

Differences in Saving and Investment between Men and Women in Luwinga Ward Mzuzu City, Malawi

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Abstract: Saving and investment are important and required for a society. Therefore, this study was conducted to assess the differences in saving and investment between business and working men and women of Luwinga Ward, Mzuzu City. Sample of 100 men and women participated in a structured questionnaire survey. Descriptive statistics was used to analyze the differences that men and women have on the preferences of type of saving and assets ownership. The logistic binary regression was used to determine the factors influencing the saving behavior of men and women. The results showed that gender moderate preferences of saving avenues and asset ownership. There were gender disparities in savings and assets ownership in which men were having long-term savings and also were owning more financial assets compared to the women. It was found that saving behavior between men and women significantly determined by source of income, sex, Marital status, age and education level. The paper recommends the provision of financial literacy and capacity development in making investment decision to women and youth. The paper also recommends economic empowerment through provision of low-interest loans to youth and women to boost their saving and investment behavior. This paper has policy impact in narrowing down gender differentials between men and women in making saving and investment decision that favours national development.

Keywords: Savings, Investment, Gender, Differences, Assets and Ownership, Malawi.

1. INTRODUCTION

Though gender differences in education, agriculture and military have been narrowing over time, women are generally still placed lower than men when it comes to saving and investment (Hira & Liobl, 2006). Saving and investment are considered normally as disposable income minus consumption expenditure. It could also be regarded as income that is not consumed immediately by buying goods and services (Odoemenem et al., 2013). Savings are important in a way of improving well-being, ensuring against time of shocks, obtain financial independence and accumulation of wealth. Also, having savings allows for economic safety and being able to accomplish goals such as having your own business or acquiring an asset such as a house or a car. Savings can have different objectives as well save to cover education or health care services, retirement planning or facing different kinds of emergencies (Hernandez et al., 2018; Loibt et al., 2015; Wubie et al., 2015).

Differences between men and women affect the saving and investment rate. In general, studies have shown that the economic wellbeing and financial behaviors of men and women differ significantly (Hira et al., 2006; Chola, 2006; Muriith et al., 2014). Women invest less money and invest their money in less risky investments compared to men who invest in high income investments (Garhi et al., 2020) this is because women have lower earnings, lower financial knowledge, lower comfort levels with math, marital status, family background and smaller retirement benefits (Cheng et al., 2019; Sudhakar, 2018). Women may also differ from men in their access to information technology, as well as the stability or inclination to use available information (Bajtelsmit and Bernasek, 1996). Although women have become more interested in, and better informed about investments, women still miss basic knowledge that can influence them to save and to manage the investments (Loibl and Hira, 2004).

Fisher (2010) found that household responsibility, fear in taking long-term saving risks, education and also traditional roles that are bound to women influence them to invest in short-term savings. For instance, in Turkey most women invest in gold which is considered as a low-risk asset and short-term saving while men tend to invest in stocks and real estates (Tatoglu, 2010).

In finance, investment is the application of funds to hold assets over shorter or longer term in the hope generating income from those assets (Laxmin, 2013). It has been observed that there are gender disparities in assets ownership between men and women. In most sub-Saharan countries, men are likely to own financial assets such as land, housing, cars, bicycles, motorcycles while women are underestimated by men to own these type of assets (Garhi et al., 2020).

In Malawi, there is low saving culture which affects investment among people (Nindi and Odhiambo, 2014) and the same argument Namate et al. (2020) put forward that low savings make investment to suffer. Phiri (2010) in his assessment of household saving behaviour showed 52.8% of the urban population were saving for various purposes but did not the gendered saving and investment behaviour. In India, Baig et al. (2023) found that domestic fund supplies of an individual for investment is mostly dependent on household savings. Those who save and invest in urban areas in Malawian cities were those employed and doing business of different sizes (Phiri, 2023). However, in Malawi many studies that have been conducted focused on financial literacy (Namate, 2020; Chirwa & Mvula, 2014; Chaula, 2020; Mitata & Chauma, 2019) but paid no attention on the saving and investment behavior gap between genders in urban areas. Hence, this study was conducted seeking to investigate the saving and investment gap between men and women in Luwinga ward. The specific objectives of the study were: 1) To analyze factors that influence saving behavior between men and women; 2) To identify type of savings that men and women do; and 3) To assess differences in asset ownership between men and women.

