

SAVINGS BEHAVIOR AMONG LOW-INCOME INDIVIDUALS IN NIGERIA: A BEHAVIORAL ECONOMICS PERSPECTIVE

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Abstract

Low-income individual's savings behavior is of essence in economics and development studies, more so in developing countries like Nigeria. This study considers low-income earners in Nigeria, looking at their savings behavior from the perspective of behavioral economics, with regard to economic incentives, psychological factors, and socio-cultural influences. In this qualitative study, data were collected through in-depth interviews among low-income earners in Nigeria. The data analysis was done using methods to identify major factors that affect savings behavior. The present study finds that low-income people in Nigeria display saving behavior for a variety of factors. It is driven by economic incentives, including access to formal financial services and competitive interest rates. Subject to several psychological factors, such as loss aversion and present bias. Socio-cultural norms influence individual savings efforts through traditional savings practices and community obligations. Moreover, low financial literacy and, accordingly, limited accessibility of financial education are major barriers to effectively saving among this category of people. The findings add to the literature available on household finance and poverty alleviation in Nigeria and other developing countries. It provides valuable insights for policymakers, financial institutions, and development practitioners in creating tailored interventions and financial products that would meet specific needs among low-income earners. The findings of this study unveil the potential of savings to absorb economic shocks, finance productive assets, and increase the level of financial inclusion amongst poor communities meaning that adopting integrated measures—economic, psychological, and socio-cultural—enhances the weak saving habits of low-income earners in Nigeria.

Keywords: *Savings, Low income, Behavioural Economics, Financial Inclusion.*

DOI: 10.58934/jgeb.v5i18.275

1. INTRODUCTION

The nature of low-income earners' savings behavior has been of immense interest to economists and development studies, especially in developing countries such as Nigeria. There is, therefore, a need to understand the factors that may influence acts of saving among this population in order to create policies or relevant interventions for financial and economic growth. Although Nigeria, the most populous country in Africa, has seen a significant improvement in economic growth, poverty and income inequality have not yet been curtailed. According to the World Bank, 2021, about 40% of Nigerians still live below the poverty line, while a large number of residents are found engaged in informal sector activities. The country is overly dependent on oil exports and is therefore vulnerable to the vagaries in the global price of oil and other economic shocks.

The Nigerian context also creates peculiar challenges and opportunities for the study of savings behavior. From a plural ethnic and cultural backdrop with more than 250 ethnic groups, this influences social norms and financial decision-making (Falola & Heaton, 2008). Traditional family structures and communal obligations may have important implications for the way financial choices are made and thus affect individual saving decisions at the household level, thereby affecting individual savings decisions at the household level (Falola & Heaton, 2008).

The financial sector in Nigeria has undergone a lot of changes, especially in the last two years, with intensified efforts at promoting financial inclusion and increasing access to formal banking services. Nevertheless, the huge proportion of the population in the country remains either unbanked or underbanked, especially in rural areas. Such a scenario engenders a complex setting for the study of savings behavior because it will mean that individuals could maintain both formal and informal mechanisms for savings. The sociocultural context of Nigeria also has much to contribute to the formation of saving behavior. Traditional ways of savings, like rotating savings and credit associations, are widespread among the low-income population under different local names: "esusu" or "ajo." Informal ways of savings are deeply rooted in Nigerian culture and provide an alternative to formal banking services for many people. Among the key findings is that for poor households, mechanisms for savings become very instrumental in cushioning economic shock due to unemployment and health crises. Design of financial products can influence the saving behavior in such people. Properly designed savings accounts will aid in improving their financial health and provoke them to save money on a regular basis. A study on rural households at Ago-Iwoye, Nigeria, discovered that they could save up to a fifth of their permanent income and a third of their transitory income; therefore, it was possible

for any effective savings mobilization programs to take off (Durojaiye, 1991). This means that despite the low-income earning and other challenges, there is an inborn capacity to save among the poor if proper mechanisms are established. Moreover, demographic characteristics, seasonality, and transaction types are among the factors that significantly influence savings behavior. For instance, Mirpourian (2020) used quantile regression analysis to study the effects of the mentioned factors on transaction sizes in savings accounts, thereby indicating that savings behavior of low-income customers is quite complex.

