

BEHAVIOURAL ECONOMICS AND PUBLIC POLICIES: SOME INTRODUCTORY ISSUES *

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Abstract. *The paper aims to inform the domestic public about the basic concepts of behavioural economics, its historical development and intellectual basis, the application of its findings in policymaking, and its effectiveness in current practical application. In the first part of the paper, the author presents the basic concepts of behavioural economics: the nudge, the choice architecture, the libertarian paternalism, cognitive biases, and others. The second part of the paper provides a concise overview of the critiques directed at behavioural economics and libertarian paternalism (Posner's critique, Mitchell's critique), and a review of the empirical validity of certain behavioural economics phenomena. The third part presents the use of behavioural findings to inform the design of public policy in different domains (the behavioural public policy), along with numerous examples, mostly from the practice of the Behavioural Insights Team in the United Kingdom.*

Key words: *nudge, choice architecture, libertarian paternalism, cognitive biases, Nudge Unit*

“...Behavioral Economics and RCT [Rational Choice Theory] are engaged in a struggle like that of the geocentric and heliocentric theories of our planetary system”.

Thomas S. Ulen (2014: 112)

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1. WHAT ARE THE NUDGE, THE CHOICE ARCHITECTURE, AND THE LIBERTARIAN PATERNALISM?

There are several definitions of “a nudge”, but perhaps the most popular one comes from Thaler and Sunstein (2008: 6), who said that *a nudge [...] is any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives*. This definition of a nudge calls for defining the term “**choice architecture**”, which means *organizing the context in which people make decisions* (Thaler, Sunstein, 2008: 3). As we know, decisions can be made in a wider context (such as political or economic), or in a narrower context (such as family or professional environment). Thaler and Sunstein (2008: 3) state the political decision-makers who choose the design of ballots, or doctors who design alternative medical treatment, or parents who describe alternative educational options for children as examples of **choice architects**. Also, in the legal context, for instance, the mediator who designs alternative options for disputing parties acts as a choice architect. So, all these decision-makers are in the position to predictably alter the people’s behaviour which they might influence while at the same time *preserving their freedom of choice*.

Relying on these basic concepts, Thaler and Sunstein have initiated some kind of a new and very provocative movement called **libertarian paternalism (LP)**. The first term in this phrase means that people still have the freedom to choose, but the second one is more controversial and requires some additional attention. The paternalistic aspect of choice architecture means that the decision-makers (who act as choice architects) have the power to alter people’s behaviour to make their life better, longer, or healthier (Thaler, Sunstein, 2008: 3). The choice architects can push behaviour in an *ex-ante* defined desirable path, such as reducing smoking or obesity, or resolving the parties’ disputes. They act in belief that they know what is in the best interest of the people, thus improving their lives. The assumption from which Thaler and Sunstein start is that people who do not make optimal decisions (such as smokers, obese people, or excessive drinkers) are willing to pay a third party to help them make better decisions (Thaler, Sunstein, 2008: 7). So, the choice architect has a kind of “a benevolent role”. This role is based on the human tendency to be *predictably irrational* (Ariely, 2008), which means that our predictions and decision-making are systematically biased and flawed. But, as people’s freedom of choice has not been blocked, in the sense that they have the power to refuse the predefined “best solution for them”, this “intervention” represents a kind of *soft or weak paternalism*, popularly known as a *nudge*. Understood in this way, “nudging” is the basis of today’s public policies in various domains (health, saving, taxing, etc.) in many countries: US, UK, Germany, Denmark, Turkey, and others.

Choice architects come from the private as well as the public sphere, which gives them more or less power and yields smaller or larger consequences of their “choice architecture”. The likelihood of abusing the power and altering people’s behaviour in a non-desirable way may be more prominent in the public sphere, but not necessarily. This is probably the basic reason why some scholars, practitioners, and laymen are concerned about the implementation of nudge in practice. Before exploring the critique of the “nudge” policy, there is a question that has to be answered: *What are those biases that require outside intervention?*

2. SOME TYPES OF COGNITIVE BIAS

Cognitive biases are systematic errors in thinking (Samson, 2020: 148) and, as such, they deviate from the norm of rationality in reasoning. So far, about 188 cognitive biases have been identified in the general population, and they are roughly classified into three groups: 1) decision-making biases; 2) social biases; and 3) memory biases. Below we present some of the cognitive biases most frequently mentioned in the literature.

