### Smart Regulation and Smart Investment (With Nudges)

Cass R. Sunstein
Harvard Law School

Administrator, White House Office of Information and Regulatory Affairs, 2009-2012

## Evidence, Not Intuitions



#### **Toward Regulatory Moneyball**

"The guy's an athlete, Bill," the old scout says. "There's a lot of upside there."

"He can't hit," says Billy.

"He's not that bad a hitter," says the old scout.

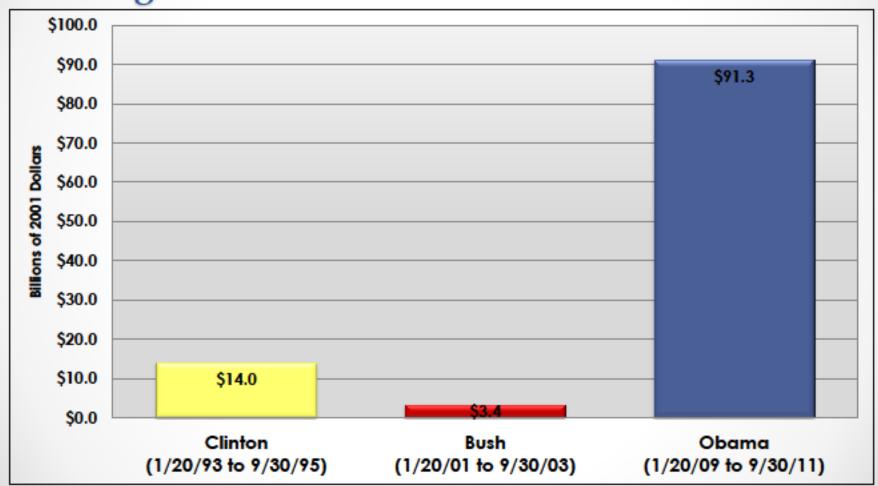
. . .

Paul reads the player's college batting statistics. They contain a conspicuous lack of extra base hits and walks.

"My only question," says Billy, "if he's that good a hitter why doesn't he hit better?" . . .

Over and over the old scouts will say, "The guy has a great body," or "This guy may be the best body in the draft." And every time they do, Billy will say, "We're not selling jeans here," and deposit yet another highly touted player, beloved by the scouts, onto his [bad] list.

### "We're Not Selling Jeans Here": Total Annual Net Benefits of Major Rules through Third Fiscal Year of an Administration



# Executive Order 13563: "Mini-Constitution"

- 1) Cost-benefit analysis; maximize net benefits
- 2) Nudges: "each agency shall identify and consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public. These approaches include warnings, appropriate default rules, and disclosure requirements."

# Executive Order 13563, continued

- 3) Public participation: "[E]ach agency... shall seek the views of those who are likely to be affected, including those who are likely to benefit from and those who are potentially subject to such rulemaking."
- 4) Integration and coordination: "Some sectors and industries face a significant number of regulatory requirements... Greater coordination across agencies could reduce these requirements, thus reducing costs and simplifying and harmonizing rules. ... [E]ach agency shall attempt to promote such coordination, simplification, and harmonization."
- 5) The Regulatory Lookback

## Concepts

- Nudge: libertarian paternalism. Influences choices but let people go as they see fit. Cafeteria design; automatic enrollment; framing (gains vs. losses)
- Choice architecture. All of our choices have architecture behind them. Rental cars, cell phone plans, mortgages, heath care
- Human errors; a) probability, b) optimism, c) longterm, d) attention (we don't notice; gorilla)
- Simpler: Complexity is (very) harmful; cf. CARD Act (\$20 billion saved annually!)

