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BANKING & FINANCE | RESEARCH ARTICLE

Demographic and Socio-economic Factors Influencing Households & Investment Choices in Tanzania:

Josephat Lotto^{1*}

Abstract: This paper primarily aims to determine the demographic and socio-economic characteristics affecting households' investment choices in Tanzania using data from the FinScope survey which was done in 2017. The study employed multivariate analytical technique. The results of the paper reveal that increase in education level lowers the likelihood of individual household to invest in informal groups as well as agricultural ventures. Also, the study shows that men are more risk averse and less likely to invest in the informal groups, investment accounts as well as personal businesses. It is also revealed that urban households may easily access financial products due to the presence of a good number of financial institutions located in urban compared to rural areas, and that urban households rarely participate in agricultural activities due to lack of enough land in townships. Finally, the paper confirms that employed households are more likely to make a good financial decision because most of them are believed to have good education which enable them to access formal financial literacy education. Consequently, the study opines that, because most of households, as revealed in the survey from



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Josephat Lotto is the Rector of the Institute of Finance Management. Josephat graduated with a PhD in Corporate Governance and Financial Strategies from the UK in 2012. He holds MSc in Finance with Distinction from the University of Strathclyde in the UK. Josephat did his MBA (Finance) at the University of Dar es Salaam. Josephat has a massive experience in several academic work appraisal and review. Apart from publishing extensively in both Local and International Academic Journals he is a peer reviewer of several internationally recognized academic journals indexed by SCOPUS and published by highly reputable publishing houses. Professor Lotto's research work focuses on Corporate Governance, Financial Regulations and Corporate Financial Strategies. He has published over 40 academic work. Josephat's work has also been featured in high quality international journals indexed in SCOPUS and Web of Science-hosted by the most reputable publishing houses such as Wiley and sons, Francis and Taylor Group and Multidisciplinary Digital Publishing Institute (MDPI)

PUBLIC INTEREST STATEMENT

An important decision people face is how to invest their wealth to form a portfolio of assets. In recent years, this decision has become increasingly complex as the menu of available financial assets has increased dramatically. In particular, low- and medium-income individuals today have a much wider range of options than they had as recently as in the early eighties, when most of them saw no other viable choice than to save in bank accounts. These same individuals can today choose from a wide variety of mutual and pension funds that offer the opportunity to invest in bonds and stocks at low minimum requirements and intermediation fees. However, this paper reveals that demographic characteristics such as gender, education level and marital status can shape the household's behavior on choosing the particular investment choice.

which the employed dataset is based, are hailing from rural settings where agriculture is the main economic activity, we establish that agricultural ventures require a complete revamp for Tanzania to become a middle-income economy through its industrialization agenda.

Subjects: Economics; Finance; Business, Management and Accounting

Keywords: age; gender; education; investment choices

1. Introduction

The world economy is currently going through some economic challenges such that every individual requires to be active and smart in investment decisions so as to cater for the rising cost of living. Many individuals consider investments to be captivating because they make decisions and later see the outcomes of the decisions they make (2016). So ideally, everybody contributes in one form of investment or the other, even those who do not participate in investment activities related to buying and selling of financial instruments and other related assets still take on investments through participation in other forms, for instance, pension plan and employee savings programmes; buying life insurance; real estate investments and investment in bank fixed deposits (Natalie 2010).

According to Dewi and Pertiw (2021), direct investment may be classified to either physical assets or financial assets than may either be traded or non-traded in a financial market. According to the author, investors may hold non-traded financial assets by placing their money on bank products, such as saving accounts and time deposit which are relatively less risky because they can be sold more easily, and have a shorter investment period. However, investors may also choose to invest their funds in traded money market instruments with a long-term investment horizon such as common stock and bond which are riskier, but offer higher expected returns as compared to money market instruments. It follows that the type of investment instrument selected by individual investor will solely depend on the risk tolerance level of the investor.

Behavioral aspect of investment has become a popular discussion topic in today's world, and investment is considered as the prime concerns of the individuals. The income that a person receives may be used for purchasing goods and services that a person currently requires or it may be saved for purchasing goods and services that a person may require in the future (Mathanika et al. 2017).