The status quo bias is a well-known human tendency to maintain the existing situation, i.e. to show resistance to change. Another name for the status quo bias is *inertia* (Samson, 2020: 160, 175). Numerous experiments show that people stick with the status quo for a variety of reasons, for instance, to avoid transitional costs or uncertain outcomes, or because the status quo decision acts as a *psychological anchor* (Samuelson, Zeckhauser, 1988: 41). *The anchoring effect* implies a human tendency to unconsciously rely on a piece of information (the so-called “anchor”) when making decisions, even if it is insignificant (e.g. see: Tversky, Kahneman, 1974: 1128). In case of the status quo, this means that the degree of *the previous commitment* to the existing conditions (the status quo) determines the strength of the anchoring effect. The stronger the first factor, the more pronounced the second one.¹ Samuelson and Zeckhauser (1988: 37-41) present other psychological explanations of the status quo bias, such as **sunk cost thinking**, **cognitive dissonance**,² **regret avoidance**,³ and a **need to feel in control**. Anyway, the existence of the human tendency toward the status quo has significant implications for the application of an important behavioural instrument – **the default option** which will be explained later.

Sunk cost fallacy indicates a human tendency to remain in a certain situation (even unfavorable) because some resources (time, money, effort, etc.) have been previously invested (see, for instance, Arkes, Blumer, 1985). This tendency strengthens the status quo bias. Thaler (1980: 47) cites vivid examples of prepaid basketball tickets or paid membership fees, in which case we continue to watch games or exercise despite certain obstacles (for example, physical injury or weather conditions that make it difficult to go to a game), while in an alternative situation (no prepaid tickets or membership fees) we certainly would not do that. This phenomenon is explained (Thaler, 1999) by the fact that we, as humans, have different **mental accounts**, which means that we treat money differently based on its origin or intended use, as opposed to the formal accounting where we think of it in terms of a “bottom line”. So, if we incur additional costs (inconvenience, time, or money), as in the example of the basketball game, we put them into a mental account that is different than the one associated with the previous ticket transaction. Thaler (1999: 184) singles out three components of the mental accounting: 1) how outcomes

¹ The presence of the status quo is so strong and ubiquitous that Thomas Huxley said: “*It is the customary fate of new truths, to begin as heresies, and to end as superstitions*”. See: BrainyQuote.com (2020).

² *Cognitive dissonance* refers to the uncomfortable tension between two or more simultaneous and conflicting ideas or feelings, in which situations individuals are motivated to reduce it by changing their attitudes, beliefs, or actions. It is an important concept in social psychology (see: Festinger, 1957). One well-known instrument for reducing this tension or mental discomfort is *rationalization*, which is often used by smokers who want to justify smoking.

³ *The regret avoidance* has been tested in a hypothetical real estate investment setup (see: Seiler, Seiler, Traub, Harrison, 2008). Results are such that the majority of subjects do not exhibit this bias, but a large minority of respondents perceive losses stemming from the *commission* as more severe than losses stemming from *omission*. This result is consistent with the **theory of omission bias**, which says that people perceive harmful commissions as worse than corresponding omissions and, hence, prefer omission to commission (Ritov, Baron, 1992: 50).

are perceived and experienced, and how decisions are made and subsequently evaluated; 2) the assignment of activities to specific accounts; and 3) the frequency with which accounts are evaluated. In case of the first component, Thaler (1999: 188-189) introduces the **notion of transaction utility (TU)**, as opposed to the *acquisition utility* which means the difference between virtually receiving the good as a gift minus the price paid.⁴ The TU means that people derive pleasure from the quality of the “deal” – the difference between the amount paid and the “reference price” for the good. For example, people are willing to pay more for the beer from a luxury resort hotel than from a small grocery store because the reference price in that context is higher (Thaler, 1999: 189). The traditional economic theory neglects the TU (and the mental accounting), and by ignoring this phenomenon it cannot fully inform us about how people make real decisions. In short, the value of the deal in decision-making also matters. The second component relates to our ability to categorize expenditures (food, housing, etc) and to label our funds (for instance, flows vs. stocks). This mental categorization process enables us to less painfully incur some payments, since we are **loss-averse** (see: Kahneman, Tversky, 1979a)⁵ and experience **pain of paying** (for more details, see: Zellermyer, 1996). Finally, considering the third element, accounts can be balanced in different periods and can be defined narrowly or broadly (the so-called *dynamic mental accounting*). Thaler (1999: 200) uses the notion of *myopic loss aversion* as an example of a more general phenomenon called **narrow framing** which means that projects are evaluated one at a time, rather than as part of an overall portfolio (Kahneman, Lovallo, 1993: 19). Because of these tendencies, people might be extremely risk-averse. To sum up, mental accounting procedures have evolved to economize on time and thinking costs and to deal with self-control problems, but they do not work perfectly (Thaler, 1999: 202-203). In any case, understanding how mental accounting procedures work can serve as a useful tool for improving our spending, investment, and savings decisions.