# Daniel Kahneman, probably the most important behavioral scientist



### Two Systems in the Mind

- System 1: Automatic, effortless, fast
- System 2: Deliberative, calculative, slow
- Some errors disappear when people speak in a foreign language

Helps explain human errors and need for nudges:

- (1) Importance of "channel factors" (eg maps)
- (2) Importance of salience ("you can't miss it")
- (3) Harmful effects of complexity
- (4) Immense power of default rules

# Common Investor Errors: A Catalogue

- Availability heuristic (recency bias; chasing trends)
- Unrealistic optimism
- Myopia and procrastination (focus on shortterm)
- Overconfidence (men worse than women)
- Unrealistic optimism
- Loss aversion (losses much worse than gains)
- Disposition effect (selling stocks too quickly that have appreciated in price, while holding on too long to stocks that have depreciated in price)

### More Investor Errrors

- Myopic loss aversion (equity premium puzzle)
- Informational cascades (herd behavior; can be rational; cf. Shiller and bubbles)
- Obvious behavioral solution: low-cost index funds and diversification

## Financial Education?

- Challenge: The record is mixed.
- Overview from Lauren Willis (2014):
- "Studies of existing programs have shown that even semester-long highschool courses and 18 months of adult credit counseling have not been enough."
- "Lack of interest or even resistance to participation is another obstacle that is costly for financial education to overcome. Voluntary financial education is widely available today, yet seldom used."
- "The ultimate challenge for financial education is that even those who are financially knowledgeable and skilled make poor financial decisions surprisingly often. Logical decision-making can be trumped by a host of biases, heuristics, and emotional states, all of which have been extensively documented in the personal finance realm."

# Alternatives to Education?

- Willis, Thaler, Sunstein: Retirement savings defaults have been more effective than retirement savings education, and they cost little to put in place.
- Maybe better than education: Provide professional assistance to help consumers to navigate the market.
- Maybe better than education: substantive restrictions might help on poor decisions (eg, company stock)

#### Four General Principles for Helping Investors

- Automatic
- Simple/easy
- Intuitive
- Meaningful
- Do Not Strain System 2

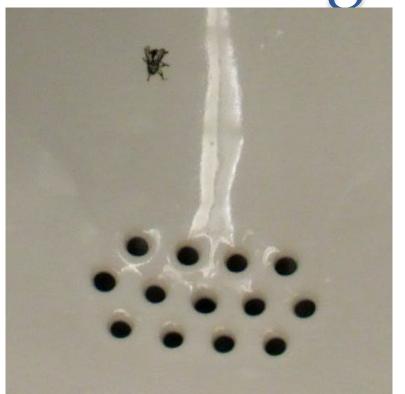
## Nudges vs. Standard Economic Tools

- Chetty et al.: Automatic enrollment has a much bigger effect than significant tax incentives (Denmark) (US Gov has responded)
- Opower: Home energy report has a bigger effect on energy use than significant price increases
- FAFSA simplification effect equivalent to a several thousand dollar education subsidy (US Ed Dept has responded; cf. new ACA application)

# What is a Nudge (1)? A GPS is. Also and similarly:



What is a Nudge (2)?



