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NUDGING PEOPLE OUT OF POVERTY?

Using behavioural economics to improve welfare policies

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Abstract New insights within the field of behavioural economics have led to the discovery of irrational behaviour of economic agents. The concept of 'nudging' is one approach to tackle this irrationality. We illustrate that behavioural economics could be especially helpful for tackling poverty, as the lives of the poor make them very vulnerable to income shocks. Also, the poor constantly deplete their mental resources. Moreover, we discuss ethical regulations for policies based on behavioural economics, centered around the idea of transparency. Finally, we present ideas scholars have put forward that could be used to tackle poverty by using behavioural economics and evaluate them from our own perspective.

1 Introduction

In recent years, traditional economics have undergone a substantial change as new studies in the field of behavioural economics have questioned the behaviour of economic agents. While traditional economics considers human beings to act in complete rationality, behavioural economics points out that human beings act irrationally in many of situations. Based on these findings, Thaler and Sunstein

(2003) developed the idea of Libertarian Paternalism, which aims to help people to make better decisions ('paternalism') without restricting them in their freedom of choice ('libertarian'). Libertarian Paternalism can be applied with small policy measurements focused on behavioural issues. These measurements are collected under the term of nudging. The ideas of focusing on human behaviour are especially interesting for the field of welfare policy in industrialised countries, as there are different opinions as to whether policies to tackle poverty should take a paternalistic approach (e.g. give people a supervisor) or a more liberal approach (e.g. transferring money to people and let them decide what to do with it). A policy is considered effective if it provides a significant effect which is beneficial compared to the costs of implementation. We consider a policy to be ethical if it respects the liberal values of the people who live in Western democracies. In the case of poverty, freedom and equality of power are most relevant.

Poverty reduction has not been researched extensively in the context of behavioural economics. Therefore, we provide insights how its findings can be used to create better policies for poverty reduction in the future. Meanwhile, we develop an interdisciplinary overview of behavioural economics, as we discuss its economic, political and philosophical implications. Therefore, we also add to the philosophical debate on behavioural economics by considering the ethical issues of the proposed policies.

This paper investigates how governments can use behavioural economics to develop both ethically tolerable and effective policies aimed at tackling poverty. We find that it is possible to create policies which are both effective and ethically tolerable when aiming for a sufficient degree of transparency. We begin by explaining the limitations of human beings and continue by presenting the cost-effectiveness of nudging. Thereafter, we illustrate that these ideas could be especially helpful for tackling poverty, as poor people are even more influenced by behavioural issues because of their environments. This is followed by an explanation on how transparency could ensure these policies are ethically tolerable. Finally, we present ideas scholars have put forward that could be used to tackle poverty by using behavioural economics and evaluate them from our own perspective.

2 Behavioural economics

The model of economic agents in traditional economics is the fully rational Homo Economicus. In contrast to traditional economics, behavioural economics does not assume that economic agents are fully rational. Instead, all economic agents

suffer from three limitations (Mullainathan & Thaler, 2000). Since an economic agent is defined as a decision maker in a specific model, we can, in the case of behavioural economics, humanise this agent as we are discussing the behaviour of actual humans. First, humans have bounded rationality. This means that people do not have the cognitive ability to always make rational decisions. Camerer, Babcock, Loewenstein, and Thaler (1997) found evidence for this when studying New York City cab drivers. Considering their working hours in the perspective of a work week, a logical strategy to maximise their profits would be to work longer hours on good days when there is high demand, and work less on days with weaker demand. However, the study found that most cab drivers simply set an income target and quit when they have reached this target every day. Thus, they quit earlier on a good day, because they reach the income target earlier, and work longer on a bad day. This is in contrast with the logical strategy (Camerer et al., 1997). Secondly, economic agents suffer from bounded self-interest. Agents do not always do what is in their best interest. From a classical economics point of view for example, donating money to charity is irrational because the donor does not receive anything in return. Finally, and most importantly for the issues at stake, economic agents suffer from bounded willpower. Often, people know exactly what is good or bad for them, but they lack the willpower to follow through on it. One example is procrastination, which prevents people from working on the most important tasks that need to be done (Mullainathan & Thaler, 2000). These findings let us conclude that it is important for policies to consider the limitations of human behaviour and decision-making. The effects of policies can be increased by being aware of these hurdles and facilitating processes to overcome them.

