

# Behavioral Economics and Insurance Regulation

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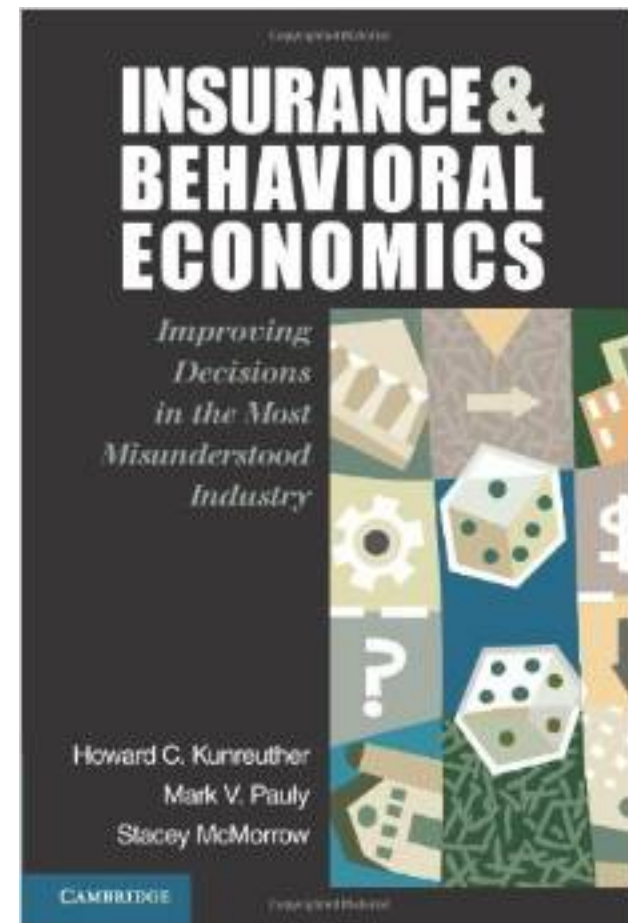
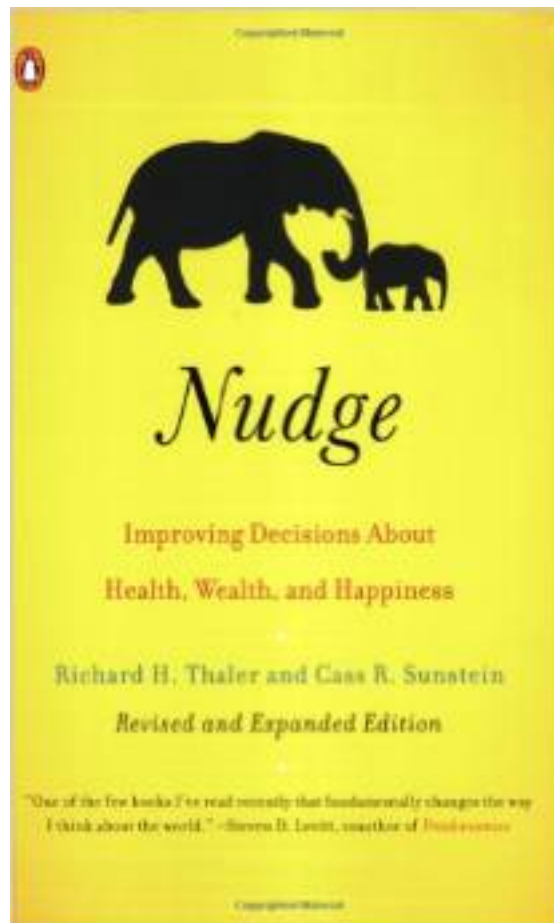
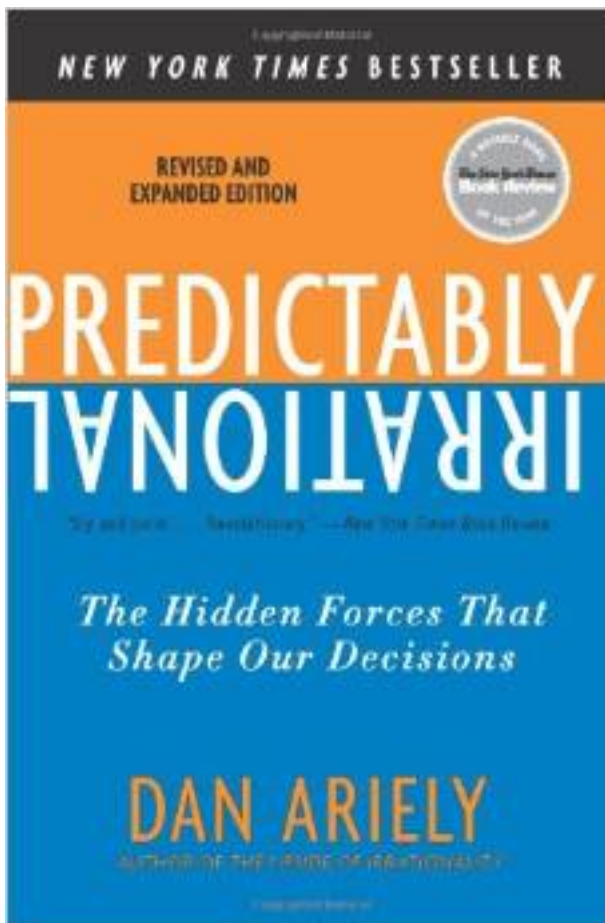
Econ?



