but has seen precedents in similar form in the utility industry and in particular in the recent Thames Tideway Tunnel project. The scenario assumes investors benefit from a 35-year CFD agreement similar to HPC, and in addition, they are provided with a return during the construction period. The return during the construction period is based on a regulated asset base methodology. Consumers contribute to the cost of construction through an increase in their electricity bills. We assume sharing the construction risk reduces the overall project risk, and therefore the investors' return requirement below the 9% agreed on the actual deal. The range of potential investor returns is indicative only and for illustrative purposes. The impact of investors receiving a return during the construction period, and the reduction in the return required reduce the strike price during the CFD period.

Taking the example of investors accepting a 7% return, consumers would contribute £7.3bn to the construction cost (41% of total cash flow during construction) and thereafter pay a strike price between £51 and £58.

Figure 5: Engineer, procure & construct (turnkey)
Strike price sensitivity to investors' return for an engineer, procure & construct project, In an engineer, procure & construct project, investors' return has a limited impact on the strike price



In the Figure 5 scenario, the government contracts a developer to design, finance and build the plant and then takes ownership once it is operational (assumed in 2025). Construction is the riskiest stage of the project and

investors don't benefit from the operational period. To reflect the increase in risk, we assume investors require a return on their investment ranging between 14% and 17%. This return is indicative, but also inline with the returns investors would achieve on HPC if they decided to sell their entire stake after the end of the construction. The chart shows how the strike price would vary according to the investors' cost of capital and whether government's cost of capital is assumed to be 2% or 6%.

If we assume an investor return of 15% and a single lump-sum payment at completion (2025) the government would need to pay £36.5 billion to the developer, assuming government's cost of capital of 2%. In this case, the strike price would need to be between £15 and £47 per MWh during the first 35 years of generation.

WHY HAVEN'T ALTERNATIVES BEEN CONSIDERED?

There are good reasons for the Department not taking an alternative financing approach for HPC, beyond adhering to the prevailing energy policy:

- Alternative financing models would expose taxpayers to additional construction and operational risk and require further investment if the project is delayed or costs overrun. There are many high-profile examples in other sectors where taxpayers have been exposed to government projects overspending. In this case the risks of overspending could be high: the HPC reactor technology has been subject to significant problems, causing costs to overrun in other projects. But our analysis shows that, under most scenarios, the construction cost could overrun significantly before the costs to consumers would equate to the current HPC deal. For example, if we assume the government financed the project and required a 2% return, construction costs could overrun by between 400% and 600% to equate to the total cost of the HPC deal.
- Taking a greater stake in the project could have obliged the government to account for HPC as a public asset, bringing it onto the government's balance sheet. This would require trade-offs against other government spending priorities if the government were to stay within its fiscal constraints. If the project were on the government's balance sheet and costs overran then further rebalancing would be required to prevent additional costs to taxpayers.

CONCLUSION

In summary, alternative ways of the government providing support for HPC could have resulted in lower costs to consumers over the life of the project. The government contributing to the project's financing could have reduced financing costs because the government's cost of borrowing is lower than for private investors. The investors' required rate of return could also have been lower if consumers or taxpayers had shared some of the construction risks. Alternative funding models would have exposed consumers and/or taxpayers to additional risks, like the project running over budget. In addition it may have resulted in the project needing to be on the government's balance sheet.

Gregor Botlik and colleagues will discuss this paper at a CISI seminar at the National Audit Office in London on 20 September 2017. See *cisi.* ora/events for details.

GREGOR BOTLIK

Gregor Botlik is an Affiliate member of the CISI. He holds a BCom (Hons) degree in Business Studies and Accounting from the University of Edinburgh and a Master's degree in International Economics and Management from the SDA Bocconi, Italy. He is a corporate finance professional with over 15 years of experience in investment banking and business, and has received multiple public awards for innovative financial transactions. He currently works for the National Audit Office (NAO) and reviews corporate finance transactions undertaken by the UK government. He was a co-author of the NAO's recent report on Hinkley Point C.



9. See para. 2.5 and Figure 5 in Comptroller and Auditor General, Hinkley Point C, Session 2017-18, HC 40, National Audit Office, June 2017.



What are you doing to meet your CPD requirements?

As of 1 April 2017, the CISI has implemented mandatory CPD which now also includes an element of Ethics.

As the leading global professional body for securities, investment, wealth and financial planning professionals, we have introduced these new CPD requirements to ensure that all our members, no matter what membership grade they have, job role they hold or jurisdiction they work in, will be unified by meeting strict annual CPD standards.

Our aim is to help our members demonstrate to consumers and the industry that they are committed to the highest standards of professionalism and integrity. We provide several resources to ensure members have all the opportunities to learn, develop, progress in their careers and meet their CPD requirements, including:

A choice of over 500 CISI CPD events globally a year for members to attend in person

Nine Professional Forums

Online training through Professional Refresher modules and IntegrityMatters

CISITV webcasts, both live and recorded, with currently over 150 to view online

Industry news through your member magazine – The Review

Suite of ethics and integrity CPD materials

Free CPD scheme that automatically records all CISI CPD

For more information visit cisi.org/newcpd



Existing members who joined the CISI prior to 1 April 2017 need to start their CPD year no later than 31 March 2018 in order to meet the new mandatory CPD requirements deadline of 31 March 2019.

We are...

your competitive edge