Traditional economic theory assumes people behave rationally with respect to perfect information and stable preferences. In contrast, behavioral economics acknowledges the fact that there are major influences on financial decision-making from cognitive biases, social influences, and psychological factors. Savings behavior of low-income earners has been studied in various contexts. While studying the savings behavior in the context of a low-income country, Rosenzweig argued that household-specific factors and ways of managing risk should be taken into account. A 2015 study by Basu et al. examined the health effects of a financial savings program among low-income US adults, thus showing the potential broader impacts of savings interventions. Savings is one of the main drivers to establish financial stability, accumulate assets, and promote economic mobility, especially in low-income households in developing countries. In a country like Nigeria, with a poverty headcount of about 63% as estimated by the World Bank in 2023, how low-income people save is of essence to development practitioners and policymakers. Traditional economic models consider the rational process in reaching decisions, driven by utility maximization and perfect information. Behavioral economics integrates the already known psychological factors, cognitive biases, and socio-cultural norms generally impinging on financial decisions into their analysis, therefore questioning perfect rationality assumptions.

Konya and Nyakwara 2019 assessed the savings and asset allocation behavior of low-income individuals in rural Kenya, thereby offering insight into what influences rural savings decisions within a socio-economic setting much like that of Nigeria. However, there is generally a lack of research targeting the savings behavior of low-income Nigerians from a behavioral economics perspective.

This paper shall fill this gap by analyzing low-income earners' savings behavior in Nigeria, bringing to the fore some peculiar economic, social, and cultural factors which influence financial decision-making in the country. It tends to shed more light on the interplay between

economic incentives, psychological factors, and socio-cultural influences. The research will investigate what actually underpins savings decisions of members of this demographic group in order to extend the present body of knowledge in the literature on household finance and poverty alleviation strategies. This should be of greater importance to research, considering that savings can help absorb economic shocks by facilitating investments in productive assets and building financial inclusion among underserved populations. With limited access to formal financial services in Nigeria, particularly in rural areas, knowledge of the barriers and facilitators of savings can help facilitate appropriate targeted interventions and initiatives in policy aimed at increasing financial resilience and economic empowerment.

The study will, therefore, provide empirical evidence and practical recommendations aimed at answering the research questions in a bid to provide support to the poverty alleviation efforts in Nigeria. They are: what roles do factors that cut across psychological and cognitive and social factors play in influencing the saving decisions of low-income individuals in Nigeria? The primary objective of this study will thus be to assess the effect of savings behavior in low-income individuals in Nigeria. Consequently, this study will add to the literature going toward behavioral economics and its applications in developing economies. It is, therefore, potentially a link between theory and practice; as such, the findings would have the potential to inform evidence-based policies and interventions tailored in the unique socio-economic and cultural landscape of Nigeria.

2. LITERATURE REVIEW

Conceptual Review

This view on risk management bears acute relevance to the context of Nigeria. The economy is highly informal, and therefore it remains vulnerable to external shocks; as a result, it puts an extraordinary burden on individuals' personal savings as a way of self-insurance against various risks and mishaps. Not surprisingly, this attitude toward managing risk through self-insurance shows in informal savings mechanisms, such as the ROSCA referred to in local parlance as "esusu" or "ajo."

Behavioral Economics and Savings Decisions

The understanding of the saving behavior, more so from the lower denomination segment, is influenced by the theoretical premises present in behavioral economics. Behavioral economics, as distinguished from mainstream economics, has long maintained that people make optimal

decisions based on complete information and rational choices. However, this approach recognizes that financial choices are created by cognitive errors, social impulses, and psychological factors. Some summarized factors identified by behavioral economics that affect saving decisions among low-income people include:

- i. Present bias: Time-inconsistent people make a greater weight of immediate payouts versus future payoffs, which will result in undersaving (Laibson, 1997).
- ii. Loss aversion: Humans dislike losing more than they like winning. This influences people's risk-taking behavior in saving decisions (Kahneman & Tversky, 1979).
- iii. Mental accounting: There will be some form of categorization in treating money different that will affect saving behavior, depending on its source or intended use by the person (Thaler, 1999).
- iv. Social norms and peer effects: Social savings decisions can be influenced by the behavior and expectations of its social group (Duflo & Saez, 2003).

Savings Behavior

Saving behaviour can be described as patterns, motives, and determinants of decision-making that underlie how people or families divide any particular income between present and future consumption (Keynes, 1936; Modigliani & Brumberg, 1954). The paper deduces that savings are significant in shaping the financial stability and accumulation of assets, which drives economic progress for low-income households in various developing countries, including Nigeria (Rosenzweig, 2001; Basu et al., 2015).

Low-Income Earners

People or households who live below the poverty line or have a little income belong to the low-income group. In fact, the article provides that 40% of the population in Nigeria belongs to the informal sector, while a big portion is also below the poverty line (World Bank, 2021). Knowing the behavior with regard to savings of this population is important in leading to design better policy and interventions aimed at improving financial well-being and economic growth. While traditional economic theory assumes that people make rational decisions based on good information and stable preferences, there can be little dispute that cognitive biases, social influences, and psychological factors exert a powerful impact on financial decision-making, including savings behavior. "Behavioral economics is the field that at the confluence of insights developed in psychology, cognitive science, and economics to understand how economic

agents make decisions in ways that are not consistent with Bounded Rationality" (Thaler & Sunstein, 2008).

