

Agenda



2.15 – 2.35	Aviva Plc - A 321 year old disruptor	Chris Payne Aviva UK Digital CIO
2.35 – 3.15	The Impact of Emerging Technologies on the Surveying Profession	Ben Elder FRICS RICS Global Director of Valuation
	Aviva Investors Response	John Hadcroft
3.15 – 3.25	The Future of Valuation Reports	James Smith / Chris Jones
3.25 – 3.40	Tea Break	

Agenda



3.40 – 4.10	Q & A	James Smith / Ben Elder / John Hadcroft
4.10 – 4.30	Aviva Investors UK Real Estate Outlook	Tom Goodwin Aviva Investors, UK Real Estate Strategy & Research
4.30 – 4.50	Aviva Investors Real Estate Finance	Gregor Bamert - Head of Real Estate Finance Adrian Poole - Director, Origination Nick Solomon - Director, Origination Neil Dobson - Associate Director, Origination
4.50 – 5.00	Surveyor Round Up, Awards & Conference Close	Chris Jones / James Smith

The Impact of Emerging Technologies – Industry Survey





Five key areas of technology identified that will have a significant impact on surveying:

- The Internet of Things
- 5G Communication
- Machine Learning & Robotics
- Building Data
- Distributed ledger technology

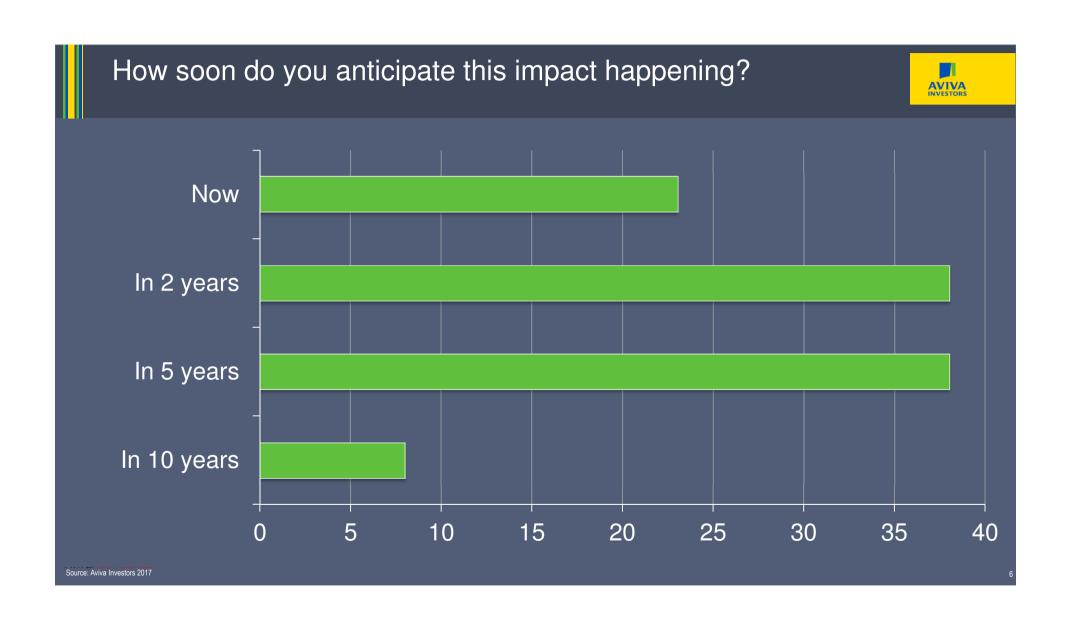
Source: rics.org/insight

How do you view the impact of the technological revolution in your role?





Source: Aviva Investors 2017





Chris Payne Aviva UK Digital CIO

Aviva Investors Property Conference 25th October 2017









Our Ambition

Zero questions, Zero friction



Our Ambition

Zero questions, Zero friction

Utilising advanced analytics, deep data and customer lifetime value to power Ask it Never



