



Research Article

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Financial Participation Among Smallholder - Farmers in Zimbabwe: What Are the Driving Factors?

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Abstract

Small-scale farmers' financial participation boosts output while also raising living conditions by breaking the poverty cycle. Many policymakers regard it as a necessary input for increasing agricultural production because it is a vital aspect of the agriculture sector's commercialization and the modernization of the rural economy. Financial participation is a vital input for agriculture to achieve substantial growth. Small-scale farmers' financial engagement in many rural families remains a concern in Zimbabwe, despite the construction of a vast network of financial institutions in towns and growth centres. This research examines the factors that influence smallholder farmers' engagement in Zimbabwe's formal financial markets. The Binary Logit model was used to evaluate the characteristics that influence smallholder farmers' engagement in formal financial markets. The results from the logit model indicated that "gender, household head age, land size, and agricultural extension service" were the significant factors influencing financial participation by smallholder farmers. As a result, the government should prioritize measures targeted at expanding the area of land available to small-scale farmers to ensure that these farmers are in the position to commercialise their activities. Again, support towards agricultural extension programs aimed at expanding farmer training and "doubling efforts to guarantee that the age distribution in farms" is balanced between the young and the old, as age has an impact on formal financial market involvement.

Keywords: Financial Participation, Smallholder Farmers, Zimbabwe

1. Introduction and Background

One of the key and valuable enablers in strengthening socio-economic capacity in the case of a crisis is the financial sector's role in supporting financial-economic operations in modern economies (Al Nawayseh, 2020). Advances in technology, particularly Information Communication Technology (ICT), have changed the financial business in recent decades, allowing corporations to provide more efficient and innovative services to the public. Various digital finance platforms have risen in popularity in recent decades, proving to be beneficial to society's most vulnerable or low-income earners, particularly those in developing countries. The most important aspect of various financial technology (FinTech) services is that they assist both the financial industry and consumers in finding the most convenient and secure way to conduct transactions when compared to traditional forms of

finance. According to Alwi (2021), the increased popularity of personal mobile devices such as smartphones has allowed numerous FinTech services to reach the most remote areas in developing countries.

These services made a lot of consumer products become flexible and allowed consumers to perform daily financial transactions using their mobile devices. Generally, the world is moving toward a cashless society where consumers rely more on non-cash ways of making payments due to the innovation of the financial sector and the invention of products like credit and debit cards apart from the FinTech services. Virtual payments are being necessitated by the availability of various technologies (Alwi, 2021). Traditional forms of making payments using cash are being replaced by electronic forms of making payments. The 2019 World payment survey highlighted that during the 2016 to 2017 period the volume of non-cash transactions rose by 12 per cent to approximately 539 billion dollars which is the highest amount in the past two decades (Alwi 2021). The per cent increase in non-cash transactions in emerging markets like Asia was around 32 per cent in the period 2016-17. In Central and Eastern Europe, the Middle East and Africa (CEMEA) the percentage increase in the same period was around 19 per cent while in Asia-Pacific (APAC) the growth rate of 7 per cent was retained.

As highlighted by Al Nawayseh, (2020) financial institutions and technology firms are increasingly increasing their investment in FinTech technologies. It was reported that the global investment in FinTech technologies was around 40 billion in 2019. However, despite the rise in investment in Fintech Al Nawayseh, (2020) pointed out that the process of maturation and acceptance of these technologies among low-income earners, retail financial services are still a challenge that needs maximum attention. One important aspect is the process of balancing the benefits and risks of FinTech innovations, especially in the developing world. The situation is made worse by the fact that in developing nations the people with less socioeconomic resources do not have the necessary information about the various financial products and sometimes these people do seek the necessary financial information. The other critical thing is that some of these people work in the agricultural sector as small-scale farmers despite its importance.

