SECURITIES & INVESTMENT



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MARCH 2015

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**Plenty to learn** Need for financial education grows as scandals continue

**Research unbundled** Separate payments come closer

## Life at the top

SIR GERRY GRIMSTONE ON THATCHER, PRIVATISATION AND BANKING MORALS

Inside Review of Financia/ Markets - see centre pages for in-depth and original academic research



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Editor

Janice Warman Consultant Editor Andrew Davis

Art Director Steven Gibbon Designers

Dean Buckley, Tara Swart Account Director

Ella Kilgarriff
Production Director

John Faulkner Managing Director

Claire Oldfield

Chief Executive Martin MacConnol

Advertising Sales Valeria Curzio Telephone: +44 20 7010 0945

Email: valeria.curzio@wardour.co.uk Cover photograph

Johanna Ward

Published on behalf of the Chartered Institute for Securities & Investment by Wardour, 5th Floor, Drury House 34–43 Russell Street, London WC2B 5HA Telephone: +44 20 7010 0999 Fax: +44 20 7010 0990 www.wardour.co.uk ISSN: 1357-7069

## Communications Editor, Chartered Institute for Securities & Investment

Richard Mitchell 8 Eastcheap, London EC3M 1AE Telephone: +44 20 7645 0749 Email: richard.mitchell@cisi.org

### **Editorial Panel**

Robert Merrifield, Chartered FCSI, *Chairman* Suren Chellappah FCSI Moorad Choudhry FCSI Simon Culhane, Chartered FCSI Paul Dawson, Chartered FCSI Scott Dobbie FCSI(Hon) Mike Gould FCSI Peter Land, Chartered FCSI Amy Lazenby, Chartered FCSI George Littlejohn MCSI

Gregor Logan MCSI Paul Loughlin, Chartered MCSI Claire Perryman MCSI Frank Reardon, Chartered FCSI Patricia Robertson, Chartered FCSI Pitricia Robertson, Chartered FCSI Nimrod Schwarzmann Arjuna Sittampalam, Chartered MCSI Nigel Sydenham, Chartered FCSI Alan Yarrow, Chartered FCSI(Hon) Sanlam Private Wealth Sanford C Bernstein Brunel University Chartered Institute for Securities & Investment Fidelity Worldwide Investment Deutsche Bank Investment Management Association Brewin Dolphin Close Brothers Chartered Institute for Securities & Investment

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## A QUESTION OF RIGHT AND WRONG? CERTAINLY - BUT WE BELIEVE THE SANCTION AGAINST JONATHAN BURROWS WAS GROSSLY DISPROPORTIONATE

he New Year has not been a good time for rail travellers, what with over-running engineering works, signal failures, tunnel fires, rebuilding mainline termini and adverse weather conditions.

But for one individual who had spent the previous five years commuting to work in the City from his home in Sussex, all these were problems from a past life. In December, Jonathan Burrows, a (now former) managing director with BlackRock, was banned by the Financial Conduct Authority (FCA) from working in financial services as a result of avoiding paying his full train fare during those five years.

This is a highly significant decision by the FCA. It marks the first time that the UK central regulator has taken action against an individual solely on account of that person's behaviour in his personal life, which has absolutely nothing to do with his work, his customers or his firm.

The regulator was absolutely right to call Mr Burrows to account and to make it publicly clear that financial services professionals cannot pick and choose when to behave ethically. As CISI members know well, principle eight of our Code of Conduct requires us to uphold the highest personal and professional standards at all times. It's a 24/7 obligation, not a 9 to 5 option.

The FCA was right to state that "Burrows held a senior position within the financial

services industry. His conduct fell short of the standards we expect. Approved persons must act with honesty and integrity at all times and, where they do not, we will take action." Had Mr Burrows been a CISI member, he would have been called to account to face his peers.

However, while we applaud the taking of action and the reminder that ethics is 'always on', we believe the sanction was grossly disproportionate and sends the wrong message. There is no doubt that

## What would have been a proportionate sanction? Perhaps a sizeable fine?

Mr Burrows was deliberately and repeatedly dishonest. However, when confronted by the train inspectors, he admitted the offence and immediately paid the fares and attendant fine amounting to £43,000. As far as the railway company was concerned, that was the end of the matter and it did not press charges.

Clearly some form of punishment is required, especially as this was not a one-off offence. In deciding the sanction, it may be helpful to consider the following:

a) Have his actions adversely affected the financial system? No.

b) Have his actions affected the market? No.

c) Did it have any direct adverse effect or

influence on clients or counterparties? No. d) Did he admit his guilt? Yes.

e) Did he make reparations? Yes.

So, what would have been a proportionate sanction? Perhaps a sizeable fine, maybe a short-term suspension from working in the sector? No. The FCA rated this as being on a par with the most serious offence possible and has banned him for life.

This penalty is more draconian than those handed to the LIBOR or interest-rate fixers, or those who peddled the toxic PPI products or precipice bonds.

So what has happened here? Why hasn't the FCA been consistent and applied its policy in this case? What message is it sending? What incentive will people have to accept responsibility if they know there is nothing to be gained from owning up; surely it's better to keep quiet and deny everything? Mr Burrows' case attracted considerable media interest, with the tabloids picking up the story over the summer and replaying it regularly; baying for blood with greater intensity and hysteria each time.

Against this background, and having had the incident brought to its attention, it was absolutely right for the FCA to take action. However, the FCA was wrong in its disproportionate response, which has the whiff of courting mob rule and lacking in fairness – a key ingredient of behaving with integrity.

## 60-SECOND INTERVIEW

Katarzyna Kmiecik, a project manager for State Street Bank & Trust in Edinburgh, was joint overall winner of the Investment Operations Certificate (IOC) category at this year's CISI Annual Awards. She also shared the prize for the IOC's Introduction to Securities & Investment unit



Katarzyna Kmiecik receiving her prize from Clare Gore Langton, Chartered FCSI(Hon)

## Why did you choose to take the IOC?

The IOC is a widely recognised qualification within the industry. It's a great stepping stone to expand your knowledge and gain a deeper understanding of the current market trends and concepts. I have worked for State Street for six years - initially in Krakow in my native Poland - and the IOC is well respected within the organisation.

## How has this qualification helped you in your career? The IOC is completed by passing three

units, which are introductory, regulatory and technical. Although a lot of the material from the first two IOC units I sat - Introduction to Securities & Investment and UK Financial Regulation - was familiar from my job, it helped fill in the gaps and give me more confidence to be competent in my role.

IOC candidates can choose from a range of technical subjects for the third unit and I studied Operational Risk. It was highly rewarding, as it gave me the understanding of the issues and terminology that I am dealing with on various projects and in training delivered to staff internally.

## What advice would you give to someone taking the qualification?

Research the different units available for the technical level so that you choose a unit that links closely with the nature of your current role or the role you are aspiring to.

## How did you study for the exam?

Regularity is key. It's all about creating a studying routine. I prefer studying in the mornings, so devoted my weekend mornings to longer sessions and did a short review (as little as 15-30 minutes) three days a week in the evenings.

## Would you recommend the IOC to others?

Absolutely - especially to individuals who are starting their careers in the financial industry

and want to quickly get up to speed with the jargon and understand the business better.

## Do you plan to take further qualifications?

I'm committed to continuing professional development and plan to study a higher-level CISI qualification. Currently, I am assessing what will be most appropriate to support my career progression.

## **IOC** factfile

- Suitable for a wide range of staff no formal qualifications are required.
- · Successfully complete three units to achieve the IOC qualification.
- Choose from a range of units and study subjects that are relevant to your industry and job role.
- Many of the units have an international focus, and a local regulatory exam can be substituted for the regulatory unit.
- Over 10,000 IOC exams are taken each year in more than 60 countries.
- Free CISI student membership.
- Candidates qualify for ACSI designatory letters on completion of the qualification.
- New units in 2015 Pensions Administration and Client Money.

For further information, see *cisi.org/ioc* 

## New CISI qualification in understanding cybercrime

Cybercrime is an increasingly pertinent issue for us all as individuals, employees and firms.

In particular:

- What are the specific risks for the financial services industry and its stakeholders?
- What steps are firms taking to protect themselves?
- What are the regulatory and legal requirements?
- What are the technical parameters

and where should firms be directing resources?

The CISI has hosted a number of high-profile events on this topic and is looking to develop a qualification to enhance understanding and foster a stronger, more united approach to this universal threat. As a professional body, the CISI relies on industry practitioners to offer their knowledge and expertise to help create and maintain its exams and workbooks. The Institute would

like to hear from members and their colleagues working in this area.

• For more information on cybercrime, what the CISI is doing in this area and how you can assist the Institute with developing this initiative, please contact Tony Morgan on +44 20 7645 0647 or email tony.morgan@cisi.org

## *Review of financial markets*



This edition of the S&IR contains in its centre pages the fifth issue of the CISI's academic journal, *Review of Financial Markets (RoFM)*. The 12-page publication includes three diverse papers from academics based around the world.

Dr Ken Kortanek, Visiting Professor at the University of Pittsburgh in the US, and his colleague, software engineer Vova Medvedev, put forward an effective method for banks to adopt to update their market prices and cost of funds: important parameters in customer pricing.

A paper from Professor Pablo Fernandez of IESE Business School, University of Navarra, in Madrid, Spain, should be required reading for all investment bank corporate finance departments as a template for obtaining valuations of a business.

Finally, Professor Ben Jacobsen at University of Edinburgh Business School writes on the concept of using 'gradual information diffusion' to forecast market prices.

*RoFM* Editor Moorad Choudhry FCSI, Professor at the Department of Mathematical Sciences, Brunel University, said: "When we introduced *RoFM*, CISI Chief Executive Simon Culhane, Chartered FCSI, stated that a key objective was to publish articles that were academically robust but also of sound practical value to market participants. While the last word on this will always be left to you, the reader, this issue certainly scores strongly on both points."

• CISI members are invited to submit papers to *RoFM* for consideration. For submission guidelines, turn to page 12 of RoFM or see *cisi.org/academic* 

## Keep up to date through our digital edition

Have you seen the digital edition of the *Securities* & *Investment Review*?

The smartphone and tablet-friendly website is updated each week with news, features and analysis on the hot industry topics. View the site at *cisi.org/sireview* 



## Ask the experts: The falling oil price

## Is the fall in the oil price good or bad for the UK economy?

Overall, the recent 40% fall in the sterling price of oil is highly positive for the UK economy. Consumers stand to benefit the most. Reduced petrol prices, energy bills and manufactured goods prices should increase the amount families have available to spend by around £350 per household. Admittedly, this could leak out of the UK if consumers spend their extra cash on imports. But since our largest export markets are also net oil consumers, the fall in crude prices should also boost demand in our tradable sector. By reducing production costs, it should make certain manufacturing lines profitable once again, encouraging investment.

Granted, the fall in the oil price means that the UK is almost certainly on course for a period of deflation in the coming months – and there are fears that deflation could become ingrained in the UK, as it has in Japan. But deflation is only likely to be long-lasting if wage growth ticks down or consumers delay spending on the expectation that prices will be even lower in the future. At the moment, wage growth is strengthening and retail sales grew at their fastest quarterly rate for 12 years in the fourth quarter of last year. So the risk that deflation lingers and dampens economic activity looks low for now.

## Why has the price drop sent stock markets into reverse?

The equity market initially interpreted the drop in the oil price as a negative development, with the FTSE 100 dropping by about 10% in the three months to mid-December. The FTSE 100 has a relatively high concentration of oil and mining companies in the index, so it fared worse than others. But over the last two months, the index has fully recovered and in February reached an all-time high (at the time of going to press). While equities have no doubt been boosted this year by the onset of quantitative easing in the eurozone, the realisation that the lower oil price will create more business winners than losers in the UK appears to have also provided some support.

## What is the likely impact on interest rates?

The Monetary Policy Committee (MPC) is currently in 'wait and see' mode – it wants reassurance that near-zero inflation will be no more than a fleeting experience.

If the deflationary risks do not materialise – that is, if pay growth does not weaken and inflation expectations remain anchored to the 2% target – interest rates may still rise this year. By boosting households' spending power, the drop in the oil prices could lead to a faster reduction in the amount of slack in the domestic economy, and an intensification of price pressures in the medium term.

Even so, with the fiscal squeeze set to intensify again and debt levels still quite high, the MPC is likely to raise interest rates only at a gradual pace. We think interest rates are likely to rise to only about 1.25% by the end of 2016 and 1.75% by the end of 2017. That should provide a relatively supportive environment for equity prices and prevent a so-called bloodbath in the bond markets.



Samuel Tombs, Senior UK Economist, Capital Economics

## The knowledge

## Social media

Social media is an essential part of business, but how can it be best used and what are the potential pitfalls to guard against? Sandra Garlick, a partner at Askews Legal who specialises in social media and the law, gives some advice.

**1** Be compliant: Your regulatory body has strict rules regarding advice that can be given in various forms of marketing. Care should be taken not to share information that could be construed as 'advice' in your social media posts. It is better to provide a web link to your website or a reliable source when sharing information.

**2** Be human: People buy from people. There is a significant element of trust in the work that you do. When setting up your profile, you may wish to share where you studied, where you are located or what your particular hobbies or interests are. However, keep detailed personal information secure to prevent identity theft.

3 Be prepared: It is wise to plan and document your social media strategy. Who is your customer? Where are they likely to be? How are you going to reach them? Why are you engaging with them? Finally, what are you going to say? Check the spelling and accuracy of content carefully.

4 Be careful: Take care not to share too much detail about you or your company. If in doubt, bounce your idea off a colleague and ensure you comply with company Data Protection, Confidentiality and Intellectual Property policies.

**5** Be aware: Stand out for the right reasons. Monitor your social media posts to ensure that you are not damaging either your personal or company reputation.

Sandra has given presentations about social media for business to several CISI branches in the UK.



media don't mix

- cisi.org/cisitv



## Art in the City

There are dazzling works of art in the City and in corporate collections across the world. In this issue, we look at a collection of Swiss art from 1805 to the present in one of the world's oldest private wealth management banks

Poised on the threshold of a new millennium, Pictet Bank decided to ground its history in an art collection that reflected its founding values. Convinced of the important role art fulfils as a way of remaining alert to a changing world, Pictet chose to forge a true cultural heritage and surround itself with works of art

Pictet has collected more than 600 works of art, including painting, drawing, sculpture, photography and even installation and video art. The collection features works from the different currents running through the artistic output of the 19th, 20th and

21st centuries, including Jean Arp, Cuno Amiet and Silvie Fleury. Each new acquisition aims to consolidate works whose importance figures in the individual artist's trajectory as well as the history of art. Exhibited first at the bank's headquarters in Geneva, the collection is also present in many of the offices of the Pictet Group, including London.

 More information about corporate art collections around the world can be seen in A Celebration of Corporate Art Programmes by Peter Harris and Shirley Reiff Howarth - go to artworldeurope.org



L'Intolérance, by Valentin Carron (2009), displayed in the Zurich room of Pictet Bank's London office

## Annual student bursary

Deadline announced for prestigious Hoare Nairne Scholarship

The CISI has announced that the ongoing annual bursary, the Hoare Nairne Scholarship, is available to one UK resident studying towards the CISI's flagship Chartered Wealth Manager qualification each year.

To be considered for the 2015-16 scholarship, candidates must submit a 1,500-word essay by 6 April 2015 on the topic: 'What is the difference, if it exists, between investing and gambling? Which category does derivative trading and spread betting fall into?'

Shortlisted candidates will be invited to an interview with the CISI Educational Trust at the Institute's offices in London in April 2015. The winner will receive £2,500 towards tuition and examination entry fees for the three-unit CISI Chartered Wealth Manager qualification.

The scholarship was awarded for the first time in 2014. The recipient was Philip Firmin, Chartered MCSI, who is shown above being presented with the bursary



by CISI Chief Executive Simon Culhane, Chartered FCSI.

The Chartered Wealth Manager qualification, formerly known as the Masters in Wealth Management, is a postgraduate qualification encompassing the knowledge wealth managers need to provide a quality service to clients Candidates must hold an appropriate benchmark qualification to enrol for the programme. For a full list of accepted qualifications, go to *cisi.org/mwm*.

• Email *MastersScholarship@cisi.org* for more information.

## Richard Lawson CBE FCSI(Hon)

The CISI is sad to report the death of Richard Lawson CBE FCSI(Hon).

Richard was a founding member (membership number 6) in 1992 of the Securities Institute, forerunner of the CISI. A thanksgiving service in his memory was held at St James' Church, Shere in Surrey, on 3 March.

A full obituary will appear in both the *S&IR* digital edition and the June 2014 print edition.

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\*Terms and conditions apply. See website for details. Offers subject to change without notice. CISI Select Benefits is managed on behalf of the CISI by Parliament Hill Ltd.