"Liked how easy it was " "No e

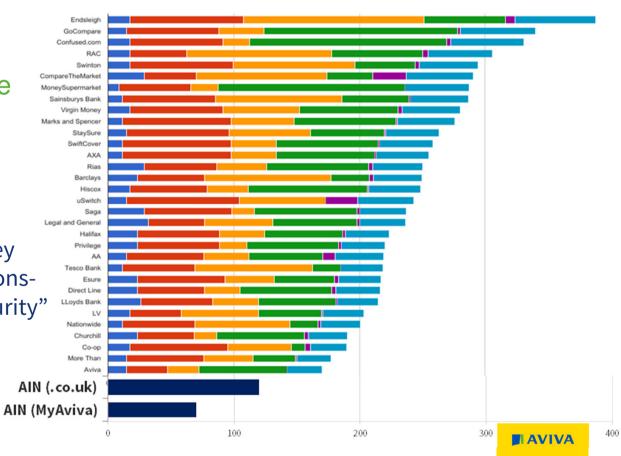
was..." "No excessive questions"

"a lot less hassle, really easy"

"on comparison sites- they asked a LOT more questionsno cctv questions or security"

"Easiest Quote Ever!"

Time To Complete Home Insurance Form (seconds)



Competitive Advantage

Customer Analytics

Ask it Never

Digital Innovation

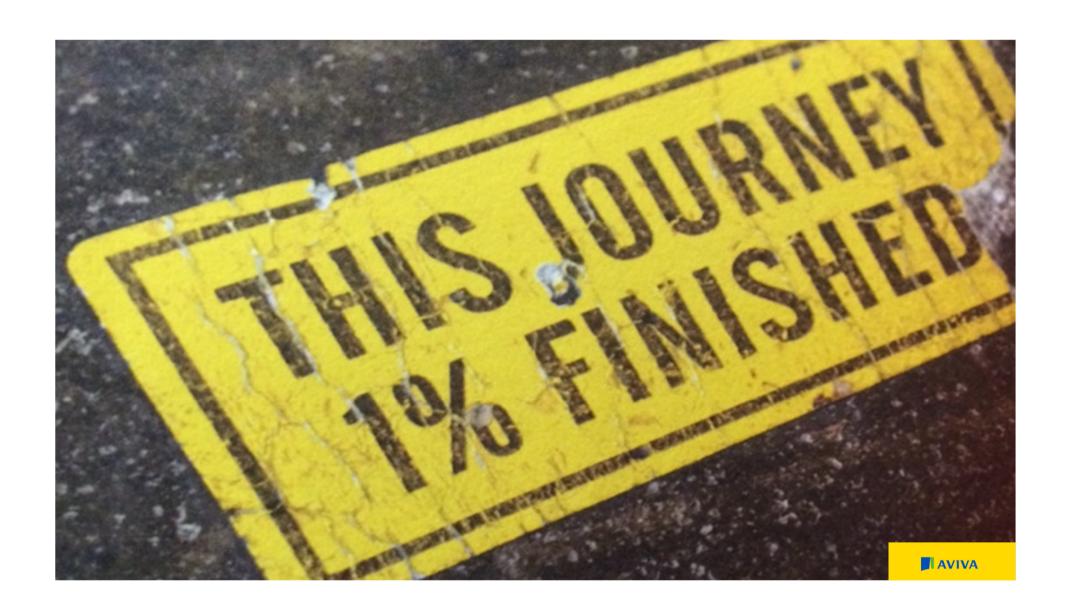
Risk Analytics



It's not Tun because it's easy.

It's fun because we're changing the insurance world.







Aviva Investors Real Estate Finance Property Conference 2017

Ben Elder BA BSc FRICS ACIArb RICS Global Director for Valuation









Its great to be a valuer!







Research



RICS Insight: The Impact of Emerging Technologies on the Surveying Profession Five key areas of technology are identified that will have a significant impact on surveying:

- ► The Internet of Things (IoT)
- ▶ 5G communications
- ► Machine learning & robotics
- Building data
- ▶ Distributed ledger technology
- ▶ BBC research Valuers: 95% chance jobs automated by 2035

ICAEAW: Artificial Intelligence and the Future of the Accounting Profession:

- ▶ Intelligent systems will takeover more decisions-making tasks from humans
- ► Extremely accurate Outputs superseding human effort
- ▶ Think radically
- Be adaptable

Focus on Data



- ► Who owns it?
- ► Security ?
- ► New sources?
- ► What due diligence is required?
- ► Independence?

Red Book – Risk Management Framework



- ▶ What do our customers want?
- ▶ What do the Regulators want?
- ▶ What is a valuation report?
- ► Are predictive values allowed? VPS4 11.
- ► Audit trail of judgments

What about the future?



