From Behavioral Economics to Public Policy

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Orientation: Some Background

Findings

• Automatic enrollment in green energy has large effects
• Old German study
• New German study – tenfold increase!
• Green Party predictive? Yes – and then no
• A general finding, a significant fact: Automatic enrollment more effective than active choosing, which is more effective than opt in
• Both Americans and Germans LIKE automatic enrollment in green energy!
• Compare: Voter registration: Oregon, California, HRC
Orientation: US Policy, 2008-present

- Credit Card law
- Tobacco law
- Affordable Care Act
- Financial reform
- Greenhouse gases
- Fuel economy; energy efficiency
- Obesity
Orientation: Default Rules

- Savings (more coming)
- NY taxis
- Thermometer settings
- Why?
- Power of inertia
- Power of suggestion
- Loss aversion (golfers; teachers; DC bag experience)
Orientation: A Success Story?
Information Disclosure

• The tale of calorie labels (USG initiative)
• The sophisticated view, and the aggregate data
• Men
• Women
• What makes sense
• A puzzle
Orientation: Five Problems

- Poverty (uptake challenge; EITC)
- Highway safety (tens of thousands of deaths)
- Smoking (hundreds of thousands of deaths)
- Mental illness
- Energy and the environment (climate change)

What might help?
- Dozens of behaviorally informed policies from the US in recent years; possibly hundreds
Real Developments

- Behavioral Insights Team in UK
- US: White House Social and Behavioral Sciences Team
- New Team in Germany
- Activity in Australia, Canada, Mexico, Colombia, Italy, and many other nations
- Breaking news from Europe
- Behavioral Applications Without Dedicated Offices
Executive Order 13563: “Mini-Constitution” (2011) (Note: This is The Big One)

Flexible approaches: “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 as well as provision of information to the public in a form that is clear and intelligible.
Executive Order, Sept. 2015, from President Obama (Important too)

• “A growing body of evidence demonstrates that behavioral science insights -- research findings from fields such as behavioral economics and psychology about how people make decisions and act on them -- can be used to design government policies to better serve the American people.”

• “The Federal Government should design its policies and programs to reflect our best understanding of how people engage with, participate in, use, and respond to those policies and programs.”
A Question

• What happened?

• A glimpse:

• Human beings are rational
• They calculate probabilities and maximize “expected value”
• They respond to incentives
• Policy prescription: Improve incentives! (Becker)
Behavioral Objections (starting in 1970s)

- People have limited attention ("shrouded attributes")
- People show "present bias" (inertia, procrastination)
- People do not always deal well with probability
- People can be unrealistically optimistic
- People are "loss averse"
- Note relevance to finance and health
Six Behavioral Policy Claims (emphasized in 2000s)

• 1) Default rules matter (energy, savings, voting)
• 2) Incentives may not always matter (much)
• 3) Choice architecture is exceedingly important
• 4) Choice architecture is not avoidable
• 5) People can use a nudge
• 6) Simplicity is VERY important (“Simpler” as a mantra)
Some Data:
Automatic Enrollment and Savings

### Automatic Enrollment

<table>
<thead>
<tr>
<th>Annual Income</th>
<th>Voluntary Enrollment</th>
<th>Automatic Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30K</td>
<td>34%</td>
<td>78%</td>
</tr>
<tr>
<td>30K - 50K</td>
<td>57%</td>
<td>86%</td>
</tr>
<tr>
<td>50K - 75K</td>
<td>64%</td>
<td>91%</td>
</tr>
<tr>
<td>75K - 100K</td>
<td>74%</td>
<td>94%</td>
</tr>
<tr>
<td>100,000+</td>
<td>88%</td>
<td>96%</td>
</tr>
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</table>
Government Failure, in a Nutshell? FAFSA (this is a flowchart, not the form)

First Time FAFSA Filers:
- Apply for a PIN number from the Department of Education at www.pin.ed.gov for you and your parent if needed. The PIN serves as an electronic signature when filling for Free Application for Federal Student Aid (FAFSA), submitting a Direct Loan Master Promissory Note, etc.

Fill out the FAFSA completing student and parent information if required on or after January 1 of each year at www.fafsa.gov. UHV's priority date is March 15th.

Financial Aid sends a missing information notification to your UHV email account requesting additional information from you (or your parent). Links to requested forms are located at www.uhv.edu/ofa/forms.aspx.

Check your UHV email to see if any additional information is needed.

You submit all required documentation that is on your To-Do List in MyUHV to the Financial Aid Office.

After all documents have been submitted, reviewed, and processed, your aid package will be determined within the week (2-3 weeks during peak processing times)*

You will receive an award notice in your UHV email account with instructions indicating steps necessary to ensure you receive your awards.

Accept/decline your awards in MyUHV.

Funds are credited to your account and the Cashier's office will refund any balances according to your selected refund method (Jaguar Card, bank account, paper check).

Make sure your Jaguar Card is activated and a refund method is chosen.

Federal Processor receives FAFSA from student/parent via the web (PIN) and required signatures via the web (PIN) or mail (Signature Page) Processed FAFSA in Student Aid Report (SAR).

Interested in Leadership/Community Service Scholarships?

UHV receives your SAR data from the processor on Mondays. Applicants must be admitted to UHV before further financial aid processing can occur.

Once processed you will receive a Student Aid Report (SAR) and should review it for any needed corrections. The SAR is for your records. If you don't receive an SAR in 2-3 weeks, call the federal processor at 1-800-4-FED-AID.
What Is A Nudge?
What is a Nudge?
A Nudge That Went Wrong

DIE FLIEGE IST NUR AUFGEDRUCKT.
What Is A Nudge?

