Behavioral Economics in Development: Perspectives from Kenyan low-income households

ALBERT KACHERO OUNGO[1], DR. YASIN KUSO GHABON[2]
[1, 2]*Department of Economics, Maseno University*

Abstract- ***This study examines behavioral economics' applicability and significance in reducing poverty and enhancing low-income households' ability to make decisions in Kenya. The study challenges the conventional belief that economic agents are rational by examining how social variables, psychological biases, and cognitive limits impact financial and health-related choices. By focusing on three fundamental ideas, time inconsistency, present bias, and nudging, the study demonstrates how these behavioral inclinations impede long-term savings, health insurance enrollment, and planning. Based on theoretical understandings and empirical data from the Kenyan setting, the study shows how behaviorally informed interventions, such as commitment devices, default options, and targeted reminders, can encourage better financial decisions among Kenya's vulnerable populations. The paper concludes that it is not only feasible but also crucial to include behavioral insights into policy design to create interventions that are in line with people's real thoughts and behaviors, particularly for those who are economically vulnerable. The use of behaviorally-informed methods could be a game-changing catalyst for equitable development as Kenya pursues universal health care and inclusive growth***

I. INTRODUCTION

Conventional economic theories frequently assume that people are perfectly rational beings who always choose the best course of action. However, according to behavioral economics, people, particularly those who are impoverished, face substantial psychological and cognitive obstacles that influence their ability to make decisions (Bertrand, Mullainathan, & Shafir, 2004). According to Hoff and Demeritt (2002), policies targeted at empowering people and reducing poverty can be improved by incorporating these behavioral insights. This paper questions the traditional economic theory of human behavior, more specifically, the presumption that people are completely rational agents who choose the best course of action based on their limitations and preferences. The lived reality of the poor and low-income households is not sufficiently represented by this viewpoint. Rather, it suggests a behavioral economics perspective that integrates psychological understanding into economic reasoning. It recognizes that people frequently behave irrationally, make cognitive errors, and are influenced by environmental and psychological factors.

Behavioral Economics

Behavioral economics incorporates psychological insights into economic models to better understand how people make decisions (Laibson, 1997). Empirical evidence indicates that real-world decision-making, particularly among low-income people, is frequently impacted by cognitive biases and limits, notwithstanding the assumption made by traditional economic theories that rational agents maximize utility (Madrian & Shea, 2001). To understand how people make decisions in the real world, behavioral economics incorporates psychological insights into economic analysis. According to Thaler and Sunstein (2008), conventional economic models assume that people are logical beings who constantly maximize their utility and behave in their own best interests. However, actual data shows that social factors, heuristics, and cognitive biases frequently cause human conduct to diverge from these logical norms. Low-income households are more likely to exhibit these aberrations, as factors such as a lack of formal financial systems, financial stress, and a lack of education can exacerbate less-than-ideal choices (Frederick, Loewenstein, & O'Donoghue, 2002).

Traditional economics assumes that people have consistent desires, a solid self-concept, and an optimistic outlook on their prospects. The decision-maker is usually said to be *"Homo economicus"*, a rational actor who invests prudently in capital, education, and health care to benefit from them later on and who has no issue setting aside a portion of his income for future needs. He is not prone to temptation or psychological conditions that could jeopardize his future (Zhang & Huang, 2024). A more realistic perspective on human nature is, however, held by behavioral economics. The first wave of behavioral economics emphasizes constrained rationality and universal biases. It demonstrates how poverty breeds a mindset of scarcity that results in rash decisions (De Bruijn & Antonides, 2022). According to the scarcity concept,

1. To meet their immediate needs, people who live in situations where resources are scarce, even those who are not impoverished but are made to feel so through experiments, often turn to the simplest means, such as taking out large loans at exorbitant interest rates, which exacerbates their resource shortage over time.

