

Assessing the Determinants of Savings Behavior of Financial Intermediaries in Ghana: A Case of Ho Municipality

Author's Details:

⁽¹⁾Felix Kwame Nyarko*Ph.D. Student, Jiangsu University, China School of Finance and Economics ⁽²⁾Dr. Yusheng Kong-Professor, Jiangsu University, China Dean, School of Finance and Economics, Jiangsu University ⁽³⁾Ethel Dzidefo Asimah-Master Student, Jiangsu University, China School of Finance and Economics ⁽⁴⁾Dominique Jean-Jacques Beraud-Master Student, Jiangsu University, China School of Finance and Economics ⁽⁵⁾Mary Bossman-Master Student, Jiangsu University, China School of Management ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾School of Economics and Finance, Jiangsu University, 212000, China
Correspondent Author: Felix Kwame Nyarko

Abstract

the study investigated the determinants of saving behavior of financial intermediaries in the Ho Municipality. The population consisted of individuals who constitute the employees and management, customers and market men and women of some selected financial intermediaries in the Ho Municipality of the Volta Region of Ghana. A sample size of 152 was drawn from the population using the probability and non-probability sampling techniques. Descriptive and inferential statistics were used to analyze the data collected. The findings showed that in general, the majority of the individuals save with the financial institution in the Ho municipality. It also showed that many individuals' choice of the financial institutions was encouraged by interest rates. It was also realized that a majority of the individuals within the Ho municipality have fewer dependents that triggered saving behavior in the Ho municipality. Also, the findings showed that a majority of individuals use the Automated Teller Machines (ATMs) to either withdraw or deposit and this encourages other individuals to save the financial institutions. However, the study concluded that the determinants of saving behavior vary from person to person as they have diversified purposes of saving and consuming money. Finally, it was recommended that financial institutions in the Ho municipality should publicize their services to create awareness in the public domain and train them on how to use the Automated Teller Machines (ATMs). Also, the study recommended that individuals must plan their expenditure against their income and join fewer social groups to have enough income to save

Key Words: Savings Behavior; Financial Intermediaries; Economic Growth

Introduction

Globally, the demographically-induced fall in saving within the industrial economies will be less disruptive than often assumed because of a similar offsetting decline in investment requirements. The rapid development of a global capital market provides an important means of accommodating the change (Smith, 2005). According to Smith (2005), Japan is an example of a country that has built up a very large net foreign investment position that can be used to finance future consumption. While the United States has followed a different path, its residents still have large wealth holdings that can be sold off in future years to finance continued consumption.

The current economic conditions in Africa has adversely affected most African families both rural and urban, with the rural families being the worst affected, resulting in high levels of poverty and, therefore, low levels of saving and investment. Ziorklui and Barbie (2007) examined that, in Africa, there are no hard and fast rules on the determination of how well national and domestic saving should perform in any given year. Thus, in discussions of how well saving are doing in any economy, the standard is usually to compare that economy to other economies of similar size and structure, or to compare the same countries' saving performance over time, or even to compare actual performance to planned performance. These performance rates averaged 37.4% in Botswana, 21.4% in Cameroon, 21.6% in Nigeria but only 6.4% in Ghana between the periods of 1980 and 2001 (Akpokodje *et al.*, 2006).

In Ghana and most developing parts of the world, families find it difficult or almost impossible to save due to low levels of incomes (Boateng, 2004). The low incomes of Ghanaian families are due primarily to the low levels of economic growth coupled with other factors such as illiteracy and political instability. Quartey and Blankson (2006) found that the low saving in Ghana could be due to the inadequate financial intermediaries as well as low incomes of the populace.

The Ho municipality is predominantly a small/medium scale business-oriented community. Consequently, the incomes of these families are likely to be only enough to meet their basic needs. In situations where family income is only able to meet the needs of the family, saving, and for that matter investment, is usually not a consideration. The unavailability or few formal financial intermediaries in the rural areas of Ghana could also be a disincentive for formal saving in these rural areas.

Saving is the portion of income not spent on current expenditures. Because a person does not know what will happen in the future, money should be saved to pay for unexpected events or emergencies. An individual's car may break down, their dishwasher could begin to leak, or a medical emergency could occur. It simply means putting something aside for future use or what will be considered as deferred expenditure (Amu, 2008).

Rural families in Ghana are mostly peasant farmers, fishermen and petty traders in mainly agricultural products. As a result, they fall within the low-income families whereby most of their earnings are considered permanent. This implies that a large percentage of their incomes are used only to meet basic needs. For households to be able to save and invest, they need to have an excess income after meeting life's basic necessities. Households, will, therefore, spend most the permanent part (income that is used to meet basic life necessities) of their income while the transitory part (the income left after basic needs have been met) is channeled into saving and subsequently investment. That is to say that before a family decides to put some money aside for future use and into productive ventures, the family might have met the basic needs of its members.

All these findings are clear indications of the fact that saving in Ghana is generally low and that most Ghanaians will prefer to save in the form of a tangible asset like buying properties rather than putting the money in savings accounts where the real value of the money stands a chance to erode as a result of inflation. The study was also necessary at Ho Municipality because there have been few studies of such nature in the entire municipality. This research will provide some literature on the state of affairs relating to investment behavior of the families at the Ho Municipality.

From the research topic, the dependent variable is saving behavior with determinants such as saving, investment, family size, growth, demographics, and external factors among others being the independent variable. Research has been conducted on saving and its determinants which have shown positive or negative relationships. For instance, Ahmad and Mahmood (2013) found out that per capita income inversely related to saving rate whiles exchange rate and inflation rate have a negative impact on saving. Results in Adelakun (2011), the analysis showed that saving rises with both the growth rate of disposable income and the real interest rate on bank deposits.

In Ghana, saving behavior is mostly dependent on the income level of the citizenry and their rate of consumption. Also, the geographical location of individuals with the same level of income may have different saving patterns due to their cost of living. Moreover, interests paid on saving are not that significant, while annual interest rates on loans range from 27.5 percent to about 38 percent (BOG, 2010). The high lending rates by banks are a very critical issue affecting the banking industry in Ghana which discourages potential savers and affects the saving behavior of people.

Mostly, saving behavior in rural areas has been found to be very low. Ho municipality is a small growing town with its populace mainly government workers, small/medium scale business operators, petty traders and few farmers are mostly affected by the problem of saving since they are those who engage in economic activities with financial returns and must save. These class of people finds it difficult to save because income generated

from their working activities are quite high if not little. From the overview, females have a higher percentage of the population (142,701) than the males (129,180) and as a result turn to spend more than the men because, naturally, women have more needs and engage in impulse buying.

The casual observation showed that the families in the Ho Municipality do not usually have access to banks and other financial intermediaries. It was, therefore, mind-boggling as to whether the families saved at all, and if they did, how often, where and what problems did they encounter as they saved and invested. Businesses in the municipality are not expanding into bigger firms or industries due to low saving. Entrepreneurial skills are not emerging because of lack of start-up capital to develop potentials of the young ones which could have been solved if they save.

Therefore, this study seeks to assess the determinants of saving behavior in financial intermediaries in Ghana, a case study of the Ho municipality.

Many other researchers have undertaken some studies in this research area. Some of whom are Bremang (2012); Larbi (2013); Ahmad and Mahmood (2013); and Adelakun (2011). Bremang (2012) undertook a study in “an investigation into the determinants, problems, and consequences of low saving in developing countries: a case study on Ghana.” The study discussed: Why Ghanaians have such low saving, Whether Ghanaians understand what an increase in the levels of saving would do to the economy of Ghana and also found out through survey analysis and literature to search the various ways to stimulate saving in Ghana. Inferring from their survey results, they concluded that, Ghanaians are not motivated to save more mainly because banks don't provide enough incentive to save. Interest on saving, which is clearly one of the issues that bother almost every saver, is quite low. The banking sector is hence not efficiently apportioning money between the surplus sector and the deficit sector of the economy since it can be seen that the deficit sector of the economy cannot afford to secure loans. It was recommended in the study that individuals could be required mandatorily to save up a certain proportion of their income before reaching retirement. Another important way of increasing the rate of private saving would be to set interest rates that give the average citizen a reason to save.

A country can also motivate its citizens to spend more money on saving if it manipulates its taxation system in such a way that individuals who earn income from savings accounts or other income generating investment pay low taxes.

Larbi (2013) investigated on “The Long Run Determinants of Private Domestic Saving in Ghana: A Co-integration Approach.” The study explored the determinants of private saving in Ghana using the Phillips and Ouliaris (1990) residual-based tests for cointegration to determine the long run relationship between private saving and its determinants. Financial liberalization, per capita income and inflation used as determinants, were found to have a positive and significant relationship with private saving. There is a strong willingness to save, but the capacity to save is not very robust. He concluded that education is key as it not only raise awareness of the need to save but also helps the people understand the need to maintain manageable family sizes that will enable them to save more. Financial liberalization is recommended to be deepened to give financial institutions room for improved financial packages for increased saving. Growth should be pursued vigorously to improve incomes and hence people's capacity to save. In spite of the results for fiscal deficits, the government must keep its spending within sustainable limits and invest appropriately.

Ahmad and Mahmood (2013) examined “Macroeconomic Determinants of National Saving Revisited: A Small Open Economy of Pakistan.” They explained the determinants of national saving in the process of economic growth, in the glimpse. It was found that per capita income inversely related to national saving rate, both in the long run and as well, in short, run significantly. The exchange rate and inflation rate have a negative impact on national saving but lagged exchange rate has a significant impact. Because of floating exchange rates and the decrease in capital controls, the volume of international capital flows in a country, has increased significantly. Trade openness is positively associated with national saving in Pakistan because trade openness cause to increase the income and welfare of the society in through market economy. The growth of the income level is negatively related to national saving. Keynesian and permanent income hypothesis of income and saving is not valid for Pakistan because per capita income and income growth inverse function of saving at the national level.

For the policy purpose, the economy should be stabilized and improve upon through more production. If we control the monetary policy, it may be helpful for the exchange rate.

In Adelakun (2011), research was conducted on “The Nexus of Private Saving and

Economic Growth in Emerging Economy: A Case of Nigeria”. The study focused on the impact of the main determinants of saving identified in the literature on private saving in Nigeria and also on the motivations of saving and how saving is measured. The study employs the Error-Correction modeling procedure which minimizes the possibility of estimating spurious relations, while at the same time retaining long-run information. The results of the analysis showed that the saving rate rises with both the growth rate of disposable income and the real interest rate on bank deposits. Public saving seems not to crowd out private saving; suggesting that government policies aimed at improving the fiscal balance have the potential of bringing about a substantial increase in the national saving rate. The degree of financial depth has a negative but insignificant impact on saving behavior in Nigeria. He recommended that: the focus of development policy in Nigeria should be to increase the productive base of the economy in order to promote real income growth and reduce unemployment. Policymakers should take explicit account of the result in the formulation of economic policy. The government should also sustain its Oil- Price-based Fiscal Rule (OPFR) which is designed to link government spending to notional long-run oil price, thereby de-linking government spending from current oil revenues. Lastly, monetary policy should focus on ways of increasing the abysmally low real interest rate on bank deposits.

