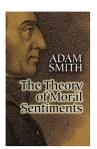


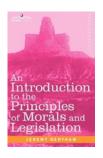
Behavioural Economics

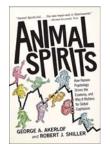
- Emotion matters for investing and consumption
- Herding Effects
- Default Effects
- Motivated Cognition
- Limited Consumer Understanding
- Heuristics
- Hyperbolic Discounting
- Affective Forecasting and Focusing Illusions
- Irrational Exuberance
- Market Instability



Animal Spirits









1759

1789

Economics can't afford to overlook the role of **emotions** in decision making: pain, pleasure, arousal, hunger, thirst, anger, hatred, contempt, pity, etc...

Broken Financial Systems

- Robert Shiller
- Overconfidence
- · Herding in Investment
- Consumer Biases
- Financial Advice Structures
- Poor Matching of Products to Risks

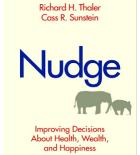


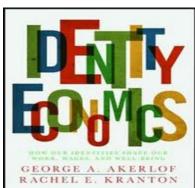
Animal Spirits

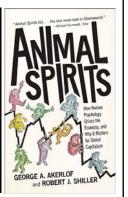
 "To understand how economies work and how we can manage them and prosper, we must pay attention to the thought patterns that animate people's feelings and ideas, their animal spirits". We will never really understand important economic events unless we confront the fact that their causes are largely mental in nature" Akerlof and Shiller



Economics with People









The Dragons of Inaction

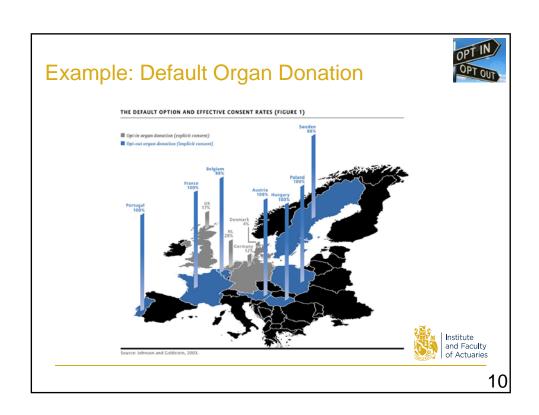
- 1. S1 vs S2
- 2. Hyperbolic discounting and present bias
- 3. Inertia & procrastination
- 4. Loss aversion
- 5. Limited attention
- 6. Ambiguity aversion
- Optimism bias
- 8. Self-efficacy
- 9. Social norms

- 10. Moral intuitions
- 11. Risk preferences
- 12. Habits
- 13. Ignorance
- 14. Ideologies
- 15. Discredence

"These dragons are not solitary creatures. They certainly interact. Indeed, their "DNA" undoubtedly is shared in some cases..." (Gifford, 2011).

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Libertarian Paternalism

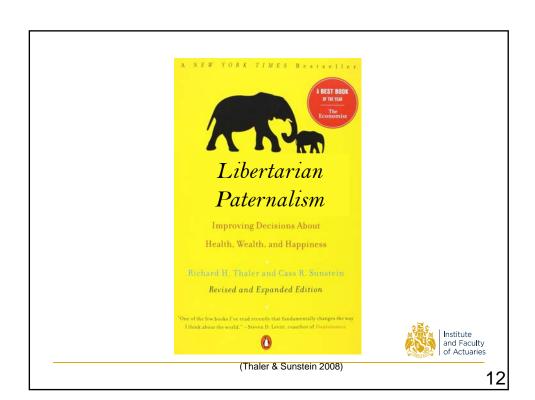
The **choice-architecture** is changed so that ...

... the individual **freedom of choice** is maintained and incentives are not changed significantly ("**Libertarian**").

... choosers are made **better off**, as judged by themselves ("**Paternalism**").

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6

Financial Regulation

- · Greater emphasis on local knowledge
- Limits on Consumer Exploitation
- Pension Auto-enrolment
- Intervention directly in consumer markets
- Understanding better incentives of financial advisors
- Examining structure of household wealth holdings



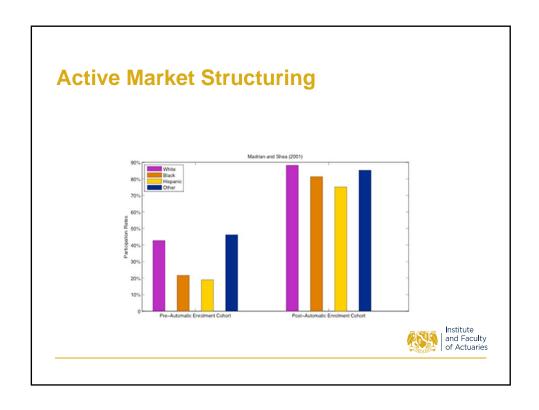
The single most celebrated policy of BLE

