

A Behavioral Perspective on Decision Making & Policy

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A Behavioral Perspective ...

1. Tutorial on the implications of a behavioral perspective
2. Outline of research, decisions in the context of poverty,...
3. Implications for regulation
4. Directions for future research...





Behavioral Economic Policy Approaches

Michael Barr – The Univ. of Michigan

Lisa Gennetian – The Brookings Institution

Jeffrey Kling – The Brookings Institution

Gregory Mills – Ideas42

Sendhil Mullainathan – Harvard University,

Antoinette Schoar – MIT

Eldar Shafir – Princeton University

Piyush Tandia – Ideas42, Oliver Wyman

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The predominant view (Rational agent model):

well informed; stable preferences (mostly about tangibles);
controlled, self-interested (selfish), calculating

Implications: people maximize; know what's knowable,
exploit opportunities; need no help from others, and no
protection from themselves.

Behavioral (empirical/experimental) view:

mediocre judgment; malleable preferences; impulsive,
myopic, trusting and vindictive

Implications: inconsistent, ineffective; could
benefit from some attention and help.

Milgram's Obedience Studies

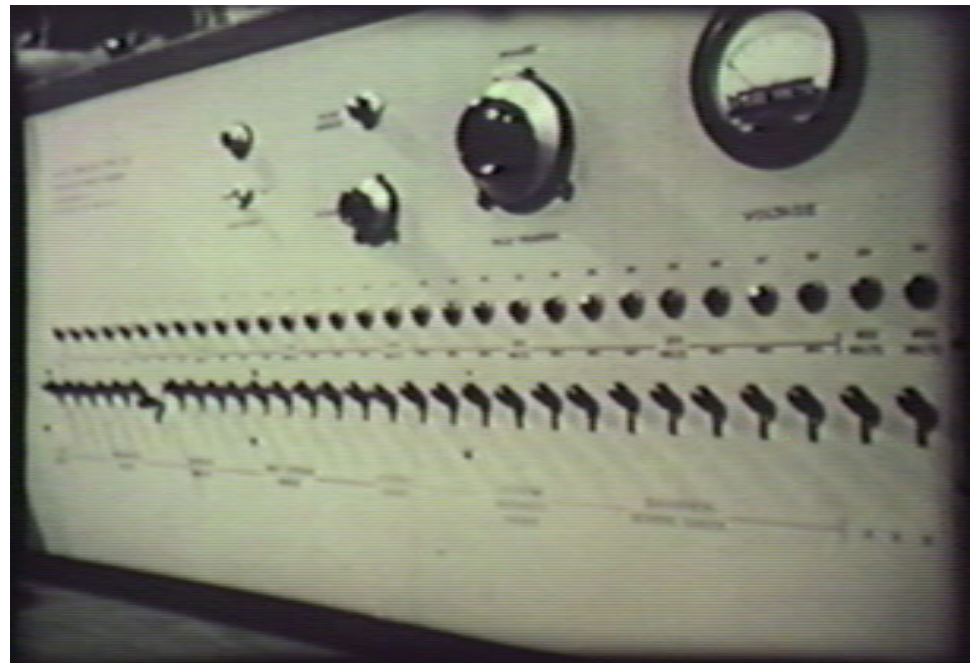
“Teachers” punish “learners” (confederates) errors with a shock generator...



Voltage increased with each incorrect answer, from 15 volts (“mild shock”), to 375 volts (“Danger: severe shock”), to 450 volts (“XXX”)

- 75, 90, 105 volts: grunts
- 150 volts: “Get me out of here! I told you I had heart trouble. My heart’s starting to bother me now. I refuse to go on!” ...
- 270 volts: screams of agony ...
- 330 volts: silence

Prods: “please continue”
“the experiment requires
that you continue”
“it is absolutely essential
that you continue”
“you must go on”...



100.0

100.0

100
VOLTS

100.0

100.0

100.0

100
VOLTS



STRONG
SHOCK

VERY STRONG
SHOCK

At what point will the “teacher” refuse to obey?

Milgram asked psychiatrists, students, and other adults for their predictions:

- everyone predicted disobedience
- average prediction: 135 volts
- no one predicted they would go beyond 300 volts
- psychiatrists predicted 1/1000 would go to 450 volts

Instead:

Every participant obeyed up to 300 volts!

65% went all the way to 450 volts!