It can be noticed from the above researcher’s works that although the variable appears similar their study areas differ from what is to be undertaken; moreover, the results they have gotten cannot be applied in our situation. What is being researched at the moment is assessing the determinants of saving behavior in the Ho municipality of Ghana. The dependent variable then is saving with determinants like income level, investments and family size being the independent variables. This study would take place at the Ho municipality in the Volta Region of Ghana. This research will address the effect of the independent variables on saving behavior.

In this study, the researchers will look at very deliberate matters such as: to determine the factors that influences the choice of a financial institution by savers in the Ho municipality; to analyze the impact of economic factors on saving behavior of people living in the Ho municipality; to investigate the impact of socio-cultural factors on saving behavior of people living within the Ho municipality; to assess the effect of financial technological factors influencing saving behavior of the people living within the Ho municipality; and to recommend policies and strategies that will improve upon the saving behavior of people living within the Ho municipality. It is from the foregoing backdrop that this study is justified and will be useful in numerous ways.

Literature Review and Hypothesis Development

Hypothesis Development

$H_0: p = 0$ (The choice of financial institution, economic, socio-cultural and financial technological factors have no effects on saving behavior in the Ho municipality).

$H_1: p \neq 0$ (The choice of financial institution, economic, socio-cultural and financial technological factors have effects on saving behavior in the Ho municipality).

Definition of Concepts/ Theoretical Literature

Definition of Savings

According to Miller and VanHoose (2008), a savings is a forgone consumption. They explain forgone consumption as when one does not spend all the income that is earned within a given period. To them, once part of what is earned today is left for future use, there is a saving. Ahmed (2007) put it in a simple language as

putting money aside for future use. He argues that saving is the result of careful management of income and expenditure so that there is something left to be put aside for future use.

Clayton and Brown (2003), in defining savings, looked at the concept purely from the economists' point of view. They explain savings as the absence of spending. Other writers on the topic such as Smith (2005) attempted to explain the concept of saving mathematically as $\text{Income} - \text{Consumption} = \text{Saving}$.

All the above definitions point to one fact that, savings represents money that is earned today but kept for use in the future. It is, however, worth to note that saving is not always a result of reducing ones' expenditure, but sometimes it comes as a result of the deliberate decision of an individual or family to put part of what is earned today aside for future use.

Definition of Investment

The concept investment originates from the word "garment" or "vestment" and means the action of putting something into somewhere else. In Economics, the concept is used to mean the purchase of capital goods, that is, goods which are not consumed, but instead, used in future products such as railroads, or a factory, clearing land, or putting oneself through education.

In corporate finance, investment means buying securities or other monetary or paper (financial) assets in the money markets or capital markets or in fairly liquid real assets such as gold, real estate or collectibles (Wikipedia, 2011).

In personal finance, the concept is used to mean money used to purchase shares, put in a collective investment scheme or used to buy an asset where there is an element of capital risk. Ahmed (2007) put it in a very simple language as putting money into some venture in order to make a profit. There are several other explanations of the concept but all boil down to the fact that there is some financial commitment to make more money in the future or to increase one's future purchasing power. Pollack and Heighberger (2002), for instance, explained investment as putting money into instruments like stock, bonds, mutual funds and other securities where the money is expected to increase in value. To Raily (2012), investment is the current commitment of an individual's income to derive future payment to compensate the investor for the time, and fund committed, the expected rate of inflation and the uncertainty of future payments.

Investment is always characterized by risk and uncertainty. The risk is explained as a measurable possibility of losing money or not gaining interest on one's investment. Pollack and Heighberger (2002) tried to differentiate between risk and uncertainty by saying that risk is measurable, but uncertainty cannot be measured.

Determinants of Saving Behavior

Demographics

The effect of demographic changes on saving can be derived from the life-cycle model when the share of the working population relative to that of retired persons increases (Bosworth, 2003; Higgins and Williamson, 2006; Lahiri, 2009). Demographics, however, are likely to help explain only the long-term trends in saving and not short-term fluctuations. The influence of demographic factors is significant on saving.

The life cycle model postulates that the age composition of the population has a significant bearing on saving behavior in developing countries. The youth and the elderly have low incomes and low saving. Those in middle age have higher productivity, income and save more to repay past obligations and to finance their retirement. Thus, aggregate saving will be affected by the age distribution of the population. The life cycle model has a mixed finding of the relationship between saving and dependency ratio.

While some studies find a positive relationship between dependency ratios and private saving (Manzocchi, 2009), other studies such as those of Deaton (2010) and Loayza *et al.* (2010) found that high dependency ratios have a negative impact on saving.

Another demographic characteristic that has been identified to impede household saving, especially in the rural areas, is high birth rates. This viewpoint was postulated several years ago in the late 60s by Leff (2009) in one of his hypothesis when he was conducting a study on dependency rate and saving rates. The finding of this study was that the disparity in aggregate saving rates between developing and developed countries is attributable to high dependency rates in developing countries. This high dependency rate is one of the main attributes of rural families in Ghana.

An increase in life expectancy will *ceteris paribus* increase the household saving ratio (of a growing population) because each person requires higher well accumulation to finance a constant consumption stream over a longer retirement plan.

Choice of Financial Institution by Savers

Growth in Client's Saving

The rate of growth in saving is an obvious factor for explaining the rate of saving. Saving and growth have been highly correlated over long time horizons as well as for many regions and stages of development (Bosworth, 2003; Schmidt-Hebbel, Serven, and Solimano, 2006). The main theoretical foundation for the link between growth and saving comes from Modigliani's life-cycle hypothesis, which tried to establish a relationship between income and saving by arguing that growth increases saving because it increases the income of the young relative to that of the elderly (Modigliani, 1970). There are additional channels through which growth can positively affect saving, particularly in developing countries. Growth in saving and higher incomes raises more individuals above the subsistence level, below which they cannot save, and make individuals more responsive to changes in the interest rate (Ogaki, Ostry, and Reinhart, 1996).

External Factors

An external factor may not be really seen to have significant effects on saving but in some ways does. For example, where one decides to deposit money will affect saving in terms of the initial amount required saving and the interest rate you might earn for keeping money with a financial institution. Higher interest rates will encourage people to save more. Also, with the availability of appropriate saving schemes, people will be attracted to save more. Advertising though does not have a significant effect on saving; financial institutions that advertise more are likely to have more clients. Services offered by the institution and good customer relations can positively affect saving behavior. It is worth to note that, when inflation is high, people have less money left with them to save because a major part of their disposable income will be spent to satisfy their needs and wants (Ouattara, 2005).

Ngendakuriyo (2014) investigated that individuals in all East African Community (EAC) countries would prefer to keep money in secret place or at least in informal saving mechanisms than in formal financial institutions. Further, the cost of the service, the distance to the financial institutions, the access to the saving when sudden needs occur, and the rate of interest paid on saving are among the main factors influencing the saving behavior in the supply side of the market.

Economic Factors influencing Saving Behavior

Family Size

There are multiple definitions formulated based on the particular theoretical perspective that one comes from when the definition of the family comes to mind. Winch (2009) defined a family as a group of related persons in differentiated family positions such as husband and wife, parents and children, aunt and niece, who fulfill the functions necessary to ensure family survival, such as reproduction, child socialization, and emotional gratification. To Olson and DeFrain (2011), a family is two or more people who are committed to each other and who share intimacy, resources and decision-making responsibilities and values.

The economic impact of the size of a family is vital when the family engages in meaningful saving and investment. Basic to all the functions of the family enumerated in the foregoing discussion is the provision of physical needs of food, shelter, and clothing, among others. For the family to be able to meet these and other needs, it is essential for the family to have a solid financial base that will enable it to cater for these needs and as well engage in deliberate and planned saving and investment.

Investment

Several reasons have been advanced in influencing people's decision to invest. However, the main reason why people invest is to earn a return on their invested fund or capital due to their deferred consumption. People invest because they want a return to compensate them for the time, the expected rate of inflation (a general increase in the price of goods and services over time) and the uncertainty of the return (Pollack & Heighberger, 1998). Other reasons advanced by Weirich (1983) are the safety of income as well as the liquidity of income. He also observed that the primary objective of investing by individuals in the hope of earning a capital gain at the time of sale.

Income level

Households belonging to lower income group may have different saving behavior, middle-income households may have different and same as higher income households may have a different saving trend (Wen and Ishida, 2001). Saving of higher income group will decrease comparatively more than other groups specifying that higher income people have higher income always prefer their children to study from well-known institutes of their areas; they will forego their more saving as compared to lower or middle-income groups.

Ngendakuriyo (2014) investigated that, the higher the level of income, the higher the probability that individuals will hold saving accounts in Banks and MFIs for all EAC countries. The panel estimation results at EAC regional level revealed that the higher the level of income, the higher the probability that an individual will hold saving products in Banks and MFIs. Indeed, an increase in the income from one level to the next increases the probability that an individual would hold a saving product by 3.00 % in Banks, 0.21% in MFIs whereas the probability of keeping saving products in secret place decreases by 4.93%.

Economists' standard model of consumer behavior is the lifecycle model, which assumes that people determine their consumption and saving at each point in their lives by looking forward to their future income and desires, rather than considering only their current income and desired spending.

Socio-cultural Factors in Saving Behavior

Dependency Ratio

Ngendakuriyo (2014) identified that the higher the number of persons in the household implies a lower probability that the household would save in Banks. The empirical results of his work suggested that the socio-economic and socio-cultural characteristics of households in East African Community (EAC) countries could inform the Banks and non-banks financial institutions on the appropriate strategies to mobilize and collect saving especially from the potential micro-savers and poor households.

There are many reasons to believe that the dependency ratio is central to explaining differences in saving behavior and economic growth across countries. The theoretical underpinnings of this belief are based on the life cycle hypothesis. The argument goes as follows: economic agents have negative saving when young with little or no income, positive saving during their productive years and again negative saving when they are old and retired (Modigliani, 1970).

As children constitute a burden for parents and do not contribute to production, an increase in their proportion in the population is expected to reduce the private saving rate (Leff, 1969).

Financial Technological Factors on Saving Behavior

Automated Teller Machine

Payment systems have developed rapidly in many countries over the past few decades. The use of electronic means of payment has increased at the expense of paper-based payment instruments. For instance, in some countries payment cards have replaced cheques, and Internet banking has become a popular means of paying invoices. Automated Teller Machines (ATMs) is nowadays a very common technology for dispensing notes to cash holders.