- ► Change
- ► Change in how property is occupied therefore its value
- ▶ Massive urbanisation
- ► Advice Risk Assessment
- ► Statistical modelling skills
- ► Exciting parts of job!



Thank you

Ben Elder belder@rics.org





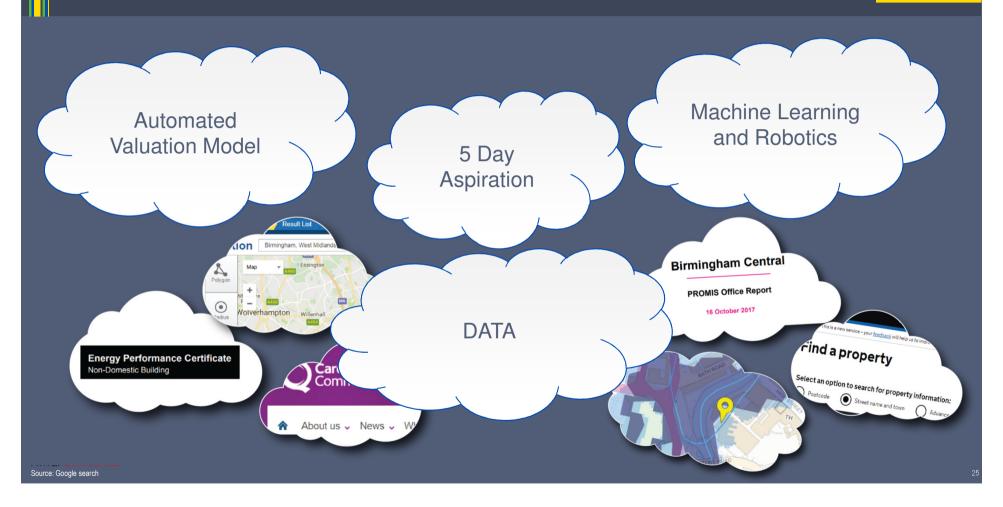


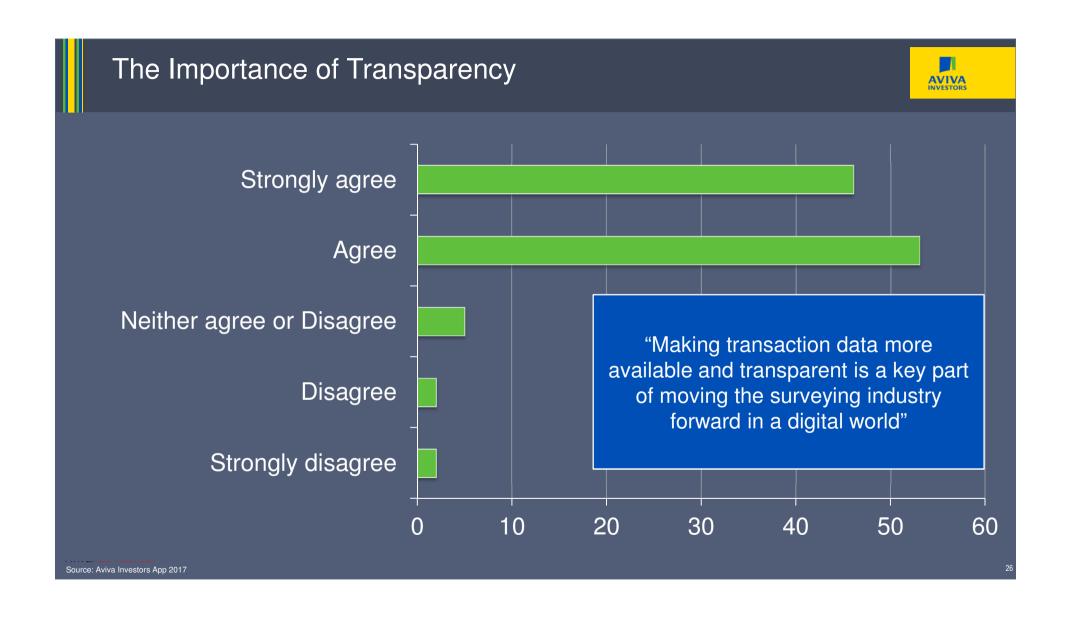




Impact of Technology



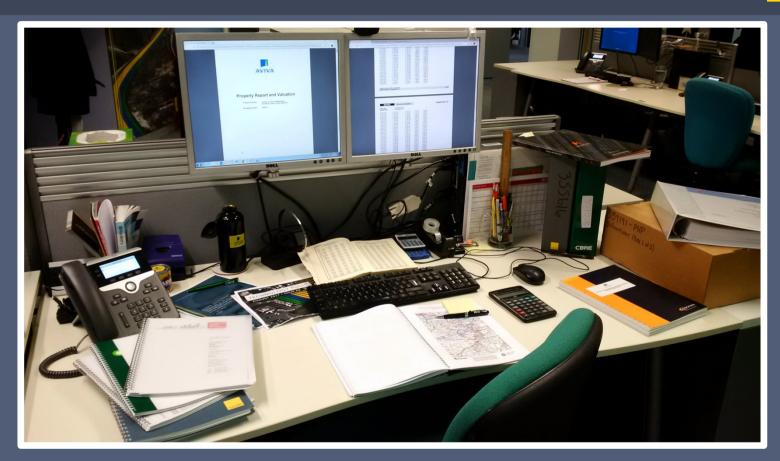






A Traditional Valuers Desk





Source: Aviva Investors October 2017

28

Existing Aviva Valuation Report





Property Report and Valuation

Property Addres

Mortgage Numbe

Contents

- 1. Executive Summary
- 2. Valuation Report
 - Section 1 Instructions
 - Section 2 Physical
 - Section 3 Legal and Statutory
 - Section 4 Environmental
 - Section 5 The Market
 - Section 6 Valuation
 - Section 7 Estimate of Current
 - Reinstatement Cost
 - Section 8 Benefit and Disclosure

The Valuation report of the Future





Aviva: Confidentia











2 Introduction - Welcome t...



з Technology Tips – What is?



4 Technology spotlight - Al...