The *S&IR*'s quick quiz features questions from CISI Professional Refresher, an online learning tool. This popular product consists of 60 modules covering topics including anti-money laundering, the UK Bribery Act and information security and data protection. The answers are on page 11.

## 1. Which of the following is a characteristic of a commodity?

- A Having a range of unique qualities
- B A by-product of a common process
- **C** A primary product
- **D** Having a high price

## 2. Which functions may the Financial Conduct Authority require to interview ahead of appointment?

- A All controlled functions
- **B** Governing functions
- **C** CEO appointments
- **D** Significant influence functions

## 3. Which one of the following types of options has unlimited potential for gains?

- A Long call
- B Short call
- C Long put
- **D** Short put

## 4. Which of the following is responsible for insider dealing legislation?

- A Financial Conduct Authority
- B HM Treasury
- C London Stock Exchange
- D Bank of England

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



## Nikolas Pojezny, Principal, Ondra Partners, City of London

As a student of the European Business School, just outside of Frankfurt, Nikolas Pojezny saw his future in the world of investment banking. In the years that followed, he worked hard to transform that dream into reality.

After completing two internships with Morgan Stanley, Nikolas was recruited as an Investment Banking Analyst for the firm's Global Industrials Group. Two years later, he left to study for his doctorate. He joined the M&A and Global Natural Resources Teams at Goldman Sachs, first as Associate and then as Vice President of Investment Banking - working in New York, Sydney and Frankfurt.

Expecting to meet cultural differences, he encountered a professionalism that he believes still permeates the industry today. "It didn't matter whether you spoke to someone in Sydney, New York or Frankfurt: they all had the same positive, can-do attitude," he recalls. "Obviously, regulatory backgrounds differed in different countries, but even then there were a lot of parallels."

Nikolas is now responsible for client coverage and transaction execution across Ondra Partners' existing European client base, while also developing plans for new geographical coverage. "It's a fascinating

## 66 It's challenging in the sense that every situation is different " get to be involved in some very

business," he says. "It's challenging in the sense that every situation is different. You meet a lot of people and you important decisions." Nikolas

wouldn't change a single decision he's made. "There's no way you can anticipate the opportunities that will pop up," he says. "But I am very happy with the way things have panned out."

His advice for anyone aspiring to work in the City is to consider an internship as a route in. "Ten or 12 years ago, an internship was the way into the industry and I think, to a large extent, it still is," he says. "For candidates and companies, there is no better way of getting to know someone than spending two or three months working with them."

He is celebrating winning two prizes at this year's CISI's Annual Awards ceremony, which recognises top performers from around the world in the Institute's exams. He was presented (pictured above) with the CISI's Corporate Finance Regulation and overall Certificate in Corporate Finance awards by Alan Yarrow, Chartered FCSI(Hon), CISI Chairman and Lord Mayor at Mansion House in the City of London.

Nikolas recommends taking the CISI's qualifications. "The qualifications were a great refresher for me, but they're even more useful at the start of your career," he says. "It's a very practiceorientated curriculum, which is really valuable."

• If you would like to tell us your own back story, email janice.warman@wardour.co.uk

## Events preview 💾

It's never too early to start thinking about your continuing professional development (CPD) planning and the CISI offers plenty of opportunities to help you meet your requirements for CPD. Below are just some of the highlights of the Institute's events programme. For further information, take a look at the latest quarterly CPD brochure, which is included in UK copies of this issue of the S&IR.

## **CONFERENCES** 1.JULY **CISI ANNUAL CONFERENCE 2015**

Grange St. Paul's Hotel, 10 Godliman Street, London, EC4

A chance to network with other CISI members and keep up to date with the latest industry developments. Confirmed speakers include Verena Ross, Executive Director of the European Securities and Markets Authority; John Cridland CBE, Director-General, CBI; and Xavier Rolet FCSI(Hon), Chief Executive of the London Stock Exchange Group.

• Want to reach out to CISI members? Sponsorship opportunities available. Contact victoria.fitzell@cisi.org

## **ANNUAL DINNERS 14 MAY**

## **BRISTOL ANNUAL DINNER 2015**

Guests will be treated to a unique setting, with the dinner being held at Bristol Aquarium. Guest speaker will be TV and radio presenter Declan Curry.

## **21 MAY**

## **LIVERPOOL ANNUAL DINNER 2015**

Former world snooker champion Dennis Taylor will entertain guests at the event at the Liverpool Crowne Plaza.

## **OTHER FORTHCOMING EVENTS INCLUDE:**

- 25 March: Hot topics in operational risk (London)
- 25 March: CISX / CISE Transition & opportunities (Guernsev)
- 26 March: Client assets and client money (CASS) (Scotland)
- 26 March: The science of monetary policy (London)
- 30 March: FCSI Masterclass: Leadership and teambuilding for senior management: seven steps to excellence (London)

## **PROFESSIONAL FORUM UPDATE**

From 1 April, the CISI's Bonds and European Regulation Interest Groups will become full professional forums. Both groups have quickly gained a loyal industry following and the CISI looks forward to further developing them.

• For details of conferences, training courses, CPD and social events available to members, visit cisi.org/events or call +44 20 7645 0777.

## Changing ethical culture takes time

IN THE LATEST BUSINESS ETHICS SURVEY, THE UK'S WORST PERFORMER IS THE FINANCIAL SECTOR, WITH A TOTAL OF 181 ALLEGATIONS OF MISCONDUCT

NANTHONY HILTON 🚺 JOHANNA WARD

t about this time every year, the Institute of Business Ethics (IBE) publishes a survey that quantifies the ethical concerns and lapses by different sectors of business. It is based on the number of incidents mentioned in the press in the year just gone – with each issue being counted just once, regardless of the size and scope of the allegation, or the number of media outlets that reported it.

It is not particularly scientific, nor does it claim to be, but it does provide a rough-and-ready guide as to which businesses are currently out of favour, how their rating changes over time and where there is work still to be done.

Perhaps inevitably, in the latest analysis, the worst performer is the financial sector, with a total of 181 allegations of misconduct. This accounted for 39% – or almost two in five – of all the news stories concerning ethics.

The score is pretty well the same as the sector had in 2012 and 2013 and is the equivalent of a news story almost every working day. To add to the sector's woes, it was accompanied by a huge increase in the cost of fines. In 2013, the Financial Conduct Authority levied fines of £424m; last year, this soared almost fourfold to £1.4bn.

For the record, retail was a long way behind in second place with 60 complaints, while the remaining top five slots were filled in order by technology, travel and utilities, all with fewer than 30 complaints.

But for finance to be the worst performer is perhaps less of a disappointment than the fact that the score is virtually unchanged on the previous 24 months, in spite of the huge efforts being made in the City to raise ethical standards. It is particularly bedevilled by lapses which took place some years ago and which no longer reflect finance industry practice, but which do continue to taint it. The row about HSBC Private Bank and its efforts to help clients avoid tax is just the latest.

However, and at risk of being complacent, one could suggest that the position is much better than the bald figures imply. Going into the detail of the analysis, one finds that the two most prominent ethical lapses relate to the treatment of customers and to price fixing. Translate this into the financial context and it turns out that a lot of the coverage related to the efforts to manipulate the LIBOR interest rate benchmark and a parallel scandal in the foreign exchange market.

Now shocking though these cases are, they are hardly in the financial mainstream. They relate to a handful of people in a specialised area of the banking sector. They have nothing to do with 90% of the people who work in banks, let alone the hundreds of thousands who work in insurance, the securities industry, investment management or for advisers.

Members of the public may not appreciate it, but the working life, everyday behaviour and personality of a person in the back office of a securities house or fund management group is as far removed from a trader on a foreign exchange desk as it possible to be. They may both work in finance, but there is not much more that they have in common. They, more than anybody, understand how unjust it is that the actions of a tiny minority taint everyone else.

Interestingly, the major ethical concerns that the public has in relation to business (as expressed in opinion polls rather than the IBE survey) are now narrowly focused on tax avoidance and executive pay – which may suggest that the huge efforts to change cultures and improve the customer experience are having some effect. Clearly, finance is in the firing line here, but probably no more so than mainstream business. Notwithstanding HSBC's woes, it is the likes of Google, Amazon and Starbucks that have caught most of the flak on tax, while anger about executive pay is now mainstream, not just an issue of bankers' bonuses.

However, it is a reminder of how changing the culture of a business or industry is like turning a supertanker, in that it takes a long time for a change of policy ordered on the bridge to show through in the day-to-day direction of the business – and even longer to shift perceptions.

Anthony Hilton is former City Editor of The Times and the London Evening Standard. His most recent award is 2014 Business Journalist of the Year

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# A book worth reading

THE NEWLY KNIGHTED SIR GERRY GRIMSTONE MCSI, CHAIRMAN OF STANDARD LIFE, RECALLS HIS EVENTFUL CAREER

● JANICE WARMAN 🖸 JOHANNA WARD

find Sir Gerry Grimstone, Chairman of Standard Life, looking out over his domain – the City, spread out beneath the imposing bulk of the Gherkin. His office is on the 34th floor, a height that could be seen as symbolic of his achievements, though it would be difficult to find someone who is more self-effacing.

If I were to point out that he is off to be knighted on Friday and he does not even mention it – that might give you some idea.

His accomplishments are almost too long to list, but we begin at the beginning of the story, and he has a nice analogy to offer.

"It's always nice if one looks back on one's life as a succession of short stories," he says. But in fact, he explains, the short stories can turn out to be a good novel, with each chapter seemingly separate "until you get to the end, and they all join up again".

His career is a good example. "My business life has really been in three major sections. I started off as a civil servant, which I enjoyed a lot, then in the middle section I was a banker in what were then called merchant banks, and then I had a portfolio career which has become a very interesting mixture now, with both financial services and public sector activities."

## **DIFFERENT PATH**

Unusually for someone whose career has scaled the heights of the private sector, Grimstone began as a civil servant. But before that, his ambitions lay in an entirely different field: he took a chemistry degree, then a research degree, but decided that they were not for him as "you weren't really at the frontier of doing anything".

So he took his civil service exams and began by joining the Department of Health and Social Security (DHSS), working on Sickness Benefit. "Actually it was great, because it introduced me to Barbara Castle, who was then Secretary of State."

Then followed a series of appointments under several remarkable people, including Private Secretary for David Owen when he was Health Minister.

Grimstone adds modestly: "I was at one point in charge of two NHS regions within DHSS, and it was very interesting starting off, given what I do now, on something which was to do with social policy."

He moved to the Treasury, where he was initially responsible for nationalised industry finances, "and then I saw the opportunity to change that into a job that hadn't been done previously – running the privatisation programme. So in the 1980s,

## "It was fantastic. It was a very interesting time. This was popular capitalism"

I was in charge of privatisation policy and I oversaw around 20 of the major privatisations for the Thatcher government.

"That was really fantastic, you know, and it was a very interesting time. This was popular capitalism. Up until British Telecom, the most people who had ever applied for a share sale were 100,000. With British Telecom, 2.4 million people got shares, so [that was] 24 times greater, and I remember a meeting after that where Mrs Thatcher said: 'Marvellous. You know, this is transforming Britain. What can we do that will be even bigger than that? I want to double it next time.' The biggest, safest thing that we could do relatively quickly was to privatise British Gas, and that was the great '[Tell] Sid' Campaign and five million people bought shares in that."

Other parts of the programme included council house sales and employee shareholdings. It was bringing capitalism into the houses or the flats of people who hadn't been able to access it before, he says.

"I think I was the youngest Assistant Secretary in the Treasury at that time and it was a fantastic opportunity."

"What impression did you form of Margaret Thatcher?" I ask him. "You must have worked quite closely with her."

"She was somebody who applied very clear, simple principles across a whole range of policies. She was very good to young, bright civil servants and she was very good at wanting to encourage people, and she didn't have much patience for doing something in a way in which it had always [been] done."

## **ECONOMIC SPOKESMAN**

Then Grimstone was offered a plum job. The Chancellor, Nigel Lawson, wanted him as Press Secretary, "which at the time was a very good job to have in the 66 The biggest, safest thing we could do relatively quickly was to privatise British Gas 99

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Treasury, because you were effectively the economic spokesman of the Government". However, the Head of Personnel had different ideas and suggested that he do something rather less exciting.

It was a turning point for him. "I thought, 'I'm not very sure what to do here.' I'd done so much capital markets work. I knew more about initial public offerings [IPOs] than probably any banker."

## **REINVENTING HIMSELF**

He'd always liked Schroders, so he called Win Bischoff, then Chief Executive. "I said to him, [if I] wanted to leave the Treasury, would you be interested? He said, 'Well, why don't you come to dinner this evening and we'll talk it over?' So I went to dinner and the next morning they called me and said, 'If you ever did want to leave, we'd be happy to make you a corporate finance director.' "

"So I resigned that lunchtime. [It was] completely mad in a way because I didn't know what I was jumping into. The Treasury were upset at my leaving, so they banned me for 18 months from any contact with the UK public sector in any form... so at the age of 36, I had to completely reinvent myself as a banker."

There was one difference between the Treasury and the private sector that struck him quite quickly. "In the Treasury, or if you changed jobs, the flow of business just sort of carried on; you'd be sitting there and files would come in and you would deal

## "At the age of 36, I had to completely reinvent myself as a banker"

with them. And so they gave me this nice little room in Schroders, and I sat there, and after about 48 hours, a dreadful kind of truth dawned upon me that it wasn't like that in the bank. You had to do it yourself! And this was a startling discovery."

At Schroders, Grimstone did everything from helping run the IPO business to hostile mergers and acquisitions. "I did the largest-ever hostile takeover, the defence of Goldfields against Anglo-American."

He then ran Equity Capital Markets all around the world, and moved first to Hong Kong to run the businesses in Asia, then to New York to run the investment banking businesses. "It was almost a kind of A–Z of investment banking."

Then he came back to the UK and soon it was as if he had never been away. When he was having New Year's Day lunch with his children at Pizza on the Park, "One of my old clients came up to me and said, 'Oh, I didn't know you were back. Would you like to join my board?"

That was just the start. Soon he was on the board of the Tote, then the board of the Royal Air Force Strike Command. He has served in varying roles in the Ministry of Defence for 15 years.

The Defence Board is a special interest of his. "We try to run things as efficiently as we would if this was one of our businesses, and I think the last three Defence Secretaries have found it very helpful."

Defence infrastructure is, he says, being turned into something that would feel like a business, as has the whole procurement side, Defence Equipment and Support (DE&S). He is also currently Chair of TheCityUK, the representative body for the financial industry and professional services in the UK.

"It's been very interesting, because the City, looking out of the window from the Gherkin here, has kind of been my parish. It's a wonderfully diverse, rich parish."

## HEART IN THE CITY

He says the City is, at the moment, the financial capital of Europe. "We believe that the City would be diminished if it wasn't the European capital. We're not nationalistic, because there are more German bankers in London than there are in Berlin. There are more French bankers here than there are in Paris, and that's because [the City] and our wholesale markets work best when people concentrate together and you have these big pools of liquidity and expertise."

Sir Gerry's interests encompass China, India and the boundary between the public and private sectors. To that end, he has just published a review of the Civil Service on what can be done to improve its health, concluding that there is a danger that recruitment to senior roles in government was "so standardised" that it could prevent the best candidates from being selected.

"A healthy and vibrant Civil Service needs more than impartial and meritocratic recruitment," the report concludes. "Critically, impartiality must not be allowed to blur the proper responsibilities of management and it must not be allowed to become a religion in its own right, in isolation from other topics."

## **HIGHS AND LOWS**

Grimstone is clearly at a high point in his life and career now, having seen Standard Life through a pivotal time in its existence as one of the longest-serving financial services chairmen in the UK. Was there a low point?

"I think probably when I came back to the UK from having been away for eight or nine years. To have run a very busy investment bank, first of all throughout Asia and then in New York, and then to come back. I was living by myself at the time – to come back and to suddenly go from being right at the centre of things to doing nothing is a very powerful reminder of the frailty of the human condition and how nothing can ever be taken for granted. All you can do is just keep on as you are, look for things to do and then everything comes right again.

"So I like to feel that we're coming back to where we started. I like the thought that I am creating the book of chapters. My advice to others, particularly to young people starting on their journey, is to try to see your life as a series of chapters, rather than short stories.

"So when you look back on it, you feel that you have produced a book that is worth reading."

"My advice is to try to see your life as a series of chapters, rather than short stories"

But there is one subject on which he won't be drawn: what the next chapter might be – what job he might go to next.

"I'm tipped for many things," he says with a smile. "But luckily none of the things which I have ever been tipped for have I ever applied for or showed any interest in. I'm very privileged to do what I do now, but no doubt there will come a time when my colleagues rightly decide that somebody else should do it."

