

From Nudging to Budging: Using Behavioural Economics to Inform Public Sector Policy

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Abstract

The use of behavioural economics to inform policy has over recent years been captured by those who advocate nudge interventions. Nudge is a non-regulatory approach that attempts to motivate individual behaviour change through subtle alterations in the choice environments that people face. It is argued in this article that government interventions ought to be more overt than that traditionally advocated by nudge adherents, and that governments should principally attempt to influence behaviour if the acts of those targeted are causing harm to others. With this in mind, governments can use the findings of behavioural economics, including present bias and loss aversion, to inform where and how to regulate directly against undesirable private sector activities. This behavioural economic-informed method of regulation is hereby termed *budge*, to indicate that, rather than nudging citizens, behavioural economics might be used more appropriately in the public sector to help inform regulation that budges harmful private sector activities.

Introduction

Over the last decade, some of the world's leading behavioural economists have been involved in attempts to develop philosophical frameworks for applying behavioural economic findings to public policy concerns (Camerer *et al.*, 2003; Sunstein and Thaler, 2003; Thaler and Sunstein, 2008). The frameworks, particularly those illustrated with examples in Thaler and Sunstein's (2008) book, *Nudge*, have subsequently proved influential in policy dialogues internationally, to the extent, for example, that these authors were appointed to official government positions in the UK and the USA, respectively.

There are at least two main reasons for the increased policy interest in behavioural economics. First, the 2008 global financial crisis probably played a role in that it was caused at least in part by insufficient regulation of the financial service sector, due to too much faith being placed in neoclassical economics, and thus alternatives to the standard economic framework were considered. Paradoxically, the particular behavioural economics approach that

has been predominantly embraced is also antiregulatory. Second, liberal-minded politicians, ostensibly of the left or the right, were (and are) searching for ways in which they could motivate people to change their 'self and society'-harming behaviours, without imposing further regulations or bans on either the general public or commercial organisations.

Thaler and Sunstein (2008) called their philosophical framework 'libertarian paternalism'. One may question this choice of words, given that it was likely to attract resentment from both libertarians and paternalists, and thus Camerer *et al.*'s (2003) 'asymmetric paternalism' may have been a wiser turn of phrase. However, Thaler and Sunstein state that they use the term 'libertarian' to modify the word 'paternalism' in order to signify that their approach is liberty preserving; that is, there should be no burden on those who want to exercise their freedom, and the approach does not include regulation or bans. It is only paternalistic in the sense of wanting to make choosers alter their behaviours such that they would be better off, as judged by their deliberative selves. The core essence of the approach is that behavioural economic insights can be used to change the 'choice architecture' (i.e., the context or the environment) so that people are more likely to make voluntary decisions that, on reflection, they would like to make, and yet, due to bounds on their (economics-defined) rationality and human error, ordinarily fail to do so (resonating to some extent with Marxist notions of false consciousness). Thaler and Sunstein contend that freedom to choose is the best safeguard against bad choice architecture.

Nudges, implied from libertarian paternalism, therefore alter behaviour in predictable ways based on systematic and frequently observed behavioural economic findings, and do not forbid any options; that is, whether or not one is influenced by a nudge is voluntary, which is presumably sometimes difficult to guarantee, since, as pointed out in a House of Lords report on behaviour change, nudges are meant to appeal to a person's reflexive or automatic cognitive processes and thus do not include openly persuasive interventions, such as the straightforward provision of information. The notion that humans think both 'fast and slow' is known as dual process theory, and lies at the heart of Daniel Kahneman's (2011) intellectual autobiography. The distinction between thinking fast and slow has, over the course of time, been categorised in various ways, including reflective versus automatic responses, non-deliberative versus deliberative decision making, 'humans' versus 'econs' in Thaler and Sunstein's terminology or, according to Stanovich and West (2000), system 1 versus system 2 (moreover, in the sense of distinguishing between a rational 'impartial spectator' and human actions that are often driven by particular affects, something close to dual process theory underlies Adam Smith's (1759) *Theory of Moral Sentiments*). Note, though, that these categorisations do not imply that their authors think that different parts of the brain are operating entirely separately from each other, but rather that the two 'systems' are probably working together in complex ways