In Zimbabwe, the agricultural sector is critical to economic development, particularly in underdeveloped countries like Zimbabwe. Zimbabwe has an agrarian economy, with agriculture serving as the primary source of income and having strong forward and backward links with other economic sectors (Mhlanga 2020) Before and after independence, the industry was well-known in Zimbabwe for being the dominating sector, accounting for “40% of exports, 50% of manufacturing, and 70%” of employment (Mhlanga and Denhere 2020). As a result, the economy's performance is inextricably related to the agricultural sector's performance (Chimhowu et al., 2010; Mpofu 2018). In 1980, the government inherited an established and largely white-controlled economy. Since 1980, the government has made redressing the developmental disparities caused by colonial rule a top priority. Mehretu Mutambirwa (2006). Because of the colonial regime's reserve status, most rural areas have remained underdeveloped. To eliminate poverty, the government is prioritizing black empowerment alongside rural development (Ndhlovu 2018). The government's current goal is to eliminate rural poverty, starvation, and illiteracy in a variety of ways.

One of the government's key efforts, among others, to accomplish economic growth and poverty reduction and rural development was to redistribute land from white minority farmers to the black majority by the end of 1999 (Oryoie et al. 2018; Chari et al. 2018) Many black households, as well as large-scale farms, were assigned A1 and A2. A total of 237, 858 households were given land (Richardson 2006; Scoones et al., 2010). Most land-based farmers face a variety of obstacles, including a lack of skills, the inability to access formal financial market goods, sometimes known as financial exclusion, and climate change, to name a few (Chidoko, 2011). According to a recent report by the Reserve Bank Governor, at least 70 per cent of Zimbabwean households are financially inactive, meaning they do not use any of the country's formal financial institutions (Masiyandima et al., 2017 Mhlanga, and Denhere 2020). In one of its financial inclusion policies, the Zimbabwean government set a target of 90 per cent financial inclusion by 2020, up from the present level of 30 per cent. This

demonstrates that the country's financial inclusion remains a source of worry. This measure of financial exclusion at the national level depicts the condition in the agriculture industry, particularly among smallholder farmers (Masiyandima et al. 2017).

Several farmers that gained from the 2000 land transformation agenda, particularly communal and small-scale farmers, are now financially excluded, turning land, one of the most important assets a country can have, into dead capital. Commentators, researchers, and academics have proposed several theories for why poverty, productivity, and gross output in agriculture are at all-time highs, even though the people of Zimbabwe own enormous swaths of land. Some claim that agricultural production is harmed because of inept black farmers; others blame international isolation; farmers, on the other hand, lament a lack of money (Hanlon et al. 2012). Financial inclusion has been identified "as a tool that can lead to financial development, which can lead to significant economic growth, income inequality reduction, and the lifting of households out of poverty (Mhlanga, 2020). Financial inclusion's economic benefits are realized not only through direct access to or use of financial services, but also through indirect but positive effects on low-income households such as access to labour markets, consumption smoothing, and cushioning low-income households from economic shocks and even natural disasters".

Empirically, Chibba (2009) claimed that traditional approaches to poverty reduction were insufficient without the development of appropriate policies that embraced financial inclusion as a means of reducing poverty and inequality. Chibba (2009) continued by arguing that financial inclusion in and of itself can provide several direct and indirect avenues for addressing developmental concerns and reducing poverty. Furthermore, Chibba (2009) concluded that the global growth in financial crises necessitates a more comprehensive approach to the implementation of policies that promote financial inclusion. Chibba (2009) made the case that financial inclusion should be used in conjunction with traditional policies to address global developmental concerns such as poverty. The author discovered four aspects that are crucial in developing the financial inclusion and poverty reduction ideology. These causes include, but are not limited to, private sector development in the financial and non-financial sectors, the expansion of microfinance support for enterprises, and finally, public support for firms in the financial and non-financial sectors (Chibba 2009). When these criteria are in place, it is claimed that financial inclusion may be scaled up, resulting in poverty reduction through direct and indirect routes. Access to finance is not only vital for boosting economic growth, which is critical for pulling households out of poverty, but it also helps decrease income inequality gaps.

