UNIVERSITY OF CAPE COAST

INVESTMENT STRATEGIES OF RURAL HOUSEHOLDS IN SMALL-SCALE MINING COMMUNITIES IN WASSA AMENFI WEST MUNICIPALITY

GAYLE SALOME STEADMAN-AMISSAH

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BY

GAYLE SALOME STEADMAN-AMISSAH

Thesis submitted to the Department of Vocational and Technical Education of the Faculty of Science and Technology, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy degree in Home Economics Education

MAY 2024

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature……. Date……

Name: Gayle Salome Steadman-Amissah

Supervisor's declaration

I hereby declare that the preparation and presentation of this thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature…… Date ……

Name: Prof. Augustina Araba Amissah

ABSTRACT

This study investigated the investment strategies of rural households in small-scale mining communities in the Wassa Amenfi West Municipality of Ghana. It aimed to analyse investment strategies used by households, determine their involvement, identify factors affecting investment, compare investment levels among age groups, and analyse the impact of age, family size, and income. The study employed a cross-sectional survey design and used multistage sampling to select 314 household heads from three rural small-scale mining communities. With positivism as the research philosophy, questionnaires and structured interview schedules were used to collect data, which was analysed using descriptive statistics, t-tests, and multiple logistic regression analysis. The results showed that the main forms of investment used by rural households were savings, and real estate. The study also found that most households were not fully involved in investment due to low-income levels and large family sizes. The study found out that age, income, and family size significantly affect households' investment engagement, whereas risk tolerance, investing knowledge, and service accessibility have a substantial impact. It was suggested that enhancing financial literacy, offering accessible investment services, and implementing income-boosting policies could boost investment in rural small-scale mining communities. The study recommended promoting financial literacy, assisting rural communities in informed investment decisions, encouraging diversified investments, budgeting practices, and integrating practical financial planning modules into Home Economics curricula.

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CHAPTER ONE

INTRODUCTION

Background to the Study

The household; a house and its occupants; also used to refer to any group of people who are related to one another by blood, marriage, or adoption and who live together, share resources, and have similar duties like producing and consuming food (Tillman & Nam, 2008). The household is the most influential group known for promoting financial behaviours of individuals (Amu & Amu, 2012). Households and families are basic units of analysis in demography. However, the difference between these two is that household consists of individuals who may not be necessarily related but live in a single residence, pool resources together and share common domestic responsibilities. Whereas a family is a group of people connected by birth, marriage, adoption, or other legal or blood ties (Hoover, n.d.).

Decision-makers in a family make all financial decisions, including savings and investments, ensuring monetary security for families, regardless of social, political, financial, and environmental settings. (Little et al., 2016). Despite societal changes, families worldwide continue to provide financial assistance for their members' advancement. In developing countries like Ghana, the focus has shifted from immediate needs to prudent long-term financial security (Amu, 2008). According to Mani, Mullainathan and Shafir (2013), poverty can hinder financial decision-making, as people's beliefs, knowledge, and hopes for future economic events influence investment decisions.

Investment is crucial for financial security and development, but decisions depend on understanding and analysing various strategies, determining the most suitable for individual or household needs. The World Bank as reported by Beegle, Christiaensen, Dabalen and Gaddis (2016) indicated that between 1990 and 2012, the percentage of people living on less than $1.90 per day decreased from 56% to 43% in Africa, but population growth increased the number of poor people by over 100 million. Per this information, people in Ghana are living on as little as GH₵11.50, raising questions about their savings and investment capabilities.

Ghana faces significant challenges in saving and investment due to low income, high dependency, low economic growth, and illiteracy among the population. (Bidisha, Abdullah, Sddiqua & Islam, 2019). Nyarko (2014) identifies that almost 90 percent of Ghana's rural residents are poor, and this results in minimal domestic investment as compared to her neighbouring countries. Studies indicate that between 1980 and 2010, saving; a financial decision for wealth creation averaged 37.4 percent in Botswana being the highest, 21.6 percent in Nigeria, 21.4 percent in Cameroon, 13.9 percent in Kenya, 7.3 percent in Malawi, with Ghana recording the least average percentage 6.4 percent (Fenta, Dessie, Mitku & Muluneh, 2017).

Typically, in Ghana about 43.3 percent of the total population of about 30 million people are rural dwellers (Ghana Statistical Services [GSS], 2021). According to Baddianaah, Baatuuwie and Adongo (2022), artisanal and small-scale mining (ASM) activities are prevalent in 80–90 percent, 40–60 percent, and less than 10 percent of low-income, middle-income, and high-income nations, respectively. Activities linked to ASM are closely associated with

nations where poverty is pervasive. Assessing ASM's contribution to national economy is challenging due to negative repercussions, but it remains a secure employment option for youth in these regions. (Baddianaah, Baatuuwie & Adongo, 2022).

Poor investment in rural regions, where mining is the primary income source is influenced by economic, political, individual, and family factors, including available funds, location, potential, and return level (Zorklui & Barbie, 2003). A household can increase investment opportunities by generating excess income after meeting basic needs, using the permanent portion for living expenses and the transitory share for investments and savings. (Mensahklo, Kornu & Dom, 2017). This means that to be able to invest, a household or individual must have provided for basic needs.

Rural households in Wassa Amenfi West Municipality, primarily smallholder farmers and miners, may lack investment knowledge due to sociodemographic factors and family needs. In every right way, education dissemination of best investment practices, and banking services could help.

Statement of the Problem

Ghana has made remarkable strides since the mid-1980s despite the fact that financial constraints are limiting the rate of growth, and is likely one of the greatest performers in Africa (Aryeetey & Baah-Boateng, 2015). Small-scale miners in Ghana's rural areas face limited resources for producing gold or other crucial minerals. (Aryee, Ntibery & Atorkui, 2003).

Relatively low earnings associated with small-scale mining led to little or no savings or investment (Nyambe & Amunkete, 2009). Savings and investment are crucial for economic growth, but despite their importance,

savings among rural dwellers worldwide are often low (Ribaj & Mexhuani, 2021).

In Ghana, several research studies have been performed on investment behaviour both in rural and urban communities (Amu, 2008; Tetteh, 2019), and savings and investment (Kodom, 2013; Haruna, 2011; Osei, 2011). Other studies focusing on financial literacy (Kafari, 2019; Bottey, 2018) highlighted the significance of financial literacy in pension investment but did not consider the investment strategies of rural households.

The researcher observed the lack of financial intermediaries in rural Wassa Amenfi West Municipality, raising questions about whether households invest in their future. If they do, what kind of investment strategies do they employ? In light of this, the current investigation aimed to investigate the investment strategies of rural households in small-scale mining communities in Wassa Amenfi West Municipality.

Purpose of the Study

The purpose of this study was to investigate investment strategies used by rural households in small-scale mining communities in Wassa Amenfi West Municipality. Specifically, the study sought to investigate the forms of investment; level of knowledge on investment; factors affecting investment and households' perspective on the effect of level of income and family size on investment.

Objectives of the Study

The study sought to;

1. describe the investment strategies used by households.
2. find out if households are fully involved in investment.

3. investigate factors affecting heads of households' engagement in investment.

Research Hypotheses

In order to find answers to issues raised in the objectives of the study, the following hypotheses have been formulated for the study.

$H_0$1: There is no statistically significant difference in the level of investment among young adults (18-35 years) and middle aged (36-50 years) heads of households.

$H_0$2: There is no statistically significant impact of age, family size and level of income on investment of heads of households.

Significance of the Study

Investment is vital for good financial management since it guarantees both present and future monetary security. This is arrived at by projecting into the future, anticipating expenses and accomplishing individual financial objectives. Below is a discussion of the study's significance:

1. The study findings will enhance understanding on how rural households in small-scale mining communities invest their resources can empower them economically. This knowledge can help these households make informed decisions to improve their financial stability and quality of life.
2. The findings can also contribute to the development of sustainable livelihoods in these communities. As the study unravels the forms of investment strategies employed by households in the study setting, it will make recommendations on proper investment strategies to help bring the ideals of proper investment to the doorsteps of rural dwellers

in Wassa Amenfi West Municipality and other rural areas. The recommendations will motivate them to venture more into investment as part of their financial security.

3. The findings of the study could also enable the redirection of government and donor organizations on rural poverty reduction in Ghana. Financial institution could take advantage of the conclusions and recommendations of the study to tailor investment policies that suit the needs of rural dwellers and people of low socioeconomic standing.
4. The findings of the study will benefit those in academia as well, as they will expand the repertoire of knowledge already available on investments in general and investment methods of rural dwellers.
5. Finally, the findings from this study in Home Economics Education can promote financial literacy. This knowledge can help individuals make better financial decisions, save for the future, and protect themselves against financial risks.

Delimitation

This study focused on investment strategies of rural households in small-scale mining communities in Wassa Amenfi West Municipality. Variables such as investment strategies used by small-scale mining households' heads, level of knowledge on investment, and factors affecting engagement in investment. The Municipality is made up of larger towns or urban centres and smaller towns/rural areas but the study only focused on small-scale mining rural areas (Samreboi Nkwanta, Oda Ahwiam and Odumase) as the main study setting. Thus, no data collection exercise was

conducted in the Municipality capital and other urban Centres in the Municipality.

Limitations

This study had limitations due to the data collection instrument used, the structured interview schedule, which was conducted in English. Since the study area was a rural area, some of the families were illiterate and unable to read, write or speak English language. Therefore, it was necessary to translate the items into their native tongue (Twi) so that they could comprehend the requirements and give proper responses. The original meaning of some of the questions and responses might have been changed during the process of translating them from English to Twi and translating the responses from Twi back to English. This presented a risk to the overall validity of the outcome. Field assistants received extensive training in order to translate items accurately while responding to respondents' answers with full knowledge of different methods for accurate translation.

Another significant limitation was the fact that some heads of households declined to take part in the study. Convincing respondents that the study was purely academic in nature and unrelated to politics took a lot of work. This was because respondents thought the researcher was taking the data from them for political propaganda as the general elections of Ghana was approaching. Some respondents who were convinced to participate in the study were hard to reach since they had to go about their various socio-economic activities. Other participants who agreed to partake in the study provided incomplete and socially desirable answers, which might undermine

the study's validity. There are other participants who did not turn in their responded questionnaires.

Definition of Terms

Investment: Investment is placing money into businesses or assets that have the potential to appreciate in value.

Household: Household refers to a person or a group of two or more persons (related or unrelated) who live together, share housekeeping arrangements (eating and sleeping) and recognize one person as the head (GSS, 2021).

Head of family: this refers to the individual responsible for providing the majority of the family's income and maintaining the home.

Organisation of the Study

The study was organised into five chapters. Chapter One covered the Background to the study, Statement of the problem, significance and objectives of the study. Chapter Two reviewed related literature on investment and investment strategies, which included an empirical framework and a conceptual frame work forming the basis of the study. Chapter Three threw light on the methods which were used to execute the study. It covered research design, study area, study population, sample and sampling technique/procedure, data collection instrument and data analysis procedures. Chapter Four presented findings of the study and discussed the findings while Chapter Five which is the final chapter presented summary, conclusions and recommendations based on the study findings.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The literature on rural households' investment strategies was evaluated in this chapter. The history of small-scale mining in Ghana, theories of investment, empirical reviews on investment, and the conceptual framework of the study were all covered in the literature review. Information for the study was acquired from sources including articles, journals, books, reports, and other reliable online sources.

Historical Overview of Mining Communities in Ghana

Pre-colonial mining is still a largely unexplored topic in the extensive and growing literature on the economic history and ethnography of West African communities. Gold mining is considered as one of the main activities of the people in the majority of the traditional European texts on the history of the Akan region of Ghana. According to these reports, gold was formerly quite accessible on the surface in practically all of Ghana's auriferous Akan nations. The gold mining industry played a major role in the pre-colonial economies of numerous Akan nations, including Wassa, Denkyira, Akyem, and Asante. Oral traditions and early Dutch and English sources often describe Ahanta, Aowin, Nzema (Apollonia), Sefwi, Assin, Twifo, and, to a lesser extent, Kwahu, as having abundant gold reserves. Lots of gold continued to be discovered in Bono Takyiman, Banda, Gyaman, and other parts of Bono Ahafo and the Northern region (Dumett & Schildkrout, 1987).

For a general overview, some data from each of the main Akan mining states are included in this study on indigenous mining techniques. The focus

will be primarily on the preservation of traditional mining practices in Wassa, Akyem Abuakwa, and Obuasi within Adanse, which is currently a part of Asante, in spite of the advent of contemporary mining methods. This article's main claim is that, contrary to expectations that it would have perished under the onslaught of contemporary mechanized companies, traditional or pre-colonial gold mining has persevered and maintained its vigour in the face of the existence of large multinational mining companies such as AngloGold Ashanti, Newmont Ghana Gold Company Limited, Goldfields Ghana Limited, and Bogoso Goldfields.

Theoretical Review

The theoretical framework for this study examines the relationship between the independent variables—age, family size, and income level—and the dependent variable, investment strategies. The following theories provide the basis for understanding these relationships.

Life Cycle Hypothesis (LCH)

The Life Cycle Hypothesis (LCH), propounded by M. Franco Modigliani and his student Richard Brumberg in 1954, describes how people base their financial choices on their lifetime consumption requirements and anticipated income (Martini & Spataro, 2024). In line with the theory, investment techniques are significantly influenced by age. To build wealth, younger people typically invest in high-risk, high-return options like entrepreneurial ventures. On the other hand, older individuals prioritise safer investments like real estate and savings to preserve accumulated wealth and prepare for retirement (Finger, (n.d.). Rural mining communities experience inconsistent mining income which affects both financial resources and literacy

of people based on their age. The household division of profits for investment activities might be affected by age-related factors.

However, critics contend that the LCH ignores liquidity constraints, which are common in low-income, rural areas, and makes the assumption that lifetime earnings can be predicted with perfect accuracy. This drawback emphasises how crucial it is to modify the theory when examining rural households in unstable economic conditions (Hayes, 2024).

Behavioural Finance

This theory is a field of study that blends psychology and finance to understand how emotional, cognitive, and social factors influence investors' decisions. Daniel Kahneman and Amos Tversky introduced behavioural finance in 1979 (Illiashenko, 2017). Unlike traditional finance theories like the Efficient Market Hypothesis (EMH), which assume rational behaviour and efficient markets, behavioural finance acknowledges that human behaviour frequently deviates from rationality, leading to less-than-ideal financial decisions (Hammond, 2015). The reason behavioural finance exists is because not everyone can have and invest in the same amount of knowledge; everyone will read and perceive things differently, and they will all have different perspectives on what they see.

This theory is especially pertinent to comprehending how family size affects investment tactics. Larger families could find it somewhat difficult to handle their money, especially with relation to investing. Usually having more dependents to support, these families have to spend more on consumption and have less money for investing. Since real assets like gold or land are thought to be less volatile and more stable than financial markets, larger families are

more inclined to be conservative with their money and invest in them. This provides them a sense of security and helps them minimise losses (Geetha and Ramesh, 2012). Behavioural biases, including loss aversion, significantly influence the financial decisions of larger families. Families that have many dependents demonstrate risk aversion since they fear that financial losses could compromise the welfare of their family. This fear drives a demand for more cautious investment options than riskier assets, such equities or mutual funds. (AlMansour, Elkrghli & Almansour, 2023; Shunmugasundaram & Sunha, 2024).

The herding tendency significantly influences investment decisions in resource-dependent societies. In the absence of formal financial education, individuals may depend on peer investment choices or informal advice, potentially resulting in a scenario where numerous community members invest in identical assets, frequently without a comprehensive understanding of the associated risks. Herding behaviour—that is, the inclination to copy the financial decisions made by peers in a community—is discussed (Shah & Hussain, 2024).

Larger families face different financial difficulties that call for a more cautious attitude to investing. In resource-dependent nations, behavioural biases such herd mentality and loss aversion greatly influence investment decisions; often this results in a preference for tangible assets rather than more volatile financial markets.

Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB) was developed by Icek Ajzen as an attempt to predict human behaviour (Ajzen, 1991). The TPB posits that

attitude toward the behaviour, subjective norm, and perceived behavioural control influence behavioural intention. According to Ajzen (1991) the TPB has three major elements impact decision-making:

1. Attitudes: A person's favourable or unfavourable sentiments on a specific investment or behaviour.
2. Subjective norms: Perceived social pressure to adopt a specific behaviour or investing strategy based on other people's beliefs and behaviours.
3. Perceived behavioural control: A person's apparent capacity to manage their money and make investing choices.

Studies by Do, Vu,Vu, Nguyen & Tran (2024); Christie (2019) posit that Perceived behavioural control over financial resources is significantly influenced by income level. Higher-income households are more likely to feel in control of their financial resources, which allows them to: invest in a variety of ways, such as buying financial products or making long-term investments; and take measured risks and think about investments that might yield higher returns but also carry a higher degree of uncertainty. Conversely, low-income households often prioritise meeting their current needs above making financial decisions impacting their future. This could lead people to prioritise short-term financial goals—such as covering bills or supporting living expenditures—above long-term investments—such as those related to payment or support of living expenses (Do, Vu, Vu, Nguyen & Tran, 2024; Christie, 2019).