ATMs have been analyzed in the literature for some thirty years. The earliest studies concentrate on explaining the adoption of this new technology. Mandell (1977) discusses ATM adoption in the USA. The first ATM was installed in the USA in 1969, and according to Mandell, only 10% of all national banks had adopted even one ATM after eight years. Mandell states that a bank's adoption of innovation depends on its size, branching status, and competitive position. According to Mandell, in those days adoption of new technology was related more closely to competition than to cost saving.

Paroush and Ruthenberg (1986) discussed the effects of ATMs on the share of demand deposits in the money supply. The authors use Israeli data and find that the introduction of ATMs increases deposits at the expense of currency holdings. Boeschoten (1992) also discusses the influence of ATMs on cash demand. According to the study, ATMs have a positive effect on the nominal currency growth, but this effect is not very robust.

Theories / Theoretical Framework

The Life-Cycle Hypothesis (LCH) Theory

The Life-Cycle Hypothesis (LCH) postulated by Albert Ando and Franco Modigliani in 1963 explains the conflict between the Average Propensity to Save (APS) observed from cross-section data, and that observed from historical time-series data.

According to their hypothesis, a typical individual has a flow of relatively low income at the early stage and end of life, but high during the middle of life. The individual does maintain a slightly increased level of consumption throughout his life, and the present value of total consumption would not exceed the present value of total income during the lifetime.

As in the life-cycle hypothesis, people smooth out fluctuations in income so that they save during periods of unusually high income and do not save during periods of unusually low income. Someone who looks ahead to a much higher future income consumes more accordingly. Thus, by relating the aggregate consumption function to the present value of the expected aggregate income, the Average Propensity to Save (APS) also the Average Propensity to Consume (APC) should remain unchanged as time passes, other things being equal. In fact, if each person saves zero over his life, then the $APS=0$ and $APC=1$ (www.jcctm.edu.hk, 2015).

The Life-Cycle Hypothesis (LCH) theory also offers important insights and guidelines to policymakers in government, to the financial service firms that produce life-cycle financial products, to the advisors who make recommendations to their client's concerning which products to buy, to educators who are trying to help the public make informed choices, and ultimately to consumers who are trying to answer these questions.

The findings of many economists bring out a problem in the life-cycle hypothesis model. It was found out that the elderly does not do not save as quickly as has been said in the model. There are two explanations for the aforementioned behavior of the elderly.

The first explanation is that the retired individuals are cautious about unpredictable expenses. The additional saving that arises due to this behavior is called precautionary saving. Precautionary saving may be made for the probable event of living longer than expected and hence having to provide for a longer than the planned span of retirement. Another rational reason is the possibility of ill-health and huge medical expenses. These probable events make the elderly save more.

The second explanation is that the elderly may save more in order to leave bequests to their children. This will discourage not saving at the expected rate. Overall research on the retired section of the society shows that the life-cycle model cannot completely explain consumer behavior. Providing for retirement is an important reason for not saving. However, precautionary saving and bequests are also important (Clayton & Brown, 2003).

The Life-cycle theory still holds in today's world as it is a matter of intense concern of millions of people around the world. It answers the most basic problems people face such as how much of their income they should save for the future; what risks they should ensure against; how should they invest what they save; should they buy or rent a house among others (Agenor and Aizenman, 2006).

The Permanent Income Hypothesis

The central idea of the permanent-income hypothesis is that, people base consumption on what they consider their "normal" income. In doing this, they attempt to maintain a fairly constant standard of living even though their incomes may vary considerably from month to month or from year to year. As a result, increases and decreases in income which people see as temporary have little effect on their consumption spending. The idea behind the permanent-income hypothesis is that consumption depends on what people expect to earn over a considerable period of time.

In order to test the theory, Friedman assumed that on the average people would base their idea of normal or permanent income on what had happened over the past several years. Thus if they compute permanent income as the average of the past four years, and income had been GHC 39,000, GHC 30,000, GHC 45,000 and GHC 24,000, [they would consider their permanent income as GHC 34,500](#) though our expectations of future income do not depend solely on what has happened in the past.

Both the permanent-income and life-cycle hypotheses loosen the relationship between consumption and income so that an exogenous change in consumption and investment may not have a constant multiplier effect. This is more clearly seen in the permanent income hypothesis, which suggests that people will try to decide whether or not a change of income is temporary. If they decide that it is, it has a small effect on their spending. Only when they become convinced that it is permanent will consumption change by a sizable amount.

An increase in income should not immediately increase consumption spending by very much, but with time it should have a greater and greater effect. A change in spending changes income, but people only slowly adjust to it. As they do, their extra spending changes income further. An initial increase in spending tends to have effects that take a long time to unfold completely.

This model has its roots in the works of Fisher (1907) and Ramsey (1928) and has since been developed in many directions. The ingredients of Friedman's model are: permanent consumption (c_p), permanent income (y_p), transitory consumption (c_t), transitory income (y_t). Measured income is the sum of *permanent* and *transitory* income (y_t) and measured consumption is the sum of *permanent* and *transitory* consumption (c_t), that is, $C = c_p + c_t$ and $y = y_p + y_t$

Permanent consumption is determined by the equation; $C_p = k(r, z) y_p$ where $k(r, z)$ is the average (or marginal) propensity to consume out of permanent income which depends on the rate of interest and on taste shifter variables z .

Keynesian's Theory

Keynes' analysis suggests that due to a number of factors, such as a liquidity trap and the general glut of saving, it is likely for saving to exceed investment and get a recession. Keynes felt recessions could last a long time because lower interest rates may not increase consumption very much due to the income effect of lower interest

rates means people have more income. Also, the liquidity trap explains when interest rates fail to boost demand. Interest rates cannot fall below a lower bound rate of zero, and lower interest rates are ineffective in boosting demand anyway.

Keynes' general glut says that if saving is high and consumer spending is low, firms will have a lot of unsold goods. In this climate, they will cut back on investment. Finally, if there is an initial fall in investment, businessmen may have negative confidence. Their "animal spirits" may fear recession and lower profits, so they cut back on investment. Consumer confidence may be adversely affected, and they spend.

With this overview in mind, Keynesian Theory generally observes the following concepts:

Unemployment

Under the classical model, unemployment is often attributed to high and rigid real wages. Keynes argues there is more complex than that, specifically which societies are highly resistant to wage cuts and furthermore that reducing wages would pose a great threat to an economy. Specifically, cutting wages reduces spending and may result in a downward spiral.

Excessive Saving

Keynes's concept here is somewhat complicated, but in short, Keynes notes excessive saving as a threat and prospective cause of economic decline. This is because excessive saving leads to reduced investment and reduced spending, which drives down demand and the potential for consumption. This can be another spiraling issue, as money not being exchanged is actively reducing prospective employment, [revenues](#), and future investments.

Fiscal Policy

The key concept in fiscal policy for Keynes is 'counter-cyclical' fiscal policy, which is the expectation that governments can reduce the negative effects of the natural business cycle. This is, generally, achieved through deficit spending in recessions and suppression of [inflation](#) during boom times. Simply put, the government should try to curb the extremes of economic fluctuation through informed fiscal policy.

The Multiplier Effect

This idea has in many ways already been implied in the atom, but inversely. Consider the unemployment and excessive saving problems, and how they stand to lead to spiraling decline. The other side of that coin is that positive economic situations can spiral upwards. Take for example a government investment in transportation, putting money in the pockets of various individuals who build trains and tracks. These individuals will spend that extra capital, putting money in the hands of other business (and this will continue). This is called the multiplier effect.

Investment Saving (IS) – Liquidity Preference and Money Supply (LM) Model

While the IS-LM Model is a complicated by-product of [Keynesian economics](#), it can be summarized as the relationship between interest rates and the real economic output. This is done through analyzing the investment-saving relationship (IS) in contrast to the liquidity preference and money supply relationship (LM), generating an equilibrium where certain interest rates and outputs will be generated.

Forms of Saving

An individual or a family's decision as to where to save so as to derive maximum satisfaction as well as ensure the security of their income is a very vital individual and family decision. It has been argued by Raily (2012)

that people save when their incomes exceed their current consumption desires and that the excess saving can be done in several ways. Raily (2012) argued that to save money, families can decide to put the money under their bed or bury it in the backyard until some future time when consumptions exceed their current income.

Generally, there are two main outlets where families can deposit any saving that they intend to do. These are formal and informal saving outlets (Ahmed, 2007; Aryeetey and Gockel, 2008; Boateng, 2004).

Formal Saving

Formal saving occurs when individuals or families keep their money with formal financial institutions such as commercial banks or other non-bank financial institutions such as insurance companies, credit unions or saving and loans companies (Boateng, 2004).

Commercial Banks

Commercial banks are the most dominant and complex institutions among all formal financial intermediaries. The importance of commercial banks as a formal saving outlet for families cannot be overemphasized. Lloyd (2009) observed that interest in commercial banks as an outlet for saving, stemmed among families not only because they play a dominant role among financial intermediaries but also because they have the ability to influence the money supply process. The activities of commercial banks also constitute the primary conduit through which central banks, monetary policies influence a nation's money supply and credit conditions to families and individuals. Ahmed (2007) observed that commercial banks in Ghana operate three main types of accounts; the current account, fixed deposit account, and the saving account.

Non-Bank Financial Institutions (NBFIs)

As at the end of December 2005, there were 34 (excluding insurance companies) NBFIs comprising of 12 saving and loans companies, 2 discount houses, 15 finance companies and 5 leasing companies operating in Ghana (Bank of Ghana, 2010).

The lines of business of the NBFIs include, but not limited to, taking deposits and lending to small scale enterprises as well as consumers, mobilizing resources, trading in short-dated financial securities, intermediate between banks, commerce and industry and the finance of acquisition of equipment, vehicles and consumer durables. It is, however, worth to note that there are three major NBFIs whose operations are regulated by other special statutory legislation instead of the provisions of the NBFIs Law (Decree 328).

These are the Social Security and National Insurance Trust (SSNIT) (Social Security Law), the Ghana Stock Exchange (Securities Law, 1993, Decree 333) and the Insurance Companies (Insurance Law, 1989, PNDC law 227). Ahmed (2007) observed that the insurance companies provide four main types of insurance for families and individuals. These are life insurance that includes term insurance and permanent insurance, motor insurance, fire, and theft insurance. Families can save their money in life insurance policies with insurance companies for use in the future.

Credit Unions

Another formal saving outlet available to families is the credit unions. Credit unions are usually owned and managed by the members. It is an avenue where families can deposit their saving. Boateng (2004) observed that credit unions accept deposits and make loans to only its members. Membership of credit unions is usually defined and restricted to a particular group of people who are encouraged to make regular contributions towards a common fund from which loans are usually granted to members at very low rates.

Informal Saving Institutions

Informal saving occurs within the informal sector of the economy. Aryeetey and Gockel (2008) observed that the informal financial sector participates in all commercial saving and lending that take place outside the formal sector in the Ghanaian economy. Informal saving options available to Ghanaian families include "susu,"

walking banks, and welfare societies as well as keeping the money at home or with a trusted member of the community.

