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Title: Nudge

Subtitle: A critical perspective

Abstract

In recent years, the nudge approach and the choice architecture design have become popular in policy and academic circles. The aim of this chapter is to present a general overview of the theory of nudges and a critical appraisal of its application to practice, in policy and program as well as in research design, also with respect to possible alternative approaches.

Nudge.

A critical perspective.

Following the publication of "Nudge: Improving Decisions about Health, Wealth, and Happiness" (Thaler and Sunstein, 2008), the term *nudge* has entered the economic and juridical focus in relation to public policies. Nudge refers to the idea that people's behaviour can be mildly, or gently, pushed towards a certain course of action. As a result, nudge can be considered as a tool of political economics, using individual cognitive characteristics to stimulate people towards a positive action without restricting their freedom of choice. This is an alternative form of intervention to other government tools of public policies, such as incentives, rules and constraints, or education and empowerment. The proponents of this theory consider nudge as a less coercive tool than regulatory efforts and incentive-based systems, although it is considered to be associated with better results if compared with free markets or traditional informative campaigns. The debate is deeply connected with the debate on paternalistic policies and the regulation approach, and is also tied with bounded rationality. However, the interplay between all these aspects makes the definition of nudge problematic. Tahler and Sunstein, indeed, propose a definition which is still not overwhelmingly accepted (Rebonato, 2012).

Policies inspired by nudge appear to be cheap and have the advantage of being experimentally testable and measurable (even if these policies can be tied with cultural and political issues such as the effects of the electricity consumption). As a result, nudge represents a novelty in the field. On the other hand, however, the need to carry out experiments in real-life situations lying, in some way, about the aim of actions that people are asked to perform, represents a point against the use of nudges.

The nudge theory is built on behavioural economics and on the idea that people have a bounded rationality, often do not have well-defined preferences, and are subject to a number of biases which cause people to make choices not in their own interest, sometimes also against their voluntary will. As for willpower, several examples exist: the desire to save and study, to consume healthier food, or avoid gambling activities. The desired action can be frustrating when lack of willpower is in action (Elster, 1979).

But nudge is also based on other aspects linked to the decision-making mechanism. In many situations, indeed, people do not have well-defined preferences and, therefore, decisions become more complex. When there is a lack of clear preferences or inability to perform statistical computations and follow logic rules, people seem to be guided by simple rules (that is, heuristics; see Kahneman, 2012) in order to save mental energies. Specifically, the rational system of decision-making appears to be challenged (and often won) by a more impulsive system, faster, which is guided by simplifying strategies, such as information availability (the ease with which the side of a problem can be visible), and would give rise to distortions and simple heuristics. These distortions and heuristics tend to lead to systematic errors. The rational system (i.e., system 2) is connected with conscious and deliberate decisions, whereas the other system (i.e., system 1) is highly unconscious and automatic. As a result, aspects which characterize the context of choice such as the number of alternatives available to individuals, the order of presentation of these alternatives, the way in which the choice is presented and framed, the existence of a default option, or the presence of a status quo alternative, which are typically considered as apparently irrelevant features, become significant.

Nudge is then added to the debate over human rationality and about the influences on the decisionmaking process. A rational agent, as described by standard neoclassical normative models (von Neumann and Morgenster, 1947), is not affected by nudge intervention. However, in real-life situations, people appear to be not so rational (Kahneman, 2003). In particular, the way through which the choice is designed and presented, the architecture of choice, becomes relevant.

Accordingly, the same mechanisms connected with the systematic errors can be used to direct people towards more healthy behaviours.

Nudge, which in this view represents a development of behavioural economics, has been already anticipated by a series of papers on the framing effect which has been found to elicit certain types of choices, rather than others, that are not necessarily for the good of individuals (e.g., marketing purposes). In this case, knowledge about decision-making processes can be used to persuade people

(see Cialdini 2001a, b). The relationship between behavioural economics, law, and public policies developed early, also thanks to Kahneman (e.g., Kahneman et al., 1998; McCaffery et al., 1995). More recently, Parisi and Smith (2005) review the various implications of behavioural and cognitive economics for the law, such as the possibility to use cognitive biases to develop an approach that could be more effective than using monetary and non-monetary rewards and punishments.

The subtitle of Thaler and Sunstein's book, "Improving Decisions about Health, Wealth, and Happiness", mainly refers to the measures aimed at pushing the limits of willpower. In front of a plate of peanuts, people tend to not restrain and eat, even when they do not want or do not need to. The act of pushing the plate in an unhandy place, which can be considered as a precommitment strategy, is an example of nudge. In their book, the authors suggest to take away the peanuts, but this appears to be a command-and-control form regulation, that is a mandate that cannot be avoided. This is in fact an example of the difficulty to define a nudge.