Investment habits can also be influenced by the Attitudes and Norms of mining communities (Laheri, Lim, Arya & Kumar, 2024; Judge, Warren-Myers & Paladino, 2019). For instance:

- Investment decisions may be influenced more by cultural focus on accumulating material things, such as gold, than by perceived diversification or profitability.
- Social norms about financial decisions could cause people to choose conventional or safe investments instead of more creative or high-risk ones.
- Influential people or leaders of communities may support specific investment products or strategies, therefore influencing the financial choices of other members of society.

The concept of planned behaviour helps to clearly show how complexly attitudes, subjective standards, and perceived behavioural control interact to guide investment decisions. Knowing these elements would help legislators and financial educators in mining communities create more successful legislation to improve financial inclusion and maximise investment returns.

Empirical Review

Investment Strategies Adopted by Rural Households and Small-Scale Miners

Income Diversification: Researches by Okoh & Hilson, (2011); Huntington & Marple-Cantrell, (2022), show that rural households in mining communities often invest in income diversification to mitigate the risks associated with mining. This covers small businesses, farming, as well as animal rearing. Studies in Ghana and Tanzania, for example, show that households purchase land or increase their farming operations using mining earnings (Hilson, 2016).

Agricultural Investments: Despite the challenges posed by mining, agriculture remains a significant investment area. According to Reardon et al., (1998); Giller et al., (2021), mining income is often reinvested into agricultural production, including purchasing inputs like seeds, fertilizers, and machinery, or expanding landholdings. In certain communities within Ghana and Malawi, a noteworthy phenomenon was observed. More especially, homes in these places make use of the money brought in from mining operations (Hilson, 2016).

These households divide the mining profits towards increasing their agricultural output. This calculated risk helped them to raise agricultural output. Households using channelling mining income into their agricultural activities employ more sophisticated farming methods, get better equipment, and buy premium seeds. Improving food security and higher crop yields follow from this as well. Also, there is diversification into cattle farming. The extra money generated by mining operations enabled people to extend their agricultural interests into animal farming. Apart from improving their general food security and nutrition, this diversification offers a more consistent source of revenue. Research by Hilson (2016), which emphasised the beneficial effects of mining profits on agricultural development in these areas, lends credence to this information.

Human Capital Investment: A significant portion of mining income is directed towards education and skills training for households, a strategy increasingly emphasized in recent literature on sustainable development and resource-based economies (Hilson et al., 2017). Governments and mining communities seek to lessen the "resource curse"—a condition in which

resource-rich nations suffer from constrained long-term economic growth as a result of an excessive reliance on extractive industries—by allocating profits to the development of human capital (Auty, 1998; Ross, 2012). This strategy invests in the future employability and resilience of communities, therefore matching the ideas of sustainable development. For example, Kamphambale, Morales, MacMahon & Coetzer (2022) underlined that, if reinvested wisely in education and vocational training, resource richness can be a driver of economic diversification. These initiatives provide younger generations with skills that are transferable across industries, thereby reducing dependence on finite mining operations. Some studies reinforced this perspective: programmes funded by mining revenues in Botswana and Chile have focused on STEM education, technical training, and entrepreneurial skills (Ruhil, 2018). Mining corporations like Antamina in Peru donate a part of their profits to initiatives targeted at education in rural areas, so raising the literacy rates and access to higher education (Aragón & Rud, 2013).

Furthermore, indicated by a 2014 study by McMahon and Moreira underlined how educational investments in mining communities could support small businesses, creativity, and sectors unrelated to mining. These results are especially significant as declining mining reserves guarantee that surrounding businesses stay profitable and sustainable well beyond the lifetime of mining operations.

In conclusion, redirecting mining income towards education and skills training represents a forward-looking strategy. It not only empowers households but also strengthens national economies by reducing reliance on mining and promoting sustainable economic diversification.

Savings and Financial Investments: Rural households and miners still mostly rely on savings in either official or unofficial financial institutions (Yaro et al., 2020). Funding for emergencies or livelihood development depends critically on credit unions and local savings clubs. Rural households in Ho Municipality in Amu (2008) have little awareness of savings; yet, they save under mutual support organisations and susu. Financial systems greatly help rural communities to keep their economic stability. Local credit unions are increasingly vital in areas where traditional banking facilities are sparse since they ensure access to fairly priced finance and encourage small-scale investments.

Asset Acquisition: Many rural homes give purchasing assets like land, house, or durable goods first priority since these investments offer both instant and long-term financial stability. Particularly housing is seen as a vital financial asset protecting against inflation and economic shocks as well as a need (Aryee et al., 2003; Moser, 2008; Sherraden & McBride, 2010). Many rural homes give purchasing assets like land, house, or durable goods first priority since these investments offer both instant and long-term financial stability. Particularly housing is seen as a vital financial asset protecting against inflation and economic shocks as well as a need (Aryee et al., 2003; Moser, 2008; Sherraden & McBride, 2010). Homes sometimes gravitate towards physical assets like real estate or durable items, which can act as hedges and present potential for rental income or resale gains, during times of economic uncertainty or too high inflation (Huseynzade, 2023). Durable items like appliances and cars, particularly in recessionary times when people reduce

unneeded expenditure to support financial stability, are also regarded to be crucial for preserving a constant level of living.

Recent research by Lin (2011) has shown that a mix of structural issues has caused the prioritising of such investments to become more extreme. Rising interest rates combined with supply restrictions and post-pandemic changes in housing demand have resulted in an affordability crisis worldwide (Malpezzi, 2023). This has driven homes to protect assets early in order to prevent future price hikes. Moreover, economic models show that families are more likely to change their durable asset levels when their desired living standards or financial objectives deviate greatly. This attitude emphasises the part these investments play in controlling household economic resilience.

Gold as Savings: Gold's liquidity and universal worth help it to be both a means of savings and an investment instrument in small-scale mining communities. Many times, keeping some of their gold output, miners use it as a kind of financial safety (O'Connor et al., 2015). Particularly in areas where official banking systems are either non-existent or underused, this technique helps people control financial needs during crises or periods of economic uncertain. During periods of financial need, miners may sell their retained gold to cover expenses, thereby providing them with a reliable financial safety net. Hilson and McQuilken (2014) highlighted how this system offers a form of financial resilience, especially in rural and informal economies where mining is a dominant livelihood strategy. Gold's position as an investment tool is further supported by the fact that small-scale miners frequently see it as a hedge against inflation and unstable economies. This emphasises the vital socioeconomic significance that artisanal gold mining plays in local banking

systems, going beyond simple production (Hilson, 2002; Ofosu, Dittman, Sarpong & Botchie, 2020).

Comparative Analysis of Investment Behaviours in Rural and Urban Households

Due to differences in income levels, access to financial services, and exposure to financial literacy, rural and urban households exhibit quite different investment behaviours. Better access to formal financial institutions, investment platforms, and financial education is generally advantageous for urban households. On the other hand, rural households—particularly those in mining-dependent areas—face difficulties like inconsistent incomes, restricted credit availability, and a lack of varied investment possibilities (Hastings, Madrian & Skimmyhorn, 2013 and Sonowal, Acharjee, Dutta, & Choudhury, 2023).

In Ghana, there exists a significant disparity in the savings and investment habits of rural and urban communities. Research conducted by Amu (2008) and Nyarko (2014) revealed that rural communities in Ghana often rely on informal savings methods, such as "susu" groups or cooperative savings. These informal savings mechanisms are preferred due to the limited availability of formal banking institutions in rural areas. Ghanaian urban dwellers, on the other hand, typically make investments in more formal financial assets like stocks and mutual funds. The higher accessibility of formal banking institutions and financial markets in metropolitan areas can be ascribed to this disparity in investment behaviour.

Furthermore, rural households in Ghana tend to place a larger value on tangible assets like gold and land, according to study by Hilson and

McQuilken (2014). Because they provide immediate financial security and act as an inflation buffer, these assets are favoured. Tangible assets offer a sense of stability and security in rural locations with limited access to formal financial institutions. All things considered, the disparities in saving and investing practices between Ghanaian rural and urban populations underscore the necessity of tailored financial inclusion plans that consider the unique demands and circumstance of every community.

Factors Affecting Engagement in Investment

Kim, Hanna and Ying (2021) studied the relationship between investors age and risk tolerance of investors. They drew the conclusion that with the increase in age, there was increase in risk tolerance. The households who were not retired in their case the wealth proportion increased with age. Harris and Jenkins (2006) studied the gender difference in risk assessment. They observed that women did not indulge in the activities, which involve risk such as gambling, and recreation but the there was no difference in gender and social risks. Ajmi (2008) suggested the various determinants of investors risk tolerance in Bahrain. In his opinion, men can assume more risk than women.

Investors with higher educational levels take on more risk than those with less education. When the investors reached retirement age, their risk tolerance decreased. Bahrainis were less risk tolerant than non-Bahrainis. Wang (2009) did a study to discover the relation between the knowledge of male and female and risk-taking behaviour. They concluded that all the three variables were highly correlated and there was correlation between objective know, subjective knowledge and risk taking.

They also noted that female investors took fewer risks and possessed less objective and subjective information than male investors. Subjective knowledge of investors served as a bridge between objective knowledge and taking risks. Lin (2009) examined the relationship between the households' background risk and risk aversion. They came to the conclusion that whereas households with lower levels of education had higher levels of ARA, families over 40 years were less risk averse. They also came to the conclusion that affluent people were less willing to take risks. Compared to women, male households were less risk adverse.

Samiuddin, & Ahmad (n.d.) investigated how different demographic characteristics affected investors' risk tolerance. They came to the conclusion that there was a direct correlation between an investor's income and risk tolerance as well as an investor's education. Additionally, there was an indirect relationship between an investor's risk tolerance and their age, gender, and marital status. They also came to the conclusion that men were risk-takers and women were risk-averse.

Wong (2011) studied the relationship between investors' risk tolerance and several demographic characteristics in three distinct countries. He noticed that married persons were risk adverse and that there was a direct correlation between education and risk tolerance. Age and education were found to be significant indicators of Australian investors' risk tolerance. The United States respondents' risk tolerance differed according to their marital status, while the United Kingdom respondents revealed gender and wealth inequalities.

Chattopadhyay and Dasgupta (2015) studied the relationship between risk tolerance of investors and their demographic characteristics. They

discovered that there was inverse relation among the number of dependents, qualification of the respondents, and number of investments and investors risk tolerance level and there was direct relation among gender, marital status, and age and their risk tolerance level of investors. Thanki and Baser (2019) investigated the relationship between risk tolerance, demographic characteristics, and personality traits. He discovered that investors' risk tolerance and education did not correlate. Investors' risk tolerance and personality types correlated positively.

Kannadhasan, Aramvalarthan, Mitra and Goyal (2016) investigated how an investor's biological makeup and personality relate to their risk tolerance. The biopsychosocial variables were found to have a positive correlation with FRT. Research indicated that risk tolerance was higher among investors with Type A personalities, higher levels of sensation seeking, and self-esteem.

Kubilay and Bayrakdaroglu (2016) examined the relationship between the risk tolerance and personality traits of the investors. They also looked at the connection between the risk tolerance of the investors and their behavioural biases. They discovered a connection between the risk tolerance and personality attributes of the investors. The behavioural biases of investors and their risk tolerance were related.

Khan (2017) investigated the relationship between an investor's traits and risk tolerance. He discovered that extraversion, risk preference, inheritance, wealth transfers, or both, and average risk were key factors when it came to males and future investing prospects. Raheja and Dhiman (2017) studied the relationship between the risk tolerance of the investors and the

various personality traits. They found that there was positive relation among them. They concluded that there was relation between the neuroticism, conscientiousness and the risk tolerance.

Unique Challenges in Rural Mining Communities

Communities of small-scale miners encounter unique challenges that limit their capacity to make investments in profitable assets. The irregularity of their mining-related revenue is one of the main obstacles. Because they might not have a solid financial basis, people in these communities find it challenging to continuously save and invest due to this unpredictability (Hilson & McQuilken, 2014).

Furthermore, health risks and environmental deterioration are frequently linked to small-scale mining operations. Because people may need to set aside money to solve environmental and health difficulties, these unfavourable effects can take money away from profitable investments (Aryee et al., 2003). Communities may need to spend money on cleaning up polluted water sources, rehabilitating degraded lands, or providing medical care for miners affected by occupational hazards.

Small-scale mining communities' capacity to invest in profitable enterprises is weakened by a vicious cycle that combines inconsistent incomes with environmental and health issues. These can therefore hinder these communities' chances for economic development and prolong poverty (Hilson, 2010).

According to empirical research, households in rural mining regions typically devote a sizeable amount of their mining earnings to two important industries: human capital development and agriculture (Hilson et al., 2017).

The desire to diversify sources of income and generate long-term financial gains is perhaps what motivates this investment approach. Mining profits are frequently used to fund farming operations in the agricultural sector, such as procuring inputs, extending farmland, or making irrigation system investments. Increased agricultural output, better food security, and improved householder livelihoods are all possible outcomes of this (Suglo, Effah, Acheampong, Sunkari, & Yeboah, 2021).

Mining profits are frequently used to fund healthcare and education in the field of human capital development. Better health, better educational achievements, and more economic prospects for household members can result from this investment in human capital (Mejía, 2020). However, an over reliance on mining profits poses a serious risk to people in remote mining communities. These households may face lower income, financial instability, and a drop in economic well-being as mining production decline (Hilson, 2016). The necessity for households to diversify their sources of income and make investments in other industries, such agriculture and human capital development, is highlighted by this susceptibility.

Investment Strategies

Investment strategy is a collection of guidelines that an investor uses to choose their investment portfolio. The risk-return trade-off of the investor informs the strategy's design (Chen, 2022). Before making any investing selections, a carefully thought-out investment strategy is vital. Investment strategies are means through which an investor, given a particular risk tolerance level, might obtain the anticipated return.

Investment plans are used as a framework for creating and choosing investment portfolios at the organizational, industry, and market levels (Fama & French, 2012). According to Schoenfeld (2004), active strategies are those that focus solely on generating returns that are better than those of the financial markets. With market timing, an investor procures at lower prices and sells at higher prices, the tactics aim to maximize returns. This could also involve purchasing investment products at a discount and offloading them at a profit if market conditions change. This approach aims to outpace the market in order to surpass a specific yardstick. The investor actively monitors the activities of their investments as part of the active investment approach, utilizing any advantageous situations that may present themselves.

Active investing tactics include environmental, quantitative, technical, and fundamental examination. Developing strategies for active investment management involves making money off of momentary inefficiencies in the market. Most investors who employ this strategy do so in an attempt to make rapid profits. This strategy will be advantageous to major investors. The potential that the portfolio managers of an active investment will be able to surpass the index due to their superior abilities may be desirable. However, it has the potential to be more expensive due to the high fees and running costs brought on by constant monitoring (Fama, 1970).

Types of Investment Strategies

Aggressive Investment Strategy

These investors concentrate on short- to medium-term investments with big returns. They are prepared to take on more risk in order to get these

big rewards. Through swift modifications, they seek to outperform the market with their investment portfolio (Schoenfeld, 2004).

Value Investment Strategy

Value investors are betting on a surprising dark horse investment to strike it rich. They make investments only after thorough investigation and analysis of the business and its sector. They believe that once the market realizes the potential of the stock, the price will increase dramatically. Every now and then, these investors find a gold mine of a stock and benefit handsomely. This kind of investing should not be confused with impulsive investing, which occurs when a person acts without a defined plan or strategy and just acts on the basis of sensational information from questionable sources (Chen, 2022).

Moderate Risk Investment Strategy

When an investor chooses to invest with moderate risk, they try to lower the overall risk in their portfolio by holding a small number of dependable stocks. In the event that the markets decline, these offset the riskier stocks in their portfolio and shield them from losing money. Moderate investors typically experience lesser gains but more portfolio stability. They have some measure of protection from market volatility (Ferri & Lipari, 2019).

Conservative Investment Strategy

Investors that prefer reliable income to large gains at the expense of more risk engage in this type of investment. Many retirees choose a conservative approach to investing so they can avoid blowing their funds on hasty choices while still earning respectable returns to cover expenses. For

these individuals, blue chip stocks are the ideal alternative (Fama & French, 2012).

High Risk Averse Investment Strategy

Highly risk-averse investors are hesitant to make purchases even when the market is clearly in a bullish trend. They do not take advantage of stock market fluctuations because they are afraid of losing money. This extremely cautious approach is inappropriate for investing in stocks. Although these investors rarely lose money, they also do not gain a lot of money (Ferri & Lipari, 2019).

Contrarian/Momentum Investment Strategies

Contrarian/momentum investment strategies have been the subject of numerous published research. De Bondt and Thaler (1985) in Ni, Liao, and Huang (2015) conducted the first and most significant study on the contrarian investment strategy. They discovered that, the U.S. equities that had produced the lowest returns during the previous three to five years were those that generated better returns over the subsequent three to five years, and vice versa, when they were ordered based on those returns.