5 Technology Trends - KP...



6 In the news









KPMG - Disruptive tech and trends

This month I am sharing some insights from KPMG on Disruptive tech and trends. KPMG have produced two interesting papers on technology Innovation - Part 1 focusing on Tech Hubs and Part 2 on Innovation covergence plus KPMG have a live technology trends index which highlights key industry sectors which is worth a look

The changing landscape of disruptive technologies

Part 1 - Global technology innovation hubs

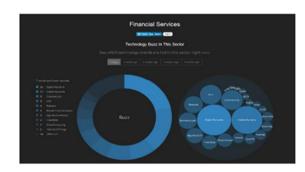


Part 2 - Innovation convergence unlocks new paradigms





Technology Trends Index







Absolute pricing

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Capital values compared to previous peak



Source: IPD Annual Index 2016

Real estate looks attractively priced on a relative basis



Bond yields remain close to record lows

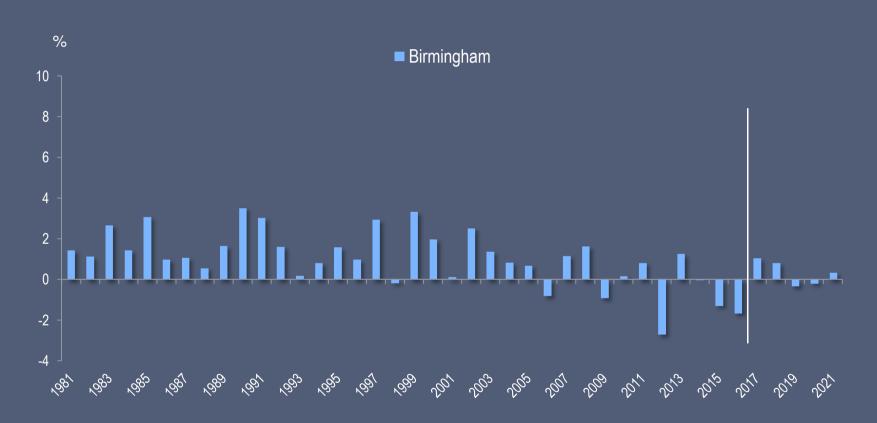


Aviva: Confidentia

No development boom in most markets



Office supply pipeline (net additions as % stock)