Financial Inclusion

Financial inclusion means the accessibility, availability, and use of formal financial services, such as banking, credit, and savings, taken by individuals and households, respectively, into account (Central Bank of Nigeria, 2020). It is important to note that an enormous part of the Nigerian population, particularly in rural areas, is unbanked or underbanked, making the study of the savings behavior very complex because some people will adopt formal mechanisms, other informal mechanisms, and in most cases, the two together.

Informal Savings

ROSCAS, indigenous to Nigeria in the form of "esusu" or "ajo," are part of the cultural history and practices. This sets in an option for the provision of deposit services where the low-income brackets have limited access to formal banking services (Ijaiya et al., 2011). The traditional systems of saving above are influential on the saving behavior of the low income earners in Nigeria.

Financial Literacy and Savings Behavior

The relation between financial literacy and savings behavior has been done in many studies. In this regard, Henager and Mauldin studied a sample of low- to moderate-income households in 2015. It was established that high levels of financial literacy are associated with an increased likelihood of saving and high saving rates. The study underscores the importance of targeting financial education toward inculcating positive savings behavior.

In Nigeria, financial literacy levels are wide-ranging with extreme variations across urban and rural regions of the country. The Central Bank of Nigeria has over the years engaged in diverse financial literacy programs, conscious of its pivotal role in encouraging savings and financial inclusion. However, it has yet to be researched how such programs can elicit changes in the savings behavior of low-income Nigerians. Institutional Factors and Savings Behavior

Institutional factors are very strong forces in explaining the savings behavior among low-income householders. As noted by Curley et al. (2009), other than guarantying access to formal banking services, institutional mechanisms that facilitate saving include products designed for saving by the low income earners and policies that reward saving.

Efforts to increase financial inclusion result in increasing access to formal banking services. There are still many challenges facing this, mainly in the rural areas where the traditional banking setup is required. The increase in mobile banking and fintech solutions gives new potential to increase access in savings mechanisms among low-income Nigerians. (Adeoti, 2011)

Sociocultural Factors and Savings Behavior

Consequently, the sociocultural background has tremendous influence on saving behaviour. Work by Gutter, et al. (2012) was an attempt to study the interaction between economic, sociological as well as psychological variables in the behaviour of savings in the low - to moderate-income groups showcases and indicates the need for addressing the investigation of cultural and social parameters. Traditional methods of saving and social networks in the determination of savings behaviour is a significant factor. The more significant perspective of the popularity of ROSCAs and other informal savings mechanisms reflects social trust and community-based finance activities (Ijaiya et al., 2011). Discussed further unto as "black tax", the more an individual is expected to assist extended family members; this could significantly affect stores behavior amongst the low-income populace.

Understanding savings behavior of low-income earners in Nigeria is desired for purpose of developing effective inclusion strategies and improving the general well-being of the low-income population. The theoretical implication and applicability of Prospect Theory, as propounded by Kahneman and Tversky in 1979, to the savings behavior of low-income people in Nigeria, is unveiled in this research paper.

THEORETICAL BACKGROUND

Prospect Theory and Savings Behavior

This groundbreaking study in the area of behavioral economics defined Prospect Theory as reflecting evaluations by individuals of gains and losses relative to a reference point, in contrast to evaluating them in relation to their true levels of wealth (Kahneman & Tversky, 1979). It also implies that people are more likely to be averse to losses. The psychological cost of a loss has traditionally been considered to be greater than the payoff from an equally sized gain. Of course, this has importance for savings behavior.

Low-income earners in Nigeria majorly work with very despicable money resources and face many economic strangencies. In this scenario, choices are benchmarked based on the minimum level of consumption necessary for survival, not most often an aspirational target (Duflo & Banerjee, 2011). Therefore, it is more likely that the poor consume more during the present and save less for the future because the decrease in consumption is likely to be more pronounced as loss than the gain from funds saved.

Furthermore, uncertainty and volatility that characterizes the financial lives of the low income earners can impact on the savings behavior. As the Prospect Theory states, that people are generally averse to risks regarding gains but, with respect to losses, are more risk-inclined. (Kahneman & Tversky, 1979). The case of people with low incomes in Nigeria, for fear of losing saved meager resources they may exhibit less than expected willingness to save since they can perceive saving not as a source for a potential gain but as a source for potential loss.