The study applied the gender lens to reveal how choices are moderated in saving and investment behavior of people living in urban area. To the nation development, this study is in line with Malawi vision 2063 which envision in inclusive wealth creating and self-reliant. The results of the study have policy application when formulating policy strategies to increase access to financial services and investment financing in Malawi. Those working in development and promoting saving and investment at household level can apply these findings in this paper to better target both men and women in their approaches. The study will help in academic world to bridge the existing gap of differences in saving and investment between men and women by increasing knowledge in academic.

2. CONCEPTUAL FRAMEWORK

The conceptual framework of this study figure 1 shows the focus on the factors influencing saving and investment. The variables in the conceptual framework are tested as hypotheses to establish the relationships between variables. The independent variables of this study include age, gender, marital status, income level, education level, source of income, household size and religion and the dependent variable is the differences in saving and investment behavior. The framework also indicates that, the differences in saving and investment also affects the preferences of the respondents in saving avenues and in asset ownership. Figure 1 shows the conceptual framework showing the relationship among variables.

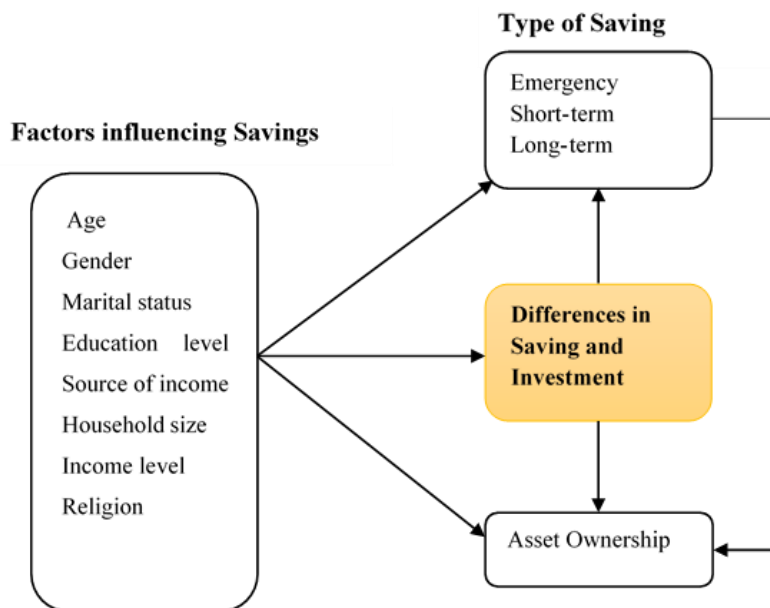


Figure 1: Conceptualizing the correlation of socio-economic factors and savings and asset ownership type
 (Source: Authors’ own work)

3. METHODOLOGY

3.1 Research design

The research was a cross-sectional study design and used structured questionnaire to collect data from 100 respondents in Luwinga Ward of Mzuzu city. The study determined by using the simplified formula provided by the Woodbury (2002). The structured questionnaire was programmed in [Kobo Toolbox](#) and administered through face-to-face with the respondents. Simple random sampling was employed to select respondents. The study population were business and working men and women. The data that was collected were age, gender, marital status, educational level, source of income, income level, household size and religion.