According to Baytas and Nusret (1999) in Krishnakumar, (2016), the long-term contrarian strategies seem to yield substantial gains in the other seven developed nations. According to Nasiri (2012), contrarian approaches seem to be successful in Germany. In the years 1986 to 1996, Mun, Vasconcelos, and Kish (2000) investigated contrarian techniques in the American and Canadian markets. Additionally, their findings indicate that the contrarian returns at this time were less significant in Canada than in the United States. Regarding momentum investment strategy, one of the earliest

studies conducted on the NYSE and AMEX by Chen and Yang (2020) revealed that a momentum strategy that purchases the last 12-month top performing stocks and holds them for just three months could generate as much as 1.49% per month in profits. A study by Kim and Ryu (2015) that used Canadian common stocks from 1978 to 1990 supports the momentum method. According to Riswandha (2017), momentum techniques were effective in twelve European nations. Riswandha (2017) said that stocks from emerging markets also showed momentum.

According to Nasiri (2012), between 1961 and 1991, a passive strategy that invested in the market index of all major German companies listed on the Frankfurt Stock Exchange underwent lower returns than trading strategies based on momentum and contrarian thinking.

Chan, Hameed, and Tong, (2000) provided statistically substantial proof of momentum gains made via international stock market indices. Assogbavi and Dodge, (2002) study found that on the Nigerian Stock Exchange, a momentum strategy that purchased medium-horizon "Winners" and sold prior "Losers" gained almost 2% monthly. According to Bogousslavsky (2016), an increase in trade volume tends to reduce the first-order daily return autocorrelation.

According to Maheshawari and Dhanka, (2017), volume offered information quality insights that pricing statistics could not provide. Bogousslavsky, LeBaron and Pontiff (2024) demonstrated a considerable correlation between trading activity and the ensuing positive autocorrelation in weekly returns. In particular, the price of securities with high transaction volume reversed, whereas the returns of stocks with low transaction volume

positively autocorrelated. Using Canadian data, Assogbavi, Osagie, Frieder and Shin (2005) revealed an imbalance in the relationship between price and volume in the equities markets. Generally speaking, low turnover stocks yield higher returns than high turnover ones. Due to the slower reaction of low volume portfolio returns to market return information. Nguyen (n.d.) discovered that high volume portfolio returns exceeded low volume portfolio returns on a daily and weekly basis. According to Gebhardt, Hvidkjaer and Swaminathan (2005), companies with high (low) previous turnover ratios experience eight consecutive quarters of progressively more negative (positive) earnings surprises and receive lower (higher) future returns.

In the succeeding five years, price momentum effects reverse, and winners (losers) with large (low) volume see quicker reversals. According to Williams (2015), During the course of the following week, equities with unusually high (low) trading volume are expected to see a rise (reduction) in value. All of these studies concur that predicting future market patterns and stock return rates requires an understanding of previous data. Using historical market data from the Canadian stock market (the TSE), this study aims to assess the performance of a variety of investing techniques. Thus, it is demonstrated how important information trading is to different investing techniques for the 1990–2000 investment period.

The Concept of Investment

Giving up something now in order to gain something later is what is termed as investing. Giving money with the anticipation of making more in the future is known as this. Investment might be defined as giving up the current value of money in favour of an ambiguous future value. Based on

whether an investment is made over the long term, the short term, and if it is poses risks or not, the growth rate of the money invested can be higher or lower. Economic, business, and financial investment are the three types of investments.

Investments in the economy could include, among other things, the purchase of new machinery, stockpiling, increased spending on plant and inventories. The amount used to start a new business or to finance current operations is referred to as a business investment. Financial investment is the act of purchasing risky or low-risk assets with the hope of later turning a profit. Rent, interest, premiums, dividends, and other kinds of income are all possible.

Types of Investors

A person who manages income to invest in various financial products while considering the yield they will obtain from that precise transaction is referred to as an investor. The main objective of any investor is to make an investment with the biggest return and the least amount of risk. There are various types of investors:

- Regular investor: They decide to make long-term investments. When they have extra cash on hand, they invest it; when they do not, they withdraw it.
- Only Savers: They do not invest in equity because they do not want to take the risk.
- Seasonal traders: They invest erratically. They demonstrate that they are holding out for the ideal chance to get a respectable return on the market.

- Angel Investors: They are unofficial financiers. They assist with advice and connections while also providing funding for new businesses.
- Business Investors: They either directly or indirectly invest. They have no qualms about flaunting their contacts.
- Risk taker Investors: They are extremely confident and constantly willing to take chances. They make long-term investing decisions.

Investment Decisions

Investments can be made in both monetary and material assets, for instance. The investor's evaluation, forecast, and analysis of the decision-making process, which includes the investing psychology, information collecting, characterizing, and comprehending the research and analysis process, is all part of making investments. People's investment behaviour can be shown by the sum of money they invest from their savings, how frequently they invest, the financial instruments they choose to invest in, and how they view risk. Depending on the risk and their financial goals, investors have different financial needs. Investors place a high priority on capital preservation and maximum investment return. Different factors—personal characteristics, emotions—have an impact on investment decisions (Chitra & Sreedevi, 2011). Investment decisions are influenced by psychological and behavioural aspects (Chang, 2010; Kourtidis, Šević, & Chatzoglou, 2011; Weller & Thulin, 2011). The definition of investment decisions used in this study will take into account the factors that investors consider while purchasing securities.

Classification of Investments

The various types of investments are as follows:

1. Physical investments: These are financial commitments in tangible assets such as air-planes, buildings, gold, machinery, and others.
2. Financial investments: These are the kinds of investments that are made to create assets or to manufacture things.
3. Marketable and non-marketable investments: An investment is deemed marketable if it can be quickly turned into cash. An investment that is difficult to turn into cash is referred to as non-marketable.
4. Transferable and non-transferable investments: Transferable investments are the avenues, which can be transferred to the others. Non-transferable investments are those that can't be transferred to another channel.

Behavioural and Demographic Determinants of Investment Decisions

Anoruo (2003) investigated how investor portfolios were impacted by customer expectations. The results of a US monthly survey were used. They came to the conclusion that when consumers anticipated a decrease in interest rates and inflation, the optimistic consumer favoured stocks, while the pessimistic consumer preferred cash and bonds. Susai and Moriyasu (2007) examined how consistently Japanese fund managers handled risk and made investments. They found out that when it comes to controlling risk, Japanese fund managers were both consistent and inconsistent. They also discovered contradictory managers' dispositional behaviour. The herding behaviour of fund managers was uniform. Kasilingam and Jayabal (2010) looked at how teachers felt about small savings programmes and observed that risk tolerance

and investment type were significantly influenced by investor perception. They came to the conclusion that investors viewed investments favourably if they generated superior returns throughout the duration of their investments, and that investors under the age of 40 preferred to avoid small savings plans since they carried higher risk. A study by Bashir, Azam, Butt, Javed, and Tanvir (2013) found a clear correlation between personality traits and risk-taking, herding behaviour, and overconfidence in Pakistani investors.

Based on research by Kasilingam and Jayabal (2010), rational people value gold, mutual funds, and shares higher than irrational ones, implying that sometimes illogical people ignore investment criteria. Patidar (2010) found that Dhar district investors avoided stock market investments and rejected risk. Shanmugasundaram (2011) discovered in Tamil Nadu that investment decision-making is much influenced by lifestyle choices; investors respond logically based on knowledge about the capital market. Examining several investment determinants, Srinivasa and Rasure (2011) found that the most notably affected ones were expected corporate earnings, market condition, company reputation, business goods and services, and return on equity.

In order to understand the variables influencing Istanbul investors' investment behaviours, Tunah and Tatoglu (2010) found that sociological and financial factors influence investment choices, with married women favouring safe investments like gold, while education level and income and investment opportunities correlate positively. Bennet and Halvitigala (2013) identified the key elements influencing investors' attitudes toward stock selection in Tamil Nadu. They concluded that the numerous elements that affected people's decisions included the company's financial ratios, ratio of price to earnings,

return on investment, return on equity, as well as managerial quality. According to Gaur, Seshadri, and Subrahmanyam (2011), male investors had more investing knowledge and confidence despite less confidence in their investment selections; female investors studied extensively before stock transactions.

Kantidas (2011) outlined that low-income people wanted safe investments like insurance while high income investors chose stocks. The majority of homebuyers favoured real estate above other investment options. Demographic traits had a considerable impact on the investment route choices. They observed that most investors chose insurance to take advantage of numerous tax benefits, a safe future, and investment potential. Clark-Murphy and Gerrans (2002) looked into how gender disparities affected fund managers' investing preferences and concluded that young women and single women chose to invest in less hazardous securities. Brahmabhatt and Canuto (2012) investigated investors' investment strategies and discovered that women invested less in Mumbai. The study found that older individuals were more knowledgeable about investing options, with stock market investments being the most popular, and women preferred gold. Fish (2012) studied and concluded that men took greater risk and women took less risk. Parashar's 2010 study found that personality factors influence risk-taking and investment outlets, with less risk-averse female investors favouring fixed deposit investments in real estate and stocks. The study by Parameshwari and Krishnan (2015) found that women showed higher willingness to invest in stocks compared to men, with a positive link between risk tolerance and investment attitudes.

Bhola, Shah, and Zanvar (2013) investigated the relationship between life cycle stages and rural investors' preferred investment opportunities. They posited that bank deposits and post office plans are popular investment options at all life stages, with investors over 50 years old making real estate investments. Investment objectives depend on life cycle stages._Jains and Dashora (2012) examined investors' decision-making criteria and stock market strategies, finding no correlation between age and market performance or dividend behaviour. Charles and Kasilingam (2013) found age as a key factor influencing investment behaviour, with strong correlations with equity experience, holding length, investor type, percentage of equity investment, and fund source.

Geetha and Ramesh (2012) also carried out studies to ascertain how investor demographics affect investing behaviour. The study found that family size and income significantly influenced investment periods, with gold, real estate, and life insurance being the most popular investment options. Kathuria and Singhania (2012) study revealed that Ludhiana's private bank employees, both men and women, rely heavily on publications, television, and the internet for investment information.

In order to understand how investors feel about different investment opportunities, Murugan (2012) performed a survey. The study found that investors are highly knowledgeable about safer investments, with full-time salaried employees and all income levels showing a preference for monthly investments. Samudra and Burghate (2012) concluded that families preferred banks deposits and that the best returns were the primary criteria for investment. Jain and Jain (2012) examined Udaipur district schoolteachers'

saving and investing habits, finding high interest rates as a significant factor affecting their retirement, children's marriages, and schooling. Obamuyi (2013) examined market determinants influencing investment, including expected corporate earnings, past success, anticipated bonuses, and dividends, while also highlighting socioeconomic factors. In Tamil Nadu, Shanmugasundaram and Jansirani (2012) studied the many factors that influence investors' choices. They concluded that psychological and behavioural aspects affected investment decisions. Masomi and Ghayekhloo (2011) examined how behavioural characteristics affect investment choices and concluded that decisions on investments were made using fundamental analysis. Investment decisions are influenced by various factors, including the underlying stock, market information, and fluctuations in stock price. Shafi (2014) explored various factors influencing stock market behaviour among investors, including herding, irrational thought, gender, income, risk factors, opinions, education, company performance, bonus payments, and corporate profitability. Vijaya (2014) investigated the numerous elements influencing the actions of individual investors. They discovered that the variables might be broken down into cognitive, emotional, herding, environmental, demographic, and market variables.

In their study, Lubis, Kumar, Ikbar, and Muneer (2015) examined the psychological variables that influence investors' choice of investments. They discovered that assessing the historical performance of potential investment options was necessary for making investment selections. Lathif and Aktharsha (2016) investigated the connection between investor effort and expertise and investment decision-making and identified that risk appetite, investor effort,

and investment ability were all highly important determinants of investors' investment decisions.

Lazar and Sundar (2017) found no correlation between the duration of stock market investments and sociodemographic traits or the frequency of these investments. Webley and Nyhus (2013) found that personality traits like extraversion and autonomy predict households' saving and borrowing habits. Mayfield et al. (2008) as cited in Oehler, Wendt, Wedlich, and Horn (2018) studied the investment management of the five personality traits. They came to the conclusion that those who valued high investment risk were unorthodox and innovative. Extraversion and risk tolerance for particular investments have a negative relationship. Those who were risk apprehensive avoided making long-term investments. Long-term asset investments were favoured by those who were receptive to their experiences. Verma (2008) investigated how each investor's personality type and demographic characteristics affected their choice of investment opportunities.

The research indicated that real estate was more frequently preferred by investors than mutual funds or insurance. Debentures and other securities did not appeal to the investors. She saw that whereas women liked fixed deposits and insurance, men favoured PPF, real estate, and equity shares, and women believed equity was very dangerous. Professionals favoured investing in mutual funds and insurance, whereas service personnel primarily invested in PPF and post office savings plans.

Mittal and Vyas (2008) carried out a study to determine how behavioural biases and individual investors' income affect investing decisions. They came to the conclusion that overconfidence increases along with money.

Overconfidence, overreaction, and feelings of loss or regret were all strongly influenced by income, while self-attribution bias and the framing effect were unaffected. Additionally, they discovered that homemakers invest in secure assets like real estate and bullions, while professionals and students chose post office deposits and derivatives, respectively. Zoghlami and Matoussi (2009) determined the psychological biases that had the biggest impact on Tunisian investors' behaviour. They found that five psychological biases—under confidence, under opportunism, caution, conservatism, and information inferiority complex—influenced Tunisian investors. Inaishi, Toya, Zhai and Kita (2010) found that increasing inclinations and market dealing increased with investor overconfidence in the market.

Lin (2011) investigated the relationship between psychological characteristics and behavioural biases of Taiwanese stock market investors. They noticed that investors with higher neurotic personalities would get the stop-loss point, allowing them to avoid suffering a loss. Lim (2012) investigated the relationship between Malaysian investors' decision-making and their psychological biases. The study found no correlation between herding behaviour and investor decision-making, but one was found between overconfidence, conservatism bias, and regret.

Bashir et al. (2013) observed the relation among investor's behavioural biases and investment. They found that there was no relationship between investors' overconfidence bias and gender. They came to the conclusion that investor overconfidence bias was adversely connected with a number of behavioural biases, such as illusion of control, loss of aversion, and confirmation bias.

Rekik and Boujelbene (2013) identified the impact of psychological and demographic factors on Tunisian investors' behaviour, revealing biases, gender, age, and experience as significant influences. Charles and Kasilingam (2014) examined the significance of personality qualities and how they affect investors' investment decisions. The study examined the correlations between personality, investment, and demographic factors, revealing a significant correlation between investment, personality, and demographic characteristics.

Only among the investors was a correlation found between neuroticism and marital status. They discovered that the traits of conscientiousness, agreeableness, and risk tolerance had a significant impact on people's investing behaviours. Alquraan, Alqisie, and Al Shorafa (2016) in Ayaa and Peprah (2021) studied the behavioural elements influencing stock market investment choices. They discovered that overconfidence bias had a significant impact on investing decisions and that herding bias had no effect at all.

Ghelichi, Nakhjavan and Gharehdaghi (2016) examined how psychological variables affected financial choices made on the Iranian stock exchange. They found that confidence, belief and regret impact investors' investment decisions. Raheja and Dhiman (2017) studied the influence of the different characteristics of the personality and the different emotional intelligence on the investors' investment decisions. They discovered that there was a good relationship between them. They came to the conclusion that there was a connection between the investment decisions and openness, extroversion, and agreeableness. Self-awareness, social abilities, empathy, managing emotions, and motivation all had an influence on investment

decisions. Gupta and Ahmed (2017) in their study found a correlation between agreeableness, extroversion, openness, regret, and overconfidence bias in investment decisions, highlighting the significant influence of behavioural factors.

Concept of Investment Strategies

According to Chen, (2022), an investor selects their investment portfolio using a set of rules known as an investment strategy. The investor's trade-off between risk and return influences the strategy's design. Prior to making any financial decisions, a well-thought-out investing strategy is necessary. Given a certain amount of risk tolerance, an investor may use investment strategies to get the desired return. At the organizational, industrial, and market levels, investment portfolios are created and selected using investment plans as a framework. (Fama & French, 2012).

The two primary investment approaches are passive investment and active investment. According to Tahmaz and Medin, (2019) the methods used to lower transaction costs are passive ones. It means watching the market closely without speculating on its future course. Financial markets are perceived as fully efficient, with quick absorption of all information necessary to affect investment prices. Among the most effective passive investment methods is the buy-and-hold approach. The main advantage of a passive investment strategy is that it has lower operating expenses (Chen, 2022). According to Schoenfeld (2004), active strategies are those that focus solely on generating returns that are better than those of the financial markets are. With market timing, an investor buys at lower prices and sells at increased prices; the tactics aim to maximize returns. This could also involve purchasing

investment products at a discount and offloading them at a profit if market conditions change. In order to surpass a particular benchmark, this strategy seeks to outperform the market. As part of the active investment method, the investor keeps a close eye on the performance of their investments and takes advantage of any advantageous conditions that may develop.

Features of an Ideal Investment Programme

The investments should contain the following features:

1. Safety: The investor should consider the safety of investment while deciding the type of investment. The investor should diversify their investment in order to reduce the risks.
2. Liquidity: The investor should consider only that investment which can easily be converted into cash.
3. Regularity and stability of income: Another feature of investment programme is the regularity of income.
4. Stability of purchasing power: The investor should balance their investment programme so that there should not be instability in purchasing power.
5. Capital appreciation: Another feature is capital appreciation. The investor should forecast the avenues, which may appreciate in future.
6. Tax benefits: Another feature is tax benefits. The investor should select his investment in such a way that the tax liability should be minimum. The returns, which are after tax, are the real returns.
7. Legality: The investor should be aware of the legal provisions related to the investment. The investor should consider the legal aspects of investment.