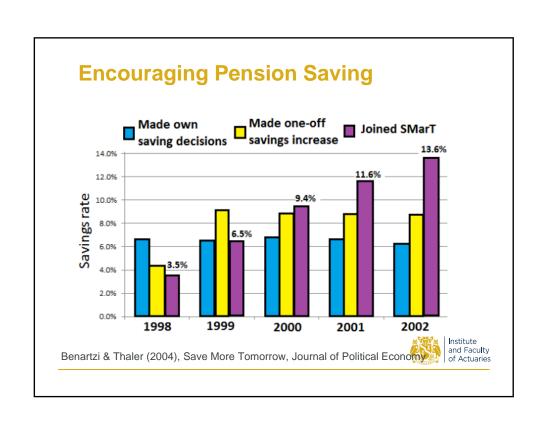


- Automatic enrolment retirement savings plans
- Broad appeal to both liberals and conservatives.
- "Automatic enrolment had become like apple pie on Capitol Hill — everyone was for it."

(Orszag, see Bubb and Pildes 2014)







Messenger	We are heavily influenced by who communicates information
Incentives	Our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms	We are strongly influenced by what others do
Defaults	We 'go with the flow' of pre-set options
Salience	Our attention is drawn to what is novel and seems relevant to us
Priming	Our acts are often influenced by subconscious cues
Affect	Our emotional associations can powerfully shape our actions
Commitments	We seek to be consistent with our public promises, and reciprocate acts
Ego	We act in ways that make us feel better about ourselves

Implications for Business

- New Product Development
- Regulatory Compliance
- Corporate Social Responsibility
- Consumer Exploitation?
- Different Models of Engagement with Regulators and Government

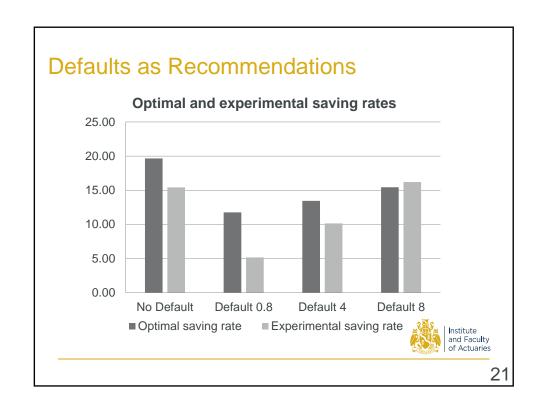


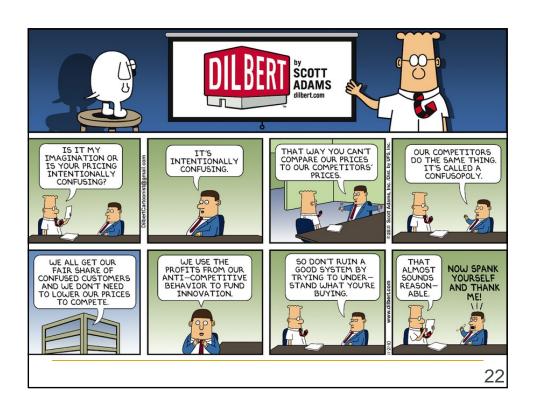


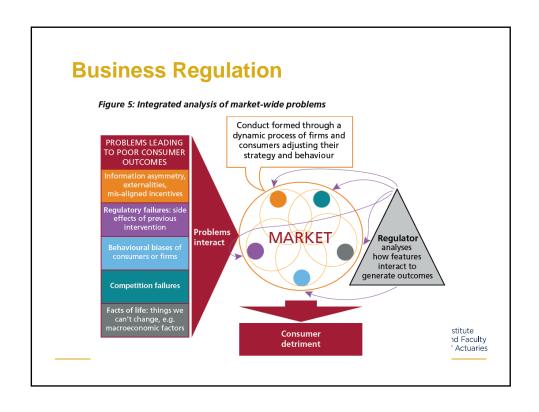
Unintended Consequences

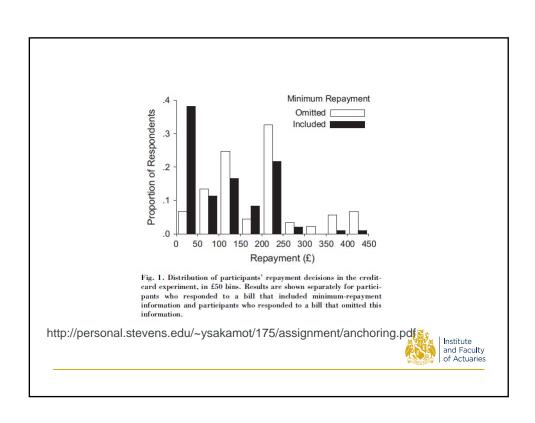
- Defaults acting as anchors
- Context matters
- Boomerang effects
- Public perception of manipulation
- Poorly designed attempts at Nudging Behaviour