The optimism bias or a general human tendency to see things more in a positive frame is a widespread and robust phenomenon. Sharot (2011) notes that this tendency is particularly pronounced in future predictions where the likelihood of positive events is overestimated and the likelihood of negative events is underestimated. For instance, we underestimate the likelihood of getting divorced and overestimate our success in the job market (Sharot, 2011: R941). Despite its obviously useful purpose, especially for mental and physical health,⁶ excessive or unrealistic optimism might be detrimental due to the underestimation of the risk of negative consequences. For instance, in the domain of legal disputes, this tendency may have negative consequences since the realistic assessment of cases is of great importance for parties (Mojašević, 2019: 200). Probably the best examples of the negative side of optimism bias are smokers, excessive eaters or spendthrifts. The detrimental effects of optimism bias may also be observed on the group level, as evidenced by the collapse of financial markets (Sharot, 2011: R944). But, on balance, it seems that the advantages of optimism bias may have outweighed its deficiencies. If it were not so, there would be a stagnation in the evolution of humanity (Varki, 2009: 684).

⁴ This concept is similar to the concept of *consumer surplus*.

⁵ As noted by Kahneman and Tversky, “losses loom larger than gains” (Kahneman, Tversky, 1979a: 279). This tendency explains already mentioned sunk costs fallacy and represents an important factor in the status quo bias.

⁶ It is a common truth that optimists live longer and are healthier than pessimists.

The phenomenon of overconfidence (effect) is closely connected with optimism. It is characterized by too much confidence in one's abilities. Both the positive and negative sides of this effect are emphasized in the literature (e.g. see: Johnson, Fowler, 2011). The bright side of this effect is that it improves the probability of success since it increases our ambition, morale, determination, and other motivational factors; the negative side lies in the fact that it may contribute to our faulty estimations, unrealistic expectations, and hazardous decisions. For instance, some traders are prone to excessive risk-taking due to this effect (the so-called *overconfident traders*), but they survive in the long run and can even drive out the rational traders from the market completely (Hirshleifer, Luo, 2001: 74).⁷ Johnson and Fowler (2011) have developed an evolutionary model which shows that overestimating one's own ability for success provides advantages in the struggle for scarce resources in a competition setting, which are particularly pronounced in the domains of high uncertainty, such as international relations, new technologies, climate change, etc.

The special version of the overconfidence effect is the “**planning fallacy**”, originally proposed by Kahneman and Tversky (1979b), which implies our tendency to underestimate the duration and completion of the project and how much it will cost. This fallacy occurs because we overestimate our abilities and underestimate risks associated with the project that we are involved in, and often ignore past experience (see: Buehler, Griffin, Ross, 1994).

3. THE CRITIQUE OF THE BEHAVIORAL ECONOMICS AND LIBERTARIAN PATERNALISM

Like any new idea that pretends to beat, or at least to modify, the existing ideas on “the market of ideas”, the emergence of Behavioural Economics (BE) and Behavioural Law and Economics (BL&E) has been sharply criticized. Criticism came from several directions, but for this paper, we single out three.

3.1. Posner's critique: Is the BE undertheorized?

The first criticism comes from **Judge Richard Posner**, one of the founders of Law and Economics and probably the most famous apologist of the application of neoclassical economics in law (see his significant work: Posner, 2014). In his paper, Posner (1998) criticized the basic assumptions, concepts, and normative implications of behavioural economics presented in a well-known paper by Jolls, Sunstein, Thaler (1998, hereinafter: JST), in which JST for the first time systematically presented the theoretical ground of this new discipline. As Posner pointed out, JST did not explain the meaning of the “behavioural economics”, but they implicitly defined it negatively: “*it is economics minus the assumption that people are rational maximizers of their satisfactions*” (Posner, 1998: 1552). To support his position, Posner has referred to Coase's⁸ explicit argument in favor of the rejection of the traditional economic model of man as a rational maximizer of his satisfactions (Posner, 1998: 1552, fn. 4). Posner wanted to say that the assumption of

⁷ Hirshleifer and Luo (2001: 74) point out that overconfident traders, as opposed to rational ones, trade aggressively because they *underestimate* the risk and *overestimate* the conditional expected value from their trading strategies.

⁸ Ronald Coase is one of the founding father of the traditional law and economics (L&E) (see: Coase, 1960).