to influence our choices and behaviour. The categorisations are intended merely as a convenient way of classifying the two types of decision-making processes that humans employ. System 1 thinking usually serves us well (indeed, it may be the case that for some tasks, including many of those related to sports – e.g., a one-on-one for a striker against a goalkeeper – optimal performance is best achieved through instinctive rather than deliberative decision making), but it is argued by nudge advocates that it can lead us sometimes to make serious mistakes; for example, too much emphasis on the immediate moment might lead us to save insufficiently for retirement. Nudge interventions are intended to exploit knowledge of reflexive cognitive processes in order to steer us towards more sensible decision making. As an alternative (or complement) to nudging, John *et al.* (2011) have defined interventions designed to engage people in deliberative debate about appropriate actions and outcomes as ‘think’ policies, and it seems clear that encouraging people to think ought to be non-contentious. However, the design of nudge policies, if not necessarily their application, seems also to call for much thought from those towards whom the interventions are targeted. After all, how can a person express what their reflective self would desire without deliberating (assuming, of course, that it is even possible to elicit deliberative preferences)? Herein lies something of a paradox within the nudge agenda, for it may be the case that a particular group of people deliberatively support a specific goal for themselves (e.g., to lose weight), but they might not support covert measures – for example, government-driven changes in the choice architecture – that are intended for them to make decisions (e.g., that are conducive to weight loss) unconsciously (i.e., non-deliberatively) *if* the changes in choice context become known to them. This resonates with Sen’s (2009) concern that in a conception of justice, both the outcome and the process by which the outcome is reached, matter. The upshot is that if the nudge is made explicit, it might be resisted actively, although that of course is an empirical question.

A dilemma thus ensues: it may be that the only way that a nudge will work is via a level of covertness that many might deem unacceptable from a democratic government. Nudge advocates may retort that since participation in nudge interventions is voluntary, those who resent their covert nature can opt out, but, as alluded to above, if people are meant to face the changes in the choice architecture *unconsciously* – e.g., unconsciously face fruit rather than cheesecake at eye level as they are about to pay for their lunch in their local canteen – how can they make the conscious decision of non-participation? In this respect, the nudge approach appears somewhat muddled. The private sector (supermarkets, financial services, etc.) make subtle changes to the choice architecture in order to maximise sales or profits all of the time of course, and some may contend that it is legitimate for the government to use ‘counter-nudges’ to steer the public towards making decisions that better serve their long-term deliberative goals. The philosopher, Luc Bovens, as stated in the House of Lords Report (2011),

argues that ethical acceptability does not require governments to explain that an intervention has been implemented, particularly if full transparency limits the effectiveness of the intervention, so long as those being nudged have the ability to discern its implementation (even if, in practice, they do not do so). Moreover, it is inevitable that we all face some form of choice architecture – i.e., the ‘default position’ – so why not allow government to shape that default so that it best serves our own good, to help save us from ourselves? The response could be that people simply do not like the idea of their government acting covertly for or against them, irrespective of its stated broad intentions, in part as a gut reaction but also in part driven by the view that policy characteristics that ought to be subjected to explicit consideration are not suppressed. People may feel that it is inevitable and, much of the time, acceptable that the private sector use almost all means at its disposal to serve its own ends (and sometimes to serve the long-term interests of its clientele), and that a principal job of government is to regulate *overtly* against the worst excesses of private sector interests. Knowledge of behavioural economics can be used to help inform where and how to use overt regulation; thus, behavioural economic policy should not be narrowed to nudges, a point to which we will return later.

A further feature of nudges is that they are not meant to change significantly the economic incentives of those to whom they are targeted, which, if the intervention is meant to provoke an unconscious trigger, is presumably a given. Nudges, therefore, should be easy and cheap to avoid (and politicians probably expect them to be cheap also to implement, which in part explains the current popularity of the approach), which helps to satisfy the libertarian aspect of libertarian paternalism and is meant to help guard against any charge of them being coercive. Leaving aside the difficulty of attempting to change someone’s behaviour without either unduly pricking their consciousness or affecting their liberty, nudges will perhaps only work if the actions of the targeted individuals are meaningful to them in relation to the objective. For example, it is likely to prove difficult to design an effective nudge to incentivise people to reduce their car use in a sustained sense by appealing directly to global carbon emissions. People like using their cars, there is not significant social opprobrium directed against car usage and the contribution of one person’s car use to global carbon emissions is too small for most people to view their own actions as important in this respect. To have a better chance of success, appeals to the average personal cost savings of (say) walking instead of driving, or towards recommended hours of weekly exercise if people reduce their car use by x per cent per week, might prove instructive, although, as aforementioned, the nudge (to be a nudge) should be designed to trigger an unconscious action rather than use overtly persuasive forms of communication.

