THE ROLE OF BEHAVIOURAL ECONOMICS IN INCREASING SAVINGS IN DEVELOPING COUNTRIES

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The choice between short-term spending and long-term saving is something that mankind is constantly faced with. People in the developing world in particular often lack the financial institutions that allow for saving and investment, on top of having to live on a very low income. Clare Delargy uses behavioural economics to examine people's propensity to save, and provides some perceptive insights into how savings decisions can be altered in order to stimulate development.

Introduction

One and a half billion people in the world live in conditions of extreme poverty, surviving on less than $1.25 a day (United Nations, 2010). Explanations as to why these people remain trapped in poverty range from the paternalistic, which contend that the poor are psychologically and attitudinally inferior to other members of society and as such require interventions from government, to the libertarian, which hold that the poor are rational individuals whose actions are informed by their own beliefs and values, rendering societal interventions unnecessary (Bertrand, Mullainathan and Shafir, 2004). Behavioural economists have countered these theories by suggesting that poverty is not a psychological weakness but rather the consequence of behaviour, influenced by the same behavioural biases and irrationalities that affect other members of the population. However, for the poor these biases have a much graver impact. Savings are an important aspect of development; they help to fund education, entrepreneurship and healthcare. It is vital that policies attempt to increase the number of people in the developing world who are saving their money in financial institutions. This essay will argue that behavioural economics can use insights from studies to influence rates of savings.

Saving in the Developing World

Saving money is crucial for development; it allows individuals to have enough capital to invest in education and pay for healthcare and it facilitates entrepreneurship. Individuals can use money they have put aside to invest in and expand their business (Dupas and Robinson, 2009). The

outcomes of a failure to save when on the poverty line can mean an inability to continue education or gain adequate healthcare. Access to banking is crucial in order to save. Without it individuals are left with few options; they can save at home, but this does not generate any interest; or they can use savings options, which may involve negative interest (Bertrand, Mullainathan and Shafir, 2004). Banerjee and Duflo (2006) surveyed individuals in 13 developing countries and discovered that, when money was borrowed, 6% came from a formal source. Only 14% of those surveyed had savings accounts. The number of people in the world without access to banking services may total 2-3 billion (Karlan and Morduch, 2009). Financial institutions have been reluctant to provide services in these areas; a disproportionate number of those without bank accounts are poor, and therefore offering such services may not be profitable (Karlan and Morduch, 2009).

Though people living in the developing world must survive on extremely little money, this does not automatically result in an inability to save. Instead, Banerjee and Duflo (2006) found that individuals living in poverty still spend money on extraneous items such as religious festivals, alcohol and tobacco and express wishes to curtail their spending on such products. There are indications that people in the developing world want to save and that they form strategies to combat their lack of access to traditional financial institutions. The presence of informal savings groups such as rotated savings and credit associations (ROSCAs) are a testament to this. Saving using these mechanisms can involve large risks, yet, as it may be the only opportunity these people have to save, they continue to use them (Wright and Mutesasira, 2001). These schemes allow a group of people to contribute their savings into one fund which is loaned out to different members in turn. Dupas and Robinson (2009) found that, though women in rural Kenya had large constraints on savings, the desire to save still remained. Forty percent of participants in an experiment accepted a savings plan even though it offered a negative real interest rate, as the bank in question had high withdrawal fees. In spite of these high transaction costs, take up of the plan led to savings.

The Behavioural Economics of Saving

There are a number of findings from the behavioural economics literature which shed light on human behaviour and can be used in an attempt to understand why people may not save money. Firstly, individuals tend to discount the future and overweigh the present when making decisions. Thaler (1981) found that this discounting does not occur linearly; instead it levels off as the time distance increases. Valuations, such as whether someone would prefer €10 now or €11 next week, decline sharply for decisions about the present; people disproportionately prefer to have the €10 immediately. However this difference in valuation is not observed when people are asked to make choices for the future. For instance, when offered €100 in one year's time versus €110 in one year and one week, these two options tend to hold the same value for people. They are more willing to wait an extra week for a greater sum of money in one year than those who have to resist €10 immediately. When making decisions in the present people can be impulsive and choose short term gains over long

term outcomes. Conversely, when they have to plan for the future, individuals often make choices that have greater long term benefits while correspondingly overestimating their ability to adhere to these plans. According to Mullainathan (2004) there is an inherent clash between what people intend to do in the future and what they actually do when it arrives. Individuals are often intuitively aware of this conflict and impose penalties on themselves to ensure that they carry out a particular task.