homo economicus, like a cold, selfish, and rational maximizer of his satisfactions, has already been abandoned in the L&E. On that ground, Posner further criticized three “bounds”, which represent the cornerstone of the theoretical basis of the BL&E: 1) the bounded rationality, 2) the bounded willpower, and 3) the bounded self-interest. In a review of the first term (the rationality), Posner said that the limitations of rationality could be well explained by positive information costs, and somehow ironically used the term “cognitive quirks” to define those limitations (Posner, 1998: 1553). Those “quirks”, which JST and other behavioural economics call “cognitive biases”, might be well incorporated in the rational-choice economics (RCE), and even if they are considered as “irrational”, the RCE usually continues to “work” (to explain and to predict). Posner gave two examples of irrational preferences (the fear of flight and voting), which are not a huge challenge to the RCE since they can be taken as given in analyzing the economics of transportation and voting as people's behaviour, respectively (Posner, 1998: 1553). Posner applied a similar line of reasoning to the second “quirk” – bounded will-power, which can be analyzed within the framework of rational choice theory, but JST *gave up from the RCE to soon* (Posner, 1998: 1555-1556). Additionally, Posner proposed the “multiple selves” approach to analyzing bounded will-power which JST did not refer to at all (Posner, 1998: 1555-1556). Thirdly, Posner critically evaluated the third “bound” – bounded self-interest (which JST refer to as a *notion of fairness*), in the way that the altruistic act, as a “deviation” of self-interest, can be actually seen as a form of self-interest considering the assumption of interdependent utilities (Posner, 1998: 1557). Basically, Posner has referred to the findings of the evolutionary biology of positive and negative altruism (using the term “vengeful man” whose passion for revenge might be very rational) in explaining “fairness”, ultimatum game, and endowment effect (Posner, 1998: 1561-1567).⁹ Finally, we might add a critique of the experiments' artificial environment, such as a coffee-mugs experiment, which often does not coincide with the real-world setting (Posner, 1998: 1570-1574).

To sum up, Posner pointed out that the three bound are not something new in theory, and, ironically or not, said that the project of JST could be named as “A Psychological Critique of Economic Analysis of Law” (Posner, 1998: 1557). He further emphasized that the BL&E *is undertheorized because of its residual, and in consequence purely empirical, character* (Posner, 1998: 1559). In the end, he criticized the normative implications of the BL&E, emphasizing lucidly that the policy based on these assumptions is manipulative and, basically, totalitarian; finally, he raised the issue of whether the experts who will create and implement this policy also suffer from these cognitive distortions (Posner, 1998: 1575).

3.2. Mitchell's critique: Is the LP an oxymoron?

The second line of criticism is focused on libertarian paternalism (LP) and Thaler and Sunstein' position that individuals cannot reliably improve their welfare but that it is necessary to manipulate the framework in which they decide (the so-called choice-framed paternalism) to achieve that goal (for more, see: Mitchell, 2004). According to Mitchell (2004: 6), the line of reasoning of the LP undercuts the basic premise of “pure” libertarianism that individuals are the best judges of their welfare and thus the best decision-makers for their well-being. Mitchell strongly opposes the thesis of the inevitability of choice-framed paternalism, and instead of that, sees the inevitability of *manipulation* of

⁹ Posner pointed out that the sunk cost fallacy also has a biological root (Posner, 1998: 1563).

choices by central planners (Mitchell, 2004: 8).¹⁰ Mitchell (2004: 19-20) believes that paternalism should be used to *maximize liberty, not welfare* (as opposed to LP which entails “making people healthier or wealthier”), giving an advantage to the individual autonomy and freedom over some vague conception of objectively good preferences that should be imposed on irrational individuals. Mitchell (2004: 20) proposes two types of paternalistic interference with individual liberty: 1) to improve decision-making competence, and 2) to prevent liberty-restricting irrational choices. This kind of paternalism is aimed at maximizing individual liberty, which is a position of a truly committed libertarian. Besides, Mitchell (2004: 29) said that it is impossible by definition (as there is no objective measure of welfare) for a third party (the central planner or anyone else) to make judgments about another individual’s utility (welfare); it is a “job” only for that individual who tends to maximize subjective utility. Finally, Mitchell (2004: 32-40) is concerned that the LP policy may have redistributive effects in the sense that rational persons can bear the cost of changing the preferences of “irrational persons” without their content, which is a violation of the libertarian principle. By and large, this author stressed that since the LP failed to reconcile traditionally opposed concepts of paternalism and libertarianism, the conclusion is that the LP is an *oxymoron*. In other words, the central planner could not know what is the best choice for the individual, and in the situation in which individual has a choice to exit (like the opt-out option in the pension plan scheme), it is not a choice without any costs, considering redistributive effects of the LP policy – shifting costs of intervention to the rational persons. Mitchell (2002: 132-137) proposes a new form of paternalism that fits better to libertarian principles – the so-called “**do no harm**” approach to irrationality regulation. This approach pays particular attention to the procedural measures, such as individual-level debiasing techniques to increase individuals’ decision skills, that might be applied without violation of substantive rights and interests of individuals to overcome their cognitive biases.

Mitchell (2017: 697-698) distinguishes between two types of nudges: 1. **the choice-independent nudges** (the libertarian nudges that promote liberty and freedom of choice), and 2. **the choice-dependent nudges** (the intrusive nudges that interfere with the autonomy of irrational choosers). The libertarian nudge entails three types: 1) **educative nudges**, when a “choice architect” tends to provide information or educate people (e.g. providing consumers with nutritional information); 2) **simplifying nudges** make the decision-making process less difficult by reducing transaction (information) costs without favoring any particular outcome; 3) **deliberative nudges** make one’s choice easier to implement (e.g. active choosing) (Mitchell, 2017: 701-702).