Plenty of investment avenues available for the investors make their decision-making process more critical and complex. There are a number of factors which influence the people to make their investment decisions. Demographic factors of investors such as gender, age and education have much significance in the investment decision process.

According to World Bank (2021), over the past decade, despite rapid population growth, Tanzania has achieved relatively strong economic growth and declining poverty rates. The country remains a lower-middle-income country despite the global pandemic-induced contraction of GDP per capita in 2020. Much of the country's development success over the decade was predicated on its strategic maritime location, rich and diverse natural resources, and socio-political stability, as well as its rapidly growing tourism sector. Such improvement has triggered a slight increase in peoples' income as revealed in World Bank (2021), and that has boosted, in a way, their confidence in investment of the savings they make. However, the choices of where to invest such proceeds is still a problem to many households. Literature, as previously discussed, suggests that demographic and social economic factors may partly explain the investment choices of the individuals. Tanzania is appropriate for this study because its economic growth is taking a right direction in macro

dimension, therefore, it is interesting to see how individuals/households in Tanzania make investment choice reflect the GDP growth.

This study, therefore, aims to find out whether the investment decisions of individual households in Tanzania is similar across different education level, locality, gender, employment and marital status. To date, behavioral finance has received less from researchers in Tanzania, and at the moment, there are few studies (if any) which tackle the linkage between households' investment choices and demographic and socioeconomic factors in Tanzania. The study contributes to the literature, which is limited, at the moment. According to Mathanika et al. (2017), demographic factors play a major role in deciding the investment behavior of individuals. Better understanding about the relationship between demographic factors and individual investor's investment decision making helps individuals to improve the quality of their investment decisions and their standard of living. It will also support financial institutions and policy makers in designing new financial products. Economic and finance literature presumes that investors are making investment decisions based on market sentiments and other publicly available information. Therefore, better understanding of this will assist the investors to select best funds and best scheme to avoid mistakes and wrong investment choices.

2. Related literature and hypothesis development

Investment decision making is a very crucial and an integral part of the investment process, which, according to Jones and Dugdale (1994), involves investor's choice to place money in several categories of investment alternatives. Presently, a large number of investment opportunities are available to investors and these options carry various types of characteristics. It is quite a sizable challenge for individual investors to select one or more investment options from the particular list in order to invest their money. Furthermore, investors need to decide their investment mix and time horizon as well.

Traditionally, investment choices, be it for individual or corporate investors, are governed by traditional finance theories which assume that investors are rational and they make optimum investment decisions rationally so as to maximize their wealth, Bodie et al. (2007). However, according to Tversky (1990), behavioral finance theories present an opposing view to traditional finance and assumes that investors are not completely rational when making investment decisions, and their investment decisions are subject to several cognitive and psychological biases.

According to the behavioral finance theorists, psychology influences on the investment decisions of investors (Tversky (1990),) and due to this reason investor's investment decisions become acceptable ones but not optimal ones. Fromlet (2001) further advocates that behavioral finance is a combination of individual behavior and market phenomena based on the knowledge gained from the fields of psychology and finance. According to Fromlet (2001), investor irrationality and the decision-making process are based on cognitive psychology and biases related with people's beliefs and preferences.

Previous literature reveals that a financial decision-making process is affected by several factors including, but not limited to, residence of the households, risk taking attitude and demographic factors of the households. Studies reveal that demographics such as gender, age, income education level and locality relate to investment decisions of people (e.g., Bajtelsmit & Bernasek, 2001; Collard, 2009).

Most recently, different aspects of investment choices have been examined. Sattar et al. (2020) examined the behavioral biases in the investment choices, and found that the investment decision making is influenced by heuristic behaviors more than prospects and personality characteristics. Dewi and Pertiw (2021), while assessing the investor's sentiments, behavioral biases and investment choices in Pakistan, reported that investors' behaviors negatively affect their decision during the pandemic. Different aspects of investment choices were explored by the Raut (2020) explored

the past behavior and investment decisions, the results showed that there wasn't any relationship between the past behavior and investment decisions.