“Susu”

According to Boateng (2004), susu is applicable to a group of people with a common interest, for example, co-workers, traders in the same area or neighbors who agree to make contributions periodically and the total sum is given to one of the members at a time until every member has his or her turn. Susu enables individuals and families to be able to acquire items which they might have had difficulty in making personal saving towards.

“Walking Bank”

This is a thrifty form of arrangement where an individual makes a daily or weekly round and collects contributions from individuals who want to save (Ahmed, 2007; Boateng, 2004). At the end of each month, the collector gives each contributor their contributions less one day's contribution as his service charge. People in the informal sector who do not get their incomes in bulk mostly undertake this form of saving. They use it to accumulate funds to undertake a venture or to procure some goods (Aryeetey and Gockel, 2008).

Welfare Society

This is formed in most communities and workplaces with the aim of assisting each other in times of need. Members contribute dues of fixed amounts, and an elected treasurer keeps these amounts. Although members do not have direct access to their saving, the money is available for members to fall on as loans in times of need, sometimes without any interest or if any at all, very minimal (Ahmed, 2007).

Purchasing Non – Consumable Items

Again, Boateng (2004) identified the propensity of families and individuals to purchase and keep non - consumable items as a way of saving. He argued that people who use this medium of saving buy capital items whose prices are likely to increase in the future and resell them at higher prices in the future. This form of saving can also be considered as an investment due to the propensity of the value of the item to increase in the future. For instance, in Ghana, many families and individuals buy pieces of land and re-sell them in the future at a higher price. This is so especially for residential lands located in urban areas whose value increase with the passage of each year. Precious metals like diamond, gold, silver, etc. are kept for their future prices to appreciate, and then they are re-sold.

Keeping the Money Home

Keeping money at home is also one of the ways in which families and individuals save money. This mode of saving is usually the option of people in the rural areas where access to other financial intermediaries is almost a nightmare. It is also the option of people who do not trust banks and other financial institutions (Ahmed, 2002). Most of the times, rural families find it more convenient to save with the informal financial intermediaries as the formal financial intermediaries are in most cases not available in the rural areas of Ghana.

Factors that Influence the Choice of Financial Institution by Savers

Marrar *et al.* (2011) conducted a *Financial Literacy, and Consumer Awareness Survey in the West Bank and Gaza* found out that trust in financial institutions was low; only 19.2% of the respondents indicated that they mostly trust commercial banks and only 13.2% trust insurance companies.

Furthermore, data indicate that a bank's reputation is the most important factor (according to 43.1% of survey respondents) when making a choice for the financial institution; this finding proved accurate when cross-referenced with locality, gender, age groups, and education level. People believe that commercial banks offer the best quality of financial services, although many respondents had never had contacts with financial institutions during the last 5 years.

Research has revealed that the level of familiarity a person has with particular financial institutions has an effect on whether or not that person trusts the institution; thus, it can be concluded that financial education should be considered a viable method to increase a population's trust, familiarity, and overall choice of financial services. Furthermore, the most familiar with financial services were highly educated, male (36.9%, compared to 18.1% for females), and between the age of 21-35.

The survey also revealed that 51% of respondents who had unspent money from month to month would deposit it or keep it in a bank or any financial institution and that 24% of respondents would use the new additional income to open an interest-bearing bank deposit.

With this, frequent access to banking saving products will influence the saver's choice of financial institution.

Furthermore, the study found that frequent access to media increases levels of financial literacy which in turn has an effect on the choice of financial institutions by savers. The study shows that 80.8% of Palestinians watch TV on a daily basis, while a lesser percentage listens to the radio daily (34.9%) and even less read newspapers daily (14.8%).

An individual's choice of saving, therefore, depends on the level of uncertainty they perceive and their current income. Particularly, the availability of insurance, the scope of borrowing and the role of the extended family are the major influences on an individual's wish to save. With the extended family system which is predominantly practiced in most sub-Saharan African countries (and Ghana is no exception), the family has a great influence on an individual's saving patterns. By providing for the consumption of older members, the family can totally erase the need for old people to put aside money for expenditure during their youthful days (Chenery, 2011).

Impact of Economic Factors on Saving Behavior

Amu and Amu (2013) researched on *the saving and investment behavior of rural families in the Ho municipality of the Volta Region of Ghana* identified and emphasized some economic factors that affect the saving behavior of people in the Volta Region.

Some of these economic factors include growth, demographics, urbanization and some external factors. They have identified that these economic factors impede household saving, especially in the rural areas, is high birth rates. It was also noted that these factors have also influenced the trends of saving behavior among the people. Thus, there have been some fluctuations in saving for some time now.

Subsistence-consumption theories propose that countries with high-income levels are likely to have a private saving and the observed confirmation powerfully chains this close. According to the permanent income hypothesis and Keynesian approach, it is hypothesized that the private, as well as national saving, is positively associated to the GDP growth and national income because an increase in income means a higher saving rate in the economy. Therefore, per capita income and GDP growth rates vary in the saving function (Deaton, 2010).

Deaton (2010) also provided evidence that higher income growth may produce higher saving. He again examines the impact of inflation which reduces the real income or purchasing power of the society which may create the uncertainty in future income. They again investigated the relationship between income and saving for Turkey. Results of the time series data explain that income positively related to saving. The life cycle theory also defines the positive relation between per capita income and saving. They also conclude that the real per capita income has a positive impact on saving, which supports the hypothesis that there is a virtuous circle that goes from faster growth.

The most significant result of this study is that public saving has a harmful impact on the saving rate that is why public saving will tend to crowd out private saving.

Edwards (2005), study why saving rate in Latin America nations have very low as likened them with some of the most effective countries in the world. He also establishes that per capita income growth appeared to be the most key determinants of aggregate saving, public saving is lesser in countries with sophisticated political instability, public saving crowded out private saving but less than proportionality. There have been great interests

in people with low income who do not have access to financial intermediaries as financial intermediaries spend a considerable amount of time chasing after people with comparatively higher income levels.

Wheley and Kempton (2006) observed that saving behavior among people of just below average incomes is mainly driven by age and that lasting saving habits seem to develop in childhood.

They also found that interest rates do not influence the saving behavior in low-income categories.

Policy Factors

Fiscal Policy and Government Saving: Fiscal policy can potentially affect saving through revenue policy (tax structure, tax incentives), expenditure policy (transfers, income redistribution), and the degree of government saving. It has been found that the last mentioned has crowded out private saving only partially and therefore helps private saving. This means that raising government saving helps raise national private and for that matter family saving (International Monetary Fund, 1995).

Social Security Systems: Social security systems are thought to have a significant impact on private saving. This is so because social security systems have the potential to replace an important saving motive - provision for retirement. Cross-country data, however, revealed little correlation between the private saving rate and the size of the pension system (International Monetary Fund, 1995). Feldstein (2005) found a significant negative impact of pay-as-you-go pension systems on private saving, but Quartey (2006) criticized Feldstein's findings on the bases that the pension scheme is a pay-as-you-go system such that, the higher your income or basic salary, the higher your pension benefits. Also, the duration one pays his pension determines his total benefits at the end of his working period. Some economists have argued that public pension schemes can even encourage saving because they create awareness of the need to provide for retirement. In studies on developing countries, social security schemes were found in some cases to have a significant impact on private saving (Edwards, 2005; Shome and Saito, 2007).

Financial Market Development: The development of financial markets has been shown to be a double-edged sword with regard to saving. Naturally, the development of such markets increases the availability of saving instruments and most likely also the return that savers get on saving, but it also makes it easier for individuals to borrow and can thus result in lower saving (Bayoumi, 2005; Ostry and Levy, 2005). Financial market development is difficult to quantify. The volume of total assets (or employees) of financial institutions and the geographical density of banking outlays all affect household saving. In their study of the relationship between financial market development and private saving, Edwards (2005) and Johansson (2006) found a positive coefficient which was significantly leading to the conclusion that financial market development has a positive net effect on saving in developing countries.

Non-Policy Factors

Apart from the policy variable discussed earlier, several other variables have been identified as affecting individual and family saving the world over. Some of these factors are; economic growth, demographics, interest rate, inflation rate, exchange rate, urbanization, etc.

Impact of Socio-Cultural Factors on Saving Behavior

Siman (2008) examined the relationship between entrepreneurship and active saving behavior. Three main explanations of wealth differences among families have been offered: the family's initial wealth endowment, the family's market return on their personal asset portfolio, and the family's saving behavior. The same study proposed that before entry, and during entrepreneurship, entrepreneurial families exhibit a more accelerated active saving behavior than wage-earning families. The study's findings suggested that accelerated saving behavior is exhibited only at certain time periods during the life cycle of entrepreneurship. Controlled funding and/or subsidies dedicated to entrepreneurship could lead to an increase in the personal saving of the families attempting to enter into, or incumbent in, entrepreneurship.

Gutter and Way (2007) studied the financial management practices of college students from states with varying financial education mandates. They explored the relationship social learning may have with saving behavior, and the previous social learning opportunities of current college students, including the discussions and observations students, may have been exposed to from their peers and parents.

The study used data coming from a study of college students across 15 college campuses resulting in a sample size of over 16,000 responses. Using logistic regression and structural equation modeling to test the relationships among the study's terms, results showed that: social learning opportunities were an important predictor of financial dispositions and financial behaviors, and financial education did not directly impact on behavior but made impact on knowledge, and that knowledge was a determinant of behavior for saving.

Another important way the family influences saving is its ability to insure against risk. In the absence of an effective and efficient insurance market and other natural retirement schemes like social security, affluent family members serve as insurance in times of hardships, offering their help and finances to members. This wipes out individuals' beliefs of the need to put down money in anticipation of future uncertainties (Nerlove *et al.*, 1985).

Individuals and families' knowledge and attitude towards saving vary greatly. Even within the same family, individuals vary in the way they perceive money (saving). A person's level of knowledge about saving influences that person's attitude towards saving. People have different behavior towards saving, and disparities in income levels, orientation toward money and their future goals and aspirations for the future might influence this. There are people who believe that money obtained today must be used to meet present needs, and the future will take care of itself (spenders).

There are others who also hold the view that, no matter how little one's income is, there is the need to save part of that income (savers). Savers compulsively save money only keeping very little free for essentials. On the other hand, spenders take delight in purchasing items (Olson and DeFrain, 2011).

Financial Technological Factors Influencing Saving Behavior

Laibson (1997) claimed that not all means are determinants of the positive saving behavior of people. Other people save money in financial institutions because they want a good return on their investment. In progressive countries, technological innovation has further complicated the mechanisms behind individual financial saving behavior which has made it more difficult for people to commit to saving. Laibson argues that technological innovation may have been responsible for the decline in US saving rates reducing welfare in the context of behavior as it has increased liquidity and reduced the opportunities for commitment to saving strategies. It can be argued that saving interest, the amount of income one could get, could be a determinant of saving behavior.