The Power of the Situation

The Tendency to Underestimate the Power of the Situation

A trivial but profound fact:

Decisions are not about objective states of the world,
but about our mental representations of those states

Behavioral research: The importance of context and construal
(in survey responses, language, perception, judgments, decisions, social /
political life, etc...)



Please estimate the average number of hours you watch television per week:

- 1-4 5-8 9-12 13-16 17-20 More than 20
- X

Please estimate the average number of hours you watch television per week:

- 1-2 3-4 5-6 7-8 9-10 More than 10
- X



How happy are you?

How many dates did you have last week?

<u>Correlation:</u>	
Happiness first	Dates first
.12	.66

On the proliferation of options

Conflict and the status quo

Shoppers in upscale grocery store encounter tasting booths for jams:

6 jams: (40% stopped); **30%** bought

vs.

24 jams: (60% stopped); **3%** bought

(Iyengar & Lepper, 2000; B. Schwarz, 2000)



401(k) options: For every 10-option increase, individuals' participation probability declines by ~ 2%

(Iyengar & Jiang, 2005)

An important contextual factor: Decisional Conflict

Patients are scheduled for carotid endarterectomy, but OR slots are taken by emergency cases (next 2 weeks). Who has higher priority?

Patient M.S. is a 52 year old [employed journalist with TIA's experienced as transient aphasia...]

Patient P.K. is a 55 year old [employed bartender with TIA's experienced as transient monocular blindness...]

Patient A.R. is a 72 year old [retired policeman with TIA's experienced as left hand paralysis...]

If asked for your opinion, on which patient would you operate first?

2 patients: Patient M.S.
Patient A.R. **38%**

3 patients: Patient M.S.
Patient P.K.
Patient A.R. **58%**



(Redelmeier & Shafir, *JAMA*, 1995)

What's Advertising Content Worth? Evidence from a Consumer Credit Marketing Field Experiment (Bertrand, Karlan, Mullainathan, Shafir, Zinman; *Quarterly Journal of Economics*, forthcoming)

Account Number 105349191

BUSINESS HOURS
MON - FRI 08:00 - 18:00
SAT 08:00 - 12:00

SIYASIKHULUMA ISIZULU

A special rate for you.

Congratulations! As a valued client, you are eligible for a special interest rate on your next cash loan from [REDACTED]. This is a limited time offer so please come in by 31 October 2003 to take advantage of this offer. You can use this cash to pay off a more expensive debt, repair your home, buy an appliance, pay for school or for anything else you want.

Enjoy low monthly repayments with this offer! For example:

	4 Months	6 Months	12 Months
Interest %	22%	20%	18%
R500	R122.20	R110.56	R80.54
R1000	R196.65	R180.45	R110.25
R2000	R222.70	R200.56	R180.35
R4000	R382.27	R300.99	R250.54

LOAN AVAILABILITY SUBJECT TO TERMS & CONDITIONS

Loans available in other amounts. There are no hidden costs. What you see is what you pay.
If you borrow elsewhere you will pay 10% more in interest payments on a R2000, 4 month loan!

How to apply:
Bring your ID book and latest payslip to your usual branch, by 31 October 2003 and ask for
To extend your deadline, call 0860 333 0004 or SMS 0860 222 334.

WIN
10 CELLPHONES UP FOR GRABS EACH MONTH!

PS: Unfortunately, if you have already taken a loan since the date this letter was issued, you do not qualify for this offer

South African lender (Experienced clients, real & substantial payoffs, etc.)

- Customers receive a letter offering loan
- Randomized interest rates
3.25%-11.75% (monthly)