Interestingly, there is another form of paternalism, called “**asymmetric paternalism**”, which does not attempt to “make a firm alliance” with libertarianism, and creates large benefits for those who make errors, while imposing little or no harm on those who are fully rational (Camerer, Issacharoff, Loewenstein, O’Donoghue, Rabin, 2003: 1212). These authors advanced four types of regulations: 1) default rules, 2) provision or reframing of information, 3) cooling-off periods, and 4) limiting consumer choices, some of which will be very intrusive on individual autonomy and others not (Camerer *et al.*, 2003: 1224).

¹⁰ Mitchell strongly focused on the central planner manipulation, although the very concept of the choice architect is related to the private organization as well.

3.3. Are certain concepts of Behavioural Economics empirically valid?

Recently, some of the key concepts of Behavioural Economics, such as the loss aversion (“losses loom larger”), the core of the prospect theory (Kahneman, Tversky, 1979a), have been questioned in some way. Namely, the loss aversion, as a robust phenomenon, has been used for explaining some other well-known behavioural phenomena: the inequity aversion¹¹ (see: Fehr, Schmidt, 1999), the endowment effect¹² (see: Kahneman, Knetsch, Thaler, 1990; Thaler, 1980), the status quo bias (see: Samuelson, Zeckhauser, 1988), the disposition effect¹³ (see: Shefrin, Statman, 1985), the equity premium puzzle¹⁴ (see: Grossman, Shiller, 1981; Benartzi, Thaler, 1995), and others. But, recent studies (Yechiam, 2019; Gal, Rucker, 2018) have started to explore an empirical origin of the loss aversion. Yechiam (2019: 1327) has critically reviewed prior studies which Kahneman and Tversky (1979a) and Fishburn and Kochenberger (1979) relied on when examining loss aversion; Yechiam found that much of the earlier evidence for this phenomenon had been over-interpreted to prove a general asymmetry in the utility function for gains and losses. Actually, according to Yechiam (2019: 1329), *what appears to be a robust finding is an aversion to high-stakes losses and gain/loss neutrality for small-to-moderate losses*. The utilities elicited in these prior studies were for high monetary amounts above \$1,000. So, the superiority and robustness of loss aversion seem to have been exaggerated.

Also, some BE concepts have been criticized in the sense that they may have alternative explanations. For instance, the concept of **endowment effect - EE** (the sellers’ tendency to assign higher prices to objects than buyers) could be explained by sellers’ sensitivity to market prices, which are often higher than one’s idiosyncratic prices. This explanation relies on the reference price theory and implies that the EE could be explained by the *aversion to bad deals*, not an aversion to losing possessions (see: Weaver, Frederick, 2012). Also, there is an integrative approach that emphasizes that the EE might be attributed to *the cognitive frames that bias which information is accessible during valuation* (Morewedge, Giblin, 2015: 339). Following that reason, Yechiam and Hochman (2013) have demonstrated that increased performance in tasks with losses can be driven by the attentional investment caused by losses (so-called *attentional effect of losses*) and not, as usually assumed, by loss aversion; so, instead of leading to a cognitive bias, losses actually increase people’s sensitivity to the incentive structure. All these alternative explanations are convincing and subtle and cannot be simply ignored.

Finally, there is a critique that the BE neglects the important fact that the (personal) *experience* and *competitive market* may induce people to learn a more rational behaviour. Relying on Becker’s earlier work (1962), List (2003) used the results of field experiments to

¹¹ *The inequity aversion* is a human resistance to “unfair” outcomes since people prefer an equal share of wealth. This phenomenon has been studied within the framework of the dictator’s game and the ultimatum game. Also, this concept is closely related to *spite and spiteful behaviour* (for more, see: Mojašević, Radulović, 2020).

¹² In the market, *the endowment effect* is the sellers’ tendency to assign higher prices to objects than buyers. This phenomenon derives from the general human tendency to put a bigger weight on things that we possess as related to the things that we do not possess. Usually, it is explained by psychological factors related to loss aversion (see also: Ericson, Fuster, 2014).

¹³ *The disposition effect* relates to the tendency of investors in the financial market to sell assets that have increased in value while keeping assets that have decreased in value. This concept is also related to loss aversion and prospect theory (Samson, 2020: 152).

¹⁴ *The equity premium puzzle* relates to the anomalously higher historical real returns of stocks as opposed to government bonds; it is usually explained by myopic loss aversion or mental accounting (Benartzi, Thaler, 1995: 73-74).

demonstrate that behavioural deviations from the predictions of the RCT may be corrected in normal markets, which means that market experience also matters. For instance, List (2003: 43) showed that the market experience of professional and ordinary traders significantly attenuates the endowment effect. But, in another study, Haigh and List (2005: 523) showed that that professional traders exhibit myopic loss aversion to a *greater* extent than students.