Taking into consideration the cognitive biases and heuristics inducted within Prospect Theory, the saving behavior of low-income Nigerians is further determined by the presence of generic factors, such as social, cultural, and institutional elements. According to the theory of planned behavior, Ajzen 1991, behavior is influenced by attitude, subjective norms, and perceived behavioral control. In this case, it is necessary to consider social and cultural norms dominant in low-income communities in Nigeria, as they will have a great impact on savings behavior. For instance, cultural beliefs and practices in relation to financial use and the perceived social status regarding saving or spending might influence decisions pertaining to saving money. Aryeetey and Udry (1997).

Besides education and income, the availability and accessibility of physical access to formal financial services (e.g., savings accounts and other savings products) can also explain variance in the savings behavior of low-income earners in Nigeria. Equally relevant, institutional factors, including the reliability and trustworthiness of the financial institutions, as well as perceived barriers to access, are likely to shape an individual's perceived behavioural control and consequently his decision with regards to saving (Dupas & Robinson, 2013).

There are some relevant research and theory that may explain some savings behaviours. These include:

Bounded Rationality Theory

(Simon, 1955): This theory recognizes the cognitive constraints and limitations which exist about the human element in the decision-making process, attacking the perfect rationality assumption of the traditional models in economics.

Theory of Planned Behavior (Ajzen, 1991)

Because this theory posits that behavior is determined by the attitudes, subjective norms, and perceived behavioral control of the behavior, including the social and cultural environment around this behavior, the study seeks to give a better insight into the savings behavior of poor Nigerians by critically considering both cognitive and context factors.

Past studies have empirically tested the determinants of savings behavior in developing countries, propelling very useful insights and challenging the need for further research in specific contexts. Income levels and economic factors predict savings behavior; higher incomes are related to higher saving rates. However, nonlinearity characterizes the relationship between income and savings; low-income households do a face number of distinct challenges and constraints in allocating resources for savings.

Having access to formal financial services, notably bank accounts and savings products, has also been documented to play a vital role in savings behavior. Indeed, increased habitual saving among low-income populations is realized through interventions that reduce the barrier to financial inclusion—for example, the presence of mobile money and doorstep banking (Brune et al., 2016). Social and demographic characteristics such as age, education, household size, and marital status have been seen to influence information on savings decisions (Ssewamala et al., 2010). The level to which cultural norms and social influence have been explored is also high, with studies arguing that financial behavior can be influenced by peer effects and social networks.

Also, Ahmmed (2023) examined savings dynamics in low-income households in Chattogram, Bangladesh, and he identified stable income and financial inclusion as elements in enhancing the saving behavior of the low-income earners. Similarly, Konya and Nyakwara (2019) have assessed the saving and asset allocation behavior by low-income people living in rural areas of Kenya and thus provide some insights into the factors shaping rural saving decisions in the Nigerian case.

These studies have emphasized the relevance of economic conditions, cultural factors, and institutional frameworks in investigating saving behavior in developing countries, particularly understanding the complex interplay of behavioral, economic, institutional, and socio-cultural factors that influence saving behavior among low-income people in Nigeria.

3. METHODOLOGY

Research Design

This study will include qualitative approaches in order to get an all-round and better understanding of the behavior of low-income earners in relation to saving money in Nigeria. Quantitative data is obtained through the gathering and analysis of survey data. The justification for using this design makes it possible to provide more profound and real insights into the motivational, belief, and contextual factors that drive savings behavior.

Data Collection

Quantitative data were collected using a structured questionnaire survey among a representative sample of 103 low-income households in Nigeria. The sampling strategy, therefore, is set to employ a multi-stage cluster sampling method to allow the proper representation of variations in different geographical regions, urban/rural divides, and socio-economic classes.

The survey instrument to be used is being designed to capture key variables related to savings behavior in the following way:

- i. Demographic and socio-economic characteristics: age, sex, level of education, structure of households, sources of income
- ii. Patterns in savings and practices: frequency of saving, amounts saved, saving instruments
- iii. Psychological and behavioral factors: time preferences, attitudes towards risk, mental accounting
- iv. Financial literacy and knowledge
- v. Access to and trust of formal financial services
- vi. Cultural values and social norms, peer influence

The questionnaire contained both verified measures and scales, which were tested on other samples but had also some specific questions appropriate to the Nigerian context.

The collected data was analyzed using appropriate techniques.

Descriptive statistics, correlation analysis, and regression modeling were the pertinent statistical techniques to analyze the results. The objectives of the regression analyses will be to identify the significant determinants of savings behavior, including demographic and socio-economic factors, psychological and behavioral factors, financial literacy, access to financial services, and social norms.

Series of diagnostic tests, running from multicollinearity checks through heteroskedasticity tests and residual analyses, were carried out to ensure that the regression models prove valid and robust.