From the discussion thus far, and as stated in Thaler and Sunstein (2008), for an intervention to be classified as a nudge it needs to be liberty preserving, rely on

the automatic, reflexive responses of those targeted and not involve overly overt methods of persuasion, not significantly change economic incentives and has to redesign the choice context according to the findings of behavioural economics. It is clear that there are difficulties with some of these requirements, notably whether a covert nudge can really preserve liberty, and whether people find covert nudges by governments acceptable even if they support the intervention's overall goal (or, in other words, whether people think that the ends justify the means). I suspect that people will not generally think that ends justify means, and will return to this point later. Common (although not universal) agreement can be found, however, in the view that behavioural economics has a serious role to play in policy formation. So, what is behavioural economics?

A box of tools

Neoclassical economics is synonymous with the rise of mathematical economics at the end of the nineteenth century and the search for neat models of internal consistency. Many economists hoped that their discipline could be similar to a natural science, and constructed assumptions about the nature of the mythical *homo economicus*. With this, thought of how people actually do decide and choose (as opposed to how they should choose, as utility maximisers) was not a major concern in mainstream economics, and some of the assumptions postulated, often based on formal logic, became divorced from human psychology. Modern behavioural economics has arisen as a reaction to these developments. Although there is no broadly accepted definition of behavioural economics (Heukelom, 2012), perhaps the most common understanding of what the term means is a set of observations that show that the cognitive processes that people employ when making decisions often systematically, and therefore seemingly deliberately, violate the set of assumptions and axioms that underlie the dominant neoclassical model (Herbert Simon (1987) stated that behavioural economics 'is concerned with the empirical validity of [the] neoclassical assumptions about human behavior and, where they prove invalid, with discovering the empirical laws that describe behavior as correctly and adequately as possible.').

As Camerer and Loewenstein (2003) have stated, a list of a theory's failings do not form an alternative theory, and, thus far, a parsimonious theory has not yet emerged to deal with all of the challenges to the neoclassical model. Indeed, such an alternative may forever prove elusive, because human decision making is complex, and a parsimonious theory is likely to be subject to just as many holes as those that beset standard economic theory. Therefore, behavioural economics may best be thought of as a box of tools – a set of systematic behavioural patterns – that can be used to enrich our understanding of human decision making, and thus potentially allow us to improve the design of public policy on a context-dependent case by case basis.

Recognition of many of the main behavioural economic observations has been evident for hundreds of years. Indeed, since behavioural economics is essentially aimed at understanding how human beings behave, the main findings have probably been implicitly broadly known since time immemorial. Adam Smith (1759) wrote, for instance, on loss aversion, or the finding that the magnitude of people's negative reaction to the loss of some amount is far greater than the magnitude of their positive reaction to the gain of that same amount: 'Pain is, in almost all cases, a more pungent sensation than the opposite and correspondent pleasure. The one almost always depresses us much more below the ordinary, or what may be called the natural state of our happiness, than the other ever raises us above it.' Or since the concept of whether the ends justify the means was earlier discussed, perhaps it is apt to take note of Machiavelli (1532) in relation to the loss aversion-driven endowment effect, which specifies that people will place a higher value on any particular thing once it is owned than they do prior to ownership: 'And it must be considered that nothing is more difficult to transact, nor more dubious to succeed, nor more dangerous to manage, than to make oneself chief to introduce new orders. Because the introducer has for enemies all those whom the old orders benefit, and has for lukewarm defenders all those who might benefit by the new orders.'