Human!



Dunce?



Baker & Siegelman, Behavioral Economics and Insurance Law: The Importance of Equilibrium Analysis, in *Handbook of Behavioral Economics and Law*, Eyal Zamir and Doron Teichman, eds., (2014)

# Anomalies (Relative to Econs)

- Insurance against irrationally small risks
  - Deductibles that are too low
  - Extended warranties
- Shadow deductible
- Insurance for emotionally treasured objects
- Preference for no-claim rebates & deferred dividends
- Preference for insurance against named risks
- Underinsurance for infrequent big risks (flood)

# Biases affecting perceived value

- Excessive discounting (decrease value)
- Over optimism (decrease value)
- Loss aversion (increase value)
- Emotional attachment (selective increase)
- Availability heuristic (depends)
- Regret aversion (increase value for frequent small losses; decrease value for infrequent large losses)
- Threshold effects (depends)
- Overconfidence/Control illusion (depends)

# Information processing issues

- Hyperbolic discounting
- Complexity aversion
- Aversion to contemplating some topics (death)
- General cognitive constraints relative to the information demand needed to assess value

# How to help Humans?

- Insurance economics still provides the best guide to when insurance is worth it
- Multiple biases/cognitive limits pointing in different directions
- Assuming we understand the relevant biases/cognitive limits:
  - De-biasing & overcoming limits are very difficult
  - Can the market be structured to reduce the impact of the bias or cognitive limit? **Sometimes.**
  - Does it need to be? **Not always.**

# Extended Warranties vs. Low HO Deductibles

- Similarly irrational for an Econ to purchase
- Similar BE explanations for why Humans purchase:
  - Regret aversion
  - Mental accounting
  - Loss aversion
  - Availability heuristic
- BUT very different market context:
  - Shrouded pricing (situational monopoly) for extended warranties means price is WAY above cost
  - Low deductible HO leads to actuarially rational risk segmentation, so price is in line with cost
  - See Baker & Siegelman, “You Want Insurance with That?” Using Behavioral Economics to Protect Consumers from Add-On Insurance Products, 20 Conn. Ins. L. J. 1 (2013) (relied on by the FCA in General Insurance Add-Ons Market Study, MS 14/1)



# BE ideas for annuities

(Market is already doing this)

- Optimism bias + over confidence = I can do better by saving/investing than giving my \$ to insurers
  - Scare stories (availability heuristic)
- Loss aversion: premiums are framed as losses.
  - Reframe premiums as an investment
- Regret aversion: what if I die too soon?
  - Provide death benefits

# APPENDIX

**Table 1: Extended Warranty Calculations**

**Assumptions**

|  |                            |
|--|----------------------------|
| TV Lifetime  | 5 years                    |
| Lifetime probability of repair <sup>33</sup>                               | 20%                        |
| Annual probability of repair   | $1 - (1-.2)^{1/5} = 4.3\%$ |
| Prob. of repair in 2 out-years<br>(not covered by manufacturer's warranty) | $1 - (1-0.43)^2 = 8.5\%$   |
| Cost of Repair <sup>34</sup>   | \$400                      |

**Results**

|                                     |                                  |
|-------------------------------------|----------------------------------|
| Expected Value of Warranty          | $0.085 \times \$400 = \$34.16$   |
| Cost of 3 year Warranty             | \$349                            |
| <b>Cost/Expected Monetary Value</b> | <b><math>\approx 10/1</math></b> |

# Why Prices are So Far Above Cost

- **Shrouded pricing**
- Stage 1 Base product
  - Advertised, competitive pricing
- Stage 2 Optional, secondary purchase
  - **Situational monopoly pricing**

# Regulatory Approaches to EW

- Enhanced disclosure
- Ban point of sale purchase of add on
- Price regulation
- Open up the situational monopoly

# FCA's Market Study

- Require firms to make public their claims ratios
- Ban point of sale purchase for certain services
- Ban pre-ticked boxes

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- Price comparison websites