3.2 Data analysis

Descriptive statistics and regression analysis were used to analyze the collected data. Descriptiv analysis i.e., frequencies, percentages and cross-tabulation were used to determine the types of saving and investments owned by men and women and the results were presented in graphs. Regression model was used to analyze the relationship between dependent variable (saving culture) and several independent variables in the study (Hernandez et al., 2018) which were the factors influencing saving. Agresti (2012) explains logistic regression application to predict dichotomous variables (0 or 1), where probability of occurrence of characteristic is 1 (i.e., characteristic is present). In logistic regression the response is binary (0, 1) and follows a Bernoulli probability distribution. In this paper the dependent variable is saving decision of business and working men and women of Luwinga: whether they save from their monthly income. The logistic regression model was stated as follows:

$$\text{Logit} (P_i) = \ln(P_i / 1 - P_i) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + e \quad (1)$$

Where: $\ln(P_i / 1 - P_i)$ = Saving behavior, P_i = SAVE 1- P_i = NOT SAVE, X_1 = Age; X_2 =Gender; X_3 = marital status; X_4 =Education level; X_5 = Source of income; X_6 = Income level (MK); X_7 = household size; X_8 = Religion; e = Error term; β_0 = Intercept (Constant term); $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ and β_8 are coefficients of variables.

4. RESULTS AND DISCUSSIONS

4.1 Demographic characteristics of the respondents

The study showed that the majority of the respondents were females with (56%) and males were (44%). Considering the marital status of the respondents, 52% contributed in the category of the married, 35% single, 9% divorced and 4% widowed. The findings observed that the majority of the respondents participated in this study were Christians

with 93%, followed by Muslims with 5% and other respondents that do not belong to any religion or any belief with 2%. The highest level of education attended by majority of the respondents was secondary with 66% followed by 25% of the respondents who managed to attend tertiary level of education while 8% of the respondents attended primary level and 1 % of the respondents never attended school. On the source of income, the findings show that 55% of the respondents sourced their income from businesses, 17% from temporal employment, 9% from formal employment and a minimum percentage sourcing their income from other means. Majority of respondents were between 20 and 40 with the maximum number of household members of 10 and minimum of 4.

4.2 Factors that influence saving behaviors

The logistic regression model was used to see the level of significance of the proposed factors of influencing the saving culture between men and women. Independent variables included in the model were age, gender, marital status, educational level, source of income, income level, household size and religion while saving from monthly income was dependent variable in the model. Chi-Square Model was used to test the model Goodness of Fit with respect to the influence of these social economic factors to saving and investment. The Chi-Square Model statistic, which is the difference of the values of the 2-log likelihood functions, was 20.044 (Table 1). The P-value for the overall model fit statistic was less than the conventional 0.05 ($p < 0.05$) with 8 degrees of freedom indicating that at least one of the parameters in the equation is nonzero.

Table 1: Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	20.044	8	.010

Source: Survey data (2022)

Table 2 shows the model summary. The Nagelkerke correlation coefficient (R^2) value of 0.701 means that about 70.1% of the variation in saving and investment is explained by explanatory variables i.e., the mentioned factors below while the Cox & Snell R square of 0.510 supports that the model fits the data well (Table 2).

Table 2. Model summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	56.820 ^a	.510	.701

Source: Survey data (2022)

Table 3 shows the results from the regression model. The model revealed that, gender affects positively saving decision of men and women ($p=0.019$), whereby men were having better saving habits than women. The study revealed that, majority of the men were flexible to undertake saving risks compared to women. The findings are in consistent with Fernandez et al. (2009) who found that there is higher risk aversion among women compared to men. Similarly, findings of Wubie (2015) observed that gender has an influence on the saving decision between men and women. In his study, he found out that male teachers were having better savings than female teachers because male teachers were willing to take saving risks compared to female teachers.

Age also found to significantly affect saving decision between men and women. The study observed that the majority of men and women respondents who were in the age range of 20-40 years were able to save ($p=0.002$). The main factor that affected other age ranges' saving culture was huge responsibilities that demand more of one's earnings. People who had above 40 years of age were found to have a lot of responsibilities than those people who were below 40 years of age. The results agree with the findings of Njung'e (2013) who also found out that household savings declines due to the age of household members thus, when household members advance in their ages, their saving culture declines. This is mainly because of household responsibility and the personal needs which increases as individuals advance in age.