Some couple of studies have examined the relationship between demographic factors- education, gender, employment status, location and marital status-and investment decision. Lewellen, et al (1977) show that male investors spend more time and money to analyse securities, depend less on brokers, and trade more than do female in addition, the difference in trading frequencies between male and female investors is more pronounced for married investors. According to the authors, by trading more, male investors earn returns more than those of female investors. Furthermore, male investors are also more tolerant to risk than do female investors (Wood and Zaichkowsky, 2004). Overconfidence is interesting because it may lead to sub-optimal results. Investors who are overconfident tend to trade more (Deaves, Lüders and Luo, 2005). Additionally, although both men and women are confident, men have a higher level of overconfidence and risk tolerance than do women (Jones & Dugdale, 1994). Diane and Debra (2003) in their research found that investors with education higher than secondary level hold more risky portfolios.

Moreover, Calderone (2014) examined the impact of demographics factors on Investment Choice among Investors, and concluded that the individual investors would prefer to invest in physical assets which yields regular income.

In regard to investor's age Ozer and Gulpinar (2005) reveal that financial risk-taking shows a divergence between age groups. Similarly, Collard (2009) provides an evidence that retired people or those near to retirement period take fewer financial risks. As an explanation, it is suggested that elder people have less time to compensate any investment loss than younger people (Grable & Lytton, 1998). Yet, some studies such as Al-Tamimi and Bin Kalli (2009), and Hawat et al. (2016) from United Arab Emirates and Malaysia respectively, consider age to have insignificant impact in determining households' financial decisions, and these studies are in line with that by Dvorak and Hanley (2010) in the USA. According to Dvorak and Hanley (2010) age is not statistically significant in explaining financial decision-making process. Subsequently, some other studies provide mixed results between households' age and financial decisions.

As far as the relationship between gender and financial decisions is concerned, a lot of previous findings are inconclusive. Most of these studies especially, Lusardi and Mitchell, (2008); Dvorak and Hanley, and Hawat et al. (2016) report that concerning basic financial decision-making females exhibit relatively lower basic financial education compared to their male counterparts. It is agreeable that women have lower financial risk tolerance when compared to men (Grable & Lytton, 1998). Bajtelsmit and Bernasek (2001) and Collard (2009) find that women tend more likely to avoid risks than men. On the other hand, according to Grable and Lytton, (1998), females are conservative while investing, whereas males are aggressive. Generally, female investors tend to spend more of their funds in long-term investments, and also, they are more conservative than male investors. However, although both men and women are considered to be overconfident, men have a higher level of overconfidence and risk tolerance than do women, Jones and Dugdale (1994), and consequently, male investors place more of their funds in riskier assets. Following these arguments this study proposes the following hypothesis;

Hypothesis 1:

H₀: There is a significant influence of head of households' gender in their choice of investment avenues

H₁: There is no significant difference between head of households' gender in their choice of investment avenues.

Investor's risk tolerance is also affected by the level of education, whereas investors with a higher level of education tolerate more to risk (Bhandari & Deaves, 2006; Lewellen et al. 1977; Schooley and Worden, 1999) than investors with lower education level. When it comes to education level of the household, the literature shows that education has a direct impact to the investor's choice of the investment avenues. According to Awais et al. (2016), education is related to making investment decisions, caused by a person's level of knowledge. It can be said that the higher a person's education level, when making the decision to invest, that person will be much more careful, especially in terms of managing and spending money on the basis of the benefits. Besides, people with low education level do not take risks. Bajtelsmit and Bernasek (2001) show that risk averseness reduces with education level. It can therefore be hypothesized that;

Hypothesis 2:

H₀: There is a significant influence of head of households' education status in their choice of investment avenues

H₁: There is no significant difference between the head of households' education level in their choice of investment alternatives

Some studies such as Jianakoplos et al. (2003) and Uccello (2000) show that married individuals generally do not make investment decisions on their own. Rather, their investment choices tend to be influenced by their spouses, either because their spouses act as the household decision-makers in financial matters or because the couple makes joint financial decisions, possibly as an outcome of intra-household bargaining. In their study, which compared the investment of couples, Jianakoplos et al. (2003) found that the investment choices of both spouses were more similar than different, suggesting either that one spouse was making decisions for the other spouse or that individuals tended to find partners with similar attitudes toward risk. Grable and Lytton, 1998, in their study on whether a married man can make a similar investment decision with a single or unmarried man, found that marital status significantly affects the investment decision. Two reasons are therefore suggested for the marital status effect. Firstly, while single people have relatively lower responsibilities in their life and that they take more risk in financial decisions, married people, on the other hand, consume their resources more cautiously by taking their future spending regarding their children into consideration. Secondly, married people are more susceptible to social risk than single people. Following this argument, one may postulate the following hypothesis;

Hypothesis 3:

H₀: There is a significant influence of marital status of head of households in their choice of investment avenues

H₁: There is no significant influence of *marital status* of the head of households in their choice of investment avenues.