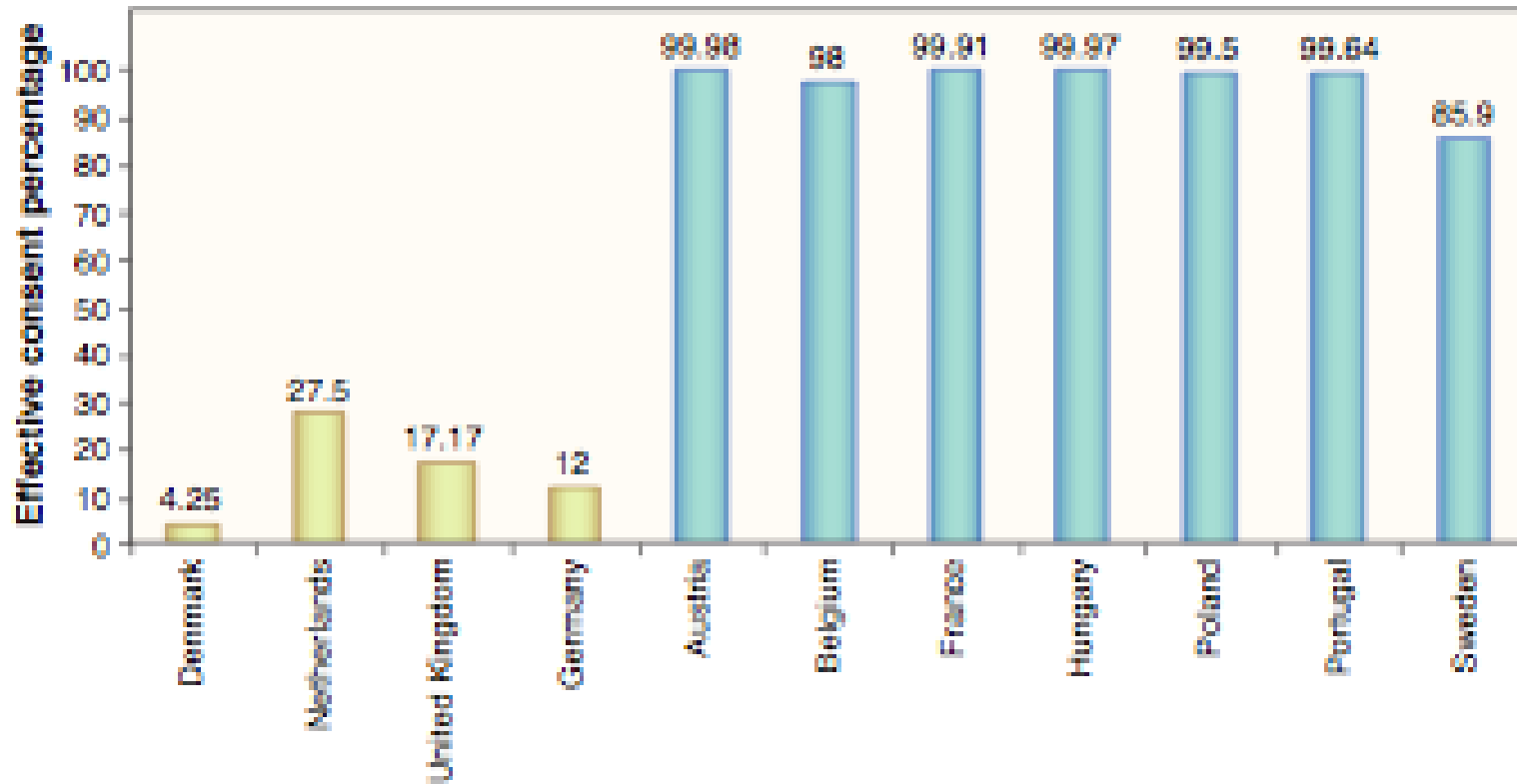
Behavioral (“Marketing”) Manipulations:

- (• subtle peripheral cues; photos
- promotions, reminders...)
- # of loan examples shown

Some results:

1 vs. 4 examples: ~ 2.3 percent. points
For males: female picture = ~ 4.5 points
(Unwanted) promotion = ~ 4 points