Theoretical Model

Guided by the arguments and theories captured in the literature review, we should try to come up with a model to explain the behavior of the low-income earner towards saving in Nigeria, especially from the dimensions of behavioral economics. In the process, we shall adopt the following theoretical model: Let:

S = the savings decision or amount of savings for an individual or household.

Economic Factors

$$S = f(Y, A, R, C)$$

Where:

Y = Income level

A = Access to formal financial services

R = Returns on savings

C = Consumption and expenditure patterns

Psychological Factors:

$$S = f(P, B, L, T)$$

Where:

P = Present bias and time preferences

B = Behavioral biases

L = Financial literacy and knowledge

T = Trust financial institutions

Cultural factors of Social-

$$S = f(N, I, P)$$

Where:

N = Social, cultural norms, and beliefs

I = Peer influence and social networks

P = Perceived financial security and future expectations

Integrate these, and we might offer a comprehensive theoretical model :

$$S = f(Y, A, R, C, P, B, L, T, N, I, P)$$

This theoretical model thus hypothesizes that the savings behavior among low-income earners in Nigeria is influenced by some economic factors such as income, access to financial services, returns on savings, and consumption patterns, and other psychological factors like present bias, behavioral biases, financial literacy, and trust in institutions, among others. Other social-cultural factors include social norms, peer influences, and perceived financial security.

We can thus stipulate an econometric model to test the theoretical model empirically by regression analysis. Depending on the nature of the dependent variable savings amount, different regression techniques can be employed. If it is a binary one—savings decision (save or not to save)—we can use the logistic regression model:

$$\text{Log}(P(S=1) / P(S=0)) = \beta_0 + \beta_1Y + \beta_2A + \beta_3R + \beta_4C + \beta_5P + \beta_6B + \beta_7L + \beta_8T + \beta_9N + \beta_{10}I + \beta_{11}P + \epsilon_i$$

Where: $P(S=1)$ is the event of the probability of saving, and

$P(S=0)$ is the event of no savings. ‘

β_0 is the intercept.

$\beta_1, \beta_2, \beta_3 \dots \beta_{11}$ are the coefficient related to the marginal impacts of the independent variables mentioned. ϵ is the error term.

In both models, $Y, A, R, C, P, B, L, T, N,$ and I are the independent variables that represent the economic, psychological, and socio-cultural factors hypothesized to influence savings behavior, as outlined in the theoretical model. The coefficients, $\beta_1, \beta_2, \beta_3, \dots, \beta_{11}$, will be estimated using OLS techniques, and their statistical significance assessed to determine how important each factor is in explaining savings behavior.

4. RESULTS

Concerning the factors influencing savings behavior among low-income individuals in Nigeria, factors such as age, gender, education level, marital status, location, occupation, and total monthly household income (Naira) in the study revealed no significant relationship to the portion of the amount saved daily. This decision was feasible as the probability values of age, gender, education level, marital status, location, occupation, and total monthly household income (Naira) were greater than a 5% level of significance leading to the acceptance of the null hypothesis of no significant relationship between the portion of amount saved and the

factors such age, gender, education level, marital status, location, occupation, Total monthly household income (Naira).

The finding suggests that regardless of age, low-income individuals in Nigeria tend to save a similar portion of their income daily. This could imply that saving behavior is not significantly affected by age-related factors such as financial responsibilities or retirement planning among this demographic. There appears to be no significant difference in saving behavior between genders among low-income individuals in Nigeria. This could indicate that both men and women face similar financial constraints or have similar saving goals within this income bracket. Contrary to expectations, the level of education does not appear to significantly impact on the portion of income saved daily. This suggests that factors other than education, such as income stability or cultural norms around saving, may play a more substantial role in determining saving behavior among low-income individuals.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.344	1.670		1.403	.164
	1. Age	-.096	.213	-.059	-.448	.655
	2. Gender	-.572	.386	-.177	-1.479	.143
	3. Education Level	.105	.110	.114	.958	.341
	4. Marital Status	-.286	.367	-.102	-.778	.439
	5. Location	.366	.550	.081	.666	.507
	6. Occupation	-.074	.168	-.053	-.443	.659
	8. TMHI (Naira)	.201	.185	.137	1.085	.281
	Do you save portion of INC	.917	.627	.166	1.463	.147

a. Dependent Variable: 12. Portion of amount saved (in Naira)

Source: Researchers SPSS Result output, 2024

Table 1: OLS Regression Coefficients

Whether an individual is married or not does not seem to influence their daily saving habits significantly. This finding suggests that marital status may not be a significant determinant of saving behavior within this demographic group. Urban or rural location does not seem to have a significant effect on the portion of income saved daily among low-income individuals in Nigeria. This implies that factors such as access to financial services, cost of living, or social norms related to saving may not vary significantly between urban and rural areas in influencing saving behavior.