Trope and Fishbach (2000) offered a glucose test to participants, telling them that the results they received would inform them what glucose levels result in optimum cognitive functioning. They were told that they could not have sugary foods for either six hours or three days prior to the test and were asked to put forward a sum of money that they would agree to pay if they did not abstain. Those who only had to give up glucose for six hours set an average fine of $1.49, while those who were told to give up high glucose foods for three days set an average penalty of $3.86. The participants in the latter condition anticipated that they would find it difficult abstaining and so set a stricter commitment device for themselves. Bauer, Chytilová and Morduch (2008) found that women living in rural Indian villages, being more likely to discount the future, did not save their money at home. Instead, recognising the temptation that keeping savings at home would bring, these women were more inclined to be members of and borrow from local microcredit organisations, using this as a form of commitment device to generate savings. These studies suggest that individuals can be aware of their inability to stick to a set of behaviours they wish to complete and are willing to set in place devices to ensure that they follow through. Planning problems can explain why individuals in the developing world who, when asked, indicate that they value the education of their children highly, consequently fail to save enough to ensure that they can attend school (Mullainathan, 2004). In order to save enough money, individuals may have to make multiple sacrifices months prior to their children attending school. A determination to save may not be sufficient as individuals may be compelled to use money intended for education for health emergencies, another indication that the high risk environments that people in developing world live in increase the negative effects of behavioural biases.

Loss aversion may also play a role in the lack of savings behaviour in the developing world. Tversky and Kahneman (1992) explain that people react differently to losses and gains of the same size; losses are felt more keenly than gains of a similar magnitude leading to behaviour which is loss averse. Karlan and Morduch (2009) hold that putting aside money for savings requires an individual to forgo goods which they could obtain immediately in exchange for unclear future benefits. They are faced with the choice of losing instant benefits when the future gain is not even assured. Thaler and Benartzi (2004) suggest that when people become accustomed to having a particular income and the lifestyle that accompanies it, putting money into savings, resulting in less disposable income, may provoke a sense of loss.

Another facet of behaviour which influences savings is a tendency to procrastinate and a failure to change the status quo (Samuelson and Zeckhauser, 1988). Thus, if it is the default position

not to have a savings account, people may fail to start one even if they wish to do so. Thaler and Benartzi (2004) successfully increased savings by designing a plan in which, for individuals who opted into the scheme, the default option was to increase the amount saved with each pay increase. Participants were free to opt out of this part of the scheme, but the majority remained with the plan and tripled their savings rate over 28 months. A closer examination of defaults on savings plans may help to explain why people do not save more money. Defaults linked to rises in income, such as those in Save More Tomorrow (Thaler and Benartzi, 2004), could be incorporated into savings plans in the developing world to ensure that, if an individual's income increases, greater savings will result.

Changing People's Behaviour

The behavioural economics perspective allows policymakers to understand why education campaigns, though helpful, are insufficient to provoke total behaviour change. Taking a rational view of the mind suggests that, once people are given adequate information about an issue, they will act in their own best interests. Dinkleman, Levinsohn and Majelantle (2006) demonstrate that information about the transmission of the HIV virus and behaviours necessary to prevent it do not lead to an eradication of such behaviours. The research indicates that a campaign designed to increase savings behaviour by purely providing information may not lead to a lasting change in behaviour. Hyperbolic discounting, self control, status quo bias and loss aversion, among other heuristics, can result in individuals failing to do things that they want to do. These findings can be used in policies attempting to increase savings in developing countries.