Above studies reveal that occupation of investors play important role in investment decision making. Investment choices on the basis of occupation are mainly associated with risk bearing capacity of investors.

Hypothesis 4:

H₀: There is a significant influence of head of households' employment status in their choice of investment avenues

H₁: There is no significant difference between the head of households' employment status in their choice of investment alternatives

Hypothesis 5:

H₀: There is a significant influence of head of households' locality in their choice of investment avenues

H₁: There is no significant influence of head of households' locality in their choice of investment avenues

3. Methodology

3.1. Data

This paper employs secondary data from the Tanzania (2017) conducted by Financial Sector Deepening Trust (FSDT) in collaboration with the Bank of Tanzania (BOT), National Bureau of Statistics (NBS) and Ministry of Finance and Planning (MoF). This is a national survey representative of adult individuals living in Tanzania. The survey considers an adult to be any Tanzanian who is 16 years or older at the time of conducting the survey. The survey targeted 1,000 enumeration areas (EA) from five regions in Tanzania mainland namely Iringa, Singida, Mtwara, Rukwa and Mwanza. However, only 998 enumeration areas were reached and achieved to interview 9,459 respondents from the sample of 10,000 respondents. However, because the focus of this study is on the household level analysis data is collapsed to 3,812 households, limiting respondents to the heads of the households.

3.2. Variable description

This paper uses *investment choices* as dependent variable and *demographic and socio-economic variables* as independent. The definition of investment choices is borrowed from the Tanzania (2017) survey where the data for this paper was adapted, and this was also used in Lotto, (2020). According to the definition, in each investment choice the variable takes the value 1 if the choice is either *Informal, agriculture, personal business or investment account*; Otherwise the variable takes the value 0 for each respective choice. The independent variables (demographic and socio-economic factors) are *gender, education, employment, marital status and location*. The variables have also been used previously by Lease et al. (1974). The detailed description of these independent variables is presented in Table 1.

3.3. Model specification

We use binary probit regression model in this study where household investment choices (dependent variable) are considered as discrete choices assuming that the error term is normally distributed with a mean of zero and a unitary standard deviation as reflected in Lotto (2020). The probit model to examine the effects of demographic and socio-economic factors on the household investment choice is specified as follows:

$$pr(choice_i = 1) = \Phi(\beta_0 + \beta_1 loc_i + \beta_2 ed_i + \beta_3 emp_i + \beta_4 ms_i + \beta_5 gnd_i + \varepsilon_i)$$

Where;

$choice_1$ = Informal groups

Table 1. Variables Description

S/n	Variable	Description	Nature
1.	Gender (gender)	Sex of the household head	<i>Dummy variable:</i> It takes the value of 1 if the head of the household is male and 0 if female.
2.	Education level(edu)	Represents highest level of education reached by the head of household. (i) No Formal Education (ii) Primary (iii) Secondary (iv) Tertiary	<i>Categorical variables:</i> 1 if no formal education, 0 otherwise; 1 if primary education, 0 otherwise; 1 if secondary education, 0 otherwise; 1 if tertiary education, 0 otherwise.
3.	Employment(emp)	Represents an employment status of head of household whether he/she is employed or not	It is a dummy variable with 1 value if household head is employed and 0 otherwise.
4.	Marital Status	Represent the marriage status of the head of household whether he/she is married or not	It is a dummy variable with 1 value if household head is married and 0 otherwise
5.	Location(loc)	This denotes household head's place of residence	It is a dummy variable coded as 1 if urban and 0 if rural.