The type of occupation also does not appear to have a significant impact on daily saving behavior among low-income individuals. This suggests that factors such as income level, stability of employment, or access to financial resources may not vary significantly across different occupations within this income bracket. Surprisingly, the total monthly household income does not seem to influence the portion of income saved on a daily basis among low-income individuals in Nigeria. This could indicate that regardless of the total income, saving behavior remains consistent within this demographic.

Overall, these findings suggest that among low-income individuals in Nigeria, saving behavior may be influenced by factors other than those examined in this study. Possible explanations could include cultural attitudes towards saving, access to financial services, or economic instability, which may play a more significant role in shaping saving behavior within this demographic.

Correlation Analysis

		Correlations								
		Age	Gender	Edu Lev	M. Status	Locatio n	Occupati on	TMHI	Do you save portion of INC	Savin gs
Age	Pearson Correlation	1	-.125	.315**	-.494**	.075	-.065	.188	-.176	.042
	Sig. (2-tailed)		.242	.003	.000	.483	.542	.078	.099	.699
	N	89	89	88	89	89	89	89	89	89
Gender	Pearson Correlation	-.125	1	.110	.109	.248*	-.283**	.221*	.102	-.096
	Sig. (2-tailed)	.242		.310	.308	.019	.007	.037	.341	.372
	N	89	89	88	89	89	89	89	89	89
Education Level	Pearson Correlation	.315**	.110	1	-.137	.230*	.000	-.032	-.113	.086
	Sig. (2-tailed)	.003	.310		.202	.031	.999	.767	.296	.427
	N	88	88	88	88	88	88	88	88	88
Marital Status	Pearson Correlation	-.494**	.109	-.137	1	-.107	.273**	-.195	.216*	-.102

Correlations										
		Age	Gender	Edu Lev	M. Status	Locatio n	Occupati on	TMHI	Do you save portion of INC	Savin gs
	Sig. (2-tailed)	.000	.308	.202		.317	.010	.068	.042	.342
	N	89	89	88	89	89	89	89	89	89
	Pearson Correlation	.075	.248*	.230*	-.107	1	-.226*	.361**	.017	.140
Locati on	Sig. (2-tailed)	.483	.019	.031	.317		.033	.001	.874	.192
	N	89	89	88	89	89	89	89	89	89
	Pearson Correlation	-.065	-.283**	.000	.273**	-.226*	1	-.272**	.040	-.056
Occup ation	Sig. (2-tailed)	.542	.007	.999	.010	.033		.010	.708	.604
	N	89	89	88	89	89	89	89	89	89
	Pearson Correlation	.188	.221*	-.032	-.195	.361**	-.272**	1	.184	.158
TMHI (Naira)	Sig. (2-tailed)	.078	.037	.767	.068	.001	.010		.084	.138
	N	89	89	88	89	89	89	89	89	89
	Pearson Correlation	-.176	.102	-.113	.216*	.017	.040	.184	1	.152
Do you save portio n of INC	Sig. (2-tailed)	.099	.341	.296	.042	.874	.708	.084		.156
	N	89	89	88	89	89	89	89	89	89
	Pearson Correlation	.042	-.096	.086	-.102	.140	-.056	.158	.152	1
Savin gs	Sig. (2-tailed)	.699	.372	.427	.342	.192	.604	.138	.156	
	N	89	89	88	89	89	89	89	89	89

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Result output, 2024

Table 2: Correlation Analysis

Zero correlation between the demographic factors and savings suggest that interventions aimed at promoting savings behavior among low-income individuals in Nigeria should not focus solely on demographic factors such as age, gender, education level, marital status,

location, occupation, or total household income. Instead, policymakers and organizations interested in promoting savings should consider alternative approaches that address broader systemic issues or individual financial literacy and behavior. Given that factors like education level, occupation, and income do not significantly influence saving behavior, there may be an opportunity to focus on improving financial inclusion initiatives. This could involve increasing access to formal financial services, enhancing financial literacy programs, and developing innovative savings products tailored to the needs of low-income individuals.

The absence of correlation between demographic variables and saving behavior suggests that cultural and social norms may play a more substantial role in shaping financial decisions among low-income Nigerians. Understanding these norms and incorporating them into financial education and outreach efforts could lead to more effective interventions. While this study found no significant relationship between the variables examined and saving behavior, it opens the door for further research to explore other potential determinants of savings behavior among low-income populations in Nigeria. Future studies could investigate psychological factors, social networks, or access to informal financial mechanisms to gain a more comprehensive understanding of saving behavior in this context.