Table 3. Parameters in a binary regression model

Variable	β	S.E.	Wald	Sig	Exp. (B)
Age					
20-40	3.421	1.118	9.368	0.002	30.604
40-60	1.871	1.513	1.529	0.216	6.494
Gender					
Men	2.152	0.915	5.530	0.019	8.602
Marital status					
Married	1.245	0.579	4.628	0.031	3.475
Education level					
Tertiary	3.518	1.326	7.038	0.008	33.719
Secondary	-0.602	0.892	0.455	0.500	0.548
Primary	1.619	1.805	0.804	0.370	5.049
Religion					
Christianity	.668	1.322	.256	.613	1.951
Income level					
10000-100000	1.032	.963	1.148	.284	2.808
100001-200000	1.817	1.159	2.456	.117	6.151
200001-1000000	1.338	1.498	.797	.372	3.811
Sources of income					
Formal employment	1.830	1.123	2.658	.103	6.237
Business	3.703	.978	14.332	.000	40.588
Farming	23.897	13191.450	.000	.999	2390
Household size	-.296	.154	3.696	.055	.744

= significant at $P \leq 0.05$, = Significant at $P \leq 0.01$, =Significant at $P \leq 0.001$

Source: Own survey (2022)

The model also indicated that marital status had positive significant effect on saving culture of men and women ($p=0.031$). Results of this study observed that, majority of the respondents interviewed were married for both men and women and it was seconded by the single respondents. The results also indicated that, these married respondents were able to save than the single respondents due to number of factors; others were able to save for education of their children while others were able to save for other household responsibilities. The findings of this study are not in agreement with the findings of Rehman (2010), who found that married people were having limitations in savings due to the responsibilities bounded to them.

The model also revealed that source of income or type of occupation of the respondents had significant influence on saving culture. The study observed that, majority of the respondents involved in different kinds of business as their source of income were savings ($p=0.000$). This observation was so because though Malawi is a low-income nation where its consumption rate is high comparing to its income earnings, the business respondents were saving for reinvestment in their businesses. This agrees with the findings of Wubie (2015) who found out that, the type of occupation of an individual has an influence on saving because the type of occupation determines the level of income of an individual.

The study also revealed that education status has influence on saving culture of men and women of this study. The observation of this study revealed that, the respondents who attended tertiary education were able to save ($p=0.008$) than those respondents who attended other categories of education. According to the observation of this study, the tertiary respondents were having more financial literacy and skills in their means of sourcing income which contributed

in having better savings compared to the respondents secondary and primary education. Xuewil (2012) findings agrees with the findings of this study. He observed that having good education is a factor that determine the understanding level of an individual and also good education determine the occupation status of an individual. He also observed that women who attended tertiary education were having knowledge of the avenues of savings and investment and invest in high risks savings and investments.

4.3 Types of savings that men and women do in Luwinda

4.3.1 General savings

Figure 3 shows general savings that men and women conduct in the selected area of this study. According to the results, out of the 44% of men respondents interviewed in this study, 30% were able to save while 14 % were not able to save similarly 36% of women respondents were also able to save while 20 % were not able to save out of 56% women interviewed.