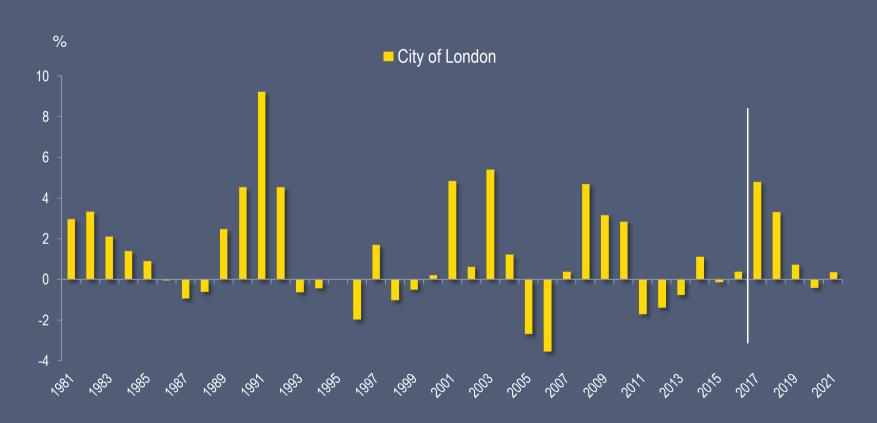


Aviva: Confidential Source: PMA, June 2017

...except in Central London offices



Office supply pipeline (net additions as % stock)



Aviva: Confidential Source: PMA, June 2017

Overseas buyers snapping up trophy assets

AVIVA INVESTORS

Record pricing stuns domestic investors



£1.2 bn

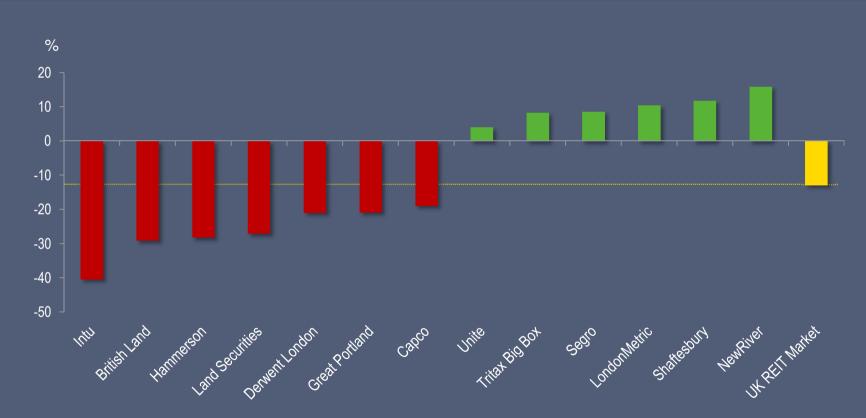


£1.3 bn

What signal is the listed market sending?



REIT pricing relative to Net Asset Value (NAV)