3 Nudging

Nudging focuses on small, behavioural issues to improve people's decision-making (Thaler & Sunstein, 2009). The idea is to change a small aspect of the environment or choice set a person encounters and thereby encourage them to take the decision that you believe is in their own best interest. Nudging often has a significant effect. Many laboratory experiments have shown how forms of nudging significantly influenced the final choice of the agent (Thaler & Sunstein, 2003). One technique used for nudging is to set a certain default choice that will be taken if people do not take an active decision. As many people are indifferent about decisions or lack the willpower to change the default, the default option influences the final choice of people in most cases. Madrian and Shea (2001)

describe how this affects employee's participation in pension plans in the United States. Usually, employees who become eligible to participate in a pension plan receive a letter letting them know that they are now eligible for participation. The employee then needs to actively decide to participate in the plan. However, Madrian and Shea studied a company where the default was set to automatic participation. This meant that employees who became eligible for a pension plan were automatically enrolled and received a letter which informed them about it, with the option to opt-out. This automatic enrollment increased participation from 49% to 86%.

In addition, nudging also has low costs compared to its effects. Benartzi et al. (2017) compared the cost-effectiveness of policy interventions based on nudging with the results of traditional policy interventions in areas such as college enrollment, energy conservation or vaccinations. They found that in all these areas, there was one nudge intervention which was more effective than comparable policy interventions. For example, a social norms nudge which consisted of sending households reports of their electricity usage compared to ones of their neighbours and offering tips for reduction, was estimated to save 27 kWh per dollar spent. The best comparable policy intervention which educated people about energy use and incentivised reduced energy usage was found to save only 14 kWh per dollar spent. Similar findings in other areas led Benartzi et al. to conclude that traditional policies may do better "when the policy maker's objective is to correct a misalignment between the public interest and the private interests of citizens making carefully reasoned decisions" (Benartzi et al., 2017, p.24). However, if the policy-maker is aiming to change the everyday behaviour of citizens who make biased decisions, then nudging is often much more cost-effective.

The findings of previously mentioned research indicate how policies focused on behavioural change often have significant effects and help people to make better decisions for themselves. Moreover, nudging techniques are usually much more cost-effective and can be applied to diverse areas. Using behavioural insights can help to create much more effective policies.

4 Poverty

We have shown that policies focused on behaviour are especially effective when applied to changing the actions of individuals who make biased day-to-day decisions. This is especially relevant in the field of welfare policy. On the one hand, poverty can be seen as a mere absence of chances in unequal societies and therefore, the poor need to be provided with more chances (Bertrand, Mullainathan,

& Shafir, 2004). On the other hand, one could see poverty as the failure of the poor to act rationally, and therefore paternalistic guidance is necessary for them (Bertrand et al., 2004). It is a balance between these positions that describes poverty most accurately.

In general, the poor suffer more than the middle-class if they make irrational decisions. People in poverty have the same bounded rationality and willpower as the middle-class, but poverty is a status in which individuals lack the financial resources to recover from income shocks or other misfortunes. Nichols, Acs, and Loprest (2009) found that low-income households have more cases of substantial income declines, from which almost half make no complete recovery. Poorer people often do not have enough financial reserves or back-up options to recover from hard times.