Uddin et al., (2017) investigated the factors that influence financial inclusion in Bangladesh. After categorizing the causes of financial inclusion into two main categories, 'bank-specific factors and macroeconomic factors, the results were presented. On the supply side, the size of a bank, its efficiency, and the interest rate charged all have a direct impact on financial inclusion, according to the study. On the other hand, the literacy rate was positively connected to financial inclusion on the demand side, while the age dependence ratio was negatively related to financial inclusion". Furthermore, a quantile regression study revealed that a bank's size has a considerable impact on deposit collecting as well as loans and advances disbursements. These findings by Uddin et al. (2017) were comparable to those discovered in Pakistan by Zulfiqar et al. (2016). The degree of education, household income level, and gender discrimination were the factors impacting financial inclusion in Pakistan, according to Zulfiqar et al. (2016), which used the probit model to estimate the drivers of financial inclusion in Pakistan. Households viewed a lack of funds and required procedures as impediments to full access to financial services. Furthermore, Soumaré et al. (2016) used the Global Financial Inclusion Database to explore the factors of financial inclusion in Central and West Africa. Sexual identity of the head of the household, education level of the household head, age, level of income, location of residence, work status, marital status, family size, and degree of confidence in banking institutions were discovered to be the factors that influence access to banking services, according to the study. It is against this background that the current study seeks "to establish the determinants of smallholder farmers' participation in formal financial markets in Zimbabwe".

2. Significance of Agriculture in Zimbabwe

Agricultural production is one of the most important sectors of the economy, even though it accounts for less than 20 percent of the total GDP in Zimbabwe (Musiyiwa et al., 2014). Almost 70 percent of Zimbabwe's population depends on this sector for their direct and indirect livelihoods. Economic growth is also tied to the performance of the sector; agriculture's expansion and development aided the growth of other economic sectors such as industry and services (Robertson 2011). Agriculture accounts for 30 percent of formal employment and the largest single source of export revenues, according to Kapuya et al. (2010). Agriculture provides food and income to nearly 75 percent of Zimbabwe's 14 million people, according to the Zimbabwe National Budget Statement of the year 2014. By supplying 60 percent of the raw materials necessary by the industrial sector, the industry also helps other industries (Musiyiwa et al. 2014). The agricultural industry is essential in Zimbabwe for the following reasons: it employs most rural households and is the country's principal source of food. Furthermore, the sector is a significant contributor to foreign exchange for Zimbabwe, which is critical in addressing the country's balance of payment issues (Rukuni et al. 2006).

3. State of Financial Participation in Zimbabwe

Financial inclusion, according to Sarma (2008) and Leeladhar (2005), is described as the process of giving vulnerable groups, such as weaker portions and low-income groups, affordable access to financial services and timely and adequate financing when needed. Even though Zimbabwe has made substantial efforts to promote financial inclusion, there are still gaps in terms of addressing the needs of the community in terms of the products and services available. Women, youth, rural populations, and small-scale agricultural products and services receive increased attention. According to the Finscope 2014 poll, there were 7 million individuals aged 18 and up in 2014 (Mhlanga and Dunga 2020). According to the poll, 67 per cent of the adult population lives in rural areas, while 33 per cent lives in cities. According to the report, 23 per cent of Zimbabwe's adult population was financially excluded in 2014. These figures illustrate that financial engagement and inclusion in Zimbabwe are extremely low. Fin Mark's 2011 survey and the "Reserve Bank of Zimbabwe's National Financial Inclusion Strategy 2016" both found that financial participation in Zimbabwe is quite low. According to the RBZ's national financial inclusion policy, about 70 per cent of Zimbabwe's population is financially excluded, with only 30 per cent having access to financial services. Table 3 summarizes major financial participation measures between 2011 and 2014. (Sanderson et al. 2018).