Smith's (1759) *Theory of Moral Sentiments* is a mine of what have become known as behavioural economic insights. For example, he also referred to the observation that people weight heavily the immediate moment compared to the future, now known as 'hyperbolic discounting' or 'present bias' (or the 'immediacy effect', or simply immediate gratification), when he wrote that the 'pleasure which we are to enjoy ten years hence interests us so little in comparison with that which we may enjoy today'. Although there is nothing in neoclassical economic theory that says that people should not demonstrate hyperbolic discounting and should discount the future exponentially at a constant rate (Camerer and Loewenstein, 2003), the latter is the commonly accepted assumption in the dominant discounted utility model. It will be argued that present bias has significant potential negative implications for mankind, and, in many circumstances, ought to be contained by government regulation.

The contribution of modern behavioural economics has been to observe phenomena empirically in controlled settings, and, in some cases, to quantify them. For example, it is often observed that the weight that people attach to losses is roughly twice that which they attach to gains (Tversky and Kahneman, 1991), a magnitude that cannot generally be explained by a declining marginal utility curve. Moreover, the early evidence of hyperbolic discounting was actually observed in rats, which demonstrated much larger discount rates when comparing immediate rewards and rewards delayed by t periods than those in the trade-off between rewards k and $k + t$ periods in the future (Camerer and Loewenstein, 2003).

Arguably, the modern behavioural economics movement began in the early 1950s, with the work of Maurice Allais (1953) reporting violations of the independence axiom. Intuitively, Allais, contrary to the assumptions of the standard economic approach, observed that the value that people attach to a particular outcome can be influenced by the size of the probability associated with that outcome occurring, and by the probabilities associated with and sizes of alternative possible outcomes. A degree of acceptance of behavioural economics by the mainstream economics community did not really materialise until the 1970s however, with work that confirmed that under certain conditions people often reverse their preferences between choice and valuation tasks (Grether and Plott, 1979) and with publication of Kahneman and Tversky's (1979) prospect theory.

Prospect theory, which eventually earned Kahneman a Nobel Prize (offering an indication that behavioural economics had earned a place in the mainstream), is a descriptive model that modifies standard theory principally by allowing for loss aversion and the non-linear weighting of probability – the latter demonstrating that people often overweight small probabilities and underweight large probabilities, which may in part explain why individuals concurrently demonstrate risk-loving (e.g., buying lottery tickets) and risk-averse (e.g., purchasing insurance) behaviours. (Scitovsky (1976) attributed the simultaneous purchasing of lottery tickets and insurance to people's search for optimal arousal, where freely chosen risk-loving behaviour can be arousing, and externally imposed prolonged uncertainty – which people insure against – impacts negatively on arousal.)

A large number of scholars are now devoted to uncovering and (dis)proving behavioural economic findings, and systematically observed behaviour patterns are of potential import in public policy design. Due to space constraints, just a few of these are highlighted here; that is, those which are of particular relevance to the discussion that follows.

Loss aversion, non-linear probability weighting and present bias have already been mentioned. Related to loss aversion, and also anchoring (i.e., the focus on salient attributes), endowment effects (i.e., how goods increase in value on acquisition), status quo bias (i.e., a reluctance to move from one's current position) and the importance of defaults (i.e., how the current framing of the choice architecture influences behaviour), is the observation that reference points matter. In standard economic theory, it is assumed that the carriers of value are final assets, but empirical investigation has discovered that people often care more about what they can gain or lose in the context of what they already have or might expect to have (their reference point), rather than what they finally hold. As aforementioned, these findings are beginning to infiltrate policy dialogues in a number of countries, but the contention here is that behavioural economics has been to some extent captured by the nudge agenda, that the policy community is

thus equating behavioural economics with something that it does not necessarily have to be and that in terms of public sector policy behavioural economics could be used for more appropriate and profound purposes.

From nudging to budging

Governments that are considering or experimenting with nudge-type interventions include those in Sweden (European Observatory, 2012), The Netherlands (National Institute for Public Health and the Environment, 2011), France (Oullier and Sauneron, 2010) and Denmark (*Economist*, 2012). The policy influence of the arch-‘nudgers’ Richard Thaler and Cass Sunstein is considerable. As earlier alluded, Sunstein served as the Administrator of the Office of Information and Regulatory Affairs in the US, and Thaler is an advisor to the UK government’s Behavioural Insights Team (BIT). The BIT, colloquially known as the Nudge Unit, was established by David Cameron soon after he came to power in 2010, and is, from a government perspective, the global leader in developing and applying nudge interventions. Currently, if one wants to learn about applied public sector nudges, in relation to searches of the international literature on nudges and how these are being piloted in a governmental context, it makes sense to focus on the work of the UK’s Nudge Unit, although the arguments presented below are relevant to any country context where public sector nudging is being considered.