Moreover, the two authors propose simple examples of nudge that do not seem to improve individuals' wellbeing, at least in a direct and clear way. For example, the choice of an opt-in mechanism, rather than opt-out (i.e., explicit versus presumed consent), seems to increase organ donation rates because of the human tendency to remain at the status quo (Thaler e Sunstein, 2008). The choice of a certain type of mechanism represents an example of choice architecture through which a public policy can be implemented and that can be considered as an alternative to public awareness campaign or strong enforcement. In fact, it seems to be true that nudging leaves margins of freedom to individuals and does not bind people to an action unless they have a clear opinion in one direction or another. People seem to be influenced by nudges when they have not a clear opinion and, rather, tend to conform to social norms and what they perceived as normality.

Considering the difference between various policies, this example shows the difficulty with the current definition of nudge but also the complexity of the discussion around the architecture of choice. A more general definition considers nudge as a tool for implementing public policies by means of behavioural economics.

Nudges' problems and critics come from different perspectives.

In their website, Thaler and Sunstein display the ballot used by Hitler as an example of bad nudge (Nudge Blog, 2010). As stated before, nudge can indeed be used in order to persuade people to the right, as well as the wrong, direction. The problem is clearly that of understanding who decide what is the right/wrong direction. Thaler and Sunstein lead the main debate to the issue of strong paternalism and soft paternalism and to the fairness of one approach over another. Strong paternalism assumes that the state knows and decides what is the best for people and then constrains them to have a coherent, consistent behaviour. Strong paternalism is also connected with the idea of an omniscient

legislator that acts rationally and is perfectly capable of using nudges and push people towards efficient behaviours. Soft paternalism, or libertarian, is instead based on the idea that we have to help people in getting their best interest in terms of wellbeing. Here is the heart of the debate between strong and soft paternalism and about the possibility to implement a soft, libertarian paternalism by means of a theory of nudges.

Meanwhile, the opponents of this theory consider nudge as a dangerous tool because, differently from more explicit and direct forms of regulation, it operates through unconscious channels (Kahneman, 2012).

In line with other critical-oriented works, referring to different example of nudging, Rayner e Lang (2011) claim that nudge is not a new policy. In particular, they highlight how similar tools tend to deny the general idea of politics that requires informed choices and discussions, and deals with problems in an explicit and direct way. They also underline the fact that nudge can be applied to avoid taking actual choices (Rayner and Lang, 2011).

Bovens (2009) precisely criticizes the lack of transparency of nudges and, particularly, the fact that choice architecture does not trigger real changes in individual preference or improve the use of willpower. More recently, Vallgårda (2012) criticizes the libertarian paternalism and denies the possibility to find an ethical reason for nudge, at least from a libertarian perspective. Furthermore, nudge would be anything new.

The fact that the theory of nudges exploits the bounded rationality is also controversial. The definition of nudge given by Rebonato (2012) underlines this aspect, which is instead not corroborated by Sunstein (2014).

Is it really impossible to develop consciously accepted forms of nudge and then give legitimacy to this type of intervention? Loewenstein et al. (2015) warn their subjects of the presence of a nudge, and in particular of a default option, in choosing between different medical treatments. The effect of the default option seems to persist, even when individuals are informed about its use. As a result, the effect was not necessarily connected with a lie.

Colander and Chong (2010) discuss instead about the benefits of giving directly to people, rather than to the government or an economist, the choice of being nudged to obtain the best result. This is the path to an actual libertarian paternalism, where individuals can freely choose their choice architecture. A different criticism refers to the effectiveness and the strength of nudge. For instance, Loewenstein and Ubel (2010) address this question in an article published in the New York Times. The question was about the reduction of electricity consumption and the preference for a nudge, rather than an incentive-based intervention (i.e., by charging higher costs), to approach the problem. Does the fact that a particular nudge intervention has been found to have an effect in controlled experiments suggest that these effects can be observed in real-life situations? Even more important, does statistical significant results imply a real impact of nudge interventions?

This article also proves the importance of this issue, considering that it has been taken out of academic publishing and issued in one of the most important newspapers in US. In the UK, for instance, a nudge unit has been created. Furthermore, the Obama administration has pointed out the need for a wider use of behavioural economic techniques in the implementation of public policies.

But if people are wrong, is there a guarantee that the governments are not going to make similar errors? Other than ethical issues, with what legitimacy can they inspire paternalistic policies?

Grüne-Yanoff and Hertwig (2016) criticize the use of nudges in the perspective of an evolutionary rationality. After all, the bounded rationality is a critic to the economic mainstream which is considered as a reference point for a hypothetical rationality, one from which we go away. However, according to the evolutionary rationality, this critic should not imply that people make systematic mistakes and are basically unable to take decisions. Moreover, people are not necessarily driven by non-modifiable and unconscious mechanisms, as those represented by the alleged system 1. In certain circumstances, indeed, simple rules and heuristics can be smart and effective. In everyday life, we need rapid decisions and, differently from the theory, logic is not always applicable. Rather than rationality, we need the ability to survive and to be clever and also to interact with the environment. Errors can be made because the environment has changed over millennia, for human beings as well as other living creatures. Furthermore, errors can also depend from an incorrect way of framing problems. Specifically, the use of conditional probabilities in describing the Bayes' Theorem makes hard to handle it, even for experts. Considering the probabilities as relative frequencies can instead make people understand the actual risk they face, giving them an effective freedom of choice. Problems need to, and can, be formulated in a more clear and understandable way. The theory of nudge also moves from an idea of a mainstream behaviour. That rationality is, however, not applicable to real-life, which is instead characterized by different situations that cannot be simply described in terms of calculable risks and probabilities.