Financial institutions and service providers may need to rethink their offerings to better serve the needs of low-income individuals in Nigeria. Instead of relying on traditional demographic markers, they may need to develop products and services that are more responsive to the specific financial challenges and preferences of this population. Since demographic factors do not seem to significantly influence saving behavior, individuals and households may need support in developing long-term financial planning skills and strategies. This could include budgeting techniques, debt management, and goal-setting exercises to help low-income individuals build assets and improve their financial resilience over time.

In the context of saving among low-income individuals in Nigeria, the findings above depicts several behavioral biases and heuristics can significantly influence their financial decisions. Many low-income individuals may prioritize immediate gratification over long-term saving. This bias can lead them to spend their income on immediate needs and wants rather than saving for the future. People tend to feel the pain of losses more acutely than the pleasure of gains. This could discourage low-income individuals from saving if they perceive saving as sacrificing current consumption, thereby avoiding the potential loss of immediate enjoyment. When resources are scarce, individuals may focus more on immediate needs rather than long-

term goals like saving. Low-income individuals in Nigeria may be more likely to prioritize spending on essential goods and services due to limited financial resources.

Cultural norms and societal expectations can influence saving behavior. In Nigeria, where communal support and obligations to family members are strong, individuals may feel pressure to spend money on social events, gifts, or supporting relatives rather than saving for personal goals. Low-income individuals may mentally compartmentalize their money into different categories, such as spending money, emergency funds, or savings for specific goals. This can lead to suboptimal saving behavior if individuals prioritize short-term needs over long-term savings goals. People often rely heavily on the first piece of information they receive when making decisions. For low-income individuals in Nigeria, this could mean that their saving decisions are influenced by initial perceptions of what constitutes a "reasonable" amount to save, which may not align with their long-term financial needs.

Individuals tend to prefer maintaining their current situation rather than making changes, even if those changes could lead to better outcomes. Low-income individuals may be hesitant to adopt new saving strategies or financial products due to a preference for familiarity and stability. Despite facing financial challenges, individuals may have an overly optimistic outlook on their future financial situation, leading them to underestimate the importance of saving for emergencies or retirement.

5. CONCLUSION AND RECOMMENDATIONS

The results of the study provided above suggest that demographic variables such as age, gender, education level, marital status, location, occupation, and total monthly household income do not exhibit a significant relationship with the portion of income saved on a daily basis. The analysis reveals that low-income individuals tend to save a similar portion of their income regardless of these demographic factors, suggesting that other influences, such as cultural attitudes towards saving, access to financial services, and economic instability, may play a more critical role in shaping saving behavior. Furthermore, the absence of correlation between these demographic factors and savings behavior indicates a need for policymakers and financial institutions to focus on broader systemic issues and individual financial literacy rather than traditional demographic markers, paving the way for more effective savings interventions tailored to the unique challenges faced by low-income populations in Nigeria.

While the study aims to obtain a representative sample of low-income households in Nigeria, there may be challenges in achieving a truly representative sample due to logistical constraints, accessibility issues, or non-response bias. This could limit the generalizability of the findings to the entire population of interest.

The study relies heavily on self-reported data from survey responses. Participants may provide socially desirable responses, suffer from recall bias, or intentionally misreport their savings behavior and related factors. This could introduce measurement errors and biases in the data.

Identifying determinants of savings behavior, there may be potential endogeneity issues and reverse causality between savings and some explanatory variables. For instance, higher savings levels could lead to increased trust in financial institutions, rather than the other way around. Addressing endogeneity concerns through appropriate econometric techniques may be challenging. Despite controlling for various factors, there may be unobserved individual or household-level characteristics (e.g., risk preferences, time preferences, cultural beliefs) that influence savings behavior but are not captured in the data. This could lead to omitted variable bias and limit the ability to draw causal inferences. Ultimately, Accurately measuring and quantifying psychological and behavioral factors, such as present bias, loss aversion, and mental accounting, can be challenging.

Recommendations

Policymakers and financial service providers should consider the following implications and recommendations:

Addressing Behavioral Biases and Heuristics

Implement financial education programs that help low-income individuals understand the long-term benefits of savings while addressing cognitive biases and heuristics. These programs should focus on:

- i. Overcoming the tendency to prioritize immediate gratification over long-term saving
- ii. Mitigating loss aversion and the perception of saving as sacrificing current consumption
- iii. Encouraging the adoption of effective financial management strategies and goal-setting exercises

Leveraging Social and Cultural Norms

Collaborate with community-based organizations and trusted intermediaries to leverage social and cultural norms, thereby influencing savings attitudes and perceived behavioral control[4].

This approach can help address the pressure to spend money on social events, gifts, or supporting relatives rather than saving for personal goals.

