Essay

How can policy makers effectively use behavioural nudges to overcome market inefficiencies?

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Abstract

This essay will examine what behavioural nudges are along with the methods that policy makers have used and can use to enforce certain behaviours to prevent market failures. In part one of this paper, we will be discussing the importance of behavioural nudges by observing both sides of the argument. In the second part of the paper, we will be exploring the influence nudges have in overcoming market inefficiencies. In addition, the paper discusses the results detected in both Sweden and in the United States of America (USA), when observing food labelling and found positive results from both countries. To support our argument, we will also be investigating key examples of nudges that have been successful and unsuccessful in the current economy.

Keywords: Behavioural economics, nudges, policy makers

Introduction

Over many years, behavioural nudges have been used as part of the government's policy making decisions as well as been a large topic of interest in behavioural economics. Behavioural nudges became a topic of interest following the 'publication of the best seller Nudge by Thaler and Sunstein (2008)' as mentioned in Bogliacino et al, (2016). It is defined as any form of influence on an individual's choice making. It is assumed that these nudges allow people to 'make choices that are rational, self-interested and consistent' (Leicester et al, 2012). There are indirect and direct forms

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of nudges for example, exchanging sugary desserts for fruits is an example of indirect nudge and warning drivers to drive within the limit to avoid a fine is a form of direct nudge. A nudge can provide guidance for the individual to not only make a decision but to also 'behave in a particular way' (Nudge theory - Wikipedia, 2021). The concept of behavioural nudges is that they provide 'positive reinforcements' when aiding individuals with their decisions. The need for nudges arises from many theories, but most importantly the use for it comes in handy when attempting to avoid market inefficiencies. This 'exist due to information asymmetries, transaction costs, market psychology, and human emotion' (Hayes, 2020). Government policy makers use these nudges to achieve obeyance in sectors such as health, education, and enforcement. We will explore these sectors in detail late on. Subsequently, we will also be looking into successful and unsuccessful forms of nudges that have been previously implemented. With this in mind, this paper will function by providing the theories behind behavioural nudges, the need for it and whether they have been successful so far.

Theory on behavioural nudges

A number of researchers have attempted to understand the concept of behavioural nudges for numerous decades. As mentioned earlier, the purpose of nudges is to improve an individual's decision-making process by providing extra information that can allow the said person to make a better-informed decision. This can come in the form of advertising the drawbacks of smoking and drinking or illustrating the disadvantages of an unhealthy diet to name a few. There are few methods that have previously been used till this day to better inform an individual. Policy makers utilise schools and other educational institutes to set examples by educating younger students of the benefits of healthy eating. They also implemented this rule through the sugar tax which was introduced in January 2014 to combat the UK's obesity. An example of a positive behavioural nudge is when schools started to provide fruits in place of sugary desserts. This change has created a positive effect as it has allowed children to be healthier and parents to be more aware of what their children are being served at school. Arno and Thomas (2016) also pinpoint a similar finding that 'items placed at eye-level in a supermarket may be selected more frequently than those near the floor' which further reinforces a positive nudge. In contrast, as a result of Covid-19 and schools being closed because of the pandemic, many children from low-income households have unfortunately been neglected and consequently, statistics have shown that the 'average intake of fruits…fell from just over one portion a day to half a portion a day' (Baraniuk, 2020).

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Despite this it is also thought that, in many cases according to Bogliacino et al, (2016) 'behaviourally informed policy interventions are complex and require new' forms of interventions unlike the neutral ones exhibited by Thaler and Sunstein (2008). Furthermore, Fischhoff and Eggers (2013) as cited in (Bogliacino et al, 2016), argue that behavioural nudges disregard the phases needed to implement a positive behavioural insight. These most common assumptions in relation to behavioural insight are that consumers are consistent, rational, and self-interested (Leicester, et al, 2012). For example, they pay particular attention to three methods needed: 'normative analysis' which utilises available resources to predict the choice the individual would make. Secondly, 'descriptive analysis' identifies the decision an individual would make predominately based on the policies that are existent. Lastly, 'prescriptive analysis' embodies and distinguishes the 'gap' between both the normative and descriptive steps taken forward. Despite this, there are also limitations to this conviction. It can be disputed that despite policy makers researching and nudging individuals to make a better-informed decision, 'without knowing individuals' values, analysts cannot identify evidence relevant to their choices' (Bogliacino et al, 2016). In the next section, we will be exploring the arguments for nudges and highlighting examples positive nudges.