$choice_2$ = Investment account

$choice_3$ = Household personal business

$choice_4$ = Agricultural investment

loc = Household head' place of residence

ed = Highest level of education reached by the head of the household

emp = An employment status of the head of the household

gnd = Sex of the head of the household

ms = Marital status of head of household

ε_i is the error term

4. Multivariate analysis

This paper employed probit regression to assess whether households' demographic and socio-economic factors affect households' investment choices. Various diagnostic tests are conducted such as multicollinearity test, heteroscedasticity test, model specification test and goodness of fit test.

4.1. Multicollinearity test

In order to test for the presence of multicollinearity, Variance Inflation Factors (VIF) and Pearson correlation analysis were employed. Table 2 reports the mean VIF of 2.96 which is far below the cut-off point of 10 as suggested by Belsley et al. (1980) which determines whether there is

Table 2. Variance Inflation Factors (VIF)

Variable	VIF	1/VIF
Marital status	3.04	0.3289
Household income	3.89	0.2570
Gender	3.15	0.3177
Location	1.76	0.5684
Employment status	1.32	0.7578
Mean VIF	2.64	

a serious multicollinearity. According to the cut-off point the VIF reported in Table 3 multicollinearity is not a problem.

4.2. Heteroskedasticity

After testing for multicollinearity, a Breusch-Pagan test for heteroscedasticity was conducted. The fear of testing for heteroscedasticity is the existence if homogeneity of variance of the residuals. This is one of the conditions to be observed before employing and multivariate regression analysis. The results of Breusch-Pagan test are presented in Table 3. The results show a chi-square value above the critical value, implying that the hypothesis for homoscedasticity could be rejected. According to Belsley et al. (1980) the homoskedasticity assumption is needed to show the efficiency of OLS. The heteroskedasticity test shows that the variances of the OLS estimators are biased. Thus, the usual OLS t-statistics and confidence intervals are no longer valid for inference problem. Using OLS estimator without adjustment will render estimations biased.

4.3. Model specification test

Model specification test is conducted to check where a model specification error which can occur when one or more relevant variables are omitted from the model or one or more irrelevant variables are included in the model. If relevant variables are omitted from the model, the common variance they share with included variables may be wrongly attributed to those variables, and the error term is inflated. On the other hand, if irrelevant variables are included in the model, the common variance they share with included variables may be wrongly attributed to them. Model specification errors can substantially affect the estimate of regression coefficients. In order to check if the model is correctly specified with the adequate number of variables, model specification test was carried out by creating two new variables, the variable of prediction, *_hat*, and the variable of squared prediction, *_hatsq*. A model is said to be correctly specified if *_hat* variable is significant. Results from the model specification test are displayed in Table 4, and the results reveal that variable *_hat* has a P value of 0.036, and therefore it is statistically significant at 5% significance level. Thus, the model is correctly specified, meaning that an addition of extra variables into the model will render the additional variables redundant.

5. Probit regression results

5.1. Results

In order to assess the link between demographic and socio-economic factors and household investment choices and decisions socioeconomic and demographic factors are associated with households'

Table 3. Test for heteroscedasticity for OEFF

Breusch—Pagan/Cook-Weisberg test for heteroskedasticity	
HO: Constant variance	
Variables: fitted values of Financial Literacy	
Chi2(1)	= 21.43
Prob >chi2	= 0.000

Table 4. Model Specification Test

Investment Choices	Coef.	Std. Err.	Z	P > z	[95%Conf.	Interval]
_hat	1.9435	0.9288	2.09	0.036	0.1232	3.764
_hatsq	0.8143	0.7946	1.02	0.305	-0.7430	2.372
_cons	0.2474	0.2525	0.98	0.327	-0.2476	0.7423

Observations = 3812
R-squared = 1.52%
% correctly classified = 72.14%

investment choices and the corresponding probit regression results are presented in Table 6. We first wanted to know how location of the household would influence his/her choices on investment, and found, from Table 5, that as compared to their counterpart rural households, urban households are about 13% more likely to invest in investment accounts and 9% are more likely to invest in personal business. Likewise, urban households are approximately 7% and 3% less likely to invest in informal groups and agricultural investment respectively as opposed rural households.

The gender of households' head is an important parameter to influence the investment choices in the household level. The results in Table 5 show that male household heads are about 3% less likely to invest in personal businesses, but are about 4% more likely to invest in agricultural investments relative to female household heads.