Generally, taking into account Posner's critique that JST have exaggerated for the empirical robustness of behavioural economics (Posner, 1998: 1570), as well as the aforesaid studies, one gets the impression that BE gave rise to modern empirical research of behavioural phenomena, many of which are *contradictory* in their findings.

4. BEHAVIOURAL PUBLIC POLICY

4.1. Historical and intellectual background of the nudge policy

Despite the long history of behavioural empirical research, the coherent application of findings in public policy-making has begun only recently, in the early 2000s. The conceptual framework on how behavioural findings might be applied to public policy has been set by the leading authorities in the field: Thaler and Sustein (2003), and Camerer *et al.* (2003). This conceptual framework has become widely recognized primarily thanks to a popular science book written for the mass market by Richard Thaler and Cass Sunstein and published in 2008: *Nudge: Improving Decisions About Health, Wealth and Happiness*.¹⁵ The lucky circumstance for the popularity of the book, and Behavioural Economics in general, was that a serious world financial crisis began in the same year, which was generated by insufficient regulation of the financial sector due to excessive faith in the neoclassical economics and the theory of rational choice. In such circumstances, there was a need for a policy that would not be intrusive and would not cost much to implement. So, **nudge policies and interventions** have been recognized as a form of soft paternalism and application of the conceptual framework of libertarian paternalism.

Certainly, another popular science book, *Thinking Fast and Slow* (2011), written by the Nobel laureate Daniel Kahneman, has contributed to the popularity of BE and the LP. The basic idea is that our cognitive apparatus comprises two systems of thinking: **System 1** – automatic, and **System 2** – deliberative (Table 1).¹⁶ It is important to note that these two systems work together in tandem, simultaneously, and influence our decisions and behaviour. Of course, other books have contributed to the establishment of the field of Behavioural Economics, such as Richard Thaler's book *Misbehaving: The Making of Behavioral Economics* (2015), or Bazerman and Moore's book *Judgment in Managerial Decision Making* (2017), and many others.

¹⁵ Partly thanks to this book, Thaler was appointed to the position of an advisor to the Behavioural Insights Team in the UK, and Sunstein became Head of the Office of Information and Regularity Affairs in the US.

¹⁶ The idea of two systems of thinking is certainly much older and is related, for example, to Adam Smith and his book *The Theory of Moral Sentiments* (2010 [1759]) in which he used the notion of an **impartial spectator** who casts judgment on our passion-led actions. Also, there is an analogy with Plato's notion of **charioteer** – our reason (see: *Phaedrus*) who tries to drive and is driven by two winged steeds, one which is unruly and another which is good (representing the two parts of our soul) (taken from: Oliver, 2017: 110).

Table 1 Two systems of human thinking

System 1	System 2
<ul style="list-style-type: none"> ▪ Regulates automatic behaviour ▪ Thinks fast ▪ Uncontrolled, unconscious, effortless ▪ Relies on stereotypes ▪ Gives immediate responses to frequent and familiar situations ▪ More prone to biases and heuristics 	<ul style="list-style-type: none"> ▪ Regulates reflective behaviour ▪ Thinks slow ▪ Controlled, self-aware, effortful ▪ Solves problems through calculation and deliberation ▪ Takes well-thought out decisions ▪ Less prone to biases and heuristics

Source: van Bavel, R. *et al.* (2013: 5).

In theory, relying on these two systems and other behavioural economic phenomena (such as cognitive biases), behavioural economists, as “choice architects”, are trying to reshape the environment (or choice architecture) to align our automatic decision-making process with the deliberative one. But, how they do it in practice is quite different; therefore, we need to clarify the specific requirements that public policy has to meet in order to classify as a nudge policy.

4.2. The elements of nudge policy

Adam Oliver (2017: 112) has singled out five elements that represent the *nudge policy requirements* (embodied in the acronym **ALIBI**): 1) it relies on an **A**utomatic decision-making process; 2) it is **L**iberty-preserving; 3) it does not use large financial **I**ncentives, 4) it is informed by **B**ehavioural Economics; 5) it targets **I**nternalities. First, the nudge policy relies on and works only with the System 1 – automatic decision-making process, and does not try to change people's opinions about their behaviours by using, for instance, education programs or informational campaigns. Second, the nudge policy tends to preserve liberty and freedom of choice and does not use bans or regulation of activities. If someone does not want to be involved in the nudge policy, he/she has the freedom to rationally give up. Third, the nudge policy includes only *small* economic incentives, not the big ones which have the power to be coercive and thus subvert liberty. Fourth, only behavioural economists (scientists) should inform the design of the public policy. Fifth, nudge does not regulate negative externalities, i.e. does not tend to reduce or minimize harm to others, but only to benefit those who represent the target of the nudge policy; thus, nudge tends to ameliorate *negative internalities*.