Argument supporting nudges

As discussed earlier, the concept of nudges has been given particular attention and many researchers have shown interest by supporting the view that nudges are beneficial. The argument is whether 'should nudging be deemed as permissible… intrusive to individuals' freedom of choice?' in Hagman *et al.*, (2015)

According to Schmidt and Engelen (2020) nudges provide a freedom of choice without significantly changing any factors that could contribute to disabling this freedom. The nudge approach plays significance when policy makers create policies that require them to be transparent as possible. In contrast, some argue that there is great concern that too much freedom of choice may eventually 'sidestep some partisan and ideological disagreements that are so often beset politics' (ibid).

On the other hand, behavioural nudges created by policy makers can also be more welcomed if people felt their choices were created 'by parties with whom they can identify' with in Hagman *et al.*, (2015). Similarly, in the context of associating behavioural nudges with policy implementation, it has been expressed that 'there has been a shifted focus toward using nudges to increase prosocial behavior' which means 'serving society at large as opposed to the individual'. This view has been

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an increasingly utilised method by policy makers to overcome inefficiencies when setting policies. An example of an environmental (educative) nudge would be to provide recycling bins to every household to set an example to recycle and to achieve the goal of a green nudge. By 'endowing individuals with resources in order to enhance their capacity for reflective choice' will facilitate overcoming such biases. However, contrary to belief, while we may assume that all individuals will obey to these rules, some decide not to and instead choose 'to free ride and choose not to recycle'.

To support the above theoretical perspective on behavioural nudges, an experiment was conducted in Hagman *et al.*, (2015) research paper. The experiment was observed in both Sweden and in the United States of America (USA). Both groups were presented with a set of questions and examples to seek to under if these interventions restricted the individuals in any way and if the policies were acceptable. The first set of policies referred to as pro-social ranged from organ donation, climate compensation, energy consumption and avoiding tax evasion. The second set of policies were referred to as pro-self which were categorised as smoking cessation, smoking discouragement, cafeteria re-design and food labelling. The survey responses 'on all four questions were given on a four-point Likert scale ranging from 1 (not at all) to 4 (very much)'. The themes identified in these responses are apparent in both Sweden and USA, where the policy on 'food labelling' was highly accepted. A significantly positive result was found with '(86.9% in Sweden and 83.8% in the United States)'. Interestingly, they found no evidence that 'nudge-policies as intrusive to freedom of choice' as hypothesised earlier. With this in mind, policy makers can use such behavioural nudges to overcome any issues that may be faced when individuals neglect or do not identify with. When this is the case, policy makers adhere to ensure that social welfare is met and thus it is 'natural that nudges are used to do just that'. Having said that, there are limitations to this experiment. The data only used two countries and the 'concept of "one-nudge-fits-all" is not tenable'. Apart from nudges, other factors such as cultural differences can also influence an individual's decision.

Argument against nudges

While we have set an argument above supporting the concept of behavioural nudges and setting examples of occasions where they have been successful, nudging has also equally received few censures. Critics question the ability of the nudging theory stipulating only guidance. Some argue that nudging can lead to the loss of freedom of choice and moral values. Hausman & Welch (2010) as cited in Schmidt and Engelen (2020) claims that nudges in fact do not act as a form of guidance

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but instead 'pull our strings and employ tricks to get us to do what *they* want'. This results in our choice not being completely of our own.