4. Empirical Literature Review

The research on the determinants of financial involvement is not new, and different studies have been undertaken on the topic, but the literature on the determinants of financial involvement amongst smallholder farmers in Zimbabwe is new but expanding. The importance of human capital in farmers' market involvement has been documented (Arene 1992; Njoku, 1991). In most circumstances, a farmer's capacity results in modifications in the business's environmental features. Farmers' capacity to engage in the financial system is frequently mentioned while discussing issues such as enhancing returns in agriculture using new technologies. Farmers' capacity for using technology plays an important role in their participation in financial markets. Furthermore, Baydas et al. (1994) and Buvinic et al. (1979) jointly discovered that the variable gender is the most important factor influencing farmers' access to rural financing. Women have been discriminated against in informal markets, according to the authors. Gender has a key role in determining a farmer's capacity to obtain rural financing.

Women are discriminated against in informal financial markets in one manner or another, according to authors like Baydas et al. (1994). The type of elements connected to women's lack of control over economic resources and the nature of their economic activity are the key factors that

limit women's access to formal financial services such as credit as compared to males. Blanchower et al. (2003) used empirical evidence to back up their claims. Feder et al. (1990) identified the age of the household head as one of the elements influencing farmers' participation in formal financial markets such as formal credit markets. According to Feder et al (1988), older persons have more expertise with the economic activities they are financing as well as with financial institutions, which boosts their lender's trust and confidence. Except for young producers that have not yet amassed a significant amount of wealth. Because of these circumstances, elderly farmers are more likely to join than younger farmers. Feder et al. (1990) also claimed that education is an asset that influences financial participation on the farm through on-farm efficiency. As formal education improves, financial management skills improve, and the nature of operations improves, more people will have access to financial services (Musebe et al.,1993). For example, a rural evaluation conducted in Kenya by Musyimi (2010) found that most farmers did not have access to financial services because they did not know how to receive and handle credit. In Rwanda, the possibility of a farmer participating in the loan market is linked to his or her level of education (Muhongayire et al., 2013). Farmers' engagement in informal financial markets is also influenced by the size of their households. The greater the labour force accessible to a given household, the greater the family's ability to overcome financial services risks. (Schreiner 1997). Farmers' income is also a major driver of their engagement informal financial markets. Off-farm wages may serve to increase a borrower's confidence, which can be a key component in ensuring loan payback. Sharma et al., (1997) agreed with this.

According to Digne (1999), as farmers' income rises, so does their access to formal financial institutions such as credit. Kiiza and Pederson (2001) in Uganda, Oboh and Kushwaha (2009) in Nigeria, and Muhongayire et al. (2013) in Rwanda, for example, found that farmers with mostly off-farm income were more likely to borrow from official sources. Agricultural land has been the most important collateral for formal loans in rural areas, according to Binswanger and Rosenzweig (1986). They further suggest that farmers with more land are more inclined to seek borrowing because land exploitation necessitates more money. This has been the foundation for comprehending the beneficial effects of land ownership in agricultural finance. Farm size has a considerable effect on formal financial participation, according to empirical research such as Oboh and Kushwaha (2009) in Nigeria. Sanderson et al. (2018) used the logit model to investigate the various socioeconomic factors responsible for financial inclusion. The study found that the household's age, education level, financial literacy, income level, and internet connectivity were the factors that positively influenced financial inclusion.

Financial inclusion was negatively influenced by factors such as the papers necessary to create a bank account and the distance to the nearest access point. Sanderson et al. (2018) also agreed with Akileng et al. (2018) on the importance of financial literacy as a factor in financial inclusion. The impact of financial literacy and financial innovation on the financial inclusion of various Ugandan households was investigated by Akileng et al. (2018). Financial education and financial innovation were identified to be among the top elements that can influence the financial inclusion of diverse households, according to the study. Similarly, Uddin et al. (2017) investigated the factors that influence financial inclusion in Bangladesh. After categorizing the causes of financial inclusion into two main categories, bank-specific factors and macroeconomic factors, the results were presented. On the supply side, the size of a bank, its efficiency, and the interest rate charged all have a direct impact on financial inclusion, according to the study. On the other hand, the literacy rate was positively connected to financial inclusion on the demand side, while the age dependence ratio was negatively related to financial inclusion. Furthermore, a quantile regression study revealed that a bank's size has a considerable impact on deposit collecting as well as loans and advances disbursements.