The Nudge Unit has released a number of reports on theory, methods and applications, with the latter focussing on such areas as health-related behaviours, personal energy saving and reducing tax fraud (Behavioural Insights Team, 2010, 2011, 2012). Within these reports, there are many examples of purported nudges that have been proposed for implementation or piloting. For example, the notion of introducing prompted choice for organ donation is touted (a policy that has been implemented in the UK recently), whereby on renewing one’s driving licence, for example, the application cannot be processed unless one states whether or not one wishes to be a donor. In those countries, such as the UK traditionally, where ‘opt in’ is the default position, roughly 20 per cent of adults are registered donors, whereas in ‘opt out’ countries – France and Portugal, for example – almost the whole of the adult population are listed as potential donors. Prompted choice is intended as a weaker form of opt out, and is expected to increase the donor rate (although the actual provision of organs for operations at the time of need also depends on whether family consent is required, as it is in almost all countries: if so, then the opt in versus opt out distinction becomes less relevant, and thus policy makers may have to weaken the consent requirement for the full benefits of opt out to be felt). Given the shortage of organ donors in opt in countries, this simple change in the default (or reference point) would seem to offer a simple (necessary if insufficient) means for achieving improvement,

although some remain uncomfortable with the notion of opt out, believing that it would serve as a burdensome obstacle to those who do not wish to be donors, or that it might be detrimental to those who feel embarrassed to state that they do not want to be a donor (and thus may be coercive). Nonetheless, a case can be made that changing the default option in this way – which can be done across a wide range of public policies, including legislating to enforce opting out of corporate pension plans, or incentivising people to remain in work-based savings initiatives so that people save appropriately for retirement (*Economist*, 2012; www.kiwisaver.govt.nz) – satisfies at least some nudge requirements. It seems to involve no strong economic incentives, at face value it remains open to refrain from the targeted act (e.g., one does not have to be a donor if one does not wish to be so) and it is informed by behavioural economics. However, its implementation appears to depend on regulation, which is at odds with the anti-regulatory positioning of libertarian paternalism, and it does affect some notions of liberty in that the opt in option, which many might prefer, is no longer available.

An additional set of proposals also appear to be based upon the manipulation of the reference point by increasing the salience of relevant information. This can be done by either highlighting benchmarks for good behaviour (e.g., the recommendation that we should eat five portions of fruit or vegetables each day, and that consuming anything less than this is, in some sense, a loss), or by using public reporting of performance as a means to incentivise better practice, such as requiring restaurants, through some kind of scoring system, to disclose their hygiene standards on their premises. A good related example of the latter at the individual rather than the organisation level is the Nudge Unit's proposal for people to use 'smart meters', so as to compare their own energy consumption levels with households of similar type. This is an attempt to introduce clearer reference points around energy consumption; behaviour that does not match up to the reference point might be perceived as a personal loss, which, due to loss aversion, could motivate action. For instance, people might choose the average energy consumption level of similar households as their reference point, and if they were to exceed this level in their own household, they may perceive their excess consumption as a loss and better contain consumption in the next quarter. A similar strategy regarding tax payment is advocated by the Nudge Unit, who conducted a trial that involved informing a local population that nine out of ten people in their area had already paid their tax debts, which led to a substantial increase in tax payments.