Regarding education level of head of households, results reveal that head of household with only primary education are approximately 8% less likely to invest in informal groups and 9% in agricultural investment, but are 16% and 3% more likely to invest in investment accounts and

Table 5. Probit Regression Results

Variables	Informal groups	Investment account	Household personal business	Agricultural investment
Location	-0.0711***	0.133***	0.0935***	-0.260***
	(0.0231)	(0.0154)	(0.0119)	(0.00996)
Gender	-0.0301	-0.00656	-0.0253**	0.0382***
	(0.0238)	(0.0153)	(0.0116)	(0.0130)
Marital Status	-0.0206	-0.00396	-0.0964**	0.0287***
	(0.0234)	(0.0123)	(0.0876)	(0.0179)
Primary Education	-0.0764***	0.155***	0.0335**	-0.0922***
	(0.0286)	(0.0151)	(0.0138)	(0.0161)
Secondary Education	-0.236***	0.280***	0.0162	-0.226***
	(0.0418)	(0.0288)	(0.0221)	(0.0221)
Tertiary Education	-0.320***	0.617***	0.0520	-0.129***
	(0.0568)	(0.112)	(0.0344)	(0.0307)
Employment status	-0.161***	0.227***	-0.264***	-0.0854***
	(0.0355)	(0.0375)	(0.0340)	(0.0194)
Observations	3,812	3,812	3,812	3,812
Wald Chi2 (9)	195.03	525.32	178.70	915.03
Significance	0.0000	0.0000	0.0000	0.0000
Pseudo R2	0.0831	0.1462	0.0724	0.2483
% correctly classified	63.65	71.65	86.31	79.17

Note: Robust standard errors in parenthesis. *** p < 0.01, ** p < 0.05, * p < 0.1,

personal business respectively compared to households with no formal education. Similarly, household heads with secondary education are approximately 24% less likely to invest in informal groups and about 23% less likely to invest in agricultural investment. However, household heads with secondary education are 28% more likely to invest in investment account compared to households with no formal education. Also, household heads with tertiary education are approximately 32% and 13% less likely to invest in informal groups and agricultural investment respectively, but are 62% more likely to invest in investment account and personal business respectively compared to households with no formal education.

Furthermore, regarding the marital status of households' head the results presented in Table 6 show that married head of households are about 10% less likely to invest in personal businesses, but are about 3% more likely to invest in agricultural investments relative to unmarried household heads. The results, further, reveal that employed household heads are approximately 16%, 26% and 9% less likely to invest in informal groups, personal business and agricultural investment respectively, but are 23% more likely to invest in investment account relative to unemployed household heads.

5.2. Discussion of findings

The results of influence of demographic and socio-economic factors on households' investment choices presented in the previous section are discussed in this section. Concerning the influence of household's location on households' investment choices, it is shown that urban-based households are more likely to invest in investment account (13% more likely) and personal business (9% more likely) compared to their counterparts, rural based household. Whereas, urban-based households are less likely to invest in formal investment groups (7% less likely) and agricultural investment (3% less likely) compared to rural based household. The results imply that urban-based household tend to choose investment avenues with relatively lower risk level as compared to their counterpart rural based household. The explanation of this finding can partly be supported by the reality that urban households may easily access financial products due to the presence of a good number of financial institutions located in urban compared to rural areas, and that urban households rarely participate in agricultural activities due to lack of enough land in townships. The results also show that households in urban areas are more likely to invest in personal businesses because it is believed that demand for business goods as well as services is usually higher in urban than in rural areas, the finding which agrees with Cole et al. (2009).