8. Conceal-ability: The investor ought to put money into a discreet investment vehicle where the revenue is hidden.
9. Tangibility: Most of the investor prefers to invest in tangible assets such as building, plant, and others.

Process of Investment Decisions

The process of investment is as follows:

1. Investment policy: In this, the various investment avenues are taken and their features are observed. The main purpose is to decide which avenue should be taken in the portfolio. It requires:

   i. to determine the amount to be invested.
   ii. to determine the objective of investment.
   iii. to identify the suitable investment avenues.
   iv. to consider the various features of investment avenues.
   v. to allocate the funds to the investment avenues.

2. Investment analysis: The next step is investment analysis. Determining the risk and return on potential investment routes is the aim of investment analysis.

3. Valuation of securities: The next step is the valuation of securities. Value means the present worth of the assets to the owners. The suitable weights should be applied for the valuation of securities.

4. Portfolio construction: The portfolio construction is the balance between risk and return. It requires the knowledge of different aspects of avenues. It includes the following steps:

   i. to decide the diversification level.
   ii. to consider the time of investment.

iii. to select the time of investment.

iv. to allocate the funds to the assets.

v. acquisition of assets.

5. Portfolio evaluation and revision: After selecting the portfolio another step is to evaluate the portfolio. The portfolio must be constantly evaluated. The portfolio should also be revised so that another portfolio should be considered.

Investment Avenues

There are many investment opportunities on the market. When selecting an investment strategy, the risk, requirement, return, and many other aspects are taken into account. Investor decisions are influenced by a wide range of variables, such as age, education, and many others (Isidore, Christie & Arun, 2021). Investors employ various investment vehicles depending on their occupations. Each investor uses a different approach when investing in a specific Investment Avenue. There are different types of avenues, which according to Jain (2012) are:

Equity shares: Common shares are another name for them. These are speculative investing options. The investor can profit greatly from this. The dividend is based on the company's profits. Equity shares can be bought on the open market or through mutual funds; an investor buys a fund, which then buys equity shares.

Debentures: A debenture is a document that acknowledges debt. The debt obligations come with a variable fee. Debentures have a fixed rate of return. Debentures come in a variety of forms, including collateral, guaranteed, simple, secured, bearer, registered, redeemable, irredeemable, convertible, and non-convertible.

Precious metals: India, for instance, also engages in gold and silver investment. The investors invest gold, silver, and other items in. The usage of gold is prevalent in many contexts. The money will come from the gold and silver at the time of sale and from the increase in value of the ornaments. The rich people or the high-income group people only make this type of investments.

Real estate: Another investment avenue is real estate. These investments are made in property, agricultural land, resorts, and others. Additionally, very big returns are anticipated from this. These are future development strategies. The value of real estate has increased significantly in India. The rate at which a property's value increases vary depending on the location. The investment in real estate has tax advantages as well. Although the return on investment in agricultural land is lower than other types of investments, the entire income is exempt from income tax. There is appreciation in the prices also. These are long-term investment and carries high risk.

Mutual funds: It is another type of Investment Avenue in which the investors pool their money in a diversified portfolio, therefore, it reduces the risk and spread the risk. Under section 80C, investors who invest in mutual funds are eligible for a tax refund. Mutual fund plans come in two flavours: open ended and closed ended. In close-ended schemes, the term of maturity is stated, whereas it is not in open-ended schemes.

Fixed deposits: These are also known as term deposits. Deposits in banks are safer investment avenues. Fixed deposits are the saving account with

the fixed rate of interest and the amount cannot be withdrawn before the maturity date.

Life insurance policies: There are many insurance policies available for the investors. A life insurance policy is an agreement between the insurer and the insured that states the insurer will pay an amount of money in the event of the insured's passing. The insured party makes regular premium payments.

-Public Provident fund: The public provident fund is opened with the minimum Rs. 500 and maximum Rs. 70000 annually. The rate of interest is 8% annually and the scheme is for 15 years. Any person can open their PPF accounts in bank or post office. There is no tax on interest on deposits and come under section 80 C of income tax. This is the best form of investment avenues.

Post office saving schemes: These avenues are very popular because they carry higher return. There is no TDS on this scheme. These include National saving certificate, National saving scheme, and others.

Stock market: The investment in stock market is not a safer investment. The investment in the stock market may yield the higher profit but the investor should be aware of stock market regularly.

Conceptual Framework

The relationship between the variables, or the characteristics or attributes a researcher wants to look into, is represented by a conceptual framework. A literature review of earlier research on a topic is frequently used to develop conceptual frameworks, which can be presented textually or visually (Swaen & George, 2022). The conceptual framework places special emphasis on the relationship among economic level, household size, and age. This study looked into the associations between small-scale miners' investing

methods and their age, income level, and family size. Age, family size, and income level are examples of demographic characteristics that function as independent variables, whereas investment technique is the dependent variable.

The model (Figure 1) below seeks to illustrate the relationship that exists between the independent variable and the dependent variables. Choice of investment strategy appears to depend on age, family size and level of income.

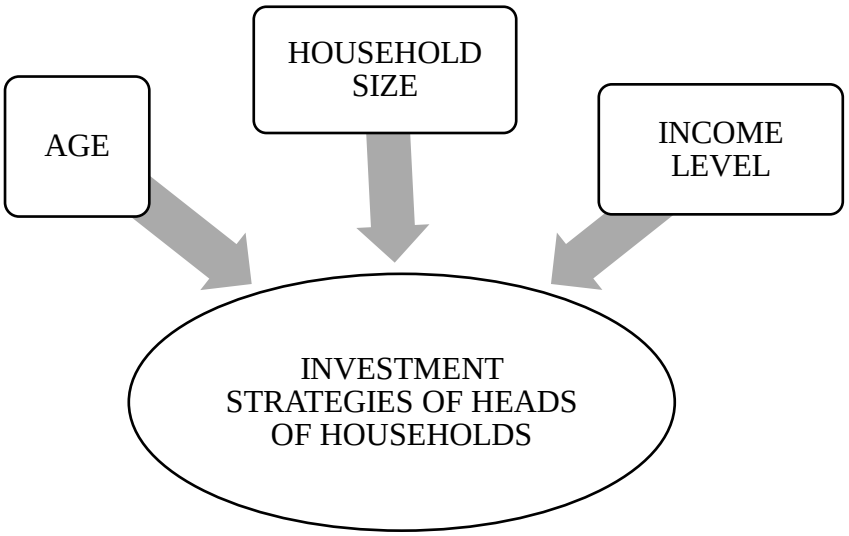

Figure 1: A framework illustrating the impact of age, family size and income level on investment.

Source: Author's construction (2022).

Rekik and Boujelbene (2013) in Ansari (2019); Obamuyi (2013); Charles and Kasilingam (2013) all identified demographic characteristics (age, gender, marital status, family size) influenced investment.

Kiran and Dhawan (2015) looked at and assessed the effect of family size on the monthly savings and consumption expenses of industrial workers. Dropping saving to income ratios revealed the results: as household size

expanded, saves declined both absolute and relative. Larger family size groups (those with more than three members) showed significantly lower mean monthly savings than the smallest family size group (those with three members). This suggests that workers with larger family sizes have a lower propensity to save.

Furthermore, family size has a considerable beneficial impact on the consumer expenditure of workers. Additionally, the decrease in savings due to the added burden of the new family member supported the idea that having more children has a negative impact on employees' savings (Kiran & Dhawan, 2015).

Rural indigenes barely survive on menial jobs, which most often are not enough to meet basic human needs. Investments are therefore alien to a vast majority of these dwellers, which consequently and in the end, keep them in the poverty region of economic charts. However, a paradigm change has occurred in how different global financial literacy programmes define financial literacy. In order to align with the idea of financial well-being, adjustments were made. A person is said to be in a state of financial well-being if they are capable of meeting their current and future commitments, have saved money for the future, and are in a position to make decisions that will allow them to enjoy their lives. Financial well-being, according to Barclays (2014), is the state and perception of someone who feels secure and financially sound both today and in the future. According to Joo (2008), personal financial wellness is a state of desired financial health that encompasses a wide range of factors, including financial satisfaction, goals for one's financial situation,

attitudes and behaviours related to money, and behaviours that are difficult to gauge through a single measurement.

Kim et al (2003) discovered that credit counselling services and debt management could help people directly deal with financial challenges and indirectly improve their sense of financial well-being. Individual financial management—in which a person has control over their financial elements in order to manage funds well—influences financial well-being, according to Vlaev & Eliott (2014). Furthermore, financial behaviour and the flow of income from owned assets are key factors in determining one's financial well-being, according to Zemtsov & Osipova (2016). To improve one's financial status, one must therefore be able to accumulate assets.

Based on this research, it can be concluded that being in excellent financial health requires the ability to manage one's resources, make investments, and preserve one's financial stability. It is a fact that the salary levels of employees in the productive age group have a big impact on how people arrange their investments. Therefore, their income level influences the interest of workers who are of productive age in investing some of their income. Saving money, for instance, for potential future expenses that are unpredictable. But each worker must have various objectives, and they must also have varied methods for attaining them.

There are people who plan in a methodical, mature, and detailed way, and there are people who don't plan at all (Henager & Cude 2016). Employees who use and comprehend financial management are more prudent with their money and know how to handle it for their own health. According to earlier research, children's early years are a time of transition from childhood to

adulthood, so it's critical that they learn how to balance needs and wants and become aware of future investments (Hastings & Mitchell, 2020). It is hoped that as a result, those who are of working age would be able to save for the future and handle their money sensibly, leading to a wealthy existence.

Every kind of investment has a different set of dangers. Even though savings and deposits are no longer the only attractive assets for people who are aware of current financial changes due to the low returns on investments, some investors still choose them as their only option. There are several options available for individuals of diverse backgrounds, from low-risk to high-risk, and from those with fixed incomes to those with variable wages. Various investment tools are available in the Indonesian society. Starting with deposits or savings, real estate, gold or jewellery, stocks, or mutual funds. Savings or time deposits continue to be the most popular choice among the available options in recent years. The rising property value has thus turned into a draw for Indonesian customers.

Currently, Indonesians are beginning to choose real estate as their preferred investment vehicle. Property is being used for both short- and long-term investments in addition to being a place to live. By making use of their increased income, those with higher incomes can increase their financial literacy and increase their wealth by engaging in investment activities. Conversely, because they have less access to information, people with lower economic status will have a harder time becoming wealthy.

Summary of Literature Review

The review of the literature included theoretical, empirical, and conceptual research on rural households' investing practices. The following main themes were examined in this chapter:

Theoretical review covered the Life Cycle Hypothesis (LCH), Behavioural Finance, and Theory of Planned Behaviour (TPB). These theories offered a strong framework for examining the link between the dependent variable (investment strategies) and the independent factors (age, family size, and income level). Age's impact on financial priorities throughout life was explained by the LCH. Behavioural Finance drew attention to the emotional and psychological aspects of family size while the TPB highlighted how income level influences how people view investing opportunities and make decisions. Literatures were reviewed on the investment strategies of small-scale mining communities and rural households. It was found that agricultural activities, education, and minerals were some preferred investment strategies. Numerous researches examined the ways in which socioeconomic, psychological, and demographic factors affected households' investing choices. The various investment strategies types—contrarian, conservative, aggressive, and intermediate risk—were also covered. The chapter focused on the steps involved in making investment decisions, such as policy, analysis, portfolio building, and evaluation. Investment options such as real estate, precious metals, mutual funds, equity shares, and small-scale savings plans were examined. Psychological biases (such as overconfidence, herding, and regret) were found to have a substantial impact on investor behaviour after the review examined the effects of age, income, education, and family size on risk tolerance and investing preferences. A conceptual framework that links

investing strategies to demographic parameters (age, income, and family size) was also discussed, with a focus on financial literacy as a means of enhancing financial well-being.

The researcher identified some gaps in relation to investment which necessitated conducting the study. Firstly, existing studies (e.g., Kasilingam & Jayabal, 2010; Lazar & Sundar, 2017) focused on urban professionals, investors, or large-scale investing behaviours, neglecting rural households that depend on erratic revenue streams like small-scale mining. Rural households, particularly those in mining communities, have particular opportunities (such as mining earnings) and challenges (such as environmental degradation and unstable incomes), but these dynamics were underexplored. Additionally, although factors like age, income, and education are associated with investment decisions (e.g., Kim et al., 2021; Samiuddin & Ahmad, n.d.), their relevance to rural and mining-dependent households is not fully examined. The review lacked information on how investment choices in these regions are impacted by demographic factors such as age, family size and varying mining income.

With these gaps, the study sought to analyse how rural households in small-scale mining communities allocate their income, whether toward productive investment, also to discover if the independent variables (age, household size and income level) statistically impact investment in rural households in small-scale mining communities in Wassa Amenfi West Municipality.

CHAPTER THREE

RESEARCH METHODS

Introduction

The techniques used to carry out the research study are presented in this chapter. The demographic, study region, sample and sampling strategy, data collection tool, data collection process, and data analysis techniques were the main points of focus. Walliman (2021) defines research methods as the equipment and tools that researchers use to conduct investigations or inquiries.

Philosophical Paradigm

A research philosophy is a set of fundamental ideas that drive the planning and conduct of a study; various research philosophies provide distinct perspectives on scientific inquiry (Tamminen & Poucher, 2020). The views about the nature of the reality under investigation are referred to as research philosophy, and the sort of research philosophy used in a given field of study is determined by the knowledge under investigation (Kirongo, & Odoyo, 2020). According to Khatri (2020); Saunders, Lewis, Thornhill, and Bristow (2015), Ontology, epistemology, axiology and methodology are four categories of research assumptions that are used to differentiate different research philosophies. Positivist, interpretivist, pragmatist, and realistic research philosophies are the four main research philosophies (Winit-Watjana, 2016).

This study adopted the positivist research philosophy. Positivism uses the hypothetico-deductive approach, which allows for the derivation of functional relationships between independent and dependent variables, to validate a priori assumptions that are frequently expressed quantitatively

(Park, Konge, & Artino, 2020). The positivist school of thought maintains that only information derived from measurement and observation is reliable. It goes on to clarify that a positivist researcher's job is restricted to gathering data and objectively interpreting it, with the results of their work typically being observable and quantifiable (Collins, 2018). Additionally, there are restrictions of human interest in the study, and the researcher is not affiliated with it. Quantifiable observations that result in statistical analysis are the foundation of positivism (Collins, 2018). The study adopted the positivist philosophy in relation to its objectives since it is predicated on the idea that everything can be confirmed by experimentation and observation.

Research Design

One way to think about research design is as the framework for a study; it's the binding mechanism that keeps all the components together. It serves as the outline for a suggested study project (Islamia, 2016). It also refers to the setup of parameters for data collecting and analysis (Kothari, 2017). The study employed the survey design. In particular, the study used a cross-sectional survey, which, as noted by Wang and Cheng (2020), allows data to be collected from respondents at a certain point in time and employs quantitative measurements of data gathering and analysis.

The design helped measure investment strategies among families in the Wassa Amenfi West Municipality. The utilization of a cross-sectional survey made data collection from families in several towns who were gathered in one location easier. It can be used with more confidence when it comes to research questions like "forms of investment employed by rural households," which the researcher is particularly interested in. It is also relatively quick and

inexpensive, has few ethical challenges, offers the opportunity to arrive at multiple outcomes, and provides exposure for additional studies (Wang & Cheng, 2020). Aside its advantages, the cross-sectional survey has some weaknesses, which include the notion that it is unable to measure incidence, difficult to make causal inference, and is susceptible to biases such as nonresponse and recall biases (Wang & Cheng, 2020).

Despite its shortcomings and given the nature of the research, the survey design was found to be the most suitable for this study because it provided insight into the types of investments made by small-scale miners in the municipality and the variables influencing those investments.

Study Area

The study was conducted in the Wassa Amenfi West Municipality. One of the fourteen municipal districts in the Western Region of Ghana is Wassa Amenfi West Municipality. The district was known as Wassa Amenfi West District until the eastern portion was divided off to form Wassa Amenfi East District in August 2004. At that time, the district was still a part of the larger Wassa Amenfi District, which had been formed in 1988 from the former Aowin-Amenfi District Council. Wassa Amenfi Central District was created on June 28, 2012, after a further section of the district was divided off; the remaining area was retained as Wassa Amenfi West District. It was renamed Wassa Amenfi West Municipality and elevated to the status of a municipal district assembly on March 15, 2018. The Municipality's capital city is Asankrangwa, which is situated in the Western Region's northernmost section.

Cocoa cultivation, small-scale mining, farming of crops and animals, trade, vocations, and artisanry are the primary industries in the Municipality.

Some others work in public sector occupations including teaching, policing, banking, and nursing.