The Power of Defaults

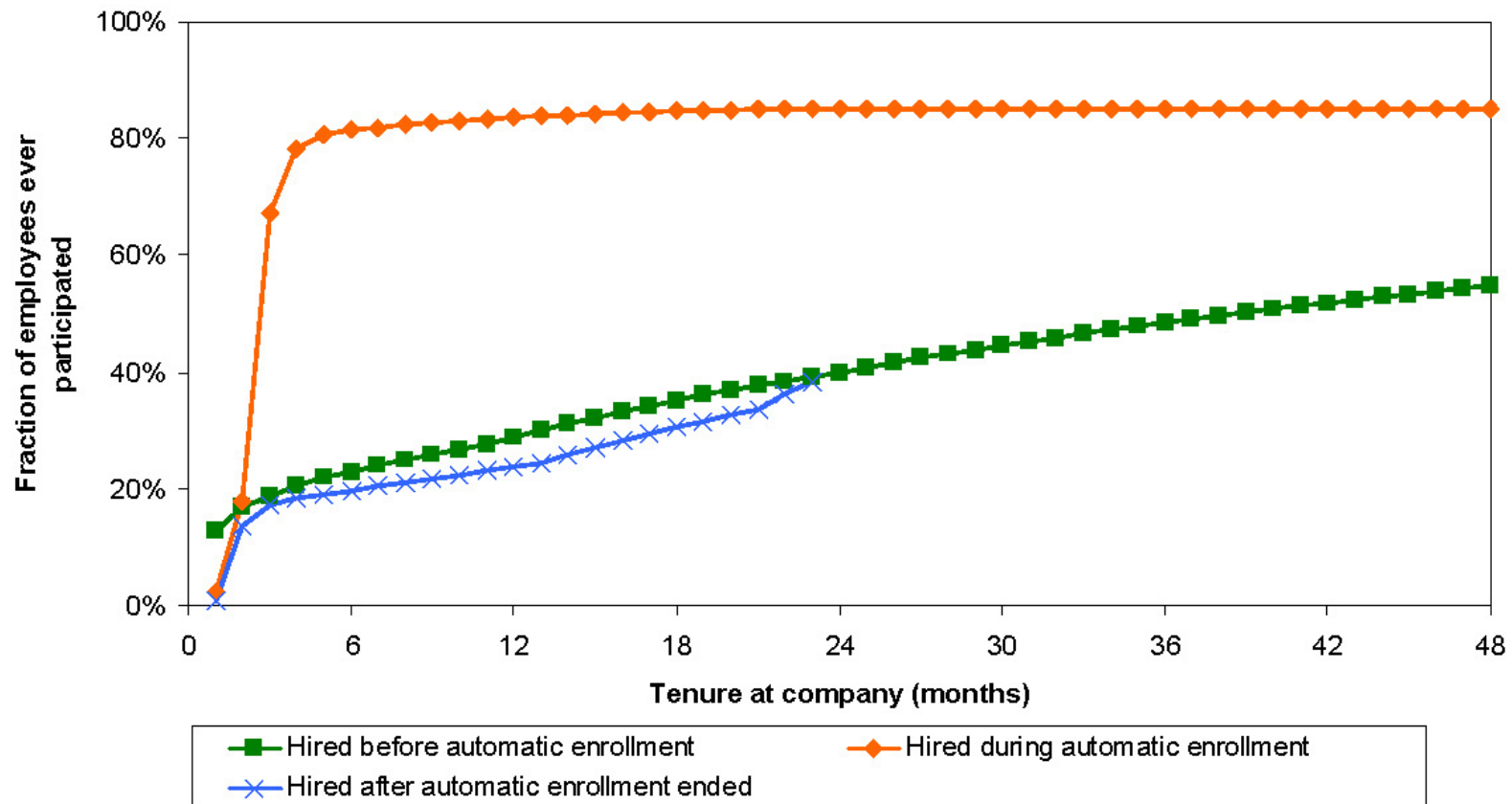


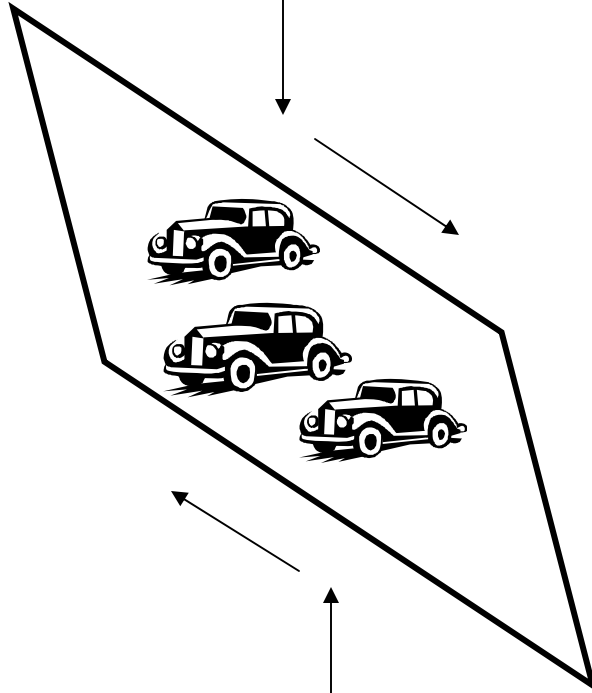
Effective consent rates, by country. Explicit consent (opt-in, gold) and presumed consent (opt-out, blue).