Later, I hear that the investiture was conducted by the Prince of Wales. Grimstone was accompanied by his three

## THE CV

PRESENT CHAIRMAN, STANDARD LIFE PLC; CHAIRMAN, THECITYUK; NON-EXECUTIVE DIRECTOR, MINISTRY OF DEFENCE; SHAREHOLDER EXECUTIVE, DELOITTE LLP AND BOARD ADVISER, ABU DHABI COMMERCIAL BANK

2006-11 CHAIRMAN, CANDOVER INVESTMENTS PLC

**1998-99** VICE CHAIRMAN OF WORLDWIDE BANKING ACTIVITIES, SCHRODERS PLC

**1997-98** MANAGING DIRECTOR, HEAD OF INVESTMENT BANKING NORTH AMERICA, SCHRODER & CO

**1995-2000** CHAIRMAN, SCHRODERS (SHANGHAI) FINANCIAL ADVISORY CO LTD

**1994-97** DEPUTY CHAIRMAN, HEAD OF INVESTMENT BANKING ASIA-PACIFIC, SCHRODERS (ASIA) LTD

**1986-1994** DIRECTOR, CORPORATE FINANCE; LATER DIRECTOR, HEAD OF INTERNATIONAL FINANCE AND ADVISORY DEPARTMENT, J HENRY SCHRODER WAGG & CO LTD

**1972-1986** UK CIVIL SERVICE DHSS AND HM TREASURY

children: Toby, a partner at Linklaters; Jenny, "who keeps pigs and bees"; and Anna, who is a GP.

He has three grandchildren, very shortly to be four, and two step-grandchildren, and is, he says, "having great fun having a coat of arms designed for the Grimstone family". The motto, he says, will translate as 'Simplicity is everything'.

"I like to think that is one of the strands in my life. I've been an adviser or an intermediary, helping other people take decisions, nearly all my life, and what you have to do is to make complicated things simple for people to understand and then take decisions on."

## THERE IS A PRESSING NEED FOR A CONCERTED CAMPAIGN OF FINANCIAL EDUCATION IN THE UK AS SCANDALS LIKE MISSELLING CONTINUE

● ♦ HEATHER CONNON

## Building knowledge

ore than one person in ten thought that bank base rates were more than 10% in 2013; yet, as had been widely reported across the media, rates by then had been at a record low of 0.5% for four years. One person in three failed to appreciate that the value of a bank account paying 3% interest would be eroded by 5% inflation. And more than one in six could not identify the available balance when shown a typical bank statement.

These findings, taken from a baseline survey of financial capability by the Money Advice Service, are a stark illustration of the pressing need for a concerted campaign of financial education in the UK. But the need is not new. It is almost a decade since the first Financial Capability Strategy was drawn up by the Financial Services Authority, the then-regulator, and seven years since Otto Thoresen asserted: "Good money sense needs to be as much a part of people's lives in the 21st century as healthy eating and keeping fit," and proposed the establishment of a generic money guidance service to ensure our financial health.

In the meantime, scandals in the financial services sector have continued. The banks' bill for misselling Payment Protection Insurance has already reached £22bn, while interest rate swaps have been added to their list of misdemeanours. Thousands of people have been lured into ill-advised pension liberation schemes. Excessive interest rates on payday lending have become a pressing social issue. And boiler room and similar scams are increasing in incidence. With new pension freedoms allowing virtually unrestricted access to funds coming into effect in April, the need for financial knowledge is increasing. Yet regulatory changes, including the retail distribution review, can make advice harder, and more expensive, for consumers to access.

Progress on financial literacy is, however, being made slowly. The Money Advice Service (MAS), an incarnation of the guidance service proposed by Thoresen, was established in 2011 – although as the panel on

People who can manage their money well are 15% less likely to suffer health problems

page 18 indicates, it has been a controversial birth and it is currently the subject of a government review, which could result in its abolition. It does, however, aim to offer the kind of generic advice that should help guide consumers through the key challenges in life.

Personal finance education has also become a reality. A programme of education for schools, which has been a core requirement for virtually anyone seeking to improve financial capability, has finally been introduced, and financial literacy is now a part of the curriculum at both primary and secondary schools.

Much still needs to be done, however. Last year, a coalition of financial services organisations, led by MAS, launched a Financial Capability Strategy for the UK.





A draft report set out its proposals on how to "make a significant change in real-world financial capability... to equip the people of the UK with the skills, knowledge, attitudes and motivations to act in a financially capable way, and to influence the external factors that support or undermine financial capability". Responses are currently being collated and a final report is due to be issued in the summer.

The need for change is becoming increasingly urgent: the draft report highlighted the deterioration in many people's financial situation due to the financial crisis and the economic downturn. Personal debt is rising and budgeting is becoming harder.

The report also pointed to research indicating that people who are able to manage their money well are 15% less likely to suffer from health problems such as anxiety and depression: "The consequences for society, the financial services industry and the UK economy are often substantial. A nation with stronger financial capability will be a social credit to any government and require less central support in increasing economic resilience and growth."

Many of the proposals are, however, more broadbrush than specific calls to action – although these may be fleshed out when the report becomes final. "Parents, schools, early years professionals, the financial services industry, charities and regulators all need to work together more effectively to increase people's capability to manage their money," is the ambitious headline conclusion.

Another commitment is "to improve people's financial capability, so that everyone reaching retirement is at least able to make ends meet, and that more can achieve higher levels of financial resilience and security".

However, its recommendations on achieving that laudable aim amount to a suggestion for further research and "increasing take-up of financial capability support that focuses on budgeting and general money management skills to enable and encourage people to save more for later in life" – without any suggestion of how this could be achieved.

Mick McAteer, founder of the Financial Inclusion Centre, is sceptical about financial capability initiatives, pointing out that a meta-analysis of all the research data shows that they have no impact on behaviour. "People self-report that they feel more confident and that they will take action, but there is no actual change," he says. He thinks the key issue is the complexity of the industry: there are 35,000 investment products and 3,200 firms across Europe, for example. "Given that level of proliferation, financial education is not going to have much of an impact." He believes that the focus should instead be on simplifying products and ending aggressive product distribution, which will have more impact.

One new initiative taken by the Government to this end is to establish a free pensions advisory service, Pension Wise. This will be offered by a number of Citizens Advice Bureaux and the Pensions Advisory Service. This service will start operating in April 2015, when the recently announced pension freedoms take effect, so it will be some time before its impact on financial capability can be measured.

McAteer thinks this is an interesting initiative, but it remains to be seen how it will work in practice. "I see it more as a defensive shield: I am very concerned that the new pension freedoms will just become a free-for-all," he says.

James Daley, a former researcher for Which? who now runs the Fairer Finance website, thinks the pensions service could be a blueprint for other parts of financial capability.

"There has been a lot of focus on effective education, and personal finance is now on the national curriculum," he says. "That is all well and good, but you should not overstate its importance. Finance will feel very abstract to a teenager.

"You need to engage with people at the point at which they are ready to engage, then you can get much better decisions," he adds. "Consumers should be getting personalised advice at key life stages – for example, when they have their first child or are buying their first house. It is good news that when people retire, they will be able to get access to an advice service, but you need something similar for other life stages."

## Further information

The Reality of Financial Education Conference, London, 27 March 2015 *cisi.org/events* 

## CATALOGUE OF CRITICISMS

The Treasury Select Committee is renowned for its hard-headed stance, but even by those standards, its review of the Money Advice Service was especially damning: "We have considered carefully whether we should recommend its abolition." The report concludes: "We are.... unconvinced that the Service has adopted the right strategy or that it currently performs the correct role. The evidence we heard in our initial hearings caused us to question whether the Service should continue its work at all."

The catalogue of criticisms was long and trenchant. The salary of its first chief executive, Tony Hobman, was excessive compared with others in similar organisations, his own earnings in his previous post and the package offered to his successor, Caroline Rookes. The body's strategy of concentrating primarily on delivering its service via the internet meant it was failing to meet the needs of much of its target audience - and even its online offering was dismissed by some observers as inadequate. Its marketing spend was excessively large, partly due to the need to promote its online offering heavily. Co-operation and engagement with other organisations that were already offering similar services was too limited and it failed to give sufficient regard to the need to ensure the quality of debt services.

Individual comments from those who gave evidence to the committee were, if anything, even more damning. Martin Lewis OBE, financial campaigner and founder of moneysavingexpert.com, said he would be embarrassed to put most of its financial health check tools on his website. Gillian Guy, Chief Executive of Citizens Advice, said that its focus on building a brand was the wrong thing to do and that the duplication



## the Money Advice Service

of resources across the financial capability sector was misguided. "We do not really need another telephone service and we do not need another web service. We need capacity within the existing services," she said.

MAS's future is still in doubt. It is funded through the levy collected by the Financial Conduct Authority from member firms, so it needs to demonstrate that it is achieving value for that money. But it has been left out of the Pension Wise advisory service, with the Government turning instead to Citizens Advice and the Pensions Advisory Service.

A MAS spokesman pointed out its successes, however. "The 2006 strategy succeeded in exceeding its target of reaching 10 million people through its delivery programme. Perhaps more importantly, it changed the way we think about financial capability and the important role it has to play in UK society," he said.

MAS will be anxiously awaiting the outcome of a government review, led by Christine Farnish – a former executive of Barclays and the National Association of Pension Funds – which will examine MAS's role, whether its remit should be changed and how effectively it is doing its job. Preliminary reports suggest she will conclude that many of its functions are already carried out by charities and other organisations and will recommend slashing its budget and staffing. FINANCIAL SERVICES FIRMS ARE HARNESSING SKILLS FROM OTHER PROFESSIONS, INCLUDING SPORT, THE MILITARY AND THE ARTS, TO ENHANCE THEIR TRAINING. WE FIND OUT WHAT THESE EXPERTS ARE BRINGING TO THE TABLE

## ■ SOPHIE MACKENZIE

## The borrowers

n the face of it, the skills required by a bomb disposal expert and the chief executive of a bank might seem completely different. One works outdoors, undertaking gruelling challenges in harsh conditions, while the other works indoors with the benefit of air conditioning. In spite of this apparent dichotomy, the demands faced by both may be just as relentless.

As a result, Major Chris Hunter is in high demand as a trainer and motivational speaker in the commercial world. He has kept audiences on the edges of their seats at financial services companies such as Barclays, BDO and Oliver Wyman Ltd. He recounts how, as the army's senior counter-terrorist bomb disposal specialist, he took his life in his hands on a regular basis – and what relevance the lessons he learned have for those whose working lives entail a different kind of risk.

"Over the past few years, I have seen the priorities of the organisations I work with change," Hunter says. "I used to talk a lot about leadership and targets – now it's all about how to cope with extreme pressure and take calculated risks. When you work in bomb disposal, you get out of bed every morning not knowing whether you're going to get back in that evening. The risks financial institutions face are different – they are financial and reputational – but the way we respond is the same."

Making decisions under extreme pressure is challenging, Hunter explains, because of the effect stress has on our neurological functioning. The prefrontal cortex, which enables us to think rationally, plan effectively and communicate clearly, is inhibited, while the limbic system – the 'fight or flight' centre of the brain – takes over.

"This is a totally normal response," Hunter says. "It does not mean you are incompetent. You need to learn to regulate your breathing, slow your heart rate down and get the brain to start working rationally again.

"In the military, we have the luxury of years of training, during which we learn to cope with risk and pressure, but experiential learning is valuable too. And the decisionmaking process is the same: obtain maximum knowledge of the situation you're facing, focus on what is relevant and eliminate what is irrelevant. That way, risk is reduced."

Feedback indicates that financial services professionals find Hunter's presentations not

only fascinating but also directly relevant to their working lives. As one delegate from BDO commented: "Chris presented to our sales and marketing community, a team that has gone through change and is under no small pressure to raise the bar in terms of delivery and success. His presentation left members of the team in awe at the nature of his role while in Iraq and brought a certain realisation to the real scale of their own everyday challenges."

## LIFE IN THE FAST LANE

Like Hunter, the Olympic gold medallist Adrian Moorhouse MBE believes psychology is crucial to creating high-performing teams. The former swimmer is Managing Director of Lane4, a performance consultancy that helps firms build competitive advantage through individual and team development. The company takes its name from the lane in a swimming pool that is traditionally reserved for the fastest heat winner.

"After the Barcelona Olympics and my competitive retirement, I was asked to do motivational speeches," Moorhouse recalls. "I met a few sports psychologists to understand what made people succeed or perform at a better level and was fascinated to know



CARTOONIST CHRIS SHIPTON IN FRONT OF ONE OF HIS GRAPHIC COMMENTARIES

## CAREER DEVELOPMENT

how performance in sport and business might transfer. On retirement, I didn't really know what I wanted to do and had to think about all the things that I was good at as a sportsman – apart from swimming 100m breaststroke. I'd had the discipline to train hard, set goals and react to feedback."

Moorhouse believes the role played by sports psychologists can be replicated in a business context with excellent results. Although they may have limited technical knowledge of athletes' individual disciplines, their expertise in managing pressure, achieving goals and sustaining performance applies as much to a business person as to an Olympian. Lane4 applies the principles of sports psychology to business, combining the insights of elite performers with the latest thinking from the commercial world and HR, as well as research from occupational psychology.

## STAGE SKILLS

It is easy to see the relevance of the high-risk, high-reward worlds of sport and the military to the financial sector – but what about the arts? Surprisingly, numerous delegates from HSBC, TSB and Investec have attended the National Theatre's Theatreworks courses, led by professional actors and directors.

These one-day workshops can be tailored to a corporation's specific requirements but typically cover a range of skills essential in business. These include increasing confidence and assertiveness in meetings, improvising and dealing with the unexpected, new ways of pitching ideas, tools

## FINDING OUR SEA LEGS

The CISI has harnessed the knowledge of the Royal Navy more than once. Rear Admiral Chris Parry CBE, author of *Sea Power*, spoke at the CISI Annual Conference 2014. His talk received an enthusiastic response from delegates, with comments that he was an "excellent and engaging" speaker and that the talk he gave was "extremely thought-provoking".

Academic and business leadership consultant Professor Andrew St George spoke at the CISI Training & Competence Conference 2014 about how the City can learn from institutions that, like the Royal Navy, place integrity at their heart. His speech can be viewed on CISI TV at *cisi.org/cisitv* 



EXECUTIVES HONE THEIR COMMUNICATION SKILLS WITH AN ACTOR

for influencing colleagues and clients, and managing upwards within an organisation. Attendees also learn to improve their use of voice and breathing, understand physical presence and body language, communicate confidently with an audience and harness their own personality, presence and purpose to affect a group.

"We don't ask people to be a tree or anything, but we do ask them to try new things"

These accomplishments might seem more appropriate for treading the boards than attending a board meeting. But as Sheila Chawla, the National Theatre's Theatreworks Account Manager, explains, delegates will not be left feeling like they are at drama school.

"We find that people from a traditional business background benefit enormously from getting out of their comfort zone," she says. "It is not about teaching people how to act, but about finding an authentic way to communicate using your own skills and personality. We don't ask people to pretend to be a tree or anything like that, but we do ask them to try things that are different from what they are used to. It's quite a journey, and people get a lot out of it."

Firms that have attended the workshops agree, with a delegate from HSBC describing the day as "a fantastic opportunity to learn about the impact you have on people, areas you can improve and the time to practise".

## FRAMING THE DISCUSSION

For organisers of corporate seminars, conferences, away-days and the like, it can be challenging to find a way to communicate the discussion that takes place and the decisions that are made in a way that's engaging and memorable. Many large corporations use graphic recording and live illustration to facilitate discussion, capture ideas as they are raised and provide a permanent aidememoire for staff to refer to afterwards.

Chris Shipton, a cartoonist and illustrator, has acted as scribe for major banks and the big four accountancy firms, as well as software companies and the NHS. He believes that cartoons are more than just amusing pictures – they provide a simple, quick and direct method for delivering complex ideas and sequences of ideas.

He says: "The underlying premise of having a cartoonist draw your meetings as they happen is to make them less dull affairs. It keeps people in the room and focused on the discussion. Large organisations face two perennial problems where meetings are concerned: keeping people engaged and having clarity of purpose.

"Also, it's fun, and it helps people tap into their own sense of creativity. People often express surprise when I start drawing, but engage more as the day goes on. When they get their own pens out and start drawing too, I know it is working."

As Shipton points out, given the cost of bringing a group of high-level individuals together in a room – both in terms of logistics and their all-too-valuable time – it makes sense to do whatever is necessary to keep them engaged. So it seems likely that in future, we will see even more financial services institutions look beyond the industry for training, motivation and inspiration.

From the army to the athletics track, it is clear financial services firms can learn much from other professions, no matter how far removed they appear to be from the world of finance.

