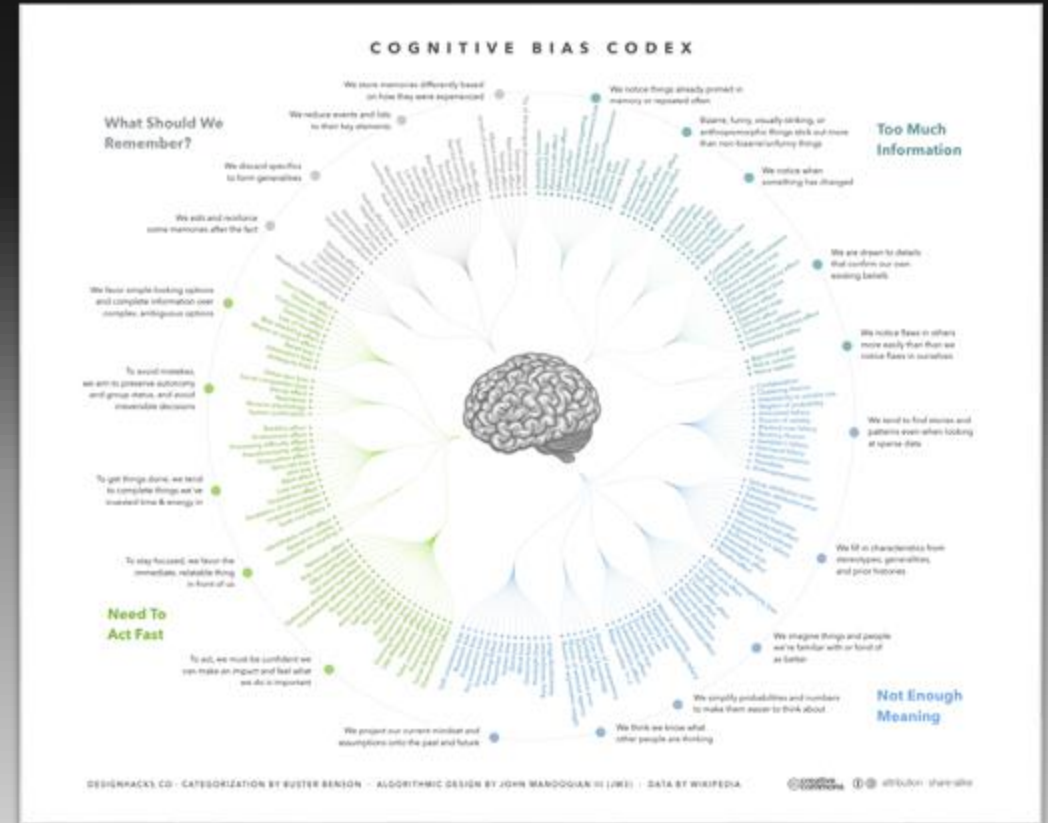# The Financial Services Club
News **E**vents **P**artnerships

All Too Human: Behavioural Finance Biases in Trustee Decision Making

Webinar

Thursday 21 May 2020

COGNITIVE BIAS CODEX

A Word From Our Chairman

Professor Michael Mainelli

Executive Chairman
Z/Yen Group

LONG FINANCE

Recent Publications
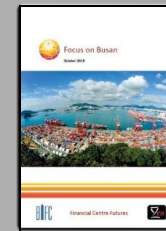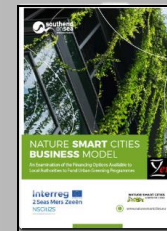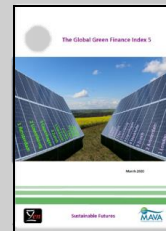
Agenda

12:00 – 12:05   Chairman's Introduction

12:05 – 12:30   Keynote Address

12:30 – 12:45   Questions & Answers

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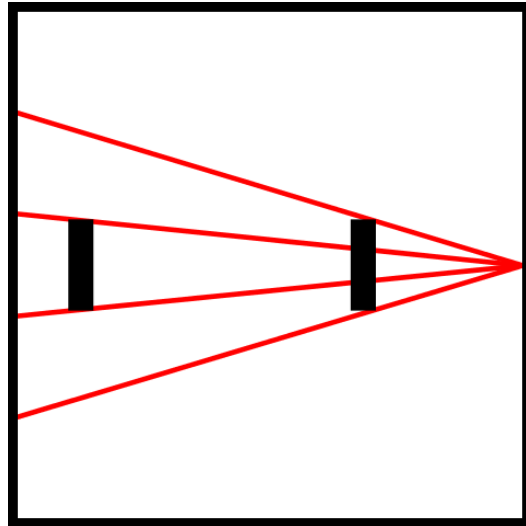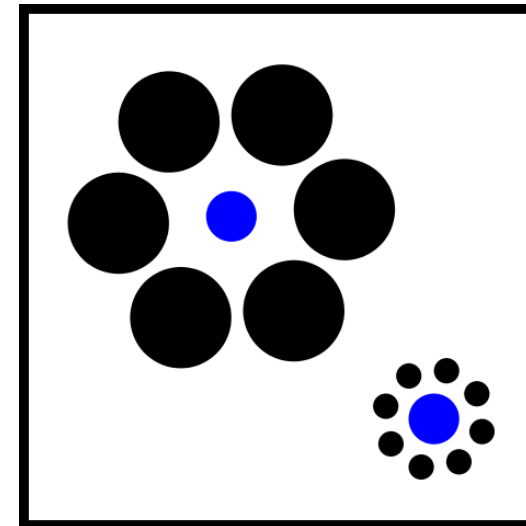
Background