Automatic enrollment effect

Automatic enrollment dramatically increases participation.

401(k) participation by tenure at firm: Company B







24
HOUR

FITNESS

FITNESS
WORLD'S BEST
FITNESS CENTER
WORLD'S BEST
FITNESS CENTER

WORLD'S BEST
FITNESS CENTER

FITNESS

24
HOUR

POINT LOB
HANDICAP
TO UPPER
LOCATED
24 HOUR

Because context plays such a key role:
Intention-Action tension

Actual prob. of behavior: often does not increase with
intention strength (“failed” educ.)

Manipulations designed to strengthen intentions to carry out a
behavior :

larger impact on self-predictions
but not on behavior (“misjudgment”)

Manipulations designed to influence ease with which intentions
are translated into behavior (e.g., access, reminders):

larger impact on behavior than on
self-predictions (increased welfare!

Work on Poverty: Two Dominant Views

Rational Choice view

- Consistent, calculating, well-defined preferences, willpower..
- Behavior: calculated adaptation to prevailing circumstances

Pathology view

- Psychological pathologies specific to the poor
- Impatient, no planning, uninformed
- Behaviors endemic to “culture of poverty”

An alternative:

Neither rational nor pathological; just plain human, prone to nuanced construal, contextual factors (inherent to poverty), etc.

The (poor) unbanked..

Rational Choice explanation:

High costs of accessing financial services: Banks are far, expensive; avoid serving the poor

Policy Implications:

Force coverage in poor areas; Subsidize accounts held by the poor; Offer financial incentives

Pathology explanation:

Culture of poverty. deep distrust, misunderstand, lack of education, wrong “values”, myopia

Policy Implications:

Financial education and training; Teach budgeting and planning
Early interventions in children

Behavioral explanation: “minor” situational factors?...

Kurt Lewin, “channel factors...”

What if Unbanked due to (among other things)?:

Nuisances (sneers from teller, babies in tow..), Unfamiliarity,
Conscious violation of social norms, Mismatched “identity”

Federal Reserve Bank (2000) asked un-banked why no checking account. Among top reasons: Do not like dealing with banks.

Policy analyst / economic theorist: “You’ve got to be kidding! Trivial given the huge advantages. Brief aversive experience vs. lifetime of benefits!?!”



Subsidized bank accounts, (Bertrand, Mullainathan, & Shafir; Center for Economic Research & Shorebank; Providing low-fee bank accounts to poor)

- Prior program proved of limited effectiveness (<50% take-up)
- Follow-up surveys: 90% reported intending to; but forgot, misplaced relevant forms, etc...
- Standard (2-hr) workshop; If workshop participant interested in FA:
 - Referral letter to take to the bank, OR
 - Sign up on site w. bank representative present at workshop
- Presence of a bank rep.: significantly increased opening / keeping an account; decreased check cashing & borrowing from family.

(Intervention -- ~10 pct. pts. -- has greater impact than choosing to be there or not, ~8 pct. pts...)

A poor 'identity'



Identity salience in the context of welfare benefits programs (EITC and local VITA sites) ...

	Condition:		
	<u>Neutral</u>	<u>Affirmation</u>	
Stopped to consider:	44%	58%	(<i>ns</i>)
Of those, took the information:	36%	79%	$p=.03.$
(Total take up:)	<u>16%</u>	<u>46%</u>	

(Crystal Hall, 2008)

US Payday Loans

- US poor often borrow at very high rates
 - 18% for loans lasting 2 weeks
 - Average 8 loans per person per year
 - Lots of good money spent...
- Note that the problem may not be taking out the loan
 - Faced with a shock with potentially large consequences, taking loan may be sensible
 - Problem is not taking the loan, but needing it!

A lack of savings...



Instability and Decision Making

- Recurring scarcity poses major decision-making challenges. As economic resources become depleted, so do cognitive energies.
- Financial shocks met with late bill payments, pay day lenders, depletion, identity threat, more shocks...
- Feedback cycle: coping mechanisms make matters worse.
- “Irony of poverty”: lack of slack calls for good decisions at the very time one is least able to make them.