Economic Sustainability

- Sustainable household finances
- More active financial regulation
- Trust in Financial Institutions
- Insolvency Resolution
- Early Intervention
- Barriers to entrepreneurship
- Retail Investment Markets
- Pension Autoenrolment



Practical Use for Companies

- · Limitations of rules or "checklist" models of BE
- BE basically still an inductive science in many cases
- Limits of RCTs methodologically and in terms of innovation as an exclusive tool
- Angry Birds innovation (Deaton)
- Importance of monitoring unintended consequences



Current Debate

- Nudge leads to too much intrusion
- Nudge leads to too little intrusion
- Need for wider concept of regulation
- Well-organised companies can side-step
- · Autonomy is over-rated
- Sunstein's reply



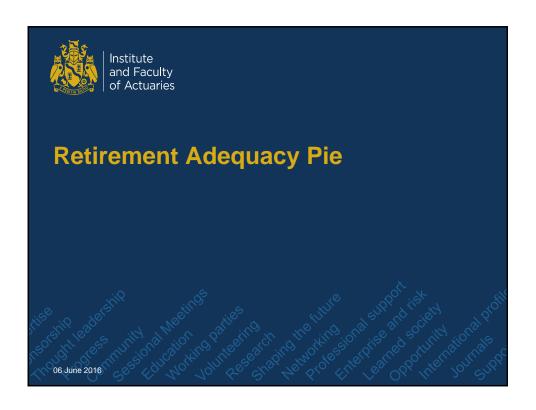
Conclusions

- Low Trust in Financial Institutions
- Confusing Markets
- · Regulation Traditionally Dominated by Rational-Choice Economics
- Behaviourally-Informed Regulation
- Examine Behavioural Biases
- Personal Responsibility



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Ingredient 1: The Customer

Jenny Christie



Vital statistics

- ➤ £1,390/month, c. £20k per annum
- **≥** 21
- ➤ Auto-enrolment 3% of salary, plus matching contribution

MILLENIAL!



06 June 2016



The Customer is not stupid...

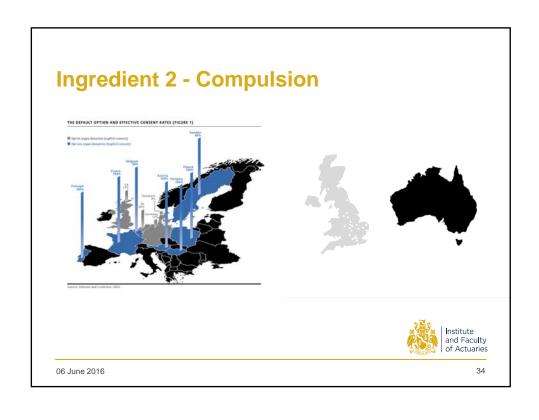


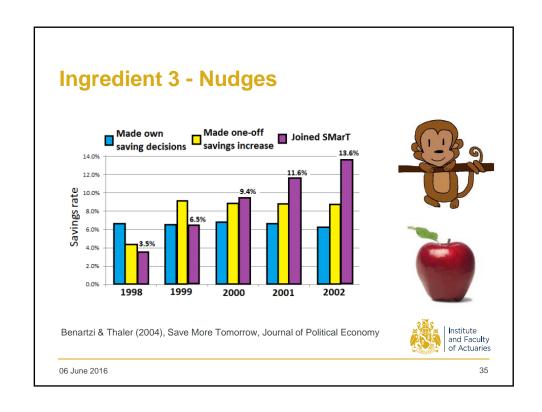


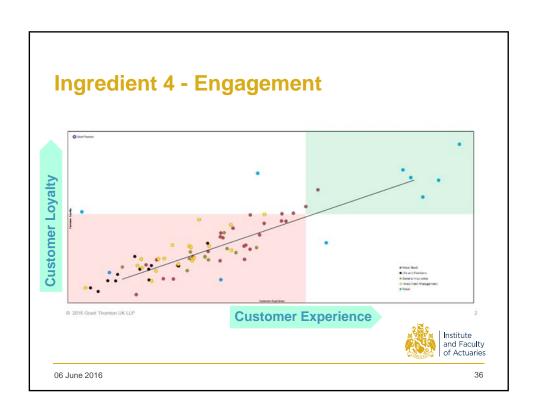


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Engagement (I) - product design