## **Further information**

FCSI Masterclass: Mach 2 Leadership, London, 6 July 2015. With speaker Chris Roebuck, who has held senior leadership roles at UBS, HSBC and KPMG and has served in the British Army – *cisi.org/events* 

## Multiple choice

MULTI-ASSET FUNDS ARE GROWING IN POPULARITY, BUT HOW HAVE THESE FUNDS PERFORMED AND WHAT DOES THE FUTURE HOLD FOR THEM?

● JILL INSLEY () CHRISTINA HAGERFORS

Picking investments may be interesting and fun, but unless you are skilled at crystal-ball gazing, knowing when to sell them can be a completely different matter. If the investment is performing well, you risk missing out on potential growth by moving too early; leave it too late, and you could lose the capital you have made to a stock market correction.

Even the best fund managers and investment experts can get it wrong. In a competition for the *Observer*, three well-known professionals were beaten by a cat named Orlando, purely because they held onto stocks that had been performing well just that little bit too long.

You also face the difficulty of knowing how much money you should put into one stock, fund or sector. Who would have guessed in January 2014 that an oversupply of crude oil would cause prices to more than halve 12 months later, dragging down investments in the oil sector – and Russia – in their wake?

No wonder investors have been turning to multi-asset funds, a type of investment that frees them from having to make timing and asset allocation decisions.

## **ALL-IN-ONE SOLUTION**

These funds provide investors with an all-in-one solution to managing risk by spreading their money over a range of assets. Most multi-asset funds include



No. of open (active) funds	
Flexible Investment	133
Mixed Investment 0-35% Shares	45
Mixed Investment 20-60% Shares	143
Mixed Investment 40-85% Shares	142
UK Equity and Bond Income	12
Total Mixed-asset Sector Funds	475
Source: Investment Association	

shares, bonds and cash, while some hold commercial property and commodities and may even include a small amount of private equity and even hedge funds. Some access an even bigger spread of assets by investing in other funds.

Patrick Connolly, a certified financial planner with independent financial advisers AWD Chase de Vere, says: "The idea is to invest in a wide range of different asset classes, which don't all perform in the same way. At any given time, some investments should be rising in value and others should be falling. However, all the assets are held because they are likely to reward investors in the long-term."

The fact that multi-asset funds provide access to a whole portfolio, managed by a professional, within one fund, make them ideal for someone who wants a 'buy and hold' solution.

Jeremy Bateman is Head of Portfolio Management at Fidelity Solutions, which has more than  $f_{30}$  bh in a range of multi-asset and multi-manager funds for both retail and institutional clients. He says: "Investors are increasingly looking for solutions which fit their specific needs on risk, return or income. The financial crisis a few years ago really brought the idea of risk home to investors both individuals and institutions. Many have responded by thinking hard about the best way to diversify their investments, and are beginning to understand that spreading risk between asset classes can lead to a smoother and more predictable set of outcomes over the long term."

There are now in the region of 475 multi-asset funds available, spread over a variety of sectors, as defined by the Investment Association. A spokesman for the body says that fund management groups nominate their funds for particular sectors depending on the regional focus or underlying asset mix. Although this may make it slightly more difficult for private investors to identify these funds, it does mean that their performance can be easily compared with that of funds with a similar investment aim and composition.

The majority of multi-asset funds can be found in the Mixed Asset and Flexible Investment sectors (see table, left). Diversification to reduce risk means that returns are unlikely to match those of a single asset fund when that particular asset class is doing well. On the other hand, if that asset class then nosedives in value, the multi-asset fund will not suffer the same level of losses.

## PERFORMANCE

"Multi-asset funds are not going to shoot the lights out – in performance terms, they are secure and plodding," says Connolly. "But that is exactly what many investors want, especially if they don't want to be continually monitoring their underlying fund holdings."

The strategy may sound similar to managed funds: the often lacklustre 'safe' option that has been offered to pension and insurance policy holders for decades. But there is a big difference in strategy, says Bateman. "Whereas insurers' actuarial expertise is helpful in considering dynamics like longevity, a thorough understanding of markets is important for meeting liabilities and delivering performance over time," he says.

"Of course, insurance companies still have a role to play, but I think we're likely to see a growing demand for multi-asset

"Multi-asset funds are not going to shoot the lights out; in performance terms, they are secure and plodding"

approaches as investors become more aware of the impact of markets on their long-term planning."

He adds that insurance products in the past were often simpler and less flexible than multi-asset products are now – with a simple benchmark of equity and fixed income and static weights held to each asset class, with the portfolio rebalanced to these weights on a quarterly basis.

"Multi-asset products now contain a variety of different asset classes, and often use tactical asset allocation to take advantage of opportunities in markets now to add value for investors," explains Bateman. "They are managed more flexibly and dynamically than the traditional insurancebased products. Increasingly, insurance companies are working with investment experts to manage these sorts of strategies for the insurance clients." Equities are the main driver of returns and volatility. The Flexible Investment sector, as its name suggests, gives the fund manager complete flexibility in composition of the fund, allowing up to 100% to be held in equities if required.

Analysis by FE Trustnet shows that in 2013, funds in the Flexible sector were up by an average of 10.13%, while those in 0%-35% Shares returned an average of 4.2%. However in 2011, when equities suffered a downturn, funds in 0%-35% Shares made a small average return of 1.38% while those in Flexible Investment fell by an average of 8.73%.

Investors also need to be aware of the total charges they will pay, as these can place a considerable drag on performance. While a multi-asset fund investing directly in the underlying assets can charge as little as 0.5% a year, the charges for one that invests in other funds will range from 1% to 1.6%, depending on whether it buys funds managed by its own investment group or those of other companies.

## THE FUTURE

Many investment experts expect multi-asset investment to become even more popular following the introduction of pension freedom rules in April this year. The new rules will allow people greater flexibility in how and when they access their pension funds, and this is expected to lead to more people keeping them invested, rather than using them to buy an annuity.

Bateman says: "We're already starting to see investors thinking about multi-asset when it comes to retirement, and the changes which come into effect in April this year are likely to put a further spotlight on this. Where savers may traditionally have purchased annuities, often at poor rates, many are looking to the multi-asset space to provide income, as well as the potential for growth over time with a clear focus on managing risk, which is key in retirement.

"Ultimately," he adds, "as Government policy and regulation place more of the financial decisions into the hands of consumers – non-expert investors – a multi-asset approach which provides diversification, risk management and access to the right asset classes and right managers at the right times is a good option for these investors."



## Counting the costs

THE EUROPEAN SECURITIES AND MARKETS AUTHORITY HAS UPDATED ITS RULES ON THE UNBUNDLING OF RESEARCH COSTS. WHAT DO THE NEW RULES MEAN?

● ♦ HEATHER CONNON

S eparation of payments for trading and research by investment houses has moved inexorably closer with the publication of the latest draft of guidelines from Europe setting out how this unbundling should be achieved.

The European Securities and Markets Authority (ESMA) has published around 1,600 pages of technical advice and standards relating to the implementation of the second Markets in Financial Instruments Directive (MiFID II) for the European Commission (EC). Its guidelines, which came out last December, contain a mindboggling amount of detail on everything from investor protection to algorithmic trading, but those who have studied the sections on research can be in no doubt: ESMA is determined that, in the interests of transparency and treating customers fairly, research must be paid for separately.

"The key purpose of this proposal is to make clear how the receipt of third-party research by portfolio managers and independent investment advisers interacts with the prohibition to accept and retain inducements, except for minor nonmonetary benefits," the document confirms. "There should be no payment for thirdparty research linked to the payments made for execution of orders." The overall aim, it adds, is to "create more transparency over spending on research to improve outcomes for consumers."

## IMPLEMENTING THE CHANGES

One of the key issues that firms need to address, therefore, is how to implement the changes. ESMA's paper says companies that are spending only small amounts on research may opt to pay directly for research out of their own resources, either by absorbing the costs of research themselves or by increasing the annual management charge or advice fee. If so, this will be "subject to requirements on general disclosure and managing conflicts of interest."

Alternatively, some may choose to use a research payment account to buy research, which can be funded by a specific charge to the client's portfolio. In this case, ESMA proposes a number of requirements aimed at ensuring that investment firms remain accountable to their clients (see box). These include the requirement that the research payment account is funded only by a specific charge to the client, and that firms set a research budget based on a "reasonable assessment" of the need for third-party research.

While the MiFID II regime is aimed primarily at investment firms managing individual portfolios of clients, rather than those under the Undertakings for Collective Investment in Transferable Securities and the Alternative Investment Fund Managers Directive, ESMA advises the EC to consider bringing the latter two within the regulations – although a timescale for these consultations is not given.

Manmet Rana, Senior Manager, Capital Markets Regulation at Deloitte, thinks the proposals will have a significant impact. In a blog following the release of ESMA's proposals, she said: "The aim of unbundling dealing commission is to address potential conflicts of interest and increase transparency for clients. It will mean a substantial shift for many in the industry and is likely to lead to increased scrutiny of the quality of research, as well as of other services that may previously have been bundled alongside dealing commission."

## LARGE MARKET

The repercussions could be extensive. The market for research and dealing commissions is large: the Financial Conduct Authority (FCA) estimates that UK fund managers pay around  $\pounds$ 3bn a year in commissions to brokers, half of which is spent on research.

Add in the amounts spent across the world, and the total could be many times that. While UK regulators have insisted for some years that investors are clear what they are paying for, these rules have been honoured more in the breach than in the observance.

An FCA consultation paper last year reported on a thematic review of commission arrangements involving 17 investment managers and 13 brokers, and concluded that, although there had been improvements as a result of previous reviews and guidance, only two of the firms were operating at the level the FCA expects. Its findings included:

It found that there were 11 investment firms still paying dealing commission linked to trade volumes, as they did not have research budgets or caps on research spending. Furthermore, one large investment manager was using dealing commission to pay for

## FIVE ESMA REQUIREMENTS FOR FIRMS' ACCOUNTABILITY

- The research payment account must be funded only by a specific research charge to the client.
- Firms should set a research budget based on a "reasonable assessment" of the need for third-party research.
- The budget must be agreed with each client, as must the frequency with which the costs will be deducted from the clients' funds.

market-data services in full, with no evidence of analysis of which services were eligible to be paid for from dealing commission. Brokers were not pricing their research as a distinct service, contributing to investment managers' difficulties in making sure they were paying appropriate amounts for dealing and research.

Martin Wheatley, the FCA's Chief Executive, sums up the key issues: "There are two persistent problems. Firstly, services are being 'bundled' together, with eligible

"A firm paid double the commission it paid previously, because it traded more"

and non-eligible services being mixed. Secondly, when this information is provided back to the client, there is a lack of clarity or adequate transparency around how their commissions have been spent.

"Examples of this poor practice include firms allocating significant sums of their Bloomberg and Reuters subscriptions, not all of which could be justified as viable research. Or a firm we looked at that paid nearly double the amount of commission than it had paid for research the year previously, simply because it had traded more year-on-year. The amount of research received, however, had remained relatively the same."

## LITTLE IMPROVEMENT

Earlier attempts at solving the problem included industry guidelines on commissionsharing agreements, but these have done little to improve the transparency of what dealing commissions were actually being used for.

In its consultation paper, the FCA proposed measures in line with those being proposed by

- The quality of research purchased must be regularly assessed "based on robust quality criteria and its ability to contribute to better investment decisions."
- Firms must have a written policy, which they are required to and provide to their clients. This should address how the research may benefit portfolios and how costs will be allocated.

the EC and it is expected to publish a summary of the responses to those consultations shortly. A spokeswoman for the FCA said it was "very supportive" of the EC proposals and will proceed with the adoption of these as they come into effect across Europe, expected to be at the start of 2017. Consultation papers from both the FCA and the Treasury on the implementation of the directive are expected later this year.

While investment firms are undoubtedly paying for research at the moment, the lack of a direct link to charges means that many investment managers regard brokers' research as free. When they are forced to recognise its costs, they may also start looking more closely at its value. The FCA acknowledges the complaints, but it says that obtaining research to inform investment decisions is a core part of a fund manager's brief.

A potentially more serious complaint is the extra burden in administrative time, and therefore cost, which will be required to satisfy the requirements to identify research costs and to communicate with clients. With pressure on fees already intense, anything that increases costs is very unwelcome – and some insiders question how much of these costs firms will be able to pass on to clients.

ESMA asked for responses to its technical advice and implementation documents by 2 March. Meanwhile firms should already be reviewing procedures for purchasing research and their client communications in preparation for it coming into force.

## **Further information**

CISI Professional Refresher: MiFID II *cisi.org/refresher.* CISI TV: European Regulation Interest Group: Interview with Daniel Trinder, Deutsche Bank & Thomas Huertas, EY - *cisi.org/cisitv* 

## CAN THE UK LEARN FROM A COUNTRY THAT HAS BEEN WORKING TO ENSURE PEOPLE CANNOT OUTLIVE THEIR PENSIONS?

ANDREW DAVIS

## Australian example

Root the pension world, 2014 turned out to be a big year, and not just in the UK. In Britain, the Budget delivered a major surprise with the news that from April 2015, annuities would no longer form a necessary part of retirement planning for anyone. Released from the need to purchase a guaranteed lifetime income, people would be free to use their accumulated retirement savings as they pleased, the Government announced.

At the end of November last year in Australia, a five-strong panel of inquiry into the country's financial system chaired by David Murray, the former Chief Executive of Commonwealth Bank, published its final report, which included a series of recommendations to overhaul the country's much-admired pensions system. Prominent among them was a suggestion that most Australians should be offered a default option when they retired that would involve them spending part of their pension fund on a guaranteed income for life. This should not be obligatory, the inquiry recommended, but any move in this direction would mark a major shift from the current situation in Australia, in which retirees are free to decide how to manage their savings.

Between them, these announcements signal a clear divergence between two wellestablished pension systems. The UK is moving away from a focus on the need to ensure that people cannot outlive their retirement savings just as Australia starts giving serious thought to a move in the opposite direction. Part of the reason for the divergence is that the two systems are quite different. In the UK, most people nearing retirement have spent much of their working lives contributing to Defined Benefit or Final Salary pension schemes that employers used to run but have now closed. Most have not, therefore, built up significant sums in Defined Contribution (DC) schemes (where what individuals receive depends entirely on the investment performance of their retirement fund, rather than being linked to their salary while working).

Individuals are compelled to save but face no restrictions on what they must do with their money when they retire

Australia moved to its current, DC-based system in 1992. The country has a relatively small number of large superannuation funds into which workers are automatically enrolled and to which they make mandatory contributions. These have risen over the years and now stand at 9.25% of salary. They are due to continue climbing in the years ahead, reaching 12% around 2020.

As a result, Australians who have been members of the system since the start and are now approaching retirement have often built up significant savings: A\$400,000 (just over £200,000) is not unusual for a saver at 65, according to the Murray Inquiry report. These sums dwarf the amounts that people typically accumulate in the UK, with estimates of the average pot usually said to be between  $\pounds 20,000$  and  $\pounds 30,000$ . Australia therefore has a much larger and more mature DC system than the UK, but since DC is clearly becoming the dominant way of saving for retirement around the world, Australia is attracting a lot of attention because it is further down the DC road than many others and therefore offers a taste of what they can expect.

Another factor that makes the Australian example interesting for the UK is the difference in the obligations that the two systems have historically put on savers. In the UK, we have not forced people to save, but we have obliged most of them to convert what they did save into a lifetime income.

In Australia, it is the other way round: individuals are compelled to save but face no restrictions on what they must do with their money when they retire. The advent of auto-enrolment into occupational pension schemes via the National Employment Savings Trust (Nest), coupled with the abolition of near-universal annuitisation, effectively makes the UK look like a lessdeveloped version of the Australian system: strong encouragement to save, coupled with freedom of choice when you retire.

The interesting catch is that Australia is now looking at moving away from that formula.

Today, about 94% of Australians exercise the freedoms they have on retirement by putting their pension money into a 'retirement account' and drawing it down progressively over the years, with no protection against the risk that it might run out.

## RETIREMENT AHEAD

"Australia has got to the stage where they have built up sizeable assets," says Chris Curry, Director of the Pensions Policy Institute. "And now they're asking, are these assets working well in retirement? And I think the inquiry has some fairly strong evidence that it's not working efficiently and there's scope for people to have better retirement outcomes."

Part of Australia's problem, the inquiry concluded, was that left to themselves, people do not buy insurance against longevity risk, which usually means buying an annuity. If this could be changed, savers would on average have higher retirement incomes and could therefore maintain higher levels of consumption in retirement, which would benefit the Australian economy.

Paul Todd, Assistant Director of Investment at Nest, says that research has repeatedly shown that "when you ask people what they want, they describe something that has a lot

Left to themselves, people do not buy insurance against longevity risk

of the features of an annuity". But where they have a choice, they still don't buy one. Ten years ago, he explained, there were 16 annuity providers in Australia; now there were very few. One of Australia's big lessons, therefore, is that even if you succeed in creating a system

in which people do save enough and build up significant pension funds, they still won't use the money to secure a guaranteed lifetime income.