2. Their concerns about not being able to meet their immediate needs consume them so much that they have little.

II. THEORETICAL FRAMEWORK

Behavioral economics is founded on three main concepts, which include time inconsistency, present bias, and nudges as discussed below:

a) Time Inconsistency

This behavioral phenomenon refers to how people's preferences evolve, especially when they are presented with choices that require balancing present and future advantages, and it often leads to conflicts between short-term and long-term intentions (Laibson, 1997). People frequently make intentions to do specific things in the future, like saving money or getting health insurance, but they seldom follow through because of temptations or a change in priorities. The c of "*hyperbolic discounting*," in which future rewards are excessively undervalued in comparison to immediate ones, is associated with this phenomenon (Laibson, 1997). In the case of a country, time inconsistency can result in underinvestment in education, delayed healthcare decisions, and insufficient savings, especially for low-income groups. Such self-control issues cannot be explained by traditional economic models, which assume that desires are constant across time. A better framework for creating interventions such as commitment devices, which assist in coordinating short-term activities with long-term objectives, is offered by behavioral models that consider time inconsistency (O'Donoghue & Rabin, 1999).

b) Present bias

This refers to the propensity to prioritize short-term gains over long-term gains (Frederick, Loewenstein, & O'Donoghue, 2002). Even when people understand how important saving money is in the long run, in the context of poverty, this could mean spending small sums on immediate consumption rather than putting it aside for a future need (Thaler, 2016). It is the propensity to value short-term gains more highly than long-term ones, even when the latter are more advantageous. Thaler (2016) provides an example of health insurance. According to his study, despite understanding the importance of health insurance or long-term savings, many individuals may choose to spend on immediate needs or pleasures instead. Present bias is especially problematic in the context of poverty, where urgent financial needs and uncertainty about the future make it even harder to commit to long-term financial goals. This behavior often leads to behaviors such as procrastination, insufficient saving, underinvestment in preventive health, and low participation in educational programs (Asgari & Pouralimardan, 2024).

People's tendency to undervalue future utility is the psychological basis for present bias. Present-biased people apply a severe initial discount between the present and the near future, followed by a shallower rate for later periods, as opposed to applying a constant rate of discounting throughout time (as in exponential discounting) (Frederick, Loewenstein, & O'Donoghue, 2002). This indicates that people frequently overvalue immediate gains and underestimate long-term advantages, which results in decisions that seem illogical when seen in the long run.

c) Nudging

Thaler and Sunstein (2008) popularized the concept of nudging, which is organizing options to help people make better choices without limiting their options. According to Thaler and Sunstein (2008), a nudge is any element of the decision architecture that modifies behavior in a predictable manner without prohibiting options or drastically altering financial incentives. Nudges use psychological insights to help people make better decisions, particularly when behavioral biases like present bias or time inconsistency can result in less-than-ideal results (Hummel & Maedche, 2019). In situations where conventional incentives or laws could be too expensive or unworkable, nudges work especially well. Automated savings programs, insurance payment reminders, and default enrollment procedures are examples of behavioral nudges that can assist low-income people in overcoming psychological obstacles and making better financial and health-related decisions (Thaler, 2016). To increase adoption and adherence to positive behaviors, nudges can be included in government initiatives, financial institutions, and mobile platforms.

A few examples of successful nudges, according to Lembcke et al (2019), include setting advantageous defaults (such as automatic membership in pension plans), streamlining difficult procedures, reminding people on time, and influencing behavior through peer comparisons or societal norms. Nudges are effective because they are inexpensive, scalable, and protect individual liberty by guiding behavior without using force. Nudges have been shown dramatically improve outcomes in a variety of fields, including education, money, and health (Madrian, 2014). For example, automated enrollment in retirement savings schemes has overcome procrastination and inertia to significantly boost participation rates (Madrian & Shea, 2001). Reminders have also been demonstrated to enhance prompt bill payment and medication adherence.

