

The Effect Of Financial Literacy On Household Financial Decision Making In Zimbabwe

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Abstract

The research paper explored the effect of financial literacy on household financial decision making in Zimbabwe. The main objectives were to determine the effect of financial literacy on financial decision making and to explore factors that influence household financial decision making. The study used a mixed methods research design, and the sample was drawn using convenience sampling. The study used a logistic regression analysis to model the results of the study, as well as thematic analysis to analyse the qualitative data. The Statistical package Stata 11 was used to run the logistic regression analysis, on a sample of 140 participants. The regression results established that financial literacy, the level of education and the level of income were the major determinants of household financial decision making as the variables were statistically significant at 95% level of confidence. Qualitative interviews established macroeconomic fundamentals, previous experiences and advice from family and friends as other factors that influence household decision making. That is the level of inflation, exchange rates, bank charges, previous experiences with financial institutions and financial advice from children and friends largely influence household financial decision making. The study recommends government to introduce basic concepts of financial literacy in courses and subjects at schools, technical colleges and university as part of curricula and make them compulsory. Household heads should improve their financial literacy capabilities and consider formal financial advice when making financial decisions.

Keywords – Financial literacy; Household financial decision making; macro-economic factors

1. Introduction

The financial landscape has changed tremendously in the recent years, bringing with it a vast number of complex and difficult to understand financial products (OECD 2020, Hastings, Madrian and Skimmyhorn 2013). These include retirement products, mortgage products, vehicle loans, insurance products, investment vehicles, education plans and alternative financial services such as pay day loans. The common concepts central in all these products is compound interest and inflation, they serve as the basis of most financial decisions (Lusardi and Mitchell 2014). These require individuals to have a certain level of financial literacy and the capacity to do calculations. Lack of understanding and knowledge can lead to unpleasant consequences (Lusardi, 2019).

Financial literacy or the lack thereof, has been a well-documented global phenomenon (World Bank 2014; OECD 2016, OECD 2018 and OECD 2020). The earliest studies to determine financial literacy levels date

back to the early 1990s, in what is now known as the Jump\$tart survey and the study concluded that there were low levels of financial literacy in America. Similar studies done in Europe, in Asia and in Africa also demonstrated that many households have little or inadequate knowledge to manage their personal finances. The FinScope Consumer Survey of 2011 (FinScope, 2014) noted that 75% of Zimbabweans lack knowledge and understanding of financial terms and concepts. This leads to households making uninformed, suboptimal decisions when it comes to managing finances and living beyond their means.

Many Zimbabweans are reaching retirement age with little or no assets to support them in their old age. According to the World Bank (2015) only 10% elderly Zimbabweans aged 60 years and above receive a monthly pension. The World Bank (2015) noted that pensions and insurance schemes were adversely affected by the hyperinflation period and the switch to multi-currency economy, which resulted in some individuals having no pension at all. Improvements in health sector and good nutrition have increased life expectancy of individuals thus this means that after retirement individuals can live for a long time (Lusardi 2019). If one did not accumulate much in terms of asset value during their active years, then they find themselves surviving on less or dependent on the generosity of others (Lusardi, 2019).

The socio-political and economic aspects of the Zimbabwe economy pose a challenge to the financial sector of the country (World Bank 2014). The World Bank (2015) noted that the financial sector had been subject to several periods of distress in the last two decades, which includes hyperinflation, collapse of the national currency which led to the adoption of multicurrency in early 2009 and the subsequent re-adoption of the local in late 2017, and lastly the partial re-dollarization of 2020. Thus the constant changes in policies (i.e. changes in currencies) and lack of consistency, hyperinflation, high levels of unemployment the high prevalence of HIV/AIDS makes financial planning and decision making in households very difficult (World Bank 2014). Banking and saving in a financial institution in Zimbabwe does not make economic sense as savings, pensions and insurance policies get eroded in value time and again. Lack of confidence in the financial system and other factors has contributed immensely to the lack of asset accumulation and retirement planning.

Financial literacy plays a major role in household financial decision making (Bottazzi and Lusardi, 2021). Financial decisions can be related to asset building or debt management. Low levels of financial literacy can lead to some potentially devastating consequences if one makes wrong decisions. Households are confronted with the responsibility of making financial decisions on a daily basis such as, whether to invest in higher education for children, or having a car, or taking a cell phone contract or borrowing and managing their liabilities. Financial literacy could be said to be a lifetime survival skill as it helps households navigate the economic landscape and make sound financial decisions in their lifetime (Lusardi, 2019). The question that remains is, how financially literate are households in Zimbabwe? and how well can they use that financial knowledge to make important financial decisions in their own best interests?