The Murray Inquiry's approach to squaring this circle is to try to use people's own behavioural biases to steer them in the right direction. It recommends offering retirees a default "comprehensive income product for retirement [CIPR] that has minimum features determined by the Government".

The inquiry put forward three possible CIPRs. The first would see 77% of the pension fund at retirement placed in a retirement account, with the remaining 23% used to purchase a Deferred Lifetime Annuity that would pay a guaranteed income from the age of 85. The second involved putting 83% of the fund into a retirement account and 17% into a Deferred Group Self-Annuitisation scheme (in which members pay into a pooled fund that pays a non-guaranteed income to surviving participants). The third option envisaged putting 75% of the fund into a GSA that would begin paying immediately and the other 25% into a retirement account to be drawn down as required.

According to the Australian Government actuary, each of these options would result in a higher Net Present Value of total income in retirement than the pensioner would receive simply by putting everything into a retirement account and drawing it down. The predicted increases were 14% for option one, 30% for option two and 31% for option three.

However, the crucial feature of these recommendations was that they should not be compulsory. Through the auto-enrolment system built into Nest, UK savers are already being nudged to start saving, but they have the freedom not to save, as well as the freedom not to use the default fund and the option to save more than the default level of contribution. In practice, around 90% choose to stay opted in, and the great majority of them stick to the default fund and contribution levels. Nest's auto-enrolment marks the beginning of an attempt in the UK to ensure most people save for retirement, without placing an outright obligation on them to do so, and the evidence so far is that it is achieving its aim.

As yet, however, the idea of creating a similar, 'nudge-based' system for those entering retirement has not caught on in the UK. It's something that hasn't really been in the debate so far," says Curry. "There's a lot of reliance on guidance and on people having choice and knowing what they want to do with it." Paul Todd at Nest says the trust's experience so far is that "people really value choice, but at the same time they don't want to be bamboozled with hundreds of choices".

Perhaps the most important question that the Australian pension system will help to answer over the next few years will be whether a blend of choice, flexibility and well-designed default options can encourage large numbers of people to make decisions at retirement that are in their own best interests, but that, left to themselves, most would not have made.

History suggests the answer could be yes. The Murray Inquiry approach "works very strongly with what we know about behaviour", says Curry. "If people are given a product that appears to be recommended to them and that has to meet certain regulatory criteria, then you'd expect it to have very high take-up."

**Further information** 

Nest's consultation on the future of retirement closed on 30 January but the trust is keen to engage with investment professionals and advisers in the months ahead. You can get in touch by email at *nestresponses@nestcorporation.org.uk* 

*CPD training course:* Pension Reform 2014 and beyond – new financial planning opportunities for retirement, next dates 17 March 2015 and 3 June 2015 – *cisi.org/courses* 





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RESEARCH INTO WEALTH MANAGEMENT, CAPITAL MARKETS AND BANKING ISSUE 5 MARCH 2015

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## **EDITORIAL**

These are always interesting times in finance. Mohammed El-Erian coined the term 'The New Normal' to signify the era of much lower growth rates in western economies, but I think the new normal is something else entirely, although related: the ongoing and seemingly permanent public sector underpinning of western economies by central banks, with nearzero interest rates and something we choose to call 'quantitative easing' (QE). Irrespective of whether one agrees with QE or not, and one could certainly see its benefits back in 2009, at least the logic of its rationale was understandable. The economy is in recession, so provide a stimulus by printing money. An age-old technique.

But with the formal adoption of QE by the European Central Bank (ECB), I confess I am now at a loss to follow its logic. Last year the ECB introduced a negative interest rate for deposits placed with it by eurozone banks. This suggests that the ECB thinks there is surplus liquidity in the system; one wouldn't penalise banks with a negative rate on deposits if one thought there was a shortage of funds in the market. Certainly no observer should be surprised if there was surplus, given all the other monetary policy support that has been forthcoming from the central bank ranging from very low interest rates to long-term funding facilities in the form of the long-term refinancing operation.

The ECB's introduction of QE suggests that the central bank thinks there is a shortage of liquidity in the system: one wouldn't print more money if there was already a lot of it about.

So which one is it? Is the eurozone long or short of funds? If Lewis Carroll wrote a story about monetary policy it would probably look like this, setting negative rates and also embarking on QE.

One appreciates that the former policy is designed to 'force' banks to lend money, but actually the one thing corporate entities don't want to do in a recession is borrow, rather the contrary: they are much more keen on paying down debt. So where can banks place the cash? Simple: buy eurozone sovereign debt. The same debt that the ECB has committed to underwrite by doing whatever it takes, and which it is itself buying more of with the cash it is printing using QE. As an exercise in circular logic, or indeed the circular flow of money, it's quite brilliant. On to this quarter's edition. When we introduced Review of Financial Markets (RoFM), our Chief Executive Simon Culhane, Chartered FCSI, stated that a key objective was to publish articles that were academically robust but also of sound practical value to market participants. While the last word on this will always be left to you the reader, this issue certainly scores strongly on both points. Banks have a need to update constantly their market prices and cost of funds, as these are such important parameters in customer loan pricing. A recurring conundrum is 'joining the dots' of the term structure of interest rates, in a way that produces a smooth and accurate curve. So it is great to be able to bring you a high quality article from Dr Ken Kortanek, Visiting Professor at the University of Pittsburgh, and Vova Medvedev who is with HED Inc., that solves just this conundrum. They show the results of applying a geometric programming technique using posynomial equations, and the output is indeed smooth and accurate. I have observed even some large banks still employing an unscientific and incoherent approach to extracting the yield curve; with RoFM Issue 5 in their hands there is now an elegant and tractable method for such banks to adopt.

Readers will recall the controversy surrounding the Government's privatisation of Royal Mail. From what one reads in the media, when the authorities were obtaining valuations of the business from their preferred list of investment bankers, the estimates received were almost 100% apart from the lowest to the highest. This is not uncommon in corporate finance project appraisal, because there are so many assumptions involved. A key input parameter is the discount rate, and a common one used is the weighted average cost of capital (WACC). Professor Pablo Fernandez who is at IESE Business School, University of Navarra has written an excellent critique on the WACC concept and how it is often misunderstood and even misused. His template should be required reading for all investment bank corporate finance departments.

Our final article is from Professor Ben Jacobsen at University of Edinburgh Business School. He writes on the intriguing concept of using 'gradual information diffusion' to forecast market prices. It's certainly a new take on the issue of financial market forecasting, or rather I should say a notwell-known take: the basic tenets have been in the financial literature space for over ten years now. So we are grateful to Professor Jacobsen for highlighting the potential benefits of this technique to us.

Enjoy the issue.

Professor Moorad Choudhry FCSI, Editor

## ABOUT THE EDITOR

Moorad Choudhry FCSI FIFS is Professor at the Department of Mathematical Sciences, Brunel University and was latterly Treasurer, Williams & Glyn plc at the Royal Bank of Scotland. He is also Honorary Professor, Kent University Business School and Visiting Teaching Fellow, Department of Management, Birkbeck, University of London.



Professor Choudhry is Managing Editor of the *International Journal of Monetary Economics and Finance* and on the Editorial Boards of *Qualitative Research in Financial Markets* and *American Securitization*.

He is also a member of the CISI Editorial Panel, which chooses key content for the *Securities & Investment Review*. He is author of *The Principles of Banking* (John Wiley & Sons Ltd 2012). mooradchoudhry@gmail.com

## EXTRACTING THE BENCHMARK YIELD CURVE FROM MARKET PRICES: A PRACTICAL APPROACH

K.O. Kortanek \* and V.G. Medvedev†

\* Visiting Professor, Department of Industrial Engineering, University of Pittsburgh, Pittsburgh, Philadelphia, US

kortanek@pitt.edu

+Staff software engineer, Ph.D, HED Inc., Hartford, Wisconsin, US

vmedvedev@hedonline.com

### ABSTRACT

In many countries there is a lack of a benchmark yield curve in spite of attempts to experiment with sovereign bonds which have sufficient liquidity. Referred to as 'on-the-run' Treasuries, they are the most frequently traded Treasury security of its maturity whose prices trade at a premium and are typically chosen by the media for reporting. It is not known whether avoiding less liquid instruments generates the 'true' underlying yield curve. Using an optimisation method we developed over the last ten years, we have obtained a benchmark yield curve from its application to all US Treasury bills, notes and bonds published on 19 December 2014 in the 'Treasury Quotations' section of *The Wall Street Journal*. For comparison purposes, we have performed an extraction on a subset of 31 T–Bills and 35 notes and bonds for a yield curve which appears reasonable, based upon a visual comparison between the two extracted yield curves. Finally, we demonstrate the application of this technique to an emerging market that exhibits a lower range of observable prices than that experienced in the US Treasury market.

## 1. RECOMMENDED MODUS OPERANDI FOR EXTRACTING FORWARD-INTEREST RATE FUNCTIONS

The problem one faces in this project is how to convincingly promulgate a method for extracting the forward-rate function and the zero-rate function from published sovereign fixed-income data. Ours is an addition to the list of forward-rate curve fitting procedures at 12 international banks kept by the Bank for International Settlements [3]. We know of no other extraction method whose computations apply to the full set of published data – for example, all US Treasury bills and all Treasury notes and bonds on a given day. In every published case of which we are aware, any particular extraction applies to a significantly reduced set of instruments from the full available set. The generally accepted belief is that extracting from an appropriate reduced set of instruments will faithfully reflect the true unknown yield curve function.

However, this may well be a fallacy. As yet no universal extraction method has emerged to justify this belief. It is not yet known what an 'appropriate reduced set of instruments' really is. It is our subjective experience that many authors recognise this open problem, which one can, in particular, infer from reading literature such as [7] and [1].

The preface of Kortanek–Medvedev [15, xi-xii] gives a description on the methodology we are following in a treatment of uncertainty quantification. A shorter and more elegant description appears in Gusev and Romanov [11, 299-300], which we quote:

"A conventional approach to the study of uncertain systems relates to the assumption that uncertainty may be described as a random process with known characteristics. In many applied problems, however, there may be a limited number of observations, incomplete knowledge of the data, and no available statistics whatever. An alternative approach to the uncertainty treatment, known as guaranteed, is based on set-membership (unknown but bounded) error description. In the problems considered here the set-membership of uncertainty is employed."

This encapsulates perfectly the problem we identified above. Thus, we have embodied this logic in our initial approach to the problem of extracting the forward-rate function from sovereign fixed-income data, see [14] and [16] <sup>1</sup>.

## 1.1 MEASURES FOR THE SIZE OF THE UNDERLYING POSYNOMIAL PRIMAL PROGRAM MODEL [8, 5]

In the first instance we set the posynomial form that we wish to fit market prices to, given by (1):

inf 
$$g_0(t) = \sum_{m_0}^{n_0} c_i t_1^{a_{i1}} \dots t_m^{a_{im}}$$

subject to

$$g_{k}(t) = \sum_{m_{k}}^{n_{k}} c_{i} t_{1}^{a_{i1}} t_{2}^{a_{i2}} \cdots t_{m}^{a_{im}} \leq 1 \quad k = 1, \dots, p$$
(1)

$$m_{0=1}, m_{1=}, n_{0+1}, m_{2=}, n_{1+1,\dots,mp}, m_{p-1+1, and}$$

where the  $i^{th}$  term is defined to be  $C_i U_1 \cdots U_m^{t-t_m}$ 

and where  $a_{ij}$  are arbitrary real constants, but  $c_i$  are positive. The expressions  $g_k(t) \ k = 1, ..., p$  are termed **posynomials**. Should the ci be arbitrary, one uses the terminology **signomials**.

The standard statement about the size of the primal program is that (a) there are m primal variables, (b) there are  $n_o$  terms in  $g_o$ ,  $n_i-n_o$  terms in  $g_{,r}$ ,...,  $n_p-n_{p-1}$  terms in  $g_{,r}$ , so there are  $n_o$  total terms in the primal program, (c) the number of (only inequality) constraints is p, and (d) the degree of difficulty is  $n_o - m + 1$ .

The zero-curve function and the forward-rate function are outputs from solving the primal geometric program (GP), see [17], [31, Forward rates via geometric programming]. The zero (ie, yield) curve is equivalent to the discount function which addresses the following question: what is the value today from receiving D dollars at a future time T, where you receive no coupon payments nor any other cash flows?

A common accuracy measure we use for the fitted yield curve is defined as follows, [16, Section 5].

**Definition 1.1** For an observed bond price time series  $P_r$ , t = 1, n and a computed price series,  $P_r$ , the mean absolute percentage error, MAPE, is

$$MAPE = \sum_{t=1}^{n} \frac{\left|P_t - \hat{P}_t\right|}{P_t} \times \frac{100}{n}$$

The units are percentages, so 0.05 means 5 basis points.

Other research employing the set membership of uncertainty includes: [22]; [6]; [19]; [20]; [9]; [21]; [10]; [30]; [23]. Major contributions in computer implementation of the set-membership approach to uncertainty occurred by the second author: [24, 25, 26, 27].

1 Note that negative published bill yields give prices above 100.000.

## 2. APPLICATION USING WSJ US TREASURY QUOTES DATA

## 2.1 THE DATA SET

The full scope of Treasury Quotes is illustrated with data published on 19 December 2014. There are 33 bills and 293 notes and bonds. For all of these instruments, 'Ask Yields' are computed by certain rules and conventions, which are conveniently reviewed in standard textbooks, eg, [12, 6.1 Day Count and Quotation Conventions]. The key observation is that any Ask Yield is an annual percentage interest rate.

We shall develop two zero-curve extractions using Treasury quotations data for the date specified.

• Run #1; 282 Instruments MAPE = 0.0269

For a given day, mm/dd/yyyy, we include data for all bills and notes and bonds unless there is an obvious abnormality. Only those notes and bonds which have maturity at least as great as the maximum maturity of all the bills are admissible.

The extracted zero curve will be in black or green upon printing. Run #1 will usually involve a large primal geometric program. For our benchmark yield curve extraction on 19 December 2014 data we found: (a) 505 primal variables; (b) 5163 terms; (c) 1070 constraints; so (d) the degree of difficulty is 4657.

## Ancillary Run #2: 66 Instruments MAPE=0.00696

All bills are included, unless there is an obvious abnormality. For each note and bond we compute a Newton–Raphson internal rate of return, IRR annual %, to compare with the *WSJ* published AskYld annual % for the instrument. To accomplish this we select a number, such as 0.015. If the absolute value of the difference between the two percentages, Newton-Raphson IRR % and *WSJ* AskYld %, is greater than 0.015, then the instrument is ignored. Clearly from this arithmetic, 0.015, as the difference of two percentages, is also a percentage, ie, 0.015%, or in financial parlance, 1.5 basis points. The choice of this cut–off figure needs to be called 'ad-hoc' simply to indicate that its choice is up to the user. The guiding goal is to choose a cut-off value so that enough notes and bonds are included from which, upon an extraction of the zero curve, the result significantly reflects the unknown but 'true' zero curve. The size of the geometric program is represented by: (a) 505 primal variables; (b) 1865 terms; (c) 638 constraints; so (d) the degree of difficulty is 1359.

For both runs we need to select certain accuracy-of-fit values which correspond to  $\gamma_k$  appearing in the relaxed inequality [16, (32)]. The reason for this selection is explained upon reviewing the notion of 'reversed constraints' needed for approximately solving a signomial geometric program through a sequence of solved posynomial geometric programs. Fortunately, our empirical experience over a respectable number of years has shown that such sequences with only up to five members are sufficient.

We often take  $\gamma_k$  to be 0.99999 for Bills and 0.9999 for notes and bonds, conveniently denoted as 0.9(5)(4).

## 2.2 THE ZERO, NO-COUPON CURVE EXTRACTIONS

The extracted benchmark yield curve and the ancillary yield curve are shown in Exhibit 1.

## 3. CONCLUSIONS

Some of the countries in Asia–Pacific where there are ongoing efforts to develop benchmark yield curves are reported in [2]. We are familiar with some of the efforts in Indonesia, particularly with the work of Handy Yunianto at Mandiri Sekuritas.

In this paper we have proposed that the full extraction illustrated with Run #1 serve as a benchmark yield curve for the US on a given day. It will serve for a comparison between it and any extraction made from a subset, however chosen, of the full set of instruments. Clearly, limiting the number of instruments will yield a smaller MAPE, and by that measure it gives a more accurate fit of published instrument prices. But any significant departure of the extraction from a reduced set, from the benchmark extraction will be suspect and call for more analysis.