ACCESSIBILITY



63% of Millennials would save more if their pension account allowed multiple withdrawals

OWNERSHIP



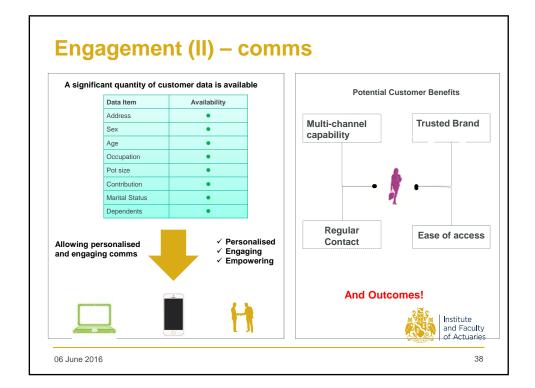
Contrast with bank account when you move job

MEANING

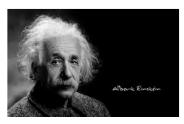
95% of Millennials feel that pension funds/insurers only provide limited, poor or no options for investing in Social Finance products Institute and Faculty of Actuaries

Source: BNY Generation Lost "Engaging Millenials with Retirement" https://www.bnymellon.com/_global-assets/pdf/our-thinking/generation-lost.pdf

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Ingredient 5 - #FinancialEducation



"Compound interest is the eighth wonder of the world. He who understands it, earns it ... he who doesn't ... pays it."

"Compound interest is the most powerful force in the universe."

"Compound interest is the greatest mathematical discovery of all time."



06 June 2016

#FinancialEducation (I)

So what if Jenny put the equivalent of one cup of coffee per day into her pension?









£2.50

£2.50

£2.50

- 1. Jenny triples her money, instantly
- Free money? Yes her employer matches her contribution ie also puts in £2.50. And this is tax free, so Jenny gets another £2.50 from the government £7.50 into her pension pot.
- 2. So this is quite a lot, per year
- 200 days at £7.50 per day that's $\pmb{£1,500}$ in the pension (before charges and investment returns)
- 3. But a bit less in her pocket
- Yup, she's given up £500 of pay (200 * £2.50) ... but she's got £1,500 into her savings scheme

is worth £1,500 a year!!!



#FinancialEducation (II)



So what if Jenny did this for 40 years?

8,000 coffees



1. How much has she put in?

So coffee has got even more expensive (its now $\pounds 5.52$), so Jenny has put in a whopping $\pounds 31,305!$

2. And the rest

That's right – her employer has matched it – and she's got tax relief – so £93,915 has gone in!

Assuming a return of 5.92% and charges of 0.75% - Jenny has also had investment returns of £180,061 – double what she has put in

3. And some investment returns



is worth £273,976!!!



#FinancialEducation (III)

And how about one last 10 year period – working till 70 – when she decides to put her feet up



10,000 coffees



1. How much has she put

Coffee is now £6.73! Jenny has put in an extra £12,000 in her last decade at work – totalling £43.635

2. And the rest

Yup – you're there already – so in total the money in is c. £131,000 pounds

3. And some investment returns

In the last 10 years alone, investment returns are $\pmb{£370,\!000}$ (nearly £200,000 more than in the previous 40!!!) – causing her pot to almost double



is worth £501,232!!!



#FinancialEducation (IV) - So what?!

1. Your pension is part of your pay If you choose not to contribute you are giving up on all those employer contributions deal and tax relief

Do you know anyone who would willingly give up a significant proportion of their pay?

2. Little and often - KEEP GOING Paying in a small amount regularly over the long run makes a HUGE difference - be persistent - it's a waiting game

3. You need a very big pot to pay for your retirement...but its very achievable

At age 60 – you might only get £3,000 to £4,800 pounds income per year for each £100,000 of savings (depending on which option you take). so at age 60 Jenny might get somewhere between £8,000 and £13,000 pounds p.a.

At age 70 this improves to between £4,100 to £6,200 pounds income for each £100,000 of savings, so at age 70 Jenny might get somewhere between £20,500 and £31,000 pounds p.a



is worth a comfortable retirement



and Faculty of Actuaries

Questions Comments

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