The financial decisions that one might make during their lifetime could be looked at from an individual's investment life cycle (Harty 2014). It has three stages, the accumulation phase, the consolidation phase and the gifting and spending phase (Harty 2014). Individuals in the accumulation phase usually accumulate a number of things to meet their needs and long term goals at certain stages in life for example cars, properties furniture, retirement plans, setting money aside for emergencies and college education for children.

In the consolidation phase the individual aims to pay off debts and capital preservation playing a central role (Harty 2014). The spending and gifting stage normally occurs at retirement. Individuals reap the benefits of proper asset allocation and they are at the end of their earning years and depends on income from investments and retirement funds.

As an individual's life cycle changes, so does the importance and severity of the financial decision (Harty 2014). Age is a factor as our conditions and resources change over time. Individuals might be of the same age but be at different stages of their investor life cycle (Harty 2014). But at the same time age is not a determining factor in asset allocation, as an individual could be close to retirement and still be in the early accumulation phase. It's important to understand where one is on the investment life cycle, as it may influence the financial decision one may take. Asset allocation decisions are usually done at different stages

of investor life cycle (Harty 2014). Career challenges, health issues and family situations all contribute towards making each individual investor unique at different stages.

The high prevalence of HIV/AIDS and increased death rate amongst the youth and middle aged, means that many individuals are finding themselves needing to look after their grandchildren with reduced resources in their retirement age. Financial decisions made in the earlier years of one's life determine the quality of life one may be able to afford later on in life. With our unique financial landscape, it may be a good decision to adopt and/or shift to other types of investments that may adjust to inflation and other economic woes that plague us, such as owning immovable properties.

The World Bank (2014) noted that Zimbabwe's economic past was underpinned by historically solid economic fundamentals, thus if policy makers choose well-articulated, credible and stable economic policies the current economic challenges could give way to a positive future. Households need to play their part and participate fully in economic activities and help Zimbabwe realise that positive future. That can only happen when Zimbabwean households make optimal financial decisions. Education and financial literacy programs play a huge role in economic empowerment and will ensure that individuals become responsible citizens who contribute towards the achievement of sustainable economic development goals (RBZ 2019). The RBZ (2019) noted that at household level women play a critical role as primary financial managers, yet the lowest levels of financial literacy and formal education are a crippling factor to the gender overall.

1.1 Problem statement

In Zimbabwe one's ability to manage their finances can mean the difference between affording basic necessities and going without. Household financial decisions on what to spend, when to spend, how much to save and saving for the future play an important role in an individual's life cycle. Most adults cannot escape the challenges of managing finances daily decisions on how to manage bills and earnings, and creating a budget (OECD, 2020). It is important to observe and study the interaction between household financial decisions given their limited resources and how individual levels of financial literacy affects allocation of available resources. Most households are failing to make ends meet, across all age groups those in retirement and those still in their active years. There's little evidence of individuals actively participating in retirement plans or investments (Niu, Zhou and Gen, 2020). Quite a number of people fail to move beyond the accumulation phase of their cycle leading to poverty and poor wealth accumulation (Lusardi, 2019). The question that remains is; where's the challenge, is it because of bad financial decisions, is it lack of financial knowledge, or perhaps some other factors?. The World Bank (2014) survey showed that only 1 in 10 Zimbabweans were receiving pension, thus 90% of Zimbabweans in retirement age do not receive retirement funds. Previous studies in other parts of the world like in America have showed that financial literacy education in schools, institutes of higher education and financial literacy programs for adults and consumers help individuals increase their financial literacy levels and enables them to make informed decisions (Lusardi 2019, Lusardi and Bottazz 2021). This current study extends the work done by other researchers in Europe and in America, but with a focus on the adult population of Zimbabwe. Thus this research seeks to explore how household financial decision making is affected by different levels of financial literacy and if or how it can be improved to help households make informed optimal decisions. Improvements in financial literacy of households will enable them to contribute meaningfully to economic growth by making informed decisions which is vital to the well-being of families, communities and the achievement of Sustainable Development Goals (RBZ 2019), thus the need for this research.