Poverty takes up the energy and attention of impoverished people which they would need to tackle other issues in their life. As financial back-up options are not available, people in poverty often face an "overwhelming juggling of financial and related challenges" (Gennetian & Shafir, 2015, p. 907). A missed payment can usually not be compensated by simply cutting back on consumption of goods as is the case for the middle class. The task of weighing how to compensate for a missed payment, e.g., by skipping the rent or taking up a loan, can become a source of constant mental preoccupation. Mani, Mullainathan, Shafir, and Zhao (2013) studied the cognitive performance of poor and well-off individuals when making financial decisions. If the amount of money at stake was low, both groups performed equally well, while the well-off outperformed the poor when the issue at hand had expensive consequences. Moreover, they tested the ability of cognitive performance of Indian farmers before their harvest and afterwards. They found that the farmers had increased cognitive performance after their harvest, when they had gone from a poor state to a better off state. Therefore, Mani et al. conclude that poverty directly diminishes cognitive ability and suggest that daily concerns based on poverty take up mental resources of the poor.

These findings show how poor people are as capable of decisions as everyone else, but they have a smaller "margin for error" (Bertrand, et al., 2004, p. 419) while the constant financial challenges deplete their mental resources. Both of these issues can perpetuate poverty. Policies aimed at positively influencing poor people's behaviour to lift them out of the situation of lacking financial resources could therefore be really effective, as they could have a significant effect without being very paternalistic or expensive.

5 Is it ethically tolerable to work like this?

Policies aimed at changing behaviour may be very effective, but we only consider them good policies if they are also ethically tolerable. Many policies seem uncontroversial at a first glance because they aim to help the poor improve their situation. However, in the Western liberal world, having a 'good' aim does not justify a 'wrong' approach. Is it possible to nudge people out of poverty in an ethically tolerable way? With ethically tolerable we aim for a standard that fits the ethical identity of a government. As we are focused on Western liberal democracies, values such as equal opportunity, justice and freedom are highly prioritised. As nudging is designed for benevolent governments (Curchin, 2017, p.237), those who argue in favour of nudging seem to disregard sophisticated ethical considerations. Therefore, we consider three categories of ethical regulations to nudging.

The first category considers that total freedom should be respected. Goodwin (2012) thinks that Thaler and Sunstein (2009) fail to acknowledge important barriers to freedom. Hausman and Welch (2010) provide a theory which shows one of those barriers. They say that in some cases nudging is paternalistic, because it may respect the freedom of choice, but not the autonomy of choice (Hausman & Welch, 2010). Freedom of choice is the number and quality of the options you have within a choice. Autonomy of choice is the ability to understand and evaluate on the options you have within a choice set. If nudging makes it look as if you have fewer options than you actually have, it does not respect the autonomy of choice.

The second category argues that nudging cannot be a tool to oppress others. This is less about the autonomy of the target, and more about the actions of people in power. Schmidt (2017) argues that nudging creates opportunity to practice alien control. Alien control occurs when someone has the power to decide over the life of another without sufficient control from the dominated person (Schmidt, 2017). For example, according to Curchin (2017) political elites can impose their values on minorities.

The last category demands that nudging cannot be manipulative. Goodwin explains that nudging is manipulative because people are unconsciously persuaded (Goodwin, 2012). However, nudging is only effective if subjects do not know that they are being nudged (Thaler & Sunstein, 2009), so a more specific approach to manipulation is required. Wilkinson (2013) defines a state in which nudging would not be manipulative. It should have no manipulative intention (unless the target has an escape clause), the nudge should not manipulate the targets decision and the nudge can only be manipulative if the target has consented.

6 Transparency as the solution

A solution to all these problems could be transparency. Thaler and Sunstein (2009) themselves introduced this idea (the publicity principle) to prevent 'evil' nudges. The publicity principle holds that governments need to publicly show its citizens their nudging plans. This principle not only prevents governments from publishing incomplete policies, but also forces governments to show respect towards its citizens (Thaler & Sunstein, 2009). Schmidt (2017) agrees that in order to control nudging, it needs to be suitably transparent. A publicity principle would force governments to respect the autonomy of choice, because governments cannot publicly defend manipulation of citizens.