We have selected a subset of 66 instruments and achieved a better MAPE accuracy. In addition, the extraction from the reduced set of instruments has provided a yield curve which appears reasonable, based upon a visual comparison between the two extracted yield curves.

## **EXHIBIT 1: THE BENCHMARK YIELD CURVE**

Exhibit 1: Benchmark & Ancillary Curves Run1 N=282 MAPE= 0.0269 Run2 N=66 MAPE= 0.0069 12/19/14



## 4. CASE STUDY: COMPARING ENSS AND GP YIELD CURVE COMPUTATIONS FOR INDONESIA

Handy Yunianto, now at Mandiri Sekuritas in Jakarta, and the author implemented the GP method to extract a benchmark interest-rate function from Indonesian market data and presented our results in June, 2004, [18]. Our study began with a comparison between the Extended Nelson-Siegel-Svensson (ENSS) extraction method [28, 29] and our GP method. The structure of the Indonesian Government Bond market is described by Kahlil Rowter, appearing in [13, Chapter 7], where the importance of a long-term interest rate benchmark is emphasised. The forward rate function of ENSS has six parameters, where t represents time.

 $FR(\beta 0,\beta 1,\beta 2,\beta 3,\tau 1,\tau 2,t) = \beta 0 + \beta 1 e^{-t/\tau 1} + \beta 2 (t/\tau 1)e^{-t/\tau 1} + \beta 3 (t/\tau 2)e^{-t/\tau 2}.$  (2)

Market practitioners also note a preference for the ENSS method as it produces smoother forward curves compared with other approaches, for example see [32]. A smooth forward curve is essential when used for market pricing. Bolder and Stréliski [4] emphasise that determining optimal ENSS parameters by seeking the minimum of a measure of the pricing errors is a global optimisation problem, but they suggest constraints on them to "avoid 'strange' local optima." We stopped an optimisation procedure realising a MAPE ranging from 0.20 to 0.60. A typical example of the extracted curves appears in Exhibit 2 below, with MAPE = 0.274.

Our computational experience with GP, upon setting  $\gamma_k$  to 0.999 for both bills and bonds, see [16, (32)], has consistently yielded a MAPE ranging from 0.07 to 0.09. This is sufficiently accurate for most market transaction applications.

Exhibit 2: Spot(ZRsven.txt) & Forward Rate(FRsven.txt) Svensson from 2 Bills & 18 Bonds



Exhibit 3: Spot(ZRgp.txt) & Forward Rate(FRgp.txt) GP from 2 Bills & 18 Bonds 10-Mar-04



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THE WACC: DEFINITION, MISCONCEPTIONS AND ERRORS

Pablo Fernandez, Professor of Finance, IESE Business School, University of Navarra, Madrid

fernandezpa@iese.edu

## ABSTRACT

The weighted average cost of capital (WACC) is a common pricing input and appraisal parameter in corporate finance. However there is often misunderstanding about what it actually measures. WACC is just the rate at which the free cash flows (FCF) must be discounted to obtain the same result as the valuation using equity cash flows (ECFs). The WACC is neither a cost nor a required return: it is a weighted average of a cost and a required return. To refer to the WACC as the 'cost of capital' may be misleading because it is not a cost. This article presents seven valuation errors caused by incomplete understanding of the WACC. We conclude with an assessment of the errors made in corporate valuation by an investment.

## 1. DEFINITION OF WACC

There are two basic methods for valuing companies by discounted cash flows:

Method 1: Using the ECF and the required return to equity (Ke).

Equation [1] indicates that the value of the equity (E) is the present value of the expected equity cash flows (ECF) discounted at the required return to equity (*Ke*).

Equation [2] indicates that the value of the debt (*D*) is the present value of the expected debt cash flows (CFd) discounted at the required return to debt (Kd).

$$[2] \quad D_o = PV_o [Kd_t; CFd_t]$$

The FCF is the hypothetical equity cash flow when the company has no debt. The expression that relates the FCF with the ECF is:

## [3] $ECF_t = FCF_t + \Delta D_t - I_t (1 - T)$

 $\Delta D_{t}$  is the increase in debt, and It is the interest paid by the company.  $CFd_{r}=I_{r}-\Delta D_{r}$ 

Method 2: Using the FCF and the WACC.

Equation [4] indicates that the value of the debt (D) plus that of the shareholders' equity (E) is the present value of the expected FCFs that the company will generate, discounted at the WACC:

[4] 
$$E_o + D_o = PV_o [WACC_t; FCF_t]$$

The WACC is the rate at which the FCF must be discounted so that equation [4] gives the same result as that given by the sum of [1] and [2]. By doing so, the expression of the WACC is given by [5]:

[5]  $WACCt = [E_t - 1 Ke_t + D_t - 1 Kd_t (1 - T)] / [E_t - 1 + D_t - 1]$ 

T is the effective tax rate applied to interest in equation [3].

So we should note that  $E_t$ -1 +  $D_t$ -1 are **not** market values nor book values: in actual fact,  $E_t$ -1 and  $D_t$ -1 are the values obtained when the valuation is performed using formulae [1], [2] or [4]<sup>1</sup>.

<sup>1</sup> Consequently, the valuation is an iterative process: the free cash flows are discounted at the WACC to calculate the company's value (D+E) but, in order to obtain the WACC, we need to know the company's value (D+E).

D = Value of debt	<i>l</i> = Interest paid	WACC = Weighted
E = Value of equity	<i>PV</i> = Present value	average cost of capital
Ebv = Book value of	r = Cost of debt	Ke = Required return to
equity	$R_{\rm F}$ = Risk-free rate	levered equity
ECF = Equity cash flow	g = Growth rate	Kd = Required return to
FCF = Free cash flow		debt
N = Book value of the		VTS = Value of the tax
debt		shield
		$P_{M} = \text{Required market}$
		risk premium
		$V_{\mu}$ = Value of equity in
		the unlevered company
		Ku = required return to

In other words, the WACC is a weighted average of **two very different** magnitudes:

unlevered equity

- · a cost: the cost of debt, and
- a required return: the required return to equity (Ke).

Although *Ke* is often called cost of equity, there is a big difference between a cost and a required return. So the WACC is neither a cost nor a required return, but a weighted average of a cost and a required return. To refer to WACC as 'cost of capital' is misleading because it is not a cost.

## 2. SOME ERRORS DUE TO MISUNDERSTANDING THE DEFINITION OF WACC

I describe below some common errors that arise in corporate finance appraisal due to a misunderstanding of the real meaning of WACC.

**2.1.** Using a wrong tax rate T to calculate the WACC. The correct tax rate (T) that should be used every year is the T that relates the *ECF* and the *FCF* in equation [3].

**2.2.** Calculating the WACC using book values of debt and equity. The appropriate values of debt and equity are the ones resulting from the valuation.

**2.3.** Calculating the WACC assuming a capital structure that is neither the current one nor the forecasted one: the debt to equity ratio used to calculate the WACC is different than the debt to equity ratio resulting from the valuation. This error appears in at least one valuation undertaken by an investment bank. Current debt was 125, the enterprise value was 2180, and the debt to equity ratio used to calculate the WACC was 50%.

This is wrong because the outstanding and forecasted debt should be used to calculate the WACC. The equity value of a firm is given by the difference between the firm value and the outstanding debt, where the firm value is calculated using the WACC, and the WACC is calculated using the outstanding (market value of) debt. Alternatively, if the firm starts with its current debt and moves towards another round of financing, then a variable WACC (different for each year) should be used, and the current debt should be deducted from the enterprise value.

**2.4.** The Enterprise Value (E + D) does not satisfy the time consistent formulae. Fernández (2002, page 401) shows that the relationship between the enterprise value of different years is:

## $E_t + D_t = (E_t - 1 + D_t - 1) (1 + WACC_t) - FCF_t.$

**2.5.** Considering that WACC/(1-T) is a reasonable return for the company's stakeholders. Some countries assume that a reasonable return on a telephone company's assets is WACC/(1-T). Obviously, this is not correct. And the error is still higher if the return is multiplied by book values.

**2.6.** Using the wrong formula for the WACC when the value of debt (*D*) is not equal to its book value (N). Fernández (2002, page 416) shows that the expression for the WACC when the value of debt (D) is not equal to its book value (*N*) is WACC = (E Ke + D Kd - N r T) / (E + D). Kd is the required return to debt and r is the cost of debt.

Given the above, we can illustrate some of the anomalies with a realworld example.

## Illustration using a real-world example

In Table 1 we show the valuation of a broadcasting company as performed by an investment bank, which discounted the expected FCFs at the WACC (10%) and assumed a constant growth of 2% after 2008. The valuation is provided in lines 1 to 7, and states that the WACC was calculated assuming a constant Ke of 13.3% (line 5) and a constant Kd of 9% (line 6). The WACC was calculated using market values (the equity market value on the valuation date was 1,490 million and the debt value 1,184 million) and the statutory corporate tax rate of 35%. The valuation included the equity value at the end of 2002 (3,033; line 8) and the debt value of 2002 (1,184; line 10). Table 2 provides the main results of the valuation according to the investment bank.

## Table 1 Valuation of a broadcasting company performed by an investment bank

Data provided by the investment bank in italics

		2002	2003	2004	2005	2006	2007	2008
1	FCF		-290	-102	-102	354	459	496
2	ECF		0	0	0	0	34	35
3	Interest expenses		107	142	164	157	139	112
4	Effective tax rate		0.0%	0.0%	0.0%	0.0%	12.0%	35.0%
5	Ke		13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
6	Kd		9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
7	WACC used in the valuation		10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
8	Equity value <i>(E)</i>	3,033	3,436	3,436	4,410	4,997	5,627	6,341
9	ΔD = ECF - FCF + Int (1-T)		397	244	-86	-197	-303	-389
10	Debt value (D)	1,184	1,581	1,825	1,739	1,542	1,239	850
11	D/(D+E)	28.1%	31.5%	31.9%	28.3%	23.6%	18.0%	11.8%
12	WACC using lines 4,5,6,8,10		12.09%	11.95%	11.93%	12.08%	12.03%	11.96%

### Table 2 Valuation using the wrong WACC of 10%

Present value in 2002 using a WACC of 10%	
Present value in 2002 of the free cash flows 2003-2008	647
Present value in 2002 of the residual value (g=2%)	3,570
Sum	4,217
Minus debt	-1,184
Equity value	3,033

### The valuation has two major errors:

**a.** Wrong calculation of the WACC. To calculate the WACC, we need to know the evolution of the equity value and the debt value. We calculate the equity value based on the equity value provided for 2002. The formula that relates the equity value in one year to the equity value in the previous year is

## $Et = E_{t} - 1 (1 + Ke_{t}) - ECF_{t}$ .

To calculate the debt value, we may use the formula for the increase of debt, shown in line 9. The increase of debt may be calculated if we know the ECF, the FCF, the interest and the effective tax rate. Given line 9, it is easy to fill in line 10.

Line 11 shows the debt ratio according to the valuation, which decreases with time.

If we calculate the WACC using lines 4, 5, 6, 8 and 10, we get line 12. The calculated WACC is higher than the WACC assumed and used by the investment bank.

**b.** The capital structure of 2008 is not valid for calculating the residual value because in order to calculate the present value of the FCF growing at 2% using a single rate, a constant debt to equity ratio is needed.

To perform a correct valuation, assuming a constant WACC from 2009 on, we must recalculate Table 1. Tables 3 and 4 contain the valuation after correcting the WACC. To assume a constant WACC from 2009 on, the debt must also increase by 2% per year (see line 9, 2009). This implies that the ECF (line 2) in 2009 is much higher than the ECF in 2008.

Simply by correcting the error in the WACC, the equity value is reduced from 3,033 to 2,014. This is, as one would agree, a significant difference.

Tabl	e 3	Va	luatior	i calcu	Ilating	the	WACC	correct	v
									-

		2002	2003	2004	2005	2006	2007	2008	2009
1	FCF		-290	-102	250	354	459	496	505.9
2	ECF		0	0	0	0	34	35	473.2
3	Interest expenses		107	142	164	157	139	112	76.5
4	Effective tax rate		0.0%	0.0%	0.0%	0.0%	12.0%	35.0%	35.0%
5	Ке		13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
6	Kd		9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
8	Equity value <i>(E)</i>	2,014	2,282	2,586	2,930	3,320	3,727	4,187	4,271
9	$\Delta D = ECF$ - FCF + Int (1-T)		397	244	-86	-197	-303	-389	17
10	Debt value <i>(D)</i>	1,184	1,581	1,825	1,739	1,542	1,239	850	867
11	D/(D+E)	37.0%	40.9%	41.4%	37.2%	31.7%	25.0%	16.9%	16.9%
12	WACC calculated with 4,5,6,8,10		11.71%	11.54%	11.52%	11.70%	11.59%	11.44%	12.04%

## Line 7 is deliberately left out

## Table 4 Valuation using the corrected WACC from Table 3

Present value in 2002 using the WACC calculated in Table 3 Present value in 2002 of the free cash flows 2003-2008 588

Minus debt	-1,184
Sum	3,198
Present value in 2002 of the residual value $(a-2\%)$	2 6 1 0
	500

## 3. Conclusions

The WACC is a discount rate widely used in corporate finance. However it is just the rate at which the FCFs must be discounted to obtain the same result as the valuation using ECFs.

The WACC is neither a cost nor a required return: it is a weighted average of a cost and a required return. To refer to the WACC as the 'cost of capital' may be misleading because it is not a cost.

• Tables and figures are available in excel format with all calculations at http://web.iese.edu/PabloFernandez/Book\_VaCS/valuation%20CaCS. html

## Exhibit 1. Calculating the WACC

The intertemporal form of equations [1], [2] and [4] is:

$$\begin{bmatrix} 1_{j} \end{bmatrix} E_{t+1} = E_{t} (1+K_{et}+1) - ECF_{t+1} \\ \begin{bmatrix} 2_{j} \end{bmatrix} D_{t+1} = D_{t} (1+K_{dt}+1) - CFd_{t+1} \\ \begin{bmatrix} 4_{j} \end{bmatrix} [E_{t+1} + D_{t+1}] = [E_{t} + D_{t}] (1+WACC_{t+1}) - FCF_{t+1}$$

*The sum of* [1,] *and* [2,] *must be equal to* [4,]:

 $[E_t + D_t] + E_t K_{et} + D_t K d_t + C_t [ECFt + 1 + CFd_t + ] = [E_t + D_t] (1 + WACC_t + 1) - FCF_t + ASCFd_t + D_t K d_t + C_t - D_t] and ECF_t + FCF_t + FCF_t + C_t + C_t - D_t] - D_t K d_t + (1-T)$ 

 $[ECF_{t+1} + CFd_{t+1}] = FCF_{t+1} + D_{t}Kd_{t+1} - D_{t}Kd_{t+1}(1-T)$  and

 $\begin{bmatrix} E_t + D_t \end{bmatrix} + \begin{bmatrix} E_t K_{et} + \\ 1 \end{bmatrix} + \begin{bmatrix} K_{et} +$ 

The WACC is: WACC<sub>t+1</sub> =  $\frac{E_t K e_{t+1} + D_t K d_{t+1} (1 - T)}{E_t + D_t}$ 

T is the effective tax rate applied to interest in equation [3].  $E_t + D_t$  are **not** market values nor book values: in fact,  $E_t$  and  $D_t$  are the values obtained when the valuation is performed using formulae [1], [2] or [4]. WACC is a rate that may be multiplied by market values [E + D], but it is not appropriate to multiply the WACC by book values.

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## FORECASTING FINANCIAL MARKETS: CROSS-ASSET RETURN PREDICTABILITY AND GRADUAL INFORMATION DIFFUSION

Professor Ben Jacobsen, Chair in Financial Markets, University of Edinburgh Business School

ben.jacobsen@ac.ed.uk

## ABSTRACT

Professional investors use a large number of strategies based on academic studies. However, to date a very promising strand of the literature focusing on market timing seems to remain largely undiscovered by practitioners. This strand is known as the Gradual Information Diffusion or Cross-Asset Return Predictability literature - the notion that not all information reaches all investors at the same time and this may lead to predictability in financial markets. I discuss some of the findings in this area and illustrate how these models can be applied in quantitative trading strategies and automated trading systems.

## INTRODUCTION

The academic focus on forecasting financial markets has shifted in the past 25 years from the question whether financial markets are predictable to how these markets can be best predicted. At the end of the 1980s most academics still felt that markets were informationally efficient. Investors, so the theoretical models assumed, would process all information so fast that prices would immediately reflect all information. As a result, market prices would follow a 'random walk'. Only new information would change prices and because new unanticipated information is unpredictable by definition, it will have an unpredictable or random effect on prices. However, since the eighties so many studies documented that financial markets were to some extent predictable that even most academics no longer believe markets are completely unpredictable. What was known as the Efficient Market Hypothesis and its empirical cousin the 'random walk' model are no longer considered to be full accurate descriptions of financial markets. Nowadays, they serve as a first approximation or a benchmark to measure how well we can predict.