1.2 Research objectives

- a) To assess the level of financial literacy among households.
- b) To determine the effects of financial literacy on household financial decision making.
- c) To explore demographic factors that affect household financial decision making.
- d) To explore other factors that affect household financial decision making

2. Literature review

Very few studies have been conducted on how financial decision making is affected by different individuals' levels of financial knowledge in Zimbabwe for us to adequately answer that question. Thus this research will add to the body of knowledge in Zimbabwe about the effect financial knowledge may have on household financial decision makers.

2.1 Financial literacy

A number of authors have defined financial literacy as the use of financial knowledge and skills (Bonga and Mlambo 2016; Maganda 2014). It is therefore not surprising that financial literacy begins with the understanding of financial concepts, awareness of financial products and the capability to make informed decisions. The process starts when one acquires the necessary skills and adopts certain attitudes and behaviours to make optimal financial decisions (Maganda 2014). Data has shown that the general level of financial literacy in most countries is lower than expected (OECD 2014, Lusardi and Mitchell 2007; World Bank 2014) but it is high in some developed countries such as Switzerland. Most countries have developed financial literacy programs, to help protect consumers through imparting the knowledge and skills which enable them to make informed decisions to improve their financial well-being (OECD 2016).

2.2 Financial decision making

The term financial decision making refers to an act of choosing a course of action, which could be through intuition, a reasoned process or a combination of the two (Simon 1911; Psychology today). It is a cognitive or reasoning process that could either be rational or irrational (Brockmann and Anthony 2002). Having the capacity to make the best possible decision is critical for one's financial well-being. Informed decision making is the ability to think critically to make good decisions without succumbing to bias, heuristics, common errors and emotions (Maqsood Finegan and Walker 2004; Psychology today). It may be as Hershey, Austin and Gutierrez (2015) stated that there might be no decision-making domain that has greater significance than decisions involving personal finance. In the course of our adult life we all make financial decisions. The question then becomes what competencies should one possess to make sound financial decisions.

2.3 Measurement of financial literacy

According to the Organisation for Economic Cooperation and development, financial literacy is one of the essential ingredients for financial empowerment of individuals and overall stability of the financial system (OECD 2016). Thus, assessing the financial literacy competencies of households is an important component of successful national strategy and the achievement of Sustainable Development Goals (RBZ 2019; OECD 2016). Various scholars have conducted a number of studies to measure the level of financial literacy of different subgroups in a number of countries. Financial literacy is measured through three key measures, which are financial knowledge, financial behaviour and financial attitudes (OECD 2017). Financial knowledge which is knowledge acquired through education and /or experience in personal finance concepts and products, is an integral dimension of financial literacy (Abdullah and Chong 2014; OECD 2017). It ensures that in a financial context, individuals and households can act in an autonomous way to manage their finances and navigate the economic and financial landscape. Abdullah and Chong (2014) further argue that financial skills and competence are dependent on knowledge and are also influenced by attitudes towards money, how it is used. Financial behaviours and actions shape financial situations of households or individuals in both the long and short term (OECD 2017). Mandell (2009) noted that financial behaviour was positively affected by financial literacy of individuals. Households need to understand that all behaviours have implications for their well-being. Some might have negative consequences for example pay day loans may impact on their financial situation negatively (OECD 2017).

2.4 Effect of financial literacy on decision making

Various scholars argue that the main determinant of financial decision-making competence is one's level of financial literacy (Lusardi and Mitchell 2013; Hershey, et al 2015; Bonga and Mlambo 2016). Financial literacy plays a major role in financial decision making. It may be as Bonga and Mlambo (2016) stated that financially literate individuals are knowledgeable and well informed on the concerns of managing their finances, they show a basic understanding of concepts of managing money and assets, as well as applying their knowledge into planning and executing financial decisions. Financial literacy, attitudes and behaviour are necessary to form sound financial decisions (OECD 2016). Agarwal, et al (2011) noted that the driving force behind sub optimal financial behaviour is financial illiteracy. It may be as behavioural theorist say, learning leads to a change in behaviour, thus financial knowledge attained through education may lead to improved financial literacy levels and help change unfavourable financial behaviours that lead to sub optimal decision making of households. According to the OECD (2016) the weakest areas of financial behaviour were exhibited in budgeting, planning ahead, choosing products and using independent advice. It is a common practice for people to function without a household budget, thus they might not have a clear idea on how to effectively allocate their funds. Budgeting is an important resource as it helps households identify how much they can afford to save every month (OECD, 2016).