Cognitive biases

Cognitive biases such as visual illusions do not imply that we cannot navigate the world successfully

Ponzo Illusion

Ebbinghaus Illusion

Cognitive biases

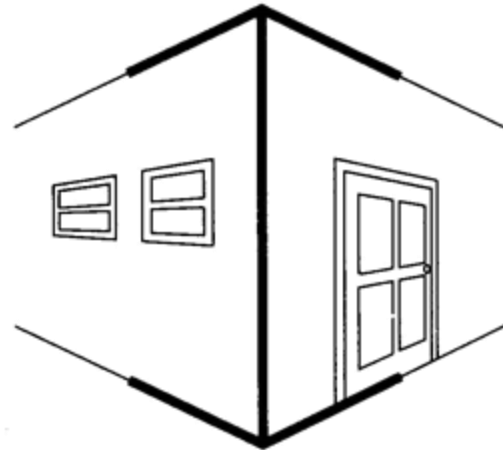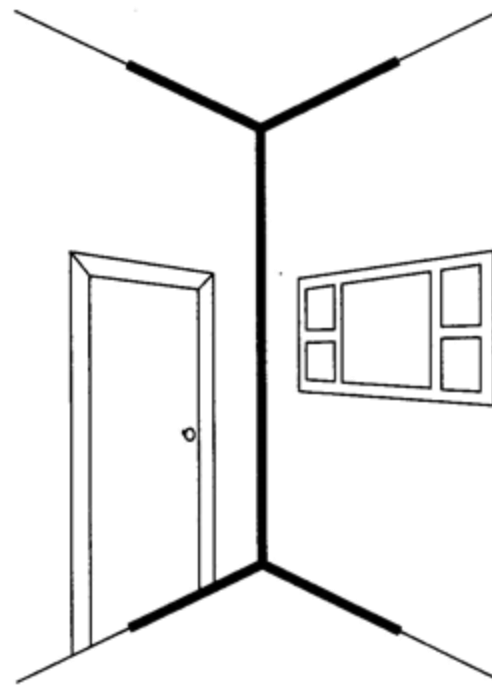Muller-Lyer illusion: Adaptation to a rectangular world?

Cognitive biases

Muller-Lyer illusion: Adaptation to a rectangular world?

Judge-advisor systems

Judges egocentrically discount advice received

However advice can receive higher weights in certain situations – <u>all below apply to trustees</u>

- When the decision is cued, and not independent

- To diffuse responsibility (legal liability of trustees)

- When the task is complex/important

- When the adviser is confident and articulated

- When advice is paid-for

Surrogate decision-making

Surrogates are really poor at making decisions for others

Surrogates project their own preferences, and adjust (insufficiently) from them

Choose what other *should* do, instead of what they *would* do

Choices are more regressive towards social norm / less extreme

- Can lead to wrong levels of risk taking

New empirical research

- We collected data on-line and in person from 208 trustees

- Trustees accessed via Aon,

- We will report the findings from 3 experiments

- All experiments based on scenarios familiar to trustees (e.g., "We would like you to imagine that you are a trustee of a DC pension scheme. As part of your duties, you must help select the default investment funds.")

Data

- Three types of trustees:
  - Member-nominated
  - Employer-nominated
  - Professional
- Significant differences in expertise metrics
  - Professionals worked longer as trustee, have finance jobs, have investments – more experienced with financial markets
  - Member-nominated worked fewer years as trustees, have fewer financial qualifications, roles, or personal investments
  - Employer-nominated are between the other 2

Measurement	Member nominated	Employer nominated	Professional	Difference
Age	60	57	60	p=.16
Female	14%	20%	19%	p=.62
Trustee (yrs)	8.5	9.9	12.9	p=.002
Qualification	25%	48%	55%	p<.001
Finance job	21%	41%	66%	p<.001
Investments	70%	79%	91%	p=.01
Total YES	1.2	1.7	2.1	p<.001
Weighted	10.2	15.0	25.3	p<.001
Total Count	**133**	**61**	**58**	