Academics now assume that investors are not always rational, cannot process all information instantaneously and sometimes collectively go wrong. This can lead to some predictability in financial markets. For instance, some stocks often do better than others even though the previous theory dictates that they should not. Well-known results are the relatively good performance of growth stocks versus value stocks (stocks with a high earnings to price ratio perform better than stocks with a low E/P), and momentum effects (stocks that do well, tend to keep doing so for six months to a year). Professional investors have implemented many of the stock selection criteria in their stock selection process or use these in their so-called 'Factor investing' - strategies to manage risk.

To date most professional investors seem to focus on the academic stock picking results. Surprisingly, a very promising strand of the literature focusing on market timing seems to remain largely undiscovered by practitioners. This is a pity because this strand is not only intuitively appealing but it also has a huge potential to deliver good investment strategies. This part of academic research is known as the Gradual Information Diffusion or Cross-Asset Return Predictability literature. Here I give a quick overview of the main concepts used in that strand of the literature and how these might be applied in forecasting strategies.

## SECTION 1: Gradual Information Diffusion, an example

In 1990 the first empirical evidence on Gradual Information Diffusion appears (before there even was a theory of Gradual Information Diffusion). Two well-known stock market researchers, Lo and MacKinlay, document that stock returns of big firms forecast stock returns of smaller companies. Large firms respond to news instantaneously as they are followed by many investors and analysts. Moreover, as they are part of the main index all important macro-economic information that will affect stock markets in general will through index trading most likely be immediately reflected in these big firms as well. The smaller firms receive less attention and may respond to the same news with a delay. As a result returns on large firms tend to predict the returns of smaller firms. This is exactly what Lo and MacKinlay (1990) find.

Would this result still hold today? To test whether big firms still lead the smaller ones I use some well known indices (like the S&P500, DAX and FTSE100) for a number of countries and test whether these forecast the movements of smaller stocks in that country. Lo and MacKinlay considered only the US market. However, if it is a Gradual Information Diffusion effect, it should, of course, be present in most countries. I measure (using a simple linear regression) how far the movements of big stock returns forecast the returns of the small firms in the next month. For the small firms I use the MSCI Small Cap indices for each country<sup>1</sup>. The table below has the results. Overall the 'big leading small'-effect is indeed positive: if stock market prices of big firms go up this month, on average stock market prices of small firms will go up in the next month (all else equal). The effect is strong. The column 'Effect' (the coefficient alpha from the regression denoted as a percentage) shows to what extent returns of the well known large cap index affect the smaller firms in the next month. For instance, for the UK, an increase in the FTSE by just 1% will in the next month lead to higher return on average of smaller firm by 0.263%. A 5% return change (not exceptional as for stock markets as it is roughly one monthly standard deviation) will change next month small cap returns by more than 1%. This generally holds for all countries. In fact, all results are statistically significant, with all the p-values below 10% and mostly close to zero (the probability that this is just coincidence is very low). Moreover, last month's big firms returns explain the effect is variation of the monthly returns of small firms. For Brazil even more than 10%. To an untrained eye, these numbers may not look like much but keep in mind that in any month a lot of unexpected news will come out. If only one indicator explains this part of variation in small cap returns in the presence of all that unpredictable news, that is relatively a large amount. Generally, it is enough to up the odds in one's favour.

1 These all start in February 1993 onwards with the exception of the Brazilian market. There our analysis starts in June 1994. End date is April 2013 for all series

## **REVIEW OF FINANCIAL MARKETS**

Country	Index	Effect	Significance (p-value)	Variation explained
Austria	ATX	21.00%	0.80%	5.70%
Brazil	BOVESPA	26.50%	0.00%	11.40%
France	CAC40	25.70%	0.20%	5.20%
Germany	DAX	13.50%	8.50%	1.90%
Japan	NIKKEI	18.20%	1.80%	2.80%
Netherlands	AEX	20.50%	2.70%	4.20%
Spain	IBEX	20.20%	0.40%	4.70%
Switzerland	SMI	32.60%	0.10%	7.50%
UK	FTSE	26.30%	1.70%	4.00%
US	S&P500	19.90%	8.10%	2.20%

Table 1. Big firms leading small firms: February 1992- April 2013. Based on the regression:

$$r_t^{Small} = \mu + \alpha r_{t-1}^{Big} + \varepsilon_t$$

It is easy to derive simple market timing trading strategies from these results. For instance, invest in small caps if the FTSE has gone up more than x%. Or, if the FTSE has gone down, short the small caps or invest risk free. With many trackers and exchange-traded funds around, trading strategies like these can be executed relatively easily and at relatively low cost. Of course, nothing prevents us from incorporating more variables based on gradual information diffusion. The empirical results on cross-asset return predictability go much further.

### SECTION 2: Gradual Information Diffusion: literature review

Nowadays, academic researchers consider Lo and MacKinlay from 1990 to have found the first evidence of a theory that has become known as Gradual Information Diffusion. In 1999 Hong and Stein published their theory on Gradual Information Diffusion in the Journal of Finance. They showed that when information travels slowly across investors and markets, it can generate price under-reaction, momentum effects and more general predictability across financial markets. Rather than assuming that all information is available and can be easily processed by rational investors, gradual information diffusion requires 'bounded rationality'. If we are willing to assume that investors cannot process all information all the time - which does not seem too unrealistic particularly in this day and age of information overload – Hong and Stein show that financial markets may be predictable. In that case, news may affect some markets first and only reach other markets with a delay, resulting in lead-lag relationships between returns in different financial markets. Hence comes the term cross-asset return predictability. While Hong and Stein (1999) focus on private information in their model, investors can also underreact to public news if the conversion of this news into a judgment about value is nontrivial. A later study by Hong, Torous, and Valkanov (2007) takes this result one step further. They show that gradual information diffusion can lead to cross-asset return predictability if, for instance, many (though not necessarily all) investors in the stock markets do not pay close attention to information in other asset markets. They point out that information might also gradually diffuse across investors when investors wake up to information at different points in time. They acknowledge that the information must have a substantial impact on economic activity in order to show up in empirical analysis.

An example may further help to clarify the theory. An investor in the oil industry will monitor what happens to oil prices very closely as any oil price change has a strong effect on the value of oil shares like Exxon or Royal Dutch. Similarly, investors in the financial industry will keep close track of the interest rate. It is one of the most important determinants of the value of financial institutions. It seems unlikely that news about oil prices is not immediately reflected in the prices of oil companies and, similarly, one would expect that bank shares respond instantaneously to changes in interest rates. However, whether oil companies respond to changes in the interest rates and banks to price changes in oil is not as clear. A rise in oil prices may affect future inflation, which in turn may have a direct effect on the value of banking shares. Changes in the interest rates affect economic growth, but whether investors in the oil industry are directly aware of it, or take this into account on a day-to-day basis is also less clear. The Hong and Stein theory suggests that it is in cases like this that we may find cross-asset return predictability. Using changes in the interest rates, we might be able to forecast the returns of stocks in the oil sector. And oil prices may forecast the financial industry stocks. Note that investors do not need to be irrational in this theory. The only assumption Hong and Stein make is that investors cannot see all information at the same time.



Exhibit 1: An example of Gradual Information Diffusion

Since the theory on Gradual Information Diffusion was published, a large number of academic studies have found strong evidence of this crossasset return predictability. Interestingly, we find it exactly where the theory tells us we should be able to find it. Table 1 . Selected Empirical Studies Related to Gradual Information Diffusion

Paper	Main Findings	Practical implications
Driesprong, Jacobsen and Maat (2008)	Oil price predicts next month's stock market returns worldwide	The monthly market timing strategy beats buy-and-hold: alphas average c. 4% p.a.; significantly higher Sharpe ratios.
		Include oil price changes to improve forecast models.
Hong, Torous and Valkanov (2007)	Returns of many industry portfolios predict next month's stock market returns in the US and eight non-US countries	One can enhance an investment strategy by incorporating past industry returns into a forecasting model
Rapach, Strauss and Zhou (2011)	The US stock market return predicts next month's stock market returns in other industrialised countries	Models forecasting non-US stock market returns should include lagged US returns
Jacobsen, Marshall and Visaltanachoti (2014)	Industrial model price changes conditioned on economic cycles significantly predict stock markets worldwide	One can dramatically improve the performance of forecast models by including industrial metal prices and economic cycle variables

In line with the example above, Driesprong, Jacobsen and Maat (2008) find that oil price changes significantly predict returns in stock markets around the world. Note that given their impact on the world economy, oil prices seem a natural candidate. Roughly speaking, a 10% increase in the oil price in one month (not unusual as it is only one standard deviation) predicts 1% lower stock market returns one month later. In line with gradual information diffusion, the effect is particularly strong in nonoil-related industries. In fact, their results confirm the example above. There is no evidence of return predictability for the resources, industrials and basic materials sectors, but predictability for the IT sector and the banking industry is significant. Norway presents another nice example for such gradual information diffusion. A positive oil shock immediately causes the Norwegian stock market to rise in the same month. This is not surprising given that Norway is an oil exporting country so investors seem to respond to the good news immediately. However, gradually the negative oil effect seems to seep through, lowering stock market returns on average in the following two months. The implication for quantitative trading strategies is simple. It may pay to include oil price changes as an indicator in an automated trading system.

Hong, Torous, and Valkanov (2007) find that in the US, 14 out of 34 industry portfolio returns forecast the next month's stock market return. Among the 14 industries, the returns of retail, services, commercial real estate, metal and petroleum predict the stock market return by up to two months. Thus lagged historical industry returns can be used in addition to other predictors to improve a forecast model. Again there seems to be a strong link with the economy. Industries that predict stock market returns also tend to forecast economic growth. This tells us

what type of information is relevant to the gradual information diffusion model. It means that news that is informative about macro-economic fundamentals gradually diffuses and affects asset prices in other markets.

Internationally, the US stock market tends to lead other stock markets even to the casual observer. This suggests that the US market might predict other markets as well. Rapach, Strauss and Zhou (2011) find over the past 30 years that last month's return of the US market predicts next month's stock market returns in ten other industrialised countries. The US market return positively forecasts stock market returns in other countries; the effect is almost similar in size as between the large firms and small firms (a change of 5% in the US market will change stock returns in other countries on average by 1%). Why does the US stock market appear to lead other stock markets? There are two obvious reasons. First, the US plays an important role in the world economy. Its growth affects the economy of its trading partners. Hence, the US stock market contains information regarding economic fundamentals both for the US and for other industrialised countries. Second, the US market is watched closely by many more investors than is the case for non-US markets. The prices in the US market are the first to reflect information related to the US economy. Investors in non-US markets tend to extract its implications for their home country's economy with some delay. Therefore, the US market leads non-US markets and we can use past US market returns to predict non-US stock market returns. Furthermore, the predictive power of past US stock market returns is significantly stronger than the home country macro-economic variables, such as inflation and dividend yields in non-US countries. Also these results of Rapach Strauss and Zhou (2011) suggest that practitioners can improve forecast models for non-US stock markets.

## **SECTION 3: Further developments**

The past ten years have seen more empirical support for the Gradual Information Diffusion hypothesis. What makes this strand of the predictive literature especially attractive is that financial market prices, in contrast to macro-economic variables, are forward-looking and reflect investors' expectations and interactions. In a way they can be thought of as collective forecasts by investors. One reason why cross-asset return predictability effects may work so well is that in a way these methods use this collective forecast of investors in one market to predict another. Moreover, as financial market returns can be observed continuously; we can update predictions faster in comparison to macro-economic variables, which typically have a frequency of quarterly, or at best monthly and tend to be backward looking.

That said, there are a large number of issues to be addressed. The first problem is that like many other quant strategies, gradual information diffusion models had a difficult time predicting stock market returns during the recent financial crisis. There are also some down-to-earth questions like how long does it take for information to diffuse into prices – can we rely on monthly data or should we focus on shorter or longer intervals? Moreover, as the oil price example above illustrates, changes in oil prices may convey information about the future of the economy. However, not all changes necessarily mean the same thing all the time. For instance, a price increase in copper might be a good signal in a recession (stronger demand) but bad news during an expansion (higher inflation). A new strand of the literature is emerging that investigates time-varying return predictability in the context of gradual information diffusion (Jacobsen, Marshall and Visaltanachoti, 2014).

There is no reason why it should not work in other financial markets. However, in real time experiments I find that in automated trading strategies, which include gradual information diffusion variables, so far it works best for forecasting stock markets.

## CONCLUSION

Gradual Information Diffusion is a promising and practical area of predictability research currently available in academic literature. Empirical research would appear to support that the effect is indeed present in financial markets. What makes it interesting from a practitioner's point of view is that this has received little attention in automated trading systems to date.

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Articles must be:

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- Between 1,500 and 3,500 words in length and accompanied by an Abstract of 80-150 words.

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If you would you like to comment on any of the articles in this issue, contact CISI Communications Editor Richard Mitchell: email richard.mitchell@cisi.org or call +44 20 7645 0749

## Rocketing to the top

## JEFFREY BALL, CHARTERED MCSI, IS HELPING TO CONVERT YOUNGSTERS TO PLAYING RUGBY LEAGUE IN AN AREA THAT IS A FOOTBALL HOTBED

hese are exciting times for Jeffrey Ball, not only professionally, but in his role as Chairman of Cramlington Rockets, the biggest community rugby league club in north-east England.

With 2015 marking the 15th anniversary of the founding of the club, Cramlington Rockets is very much on the up. The club this year expects player numbers to pass 200 across eight teams, ranging from the under-9s to adults.

It has also recently taken the step of launching its own Community Department, which aims to introduce rugby league to 10,000 children, from the age of six, in the coming year. Jeffrey, an assistant director for wealth manager Brewin Dolphin in Newcastle, working in its charity team, said: "As a comparison, before we moved the club to its current home in Cramlington in 2009, there were no opportunities for local children to play rugby league. "We work really hard to provide a safe environment for kids to learn a new sport, get fit and, most importantly, have fun."

Jeffrey, who is also Head Coach of the under-14s team at the club, has been involved with the Cramlington Rockets for almost eight years. "A friend who I played touch rugby with asked if I wanted to come down and have a go. From there I was hooked and I became an assistant coach, then a head coach while also joining the club's committee. I became Chairman in March 2014 when the founder stepped down after 14 years in charge. All the hard work everyone at the club has put in

## LORA BENSON

is paying off. Every year we have some new achievements to recognise, which is amazing."

Last year the first team won the North East Men's Plate Final – a victory built on the club's commitment to develop homegrown talent. "Of the 20-man squad, 14 had come through the club's youth system. It was a very proud moment for the club," said Jeffrey.

This is just one of the club's notable achievements. The club boasted North East

"We work really hard to provide a safe environment for kids to learn a new sport"

junior champions across three age groups in 2014; had one player selected for the England Youth team and another for Great Britain and Ireland Students; and one ex-junior has signed a contract with Gateshead Thunder, the local professional rugby league club.

Cramlington Rockets' 'in-house' referee won North East Educational Match Official, and he and two other members were nominated for national community rugby awards.

As Chairman, Jeffrey's role is to develop a culture of success and make Cramlington Rockets recognised as a flagship club for the sport in an area that is dominated by football.

It is England's most northerly junior rugby league club, and the only one in Northumberland. "We expect people to maintain the highest standards, even when not playing, and treat everyone involved with respect," says Jeffrey. "We are role models for a lot of young people, so if we can give them some life skills and a good experience, we're happy.

"We have always been people-focused; we believe results are a natural outcome of giving players a solid foundation to build upon. [Players are encouraged to] keep winning and losing in perspective. It is a process that has proven successful for a number of years," he adds.

"We are a player's first experience of rugby league 99% of the time, so we like to ensure it is a good one," says Jeffrey. "A lot of players stick with us all the way through to adulthood, which is a fantastic achievement."

Through its community programme, the club will work with schools and community partners to enable children to "start their journey into rugby league", he says. Promising youngsters can then progress, at the age of 16, to a new academy launched by the club.

"The Community Department is working not just for what happens in the next couple of years, but for the next ten years for those who become a part of the Rockets family."

Contact *lora.benson@cisi.org* if you have a hobby you think will interest other CISI members. You will receive a £25 shopping voucher as a 'thank you' if we publish your story.

## Brought to account

A RESEARCH PARTNER IN A BOUTIQUE ADVISORY FIRM FINDS HERSELF FACING A DIFFICULT DECISION. A MAJOR CLIENT'S PLANNED FLOTATION LOOKS OVERVALUED - BUT NO ONE WILL LISTEN TO HER



ohn has spent most of his working life in the City of London. He now fills a number of non-executive roles, but for 20 years before he stopped full-time work, he was a senior director of an investment bank. Recently, he was surprised to receive an email out of the blue from Jean, asking if he could meet up for 30 minutes. Jean, whom he had not seen for several years, had been an analyst who had worked in the Mergers & Acquisitions team in his old bank and he had also known her as a college friend of his daughter.