Only those policies that contain these five elements can be considered as nudge policies. It is well known that this type of policy has long been used by the private sector, especially in marketing to maximize profits. However, representatives of libertarian paternalism believe that it is also legitimate that the *public sector* should use the findings of behavioural science to guide people to make decisions that better serve their long-term interests and thus improve their well-being. As an illustration of the formal adoption and implementation of the nudge policy at the highest state level, we present the example of the Behavioural Insights Team in the United Kingdom.

4.3. The Behavioural Insights Team in the United Kingdom

The Behavioural Insights Team in the United Kingdom (so-called *Nudge Unit*) was the first governmental unit in the world established¹⁷ to generate and apply behavioural insights to inform policy, improve public services, and deliver results for citizens and society. It has evolved from a small unit to a global company with offices around the world. Today, it applies behavioural insights in different areas of public policy, including: consumer and finance, crime, justice and security, education, health and wellbeing, local government and services, tax, international development, etc (BIT, 2020).¹⁸

The intellectual foundation for the mission and operation of the UK Nudge Unit is the document titled *MindSpace Report* (Cabinet Office and Institute for Government, 2010), which is briefly presented in Table 2 (below). The UK Nudge Unit was the world's first central government behavioural unit that was later used as a model for establishing other behavioural units elsewhere. The **MindSpace** is a mnemonic that comprised nine elements for designing behavioural policies and interventions (Table 2).

Table 2 Mindspace

Messenger	we are heavily influenced by who communicates information
Incentives	our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms	we are strongly influenced by what others do
Defaults	we “go with the flow” of pre-set options
Saliency	our attention is drawn to what is novel and seems relevant to us
Priming	our acts are often influenced by sub-conscious cues
Affect	our emotional associations can powerfully shape our actions
Commitments	we seek to be consistent with our public promises, and reciprocate acts
Ego	we act in ways that make us feel better about ourselves

Source: Mindspace Report (Cabinet Office and Institute for Government, 2010)

As noted by Oliver (2017: 115-116), some of these elements are intertwined and strongly correlated. For instance, Messenger and Norms are partly driven by the trust; Norms, Commitments, and Ego are associated with reputation and reciprocity; Loss aversion and other mental shortcuts are classified as Incentives, but they are strongly related to Commitments and Priming, etc. However, for reasons of simplicity and practicality, as well as political opportunism, the Mindspace was devised as shown in Table 2. Another important point is the possibility of *manipulating* these interventions; for this reason, this Report emphasizes that public permission is needed for the general implementation of nudge policy. But, Oliver (2017: 116-117) rightly raises the question of whether it is legitimate to translate public permission for a general approach to each intervention.

The approach in the *MindSpace* also addresses negative externalities, thus actually exceeding the requirements set for the original nudge policy (which only addresses *negative internalities*). The reason was of a political nature: to gain broader public support and to avoid a label “nanny state”, but this approach affects the future practical work of the Unit which goes beyond the framework of the original nudge policy, in

¹⁷ The Unit was established two years after the publication of the famous Thaler and Sunstein's book: *Nudge* (2008), and after the new Conservative-Liberal Democratic coalition government took power.

¹⁸ The Behavioural Insights *Team* website (2020): <https://www.bi.team/about-us/>; accessed 27.8.2020.

respect of: 1) preserving liberty, 2) addressing negative externalities, and 3) being informed by Behavioural Economics (Oliver, 2017: 117-118).

4.4. Examples of the nudge policy¹⁹

The first classical example of the nudge policy is **placing fruits instead of chocolate bars at the supermarket checkout counter** (Oliver, 2017: 118). In this case, the freedom of the consumer's choice is preserved: *he/she is not required to buy fruits*. Secondly, on reflection, he/she might prefer to buy fruits rather than chocolate: *his/her choice is internalized*. Thirdly, he/she is more likely to buy fruits since the automatic part of the cognitive apparatus is now activated: *behavioural economics*. But, in the UK, this nudge policy also included *external* considerations – saving public costs concerning obesity.

The second example of the nudge policy which satisfies the previous three conditions (liberty-externalities-behavioural economics), is **painting green footprints that lead up to rubbish bins** to motivate people to drop their litter appropriately. On the other hand, **the policy of introducing a small charge for plastic bags** is not a classical nudge, since the freedom of choice has not been preserved; namely, people do not have the possibility of not paying a plastic bag while receiving it (Oliver, 2017: 119).

The third example of the nudge policy is **deposit contracts for smoking cessation** (Oliver, 2017: 119-120). Smokers would *voluntarily* deposit a certain amount of money which would be returned to them if they stopped smoking. The basic idea is that the loss aversion (*behavioural motivation*) will incentivise smokers to remain committed to abstinence (*negative externalities*), with only one *external* benefit – saving money for the National Health Service. On whole, this intervention is within the scope of nudge policy.