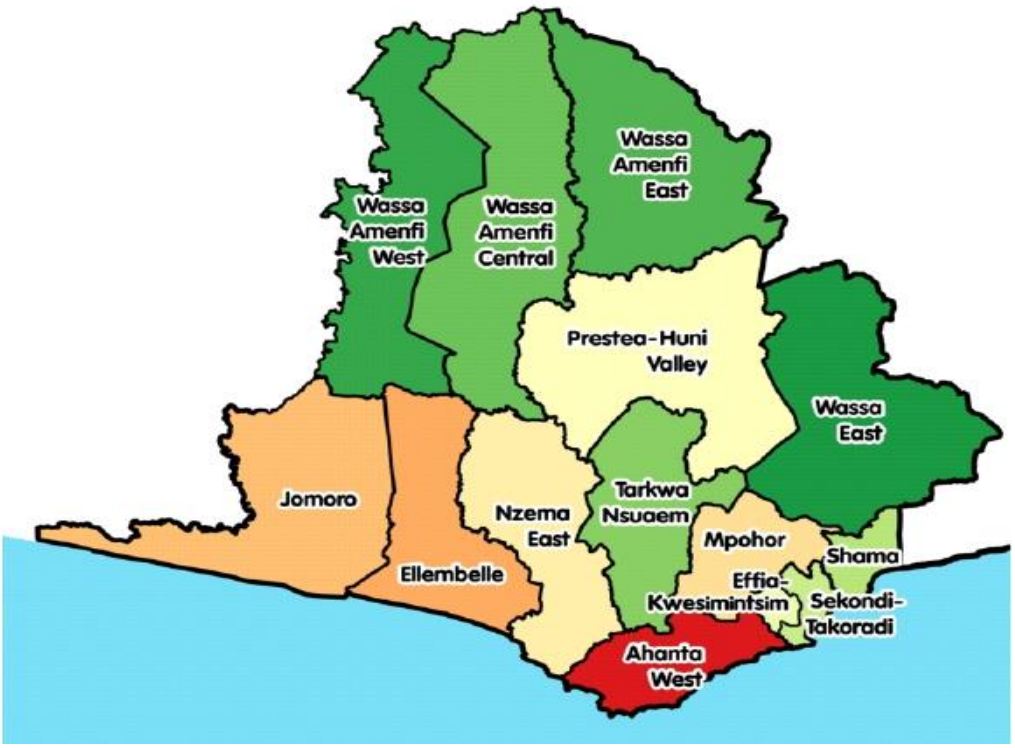

Figure 2*: A map of the Wassa Amenfi West Municipality and its environs.*

Source: Office of the Head of Local Government Service, (2021).

According to the Willis et al., (2022) rural areas in Ghana are settlements with less than 5,000 people on the other hand, urban regions that have 5,000 or more residents. The total rural population of communities of Wassa Amenfi West Municipality is 74,366 making 57.3% of 129,882 being the total population of the Municipality (GSS, 2021). The current study focused on respondents from three small-scale mining rural communities Samreboi Nkwanta, Oda Ahwiam and Odumase in the Wassa Amenfi West Municipality. There are sixteen small-scale mining communities within the district, however the selected communities are part of the rural communities (Wassa Amenfi West Municipality Statistics Office, unpublished).

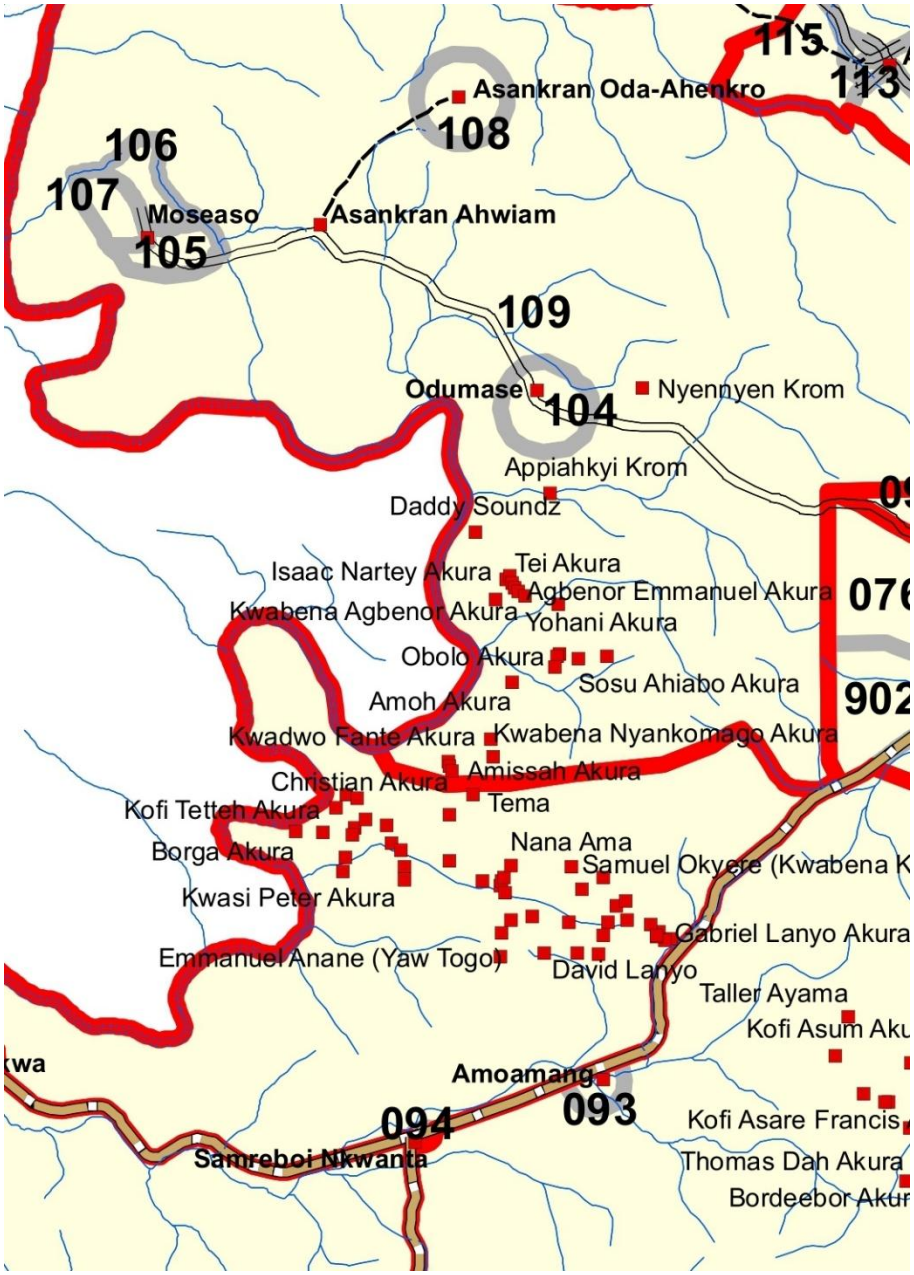

Figure 3: Sampled areas within Wassa Amenfi West Municipality.
Sample areas- 094, 104 and 108

Source: Wassa Amenfi West Municipality Statistics Office (2022).

Population

Study population is defined as all people or items (units of analysis) embodying the characteristics of interest of a researcher (Bhattacherjee, 2012). The Wassa Amenfi West Municipality is made up of 189 communities. It has two types of communities – (urban and rural). There are 55,516 people living

in urban neighbourhoods overall, accounting for 42.7% of the total population, while the rural communities have a total population of 74,366, which is also 57.3% of the total population. Sixteen of the twenty settlements in the municipality are rural, and twenty of them actively engage in small-scale mining. The population of the study consisted of 40, 229 households in the Wassa Amenfi West Municipality (Ghana Statistical Service, 2021).

This study's target demographic was limited to the households residing in the rural Wassa Amenfi West Municipality's small-scale mining zones; Samreboi Nkwanta, Oda Ahwiam and Odumase. All households in the rural small-scale mining areas were included, irrespective of their occupation, level of education, or other socioeconomic characteristics.

The accessible population for the study comprised heads of households in the aforementioned communities within the municipality. These rural communities were selected because they represent the socio-economic and demographic characteristics of the Municipality's rural small-scale mining households. The study specifically targeted household heads as they are typically the primary decision-makers regarding financial and investment strategies within their households. To ensure a representative sample, the study focused on these areas due to the respondents' willingness to participate, and the availability of accurate records from Municipality's Statistics office. This accessible population is part of the larger target group of all rural households in the Wassa Amenfi West Municipality small-scale mining communities but is limited to those residing in the selected communities.

Sample and Sampling Procedure

According to Taherdoost (2016), a sample is a subset selected from a sample frame or entire population. A sample can be used to make inference about a population or make a generalization relating to an existing theory. The inclusion criterion for the selection of a sampling unit was that each of the participants should be a head of a household in rural small-scale mining communities within the Wassa Amenfi West Municipality.

For this study, participants were selected from Samreboi Nkwanta, Oda Ahwiam, and Odumase using multistage sampling technique. These rural communities were selected because the populations of each town are less than 5,000 people (Willis et al., 2022). With this sampling technique, the population was split up into strata, or smaller subsamples. Multi-stage sample designs are typically appropriate for large geographic enquiries. For multistage sampling to be the most successful and efficient strategy, different probability sampling techniques must be combined (Etikan & Bala 2017). In this study, the key features of the multi-stage sampling were randomly selecting the strata; the strata were the three small-scale mining rural communities (Samreboi Nkwanta, Oda Ahwiam and Odumase) and the respondents within the selected strata were selected using convenient sampling (Taherdoost, 2016). Thus, respondents were selected based on their willingness to participate in the study. Table 1 presents a list some small-scale mining communities with their respective number of households.

Table 1: Some small-scale mining communities and their number of households

Small-scale mining rural communities	Number of households
Oda Ahwiam	419
Asankran Saah	1160
Odumase	529
Moseaso	1905
Samreboi Nkwanta	513

Source: Wassa Amenfi West Municipality Statistics Office (unpublished).

Using the lottery approach, the researcher randomly selected three rural communities with small-scale mining. The names of rural small-scale mining communities were written on slips of paper and mixed together in a bowl. The researcher randomly picked three slips of paper and the selected communities became the strata from which the respondents were drawn from. The respondents who were willing and available for the data collection were also conveniently selected from each stratum. The multi-stage sampling technique works well for sizable, geographically scattered populations and permits flexible sample selection and effective data collection, its primary drawback is the possibility of a less representative sample as compared to basic random sampling (Singh & Masuku, 2014). Sample size for the quantitative aspect of the study was determined according to the Yamane formulae as cited by Anokye (2020).

$$n = \frac{N + 1}{1 + N(e)^2}$$

Where n = Sample size

N = Population size

E = Margin of error

Therefore, study sample =

$$n = \frac{1461 + 1}{1 + 1461(0.05)^2}$$

n = 314

Thus, the sample size for this study was 314.

The sample size was obtained using this formula: (sample size/population size) × stratum size. Table 2 shows the breakdown of the sample population and the selected sample respectively.

*Table 2***:** *Breakdown of population and sample selected*

Rural Communities	Total number of households	Number of respondents
Samreboi Nkwanta	513	79
Oda Ahwiam	419	94
Odumase	529	141
Total		**314**

Source: Wassa Amenfi West Municipality Statistics Office (unpublished).

Data Collection Instrument

The data collection instruments for the study were a questionnaire and a structured interview schedule. The instruments were structured based on the research objectives. A questionnaire is a research tool made up of a series of standardized questions meant to collect data from one or more respondents on a certain topic that is statistically significant (Pahwa, 2021). A structured interview schedule, which includes a set of questions, is a data collection method similar to the questionnaire. However, a structured interview schedule differs from a questionnaire in that the researcher fills it out, whereas respondents fill out the former. The researcher presents the schedule to the

respondents and poses the questions (Bhashanjali, n.d.). For this study, both the questionnaire and structured interview schedule had the same items.

First section of the instruments measured basic data (age, sex, size of family, occupation, monthly income and the monthly income distribution). The second section consisted of five items measuring forms of investment measured Yes, No and Sometimes responses, whereas the third section consisted of eight items on factors affecting engagement in investment measured on a 5-point Likert scale. Finally, the fourth section consisted of three items measuring the impact of demographics on investment. Thus, the items in the second, third and fourth sections of the research instrument were close ended with responses ranging from 1-5 on a five-point Likert scale, where 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly Agree.

Validity and Reliability of Instrument

The instrument for the study was thoroughly vetted before its final approval by supervisors and experts in the field of research. It was also given to some lecturers in the Department of Vocational and Technical Education for scrutiny to check if the items measured exactly what it purported to measure in order to establish reliability, the internal consistency of the instrument was measured using a reliability coefficient, which was derived using Chronbach's alpha. A Cronbach's alpha of 0.76 was gotten which is an acceptable reliability.

Training of field assistants

Field assistants must get in-service training in the designated areas in order to adequately acquire pertinent knowledge and abilities for research

(Nawaz, Khan, Ullah, Nawab & Pervaiz, 2020). Due to the nature of the data collection exercise, four field assistants were enlisted and trained to help collect data. Selection of the field assistants were based on educational background (with minimum qualification being WASSCE - Senior High School graduate). Additionally, proficiency in both local languages specifically Twi and English were a criterion for selection to enable easy translation of the instrument items whenever the need arose. The field assistants were trained for five days. They were educated on how to interpret the items in local language of the respondents.

Data Collection Procedure

Leaderships of the various communities (assembly members and some traditional leaders) were officially contacted and briefed on the purpose of the study through an introductory letter and a schedule for the data collection exercise. Permission was also sought from them for their approval to conduct the study in the communities. The multistage sampling procedure was used to select 314 respondents to respond to the items in the structured interview schedule and questionnaire. The survey respondents were given 30-45 minutes to complete the questionnaires; some also preferred to use more time to respond thus the researcher retrieved the questionnaires later. The respondents who are unable to read and write were interviewed by the researcher and the field assistants. Their responses were transcribed on the schedule. The data collection took 21 days to be completed. Three hundred and fourteen questionnaires were administered. However, 250 of them were retrieved from the respondents and that was used for the data analysis. Thus, there was a 79.62% response rate which is acceptable according to Babbie (1990).

Data Analysis

Reducing a large amount of data to a manageable size, creating summaries, searching for patterns, and applying are all part of data analysis. Measures of dispersion (Standard Deviation) and central tendency (Mean) were used in the analysis of research objectives 1, 2, and 3. A criterion score of 3.0 obtained from adding together scores on the 5-point Likert scale and dividing by the number of scales, this $\frac{1+2+3+4+5}{5} = 3.0$. Therefore, items which that recorded mean scores of 3.0 and above were prioritized, whereas items scoring less than the criterion score of 3.0 were not.

To ascertain whether there was a statistically significant variation in the proportion of investment among young adults and middle-aged small-scale miners, research hypothesis one was examined using an independent sample t-test. The means of two groups are compared using t-tests to see if there are any statistically significant differences. The t-test is suitable for investigating hypothesis in this study, that is, the difference in investment levels between young adult and middle-aged household heads (Bevans, 2020). A multinominal logistic regression analysis was used to examine research hypothesis two in order to estimate the degree to which age, family size, and income level would influence investment. With multiple logistic regression analysis, people may effectively address problems involving non-linearity and several independent variables by using multinomial logistic regression, which is reasonably accurate and mature. It is also more popular and does not require that the variables follow a multivariate normal distribution (Sun, Wang, Zhang & Zuo, 2023). When confounding variables are taken into account, this tool

works well for determining the direction and strength of correlations between variables.

Ethical Clearance

According to Saunders, Lewis, and Thornhill (2012), research ethics is concerned with the creation and definition of a study subject, the planning and acquisition of access for a research study, the collection, processing, and storage of data, the analysis of data, and the ethical and responsible reporting of research findings. The University of Cape Coast's Institutional Review Board (UCCIRB) was consulted in order to obtain ethical approval. After examining the questionnaire and interview schedule, the researcher also received approval from her supervisor.

Introductory letter was obtained from the Head, Department of Vocational and Technical Education of the University of Cape Coast and the leaders of the communities to seek for their permission to carry out the study. Confidentiality of participants was assured by anonymity. Participants were asked to sign informed consent forms to serve as proof of participation, before administering the instruments to them.

Data Management

All throughout the world, research projects gather research data. Research data are still valuable even after projects are completed. The preservation and dissemination of research data raises ethical, legal, and practical concerns, making data management necessary for the protection of the privacy of research participants and data (Dalkılıç, & Karaarslan, n.d.; Stiles, & Petrila, 2011). The data for this study from participant is securely kept in the researcher’s residence. For efficiency, meticulousness and security,

the researcher has arranged and coded data personally into the statistical software. The researcher has locked the questionnaires in a secured case at her residence. The questionnaires and structured interview schedules would be kept for future references for the study should the need arise. The report is also safeguarded on the researcher's computer which is also secured with a password. Furthermore, all softcopy information is uploaded to the researcher's Dropbox as a backup. The soft copies would be retained in the researcher's Dropbox for at least five years (Hoofnagle, Van Der Sloot, & Borgesius, 2019).

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The findings and a discussion of the findings from the data collection are presented in this chapter. The study explored various aspects of household investment strategies, beginning with the demographic characteristics of respondents, including age, gender, occupation, and income levels. It examined forms of investment strategies used by respondents, such building, education, vehicles, bank products, and valuables and minerals. The research also evaluated the involvement of households in investment. Additionally, it investigated the factors affecting heads of households' engagement in investment. Another focus was the difference in the level of investment between young adults (18-35 years) and middle-aged (36-50 years) heads of households. Finally, the study analysed the impact of age, family size, and level of income on the investment strategies of heads of households.