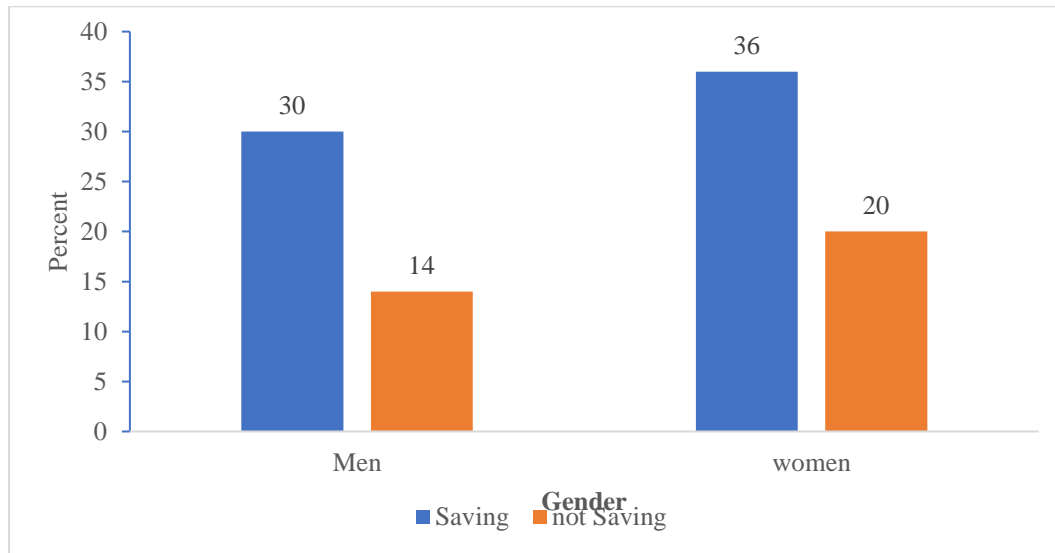


Figure 2: Men and Women Savings

4.4 Types of saving men and women practiced

Figure 4 shows the savings practiced by the respondents in this study. The findings show that majority of women were able to save on short-term while men were able to save on long-term.

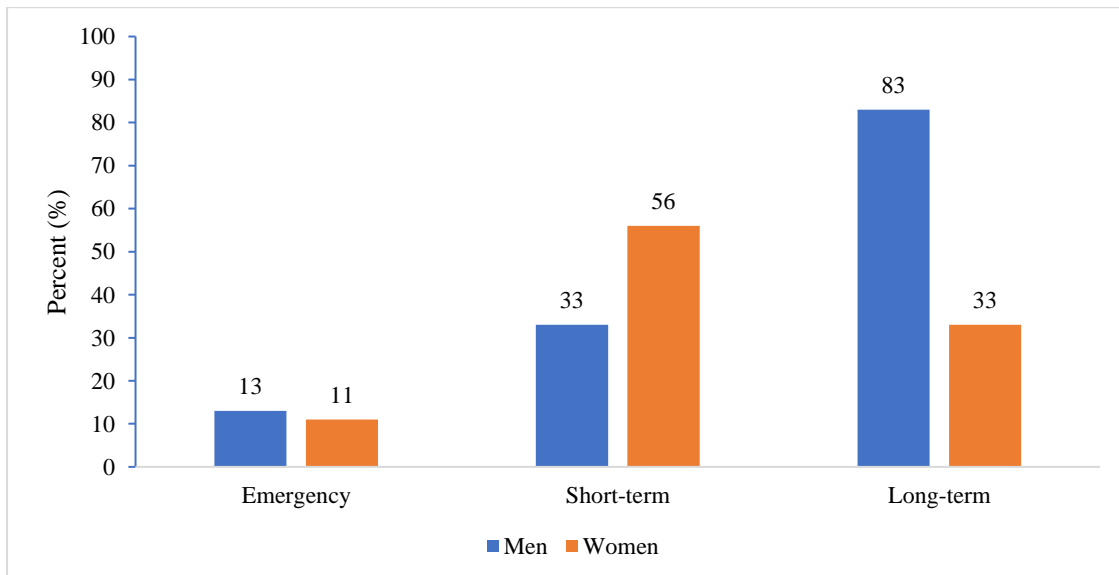


Figure 3: Types of savings

The descriptive analysis used for this study found that, the majority of women respondents were involved in the short-term savings. The findings showed that 56% of women were saving in short-term due to fear in taking risks, low income and lack of enough knowledge on the avenues of savings and investment. The study continues to reveal that women respondents in this study were having fears to invest in high-risk savings such as business with high capital, shops and land in fear of making losses if the savings does not perform as they were expecting. The findings are in consistent with Gneezy et al., (2007) who found that women investing in stocks which was considered as a long-term saving in Turkey were in low numbers due to fear of making losses compared to men. However, they choose to invest more often and in high amount low-risk savings. The findings of Fisher (2014) emphasized that women saving in short-term are in large numbers for instance, women were less inclined to save in the short term if they were in poor health, while poor health did not significantly affect men’s attitude towards short-term savings. Men were found to be risk takers and opted for long-term savings consistent with Lie et al. (2023), Charness and Gneezy, 2007; Eckel and Grossman, 2008). The study indicates 83% of men were able to save in long-term savings such as huge capital business, investing in education and other factors without fear.