Jean explained that about 12 months ago, she had left the bank to join a boutique advisory firm, where she is the research partner. The firm is currently working on bringing to market a new client, and success in this transaction is crucial if it is to have any credibility. The client was an outsourcer that specialised in taking routine clerical tasks, in both the private and public sectors, applying its skills in organisational and operational management to re-engineer and automate, reducing costs by labour saving and relocating to lower-cost regions or overseas. Standard contracts generally ran for ten years, and the client's business model involved high costs in the first few years, as jobs were reorganised and/or new equipment was bought.

On a strict comparison of costs and profits, new contracts were generally unprofitable for the first three or four years, then substantial – often indecent – margins could be made in later years. As the client was growing rapidly, the number of lossmaking contracts was on this basis much greater than the profitable ones. Jean went on to explain that, despite this, the client's accounts showed relatively large and rapidly growing earnings. The key to this apparent anomaly was that the client capitalised not only assets but also a proportion – in her view, too high a proportion – of actual running costs.

The accounts were not sufficiently transparent. Effectively, profit was being recognised too early, and the client was dependent to a greater degree than outsiders might appreciate on a rapidly growing stream of new business and future cost saving, which was not yet certain. Jean had looked at this in considerable detail and was quite quickly able to satisfy John that her concerns were justified, and that the anticipated share price on launch was not sustainable if the market were aware of the practices that Jean described. Jean said that the client's management was controlled by three strong individuals: the chairman, the chief executive, and the chief financial officer (CFO). The three had worked together in a large multinational and had built the business originally with a private equity house over a good number of years. Each of them had a major financial commitment to it, and all, including the chairman, would benefit significantly from a successful flotation. Jean had raised her concerns with the CFO, who had initially taken steps to persuade her that she was wrong, but increasingly was showing clearly that he and his two senior colleagues regarded Jean's attitude as one of disloyalty and had begun to question her commitment and, more worryingly, whether they had perhaps made a mistake in choosing her firm.

Jean had discussed the accounting treatment with the client's auditors, an ambitious, mid-sized firm that had grown rapidly, in good part stimulated by the growth of the client. The audit partner said he understood Jean's concern but that the matter was one of interpretation. The client had always delivered in the past, and he saw no reason to challenge the current position. The chair of the client's audit committee, also the senior independent director, is senior partner of the client's

## All six partners had borrowed heavily to set up their firm and success for the client is crucial

long-standing and quite small firm of solicitors. Jean had tried to raise the subject with him and had received little better than a brush-off.

Jean told John that she had followed the client for some time and was confident that her analysis was sound. Although she had shared her concerns with one of her partners, who is the sponsor of the issue, he had said that he was confident in relying on the client's audited accounts and the assurances of the firm's executive that its accounting treatments and projections were all soundly based.

Jean feels that she is in a difficult position. All six of the partners in the boutique, in order to set up the firm, had borrowed heavily to fund the business until it became established, and so success with the client transaction is crucial to all of them.

Jean is perhaps fortunate in that she has no dependants beyond herself and her husband, while she is aware that her partners all have children and significant external commitments, such as school fees and large mortgages, to meet on a regular basis. Consequently, she feels reluctant to make too big a fuss, although her real inclination is to say that she feels that the risk involved in continuing with the client flotation is too great for the boutique.

John offers Jean a number of possible courses of action to discuss with her partners/the client to help remediate the position, but says that at the end of the day, Jean may be faced with deciding that she:

- should accept that the accounting treatments in question are an art not a science and that having raised her concerns, she should allow the flotation to continue
- should seek to persuade the sponsoring partner of her concerns, and if he remains unreceptive, should insist that the matter is aired with all the partners
- has no credible option other than immediate resignation
- must immediately report the matter to both the accounting regulatory authorities and the FCA.
- What would you advise Jean to do?

Visit *cisi.org/broughttoaccount* and let us know your favoured option. The results of this survey and the opinion of the CISI will be published in a future edition of the *S&IR*.

## SHOCK AND AWE: THE VERDICT

The 'Grey Matters' dilemma in the December 2014 print edition considers the efforts of Richard, a new manager, to restore acceptable standards of performance in the operations department that he runs. He issues a communication to all staff, raising the possibility of disciplinary action – including termination – for those who fail to perform. Nevertheless, mistakes continue and he wishes to implement his disciplinary policy immediately and calls for his boss's support.

Readers were offered four courses of action on how Richard's boss should proceed. Close to 100 members responded, with many leaving comments to support their selection.

## The result was as follows:

**A.** Support Richard in his proposed course of action, to the maximum extent that it is permitted within the firm's employment policies, because he was selected to do a job and failure to support him at this stage will fatally undermine his authority (6%)

**B.** Support Richard in taking action, but ensure that it is proportionate to the actual incident, irrespective of the warning that he had sent out (52%)

**C.** Suggest that no action should be taken without involving HR in the decision, even if that results in losing the "shock and awe" impact for which Richard clearly hopes (37%).

**D.** Suggest that no action should be contemplated that might have unintended consequences. Consideration must be

given as to whether a hard line now will make matters worse or better (5%).

## The CISI verdict

The most popular course of action, and that which the CISI favours, is to support Richard in taking action, but to ensure that it is proportionate to the incident that occurred after his public warning.

In practice, that will almost certainly involve HR in the process, and so members who voted for option C were nearly as 'right' as those voting for option B.

Some 11% of the total vote was cast for choices A and D, and while both of those have some merit, they also have some drawbacks; either on the overreacting side with A or the danger of 'paralysis through analysis' in D.

## Paying for research

TIGHTER REGULATION HAS IMPROVED INDEPENDENCE, DIVERSITY AND VALUE FOR MONEY IN INVESTMENT RESEARCH BUT FURTHER CHANGE COULD ROCK THE BOAT

● ALISTAIR HAIG AND PROFESSOR BILL REES

Record to the second se

In the US, regulators reacted by imposing restrictions on the activities of sell-side analysts that culminated in the 2003 Global Analysts Research Settlement. Conversely, the UK approach placed responsibility on the buy-side and the Myners report (2001) recommended far-reaching changes in the methods of commissioning and paying for investment research. Institutional investors resisted this and a compromise was found, the key characteristic of which was the introduction of Commission Sharing Agreements (CSAs). This crucial innovation changed the payment mechanism, allowing fund managers to instruct their broker to 'pay away' research commissions and ending the one-to-one relationship between research and execution counterparties.

Given London's global significance, and the international nature of the brokerage market, this indirect approach has gained traction internationally and precipitated a substantive change in the market for investment research.

## KEY FINDINGS ON THE IMPACT OF CSAs ON INVESTMENT RESEARCH

Chart 1. In your organisation, do you expect CSAs paid to independent research providers to be...



Chart 2: In your organisation, do you expect research commissions paid to the executing broker to be...



Chart 3: In your organisation, do you expect research funded by the firm rather than client commissions to be...



Chart 4: In your organisation, do you expect CSAs paid to other sell-side firms (brokers) to be...



The results presented here are part of an ongoing study into the market for investment research. Our evidence suggests that the introduction of CSAs has allowed fund managers to obtain a higher degree of independence in the advice they purchase, a wider choice of inputs and better value for money. We also find that fund managers place more emphasis on information processing rather than equity valuation, on business research rather than securities research and on advice rather than predictive accuracy.

Overall, the process of analysis is viewed as more valuable than any resulting recommendations, which will probably be reworked by an internal buy-side analyst. In our view, CSAs have led to a noticeable improvement in the market for investment research, although even last year these improvements did not satisfy the UK regulators.

It is possible that recent improvements in the operation of CSAs can be attributed to the impact of the financial crisis on buy-side and sell-side firms, greater understanding that CSAs can be advantageous and increased pressure from the UK regulator since 2012.

## ABOUT THE RESEARCH

In December 2014, we surveyed 40 UKbased buy-side institutions to evaluate the impact of CSAs on the accuracy of analysts' output, the demand for independent research, the diversity of research providers and value for money.

Respondents typically represented substantial funds, including at least ten of the largest 25 investment managers (each managing over \$100bn) and the majority of respondents had more than ten years of experience in the investment industry. The respondents typically represented long-term investors, with more than half referring to at least a one-year horizon and one-third a horizon of more than two years.

We are grateful to Bloomberg for helping us to collect this data and to its buy-side clients for taking part.

## Has the introduction of CSAs improved analyst predictions?

The adoption of CSAs was not intended to improve the accuracy of analysts' output,

CSAs have led to a noticeable improvement in the market for investment research

be it earnings forecasts, target prices or recommendations. Even so, the mitigation of conflicts of interest may improve predictions and there is some US evidence that suggests modest improvements in output accuracy following the Global Settlement. Our respondents report no strong views regarding the impact of CSAs on accuracy. Indeed, it appears that they are little concerned, preferring insightful information concerning strategy, governance and innovation.

However, 70% agree that CSAs have reduced conflicts of interest – a prime cause of inaccuracy – whereas only 6% disagree. The accuracy of analysts' predictions is an empirical question, but it appears that one of the prime incentives for inaccuracy has been reduced.

## Has the introduction of CSAs resulted in more independent research?

The traditional (pre-CSA) approach was criticised for three reasons. Firstly, percentage commission payments meant that the same research effort could generate different fees as assets under management fluctuated. Secondly, fund managers needed to trade in order to generate commissions, which sometimes resulted in excess trading. Thirdly, the broker vote on which the fees were established might have lacked detail, accuracy and timeliness.

These problems do not apply to independent researchers, and CSAs should encourage this method of research provision. The past ten years have seen persistent and accelerating growth in independent research providers; 59% of respondents believe this has increased during the five years to 2015, whereas only 24% disagree (see Chart 1).

## Has the introduction of CSAs resulted in a wider range of inputs?

Our survey evidence confirms our previous research findings that fund managers value a variety of research inputs and use a large number of research providers. More than half of respondents represent organisations that have used CSAs to obtain a wider range of inputs, and over one-third of respondents claim to use more than 100 different research providers.

Our evidence is consistent with reduced payments to executing brokers and increased payments to independent providers, although our respondents are equivocal about the research fees paid to non-executing brokers. Overall, this suggests an increase in the diversity of providers. Of our respondents, 49% agreed that they would use CSAs to increase the variety of research available, while only 20% disagreed.

## Has the introduction of CSAs resulted in better value for money?

We asked how fund managers expect their organisations' research procurement to have shifted in the five years from 2010 to 2015. Firstly, 70% of our respondents suggest research commissions to executing brokers are declining (see Chart 2).

Conversely, we find a strong belief that fund managers are increasing their purchase of research that is not charged to investors: 44% suggest an increase, against 12% arguing a decline (see Chart 3).

Interestingly, we find a divergence in opinion on the change in CSAs paid to non-executing brokers: a 46% sample expects this to increase, while 38% expect it to decrease (see Chart 4). This is a fairly complex pattern, but our discussions with the survey respondents clarify that some fund managers are taking the view that the appropriate response is to pay for research with their own funds, while others have moved to 100% CSA use. Whichever approach is taken, it is clear that a more considered approach to buying research is becoming normal practice.

## CONCLUSION

Crucially, we note that 90% of respondents consider that changing regulations could lead to unintended consequences. This is perhaps not surprising given that announcements by the Financial Conduct Authority (FCA) and the European Securities and Markets Authority (ESMA) since July 2014 point towards an outright ban on the use of dealing commissions for research.

The impact of that would surely be substantive. The FCA announcement on 19 February this year has again led to multiple interpretations. Our research suggests that the unintended consequences could include a further shift in research resources from sell-side to buy-side, a reduction in research that could also be detrimental to the quality and variety of the informational environment, and lower research budgets.

However, our research confirms that fund managers value independence, a variety of inputs and value for money. We also find divergence in opinions regarding the

## Fund managers value independence, a variety of inputs and value for money

patterns of CSA usage to pay for other sell-side research. Importantly, the high level of regulatory uncertainty appears to be viewed negatively, as almost all respondents are nervous about uncertain change.

Overall, we conclude that, despite incomplete compliance with FCA rules, the CSA payment mechanism has improved the efficiency of the market for research. The current level of scrutiny on research procurement is much higher than previously and this impact has spread well beyond the UK.

Clearly, practitioners would value a period of stability, during which we would anticipate a further shift towards the use of CSAs and self-funded research.



Alistair Haig is a researcher at the University of Edinburgh Business School, where he is taking an independent look at how fund managers decide to make or buy research. Visit www.business-school.ed.ac.uk/ about/people/862/Alistair/Haig



Bill Rees is Professor of Financial Analysis at the University of Edinburgh Business School. He is author of *Financial Analysis* and has published in leading journals.

## Heads we win

SHOULD REGULATORS BE TAKING AN INTEREST IN FUND MANAGERS' FEE STRUCTURES? A NEW PAPER FROM CASS BUSINESS SCHOOL TAKES A TRENCHANT VIEW

■ ANDREW DAVIS 🚺 JOHANNA WARD

Here are three questions that it might amuse you to ponder. First, should regulators be taking an interest in fund managers' fee structures? Second, why does it appear that fund management companies do not go bust? Third, what signals do fund management companies send about themselves, consciously or unconsciously, through the fee structures they adopt?

I was prompted to ask myself these questions and others after reading a now-famous paper published late last year by four academics at the Centre for Asset Management Research at Cass Business School in London, two of whom I was lucky

The fee structure universally applied to retail investors' funds almost always results in the consumer ending up the loser

enough to be able to question about their findings. The four authors of *Heads We Win*, *Tails You Lose*, Andrew Clare, Nick Motson, Richard Payne and Steve Thomas, created a series of models "to gauge the impact of three mutual fund fee structures on the utility of investors and fund managers: a fee fixed as a proportion of assets under management [AUM]; an asymmetric performancebased fee; and a symmetric performance-based fee".

Their headline finding was striking: "There is no single

structure that simultaneously maximises both the investors' and the managers' utility. In fact, the results show that the most prevalent fee structure currently in the UK market (a fixed fee as a proportion of AUM) is generally the best structure for the manager and the worst for the investor."

The paper's findings are based on models and so have the limitations of models, but they are important nonetheless. Since it would appear that there is no win-win way of charging for asset management, this is a transaction that must always produce a winner and a loser. The Financial Conduct



Authority appears to believe that one of its chief roles is to protect consumers from suffering poor outcomes. Therefore, when it is suggested that the fee structure universally applied to retail investors' funds almost always results in the consumer ending up the loser, the answer to the first question is clear. Obviously regulators should be taking a close interest in fund managers' fee structures.

This brings us neatly to the second question. The implication of *Heads We Win, Tails You Lose* is that fund management

companies do not go bust because the charging structure they use is, under almost all circumstances, more beneficial to them than to their customers. This obviously helps to cushion the negative impact of poor performance and ultimately keeps the wolf of bankruptcy from the door. This conclusion is reinforced by the paper's finding that the most advantageous charging structure from the customer's point of view is a symmetric performance-based fee, under which the manager wins when the client wins and loses when they lose. Clearly, symmetric performance fees would leave the fund manager at risk of losing money periodically, and so it's hardly surprising that they are not queuing up to introduce them.

The problem, however, is that with the risk of going bust largely removed, the possibility of genuine competition - a Darwinian survival of the fittest - is also greatly reduced. The lack of real competition between fund managers is a serious structural weakness of this industry: it should be entirely possible for poorly performing fund management companies to go bust with no direct harm to the interests of their clients, but this does not happen. The way that fund management services are charged for helps to explain why this is the case.

How about the third question: what messages do fund management companies send about themselves, consciously or unconsciously, through the fee structure they adopt? If one follows the logic of *Heads We Win, Tails You Lose*, the conclusion would be that any manager that charges a fixed fee of AUM is implicitly telling the world that they know they are not very good, because in order to do business, they require a fee structure that is the least beneficial for the client under almost all circumstances.

So when do the clients win under the fixed fee structure? The paper finds this happens only when the managers are extremely skilful and are permitted a big tracking error against their benchmark index (otherwise known as a high active share). Customers do best when these managers perform well by paying them a fixed fee rather than one linked to performance. The mystery, therefore, is why managers who can demonstrate high skill and high tracking error do not routinely charge performance-based fees. Either they don't know how to maximise their own profits, or they lack confidence in their ability to sustain their performance.

What does this all boil down to? In a world where investors can track an index, there is no question of outperformance, so performance fees for these products are irrelevant and a (low) fixed fee on AUM might be a sensible way to charge. But for active management? I don't think so.





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