Demographic Characteristics of Respondents

The description of demographic characteristics is not specified in the study objectives, it is justifiable to include a description of the demographic characteristics of respondents. Demographic characteristics give readers contextual information that helps them understand the population being studied and places the findings within the larger socio-economic and cultural environment. Demographic information is crucial for contextualising research findings, ensuring that the results are interpreted in light of the sample's characteristics (Creswell & Creswell, 2018). By describing the respondents' demographics, researchers can show whether the sample is representative of

the larger population. This increases the reliability of the results and guarantees that the inferences made are relevant to the intended audience (Fowler, 2009). Thus, the research determined the subsequent demographic attributes of the participants: age, gender, employment status, and monthly income of the household's head.

Age Distribution

The age distribution table (Table 3) provides valuable insights into the demographic composition of rural households in small-scale mining communities within the Wassa Amenfi West Municipality.

Table 3: Age distribution of respondents

Age Range (Years)	Frequency	Percentage
18 – 35	154	61.6
36 – 50	86	34.4
50+	10	4
Total	**250**	**100**

Source: Field survey (2023)

Dominance of Working Age Population: The data in Table 3 indicates that the majority of the population, mainly aged 18-50, is active in various economic activities, including small-scale mining and other livelihood forms in these communities.

Prime Working Age Group (18 - 35): The 18-35 age group, comprising 61.6% of responses (Table 3), is a significant demographic with productivity and active economic participation, providing valuable insights into community economic dynamics.

Middle-Aged Population (36 - 50): 34.4% of the surveyed population, aged 36-50, as shown in Table 3, are experienced investors with established livelihoods and strategies influenced by retirement planning, family responsibilities, and asset accumulation.

Elderly Population (50+): Elderly individuals, despite comprising only 4% of the population, have unique investment preferences, necessitating understanding of their financial needs and challenges for inclusive investment strategies.

Implications for Investment Strategies: Age distribution data is crucial in determining investment strategies for different age groups, enabling financial institutions to develop responsible financial management and long-term planning. It also aids in retirement planning services, offering tailored solutions for older adults, and informs broader economic policies promoting sustainable growth across different age cohorts (Prakash, Alagarsamy & Hawaldar, 2022; Kumar, Kumar & Kumar, 2024).

Justification for the age range limit of 18 to 50 years of respondents: The study focused on participants in the economically active age range, who are most likely to directly influence investment choices and household income. According to OECD (n.d.), the number of people aged 15 to 64 in the overall population is known as the working age population. Also, the age range started at age 18 because in most rural settings, individuals aged 18 and above are considered mature enough to make independent financial decisions (Sabri et al., 2023), and those up to 50 years are still actively involved in income-generating activities (Okoye, Okoye & Chijioke, 2016).

Gender distribution

The gender distribution table (Table 4) provides insights into the representation of males, females and other gender within the study area.

Table 4: Gender distribution of respondents

Gender	Frequency	Percentage
Male	163	65.2
Female	85	34
No response	2	0.8
Total	**250**	**100**

Source: Field survey (2023)

Gender Balance: Table 4 shows gender distribution in communities, with males (65.2%) and females (34%), with unspecified genders at 0.8%, suggesting significant roles for both genders in economic activities.

Male Representation: The survey, as shown in Table 4, reveals a significant male presence in the population, highlighting their significant role in household dynamics and societal expectations, influencing their investment behaviours and financial decisions.

Female Representation: While females represent a slightly lower percentage (85%) of the population, their presence remains significant. Understanding the specific roles, responsibilities, and challenges faced by women in small-scale mining communities is crucial for designing inclusive investment strategies and development initiatives.

Implications for Investment Strategies: Gender distribution data is crucial for understanding rural households' financial needs and preferences, as traditional gender roles significantly influence economic participation and

decision-making processes (Doss & Quisumbing, 2018). Rural women face financial inclusion barriers like limited credit, property rights, and social norms. By analyzing gender distribution data, financial institutions can identify targeted interventions like microfinance and skills training to enhance household income (Food and Agricultural Organisation of the United Nations, 2019). According to Tanzile, Domapielle, M. K. & Fielmua, (2023) promoting gender-sensitive investment strategies can significantly empower rural households, improving women's financial well-being and community resilience. This empowers women to invest in education, healthcare, and nutrition, contributing to sustainable development outcomes.

Household size distribution

The household size distribution table (Table 5) offers insights into the composition of rural households within small-scale mining communities in Wassa Amenfi West Municipality.

Table 5: Household size distribution of respondents

Household size	Frequency	Percentage
1-5	153	61.2
6-10	78	31.2
11-15	8	3.2
16 -20	5	2.0
No response	6	2.4
Total	**250**	**100**

Source: Field survey (2023)

Variability in Household Sizes: Table 5 illustrates a diverse range of household sizes within the surveyed population. The majority of households fall within the 1 to 5 family members range, comprising 61.2% of the entire respondents. This suggests that a substantial portion of households in these

communities consists of smaller households, which may influence investment decisions and resource allocation strategies.

Moderate to Large Household Sizes: The distribution, in Table 5, also reveals a substantial presence of moderate to large household sizes. Approximately 31.2% of households have 6 to 10 members, while 3.2% have 11 to 15 members. This indicates the prevalence of extended families or households with multiple generations living together, which can affect investment priorities, financial planning, and resource management practices.

Implications for Investment Strategies: The data highlights the importance of adapting investing methods to suit the diverse needs and preferences of households, focusing on products and services with flexibility and risk mitigation features (Esteve et al., 2024)

Social and Economic Dynamics: Household sizes in small-scale mining communities are influenced by factors like migration, employment, cultural norms, and structures, requiring understanding for effective investment interventions (Arah, 2014).

Occupation distribution

The occupation distribution table (Table 6) sheds light on the diverse employment landscape within rural households in small-scale mining communities in Wassa Amenfi West Municipality.

Table 6: Occupation distribution of respondents

Category of Occupations	Frequency	Percentage
Skilled jobs	89	35.6
Semi-skilled jobs	75	30.0
Unskilled jobs	53	21.2
Artisans/Craftsmen	24	9.6
No response	9	3.6
Total	**250**	**100.0**

Source: Field survey (2023)

Occupational Diversity: Table 6 reveals the types of jobs undertaken by the respondents, reflecting the multifaceted nature of rural economies in small-scale mining areas. According to Indeed Editorial Team, (2024), occupations can be grouped into three, namely skilled, semi-skilled and unskilled jobs. Skilled jobs are that require technical skills, specialised training, or professional education. Teachers, nurses, police officers, bankers, miners, electricians, and mechanics are examples of skilled jobs in the study area. Jobs requiring only minimal knowledge or training are classified as semi-skilled. Jobs under this within the study area include phone repairers, commercial drivers, and traders. Unskilled jobs require a lot of physical labour and little formal education are considered unskilled jobs e.g., farmers and labourers. Finally, craftsmen and artisans are occupations requiring creative or manual craftsmanship such as hairstylists, carpenters, masons, and dressmakers.

Implications for Investment Strategies: Understanding the occupational distribution provides insights into the income sources, livelihood strategies, and economic dynamics of rural households. Tailoring investment strategies to address the specific needs, aspirations, and constraints of different occupational groups can increase the impact and efficacy of activities meant to support income production, community economic empowerment, and sustainable development (Rahut, Mottaleb & Ali, 2017).

Monthly income distribution

The monthly income distribution table (Table 7) provides critical insights into the income levels of head of rural households within small-scale mining communities in Wassa Amenfi West Municipality. According to Willis et al., (2022), rural communities are those with a total population of less than

5,000 residents. Therefore, households within rural areas are considered rural households.

Table 7: Monthly income distribution of respondents

Monthly income range (GH₵)	Class	Frequency	Percentage
100-1,000	Low-income	53	21.2
1,100-2, 000	Low- income	66	26.4
2,100-3, 000	Middle- income	54	21.6
3,100-4,000	Middle- income	25	10.0
4,100-5,000	Middle- income	10	4.0
5,100-6,000	High- income	12	4.8
6, 000+	High- income	30	12.0
Total		**250**	**100.0**

Source: Field survey (2023)

Income Diversity: Table 7 reveals a diverse range of monthly income levels among the surveyed population. Household incomes vary across different income brackets, ranging from as low as GH₵ 100 to over GH₵ 6,000. From the table, it can be said that the study area has three classes of people: low- income, middle- income, and high-income classes. According to Kenton, Kelly and Eichler (2024), the low- income class is the lowest level of society, often working in low-paying jobs with limited skills. They earn less than the upper- and middle-income classes and hold little power. The middle - income class consists of households between the upper and working income class, with varying income, education, and social status. The upper income class, despite making up a small percentage of the total population, controls a large amount of wealth.

Income Concentration: 31 percent of households fall within the middle-income range, as shown in Table 7, with 21.6% earning between GH₵ 2,100 and GH₵ 3,000 per month and 10% earning between GH₵ 3,100 and GH₵ 4,000 per month. This suggests a moderate level of income stability and economic activity within the communities.

Income Disparities: While a significant portion of households earns moderate incomes, there are notable disparities across income brackets. Lower-income households (earning between GH₵ 100 and GH₵ 2,000 per month) represent 21.2% of the surveyed population, while higher-income households (earning above GH₵ 5,000 per month) constitute 16.8% as shown in Table 7.

Sustainability: Sustainable investment strategies should consider the income dynamics and vulnerabilities faced by rural households, particularly those reliant on volatile sectors such as small-scale mining. Diversification of income sources, financial literacy programmes, and access to microfinance services can help mitigate income risks and enhance household resilience to economic shocks.

Investment Implications: Tailoring investment strategies to the income distribution profile is crucial for ensuring relevance and impact. Investment options should be accessible, affordable, and tailored to the specific needs and preferences of households across different income brackets. Priority should be given to initiatives that promote income generation, asset accumulation, and long-term financial security for rural households.

Research Objective One: Describe the investment strategies used by households

This research objective required to describe the investment strategies used by households. The researcher used a three-point Likert scale questionnaire and interview schedule to solicit participants' responses to the research question. The statements in the questionnaire and interview schedule were coded from zero (0) to two (2). As such a benchmark value of one (1) was established. Therefore, any mean value below one was considered a negative response while that above one was considered positive. In this case, a higher mean (above one) indicates a higher level of investment perceived by respondents in that particular category. Table 8 and figure 4 present a summary of the findings.

Table 8: Investment strategies used by respondents

Investment	Mean	Std. Deviation
Building	1.089	0.099
Vehicles	0.766	0.097
Education	1.044	0.016
Bank products	0.803	0.091
Valuables and minerals	0.590	0.078

Source: Field survey, (2023)

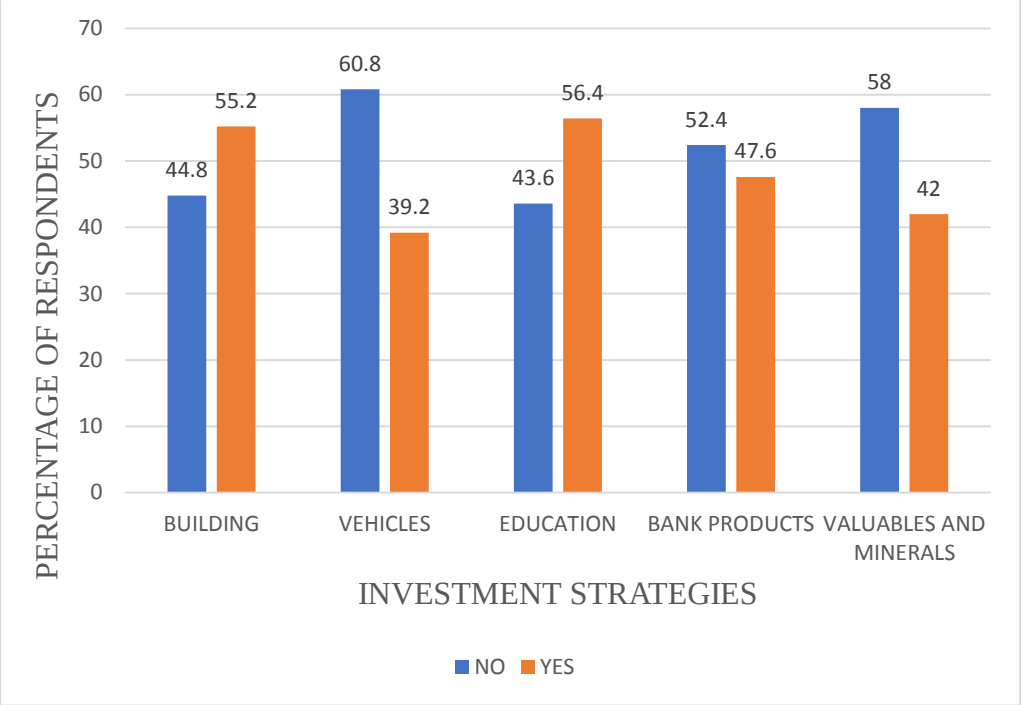

Figure 4: Frequency of forms of investment strategies used by participants. Source: Field survey (2023).

The variables with positive responses (mean values above 1.0) include Building and Education as preferred forms of investment strategies. Building (Mean = 1.089, Std. Deviation = 0.099), in Table 8, appears to be the most significant form of investment strategy among respondents, with the highest mean value. This suggests that buildings are considered significant investment assets by the respondents. The relatively low standard deviation shows a high level of agreement among respondents, suggesting that most heads of households perceive a significant level of investment in this category. This implies that the respondents may view building-related investments favourably for potential returns or stability. This could influence decisions related to real estate development, property management, or housing investments. This finding agrees with the findings of Verma (2008), Kantidas (2011), Geetha and

Ramesh (2012), and Parashar (2010) that individuals engage in investment in buildings or real estates more than other investment strategies.

Education, (Mean = 1.044, Std. Deviation = 0.016) in Table 8, also received positive responses reflecting the importance attached to investing in knowledge and skills development. This suggests investments in education may be considered important for personal development, workforce skills, or societal progress. This could influence decisions related to education funding, educational institutions, or training programmes. The standard deviation is very low (0.016), indicating strong agreement among respondents regarding investment in education. Education is likely perceived as a valuable long-term investment for improving social and economic mobility. The findings are in accordance with that of Hien (2018); McMahon and Moreira (2014) who posited that investments in education and training have a number of beneficial effects on the economy and society, including boosting economic growth, raising national productivity, raising people's intellectual and qualification levels, and lowering unemployment and poverty in a nation. Building and education together demonstrate a desire for investments that yield both measurable and intangible results over the long run among the household heads in the Wassa Amenfi West Municipality.

The investment strategies with negative responses (mean values below 1.0) include Vehicles, Bank products, and Valuables and minerals. The reaction to vehicles (Mean = 0.766, Std. Deviation = 0.097) was somewhat negative, indicating that although households may purchase vehicles, they do not strongly believe that doing so is an intelligent investment choice. From Figure 4, vehicles received a higher negative response that positive (No -

60.8%, Yes – 39.2%). Instead of being seen as instruments for accumulating wealth, vehicles are frequently seen as depreciating assets. The findings of the study concur with Huseynzade (2023) who asserted that vehicles and appliances, are considered essential for maintaining a stable quality of life, thus, owning vehicles is not seen as an investment. This suggests that compared to buildings, vehicles might be viewed as less reliable or profitable investment possibilities. This might have an impact on choices about investments in the automotive sector, transit systems, or automobile production.

The result for Bank products (Mean = 0.803, Std. Deviation = 0.091) indicates that bank products including savings accounts, certificates of deposit, or investment funds may be fairly attractive solutions for holding or expanding money. This would affect choices on banking services, investing techniques, or financial planning. The moderate standard deviation suggests some variability in respondents' perceptions. The present study partly confirms the findings of Samudra and Burghate (2012) as well as Bhola, Shah, and Zanvar (2013) that banks products were preferred by families and all age groups. The results could indicate limited trust in or accessibility to formal financial institutions, low perceived returns on such investments, or low financial literacy.

Valuables and Minerals (Mean = 0.590, Std. Deviation = 0.078) from Table 8, received the lowest mean score, reflecting a very low level of investment in valuables and minerals. It suggests that households could be empty of means or desire in valuable objects including rare commodities, jewellery, or precious metals. These findings differ from those of O'Connor et

al., (2015) and Hilson and McQuilken (2014), who observed that houses in mining districts usually preserve gold production as financial security, managing financial demands during emergencies or economic turbulence. They sell reserved gold to cover expenses, therefore providing a steady safety net especially in rural and unofficial economies where mining is the sole means of income. The findings of this objective suggest a clear distinction between preferred and less-preferred investment strategies. Building and education stand out as prioritized investment strategies, likely due to their long-term benefits and alignment with household goals for stability and growth. Building investments seem to be a dependable source of income for long-term security and possible value growth; real estate can be sold or rented to make money. However, the less emphasis on investments in vehicles, bank products, and valuables and minerals, possibly due to concerns about depreciation, accessibility, or perceived lower returns, reflects a larger trend of households favouring practical, long-term investments over financial or short-term ones.

Research Objective Two: Find out if households are fully involved in investment

This research objective sought to find out if households are fully involved in investment. The researcher used a closed-ended questionnaire and interview schedule to solicit how the monthly income of respondents was used. Participants were asked the percentage of their monthly income they spent on several items. Participants' responses to how their monthly income is spent have been summarized in Table 9.