3.3 Asset ownership by gender

Figures 5, shows the distribution of assets. The study findings revealed that the majority of financial assets such as house, shops, cars, land are owned by men while women are able to own kitchen utensils and other low-income assets. Paxton (2009: 209) argued that “female-headed households hold more liquid family consumption assets, such as small animals and grain, and invest more in their homes whereas male-headed households save more in financial and quasi-liquid assets. Other financial assets are owned jointly”.

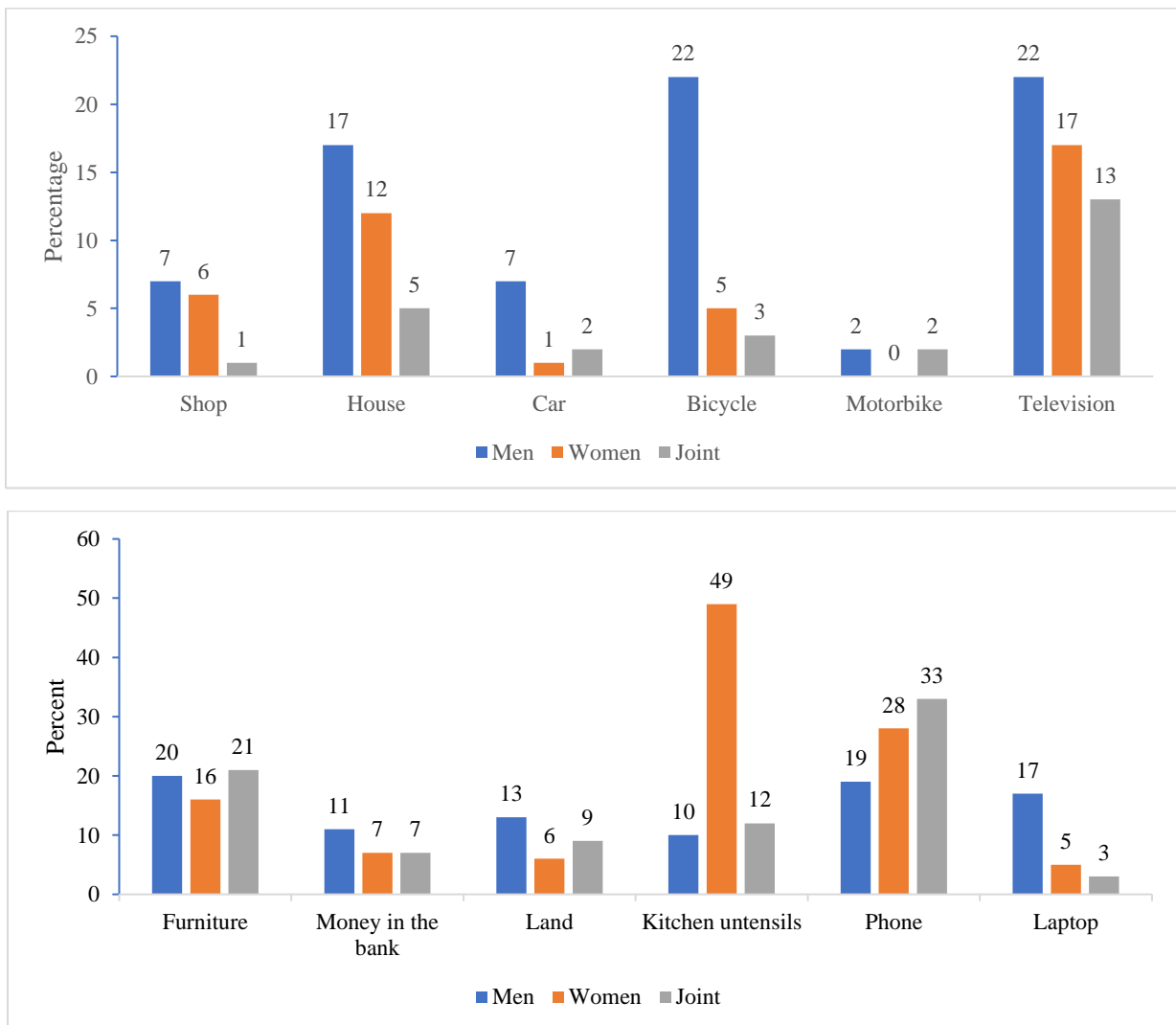


Figure 4: Asset ownership by Gender

According to the results of this study using descriptive analysis, it has been observed that most of the financial and high-income assets were owned by men respondents, women were owning low-income assets and other assets were jointly owned. The study pointed out the factors influence these differences in assets ownership between men and women in this study. According to the data given by this study, majority of men are able to own financial assets such as land with 13%, house with 15% while women are owning these assets with minimal percentage comparing with their population. For instance, women are owning houses at 12% and owning the land at 6% though it seems that women control a lot of land culturally. This study indicated that the traditional roles and norms bound to the women contribute to the gender gap in assets ownership behavior. These findings agree with the findings of Nyamwase et al. (2022), who revealed that, traditional norms are some of the critical factors that are limiting women to own the land. Mhango et al. (2014) found similar results that gender inequality in land ownership is mainly caused by traditions and customs which promote and perpetuate the patriarchal system.

The study also observed that, the low-income level of the majority of women respondents in this study is also another factor that has high disadvantage to women in owning the assets. Findings of this study revealed that the majority of the women respondents were having low incomes that limited them to own high income assets comparing to the men counterparts. For instance, men respondents 7% were owning vehicles while women 1% were owning vehicles. These findings are in consistent with Idris (2018) who identified that lack of income is a barrier to women to own capital assets.

The study also observed that education level of the respondent's influences gender gap in asset ownership. The majority of the women respondents interviewed in this survey attended secondary school level of education. This is in consistent with Adenegan et al. (2017) who found that women having formal education were involved in the unskilled job which earns them little amount of money which determines and limits them to own assets.