The significance of local institutions for farmers' access to financial markets has been shown in numerous research. The level of financial institution penetration in rural areas is typically found to be connected to participation in formal financial markets. Kiiza and Pederson (2001) in Uganda, Oboh and Kushwaha (2009) in Nigeria, and Shah et al. (2008) in Pakistan, for example, imply that

proximity to a financial institution is a crucial factor influencing a rural household's engagement in the formal financial market, such as formal credit programs. Access to agricultural extension services has also been documented in studies such as Yehuala (2008) in Ethiopia. In addition, several of the researchers listed below investigated financial participation using diverse models that focused on different groups of individuals.

5. Methodology and Data Collection

The research was carried out in Zimbabwe. To obtain quantitative data for the study, a systematic questionnaire was created. The "North-West University's Education, Management and Economic Sciences, Law, Theology, Engineering and Natural Sciences Research Ethics Committee approved a structured questionnaire that was utilized in the study (NWU-EMELTEN-REC). NWU-00354-19-2A is the university's number for ethics approval. The Ministry of Lands, Agriculture, Water, Climate, and Rural Resettlement in Zimbabwe also gave their approval to the research". Farm homes, both male and female-headed, were the primary data sources. The study's agricultural homes were chosen using a multistage simple random sampling process. Before the survey, the sample unit was a household head who was a farmer who either engaged in the official financial market or did not. Data was collected from a sample of 400 small scale agricultural homes.

5.1 Model Specification

Financial engagement in the formal financial market was the dependent variable. The variable was defined as "If the respondent participated in or used any of the services provided by formal financial institutions, the variable was set to 1; otherwise, it was set to 0".

5.2 Variables

The independent variables include "Education Level, Gender of the household head, Age of the household head, household size, Off-farm Income, Land Size, Informal credit participation, Agricultural Extension Service, Distance from the nearest financial institution, and Transaction costs were among the independent factors".

Table 1: Table of Variables to be Included in the Logit Regression

Independent Variables	Unit	Expected sign
Education level	Number	+
Gender	Dummy variable where 1 is male and 0 otherwise	+/-
Age	Number of years	+/-
Household size	Number of people in the household	+/-
Off-farm income	Measures in US\$	+/-
Size of Land	Number of Hectors	+
Informal financial market participation	When a household participates the variable will be 1 and 0 otherwise.	-
Extension service	Participation = 1 Non-Participation = 0	+/-
Cost of Transaction	Cost in US\$	+/-
Distance	Number of kilometres	+/-

Source: Author's Analysis

5.3 The Logistic Regression Model

The dependent variable is dichotomous in this example, conditional probability models were used. As a result, the study applied logit regression, which is described as a model used to approximate the probability of a specific event using a variety of independent variables (Breen et al., 2018). Because of the nature of the variables under examination, this methodology was deemed appropriate. The model also offers the authors reliable, non-biased estimations (Alzen et al 2017). The “logit regression model has been used by several researchers, including Kitila (2019), Mhlanga and Garidzirai (2020), and Dunga (2019)”. The logit model, according to these authors, is simple to use, efficient and provides an accurate approximation of the relationship's direction. The logit model's equation converts the log-odds of success into a linear component, as seen below:

$$\log\left(\frac{\pi_i}{1-\pi_i}\right) = \sum_{k=0}^K x_{ik} \beta_k \quad i = 1, 2, \dots, N \tag{1}$$