Methodology

The present study uses experimental and non-experimental design, and this is how it was undertaken. This research work employed the descriptive research design to collect data in order to answer research questions concerning the current status of the subject of the study. The purpose of employing descriptive research was to enable the researchers to observe, describe, and document the determinants of saving behavior as it naturally occurs. Due to the research topic, saving data cannot be collected from every individual. Therefore, a sample of the population was most appropriate.

For the purpose of this study, a case study was used; using the same selected State-Owned Banks (that is, GCB Bank, Agricultural Development Bank and the National Investment Bank). More specifically, the researchers made use of correlation design to establish the relationship between the determinants of saving and the people's saving behavior in the Ho municipality.

Finally using a case study enables the researchers to narrow down the very broad field of study into one easily researchable area, and also help to improve the data collection procedures and the reliability and validity of our findings.

The population of the study was heterogeneous because the customers are quite distinct from the employees who are also distinct from the various management of the banks. Therefore a stratified sampling technique was adopted. The total estimated population size of the study including the customers, the tellers, and management staff of the three-public state-owned banks was 250.

Semi-formal sector (Customers) was hundred (100), fifteen (15) for the formal sector (both the employees and management staff) of the three state-owned banks and thirty-seven (37) for the informal sector (market women and men). The customers are the main reason for the existence of the banks, and for whatever services the bank rendered are dependent on the customer's saving behavior. The employees and management staff are the people that form the organization's structure and perform all the activities of the state-owned banks. These customers included individual households, businesses like retail shops, shopping malls, hotels, radio stations among others and other private and public-sector institutions. The choice of the target population is to solicit information that represents a cross-section of all individuals and business activities that deal with the determinants of saving behavior in the Ho municipality.

The sample size was selected according to Krejcie and Morgan (1970) for determining sample size as cited in Makhbul, Rahid, and Hasun (2011). A sample size of 152 was used for the study. This was derived using the formula $s = X^2 NP (1 - P) \div d^2 (N - 1) + X^2 P (1 - P)$, where s = required sample size, X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841), N = the population size, P = the population proportion (assumed to be .50 since this would provide the maximum sample size) and d = the degree of accuracy expressed as a proportion (.05).

$$S = (3.841) \times (250) \times (0.50) \div (0.05)^2 (250-1) + (3.841) \times (0.50) \times (1-0.50) = 152$$

The sampling techniques employed in the study are probability (simple random sampling) and Non- probability sampling (purposive and stratified sampling). Selection of customers was by chance depending on their willingness and availability to participate in the study, thus, why the simple random sampling was used.

The stratified sampling technique was used in the selection of the respondents. The sampling size for the study was drawn from three (3) main strata, that is, the formal sector (management and employees of the banks to be visited), informal sector (market women and men) and the semi-formal sector (customers). One hundred (100) customers were selected randomly across the three banks in the Municipality, fifteen (15) employees and management staff were also selected from these banks and thirty-seven (37) market, women and men. The reason for the stratified random sampling is to ensure that each stratum is adequately represented.

For the purpose of this study, the researchers use both primary and secondary data. There was a heavy reliance on the use of primary data since the main tools used were structured questionnaires. The questions used were derived from the research questions of the study and were designed such that they obtained information to meet specific objectives of the study.

Three separate questionnaires were designed for each section of the target population. That is, one set of questionnaires was designed for the customers; another set of questionnaires was designed for the employees and management staff, and another for market women and men.

The researchers developed 30 questions to be answered by management and employees, 32 questions to be answered by customers and 30 questions to be answered by market women and men. The self-designed questionnaire for the study had five (5) sections. Section A requested the respondent to provide their background information such as sex, age, sex of head of the family, family size, religion and level of education; Section B determines the factors that influence the choice of a financial institution by savers in the Municipality; Section C analyzes the impact of economic factors on saving behavior of people living in the Municipality; Section D investigates the impact of socio-cultural factors on saving behavior of people living within the Municipality; Section E assess the effect of technological, financial factors influencing saving

behavior of the people living in the Municipality and finally; Section F recommends policies and strategies that will improve upon the saving behavior of people living within the Ho Municipality. The types of the questionnaire used were the closed-ended and open-ended type of questions.

Under the secondary data, records on saving patterns from the banks were also used. These were records for the past five years to monitor if saving has increased in these banks and again ascertain the number of people (customers) who have accounts with the banks for the past five years. The choice of data collection method was informed by the general objectives of the study, and the effect of the determinants of the saving behavior on the economic development of Ghana.

For good analysis and presentation of results, the collected data was analyzed using the IBM Statistical Package for Social Sciences (SPSS, version 20.0) and the MS Excel. The choice of the above tools was based on the fact that, SPSS is useful in analyzing data on behavior and is appropriate for both qualitative and quantitative data. The numerical approach was used to compute frequency analysis. The graphical method was also used to create a histogram and a pie chart. The null hypothesis (H_0) was tested at a significant level of 0.05 using the Z- test statistics. The MS Excel is also simple and gives a clearer pictorial view of drawing graphs. In generating the actual results, data collected was first edited and coded and entered into IBM Statistical Package for Social Sciences (SPSS, version 20.0) spreadsheet.

Objective 1: To determine the factors that influence the choice of a financial institution by savers in the Ho Central Municipality

Data collected on this objective was edited and coded and entered into SPSS and MS Excel. To present descriptive statistics for this study, a pie chart was used showing proportions in percentage to present the variables and sample characteristics. The reason for this choice of presentations was because the data were categorical by nature. To test for the correlation between our variables, we run a bivariate correlation to help us test the relationship between our variables. The bivariate correlation was run, and the Spearman coefficient correlation was considered. This is because, the data used is categorical, and that is, non-parametric type of data was used in the study. Non-parametric is a statistical method where the data is not required to fit a normal distribution, and it uses data that are often ordinal in nature. It does not rely on numbers but rather ranking or order of the sort.

Example: ranks, scores or categories.

Objective 2: To analyze the impact of economic factors on saving behavior of people living in the Ho Central Municipality

Data collected on this objective was edited and coded and entered into SPSS and MS Excel. To present descriptive statistics for this study, pie charts were used showing proportions in percentage to present the variables and sample characteristics. The reason for this choice of presentations was because the data were categorical by nature. To test for the correlation between our variables, we run a bivariate correlation to help us test the relationship between our variables.

The bivariate correlation was run, and the Spearman coefficient correlation was considered. This is because, the data used is categorical, and that is, non-parametric type of data was used in the study. Non-parametric is a statistical method where the data is not required to fit a normal distribution, and it uses data that are often ordinal in nature. It does not rely on numbers but rather ranking or order of the sort. Example: ranks, scores or categories.

Objective 3: To investigate the impact of socio-cultural factors on saving behavior of people living within the Ho Central Municipality

Data collected on this objective was edited and coded and entered into SPSS and MS Excel. To present descriptive statistics for this study, a bar chart was used to present the variables and sample characteristics. The reason for this choice of presentations was because the data were categorical by nature. To test for the

correlation between our variables, we run a bivariate correlation to help us test the relationship between our variables.

The bivariate correlation was run, and the Spearman coefficient correlation was considered. This is because, the data used is categorical, and that is, non-parametric type of data was used in the study. Non-parametric is a statistical method where the data is not required to fit a normal distribution, and it uses data that are often ordinal in nature. It does not rely on numbers but rather ranking or order of the sort. Example: ranks, scores or categories.

Objective 4: To assess the effect of technological, financial factors influencing saving behavior of the people living within the Ho Central Municipality

Data collected on this objective was edited and coded and entered into SPSS and MS Excel. To present descriptive statistics for this study, a bar chart was used to present the variables and sample characteristics. The reason for this choice of presentations was because the data were categorical by nature. To test for the correlation between our variables, we run a bivariate correlation to help us test the relationship between our variables.

The bivariate correlation was run, and the Spearman coefficient correlation was considered. This is because, the data used is categorical, and that is, non-parametric type of data was used in the study. Non-parametric is a statistical method where the data is not required to fit a normal distribution, and it uses data that are often ordinal in nature. It does not rely on numbers but rather ranking or order of the sort. Example: ranks, scores or categories.

Results, Findings, and Discussions

Response Rate

A total of 152 questionnaires consisting of 100 for the semi-formal sector (customers) representing 66%, 37 for informal sector (market men and women) representing 24%, and 15 for the formal sector (management and employees) representing 10% was administered. All these questionnaires were answered by respondents and later retrieved.

Demographics of Respondents

The field data analysis on customers, market men, and women, and management and employees depict the gender distribution of the respondents. Out of the total respondent, 62 were male representing 62%, and 38 were female representing 38%, 8 were male representing 21.6%, and 29 were females representing 78.4%, and 6 were males representing 40%, and 9 were females representing 60% respectively.

Information on the sex of head of the family from customers, market men, and women, and management and employees indicate that 86 were male and 14 were female, 23 were male and 14 were female, and 14 were male representing 93.3% and 1 female representing 6.7% respectively.

Information on family size from customers, market men and women, and management and employees again show that, 54 respondents have got between 4 and less family size, 37 has between 5-7 family size, 2 between 8-10 family size, and 7 above 10 family size, 13 respondents have got between 4 and less family size, 13 has between 5-7 family size, 9 between 8-10 family size, and 2 above 10 family size, and 7 respondents have got between 4 and less family size, 7 has between 5-7 family size, and 1 above 10 family size respectively.

Finally, the analysis tried to look at the religion of respondent as acquired from the data gathered from customers, market men and women, and management and employees. It shows that 98 customers representing 98% were Christians, 1 Muslim, and 1 was African traditional religion representing 1% apiece, 33 customers

representing 89.2% were Christians, 3 Muslims representing 8.1%, and 1 was African traditional religion representing 1%, and 15 management and employees representing 100% were Christians.

Results

Factors that Influence the Choice of a Financial Institution by Savers

Table 1.0 Results from the respondents showing the impact their choice of financial institution influencing saving behavior

H₀: Expected frequencies are equal to the observed frequencies

Question	Response in frequency		χ^2 df(1)	Interpretation
	Yes	No		
Do you save with financial institution?	31(83.8%)	6(16.2)	16.89	Significant
Do you operate a saving account?	91(91%)	9 (9%)	67.24	Significant
Do you realize increment in clients" saving as the years go by?	11(73.3%)	4(26.7%)	3.30	Not Significant

Significance level: 0.05

A one-way χ^2 test was used to analyze these data from the table 1.0 above. We expected 18.5% of our sample of people to save with financial institution and 18.5% of our sample of people not to save with financial institution; however, observed frequencies were significantly different from expectations, $\chi^2 (1, N = 37) = 16.89, p < 0.05$. Approximately eighty-four percent of our samples save with financial institution, and sixteen percent of our samples do not save with financial institution. Studying the table, it becomes clear that majority of the respondents save with financial institution and a minority of the respondents do not save with financial institution.

The trend of the result may be due to the increasing number of a financial institution in the Ho municipality which might have increased the familiarity level of banks by respondents through education. The respondents" level of awareness on the importance of saving with financial institutions may also be a factor.