Table 9: Disbursement of monthly income by respondents

Monthly income	Mean (GH₵)	Std. Deviation
Percentage of monthly income spent on food	22.8960	0.82400
Percentage of monthly income spent on housing	9.4144	0.94823
Percentage of monthly income spent on Children's education	12.3160	0.88572
Percentage of monthly income spent on utility bills	11.5404	0.67923
Percentage of monthly income spent on Clothing and household items	11.6586	1.83176
Percentage of monthly income spent on Savings	12.3000	1.00815
Percentage of monthly income spent on Investment	11.6144	1.65001
Percentage of monthly income spent on Others	5.6200	0.06686

Source: Field survey (2023)

The analysis of mean and standard deviation for the percentage of monthly income spent on various categories reveals valuable insights into spending patterns and variability among individuals. The data in Table 9 indicates that, on average, a substantial portion of monthly income is allocated to essentials such as food (mean: 22.8960) and housing (mean: 9.4144). High spending on food suggests that it is a priority for most individuals, indicating the importance of budgeting and cost-saving strategies to manage food expenses effectively. Moderate spending on housing highlights the significance of affordable housing options and potential challenges related to housing affordability for individuals with lower incomes. Tyran and Thomas (2012) found that, in addition to actual returns, people's opinions of housing investments are influenced by whether they make or lose money. Furthermore,

Gyourko and Molloy (2015) argued that government policies and regulations influence involvement in housing as investment.

Spending on children's education, from Table 9, also occupies a significant portion of income, with relatively low variability among individuals (mean: 12.3160). Substantial spending on education underscores the priority placed on investing in children's future, emphasizing the importance of access to quality education and financial planning for educational expenses. Agabi (2012) asserted that investing in education is equivalent to investing in the development of human capital. This emphasizes Weisbrod's (1962) conclusion that a sizable portion of governmental or private spending income is allocated to formal education. Investing in education is equivalent to investing in the development of human capital (Agabi, 2012).

Utility bills account for a notable portion of income as well, though with slightly lower variability (mean: 11.5404). Significant spending on utilities emphasizes the importance of energy efficiency measures and cost-saving initiatives to manage utility expenses effectively.

Conversely, from Table 9, discretionary expenses like clothing and household items show moderate spending levels (mean: 11.6586), with higher variability among individuals (standard deviation: 1.83176). Moderate spending with high variability suggests diverse preferences and lifestyle choices among individuals, indicating opportunities for targeted marketing and consumer education on budgeting for discretionary expenses.

Significant amounts of income are also allocated to investments (mean: 11.6144) and savings (mean: 12.3000), but with varied degrees of fluctuation (standard deviations: 1.65001 and 1.00815, respectively). A substantial

amount of money is put aside for saves, which emphasizes the value of disaster readiness and financial planning, the need for financial literacy, and having access to savings choices. According to Lusardi and Mitchell (2014), who explored how financial literacy affects investment decisions significantly, having greater financial knowledge is correlated with making more informed and active investment decisions. Thus, sufficient financial literacy stimulates involvement in investment.

Moderate spending with high variability suggests varying risk appetites and investment strategies among individuals, highlighting the importance of investment on education and access to diverse investment options. Other miscellaneous expenses appear to comprise a smaller portion of income (Table 9) with very low variability (mean: 5.6200, standard deviation: 0.06686). Lower spending with minimal variability suggests that miscellaneous expenses may be relatively stable and predictable, providing opportunities for individuals to allocate resources toward other financial goals.

A large amount of monthly income is spent on necessities like housing and food as they align with Maslow's hierarchy of needs, emphasizing the prioritization of basic needs for survival (Saputra, 2024). According to an analysis of spending patterns; this highlights the significance of planning and cost-cutting measures. A considerable amount of revenue is also allocated to children's education, highlighting the significance of having access to high-quality education and making sound financial decisions. Since utility costs take up a sizeable amount of revenue, cost-cutting and energy-efficient solutions are imperative. Moderate spending levels are evident in discretionary expenses such as clothing and household items, which suggests a range of

tastes and lifestyle choices. A significant amount of income is also allocated to savings and investments, underscoring the importance of emergency readiness and financial planning.

Research objective three: investigate factors affecting heads of households' engagement in investment

This research objective sought to investigate factors affecting heads of households' engagement in investment. The researcher used a five-point Likert scale (Strongly disagree, disagree, undecided, agree, strongly agree) questionnaire and interview schedule to solicit participants' responses to factors that affect their engagement in investment.

The statements in the questionnaire and interview schedule were coded from one (1) to five (5). As such a benchmark value of three (3) was established. Therefore, any mean value below three (3) was considered a negative response while those above three (3) were considered positive. In this case, a higher mean (above three) indicates factors affecting heads of households' engagement in investment. The analysis of responses on a 5-point Likert scale regarding factors influencing engagement in investment unveils intriguing insights into perceived influences and the variability of opinions among respondents. Table 10 presents a summary of the findings. The overall mean for the factors affecting household heads' engagement in investment is 3.4025.

Table 10: Factors affecting heads of households' engagement in investment

Statement	Mean	Std. Deviation
My income level influences my engagement in investment	3.69	7.201
The number of dependents influences my engagement in investment	3.64	4.831
The length of time required for an investment cycle could affect my investment decision.	3.21	1.094
The returns on investment affect my decision towards investment.	3.31	1.154
The risk tolerance of an investment influences my engagement.	3.26	1.156
Records/reputation of an investment product affect my decision on engagement in it.	3.37	1.249
The current rates of inflation with the returns of the investment influence my engagement in it	3.37	1.256
Government policies and regulations affect my engagement in investment	3.37	1.313

Source: Field survey (2023).

Firstly, according to Table 10, respondents generally perceive their income level as a significant determinant of their investment engagement, with a relatively high mean score of 3.69 (higher than the overall mean 3.4025). The relatively high mean suggests that respondents perceive their income level as a significant factor influencing their engagement in investment. This

implies that because income has a direct bearing on one's financial capacity and risk tolerance, people frequently take it into account when determining whether or how to invest. However, the wide standard deviation of 7.201 indicates considerable diversity in how individuals view the impact of income on investment decisions. This suggests that while some people may firmly believe that income has a significant role in financial choices, others may disagree. This variation may result from things like: Wealth Distribution where individuals in higher income groups may have more money to spend, which enables them to make more investments. While those in lower groups could feel limited or think that other aspects—like risk tolerance or family size—are more important. Also, Alternative Influences, this implies that other respondents might give more weight to market opportunities, investment expertise, or financial literacy than to income levels.

Studies by Kantidas (2011), Geetha and Ramesh (2012), and Murugan (2012) together with the present study confirm that income levels of individuals significantly influence their engagement in investment. Respondents with lower incomes may prioritise safe, low-risk options or put off investment entirely, those with higher incomes are likely to have a larger capacity for risk and diversification. Income may serve as a psychological barrier for some people, leading those with lower incomes to believe that investing is impossible. Some of the variation in reactions may be explained by this perspective. According to the findings, income has a variable impact on investment engagement. This emphasises the significance of customised financial education and regulations that tackle the unique obstacles encountered by various income brackets in order to promote wider

engagement in investing endeavours. In conclusion, although though income level is typically seen as a key determinant of investing activity, the wide range of answers reflects a variety of financial situations, goals, and viewpoints.

Similarly, the number of dependents is regarded as influential in investment engagement, with a mean score of 3.64 as shown in Table 10. This score being higher than the overall mean of 3.4025 suggests that respondents perceive the number of dependents as an important factor in investment decisions. Though the high standard deviation of 4.831 signifies varying opinions among respondents. While some respondents strongly agree with the influence of household size, others may not consider it impactful. This disparity suggests different viewpoints, which could be brought about by differences in people's financial situations, cultural norms, or investing preferences. Findings from Geetha and Ramesh (2012) support the finding of this study that family size influences participants' engagement in investment. Given the respondents' desire for stability and financial security, those with larger families or more dependents may be more cautious or deliberate when making investment decisions. On the other hand, people with fewer dependents may be more willing to take on investing risks, which could result in a range of opinions among the respondents. All things considered, although household size is acknowledged as a significant determinant of investing participation, the range of opinions indicates that not everyone gives it equal weight.

Regarding other factors, such as the length of time required for an investment cycle, returns on investment, risk tolerance, records/reputation of

investment products, current inflation rates, and government policies and regulations, respondents express moderate perceptions. From table 10, mean scores ranging from 3.21 to 3.37 indicate some degree of importance attached to these factors in investment decisions. A mean score above 3 on a 5-point Likert scale typically indicates moderate importance, so these factors still hold relevance in influencing investment decisions. The standard deviations range from 1.094 to 1.313, indicating varying levels of agreement among respondents. Factors like the length of time for an investment cycle (SD = 1.094) show relatively higher consensus and Government policies and regulations (SD = 1.313) show greater variability, suggesting more diverse opinions on its importance. The mean of 3.21 suggests that respondents somewhat consider the length of time required for an investment cycle in their investment decisions likely due to its impact on liquidity and decision-making timelines. A study by Lazar and Sundar (2017) concluded that there is no correlation between the length of the investment and engagement in investment as opposed to the finding of this study. Respondents indicated that the length of time required for an investment maturity affects their engagement in investment.

The mean (3.31), in Table 10, suggests that respondents consider investment returns as an important factor in their investment decisions. Thus, the present study confirmed the finding of Bennet and Halvitigala (2013) that return on investment, price to earnings ratio, return on equity, managerial quality, among others affects individuals' engagement in investment. Although potential profits or returns are a top priority for investors, they may

not be the most important consideration in this situation of the heads of households in Wassa Amenfi West Municipality.

The mean score (3.26) of risk tolerance, as shown in Table10, demonstrates a moderate assessment of each person's risk tolerance when choosing investments. Kasilingam and Jayabal (2010), together with the present study observed that risk tolerance significantly influenced investor's engagement in investment. This means heads of households see opportunities as investment strategies and risk a great deal in expectation of a high return rate.

The mean (3.27), from the Table 10, suggests that respondents consider records/reputation of investment products, current rates of inflation with investment return, and government policies and regulations as somewhat influential in their engagement. Lubis, Kumar, Ikbar, and Muneer (2015), Shafi (2014), and the present study discovered that heads of households assess the historical performance of potential investment strategies, inflation rates, etc. before engaging in any investment strategies. This result reflects the value of credibility and trust in investment decision making. The inflation rate (mean = 3.37) suggests that purchasing power of returns is a cause for concern. Lastly, the mean score of Government Policies (3.37) indicates sensitivity to the policy and regulatory frameworks that impact the stability of investments. All of these factors show that although they influence investment choices, they are viewed as secondary to more important considerations (probably those with mean scores higher than 3.402). Nonetheless, the fact that their scores are near the average indicates that they continue to have a major influence on investor behaviour. This analysis demonstrates the careful method that

investors employ when balancing priorities according to individual and market factors.

In summary, while income level and family size emerge as relatively prominent factors influencing investment engagement, there exists notable variability in perceptions regarding other factors. This variability shows the complexity of each person's process for making investment decisions and emphasizes the necessity for specialized financial planning techniques and investment education programmes to successfully meet a range of needs and preferences.

Research hypothesis one: H_0: There is no statistically significant difference in the level of investment among young adults (18-35 years) and middle-aged (36-50 years) heads of households

This research hypothesis sought to establish whether the level of investment of participants differs based on their ages. An independent samples t-test was conducted. The results are presented in Tables 11 and 12.

Table 11: Percentage of monthly income spent on Investment

Age (Years)	Mean	Std. Deviation
18-35	11.2052	1.38564
36-50	12.5349	1.68996

Source: Field survey 2023

Table 11 shows the descriptive of the monthly income participants spend on investment. The results reveal that participants from the ages of 18 to 35 years have a mean of 11.205 and a standard deviation of 1.386 while participants from the ages of 36 to 50 years have a mean of 12.535 and a standard deviation of 1.690. The results indicate that older participants tend to

spend more of their monthly income on investments when compared to younger participants. To be sure, though, an independent samples t-test was performed to see if the amount of investment among young adults (18–35 years old) and middle-aged (36–50 years old) heads of households differed statistically significantly. A summary is presented in Table 12.

Table 12: Independent t-test analysis

Levene's Test for Equality of Variances		t-test for Equality of Means		
F	Sig	T	Df	Sig. (2-tailed)
.835	.362	-.837	238	0.404

Source: Field survey 2023

Table 12 shows the results of the Levene's Test statistic and the t-test for Equality of Means. The result shows a Levene's Test statistic (F) of 0.835 with a corresponding p-value of 0.362, suggesting that there is no significant difference in variances between the two groups.

The test reveals that there is no statistically significant difference between the means of participants aged 18 to 35 years (M=11.205, SD=1.386) and those aged 36 to 50 (M=12.535, SD=1.690); t (238) = -0.837, p = 0.404. This is a signal that age may not necessarily determine which percent of monthly income to be spent on investment. This may also be because Table 8 reveals that less than 12 percent of the monthly income is invested.

The results of the Independent Samples Test, in Table 12, suggest that there is no statistically significant difference in the percentage of monthly income spent on investment between the two groups being compared. Therefore, the null hypothesis is not rejected indicating no significant

difference in investment levels between young and middle-aged adults. These findings imply that, based on the available data and test results, there is no evidence to support a meaningful distinction in investment spending patterns between the groups under consideration as discovered by Jains and Dashora, (2012).

Potential reasons for the lack of significant differences in investment between young and middle-aged adults in the study area may include Similar Financial Education and Knowledge, that is, young and middle-aged persons may have similar access to resources for financial literacy, which could result in similar investment practices. This is consistent with the findings of Garg and Singh (2018), who found that youth financial literacy is low in most parts of the world, which is concerning. Social or cultural norms could be another factor. Similar levels of engagement may arise in this case due to common cultural views regarding investment. This is in line with researches showing that attitudes and conventions within mining communities can also affect investment behaviours (Laheri, Lim, Arya & Kumar, 2024; Judge, Warren-Myers & Paladino, 2019).

Research hypothesis two: H_0: There is no statistically significant impact of age, family size, and level of income on the investment strategies of heads of households.

This research hypothesis sought to establish whether age, family size, and level of income has impact on the investment strategies of heads of households. A multinomial logistic regression analysis was conducted. Table 13 to 18 presents the results of a multinomial logistic regression analysis, which aims to predict the probability of various investment strategies based on

certain factors or variables. Each investment strategy, such as building, vehicle, education, bank products, and valuables and minerals, is evaluated in terms of its pseudo-R-square value.

Table 13 shows the pseudo-R-square value, which is a measure of how well the predictor variables (age, family size, and level of income) explain the variation in the dependent variable (the choice of investment strategy). Higher numbers on the scale of 0 to 1 suggest a better model fit.

Table 13: Variation of how well age, family size, and level of income predict investment strategies of households

Investment strategy	**Pseudo R-Square**
Building	0.274
Vehicle	0.017
Education	0.051
Bank products	0.105
Valuables and minerals	0.120

Source: Field survey (2023).

Analysis of Table 13 shows that the investment strategy with the highest pseudo-R-square value is building, suggesting that the model explains approximately 27.4% of the variation in this category. This indicates a relatively strong fit for predicting building as an investment strategy.

On the other hand, the model's performance is less pronounced for predicting vehicle and education as investment strategies, as indicated by their lower pseudo-R-square values of 0.017 and 0.051, respectively. These values suggest that the model explains only around 1.7% and 5.1% of the variation in vehicle and education choices, respectively.

Bank products and valuables and minerals fall somewhere in between, with pseudo-R-square values of 0.105 and 0.120, respectively. These values suggest moderate fits for predicting these investment strategies, with the model explaining approximately 10.5% and 12.0% of the variation in bank products and valuables and minerals choices, respectively. Tables 14 presents output of the parameter estimates of the investment strategies employed by households.

Table 14: Impact of the independent variables on Investment strategies

Investment strategies	**Socio-demographic characteristics**		
	Age	**Household size**	**Monthly income**
Building	0.168	0.034*	0.016*
Vehicles	0.846	0.360	0.025*
Education	0.765	0.387	0.187
Bank products	0.017*	0.780	0.036*
Valuables & minerals	0.283	0.152	0.011*

**The asterisks represent variables with statistically significant relationships*

Source: Field survey (2023).

Impact of age, household size, and level of income on building

In Table 14, the regression analysis reveals insights into predictors of the building investment strategy. Age demonstrates a significance level of 0.168, indicating non-significance in predicting building choice. Conversely, household size exhibits a significance level of 0.034, suggesting statistical significance in predicting building choice at the conventional threshold. Similarly, monthly income displays a significance level of 0.016, indicating its statistical significance in predicting building choice.

The analysis highlights household size and monthly income as statistically significant predictors of the building investment strategy, as their significance levels fall below the conventional threshold of 0.05. This result aligns with research by Bujang, Zarin and Jumadi, (2010) which demonstrated that household size and income levels have a major impact on housing or real estate investment decisions. Specifically, greater income levels are frequently associated with more diverse and riskier investment portfolios.

The implication of these findings suggests that among the variables examined, household size and monthly income hold stronger predictive power for the choice of building as an investment strategy. This suggests that individuals with larger families or higher monthly incomes may be more inclined to choose building investments, indicating potential avenues for targeted marketing or investment strategy customization.