For other BIT proposals, it is a little harder to classify them as nudges, at least as defined by libertarian paternalism. Rather, many of the proposals appear to be quite straightforward applications of economic incentives, informed by the relative price mechanism of standard economic theory. There is nothing intrinsically wrong in this of course, but those attempting to apply behavioural

economic theory should be sound in their theoretical claims, otherwise the entire behavioural economic approach could become (re)marginalised by the mainstream economics community. Examples of proposed pilots include redeemable Nintendo points for diabetic children who agree to regular blood-sugar tests, and upfront incentives to encourage the uptake of energy efficient products, including a month's exemption from council tax payments. Nudge advocates might argue that some of the incentive-based initiatives are attempts to exploit people's tendency towards hyperbolic discounting – i.e., offering a small incentive to do something now may offset to some degree the unpleasantness of undertaking the targeted task, and might remind those targeted that the task, though unpleasant, can offer longer-term benefits. This can be taken one step further, such that tasks that were formerly unpleasant can be made enjoyable. For example, the Nudge Unit has formed a partnership with *LazyTown*, a public-private initiative that has been operating nationally in Iceland since 1996, in which young children sign an 'energy contract' with their parents that rewards them with, for example, additional television viewing time for eating healthily, going to bed early and being active. Following the introduction of *LazyTown*, and up until that time uniquely in the developed country context, childhood levels of obesity in Iceland started to fall. Depending on how strict the parents are, the *LazyTown* initiative may preserve liberty, can avoid significant economic incentives, does not have to involve overly overt methods of persuasion and, if it engages children via feelings of enjoyment (and thus feeds into notions of present bias), is informed by behavioural economics. In short, *LazyTown* can perhaps be classified as a nudge. And yet, even with these hyperbolic discounting/present bias qualifiers, there remains a lingering sense that advocated 'nudge' initiatives are, in general, in danger of morphing beyond the original libertarian paternalistic requirements. By claiming that so many things are nudges, the approach, it could be argued, is in danger of becoming theoretically empty.

The boundaries for qualifying an intervention as a nudge are clearly a little blurred. There are, however, more fundamental challenges to the nudge approach. For instance, how are we to determine the directions in which it is legitimate to nudge people? Earlier, it was noted that the libertarian paternalist would look to those things that the targeted individuals would want for themselves following deliberative reflection. However, we ought to be somewhat cautious about deliberative statements of preference because there is no guarantee that the limitations on attention, information, cognitive ability and self-control that affect the individual's automatic responses are absent from their deliberative decision making. (Sugden, 2009, goes a step further by arguing that there is no reason to believe that, even in the absence of these limitations, individuals will reveal coherent preferences: that is, according to Sugden, we cannot assume that there is a rational economic agent 'inside' each human.) Indeed, as Prelec (forthcoming) has indicated, it may be that answers taken as deliberative preferences are often

not really preferences at all, but responses to pressure, to how a question is framed or to what individuals think their questioner wants to hear (although the presence or absence of questioner-induced bias is of course difficult to verify), and that, therefore, the best approximation of what a person really wants, taking into account all of the perceived costs and benefits of the options placed in front of them, may in fact be given by what they choose, particularly for everyday choices over which they have a great deal of experience. If cognitive, attention and information limitations do indeed affect people's automatic *and* reflective responses, then policy makers will greatly influence statements about what individuals *ought* to want, by either manipulating (intentionally or otherwise) their deliberative responses, or by deciding that their deliberative responses cannot be trusted. If this argument is accepted, then it seems clear that we ought to be reluctant to give policy makers a license to try to interfere in personal lifestyle behaviours that only or principally affect the persons who are engaged in those specific behaviours, particularly if individuals are at least aware of the potential harms that their actions inflict upon themselves. However, this does not negate Mill's (1869) position that governments should attempt to influence the behaviours of those whose actions are causing harm to others. Mill (1869) would not have supported the libertarian paternalistic notion of influencing people's preferences for their own good: 'The only reason for which power can be rightfully exercised over any member of a civilised community against his will', he wrote, 'is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant.' Admittedly, Mill perhaps did not recognise fully the strength of irrational and unconscious factors in human behaviour (Berlin, 1969), but this may be all the more reason to protect people explicitly against those who might exploit their errors. Even in relation to negative externalities, however, the boundaries are not always clear – for example, does weight loss among the obese potentially benefit the non-obese sufficiently to make it legitimate for the government to manipulate the obese to lose weight, particularly if the evidence that the healthy living incur, on average, greater lifetime health care costs than those who are obese is to be believed (Van Baal *et al.*, 2008)? Even for those personal lifestyle behaviours that are found to incur costs for society, it is difficult to discern where a government ought to draw a line, since all of us are likely to partake in at least some of those behaviours.