Improving Financial Inclusion

Enhance the accessibility, reliability, and trustworthiness of formal financial services to address institutional barriers to savings[3][5]. Strategies may include:

- i. Increasing access to stable employment and income sources
- ii. Providing affordable housing and healthcare options
- iii. Developing innovative savings products tailored to the needs of low-income individuals

Focus on addressing broader systemic issues and contextual factors that may influence savings behavior, such as cultural attitudes towards saving, access to financial services, and economic instability including: improving financial literacy and capability programs, enhancing financial inclusion initiatives and addressing income instability and economic challenges faced by low-income populations

Further Research

These areas of research can further explore the complexities around saving behavior of low-income populations and eventually lead to more potent ways of enhancing financial well-being in a low-income population. Precisely, the way cultural beliefs and social norms influence the attitude to save among low-income earning people needs further research. Exploring the context-specific challenges low-income earning individuals face in accessing formal financial services; how improved financial knowledge influences saving practices among low-income earning households. Pursue econometric methods for testing endogeneity concerns in savings research. This might involve longitudinal studies that trace changes in savings behavior over time and their causal linkages with other variables. Investigate the effects of changes in the economy on low-income household savings through variables such as inflation and unemployment to establish how resilient the savings practice is during hard economic times.

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APPENDIX

Bias Survey (<https://forms.gle/MUHBC8Nd1Mr2EJtz8>)

Thank you for your interest in participating in our research study. Your insights are valuable as we explore the fascinating intersection of cognitive biases and economic decision-making. Please read the following information before proceeding to the survey:

Purpose of the Survey: This survey aims to investigate how biases, or mental shortcuts, may impact the way individuals make economic decisions. By understanding these biases, we hope to contribute to the broader knowledge of behavioral economics and enhance our comprehension of decision-making processes in financial and economic contexts.

Survey Content: The survey consists of a series of scenarios and questions related to economic decision-making. You will be presented with hypothetical situations and asked to make choices or express your preferences. Additionally, there are questions that indirectly assess cognitive biases to gain insights into your thought processes during decision-making.

Duration: The survey is designed to take approximately 5 minutes to complete. Your thoughtful responses are crucial for the success of our study, and we appreciate the time you dedicate to providing accurate and honest answers.

Confidentiality: Your responses will be kept confidential, and all data collected will be anonymized. Your personal information will not be linked to your survey responses, ensuring your privacy throughout the study.

Voluntary Participation: Participation in this survey is entirely voluntary. If you choose to participate, you may withdraw at any time without penalty. Your decision will not affect your relationship with [insert organization or institution] or any associated entities.

Contact Information: If you have any questions or concerns regarding the survey, please contact Róláké Olújímí at r.olujimi@gmail.com. Your feedback is highly appreciated.

By proceeding with the survey, you indicate your consent to participate in this research study.

Section 1: Demographic Information

- i. Age
- ii. Education Level
- iii. Occupation
- iv. Years of Experience

Section 2: Bias Assessment

- i. Please indicate the extent to which you agree or disagree with the following statements on a scale of 1 to 5, where 1 = Strongly Disagree and 5 = Strongly Agree.
- ii. I tend to make decisions based on relative framing rather than absolute framing.
- iii. I am risk-averse when making economic decisions.
- iv. I exhibit zero-risk bias in my decision-making process.
- v. I tend to discount future gains or losses when making economic decisions.
- vi. Scenario 1: Investment Decision

Imagine you have \$10,000 to invest. You are considering two investment options:

Option A: A high-risk, high-return investment.

Option B: A low-risk, low-return investment.

- vii. Scenario 2: Purchase Decision

You are planning to buy a new electronic gadget. Two models are available:

Model X: More features but higher price.

Model Y: Fewer features but lower price.

On a scale from 1 to 5, how important is the price factor in your decision-making process? (1 = Not important, 5 = Extremely important)

- viii. How often do you actively seek out information that supports your initial beliefs or preferences? Always Often Sometimes Rarely Never
- ix. How do you handle information that contradicts your initial beliefs or preferences?
- x. Are you influenced by the first piece of information you receive when making a decision?
- xi. How likely are you to adjust your decision after receiving new information that contradicts the initial information?

Section 3: Decision-Making Scenarios

Please respond to the following hypothetical economic decision-making scenarios.

- i. Scenario 1: You are presented with two investment options:

Option A offers a guaranteed return, while

Option B has a higher potential return but comes with higher risk.

Please indicate which option you would choose and briefly explain your decision-making process.

- ii. How would you describe your current financial situation?
- iii. Do you think your financial situation will improve, stay the same, or worsen in the next 12 months?

- iv. How secure do you feel about your current job or source of income?
- v. How do you expect the overall economy to perform in the next 12 months?
- vi. In your opinion, is now a good time to make significant purchases (e.g., a home, car, major appliances)?

Thank You!