Impact of age, household size, and level of income on the vehicles

In Table 14, the regression analysis presented insights into predictors of the vehicle investment strategy. Age demonstrates a significance level of 0.846, indicating non-significance in predicting vehicle choice. Similarly, household size exhibits a significance level of 0.360, suggesting non-significance in predicting vehicle choice. Conversely, monthly income displays a significance level of 0.025, indicating its statistical significance in predicting vehicle choice at the conventional threshold.

The analysis highlights monthly income as the only statistically significant predictor of the vehicle investment strategy, as its significance level falls below the conventional threshold of 0.05. According to Knez, Jereb and Obrecht, (2014), prices determine the purchase of vehicles, thus, persons with

higher income would be interested in investing in vehicles. However, neither age nor household size emerges as significant predictors in this model. Per the findings Knez, Jereb and Obrecht, (2014), vehicles are surprisingly, more attractive for the older population. The disparity in the study regions that the various researchers employed could be the cause of this discrepancy.

The implication of these findings suggests that among the variables examined, monthly income holds the strongest predictive power for the choice of vehicles as an investment strategy. This implies that individuals with higher monthly incomes may be more inclined to choose vehicle investments, indicating potential marketing strategies or investment customization targeted towards this demographic.

Impact of age, household size, and level of income on education

Table 14 presents the regression analysis findings concerning predictors of the education investment strategy. Age, household size and monthly income exhibit significance levels of 0.765, 0.387, and 0.187 respectively, indicating its non-significance in predicting education choice at the conventional threshold.

Age, household size, and monthly income do not show up as significant predictors in this model based on the study that was supplied, since their significance levels fall below the accepted cutoff of 0.05. This could be attributed to the fact that education is essential and compulsory for all individuals in Ghana. The government of Ghana has educational policies running which make some levels of education free for all Ghanaian children; the policies are Free and Compulsory Universal Basic Education (FCUBE) programme and Free Senior High Schools (FSHS), in order to boost the

nation's economy by increasing human resources through education. Hence, factors such as age, household size, and income may not necessarily influence investment decisions in education, as they are mostly government-funded.

The implication of these findings suggests that in the context of education investment strategies in Ghana, demographic factors such as age and household size, in addition to financial factors like monthly income, may not play significant roles in decision-making. Therefore, alternative factors or approaches may need to be considered when designing investment strategies for education in this setting. In support of this, Wati and Sahid (2022) discovered that the following variables are related to the amount spent on education: return on investment, efficiency, competitiveness, planning, quality, and out-of-pocket costs.

Impact of age, household size, and level of income on bank products

In Table 14, regression analysis findings shed light on predictors of the bank products investment strategy. Age demonstrates a significance level of 0.017, indicating statistical significance in predicting bank product choice at the conventional threshold. Additionally, monthly income displays a significance level of 0.036, indicating its statistical significance in predicting bank product choice at the conventional threshold. Conversely, household size exhibits a significance level of 0.780, suggesting non-significance in predicting bank product choice.

Based on the results in Table 14, age and monthly income emerge as statistically significant predictors of the bank products investment strategy, as their significance levels fall below the conventional threshold of 0.05. Contrary to the findings of Sukma and Suprati (2020) that ages of respondents

do not influence investment in bank products, this study discovered that ages do impact. A difference between these findings can only be attributable to the levels of risk tolerance among the various age groups. However, household size does not appear to be a significant predictor in this model as opposed to the findings of Singh and Sailo (2017) which indicated that household size affected investment in bank products by respondents.

The implication of these findings suggests that among the examined variables, age and monthly income hold the strongest predictive power for the choice of bank products as an investment strategy. This implies that individuals with higher ages and monthly incomes may be more inclined to choose bank products as investment options (as they may offer better stability, security and liquidity) indicating potential avenues for targeted marketing or investment strategy customization.

Impact of age, household size, and level of income on valuables and minerals

Table 14 presents findings from a regression analysis regarding predictors of the valuables and minerals investment strategy. Age and household size exhibit significance levels of 0.283 and 0.152, both suggesting non-significance in predicting valuables and minerals choice. However, monthly income displays a significance level of 0.011, indicating its statistical significance in predicting valuables and minerals choice at the conventional threshold.

Overall, only monthly income emerges as a statistically significant predictor of the valuables and minerals investment strategy, with its significance level falling below the conventional threshold of 0.05. This is due

to the fact that heads of households with higher incomes typically have more discretionary income that can be allocated to investments in jewels and minerals, while heads of households with lower incomes may be more focused on meeting their immediate financial requirements.

Conversely, the intercept, age, and household size do not appear to be significant predictors in this model. A similar conclusion was reached by Ansari, (2019) that investment choices involving valuable minerals may not be solely based on an individual's age. While younger investors may be more willing to take on risk and have a tendency to make more speculative investments, older investors often want more diversified and stable portfolios. Yet, rather than relying solely on age, the choice to invest in minerals may also be influenced by other variables like individual risk assessment, market movements, and economic data. Also, household size could indirectly influence investment decisions through factors such as available disposable income, financial obligations, and long-term financial goals. Large families may prioritize investments differently from smaller ones, but the correlation with investments in minerals specifically is not well-explored in literature.

The implication of these findings suggests that among the examined variables, monthly income holds the strongest predictive power for the choice of valuables and minerals as an investment strategy. This implies that individuals with higher monthly incomes may be more inclined to choose valuables and minerals as investment options, indicating potential avenues for targeted marketing or investment strategy customization.

In summary, the analysis certain demographic variables (that age, household size, and level of income) had statistically significant impact on the

investment strategies of the heads of households, therefore, the null hypothesis (H_0) was accepted. The statistically significant impact of the demographic variables on investment strategies of heads of households within the study area may be attributed to risk tolerance and financial literacy. People who have a higher risk tolerance are more inclined to use aggressive investment strategies as opposed to conservative ones. This is supported by researches by Kim, Hanna, and Ying (2021); Samiuddin and Ahmad (n.d.); and Chattopadhyay and Dasgupta (2015), that age, family size, and income levels all affect an investor's risk tolerance. Additionally, the selection of investment tools and strategies is greatly influenced by financial literacy and market expertise (Lusardi & Mitchell, 2014).

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter provides a summary of the study and propose some recommendations towards improving investment in the study area.

Summary

The following defined research objectives were to be addressed by the study.

The research investigated three main objectives:

1. to describe the investment strategies used by households.
2. to determine if households are fully involved in investment.
3. to investigate factors affecting heads of households' engagement in investment.

Additionally, the research tested two hypotheses:

1. There is no difference in investment levels between young adults (18-35) and middle-aged adults (36-50).
2. There is no impact of age, household size, and income on investment strategies.

In order to find answers for the objectives and hypotheses, a cross-sectional survey was conducted in three (3) small-scale mining rural communities Samreboi Nkwanta, Oda Ahwiam and Odumase in the Wassa Amenfi West Municipality. Using the multistage sample technique, 314 heads of household were chosen from each of the three communities. The researcher created questionnaire and structured interview schedule (both with the same items), and gathered the data with the help of the field assistants who had received training. There was a 79.62% response rate, thus, the data retrieved

from the data collection was 250. The literature was evaluated from empirical sources, which included earlier studies, as well as theoretical concerns related to the subject. Statistical methods such as measures of central tendencies, independent T-test, and Levene's test were used to analyse the acquired data.

The key findings of the study are as follows:

1. The study highlighted that buildings are the favoured investment choice among respondents, followed by education. Meanwhile, vehicles and valuables/minerals rank lower in preference, offering insights into resource allocation decisions.
2. Monthly income is largely allocated to essentials like food and housing, underscoring their significance. Substantial portions are also dedicated to children's education, utilities, savings, and investments, emphasizing financial planning. Discretionary expenses exhibit more spending variability.
3. Income level and family size are identified as key factors influencing investment engagement, with substantial impact according to mean scores. Other factors like investment returns, risk tolerance, and time horizon also play a moderately influential role, demonstrating varying perceptions among respondents.
4. The t-test results failed to reject the null hypothesis, suggesting no significant difference in investment levels between young (18-35) and middle-aged (36-50) adults.
5. The multinominal logistic regression analysis revealed that age, family size, and income significantly impact certain investment strategies of household heads, but not all examined strategies.

These findings are largely consistent with previous literature on household finance and investment behaviour. Studies have commonly found that households prioritize essential spending on items like food, housing, and utilities. They also tend to allocate meaningful portions of income to savings, investments, and children's education.

Regarding investment strategies, preferences for tangible and familiar assets like real estate have been widely documented. Perceptions of education as a key investment are also understandable given its role in human capital formation. The influence of income level and family responsibilities on investment is well established. However, the mixed findings on other factors like risk tolerance align with literature showing complex interactions between demographic and psychological factors in decision-making. Finally, the lack of difference in investment levels between age groups contradicts some research finding higher investing among older households. This may be due to the study's narrow age ranges or other sample characteristics.

Conclusions

This study explored the investment strategies of rural households in Wassa Amenfi West Municipality, an area deeply influenced by small-scale mining activities. Despite Ghana's economic progress since the mid-1980s, financial constraints and the lack of financial intermediaries in rural areas remain significant challenges, limiting savings and investments essential for economic growth. This research aimed to bridge a gap in understanding how rural households in these communities strategize their investments amid limited resources and financial infrastructure. The findings revealed that building and education were the most preferred investment strategies among

the heads of households in the study area, reflecting a focus on long-term stability and future-oriented development. These choices highlight the value placed on tangible assets and human capital development. However, investment in vehicles, bank products, and valuables and minerals were less significant, likely due to concerns over depreciation, accessibility, and perceived returns.

Socio-demographic factors such as income levels and household size significantly influenced investment choices, underscoring the importance of financial capacity and family structure in shaping financial decisions. Age, however, had limited impact except in specific cases like investments in bank products. The lack of significant financial literacy and access to reliable financial services emerged as critical barriers to investment participation. Given the limited resources available to small-scale miners and the low financial inclusion in these communities, tailored interventions are essential. Policymakers and financial institutions should focus on creating accessible, flexible financial products and enhancing financial literacy programs. Addressing these challenges, particularly for marginalized groups like women, can empower households to make informed investment decisions, improve financial resilience, and contribute to sustainable community development.

This study contributes to the understanding of rural investment behaviour in small-scale mining communities, highlighting the need for inclusive financial policies that address the unique challenges of such areas. Future research could examine the role of broader economic and policy environments in shaping investment behaviours, providing a deeper understanding of how rural communities can be better supported.

Recommendations

The researcher recommended the following in light of the study's findings:

1. The media and financial organisations should emphasise financial literacy and help people in rural areas make informed decisions regarding investments through various community outreach programmes.
2. Financial institutions, Government Agencies, NGOs, Financial Advisors and Influencers should encourage individuals in rural communities to engage in diversified investments to mitigate risk and optimize returns and to promote budgeting practices that balance essentials, education, and discretionary spending. This can be achieved through radio, television, and social media broadcasts, as well as community outreach programmes.
3. Curriculum developers should integrate practical financial planning modules into Home Economics curricula at the basic, pre-tertiary and tertiary levels.
4. Financial institutions should provide workshops on investment strategies, risk management, and emphasize the importance of long-term financial goals in education.
5. Community leaders should facilitate community-based financial literacy programmes and establish support networks for sharing investment knowledge.
6. Government should implement policies supporting affordable housing and education, foster a conducive environment for diverse investment

opportunities, and develop and promote financial education initiatives for citizens.

7. Traditional or political leaders should collaborate with NGOs to expand financial literacy outreach within the communities.
8. NGOs and financial institutions should offer resources for low-income families to access essential services and support initiatives that empower communities in making informed financial decisions.

Areas for Further Studies

It is recommended that further studies be conducted in the following areas:

1. Examine how investment strategies are affected by cultural elements unique to Ghanaians within small-scale mining rural communities. Investigate traditional beliefs, values, and community dynamics that may shape residents' financial decisions.
2. Conduct a longitudinal study to track changes in investment strategies over time. Explore how external factors such as economic fluctuations, commodity prices, or global events influence the investment behaviour of rural households in small-scale mining communities.
3. Compare the investment strategies of rural households in small-scale mining communities with those in urban areas. Identify key differences and similarities to understand the broader socio-economic context and potential urban-rural disparities in investment patterns.
4. Conduct research on the environmental implications of small-scale mining investments in these rural households. Evaluate how sustainability and environmental concerns influence their investment choices and propose strategies for more eco-friendly investments.

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APPENDICES

APPENDIX A

QUESTIONNAIRE/INTERVIEW SCHEDULE

UNIVERSITY OF CAPE COAST
FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

TOPIC: INVESTMENT STRATEGIES OF RURAL HOUSEHOLDS IN SMALL-SCALE MINING COMMUNITIES IN THE WASSA AMENFI WEST MUNICIPALITY

QUESTIONNAIRE/INTERVIEW SCHEDULE

Introduction

This is research being conducted by a Master of Philosophy (M. Phil) student of the Department of Vocational and Technical Education, University of Cape Coast. The objective is to contribute to the body of knowledge on savings and investments in Ghana by learning about the investment techniques used by rural households in small-scale mining communities in the Wassa Amenfi West Municipality. It is also anticipated that the research would provide suggestions on how to improve Ghanaian rural households' financial stability. We kindly ask that you provide your honest opinions. You are assured that every response will be handled in the strictest confidence and will remain anonymous. Additionally, be rest assured that your answers will only be utilized for scholarly research. Thank you in advance.

SECTION A: BASIC DATA

1. Age ……..
2. Gender Male ☐ Female ☐
3. Household size ……..
4. Occupation ……..
5. Monthly income in Ghana Cedis (GH₵) ……

6. Please indicate the percentage of your monthly income you spend on the following items.

Food [ ]
Housing [ ]
Education of children
Utility bills [ ]
Clothing and household items [ ]
Savings [ ]
Investment [ ]
Others

7. How much did you invest approximately in the

Last month ……
Last three months …….
Last year ……...

8. Which the following items do you own? (Tick as many as applies)

House	
Farm land	
Purchased land	
Vehicles	
Other	

Please specify ……..

9. Do you consider your ownership of the item(s) it as an investment?

Yes ☐ No ☐

SECTION B: FORMS OF INVESTMENT

This section of the questionnaire and interview schedule gather data on forms of investment you engage in. Please indicate the extent to which you would engage in each of the forms of investment below and provide the appropriate responses on a scale of 1-3, where 1 = Yes, 2 = No, and 3 = Sometimes (ST). Kindly provide your response in one of the boxes provided by ticking (✓) in the space that best corresponds to your response.

Item	YES	NO	ST
10. I invest in buildings.			
11. I invest in vehicles.			
12. Investment in education will increase my fortunes in future.			
13. I invest in bank products (bonds, shares, fixed deposit, etc.)			
14. I invest in other valuables and minerals.			

SECTION C: FACTORS AFFECTING ENGAGEMENT IN INVESTMENT

This section of the questionnaire and interview schedule gather data on factors affecting engagement in investment. Please indicate the extent to which each of the factors below would affect your decisions on investment and provide the appropriate responses on a scale of 1-5, where 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Undecided (UN), 4 = Agree (A) and 5 = Strongly Agree (SA). Kindly provide your response in one of the boxes provided by ticking (✓) in the space that best corresponds to your response.

Item	SD	D	UN	A	SA
15. My income level influences my engagement in investment					
16. The number of dependents influences my engagement in investment					
17. Length of time required for an investment cycle could affect my investment decision.					
18. The returns on investment affect my decision towards investment.					
19. The risk tolerance of an investment influences my engagement.					
20. Past records /reputation of an investment product affect my decision on engagement in it.					
21. The current rates of inflation with the returns of the investment influence my engagement in it.					
22. Government policies and regulations affect my engagement in investment.					

SECTION D: IMPACT OF DEMOGRAPHICS ON INVESTMENT

This section of the questionnaire and interview schedule gather data on impact of age, household size and level of income on investment. Please indicate the extent to which each of the factors below would affect your decisions on investment and provide the appropriate responses on a scale of 1-5, where 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A) and 5 = Strongly Agree (SA). Kindly provide your response in one of the boxes provided by ticking (✓) in the space that best corresponds to your response.

Item	SD	D	N	A	SA
23. I believe age can influence my investment decisions					
24. I believe household size can influence my investment decisions					
25. I believe level of income can influence my investment decisions					

Thank you

APPENDIX B

ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST
INSTITUTIONAL REVIEW BOARD SECRETARIAT
TEL: 0558093143 / 0508878309
E-MAIL: irb@ucc.edu.gh
OUR REF: IRB/C3/Vol.1/0048
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OMB NO: 0990-0279
IORG #: IORG0011497

20TH FEBRUARY 2023

Ms Gayle Salome Steadman-Amissah
Department of Vocational and Technical Education
University of Cape Coast

Dear Ms Steadman-Amissah,

ETHICAL CLEARANCE – ID (UCCIRB/CES/2022/76)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research on ***Investment Strategies of Rural Households in Small-Scale Mining Communities in Wassa Amenfi West District.*** This approval is valid from 20th February 2023 to 19th February 2024. You may apply for a renewal subject to the submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit a periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Kofi F. Amuquandoh

Ag. UCCIRB Administrator