If it is acceptable for governments to influence the actions of those who are harming others, how should this be done? Nudge, as has been stated, is a decidedly anti-regulatory approach. Some leading behavioural economists have made it clear that the approach is meant to serve as a complement, and not as a substitute, to regulation (Loewenstein *et al.*, 2012), but others from outside the discipline have nonetheless criticised the nudge approach for undermining potentially more effective regulatory measures (House of Lords, 2011; Marteau *et al.*, 2011). The inducement of this 'either or' mentality is probably partly

attributable to some of the language that Thaler and Sunstein (2008) used; for example, 'In many domains, including environmental protection, family law, and school choice', they wrote, 'we will be arguing that better governance requires less in the way of government coercion and constraint, and more in the way of freedom to choose. If incentives and nudges replace requirements and bans, government will be both smaller and more modest.' However, most of the blame for provoking the critique of nudge policies in this respect, at least in the context of the UK, can be attributed to the coalition government. For instance, Oliver Letwin, the Minister of State for Policy, has argued that behavioural change policy (i.e., nudge interventions) might be used as a substitute for legislation, although he has admitted that behavioural interventions cannot substitute for all regulation (John and Richardson, 2012). There is a danger that an ideological preference for non-regulatory interventions will encourage (and has encouraged) officials to exclude consideration of potentially more important and effective regulatory measures when thinking about behaviour change. Indeed, the UK government-supported 'responsibility deals' with private corporations, whereby the private sector in principle agrees to self-regulate by, for example, using socially responsible nudge interventions of their own in exchange for the freedom from further government regulatory measures; however, these deals have been shown to be lacking in effectiveness (e.g., BBC, 2012; House of Lords, 2011).

There is a further intellectual problem with the nudge agenda that has significant potential implications for practical policy making in that nudge is often equated with behavioural economics, and, consequently, behavioural economics is, in the minds of many, anti-regulatory. However, this assumption is far from the truth in that the findings of behavioural economics can provide a firm theoretical justification for regulating across a range of areas. For example, if we take present bias, we know that people heavily weight the immediate moment and overlook the longer-term detrimental consequences of their actions to themselves (politicians do sometimes implicitly act on this – for example, they recognise that, left to themselves, people might not save sufficiently for their retirements, and therefore governments mandate social security systems in order to avoid mass poverty among the elderly). As indicated earlier, this tendency has been known for hundreds of years – Hume (1739), for instance, wrote that 'there is no quality in human nature which causes more fatal errors in our conduct than that which leads us to prefer whatever is present to the distant and remote' – but modern behavioural economics has lent empirical force to the point. We also know that the food, drink, tobacco, motor vehicle and information technology industries, lending institutions and a host of other private sector interests are aware of this tendency in human beings and devise ways to seek to profit from it, which is economically rational since their objective is weighted heavily towards profit maximisation. Essentially, however, they use techniques that can cause long-term harms to others. Mill, presumably, would argue that this is justification enough

to regulate them. In an introduction to Mill's (1869) classic work, *On Liberty*, Isaiah Berlin (1969) wrote that he was acutely conscious 'of the diminishing effect of mass culture; of the destruction of genuine purpose, both individual and communal, by the treatment of men as irrational creatures to be deluded and manipulated by the media of mass advertising and mass communication, and so "alienated" from the basic purposes of human beings.' Following Berlin, it seems legitimate for the government to regulate openly against the worst excesses of this manipulation, rather than introduce measures of its own that exploit people's reflexive decision making in an attempt to counter the damaging effects of the covert tactics of others.