The result above has been supported Marrar *et al.* (2011) who indicate that the level of familiarity a person has with particular financial institutions has an effect on whether or not that person trusts the institution; thus, it can be concluded that financial education should be considered a viable method for increase a population's trust, familiarity, and overall choice of financial services. Furthermore, the most familiar with financial services were highly educated, male (36.9%, compared to 18.1% for females), and between the age of 21-35. The survey also revealed that 51% of respondents who had unspent money from month to month would deposit it or keep it in a bank or any financial institution and that 24% of respondents would use the new additional income to open an interest-bearing bank deposit.

Secondly, a one-way χ^2 test was used to analyze these data from the table 1.0 above. We expected 50% of our sample of people to save with financial institution and 50% of our sample of people operate savings account; however, observed frequencies were significantly different from expectations, $\chi^2 (1, N = 100) = 67.24, p < 0.05$. Approximately ninety-one percent of our sample operate savings account, and nine percent of our sample does not operate savings account.

The trend of the results may be due to the fact that majority of the respondents do not keep their monies at home to be misused or get stolen by thieves but rather have access to financial intermediaries to keep their monies safe, and they might also have a fair knowledge about saving.

The result above has been supported by Ahmed (2002) who stated that keeping money at home is also one of the ways in which families and individuals save money. This mode of saving is usually the option of people in the rural areas where access to other financial intermediaries is almost a nightmare. It is also the option of people who do not trust banks and other financial institutions.

Finally, a one-way χ^2 test was used to analyze these data from the table 1.0 above, but the response was found not to be significant to the choice of financial institution. The above results indicate that minority of the respondents do not realize increment in clients' saving as the years go by.

The trend of the results may be due to the fact that there has been a significant variation in the major macroeconomic indicators as the years go by. This is because according to Modigliani's life-cycle hypothesis, economic growth increases saving because it increases the income of the young relative to that of the elderly (Modigliani, 1970). This means that an increase in income will lead to an increase in saving either at the individual or the family levels. So, this is why there has been an increment in clients' saving in the banks as the years go by.

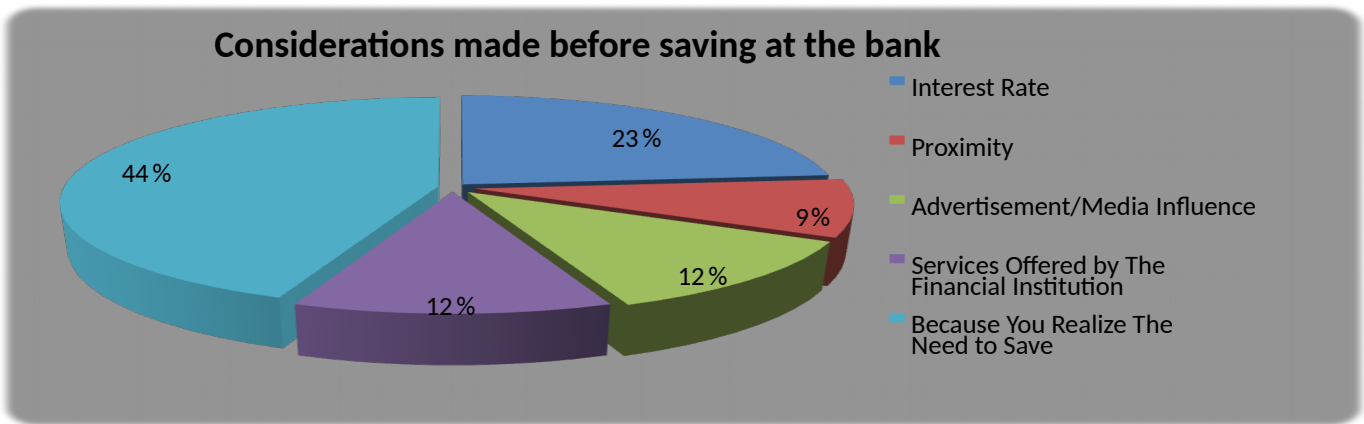


Figure 1.0 Considerations made Before Saving at the Bank

Figure 1.0 above shows that respondents save because they realize the need to save. The trend of the result may be as a result of increase dependent and the role of the extended family to save. The result above has been supported by Siman (2008) who indicated that the family has a great influence on an individual's saving patterns. By providing for the consumption of older members, the family can totally erase the need for old people to put aside money for expenditure during their youthful days.

Economic Factors Influencing Saving Behavior

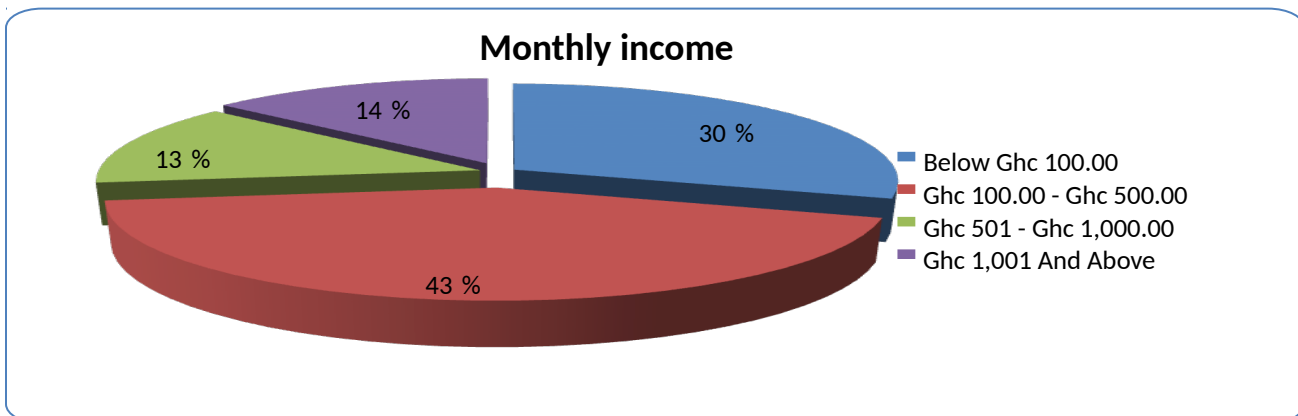


Figure 1.1 Monthly income from business

Figure 1.1 above shows that majority of the respondents earn between GHC 100.00 – GHC 500.00. The trend of the result may be as a result of a decrease in monthly income due to inflation in the country at large. The result above has been supported by Wen and Ishida (2001) who provided evidence that higher income growth may produce higher saving. He also examines the impact of inflation which reduces the real income or purchasing power of the society secondly it may create the uncertainty in future income. Results of the time series data explain that income positively related to saving.

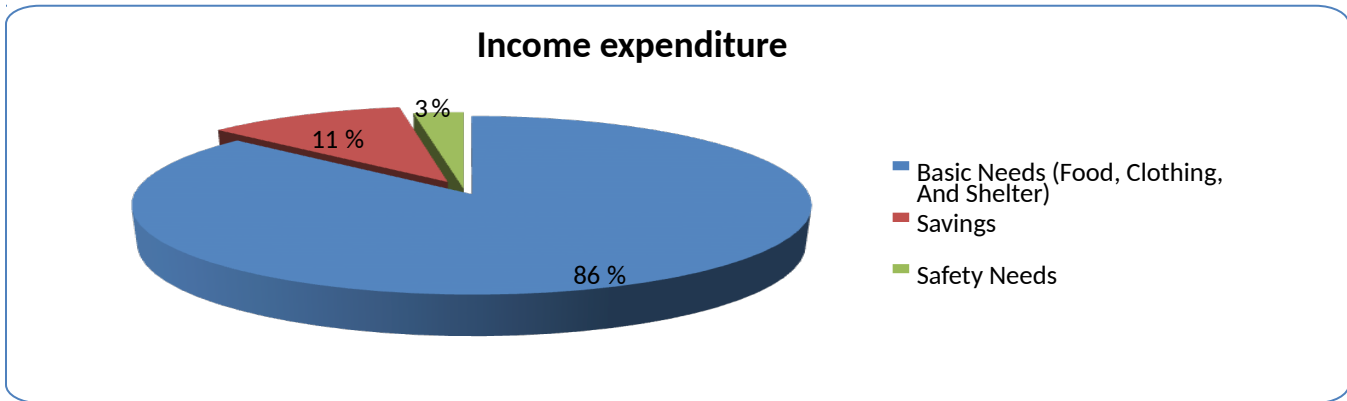


Figure 1.2 Item that takes Many percentages of Respondents' Income

The above figure 1.2 indicates that majority of the respondents use more of their income to provide for their basic needs. The trend of the result may be as a result of the growth of the respondents. This view expressed by the participants is consistent with the view of Modigliani's life-cycle hypothesis, which tried to establish a relationship between income and saving by arguing that growth increases saving because it increases the income of the young relative to that of the elderly (Modigliani, 1970). There are additional channels through which growth can positively affect saving, particularly in developing countries. Growth and higher incomes raise more households above the subsistence level, below which they cannot save, and make households more responsive to changes in the interest rate (Ogaki, Ostry, and Reinhart, 1996).

Table 1.1 Results from the respondents showing the economic factors influencing saving behavior

H₀: Expected frequencies are equal to the observed frequencies

Question	Response in frequency		χ^2 df(1)	Interpretation
	Yes	No		
Do factors such as inflation, exchange rates, interest rate, etc., have interest on your saving?	22(59.5%)	15(40.5%)	1.34	Not Significant
Is the interest on deposits in your bank encouraging to customers?	6(40%)	9(60%)	0.60	Not Significant

Significance level: 0.05

A one-way χ^2 test was used to analyze these data from the table 1.1 above, but the response was found not to be significant to the economic factors influencing saving behavior. From the table 1.1, the highest number of

respondents (n=22, 59%) agree that economic factors such as inflation, exchange rate, interest rate and the like have an effect on their saving. The above results may be as a result of an increase or a decrease in the above determinants. The view expressed by the participants is consistent with the view of Ouattara (2005) that higher interest rates will encourage people to save more and that when inflation is high, people have less money left with them to save because a major part of their disposable income will be spent to satisfy their needs and wants. The above results indicate that majority of the respondents disagreed that the interest on deposits in the bank do not encourage customers to save. This finding had agreed with that of Wheley and Kempton (2000) when they observed that saving and investment behavior among people of just below average incomes is mainly driven by age, and that interest rates do not influence the saving behavior of people in low-income categories. The findings of this study showed that interest rates were one of the main determinants of the saving behavior of individuals. This finding was in accordance with the assertion by Hofstede as cited in Hills" (2002) theory of risk-taking propensity as having an influence on the saving behavior of people. Hofstede also advanced the socio-cultural theory of uncertainty avoidance as exerting a significant influence on people's decision to invest. The findings in this study also showed that one hindrance to the respondent's saving was that they were not certain as to what would happen to their saving in the future.