The findings of this study also revealed that marital status has influenced women respondents to own financial and high-income assets. The study indicated that some of the assets were owned jointly whereby a wife and a husband had control over it. For instance, assets like television, furniture, phones and money in the bank were owned jointly with the majority of married respondents; television 13%, furniture 21%, cash in the bank 7% and phones with 33%. Our findings collaborate with the findings of Adenegan (2017) who emphasized that married women have an advantage to own financial assets because they get support from their husbands unlike the divorced and the widowed women. In his study, findings show that divorced and widowed women had low asset ownership comparing to married women. The reason is that these women were heads household and had to fully care for their household which hindered them from owning the assets.

Finally, the results of this study also indicated that women were limited to own assets due to household size. The number of household members determines the huge amount of income required for the sustenance of the household. The findings of this study observed that, the majority of the women were involved in small businesses and unskilled work and earned little money to provide for household daily needs. Olodokun (2017) and Olodokum et al. (2017) found that the household size of the family was critical factor that limited women to own the assets because their finances were easily used by the household responsibilities. Therefore, when a household has a large number of members and the income of a woman in that particular household is limited, it hinders the woman from owning an asset which is determined by the level of an income that a particular person earns (Olodokum et al., 2017).

5. CONCLUSIONS AND RECOMMENDATIONS

The study revealed that there are differences in savings between men women. Women tends to save in short-term savings while men save in long-terms savings. Similarly, majority of financial assets such as land, cars, houses, and shops are owned by men and, on the other hand, women tend to owns more kitchen utensils. Age, gender favoring men, marital status, source of income and level of education are significant factors affecting the saving behavior between men and women.

The paper recommends the provision of financial literacy and capacity development in making investment decision to women and youth. This will allow these groups to make savings and investment in items that will accelerate the national development. Further, the paper recommends economic empowerment through provision of low-interest loans to youth and women to boost their saving and investment behavior.

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