In equation one, “to find parameters where the probability of the observed data is the greatest, we employ the maximum likelihood estimation. To proceed with the estimation of the logit model, the first thing is to state the probability” that $Y = 1$. “probability that $Y = 0$ is written as $1 - \hat{P}$. Where \hat{P} is the probability $Y = 1$ and $Y = 0$ only show whether the household has access to formal financial services or not? $Y = 1$ when a household has access to formal financial services and $Y = 0$ when a household does not have access to formal financial services”. The following equation will result because of this:

$$\ln\left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 X \tag{2}$$

The equation is calculated as follows to get the expected chance that $Y=1$ for all values of X :

$$\hat{P} = \frac{\exp(\beta_0 + \beta_1 X)}{1 + \exp(\beta_0 + \beta_1 X)} = \frac{e^{\beta_0 + \beta_1 X}}{1 + e^{\beta_0 + \beta_1 X}} \tag{3}$$

The model will be expressed as follows, with the variables serving as factors impacting demand for formal financial services:

$$\ln\left(\frac{P}{1-P}\right) = \beta_0 + \sum_i^n \phi_i + \sum_j^n \phi_j + \varepsilon \tag{4}$$

All the components in the model are represented in Equation 4, are represented as $\sum_i^n \phi_i$ and all of the covariates are shown as $\sum_j^n \phi_j$.

When Z is substituted for X in the previous equation, the equation becomes:

$$Z = \beta_0 + \phi_1 \text{Education level} + \phi_2 \text{Age} + \phi_3 \text{Household size} + \phi_3 \text{Off-farm Income} + \phi_4 \text{Gender} + \phi_5 \text{Land size} + \phi_6 \text{Informal credit participation} + \phi_7 \text{Agricultural extension service} + \phi_8 \text{Distance from the nearest financial institution} + \phi_{10} \text{Transaction costs} + \varepsilon \tag{5}$$

6. Results and Discussion

Table 2: Gender distribution of the study

Study's gender distribution		
Gender of the Household Head	Frequency	Percentage
Male	233	58 %
Female	167	42 %
Total	400	100

Source: Author's Analysis

Table 3: Access to formal financial services in the sample

Access to formal financial services		
Variable (Access/No access)	Number	Percentage
Access	112	28%

Access to formal financial services		
No access	260	65%
Do not Know	15	3%
Unspecified	16	4%

Source: Author's Analysis

6.1 Logit Regression of the Factors Influencing Farmers' Formal Financial Market Participation

The estimated results from the logistic model are presented in the table below. The findings reveal the likelihood of formal financial market participation. Participating in the informal financial market, agricultural extension service, education, transaction costs, land size, and off-farm income were all significant explanatory variables, according to the logistic regression model's maximum likelihood estimates. The logit coefficients are function coefficients that do not correlate to average partial effects and are expressed in logit index changes.

6.2 Logit Regression: Farmers' Formal Financial Market Participation

Table 4:

Variable	B	S.E.	Wald	Df	Sig	Exp(B)
Level of Education	0.971168	0.394227	72.539	1	0.471	2.694
Gender	2.248842	0.7678771	31.354	1	0.018**	1.694
Age	0.9737718	0.0146174	12.946	1	0.077*	8.085
Size of Household	0.9924835	0.0344692	29.434	1	0.828	46.784
Off-farm Income (1)	1.001139	0.0008127	10.332	1	0.161	1.242
Size of Land	1.028258	0.0165214	20.790	1	0.083*	1.010
Informal financial market participation (1)	0.9759731	0.3391763	.004	1	0.944	1.000
Agricultural extension service (1)	0.5340236	0.1907183	36.516	1	0.079*	1.105
Distance	1.00325	0.0075127	35.052	1	0.065*	1.823
Transaction costs	0.9346634	0.0841941	36.002	1	0.053*	1.634
CONST	1.301	.102	25.006	1	0.022**	6.823

***, **, *Represent level of significance at 1%, 5% and 10%, respectively

Omnibus Tests of Model Coefficients, Chi-square Step 1 Step 3975.796, Block 3975.796, Model 3975.796, df 7, Sig. .000.
Model Summary, Step-2 Log-likelihood 18929.507a Cox & Snell R Square 0.174, Nagelkerke R Square 0.260.