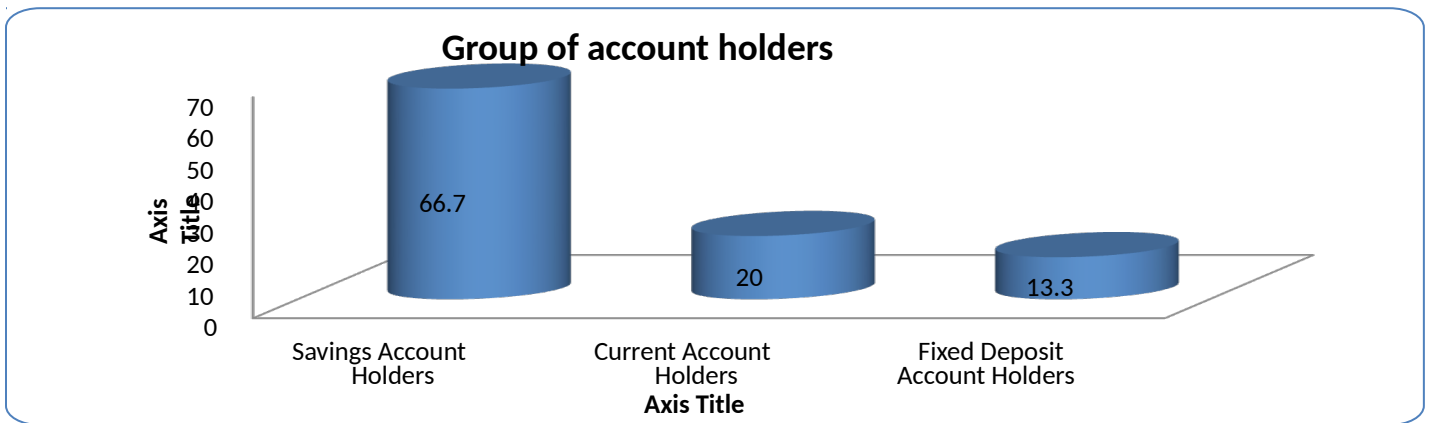


Figure 1.3 Group of Account holders that Save More at the Banks

Figure 1.3 above results indicate that majority of the respondents agreed that saving account holders constitute the group that saves more at the bank. In a related study of Nigerian households, Akpokodje et al. (2004) found that demographic factors were significant in saving. Their study tried to find out whether the life cycle model which postulates that the age composition of the population has a significant bearing on saving behavior in developing countries and whether aggregate saving will be affected by the age distribution of the population. Their study concluded that mid-aged individuals would save more than the young and the aged, but this focuses only on the relationship between age in general and saving. This means that where there are a majority of mid-aged individuals, the saving account holders will constitute the group that saves more at the bank.

Results on Respondents View on Whether Socio-cultural Factors Impact Saving Behavior

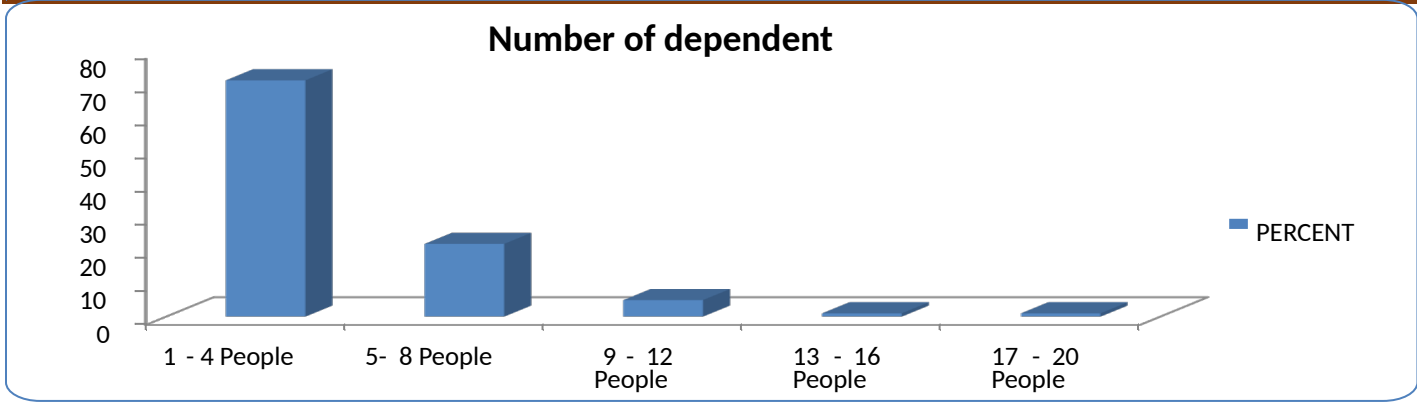


Figure 1.4 Number of People Supported Financially in Addition to the Respondent

Figure 1.4 above indicates that the highest number of respondents (n= 71; 71%) have from 1-4 people they support financially in addition to themselves. The trend of the results is supported by research by Modigliani (1970) and Keho (2011) that find out that a striking feature of most African countries is the age structure of their population. High fertility rate leads to high youth-dependency ratio and has adverse implications on saving. Using the Life Cycle Hypotheses, a person at the early stages of his life has little or no money and may have low saving. His saving becomes positive during his productive years and again negative when he retires (Modigliani, 1970). High dependency on the productive age class of a country yields low saving since children and old parents will both depend on the age group involved in productive work (Keho, 2011).

Table 1.2 Results from the respondents showing the socio-cultural factors influencing the saving behavior

H₀: Expected frequencies are equal to the observed frequencies

Question	Response in frequency		χ^2 df(1)	Interpretation
	Yes	No		
Do you belong to any social club, group, or organization in relation to your profession?	11(73.3%)	4(26.7%)	3.30	Not Significant
Do customers seek loans for social activities such as funerals, weddings, naming ceremonies, etc.?	9(60%)	6(40%)	0.60	Not Significant

Significance level: 0.05

A one-way χ^2 test was used to analyze these data from the table 1.2 above, but the response was found not to be significant to the socio-cultural factors influencing saving behavior. Eleven (11) respondents representing 73.3% agreed they belong to a social club at the bank, and four (4) respondents representing 26.7% disagreed they belong to a social club at the bank. The above results indicate that majority of the respondents agreed they belong to a social club at the bank.

Finally, the above results indicate that majority of the respondents agreed that customers seek a loan for social activities such as funerals, weddings, naming ceremonies, etc. This seemingly low knowledge on contingency investment by the studied families could be explained in view of Maslow’s hierarchy of human needs. This means that customers will seek a loan for social activities such as funerals, weddings, naming ceremonies in order to satisfy other human needs other than their basic needs.

According to Maslow as cited in Feist (1994), an individual (in this case family) will only meet a higher need if they were able to meet lower level needs. The findings showed that most of the respondents realized that more customers seek a loan for social activities such as funerals, weddings, naming ceremonies, etc.

Financial Technological Factors Influencing Saving Behavior

Table 1.3 Results from the respondents showing the technological, financial factors influencing saving behavior

H₀: Expected frequencies are equal to the observed frequencies

Question	Response in frequency		χ^2 df (1)	Interpretation
	Yes	No		
Do you withdraw/ or deposit money using Automated Teller machine?	77(77%)	22(22%)	30.18	Significant
Does your bank have an Automated Teller machine?	14(93.3%)	1(6.7%)	9.20	Significant

Significance level: 0.05

A one-way χ^2 test was used to analyze these data from the table 1.3 above. We expected 50% of our sample of people withdraw/ or deposit money using Automated Teller machine and 50% of our sample of people do not withdraw/ or deposit money using Automated Teller machine; however, observed frequencies were significantly different from expectations, $\chi^2 (1, N = 100) = 30.18, p < 0.05$. Seventy-seven percent of our samples withdraw/ or deposit money using ATM, and twenty-two percent of our samples do not withdraw/ or deposit money using ATM.

The trend of the result may be due to how complicated the ATM is operated without ease. The result above has been supported by Laibson (1997) who indicates that, in progressive countries, technological innovation has further complicated the mechanisms behind individual financial saving behavior which has made it more difficult for people to commit to saving. Laibson argues that technological innovation may have been responsible for the decline in US saving rates reducing welfare in the context of behavior as it has increased liquidity and reduced the opportunities for commitment to saving strategies.

A one-way χ^2 test was used to analyze these data from the table 1.3 above. We expected 7.5% of our sample bank have an Automated Teller machine and 7.5% of our sample bank does not have an Automated Teller machine; however, observed frequencies were significantly different from expectations, $\chi^2 (1, N = 15) = 9.20, p < 0.05$. Ninety- four percent of our sample banks have ATM, and seven percent of our samples do not do not have ATM. The trend of the result may be due to the convenience of the ATM.

The trend of the results is supported by Simone (2015) who researched that payment systems have developed rapidly in many countries over the past few decades due to the use of electronic means at the expense of paper-based payment instruments. Reduced cost, convenience, easy access, technological advancement are some factors considered by customers on the use of ATM’s. Also, the intra-household decision-making process lends further credence on individual use of ATM’s describing that husbands/males are the primary financial decision-makers therefore, they patronize the use of ATM cards more than wives/females.

Conclusions and Recommendations

Conclusions

The following outlined the summary of findings of the study:

To begin with, the study determined the factors that influence the choice of a financial institution by savers in the Ho Municipality revealed the respondents' view on what impact their choice of financial institution. According to the management and employees of the various banks, the trend of the results may be due to the fact that there has been a significant variation in the major macroeconomic indicators as the years go by. This means that an increase in income will lead to an increase in saving either at the individual or the family levels. So, this is why there has been an increment in clients' saving in the banks as the years go by.

Again, according to market men and women, the level of familiarity a person has with particular financial institutions has an effect on whether or not that person trusts the institution; thus, it can be concluded that financial education should be considered a viable method for increase a population's trust, familiarity, and overall choice of financial services.

The trend of the results may be due to the fact that majority of the respondents do not keep their monies at home to be misused or get stolen by thieves but rather have access to financial intermediaries to keep their monies safe, and they might also have a fair knowledge about saving. The above results indicate that majority of the respondents save because of the high interest rate. The view expressed by the customers is consistent with the view of the Economist's Standard Model of consumer behavior which assumes that people determine their consumption and saving at each point in their lives by looking forward to their future income returns and desires, rather than considering only their current income and spending.

It becomes clear that majority of the respondents save with financial institution due to the increased number of financial institutions in the Ho municipality which might have increased the familiarity level of banks by respondents through education. Increase in awareness about the importance of saving with financial institutions may also be a factor.