## What is a Nudge (3)?

#### Virtual Ageing Simulation



A: Actual photo of First Author



B: Non-aged Digital Avatar

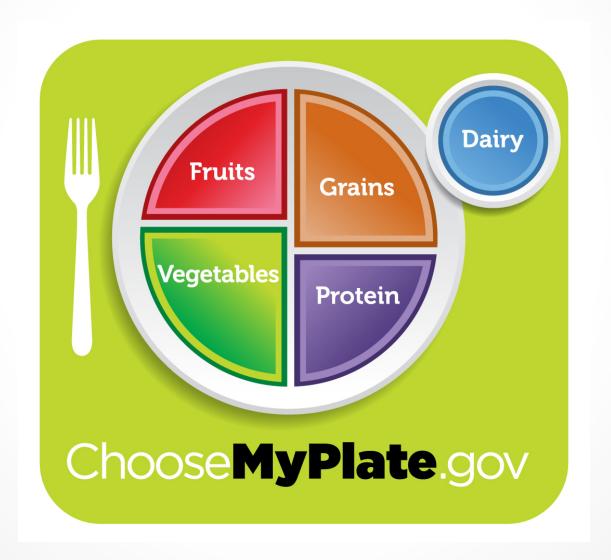


C: Aged Digital Avatar

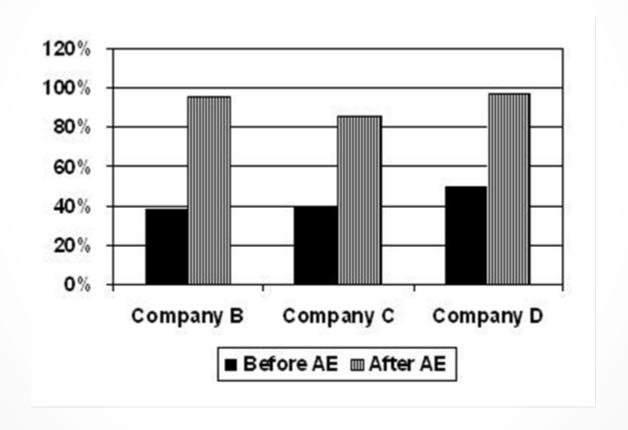
### Old USDA Food Pyramid



#### **New USDA Food Plate**



# Automatic Enrollment Is a Nudge



#### Opt in vs. Opt out

- More people will stay in under "opt out," even if transactions costs are very low, and hence default rules matter
- Examples: savings; health insurance; school meals; electronic rather than paper reporting and filing; privacy
- Cautionary notes on automatic enrollment and automatic escalation

#### President Obama on opt-out:

"[W]e're going to make it easier for small businesses to do what large businesses do: allow workers to automatically enroll in a 401(k) or an individual retirement account. We know that automatic enrollment has made a big difference in participation rates by making it simpler for workers to save – and that's why we're going to expand it to more people."

## Simplification Is A Nudge

- Basic finding: Complexity can have serious adverse effects, defeating program goals. (What seems to be resistance may be a response to ambiguity.)
- Financial Aid for College Reform enabling large numbers of students to attend college.
- Prescription Drug Plans
- Call to all agencies to simplify requirements, especially on small business and participants in federal programs
- Form Simplification Project

#### Social Norms Are Nudges

- Energy use: levels decrease when people learn that they are spending more money than their neighbors
- Tax compliance increases too
- Increase in usage of seatbelts, prompted in part by changing social norms
- Can be used in financial domain; investors are affected by perceived social norm

## Smart Disclosure: A Nudge

- Basic idea: disclose information in machinereadable formats
- Energy use
- Utility and electricity suppliers across the country have committed to provide more than 15 million households with access to data about their own energy use with an online "Green Button," which will enable homeowners and building owners to make smarter decisions
- Investments, retirement, credit cards, mortgages, and more

## Simpler: Regulatory Lookback

Executive Order 13563, Sec. 6(b)

"Within 120 days of the date of this order, each agency shall develop and submit to the Office of Information and Regulatory Affairs a preliminary plan ... under which the agency will periodically review its existing significant regulations to determine whether any such regulations should be modified, streamlined, expanded, or repealed ...."

## Regulatory Lookback: Results

- Over 500 reform proposals
- Preceded by public comment
- Many already finalized
- Over ten billion dollars in savings over next five years
- Sleeper Executive Order 13610
- "Members of the public . . . have important information about the actual effects of existing regulations. [A] gencies shall invite, on a regular basis . . . public suggestions about regulations in need of retrospective review."

### The Future

 "Agencies shall regularly report on the status of their retrospective review efforts to OIRA. Agency reports should describe progress, anticipated accomplishments, and proposed timelines for relevant actions... Agencies shall make final reports available to the public within a reasonable period."

## New Directions

- Greater simplification and ease
- Increasing empirical assessments of human consequences (randomized controlled trials)
- Retrospective analysis (crucial for private and public sectors)
- Cumulative burdens (for government to keep in mind)
- Nudges by private sector: doing good and doing well (cf. cascade effects)
- The tale of the FCC and "bill shock"