However, multiple authors argue that the publicity principle lacks specifications. For example, Hausman and Welch (2010) argue that governments could publicly defend the use of subliminal messages, which is something that Thaler and Sunstein clearly object to (Hausman & Welch, 2010, p.132). Thaler and Sunstein (2009) do not consider the consequences of transparency and the extent to which the publicity principle needs to be applied. Furthermore, a major problem with transparency is imaginable: it obstructs the effectiveness of nudging, as nudging works with subconscious biases (Curchin, 2017). Moreover, Grüne-Yanoff (2012) thinks that nudging cannot be fully transparent, because people will change their choice if they know they are manipulated (pp. 637–638).

Bovens (2009) provides a criterion to specify the extent of transparency. He divides transparency into two types. Type interference transparency, meaning governments have to indicate that they are using nudges, and token interference transparency, which requires governments to more detailly explain how the nudges function (Bovens, 2009). If governments only used type interference transparency, this would not be sufficient. However, token interference transparency will also only need to be applied in principle, because otherwise it would make nudging ineffective. Practicing token interference transparency in principle will make sure that governments will not apply nudging in an ethical incorrect way, because attentive people will notice (Bovens, 2009).

7 The extent of transparency for poverty

We have narrowed down the transparency principle to making policies transparent in principle. But how does the transparency principle work in the case of poverty specifically? The poor often lack access to resources that wealthier people do have access to. One of these resources is access to news informa-

tion. Nguyen and Western (2007) researched this in Australian adults, and they make two claims. First, online news has become a primary news source for the majority of the people. Secondly, the users of online news are more socio-economically advanced (Nguyen & Western, 2007). Moreover, a report by Servon and Horrigan (1997) shows a causal relation between the ability to participate in mainstream economy and the access to information technology.

Just as Bovens (2009) proposes to apply transparency in principle, this paper argues for a similar approach in the case of poverty. Governments need to apply a publicity principle to such an (low) extent that it does not easily reach the awareness of the poor, but is generally known within the political sphere. Since people with low economic status have less access to news, the government does not have to spend much effort publicising nudging initiatives. Because the poor are not actively aware of these plans, the policies keep their effectiveness. Although the poor are unaware of the nudge, all parties with political power can check if the policies remain ethically accountable. This application of behavioural economics policies seems to have much in common with manipulation, but there is one major difference; manipulation and the oppression of minorities include an unethical intention, but with applying transparency to a low extent, unethical intentions are made impossible. This allows nudging policies to be effective and ethically tolerable at the same time. For the final part of our paper, we will present implementations of this idea.

8 Policy proposals

As previously defined, poverty is a state in which individuals do not have enough financial backup options. Therefore, policies aimed at reducing poverty should try to increase the financial assets people have. We found three important areas which could help people increase their financial assets. These areas are the opening of a bank account, the accumulation of savings on accounts, and the participation in social welfare programs.

People who do not have a bank account have at least three disadvantages. First, alternative financial institutions such as check cashers usually have high fees. Second, to pay their bills these people cannot use automatic deposits or other helpful devices automatically fulfilling the task. Third, saving becomes increasingly more difficult. Thaler (1990) has shown how transferring money to a savings account makes it more probable for people to save this money instead of spending it. Therefore, it is desirable to convince people to open a bank account. According to the Federal Deposit Insurance Cooperation (FDIC, 2017), more than 6 percent of US citizens did not have a bank account in 2017. Moreover, an

additional 18 percent did use financial products or services outside the banking system although they had a bank account. Thus, effective policies could really make a significant difference here.

To increase the number of bank accounts among the poor, a behavioural economics approach aims at changing small, behavioural issues and hurdles (Bertrand, Mullainathan and Shafir 2006). Bank account fees should be made more transparent to reduce the psychological barrier of understanding the banking system and thus allow the poor to be confident enough to open a bank account (Bertrand et al., 2004). Making bank account fees more transparent also shows respect towards the choice autonomy of the poor. Moreover, governments could issue welfare pay checks electronically to bank accounts, thereby setting the default of having a bank account (Bertrand et al., 2004). This way, the poor are strongly motivated to think about the benefits of a bank account, but still have the full ability to not accept the accounts offered by the state.