As a result, as an alternative to nudges, other authors propose the boost approach, whose aim is to extend people's decision-making skills and refine the decision-making environment rather than focus on distortions and biases. In particular, Grüne-Yanoff and Hertwig (2016) refer to nudge and boost policies as two different research programs. The first program is based on the analysis of systematic cognitive heuristics and biases, which are considered to result in poor choices, whereas the second is a simple heuristics program where bounded rationality is considered in its capacity, rather than inability, to produce good inference and choice.

Conclusion

Nudge is receiving an increasing and strong attention for both the development of the behavioural approach and the possibility (which the nudge approach seems to offer) to realize low-cost public policies, whose effectiveness can be proven.

It is hard to believe that the political debate around the paternalistic approach can ultimately have a solution. Indeed, this is a long-term discussed issue and nudge tends to complicate, rather than simplify, its resolution.

The problem lies in the fact that different forms of nudge exist and each form is associated with different critical issues. At the same time, however, most discussions tend to simplify and take into account only specific examples.

Kahneman (2012) underlines how writing with a difficult-to-read font can focus attention and decrease the possibility of errors occurring in the solution of a problem. This is an example of nudge that increases the ability of people to influence for the better the relationship between individual well-being and choices.

Cross-References

Behavioural law and economics, paternalism, financial education.

References

Bovens, L. (2009). The Ethics of Nudge. In Grüne-Yanoff, T. and Hansson, S.O. (Eds.), *Preference change: Approaches from Philosophy, Economics and Psychology. Theory and decision library A*(42), Springer, New York, pp. 207–220.

Cialdini, R. B. (2001a). The science of persuasion. Scientific American, 284(2), pp. 76-81.

Cialdini, R. B. (2001b). Influence: Science and Practice. Boston, MA: Allyn & Bacon.

Colander, D., Chong, A.Q.L. (2010). The Choice Architecture of Choice Architecture: Toward a Non-Paternalistic Nudge Policy. Department of Economics Middlebury College Middlebury, Middlebury College Economics Discussion Paper No. 10-36 (available at: http://sandcat.middlebury.edu/econ/repec/mdl/ancoec/1036.pdf).

Elster, J. (1979). Ulysses and the Sirens. Cambridge, UK: Cambridge University Press.

Grüne-Yanoff, T., Hertwig, R. (2016). Nudge versus Boost: How coherent are policy and theory? *Minds & Machines*, 26(1), pp. 149–183.

Kahneman, D. (2003). Maps of bounded rationality: A perspective on intuitive judgement and choice", *American Economic Review*, 93(2), pp. 162–168.

Kahneman, D. (2012). Thinking, Fast and Slow. London, UK: Penguin Books.

Kahneman, D., Schkade, D., Sunstein, C. (1998). Shared outrage and erratic awards: The psychology of punitive damages. *Journal of Risk and Uncertainty*, 16(1), pp. 49–86.

Loewenstein, G., Ubel., P. (2010, July 14). Economics behaving badly. The New York Times. Retrieved from: <u>http://www.nytimes.com/2010/07/15/opinion/15loewenstein.html</u>.

Loewenstein, G., Bryce, C., Hagmann, D., Rajpal, S. (2015). Warning: You are about to be nudged. *Behavioral Science & Policy*, 1(1), pp. 35–42.

McCaffery, E.J., Kahneman, D., Spitzer, M.L. (1995). Framing the jury: Cognitive perspectives on pain and suffering awards. *Virginia Law Review*, 81(5), pp. 1341–1420.

Nudge Blog. (2010, August 10). The Nazis nudged. [Blog post]. Retrieved from: http://nudges.org/2010/08/11/the-nazis-nudged/).

Parisi, F., Smith, V.L. (2005). *The Law and Economics of Irrational Behavior*. Stanford, CA: Stanford University Press.

Rayner, G., Lang, T. (2011). Is nudge an effective public health strategy to tackle obesity? No. *British Medical Journal*, 342, d2177.

Rebonato, R. (2012). *Taking Liberties: A Critical Examination of Libertarian Paternalism*. New York, NY: Palgrave Macmillan.

Sunstein, C.R. (2014). *Why nudge? The politics of libertarian paternalism*. New Haven, CN: Yale University Press.

Thaler, R.H., Sunstein, C.R. (2008). *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven, Conn: Yale University Press.

von Neumann, J., Morgenstern, O. (1947). *Theory of Games and Economic Behaviour*. Princeton, NJ: Princeton University Press.

Vallgårda, S. (2012). Nudge: A new and better way to improve health? *Health Policy*, 104(2), pp. 200–203.