Experiment 1: Naïve diversification set-up

2 Funds - Balanced

Fund
FTSE All-Share companies
FTSE UK Conventional Gilts All

4 Funds - Balanced

Fund
FTSE All-Share companies
FTSE 100 companies
FTSE UK Conventional Gilts All
FTSE UK Conventional Gilts over 15 years

2 Funds – Unbalanced/Shares

Fund
FTSE All-Share companies
Balanced Fund (50% FTSE All-Share, 50% FTSE All Gilts)

4 Funds – Unbalanced/Shares

Fund
FTSE All-Share companies
FTSE 350 companies
FTSE 100 companies
FTSE UK Conventional Gilts over 15 years

There were 2 more conditions unbalanced towards bonds

Experiment 1: Naïve diversification results

Condition	Bond % (95% CI)
Balanced	63% (56%~69%)
Bond-Heavy	70% (63%~76%)
Equity-Heavy	44% (37%~51%)

Condition	Concentration (95% CI)	Funds Chosen
2 Funds	0.67 (0.63~0.71)	1.8 (1.6~2.0)
4 Funds	0.44 (0.39~0.49)	2.8 (2.6~3.0)

- The Mix of Funds influenced the proportion allocated to bonds (p<.001)
- All trustee types showed the same bias (p=.13)

- The Number of Funds offered influenced the number of funds chosen and concentration between funds (p<.001)
- All trustee types showed the same bias (p=.27)

Experiment 2: Framing / context effects set-up

Label 30%	Bonds	Stocks	Worst Case	Average Case	Best Case
	100%	0%	£11,000	£11,000	£11,000
	90%	10%	£10,750	£11,500	£12,250
	80%	20%	£10,500	£12,500	£14,500
	70%	30%	£10,000	£13,500	£17,000
	60%	40%	£9,500	£15,000	£20,500
Conservative	50%	50%	£9,000	£16,500	£24,000
	40%	60%	£8,900	£18,000	£28,000
Moderate	30%	70%	£7,000	£20,000	£33,000
	20%	80%	£6,000	£22,000	£35,000
Aggressive	10%	90%	£5,000	£24,000	£43,000
	0%	100%	£2,500	£26,000	£49,500

Label 70%	Bonds	Stocks	Worst Case	Average Case	Best Case
	100%	0%	£11,000	£11,000	£11,000
Conservative	90%	10%	£10,750	£11,500	£12,250
	80%	20%	£10,500	£12,500	£14,500
Moderate	70%	30%	£10,000	£13,500	£17,000
	60%	40%	£9,500	£15,000	£20,500
Aggressive	50%	50%	£9,000	£16,500	£24,000
	40%	60%	£8,900	£18,000	£28,000
	30%	70%	£7,000	£20,000	£33,000
	20%	80%	£6,000	£22,000	£35,000
	10%	90%	£5,000	£24,000	£43,000
	0%	100%	£2,500	£26,000	£49,500

Experiment 2: Framing / context effects results

Trustee Type	Bonds %		p value
	Label 30%	Label 70%	
Member nominated	34%	48%	.01
Employer nominated	25%	27%	.85
Professional	27%	26%	.85

- Member-nominated trustees were influenced by the extraneous labels, choosing the fund labelled "moderate" more often
- Employer-nominated and professional trustees not influenced by the labels
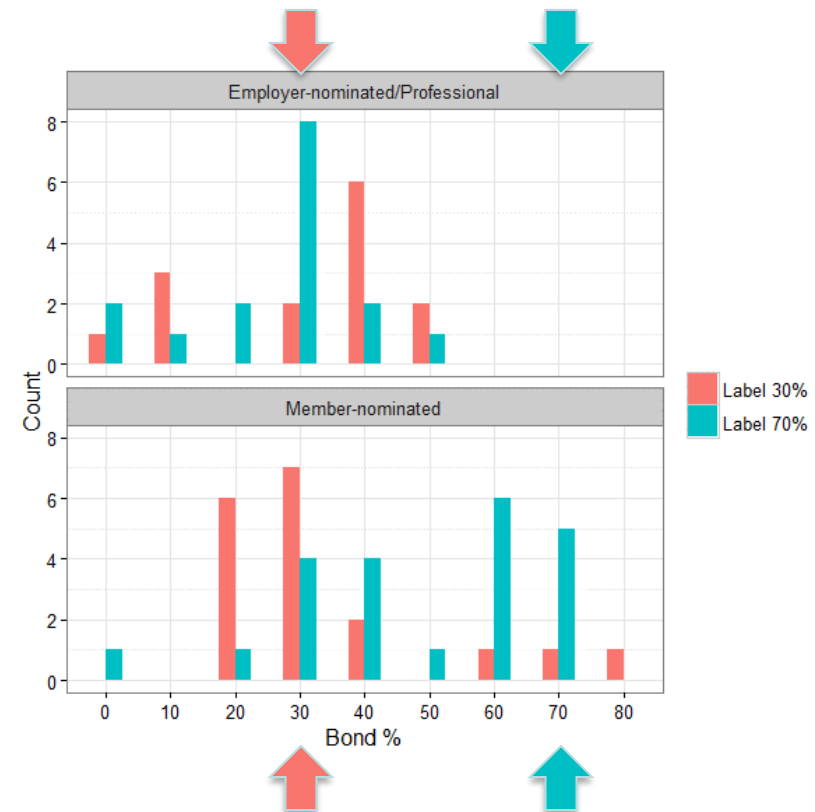
# Experiment 3: Surrogate decision-making set-up