2.5 Demographic factors that affect financial literacy and financial decision making

Lusardi (2012) noted that not only was financial illiteracy and lack of numeracy skills widespread within population but there were some demographic groups who were severely affected than others. Several studies have identified a number of groups that demonstrated severe lack of financial literacy (Lusardi 2012; Bernheim, et al 2001; Mandell 2009; Christelis et al 2010; Lusardi and Mitchell 2007; Brounen et al 2016). Such as the large difference in financial knowledge across educational level attained, with people who attained low levels of education demonstrating the lowest levels of financial literacy compared to their counterparts (Lusardi and Mitchell 2007; Christelis et al 2010; Lusardi 2006). On a different study Maganda (2014) found that level of financial literacy amongst a commercial bank's client was fairly high, thus financial inclusion might lead to an increase in the financial literacy levels of households. He also noted that level of education influenced the level of financial literacy of an individual as well as owning a bank account. Financial knowledge and education make it easy for a bank's clients to navigate the financial landscape and to choose appropriate products for themselves (Maganda 2014).

2.6 Other factors that affect decision making

According to Brounen et al (2016) loss aversion bias might also be a contributing factor to financial decision making as households may prefer to avoid losing compared to an equivalent gain. They go on to explain that different income groups demonstrate different levels of loss aversion which may be seen through under or over budgeting and saving in households (Brounen, et al 2016). It may be as (Hershey, et al 2015) noted that we are all prone to suffer from different types of cognitive biases that might limit our financial competence. A number of biases that predispose individuals to make poor financial decisions have been identified over the years (Nofsinger 2001 cited in Hershey, et al 2015). Examples of these biases include framing bias, status quo bias, overconfidence bias, familiarity bias among others. The most telling aspect of biases is that the distorted perceptions they create are normally not visible or easily detectable to the decision maker (Hershey, et al 2015). Thus this may lead to one making sub optimal decisions. Madrian, et al (2018) argues that a decision may be influenced by how an attribute is framed, presented and considered. Psychological biases may lead individuals to favour some outcomes over others for example more weight may be allocated to potential losses than to equivalent gains (Madrian, et al 2018). When people are presented with several options with different probabilities they tend to choose the option with more certainty and discount very small probabilities ((Kahneman and Tversky 1979). Madrian, et al (2018) further explain that in some cases decisions may be affected by the emotional state of individuals.

3. Methodology

The study used a mixed methods research design, and the sample was drawn using convenience sampling. The study used a logistic regression analysis to model the results of the study, as well as thematic analysis to analyse the qualitative data. The Statistical package Stata 11 was used to run the logistic regression analysis, on a sample of 140 participants.

Model specification

The following logit regression model was used;

$$hhd\ fdec = B_0 + B_1 fin\ lit + B_2 age + B_3 gender + B_4 lev\ ed + B_5 hhd\ bev + \epsilon$$

where $hhd\ fdec$ is the dependant variable and represents household financial decision making,

$hhd\ fdec = 1$ if households are making optimal financial decision or
 $= 0$ otherwise

4.0 Results and Discussion

A total of 140 questionnaires were distributed, with 113 being returned, however only 100 questionnaires were fully completed and usable after data cleaning, yielding a 71 percent response rate. Majority of the respondents were female making up 58% of research respondents and 45% of the respondents were aged between 31 and 40 years old, 34 % attained a level of diploma and above in terms of education and vast majority (61%) earned a salary of between 10000 and 50000 Zimbabwean dollars (50-250USD). The Cronbach alpha for the research instrument construct was at 0.73, a Cronbach alpha above 0.7 is usually considered reliable whilst the Pearson correlation coefficient of logit regression variables were all significant and lower than 0.7. Showing the absence of multi-collinearity among model variables.

4.1 The level of financial literacy among households.

OECD (2020) framework which was used to measure financial literacy considered an individual who score more than 70% as financially literate and those who score less than 70% as financially illiterate. The mean score for financial literacy was 0.59793 showing that the majority of households have low levels of financial literacy. The maximum score for financial literacy was 81% whilst the minimum score was 12%. The data was negatively skewed, showing that the majority of the respondents scored lower marks.

4.2 Effect of financial literacy on decision making.

The purpose of this research was to determine the effect of financial literacy to household financial decision making. Various authors concur that financial literacy has a positive impact to individual financial decision making (Lusardi 2019, OECD 2020).