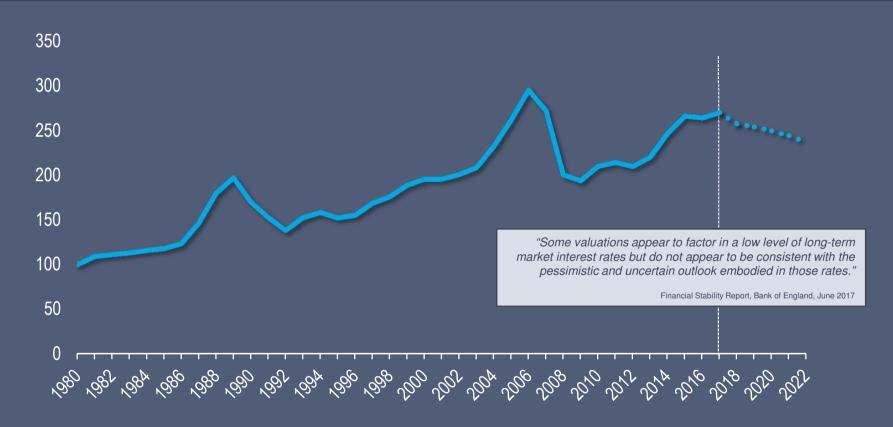


Source: Aviva Investors, 20 Oct 2017

Capital values to see some correction



Rental growth more modest, and yields set to rise



Lending

No debt bubble - leverage generally low





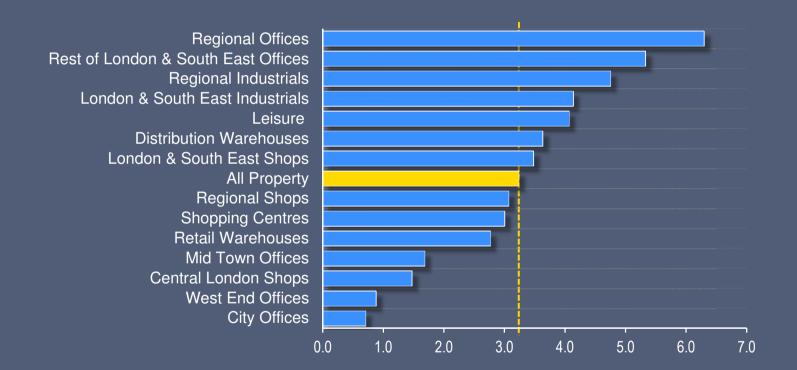


For illustrative purposes only

Modest outlook for real estate returns



Total returns forecast 2018 to 2022 % p.a.



The future of logistics

Locations that meet future supply chain demands





For illustrative purposes only

Urban logistics





A3205 NINE ELMS LANE



Source: CBRE, October 2017

Urban logistics





A3205 NINE ELMS LANE



The future of retail



High engagement experiences, empowered consumers



For illustrative purposes only

The future of offices



Robust locations where people want to live, work, play and learn









Scale

Skills

Clusters

Cities that will drive growth of the knowledge based economy



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The Case for Change

- Capital
 - Multi Asset Class Funds
- Segregated Mandates
- Product
 - Floating Rate
 - Loan Size
 - Tenor
 - Asset class
- 2017 Achievements
 - New Mandates
- Closed First Floating Rate Deals
- Fully invested € Fund

The Case for Continuity



Why change what has made us successful?

- Unwavering Participation in the Lending Market for 35 years
- Stability of Offer
- Industry Relationships
- Customer Focused Service
- Tried and Tested Processes
- Good Ole Fashioned 'Gut Feel' for Deals
- Work with Borrowers During the Bad Times

The Case for Continuity



Continuing our Traditional Lending

Bruntwood

Size: £115.5m Term: 15 years Security: Twelve UK Regional Offices



Aquila

Size: £144m Term: 7 years

Security: Portfolio anchored by Bond Street, Chelmsford



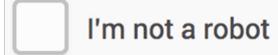
The Case for Evolution not Revolution

















CBRE All Property Index - 2017



CBRE All Property Monthly Index												
	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17				
Rental Value Growth	103.6	103.3	102.9	103.3	105.4	109.5	112.2	113.9				
Capital Growth	101.6	104.5	101.2	102.2	115.2	126.4	124.3	130.6				

As a collective the 63 respondents under estimated

- Rental growth by 1.15% with an average of 112.59
- Capital growth by 7.47% with an average of 120.84

The closest predictions

- Rental growth Andrew Surgenor (CBRE) 0.02% out
- Capital growth Colin Jennings (LSH) 2.60% out

Company Results The best and the worst





Simon Cullimore Jeremy Handley Peter O'Brien

Tim Luckman



Tim Henman Andrew Surgenor Barry West

Charlotte Low



Sarah Marshall Andy Peeke-Vout James Payne

Mark Hurren



Dan Pearce David Raw Chris Jones

Tom Nuttall

Lambert Smith Hampton

Colin Jennings Rob Harrison Chad Davies

Tom Ridge

MONTAGU EVANS

Caroline Parker Andrew Hues Keith Hutchison

Scott Zanre

THE BEST OF THE REST

David Ogilvie Warren Epstein Jonathan Langstaff

Matthew Nagle

Source: Aviva Investors 2017

Winners Podium - 2017



Firm	Individual	Capital Growth	% Out	Rental Growth	% Out	Difference %	Final Position
Lambert Smith Hampton	Colin Jennings	127.2	-2.60	114.1	0.18	2.78	1st
Dacres	David Ogilvie	127.1	-2.68	113.7	-0.18	2.86	2nd
Lambert Smith Hampton	Rob Harrison	126.0	-3.52	114.3	0.35	3.87	3rd
MONTAGU EVANS	Scott Zanre	108.9	-16.62%	106.6	-6.41	23.02	WOODEN SPOON

Source Aviva Investors October 2017





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