TAKE YOUR LITTER HOME OTHER PEOPLE DO
What Is A Nudge?

- Placing nutritious foods like broccoli at the beginning of the lunch line, rather than in the middle, increased the amount students purchased by 10 percent to 15 percent.
- Requiring or encouraging the use of cafeteria trays increased vegetable consumption: students without trays eat 21 percent less salad but no less ice cream.
- Decreasing the size of bowls from 18 ounces to 14 ounces reduced the size of the average cereal serving at breakfast by 24 percent.
- Keeping ice cream in a freezer with a closed opaque top significantly reduced ice cream sales.
What is a Nudge? (Without graphics)

• A feature of the social environment that affects people’s choices without imposing coercion or any kind of material incentive.
• Can be a psychic cost, though; definition might be slippery.
• We might want to speak of a continuum of costs rather than a categorical distinction. Is a graphic health warning materially different from a 2 cent tax? (Maybe!)
A Word on Calorie Labels

• “The final rule may also assist consumers by making the long-term health consequences of consumer food choices more salient and by providing contextual cues of food consumption. The behavioral economics literature suggests that distortions internal to consumers (or internalities) due to time-inconsistent preferences, myopia or present-biased preferences, visceral factors (e.g., hunger), or lack of self-control, can also create the potential for policy intervention to improve consumer welfare.”

• Large impact? Recall: new data!
Energy Efficiency and Fuel Economy: Behaviorally Informed, but Well Beyond Nudges

- Department of Energy and EPA
- Lots of regulations (lots); very major effects; not mere nudges
- Benefits way higher than costs
- But a secret!
- The behavioral speculation
- The internalities puzzle
Orientation: Ten Nudges

1) Default rules
   (retirement, health, poverty, environment)
2) Simplification
   (forms easier to complete/understand)
3) Information/disclosure
4) Warnings (cigarettes; distracted driving)
5) Reminders (education and parents)
Ten Nudges, Continued

6) Increases in ease and convenience
7) Uses of social norms
   (tax payments; energy use)
8) Nonmonetary rewards
   (recognition of some kind)
9) Active choosing/prompted choice
10) Precommitment strategies
    (people voluntarily agree, in advance, to a certain course of conduct, eg smokers)
Acknowledgments

• Active choosing can indeed be best, and it is a form of choice architecture (my recent environmental finding)
• Choice architecture must be transparent and subject to public scrutiny (meaning what, exactly?)
• Choice architecture must not be undertaken for illicit ends (important!)
What is NOT a Nudge?

• A jail sentence
• A criminal sentence or a civil penalty
• A subsidy
• A tax incentive
• Note: Hard paternalism vs. soft paternalism
• Note: Means paternalism vs. ends paternalism
• Note: Study of more free reports to universities
• Note: Effect of small tax (loss aversion)
American Model

• A few of many American nudges:
  – CARD act (disclosure and default rules; cf. Federal Reserve and overdraft protection) (a note on data!)
  – Financial reform (“know before you owe”);
  – Health care (disclosure [calorie labels etc.] and the interesting tale of auto-enrollment);
  – Fuel economy & energy efficiency labels (and rules);
  – Education (financial aid form, for-profit education, and more);
  – Childhood obesity (norms and choice architecture)
  – Much more
Children and School Meals

• “Direct certification”

• States and Local Educational Agencies directly certified 12.3 million children at the start of School Year 2012-2013, an increase of 740,000, or 6 percent, from the previous school year.

• Very Recent initiative
PLATE, NOT PYRAMID

Old USDA Food Pyramid
New USDA Food Plate
Do Nudges Work? Three Revealing Examples

• 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)
A behaviorally informed email campaign to increase savings by service members nearly \textbf{doubled} enrollment in federal savings plans.

Simple text messages to lower-income students, reminding them to complete required pre-matriculation tasks, increased college enrollment among those students by 5.7 percentage points.
SBST, continued

• An outreach letter to farmers, designed to promote awareness of a loan program, produced a 22 percent increase in the proportion of farmers who ultimately obtained loans.

• A new signature box on an online form, requiring vendors to confirm the accuracy of self-reported sales, produced an additional $1.59 million in fees collected by the government in just one quarter, apparently because the box increased honest reporting.
Is Nudging Tyrannical? (“Libertarian” objection)

• 1) Nudging is inevitable (what JS Mill did not quite see); choice architecture is unavoidable; active choosing is itself a form of libertarian paternalism)

• 2) Human errors (what Mill also missed), e.g:
  • a) neglect of the long term;
  • b) unrealistic optimism;
  • c) problems in dealing with probability;
  • d) attention (we don’t notice)
Are Stronger Tools Better?

• True, coercion or economic incentives might be justified (when costs and benefits justify them)
• But one size may not fit all
• Government or business may not know best
• Choice architects may have their own agenda
• Freedom of choice is an important safeguard
• An ingredient in welfare and human dignity
Behaviorally Informed, but Not Nudging?

• CARD Act, Agarwal et al. 2013: “We estimate that regulatory limits on credit card fees reduced overall borrowing costs by an annualized 1.6% of average daily balances, with a decline of more than 5.3% for consumers with FICO scores below 660. We find no evidence of an offsetting increase in interest charges or a reduction in the volume of credit. Taken together, we estimate that the CARD Act saved consumers $11.9 billion per year.”

• Household finance? (poor choices, eg investment)
• Health care choices? (poor choices)
• Social security reform? (more savings?)
• Third-party effects (nudges as complements?)
Do not wait to strike till the iron is hot; but make it hot by striking.

— William Butler Yeats —