Perhaps the most interesting finding in Schubert (2017) paper, is that 'transparency makes most nudges somewhat less effective, without, however, eliminating their impact'. As identified earlier, transparency is key to avoid market inefficiencies as this is a result of asymmetric information. According to Bruns *et al.*, (2016), they believe that 'full transparency of nudges, thus, may even lead to the opposite outcome than the one intended'. To an extent, this is feasible for example, a handful people will attempt to understand the drawbacks of smoking and slowly quit. Whereas few people will 'protest against being manipulated'. In contrast to this, according to Reisch and Sunstein (2016), their research found there was a 'strong majority support for nudges' from the six countries they studied. However, they also mention that the same six countries 'reject nudges that offend' any basic morals that are taken away from its citizens for example, the government should not exploit its power and coerce money from its citizens without their consent. It should also be noted that it is impossible for policy makers to that they are completely aware of an 'individual preferences necessary to design optimal nudges'.

In summation to the above arguments, Hirschman (1991) as cited in Sunstein (2017) holds the same view about unsuccessful nudges. He claims that while policy makers may observe nudges to have good intentions, it has shown evidence of being 'futile'. For instance, Hirschman (1991) proclaims that environmental nudges that are utilised to reduce pollution may cause 'increasing energy costs for the most disadvantaged members of society'. Therefore, in the process of attempting to modify the issue, nudges can 'jeopardize' this goal.

Relationship between nudges and overcoming market inefficiencies

Leicester et al, (2012) discusses extensively on the relationship between behavioural nudges and how to overcome market inefficiencies/ failure. As mentioned earlier, market inefficiencies occur 'due to information asymmetries, transaction costs, market psychology, and human emotion' (Hayes, 2020). As a result of market inefficiencies that occur in the economy, policy makers are constantly regulating this to ensure that the any issues are kept to minimal. As a result of this, policy makers use nudges as a form of intervention to overcome these problems. As discussed in the previous section, behavioural nudges functions only as a form of guidance to allow the individual to make a better-informed decision. In the case of market inefficiency, whereby policy makers are

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tacking asymmetric information, nudging may not prove to be sufficient. An example of an unsuccessful nudge is the introduction of benefits to unemployed individuals – this essentially 'can reduce the effort people put into searching for jobs' (Leicester et al, 2012). Similarly, providing people with easier access to credit can also deter people from managing their finances well. These are all examples of moral hazard – a key concept in behavioural economics that highlights how individuals may engage in behaviours that can be risky, but they are aware that they are protected by a form of means therefore, do not restrict themselves from performing this behaviour.

On the contrary, market failures are not the only reason people engage in risky behaviours. 'Social preferences might mean people do not engage in more risky behaviour even when insured' according to (Leicester et al, 2012). Another perspective observed within behavioural nudges, is the concept of 'de-biasing' which is essentially an attempt to help 'alter these biases' rather than recuperating the welfare. An example of a positive nudge as a result of this, is the 'alcohol strategy published by the Home Office (2012)'. The purpose of this approach was to regulate the timing that alcohol is served at, set a minimum price as well as 'providing information on the dangers of excess alcohol consumption'. While this strategy sounds promising as it is transparent and can be effective. The issue here is that 'Packaging policies together like this might improve their overall effectiveness, but… challenging to isolate the impact of individual policies on behaviour'.

Leicester et al, (2012) also offer a valuable insight into the advantage of using nudges. They state that nudges 'change the behaviour of those who are 'biased' without imposing particular costs on those who are not'. An example of a positive nudge in this scenario would be the case of placing bans on cigarettes and the areas in which they are smoked in. A 'nudge-inspired policy might be to arrange some sort of private or public mechanism whereby people can voluntarily commit'. By implementing this, policy makers are essentially providing enough information by being transparent to the people by creating an agreement with them. Conversely, if they fail to oblige to the agreement, they can face a penalty that defeats the purpose of not imposing a cost.

Conclusion

The purpose of this paper was to evaluate how effective nudges are and how policy makers should utilise them to decrease market inefficiencies in the economy. The evidence presented in this paper has shown that nudges is a key concept in behavioural economics and useful as it is transparent. The findings from this paper have demonstrated nudges are relevant to an extent in providing

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guidance to individuals to make a better-informed decision for example, educate a smoker on the harms of smoking or providing recycling bins to increase recycling for environmental benefits. They are also cheaper to administer. In contrast, few sources have displayed uncertainty when conforming to the rules of nudging and if it may 'jeopardize' an individual's decision by eliminating their freedom of choice.

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