Moreover, the poor should be encouraged to start saving on these bank accounts. One effective way would be commitment devices which bind someone to save towards a certain target. Bertrand et al. (2004) point out that so-called Individual Development Account (IDA) plans, which offer matching funds for savings and make the poor commit to a certain savings target, can be very helpful. Moreover, Bertrand et al. propose that defaults should be used to accumulate savings, for example by automatically transferring a fraction of each pay check to a savings account. Bertrand et al. (2006) cite a successful example, in which a bank offered an extra savings account to which five dollars were automatically transferred every month from peoples checking account. This increased the long-term savings of most customers significantly. However, to be considered ethically tolerable, such programs must be based on voluntary enrolment in the first place, and then be continued under professional supervision. The supervisor's methods should be publicly known by the government. This way, supervisors cannot act unethically by for example preferring certain banks over others.

Finally, the poor could be supported by increasing their participation in welfare programs they are eligible for but do not apply for. People do not participate in welfare programs they are eligible for because of multiple reasons: Gennetian and Shafir (2015) found that often, the hassle of completing the application for such programs is quite severe. For example, in the United States, people wait in line for a long time and cannot be sure if they will leave with a completed application as documents are often missing, when applying for the Supplemental Nutrition Assistance Program. Moreover, procrastination could be another issue which holds the poor from signing up, especially if individuals believe that they will soon leave poverty and thus do not want to take the effort of applying.

Gennetian and Shafir propose that governments need to tackle these behavioural issues. They should try to better facilitate the process of application, for example by prefilling forms or concretely contacting at-risk population. Ethical standards would require that the poor receive explanations how the program influences their financial future and that details of the welfare programs are publicly accessible. Another idea would be to automatically enrol people for welfare programs based on tax forms they hand in. People would still have an opt-out option, but the default would be set for participation (Gennetian & Shafir, 2015). This is ethically tolerable if it is guaranteed that the participants know they can easily opt-out.

Instead of aiming to create new large policy interventions, behavioural economics aims to create more cost-effective policies that help people start saving and increase participation in social welfare programs. These small policy interventions must be seen as an addition to larger programs, not as a replacement. If they are designed in an ethical tolerable way, they can help to fight poverty more effectively and support larger policy interventions.

9 Conclusion

This paper explored how behavioural economics provides valuable insights to improve policy-making by governments tackling poverty in industrialised countries. The knowledge of behavioural economics can be used to improve the overall effectiveness of policies. Humans have bounded rationality, bounded self-interest and bounded willpower, which contradicts the traditional model of the Homo Economicus. Therefore, small policy interventions aiming to facilitate behavioural issues that harm the effectiveness of policies can be very effective, because they provide large effects while requiring little costs. The lives of the poor make them very vulnerable for income shocks and constantly deplete their mental resources. Thus, policies encouraging behaviour to increase savings can be especially necessary and effective. To avoid that these policies are used to disrespect the freedom of choice, oppress groups in society or manipulate people, they need to be transparent to an extent that is considered ethically tolerable. In the case of poverty, this extent is rather low because full transparency would cause the policies to lose their effectiveness. The presented policies do not lose effectiveness because the publication of them does not reach the poor easily, and the policies cannot be applied in a wrong way because others with better access to news resources will notice. Finally, we conclude that it is possible to create policies which are both effective and ethically tolerable when aiming for a sufficient degree of transparency.

The presented ideas imply that there are more effective ways for policy-makers to create good policies. Large welfare policies are often designed in a deliberate way but could miss out on a lot of people because of seemingly small behavioural issues. The importance of this issue cannot be understated because it could help a larger amount of people in poverty start accumulating savings and finally leave poverty, a state which depletes their resources and causes instability. This advancement would benefit the whole of society reach a better standard of living.

References

Benartzi, S., Beshears, J., Milkman, K. L., Sunstein, C. R., Thaler, R. H., Shankar, M., . . . Galing, S. (2017). Should governments invest more in nudging? *Psychological Science, 28*(8), 1041–1055. doi:10.1177/0956797617702501

Bertrand, M., Mullainathan, S., & Shafir, E. (2004). A behavioural-economics view of poverty. *The American Economic Review, 94*(2), 419–423. doi:10.1257/0002828041302019.