Table 4.1: logit regression analysis results

Numb of obs	100					
LR Chi2 (5)	62.61					
Prob > Chi2	0.001					
Pseudo R^2	0.4750					
HH Behaviour	coefficient	Standard error	Z	P>z	95% conf. interval	
Financial literacy	5.279	2.3707	2.23	0.026	.63255	9.9258
Level of education	1.2511	0.49752	2.51	0.012	.27605	2.2262
level of income	1.2057	0.66093	2.12	0.048	.18965	2.5011
Age	0.05269	0.38687	0.14	0.892	-.70556	.810942
Gender	0.29181	0.63733	0.46	0.647	-.95734	1.5409
Cons	-8.2988	1.9292	-4.30	0.001	-12.080	-4.5175

Source: primary data analysis (2022)

The model explained 47.50 of the dependant variable household financial behaviour as shown by the Pseudo R^2 and the model was significant at a p-value of 0.001.

Financial literacy: The regression results established that financial literacy has a positive significant relationship with household financial behaviour. An increase in financial literacy of individuals increased the probability that household financial decision making is equal to one (likelihood that $y=1$). The regression results were consistent with OECD (2020) and Lusardi (2019) who concluded that financial literacy is crucial in making financial decisions. That is Households headed by a financially literate parents or guardians made financially literate financial decisions that those headed by individuals with low levels of financial literacy. Considering the benefits of financial literacy like, wealth accumulation, financial wellbeing and financial resilience (OECD, 2022), only a few households with higher levels of financial literacy can make well informed decisions.

Level of education: An increase in level of education increased the probability that household financial decision making was equal to 1. Level of education had a significant positive relationship with household financial decision making. Various authors concur that educated individuals have higher levels of financial literacy and make better financial decisions than the less educated (Kadoya and Khan, 2017). This study concludes that the level of education is crucial for household decision making, therefore any financial literacy programs targeted at households should give first preference to households with less educated individuals.

Level of income: An increase in level of income of individuals' increases the probability of household financial decision making is equal to one. Level of income was significantly different from zero at 95% level of confidence which presents that the level of income of households affect household decision making. However age and gender variables were not statistically significant at 95% level of confidence.

Thus our model would be:

Financial decision making = $0.7136 + 5.2790\text{financial literacy} + 1.2511\text{ level of education} + 1.2057\text{ level of income}$.

4.3 Other factors that affect decision making.

Qualitative data from follow up interviews established that macro-economic fundamentals, advice from family and friends and previous experiences as major influencers of household financial decision making. The hyperinflationary environment and its resultant erosion of the purchasing power of money forced households to use or convert their money denominated in local currency as soon as they receive the money. One respondent indicated that *"Due to hyperinflation I usually convert my excess funds to United States Dollars and sometimes I hoard groceries and stock in my household in the fear of future price increases"*. Another respondent indicated that *"We mainly consider the exchange rate used by an institutions before making a purchase as the majority of informal institutions are using the parallel black market rates which is very high and expensive whilst formal registered companies usually use government official rates"*.

The majority of respondents indicated that their previous experiences with financial institutions influences where and how they deposit and save their money. Due to high bank charges and transactional cost associated with financial institutions, formally employed households' heads prefer to immediately withdraw their salaries from banks whilst self-employed household heads save their funds at home. Household financial decisions are mainly influenced by advice from family and friends. Households share information and experiences of where they purchase their goods and services, how they save and this information influences household financial decisions. One respondent indicated that *"I usually consult my children and my friends from my church before making major financial decisions"*. The majority of households do not use formal financial advice.

5. Recommendations

1. Government should introduce basic concepts of financial literacy in courses and subjects at schools,

technical colleges and university as part of curricula and make them compulsory. This will ensure that all school leaving individuals, whether they progress to higher education or not they remain equipped with the knowledge to make optimal decisions for themselves.

2. Household should work on improving their financial literacy competences as this will largely influence the nature and quality of financial decisions they make for their households. Well informed financial decisions improves the financial wellbeing of households.
3. Financial institutions should develop strategies which restore depositor confidence and try to lower their transactional charges as the majority of household indicated that they prefer saving their money at home rather than depositing the money in banks.
4. The central bank should continue to lower the levels of inflation and exchange rates in the country as these macroeconomic fundamentals largely influence household financial decision making.

5.2 Areas for further study

Future studies should look at the effect of financial literacy on retirement planning and the effect of parental financial socialisation on siblings' financial literacy.

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