It is perhaps important to note that when regulating commercial enterprises government is not relying *directly* on changing the personal lifestyle behaviours of individuals *per se* (i.e., they are not relying on demand-led change), but is rather targeting the often profit-driven nature of the supply side. In other words, rather than leaving the supply side largely free while attempting to influence demand so that people make 'better' choices, the demand side is left largely free but the supply side is shorn of those goods, services and processes that are deemed excessively exploitative (for example, pay day loans, which tend to be targeted at the relatively poor via advertisements that exploit present bias by concealing interest rates that are sometimes set at the thousands of percent; fortunately, the UK government has recently announced plans to regulate more closely the pay day loan market – <http://www.bbc.co.uk/news/business-21683739>). To take another specific example, regulation of the food industry to introduce a 'traffic light' system, such that a red mark is displayed on energy rich foods and a green mark is placed on healthier products, is known to be an effective way to change food purchasing patterns (House of Lords, 2011). Moreover, behavioural economics, both *vis-à-vis* present bias, but also in relation to giving the consumer a very clear reference point, such that a red mark is perceived as a health-related 'loss' and a green mark as a 'gain', provides a clear intellectual justification for traffic light labeling. Unfortunately, successful lobbying by the food industry (e.g., cheese and chocolate manufacturers) has dissuaded the introduction of such regulation at the EU and UK governmental levels, and led to the UK (for instance) adopting less effective responsibility deals instead.

It would of course be naïve to imply that politics (e.g., lobbying, power asymmetries, financial and business interests, opposition parties) does not play a powerful role in political decision making, and may often prevent further regulation even if a particular government ideally desires it. Moreover, politicians are human, and suffer from, for example, present bias, exacerbated in democracies by relatively short-term electoral cycles and the concomitant pressure to try to satisfy the all too frequent short-sightedness of the electorate. The main point intended here, however, is that behavioural economics should not be used as a reason for *not* regulating the often socially harmful activities of the

private sector (e.g., excessive and exploitative marketing techniques to encourage people to overindulge on alcohol, cigarettes and unhealthy foods, irresponsible lending by financial institutions, the production of fuel inefficient vehicles, etc.); rather, an education in behavioural economic concepts can *sometimes* give a legitimate justification – a theoretical foundation – for public officials to regain the confidence to lead, by offering potential insights into where and how their citizens' cognitive limitations are being exploited excessively, and by also imbibing politicians with a sense of awareness of the bounds on their own rationality. **Behavioural economic informed regulation** – or *budge* policy – calls for stronger and clearer input from behavioural economics than that which can now be observed in the nudge community, and recognises that policy makers should often aspire to budge profit-oriented industry (for whom a socially responsible image might actually be good for profits) rather than nudge citizens if they are to serve more effectively the social good.

Conclusion

Over the last several years, the nudge approach to behavioural change has received substantial attention in academic and policy circles. It is argued here that nudges do not fulfil the requirement that government policy should be overt. Richard Thaler has argued on his twitter feed that nudges can be overt, and given that he is arguably the world's leading behavioural economist, and that he is one of the authors of libertarian paternalism, his word is not easy to contest. However, overt policy seems to go somewhat against the original nudge spirit of appealing to people's unconscious system 1 thinking. Since the popularisation of the approach, its advocates have tried to encapsulate too much, and, in consequence, it has become somewhat theoretically empty and, in practice, too often gimmicky.

For many, a further problem with nudges is that they may interfere too much with personal lifestyle choices. In theory, people are at liberty to ignore a nudge if they so wish, but if these interventions are meant to influence unconscious actions, then they may be practically unavoidable. It is maintained here that the role of government is not, for the most part, to interfere with personal lifestyle choices unless those choices present harms – or negative externalities – to others, although the government may be warranted in enforcing some behaviours designed to protect people principally from themselves if the intervention is considered openly and explicitly and supported widely, such as seatbelt legislation. The most effective way of preventing people or organisations harming others is to regulate their activities. Nudge is anti-regulation, but behavioural economics is not. Thus, it is proposed that a new approach be developed – *budge* – or in longhand, behavioural economic-informed regulation designed to budge the private sector away from socially harmful acts. An awareness of the main behavioural economic findings – for example, present bias, reference points, loss

aversion and nonlinear probability weighting – can help to inform decisions on where and how to regulate (for instance, traffic light food labelling), and may also ensure that public officials gain a better understanding of their own decision-making limitations. Budge could benefit society greatly, and might even prevent future catastrophes (for example, sufficient banking regulation in recognition that citizens focus on the short-term benefits of borrowing and overlook the long-term pain of repayment). Assuming that politicians are not driven entirely by ideology, budge can offer a theoretical basis to recapture their confidence to regulate against harms.

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