Secondly, the survey also analyzed the impact of economic factors on saving behavior of people living in the Ho Municipality. The management and employees of the various banks concluded that mid-aged individuals would save more than the young and the aged, but this will only focus on the relationship between age in general and saving. This means that where there are a majority of mid-aged individuals, the saving account holders will constitute the group that saves more at the bank. According to market men and women, the result provided evidence that higher income growth may produce higher saving. It is also revealed that the impact of inflation which reduces the real income or purchasing power may create the uncertainty in future income. To customers, more of their income is spent on basic needs. This may be based on the fact that respondents focus more on what they need. Majority of the respondents came to a conclusion that, inflation causes a decrease in monthly income.

In addition, the survey investigated the impact of socio-cultural factors on saving behavior of people living within the Ho Municipality. The management and employees are of the view that customers will seek a loan for social activities such as funerals, weddings, naming ceremonies in order to satisfy other human needs other than their basic needs. According to market men and women as well as customers, high fertility rate leads to high youth-dependency ratio and has adverse implications on saving.

Finally, the survey also assessed the effect of technological, financial factors influencing saving behavior of the people living in the Ho Municipality. According to market men and women, the trend of not using the ATMs may be due to how complicated the usage of the ATM. On the contrary, to management and employees it has reduced stress and to customers, using the ATMs has been very convenient.

Recommendations

As a result of the critical role the people's saving behavior plays in national development, it is very necessary and hence expedient for policymakers to take the following measures to increase the saving behavior of people living within the country.

Banks and financial institutions should extend their advertisement to the public via media advertisement to increase knowledge of the outside world about their products and services rather than limiting it to the confines of their banking halls. Financial institutions should also operate diversify their accounts for customers to have more options to choose from when opening accounts with them. Banks should also provide reasonable interest rates to motivate and compensate a customer's decision to will forgo current consumption for the future. The Bank of Ghana should formulate new policies and guidelines that will make the establishment of banks easier. This will help in the establishment of new banks especially in the study area so as to encourage those in the area to save and curb the problem of proximity.

Individuals should consistently plan how they will spend income earned. When this is done, the percentage of income to be spent on daily activities, those for precautionary need, luxuries, owing or buying real assets as well as that for saving and other forms of investment will be known and therefore apportioned accordingly. This will prevent spending beyond one's income. Individuals and firms should be educated on the various factors that affect the interest rate which is discouraging saving in the Ho municipality to keep them abreast of opportunities that are available to them. This will improve their knowledge on the various major determinants of saving behavior, and they will be encouraged to participate in them. For instance, agricultural extension services should be made available for those individuals who invest in farming.

Individuals should try their possible best to belong to few social groups since belonging to such groups come with financial obligations and commitments. Banks should conduct thorough investigations about loans customers take so those loans do not end up being used for social events such as weddings, funerals, parties but are rather channeled into productive sectors to increase income level which in turn increases saving.

Finally, management of the banks should employ specialists who will teach customers who have newly acquired ATM cards. This will enlighten such customers on the operation of the ATMs, and as such, the complication attached to operating the ATM will be erased. This will reduce the pressure of customers lined-up in the banking halls.

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References

- i. *Adelakun, J. O. (2011). The Nexus of Private Saving and Economic Growth in Emerging Economy. A Journal of Economics and Sustainable Development, 2, 6- 10.*
- ii. *Agenor, P. & Aizenman, J. (2006). Saving and the Terms of Trade under Borrowing Constraints. Journal of International Economics, 86, 123-139.*
- iii. *Ahmad, K. & Mahmood, H. (2013). Macroeconomic Determinants of National Saving. Nigeria, Lagos: Cape press.*
- iv. *Ahmed, M. S. (2007). Management in living for senior secondary schools (2nd ed.). Ghana, Kumasi: Bayoba Graphics Limited.*
- v. *Akpokodje, G., Lancon, F., Erenstein, O. & Toure, A. A. (2006). Saving trends and behavior in Nigeria. West African journal of Monetary and Economic Integration, 2(2), 87-120.*
- vi. *Amu, E. K. M. (2008). Saving and investment behavior of rural families in Ghana. An unpublished PhD thesis, University of Cape coast, pp:167.*
- vii. *Aryeetey, E., & Gockel, F.A. (2008). Mobilizing domestic resources for capital formation in Ghana: The role of informal financial sectors, AERC research paper 3.*

- viii. Bayoumi, T. (2005). *Financial deregulation and household saving*. *Economic Journal*, 103, 32-43.
- ix. Boateng, I. K. (2004). *Basic business knowledge and consumer skills*. An Unpublished Masters.
- x. Boeschoten, W (1998). *Cash Management, Payment Patterns and the Demand for Money*. *De Economist Journal* 146(1), 117–142.
- xi. Bongaarts J (1998). *Dependency burdens in the developing world*, Paper prepared for Symposium on Population Change and Economic Development. Bellagio, Italy, P.19.
- xii. Bosworth, B. (2003). *Saving and Investment in a Global Economy*. Washington: Brookings Institution.
- xiii. Bremang, A. J. (2012). *Problems and consequences of low saving in developing Countries*. An unpublished Bachelor of Science degree in Business Administration thesis, Ashesi University College, pp:176.
- xiv. Chenery, H. T. S. (2011). *Hand book of Development Economics, Volume I*. Elsevier Science Publishers, Amsterdam, North-Holland. pp.35.
- xv. Clayton, G. E., & Brown, J. E. (2003). *Economics principles and practice.*: Charlse E. Merill Publishing Company, Columbus, pp.217.
- xvi. Darko, E. (2012). *Sales promotion on consumer buying behavior in the telecom industry*. An unpublished Thesis, University of Science and Technology, pp:23
- Deaton, A. (2010). *Growth and saving: What do we know, what do we need to know, and what might we learn*. A research program in development studies. Princeton: Princeton University.
- xvii. Dovi, E. (2008). *Boosting domestic saving in Africa*. *Africa Renewal*, 22(3), 12-25.
- xviii. Edwards, S. (2005). *Why are Latin America's saving rates so low? An International Comparative Analysis*. *Journal of Development Economics*, 51: 5- 44.
- xix. Feldstein, M. (2005). *International differences in social security and saving*. *Journal of Public Economics*, 14: 22-45.
- xx. Gutter, M. S., Wang, L., & Way, W. (2007). *Financial management practices of College Students from states with varying financial education mandates (Working paper)*. University of Wisconsin-Madison.
- xxi. Henderson, V., & Poole, W. (2005). *Principles of economics*. Heath and Company. Lexington: D.C.
- xxii. Higgins, M., & Williamson, J. (2006). *Asian demography and foreign capital dependence*, NBER Working Paper 5560. Massachusetts: National Bureau of Economic Research.
- xxiii. Johansson, S. (2006). *Private Saving in Indonesia (Unpublished)*. International Monetary Fund Working paper.
- xxiv. Lahiri, A. (2009). *Dynamics of Asian saving*, Staff Papers, International Monetary Fund.
- xxv. 36, 28-61.
- xxvi. Larbi, A. D. (2013). *The Long Run Determinants of Private Domestic Saving in Ghana: A Cointegration Approach*. *Journal of Economics and Sustainable Development*, 4(4), 125.
- xxvii. Laibson, D. (1997). *Golden eggs and hyperbolic discounting*. *Quarterly Journal of Economics* (62), 443-77.
- xxviii. Leff, N.H. (2009). *Dependency rates and saving*. *The American Review*; 59(5), 886 – 896.
- xxix. Lloyd, T.B. (2009). *Money, banking and economic activities (3rd ed.)*. New Jersey: Practice Hall.
- xxx. Loayza, N., Schmidt-Hebbel, K., & Serven, L. (2010). *What drives private saving around the world*. *The review of economics and statistics*, LXXXII (2), 165-181.
- Mandell, L (1977) *Diffusion of EFTS among National Banks*. *Journal of Money, Credit and Banking*, 9(2), 341–348.
- xxxi. Manzocchi, S. (2009). *Foreign capital in developing economies: Perspectives from the theory of economic growth*. New York: St. Martin's Press.
- xxxii. McKinnon, R. (2003). *Money and Capital in economic development*. Washington, D.C: The Brooking Institute.
- xxxiii. Miller, R. L., & VanHoose, D. (2008). *Money, banking, and financial markets*. Australia: South-Western Thomson Learning.

- xxxiv. Modigliani, F. (1970). *The life cycle hypothesis of saving and intercountry differences in the saving ratio*. In W. Eltis, M. Scott, & J. Wolfe, (Eds.). *Induction, growth, and trade* London: Oxford University Press.
- xxxv. Ngendakuriyo, F. (2014). *Household saving mobilization across EAC Countries. An exploratory analysis in financial sector development and regionalization project*. Arusha: Tanzania.
- xxxvi. Ogaki, M., Ostry, J., & Reinhart, C. (2006). *Saving behavior in low- and middle-income developing countries*. *Staff Papers, International Monetary Fund*, 43, 38-71.
- xxxvii. Olson, D. H., & DeFrain, J. (2011). *Marriage and the family: Diversity and strengths (3rd ed.)*. London: Mayfield Publishing Company.
- xxxviii. Ostry, J., & Levy, J. (2005). *Household saving in France*. *Staff Papers, International Monetary Fund*, 42, 75-97.
- xxxix. Ouattara, B. (2005). *Modelling the Long Run Determinants of Private Investment in Senegal, Credit Research Paper, Centre for Research in Economic Development and International Trade*, pp: 8846. University of Nottingham, pp: 04.
- xl. Ouliaris, S. (1990). *Household Saving and the Rate of Interest*. *Economic Record*, 57.
- xli. Paroush, J., & Ruthenberg, D. (1986). *Automated Teller Machines and the Share of Demand Deposits in the Money Supply, the Israeli Experience*. *European Economic Review*, 30, 1207–1215.
- xl.ii. Pollack, K., & Heighberger, E. (2002). *The real-life investment guides*. Toronto: McGraw Hill
- xl.iii. Quartey, P. (2006). *Finance and small and medium enterprise development in Ghana*. An unpublished PhD thesis, University of Manchester.
- xl.iiii. Raily, H. (2012). *Investment (3rd ed.)*. Sydney: The Dryden Press.
- xl.v. Schmidt-Hebbel, K., Serven, L., & Solimano, A. (2006). *Saving and investment: paradigms, puzzles, policies*. *World Bank Research Observer*, 11, 87-117.
- xl.vi. Shaw, E. (1973). *Financial deepening in economic development*. Oxford: Oxford University Press.
- xl.vii. Shome, P., & Saito, K. (2007). *Creating capital through social security institutions: The Asian experience*. *Domestic Finance Studies*, 61, 19-28.
- xl.viii. Smith, A. W. (2005). *Understanding economics (2nd ed.)*. New York: Macmillan/McGraw–Hill.
- xl.ix. Winch, R. F. (2009). *Towards a model of family organization*. In W. R. Burr, et al. (Eds.). *Contemporary theories about the family*. New York, NY: New York Press.
- l. Zorklui, S. Q., & Barbie, W. (2007). *Financial sector reforms and saving in Sub-Saharan Africa*, *Saving and Development*, 1, 63-98.