



PBL Netherlands Environmental
Assessment Agency

Comments Allcott

Economic experiments and consumer behavior

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EEP Seminar 15-5-2014 | Vollebergh





Dealing with old questions in a new jacket

- Energy Efficiency Paradox :
 - Bottom up analysis of shows many energy (cost) saving options on the shelf that consumers (and producers!) do not exploit
 - Irrational behavior from an engineering perspective
- Economists have always been skeptical
 - Just reflect high individual discount rates (Hausman 1979)
 - Information failures (Jaffe and Stavins 1994)
- Reframed (?) as new insights from behavioral economics:
 - (Rational?) inattention due to high cost of information collection
 - Herding behavior in groups
 - Social norms or even social dilemma's



The old policy

- Demand side management in US-DSM program on households in 1990s
- Price incentives through a subsidy ('passive regulator')
- Scheme was used a lot, but free riding would be large (based on simple survey questions; e.g. Eto et al., EnJ, 1996)
 - Nevertheless residential energy tax credits seemed to be effective (see Hassett and Metcalfe, 1995 in a neglected paper)
- DSM was judged to not solve the gap and posed a burden on new initiatives



The Allcott story

- Start from rational inattention
 - Costly to change behavior
 - Tastes differ
- Nudge by 'manipulating' information set ('marketing plus')
 - Information provision (marketing like advertising)
 - Using behavior of your peers as a yardstick (plus)
- Combine with up to date Program Evaluation to measure effectiveness properly
 - field experiment to estimate real behavioral responses
 - in the short and long run



Evaluation I

- Very useful set up of the experiments
 - Free riding not an issue (burden of behavioral change is at the side of the household)
 - Cost of intervention is relatively small

- Some questions though:
 - Are data on energy use based on self reporting?
 - Do the experiments control for common (time) shocks such as the impact of an economic crisis or rising energy prices?
 - Are results depending on the type of information trigger (what 'plus' could be exploited)?
 - we still don't know *why* behavior changes and why this happens to be a persistent change



Evaluation II

- Could other information triggers be exploited as well?
 - E.g. moral motivation for public goods provision?
 - › see framed field experiment on buying organic meat and fair trade chocolate (Vringer et al., 2013 and 2014)

- Results convincing in this case, but also wider applicability?
 - Other decisions by consumers like buying products 'for the good'
 - Investment decisions by households and firms

- Effectiveness compared to other instruments
 - Subsidies often combine price incentives with information provision (see Aalbers et al., 2013)
 - Impact on supply side is likely to differ



Sexy topic

- Behavioral and experimental economics have shown 'hard to deny findings' on complexity of human decisionmaking
- Incentives matter, but finding out how is not easy and costly
- More and more governments institutionalize potential useful insights from behavioral economics
 - BIT UK: close to prime minister; separate budget
 - BIT NL: network organization within ENV&Infra; no budget; cooperation with 'willing' policy makers
- Crux: are policy makers willing to learn from new insights and invest in making them possible?



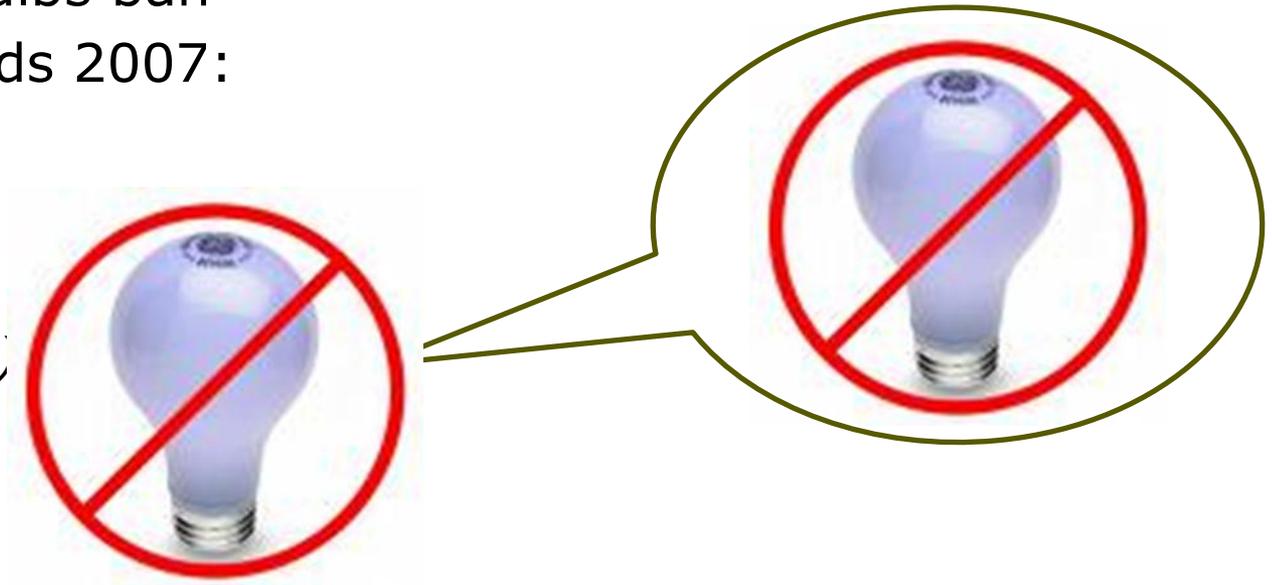
Lessons for (Dutch) policy makers

- Policy implications Allcott:
 - Cheap options available to change behavior 'for the good'
 - Proper evaluation of policies very useful
- Difficult to convince policy makers in EU
 - Dutch and OECD experience
- Behavioral economics now on the agenda (today!)
but also the idea gains ground that
Nudging = Manipulation = No legitimacy
- Reveals interesting paradox: light bulbs in Netherlands

Policy makers become skeptic

- Example: lightbulbs ban
in the Netherlands 2007:

*(Dutch Minister
for Environment)*



- Solved?

YES: by lobbying for an EU ban which has been implemented in 2011!!!



If you want to know more?

- See Vringer et al., 2014, OECD Working Paper, forthcoming
- Or in Dutch 'Dilemma's rond duurzame consumptie':
http://www.pbl.nl/sites/default/files/cms/publicaties/PBL_2013_Dilemmas-rond-duurzame-consumptie_657.pdf