Commitment devices allow individuals to meet their future goals or perform desired behaviour, which they recognise would be difficult to achieve due to personal conflict (Bryan, Karlan and Nelson, 2009). The presence of commitment devices in savings plans used by formal institutions would allow individuals to save money for their long term benefit and prevent them from spending it on short term gains, which research indicates they want to do. In a field experiment, Ashraf, Karlan and Yin (2006) examined the effect of offering savings policies with inbuilt mechanisms to ensure commitment. They assessed the discount rate of a group of people living in the Philippines and offered a savings policy to half the sample. Women traditionally manage the finances in Filipino culture and women who were less likely to discount the future were more inclined to choose the plan. The plan involved a voluntary commitment made by the individual to not withdraw any money until a specific monetary target or date was reached. Participants decided themselves to enter into the commitment, but once it was made, money could not be withdrawn until the target was reached. In total, 28% of individuals offered the plan decided to avail of the opportunity. Savings in this group increased by 81% over 12 months, indicating that not only is the programme effective at generating savings but that the savings commitment entered into is viewed as long term. The authors demonstrate that the type of savings programme offered by banks will not only influence the amount people save but also the sort of person who will save. In this case, the programme attracted those who had a lower

discount rate. Using savings accounts such as these not only produces commitment but also represents a safer way of saving money as it is less vulnerable to theft (Dupas and Robinson, 2009).

An increased use of commitment savings plans in developing countries, offered on a voluntary basis, could lead to an increase in savings rates. Individuals would be offered a savings contract with a local bank and the commitment required would be in the form of keeping the money in the account for either a specific amount of time or until a specific monetary target is reached. Karlan and Morduch (2009) recommend marketing and labelling savings plans in a positive manner; drawing particular attention to the gains involved may help to increase uptake and commitment. Policies regarding savings should be accompanied with financial education about the benefits of saving in institutions, which may prevent feelings of loss aversion from affecting take up. Utilizing savings plans could result in an increase in investment in education or other areas, thus promoting development. Policy makers should also consider including automatic increases in savings if an individual's income rises, drawing on the successes of Save More Tomorrow (Thaler and Benartzi, 2004).

Though Ashraf, Karlan and Yin's (2006) study is a significant in attempting to promote saving in the developing world, it cannot establish that these increased savings have generated a corresponding increase in participants' welfare. In fact, it may be that the monetary constraints participants imposed upon themselves resulted in a loss of welfare, such as an inability to pay for urgent medical care. Similarly, the low uptake rate of 28% indicates that such plans should not be made mandatory butoffered only on a voluntary basis. However, it may be that this low uptake rate is a reflection of the absence of interest rate increases in exchange for a reduction in access to money, which is something future policies could rectify. Many criticisms of policies derived from behavioural economics literature centre around questions regarding liberty; is it correct to use research findings on behavioural biases to elicit changes in behaviour? If all humans are susceptible to behavioural biases, surely this applies to those administering policies based on this research too. Can we trust these individuals to generate effective policies without allowing themselves to be influenced by such biases (Whitman, 2010)? However, the approach discussed is not considered to be overly paternalistic in nature, as it provides individuals with a choice to enter a savings plan to combat biases that, as the literature indicates, they are already aware of and attempt to combat themselves.

Conclusion

Using behavioural economics to help stimulate development is a relatively new approach and is by no means perfect; Duflo (2005) laments the fact that it has not to date produced an overarching theory explaining how its findings are relevant to development economics. It is also controversial as to whether it is possible to directly apply findings from western studies, such as behaviour regarding pension contributions (Benartzi and Thaler, 2004), to people living in developing countries. This western perspective, a characteristic of much psychological research (Henrich, Heine and

Norenzayan, 2010), needs to be counterbalanced by research examining the decision making in people living in poverty. The assumption that the findings in the behavioural economics literature can be universally applied must be verified experimentally; however, early studies such as those by Ashraf, Karlan and Yin (2004) suggest that these findings may be universal. Similarly, while behavioural economics has developed theories examining the importance of human behaviour on savings and finance among the poor, it has yet to do so in many other areas, such as education (Banerjee and Duflo, 2010).

Field research suggests that individuals in developing countries exhibit the same biases and behavioural anomalies as those which have already been established, through experiments, in western societies. Providing access to credit and financial institutions is not a panacea which can solve all the problems facing those living in the developing world; lack of education, corruption, inequality and disease continue to be huge constraints on development (Karlan and Morduch, 2009). However, Ashraf, Karlan and Yin's (2006) study demonstrates the potential that commitment savings plans have to increase savings in the developing world, which in turn could have a marked impact on the lives of those living in difficult economic conditions.

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