The model was examined for “heteroscedasticity and multicollinearity, and the results of the Breusch Pagan/Cook-Weisberg test and the Pearson correlation coefficient showed that there were no problems with heteroscedasticity and multicollinearity”. The findings of the logit model revealed that “gender, age of the household head, land size, agricultural extension service, distance to the nearest financial institution, and transaction costs” were all significant factors influencing smallholder farmers' financial participation in the formal financial market. With a P-value of 0.065 and an odds ratio of 1.823, distance to the nearest financial institution was statistically significant at 10 percent. The study's a priori predictions are supported by these findings. The distance to the nearest financial institution might affect financial participation in either a favourable or negative way. The findings suggest that when financial institutions are close to people, they are more likely to join informal financial organizations. Another variable that was significant at the 10 percent level of significance was transaction costs. This variable can either stimulate or demotivate households to join the formal financial market, especially if the cost is high. The P-value for variable transaction costs was 0.053 and the odds ratio was 1.634. As a result, it is critical to guarantee that transaction costs are affordable to households for them to be able to buy the services necessary to boost their financial involvement. The variable of agricultural extension service is positive and significant at the 10 percent level of

significance, as seen in the table above. This means that households who receive technical guidance from agricultural extension agents are more likely to use formal financial markets, as evidenced by a significantly positive coefficient. The possibility of respondents joining the formal financial market would increase if agricultural extension services were expanded.

This is especially true when agricultural extension workers push farmers to employ modern technologies such as enhanced seed varieties, herbicides, and fertilizers, all of which cost more money. Farmers will be forced to open bank accounts to access credit requirements, resulting in participation in the official financial sector. Participation in the formal financial market is positively associated with the land size. At the ten percent level of significance, the coefficient is statistically significant. This research indicates that as respondents' land holdings grow larger, their possibility or probability of participating in the formal financial market grows. This is true in the sense that land size can be used as a proxy for the scale of activity, and lenders can use it to assess the farmer's predicted income and, hence earning capability. Farmers with big farm sizes are likely to use formal financial services more frequently, as it affects savings and credit. The age of the household has a favourable and considerable impact on formal financial market participation. At the ten percent threshold of significance, the coefficient is positive and significant. This means that the likelihood of a farmer participating informal financial markets grows as he or she gets older. This was reinforced by Li et al. (2007), who claimed that older persons have more expertise with the financed economic activity, which increases their trust in lenders. Young people, on the other hand, need more financial services such as formal loans because their wealth is still little, and they need more money to create more wealth, according to Li et al. (2007). In this regard, young individuals are more likely to use more informal financial services. The household head's gender is both positive and statistically significant, meaning that it enhances the likelihood of small-scale farmers participating informal financial institutions. This is consistent with the fact that female farmers are less likely to use saving, credit, and money transfer services, according to Bacon (2005), who stated that financial, economic, cultural, political, and legal barriers affect female farmers' demand for financial services in the individual, household, and larger community, and national contexts.

7. Conclusion

Small-scale farmers' financial participation enhances output while also breaking the poverty cycle by improving living conditions. Because it is a critical part of the agriculture sector's commercialization and the modernisation of the rural economy, many policymakers consider it a crucial input for growing agricultural production. Financial participation is a critical component in agriculture's ability to grow significantly. Despite the creation of a broad network of financial institutions in towns and growth centres, small-scale farmers' financial engagement in many rural families remains a worry in Zimbabwe. The factors that influence smallholder farmers' participation in Zimbabwe's formal financial markets are examined in this study. The Binary Logit model was used to assess the factors that affect smallholder farmers' participation in informal financial markets. The logit model revealed that "gender, household head age, land size, and agricultural extension service" were the most important factors impacting smallholder farmers' financial engagement. As a result, the government should place a high priority on initiatives aimed at increasing the amount of land available to small-scale farmers so that they can market their operations. Support for agricultural extension programs aimed at improving farmer training and "doubling efforts to ensure that the age distribution of farms" is balanced between the young and the old, as age influences formal financial market participation.

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