Legal & General Investment Management

CISI Event: Biases and investing

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What do we do to control this?





Goal setting



Too little risk



Paths matter



Under the influence



1. Too little risk – Myopic risk aversion (reckless prudence)



Be wary of making decisions in isolation, leading to too little risk taking



Source: LGIM

2. Paths matter – Prospect theory

People evaluate decisions from their current states

- So paths of investment returns matter
- **Q:** Which of the following is intuitively more appealing?
 - 1. Win £10m, then lose £9m
 - 2. Win £1m



Investors will accept lower outcomes for a smoother ride



Source: LGIM

-3. Under the influence - Framing



How information is presented impacts decisions investors make



Source: LGIM

- Putting asset classes into competition

Relative valuation is important to help avoid framing



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Source: * Earnings before interest and taxes over enterprise value for MSCI World ** Updated version of King & Low (2014) global real yield

L Investing



Gut feel



Anchored



Neglectful



We are influenced by what is in front of us



"Trump to expand US military intervention in Afghanistan"

Trump "I'll close government" to build a wall

"EU is 'confused and puzzled' about UK's post-Brexit trade plans"



Source BBC News

4. Gut feel – Recency effect

People extrapolate recent events into the future indefinitely

Survey Period	Net% FM OW Global Equities	Change From Previous Month	Performance of Global Equities Between Survey Periods
07/11/2014 13/11/2014	46%	12%	4%
05/12/2014 11/12/2014	52%	6%	2%
09/01/2015 15/01/2015	51%	-1%	1%
06/02/2015 12/02/2015	57%	6%	4%
06/03/2015 12/03/2015	58%	1%	1%
02/04/2015 09/04/2015	54%	-4%	1%
08/05/2015 14/05/2015	47%	-7%	0%
05/06/2015 11/06/2015	38%	-9%	-1%
02/07/2015 09/07/2015	42%	4%	-1%
07/08/2015 13/08/2015	41%	-1%	2%
04/09/2015 10/09/2015	17%	-24%	-8%
02/10/2015 08/10/2015	26%	9%	-1%

Everything we see, read or hear, unduly influences our decisions



Source: Bank of America Merrill Lynch, LGIM

-...which can lead to too much emphasis on one thing

The Roadmap Central Scenario



We're not always as in control of our decisions as we believe we are



Considering a wider range of possibilities





...helps us avoid the availability bias

5. Anchored – anchoring and adjustment

Q1: Are more or less than 10% of African countries members of the United Nations?Q2: What percentage of African countries are members of the United Nations?





We tend to anchor first, and then never adjust enough



Source: LGIM

-How do we structure ourselves to avoid this?



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6. Neglectful - base rate neglect

Based on the SPIVA report, the percentage of active European funds beaten by their benchmark ranged from 57% to 80% depending on the period¹

Q: What do you think your success at selecting active European equity managers is?



Remember, you can't all beat the odds!



¹ Source: S&P Dow Jones Indices, LLC. Data is as of June 30, 2016.

^L Miss-calibration is common, but dangerous

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Source: Some representative calibration curves. (Taken from Lichtenstein, Fischhoff, & Phillips, in press. Copyright 1977 by D. Reidel Publishing Co. Reprinted by permission.)

L Evaluation leads to innovation







^L Variation is key

Key Risk Scenario Analysis team



Independent decision-making

Discuss differences in opinions, don't take average

Rotate 3 key inputters and lead input coordinator

The lead input coordinator rotates

Changing the structure of a process helps avoid anchoring



L Stupidity of crowds

Discussion about European credit markets

between experts from the asset allocation and active fixed income teams

Decisions made in small groups helps avoid CONSENSUS thinking



L Invested



Single-minded



Attached



Egocentric



7. Single-minded - confirmation bias

Facts are then found to support our conclusion, while evidence to the contrary is ignored (c.90% of voters were unaffected)

E.g. Additional information on African countries:



- Somalia and Sudan are in the bottom three countries globally for corruption. There are three long-running African wars that claimed over 1,000 lives each since 2014
- Real GDP has more than doubled in 20 years and average years of school education more than doubled since 1975

Are you making sure you're considering all the facts?



Source: LGIM

8. Attached - endowment effect

Owning something makes it more valuable to you

• We asked people to value a book:



Start with a blank piece of paper!



Looking at the whole universe

Multi-Asset Scorecard	Macro and Fundamentals	Long-term factors	Tactical factors	Scenario Analysis	Tail risks	Overall score
Equities	•	•	•	•	•	•
Real estate	•	•	•	•	•	••
Duration	•	-	•	•	•	•
GBP	•		•	•	•	•
Credits	•	•	•	•	•	•
Inflation	•	••	•	•	•	••
Commodities	•	•	•	•	•	•



9. Egocentric bias

There is a tendency to ascribe more responsibility to the things that you do

- **Q:** How impacted were you by the biases?
- 1. Less than the average person

57%



2. More than the average person

43%

• People will over-weight successes and their contributions to group outcomes

Objectively consider everything and everyone that contributes to an outcome



Source: LGIM

-Record trade rationales

Long Russian ruble vs. commodities

- Why do we like it?
- What do market signals tell us?
- What do we expect next?
- What could go wrong?







Source: LGIM, for illustrative purposes only.







-Lessons learned



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