Create Stability

- Interrupt the feedback cycle through financial tools that enable working-poor families to:
 - Build and maintain buffer stock
 - Accumulate long-term protected savings
 - Conserve cognitive energies and financial resources
 - Focus on budgeting and planning
- Introduce a financial product that automates and simplifies a family's finances.

StabilityFirst Product

- Basic features:
 - Direct deposit of paychecks and benefit checks
 - Automatic payment of recurring bills
 - Ability to pre-commit deposits into long-term savings
 - Separate accounts (long term, buffer stock, transactions)
 - Budgeted transfers to general-purpose reloadable debit card for regular spending needs
 - Limited personal line of credit for emergency needs (?)
 - Borrowing from savings (at competitive rates...)
- To be tested in a small-scale pilot and then rigorously evaluated in a subsequent demonstration project

Financial Health Check Product

- Managing finances is complex and households have few sources of unbiased advice
 - The wealthy receive advice; The rest don't have enough assets to justify free advice
 - Consumers often not willing to pay for advice as direct benefit not visible
- Credit Unions and non-profits attempt to provide advice at least for particularly tough decisions, e.g.
 - Home purchase
 - Credit counseling
- Test a voluntary, in-person, intensive “financial health check” that pays for itself by changing behavior materially

Financial Health Check: Insight and design

The insight

- Research shows feedback on consumption patterns can change behavior materially
- Commitment contracts – individuals commit to change behavior – can also be quite effective
- People may provide highly useful information during the financial health check
- Also, people who opt for a financial health check are likely to be lower credit risk
- **“Reverse adverse selection”, information, and behavior change treatments can be monetized by way of lower credit costs**
 - **Similar to discount on auto insurance for defensive driving course**

Financial Health Check: Insight and design

The design

- Randomized Controlled Trial design
- Voluntary financial health check
 - Establish financial goals and set commitments to save more, reduce debt etc. per customer needs
 - Set up better cash flow management via automatic bill payment, automatic transfers to savings etc.
 - Provide direct feedback via a “financial health score”
- Second health check in 9-12 months
- **Interim measurements of impact:**
 - **Opt-in effect: credit quality and savings behavior of those opting for financial health check vs. control sample & Behavior effect: change in credit and savings behavior**

Behaviorally Informed Regulation in a Nutshell (Barr, Mullainathan, & Shafir, 2008)

- Fallible consumers
 - choose bad mortgages, funds w. excessive fees, ignore late fees & APR's, focus on free gifts, teaser rates, etc.
- Behavioral economics: lenders compete on non-rational push factors (cf. rational model...).
- Firms set their contexts to maximize profits
- Imperfect regulators who can observe only some parts of the *context*
 - Directly regulating context can be ineffective; e.g. exactly what is disclosed

The firm & the individual

Market neutral / wants to overcome consumer fallibility

Market happy to exploit consumer fallibility

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Consumers misunderstand compounding in *savings*
→ Banks would like to *reduce* this so as to increase savings base

Consumers misunderstand compounding in *borrowing*
→ Banks would like to *exploit* this to increase borrowing

pro
crastin
ation

Consumers procrastinate in signing up for EITC
→ Tax filing companies would like to *reduce* this so as to increase number of customers

Consumers procrastinate in returning rebates
→ Retailers would like to *exploit* this so as to increase revenues

Behaviorally informed regulation

Market neutral / wants to overcome consumer fallibility

Market happy to exploit consumer fallibility

R
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L
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Public education on saving
Direct deposit/auto-save
Licensing

Opt-out mortgage (credit card, etc.) system
Information debiasing on debt

S
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Tax incentives for savings plans for poor

Penalties to make opt-out system “sticky”
Ex post liability standard for truth in lending
Broker fiduciary duty

- Benefits
 - Permits innovation in mortgage products & disclosure approaches
 - Reduces reliance on simple non-understanding
 - Reduces “evasion through compliance”
 - Puts incentives on lenders to disclose appropriately
- Risks
 - Uncertainty raises costs of lending for complex products that might benefit some (many?) borrowers

Regardless, seems sensible for regulation to be informed by behavioral insight....

To summarize:

Context has enormous impact on behavioral outcomes

Context of the poor is particularly tough

Let us explore the impact of interventions that attempt to facilitate the (behavioral / financial) context of our clients...

(and hope that regulators are able to help..)

Thank you!...