The results also show that males head of households are less likely to invest to invest in personal businesses (3% less likely), but are more likely invest in agricultural investments (about 4% more likely) relative to female household heads. It is obvious that males and females have different characteristics and this certainly have an impact in investment decision making. Male investors are more focused on investment goals and returns and have a higher level of confidence in investing while women tend to be less confident. On the other hand, according to Violeta & Linawati, (2019), women pay attention to many things and have less tolerance for risk. The findings of this study are in line with the preceding facts, and they indicate that men are more risk averse and less likely to invest in the informal groups, investment accounts as well as personal businesses. Basing on the same argument, men are more likely to participate in agricultural activities relative to women due to the difference in their risk tolerance levels. This finding is consistent with Violeta & Linawati, (2019), Lusardi & Mitchell, (2008); Dvorak & Hanley, and Hawat et al. (2016)

In regard to the influence of education on investment choices, the result show that households with formal education tend, more likely, to choose investing in investment accounts and personal business as opposed to those with no formal education. Particularly, head of household with primary education are 8% and 9% less likely to invest in informal groups and agricultural investment respectively, but they are 16% and 3% more likely to invest in investment accounts and personal business respectively. Likewise, households with secondary education are 24% and 23% less likely to invest in informal groups and agricultural investment respectively while households'

heads with secondary education are 28% more likely to invest in investment accounts than those with no formal education. On the other hand, household heads with tertiary education are 32% and 13% less likely to invest in informal groups and agricultural investment respectively, but are 62% more likely to invest in investment account and personal business respectively compared to households with no formal education. It is highly aggregable from the literature, such as Awais et al. (2016), that the higher a person's education level, when making the decision to invest, the more carefulness of that person in terms of managing and spending money on the basis of the benefits. The findings of this study reveal that the higher the education level of the household the higher is the risk the household takes. In other way households with higher level of education tend to choose investment avenues with more risk as compared to those households whose education level is low. The message which one can derive from these findings is that increase in education level lowers the likelihood of investing in informal groups as well as agricultural ventures. These findings are in line with Rooji et al. (2007) and Bhandari and Deaves (2006).

The results further show that married head of households are about 10% less likely to invest in personal businesses, but are about 3% more likely to invest in agricultural investments relative to unmarried household heads. Literature such as Bajtelsmit and Bernasek (2001) states that a person's marital status tends to influence investment decisions of individuals. The results of this study show that unmarried head of households tend to invest in more riskier investment avenues compared to the married head of households. There exist two suggested reasons for the marital status effect. Firstly, single people have relatively lower responsibilities in their life and they take more risk in financial decisions. Married people consume their resources more cautiously by taking their future spending regarding their children into consideration. Secondly, married people are more susceptible to social risk than single people, which justifies further the marital status effect. The results of this study are consistent with Obamuyi (2013).

Finally, the study checked whether employment had an influence in investment choices households make. The results show that employed household heads are approximately 16%, 26% and 9% less likely to invest in informal groups, personal business and agricultural investment respectively, but are 23% more likely to invest in investment account relative to unemployed ones. It should be understood that employment is a key factor which may influence the investment choice of households. Employed individuals are believed to be more educated and have more income stability than the unemployed individuals. The employed households are expected to be more aware of risks involved in different investment platforms hence may tend to take more risks as opposed to their counterparts-unemployed individuals. The results of this study show that employed head of households tend to choose investment platforms which are riskier than the unemployed head of households. These results are consistent with Calderone (2014).

6. A concluding remark

This paper primarily aims at assessing the impact of socio-economic and demographic factors in enhancing the households' investment choices. The results of the paper reveal the following; *first*, increase in education level lowers the likelihood of individual household to invest in informal groups as well as agricultural ventures; *second*, men are more risk averse and less likely to invest in the informal groups, investment accounts as well as personal businesses; *third*, urban households may easily access financial products due to the presence of a good number of financial institutions located in urban compared to rural areas, and that urban households rarely participate in agricultural activities due to lack of enough land in townships; *fourth*, formal financial advice increases financial literacy among households; and *finally*, employed households are more likely to make a good financial decisions because most of them are believed to have good education which enables them to access formal financial literacy education.

Consequently, better understanding about the relationship between demographic factors and individual investor's investment decision making may support financial institutions and policy makers in designing new financial products. The study opines that, because most of households, as revealed

in the survey from which the employed dataset is based, are hailing from rural settings where agriculture is the main economic activity, we establish that agricultural ventures require a complete revamp for Tanzania to become a middle-income economy through its industrialization agenda.

This study is limited to only one round of the Tanzania's FinScope-2017 survey. There are other rounds of the household survey data. A similar study that uses panel data which includes more than one wave of the survey data is highly recommended. Furthermore, elements of psychological and other factors should be considered in explaining the household's choice of investment choices in future studies.

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