- **Scenario: Assume a state pension of £7200/year, retirement at 65, contributions for 45 years, final salary of £60,000**

- **Question: What is an appropriate level of pension replacement income (excluding state pension or savings):**
  - For an average DB pension scheme member?
  - For an average DC pension scheme member?
  - For you?

Experiment 3: Surrogate decision-making results

- **Trustee's own replacement ratio significantly influenced their answer (b=0.42, p<.001)**
  - Surrogate decisions adjusting from own preferences
  - Relatively richer trustees' answers might not be applicable to general member population
- **Higher answers to DB (59%) funds than DC (51%) funds (p<.001)**
  - Legacy effects
- **Target ratios should be independent**
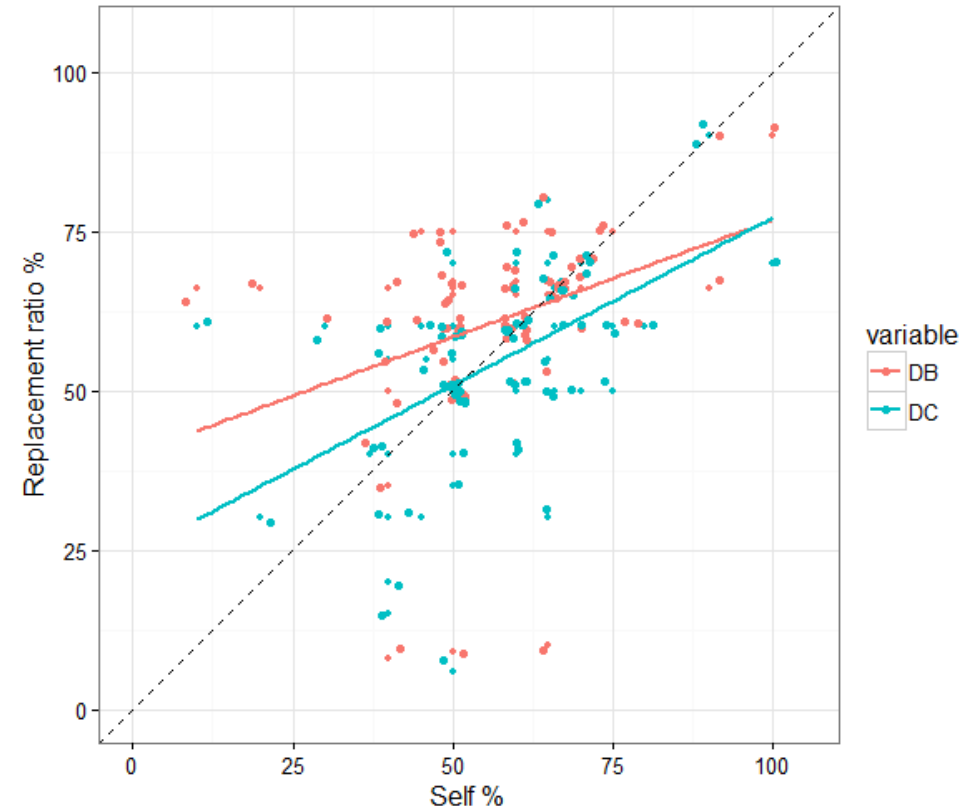
Conclusions

- Trustee decisions are set in environments that differ from the majority of extant behavioural finance research:

    - Sophisticated investors making decisions in group, with advice, on behalf of others

- Trustees unlikely to be immune from decision-making biases

- Further investigation of these biases crucial for sustainability of future pensions and influencing policy

Conclusions

- Trustees exhibit behavioural biases, but to a lesser extent than unsophisticated investors

- Less experienced member-nominated trustees generally more susceptible to biases than more experienced professional trustees

- Trustees displayed naïve diversification, were influenced by extraneous information, and projected their own preferences when deciding for members

Questions, Comments & Answer(s)?

Thank You

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