The next and perhaps the most controversial example is **organ donation**, which is often cited in the behavioural literature (Oliver, 2017: 120-121). The Nudge Unit proposed to move from an opt-in system to a **system of prompted choice** in which people have to state whether or not they want to be organ donors when issuing or renewing a driver's license. The system of **prompted choice** was adopted in England, but Wales went a step further and adopted **the system of presumed consent or opt-out system²⁰ of organ donation**, where people have to register if they do not want to be donors.²¹ Regardless of *being behaviourally motivated*, **the system of prompted choice** cannot be considered as a classical nudge because it requires *regulation* (on the one hand) and includes huge *external* benefits (on the other hand).

The *LazyTown* program used in Iceland is particularly interesting (Oliver, 2017: 122-123). It envisages **that children sign a contract with their parents** which obliges them to eat healthy food, go to bed earlier and be active. Parents are obliged to reward them for such behaviour. It can be said that this program uses the instruments of rational economic theory, but the incentives are basically *small* and rely on a well-known cognitive bias – *the present bias*.²²

¹⁹ The presented examples are taken from Oliver (2017: 117-127), but they can be found in other classical behavioural literature.

²⁰ The opt-out system has been used by the UK government to increase the acceptance of personal pensions.

²¹ France and Portugal have the same opt-out system and, as expected, a much larger number of donors compared to countries that have an opt-in system (20% of the population) (taken from: Oliver, 2017: 120-121).

²² Generally, *the present bias* is used to describe impatience or immediate gratification in the decision-making process (see: Samson, 2020: 167). For instance, a person might prefer to receive ten euros today over receiving fifteen euros tomorrow, but would not mind waiting one *extra* day in the future to receive the same sum.

There are also examples of nudge policy in other domains, which are more or less distant from the domain of the original nudge policy (the three elements). For example, in the UK, a **one-month holiday from council tax payments** (tax paid to local government authorities) has been proposed to those who agree to **insulate lofts**. This intervention, based not on small incentives, included huge external benefits (externalities). Another intervention with huge external benefits is the introduction of **smart electricity meters** that offer additional information on the average energy consumption of similar households, as a reference point to avoid higher energy consumption. In the domain of energy saving, another example of behaviourally motivated incentive is an example of changing the **default settings in heating and cooling systems in government departments** (Oliver, 2017: 125-126).

5. CONCLUSION

The proponents of behavioural law and economics (BL&E) have obviously had the intellectual courage to question some of the fundamental tenets of neoclassical economics and economic analysis of law. This step forward has also had practical implications in the creation and implementation of behavioural public policy, originally applied in the UK and later in many other countries worldwide. Like any novelty, behavioural economics and the ideology of libertarian paternalism have met with well-argued criticism. One gets the impression that some of these critiques are also ideologically coloured in terms of preserving the rational choice theory (RCT) as the intellectual basis of numerous other directions in economics and law. Therefore, this article has raised and addressed *the question of whether the conflict between the “rational man” and the “behavioural man” is rather inflated and ideologically colored*. If we look at this question from the position of one (RCT) or the other direction (BL&E), the answer would be negative. But, if we look at it from a broader perspective, then we get a qualitatively different answer. As noted by Kelman, “...*the main problem with RCT is its pretense to completeness[...]*and behavioral theorists have done a wonderful job exposing this incompleteness and reminding us both how many distinct sources of understanding we have and how limited that understanding really is” (Kelman, 1998: 1590-1591). From this perspective, we might conclude that we are dealing only with two of many other *approaches*, both of which undoubtedly have important practical implications in the domain of public policy. The behavioural approach, perhaps, has a greater potential for development but only if it rises above rigidity and self-sufficiency, which the theory of rational choice seems to have largely embraced.

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BIHEVIORISTIČKA EKONOMIJA I JAVNE POLITIKE: NEKA UVODNA PITANJA

Cilj rada je da informiše domaću javnost o osnovnim konceptima biheviorističke ekonomije, zajedno sa kritičkom analizom, njenim istorijskim razvojem i intelektualnom osnovom, primenom njenih nalaza u kreiranju javnih politika, kao i efektima u njenoj dosadašnjoj praktičnoj primeni. U prvom delu rada, autor predstavlja osnovne koncepte biheviorističke ekonomije: usmeravanje, arhitekturu izbora, libertarijanski paternalizam, kognitivne pristrasnosti i druge. Drugi deo rada pruža detaljnu kritičku analizu biheviorističke ekonomije i libertarijanskog paternalizma, i to: Poznerovu kritiku, Mičelovu kritiku, kao i preispitivanje empirijske validnosti određenih fenomena biheviorističke ekonomije. U trećem delu, dat je prikaz upotrebe biheviorističkih nalaza u svrhu informisanja kreatora dizajna javnih politika u različitim oblastima (bihevioristička javna politika) sa brojnim primerima, mahom iz prakse britanskog Tima za biheviorističke uvide.

Ključne reči: usmeravanje, arhitektura izbora, libertarijanski paternalizam, kognitivne pristrasnosti, Tim za usmeravanje