III. PERSPECTIVES FROM THE KENYAN CONTEXT

Kenya is a lower-middle-income country with a population of about 54 million people (World Bank, 2023). Over the past 20 years, the country's economy has grown steadily, with industry, services, agriculture, and the rapidly expanding digital economy as important sectors. Notwithstanding these advancements, Kenya still faces significant socioeconomic challenges, especially in poverty, inequality, and unemployment reduction, problems that disproportionately impact households in the informal sector and those with lower incomes. The informal economy, which employs around 83% of Kenya's workforce, is typified by poor and irregular revenues, restricted credit availability, and inadequate social safety nets (Kenya National Bureau of Statistics, 2022). Vulnerability and poverty are still pervasive, particularly in rural areas. Many households live barely over the poverty line and are susceptible to economic shocks like droughts or medical emergencies, even though the country's poverty rate decreased to about 36.1% in 2021 (World Bank, 2022). These weaknesses, along with low financial literacy and high dependency ratios, foster an atmosphere in which behavioral barriers, like present bias and time inconsistency, can seriously impede economic advancement.

With little access to standard banking, insurance, and social safety nets, a sizable section of Kenya's population works in the informal sector (Kenya National Bureau of Statistics, 2022). Therefore, it is essential to understand the behavioral patterns of low-income people to create development strategies that work. Through the identification of the psychological obstacles that prevent positive economic behavior, such as saving, making health investments, and efficiently utilizing financial technologies, behavioral economics offers frameworks and techniques to close these gaps (Hummel & Maedche, 2019).

Time inconsistency illustrates how preferences can change over time, especially when people must choose between short-term satisfaction and long-term advantages. When the opportunity cost of immediate spending becomes apparent, informal workers in Kenya who have stated intentions to save money do not follow through on their plans (Dupas & Robinson, 2013). This tendency was also noted by Duflo, Kremer, and Robinson (2011), who noted that farmers did not buy fertilizer even when it had a high return until it was supplied at the appropriate time. Understanding this dynamic enables politicians to

provide incentives and commitment devices that support people in maintaining their long-term objectives.

Conversely, present bias is the cognitive propensity to give undue weight to short-term results at the expense of long-term benefits. It focuses on how making poor decisions is influenced by short-term thinking (Thaler & Sunstein, 2008). Present bias explains why many low-income households in Kenya underinvest in health insurance and savings even if they recognize their significance. The unknown advantages of future planning are subordinated to the urgency of everyday necessities like food, rent, and transportation (Ngigi & Macharia, 2020). Dupas and Robinson (2013) discovered that people in Western Kenya frequently put non-essential spending ahead of health savings, demonstrating the behavioral barriers brought forth by present bias. Especially in low-income areas, this bias can result in cycles of vulnerability and underinvestment. Behavior can be changed toward better long-term decisions by addressing present bias with goal-setting interventions, automation, and reminders (Thaler & Sunstein, 2008).

Last but not least, nudges, a theory made popular by Thaler and Sunstein (2008), are based on the notion that context affects decision-making and that it may be enhanced by altering the setting in which decisions are made. Nudging techniques have been used in a variety of settings in Kenya, including boosting savings with mobile platform automatic transfers, encouraging NHIF enrollment through peer-based reminders, and encouraging responsible mobile credit use through SMS notifications (Jack & Suri, 2014). According to Nyaboga (2019), NHIF enrollment among boda boda riders was enhanced by organized group payments and streamlined payment schedules.

Because low-income populations have higher cognitive loads and may find it difficult to make complicated or high-stakes decisions, nudges are particularly effective with them. Nudges are a promising technique for improving development outcomes in contexts with limited resources since they are usually inexpensive and scalable (Thaler & Sunstein, 2008).