Bertrand, M., Mullainathan, S., & Shafir, E. (2006). Behavioral economics and marketing in aid of decision making among the poor. *Journal of Public Policy & Marketing, 25*(1), 8–23. doi:10.1509/jppm.25.1.8.

Bovens, L. (2009). The ethics of nudge. In S. O. Hansson & T. Grüne-Yanoff (Eds.), *Preference change: Approaches from philosophy, economics and psychology,* (pp. 207–220). Dordrecht: Springer Netherlands.

Camerer, C., Babcock, L., Loewenstein, G., & Thaler, R. (1997). Labour supply of New York City cabdrivers: One day at a time. *The Quarterly Journal of Economics, 112*(2), 407–441. doi:10.1162/003355397555244

Curchin, K. (2017). Using behavioural insights to argue for a stronger social safety net: Beyond libertarian paternalism. *Journal of Social Policy, 46*(02), 231–249. doi:10.1017/S0047279416000672

Federal Deposit Insurance Corporation. (2017). *FDIC national survey of unbanked and underbanked households* (FDIC-038-2018). Retrieved from Federal Deposit Insurance Corporation: https://www.fdic.gov/householdsurvey/2017/2017report.pdf

Gennetian, L. A., & Shafir, E. (2015). The persistence of poverty in the context of financial instability: A behavioural perspective. *Journal of Policy Analysis and Management, 34*(4), 904–936. doi:10.1002/pam.21854

Goodwin, T. (2012). Why we should reject 'nudge'. *Politics, 32*(2), 85–92. doi:10.1111/j.1467-9256.2012.01430.x

Grüne-Yanoff, T. (2012). Old wine in new casks: Libertarian paternalism still violates liberal principles. *Social Choice and Welfare, 38*(4), 635–645. doi:10.1007/s00355-011-0636-0

Hausman, D. M., & Welch, B. (2010). Debate: To nudge or not to nudge. *Journal of Political Philosophy, 18*(1), 123–136. doi:10.1111/j.1467-9760.2009.00351.x

Madrian, B., & Shea, D. (2001). The power of suggestion: Inertia in 401(k) participation and savings behaviour. *The Quarterly Journal of Economics, 116*(4), 1149–1187. doi:10.1162/003355301753265543

Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science, 341*(6149), 976–980. doi:10.1126/science.1238041

Mullainathan, S., & Thaler, R. H. (2000). Behavioral economics. *Working Paper Series, 7948*(7948). Retrieved from https://www.nber.org/papers/w7948.pdf

Nguyen, A., & Western, M. (2007). Socio-structural correlates of online news and information adoption/use: Implications for the digital divide. *Journal of Sociology, 43*(2), 167–185. doi:10.1177/1440783307076894

Acs, G., Loprest, P., Nichols, A. (2009). *Risk and recovery: understanding the changing risks to family incomes* (Report no. 824790859). Retrieved from Urban Institute: https://www.issuelab.org/resources/7649/7649.pdf

Schmidt, A. T. (2017). The power to nudge. *American Political Science Review, 111*(2), 404–417. doi:10.1017/S0003055417000028

Servon, L. J., & Horrigan, J. B. (1997). Urban poverty and access to information technology: A role for local government. *Journal of Urban Technology, 4*(3), 61–81. doi:10.1080/10630739708724567

Thaler, R. H. (1990). Anomalies: Saving, fungibility, and mental accounts. *The Journal of Economic Perspectives, 4*(1), 193–205. doi:10.1257/jep.4.1.193

Thaler, R., & Sunstein, C. (2003). Libertarian Paternalism. *The American Economic Review, 93*(2), 175–179. Retrieved from http://www.jstor.org/stable/3132220

Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth, and happiness.* New York: Penguin Books.

Wilkinson, T. M. (2013). Nudging and manipulation. *Political Studies, 61*(2), 341–355. doi:10.1111/j.1467-9248.2012.00974.x