CONCLUSION

This study shows how classic economic models' presumptions about rational decision-making frequently conflict with the realities faced by low-income households, particularly in developing nations like Kenya. By considering the psychological and cognitive factors that influence personal decisions, behavioral economics provides a more complex picture. Despite their best efforts, many low-income households in Kenya do not follow through on long-term financial and health plans, which can be explained by the ideas of time inconsistency and present bias. These actions are the consequence of predictable psychological tendencies impacted by scarcity, uncertainty, and urgent needs rather than ignorance. A low-cost, scalable intervention, nudging is a potent tool for coordinating human behavior with outcomes that are advantageous to both the individual and society.

REFERENCES

[1] Asgari, H., & Pouralimardan, M. (2024). present bias and individual financial behaviors (an application of behavioral economics). *The Journal of Economic Policy*, *15*(30), 365-399.

[2] De Bruijn, E. J., & Antonides, G. (2022). Poverty and economic decision making: a review of scarcity theory. *Theory and Decision*, *92*(1), 5-37.

[3] Duflo, E., Kremer, M., & Robinson, J. (2011). Nudging farmers to use fertilizer: Theory and experimental evidence from Kenya. *American economic review*, *101*(6), 2350-2390.

[4] Dupas, P., & Robinson, J. (2013). Savings constraints and microenterprise development: Evidence from a field experiment in Kenya. *American Economic Journal: Applied Economics*, *5*(1), 163-192.

[5] Frederick, S., Loewenstein, G., & O'donoghue, T. (2002). Time discounting and time preference: A critical review. *Journal of economic literature*, *40*(2), 351-401.

[6] Hoff, K., & Demeritt, A. (2023). Using behavioral economics to reduce poverty and oppression. *Social Philosophy and Policy*, *40*(1), 185-209.

[7] Hummel, D., & Maedche, A. (2019). How effective is nudging? A quantitative review on the effect sizes and limits of empirical nudging studies. *Journal of Behavioral and Experimental Economics*, *80*, 47-58.

[8] Jack, W., & Suri, T. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review*, *104*(1), 183-223.

[9] Kenya National Bureau of Statistics (KNBS). (2022). *Economic Survey 2022*. Nairobi: KNBS.

[10] Laibson, D. (1997). Golden eggs and hyperbolic discounting. *The Quarterly Journal of Economics*, *112*(2), 443-478.

[11] Lembcke, T. B., Engelbrecht, N., Brendel, A. B., & Kolbe, L. M. (2019, June). To Nudge or not to Nudge: Ethical Considerations of Digital nudging based on its Behavioral Economics roots. In *ECIS*.

[12] Madrian, B. C. (2014). Applying insights from behavioral economics to policy design. *Annu. Rev. Econ.*, *6*(1), 663-688.

[13] Madrian, B. C., & Shea, D. F. (2001). The power of suggestion: Inertia in 401 (k) participation and savings behavior. *The Quarterly journal of economics*, *116*(4), 1149-1187.

[14] Ngigi, S., & Macharia, I. (2020). Behavioral insights and savings mobilization among informal sector workers in Kenya. *African Journal of Economic Policy*, 27(1), 45–60.

[15] Nyaboga, J. M. (2019). *Effects of Socio-economic Factors on the Uptake of Health Insurance by Motorcycle Taxi Operators in Machakos County, Kenya* (Doctoral dissertation, University of Nairobi).

[16] O'Donoghue, T., & Rabin, M. (1999). Doing it now or later. *American Economic Review*, 89(1), 103–124.

[17] Thaler, R. H. (2016). Behavioral economics: Past, present, and future. *American economic review*, *106*(7), 1577-1600.

[18] Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.

[19] World Bank. (2022). *Kenya Economic Update: Navigating the Pandemic*. World Bank Group.

[20] World Bank. (2023). *Kenya Overview*. https://www.worldbank.org/en/country/kenya/overvi

[21] Zhang, X., & Huang, Y. (2024). The key to sustainability science: from “homo economicus man” to “eco economic man”. In *Handbook on Climate Change and Environmental Governance in China* (pp. 72-84). Edward Elgar Publishing.