EFFECT OF FINANCIAL LITERACY ON POVERTY LEVELS IN KENYA

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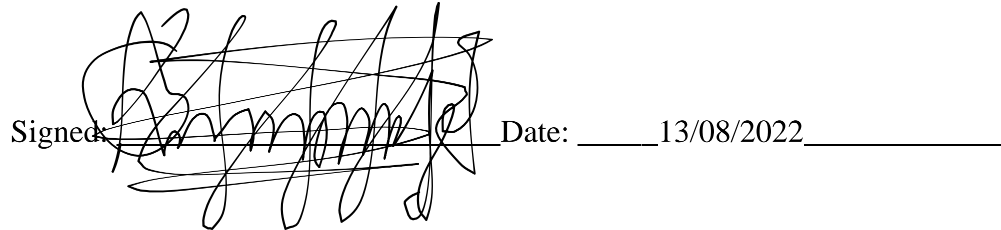
DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.



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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CFPB	Consumer Financial Protection Bureau
GDP	Gross Domestic Product
KNBS	Kenya National Bureau of Statistics
MSE	Micro and Small Enterprises
SDG	Sustainable Development Goals
SME	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNFPA	United Nations Population Fund
VIF	Variance Inflation Factors

ABSTRACT

Reducing poverty is the greatest challenge for the government as it pursues Vision 2030. According to official figures, 32 per cent of Kenyans are classified as poor, meaning they live on less than a dollar a day. Low financial literacy has been cited as one of the factors causing the high poverty levels in Kenya. Any long-term government plan must address financial literacy, which is the result of accumulated years of living in poverty. The reason someone is poor today perhaps is because they never had access to basic and advanced financial literacy education. The objective of this research was to determine the effect of financial literacy on Kenya's poverty levels. The study was based on prospect theory, dual process theory and the goal setting theory. The independent variable was financial literacy measured using the multidimensional poverty index per quarter while the control variables were economic growth, the unemployment rate, and public debt. The dependent variable that the research attempted to explain was the poverty levels in Kenya. The data was collected on a quarterly basis over a period of twenty years (from January 2012 to December 2021). A descriptive research approach was employed in the research, with a multivariate regression model used to examine the connection between the study variables. The study's findings yielded an R-square value of 0.995, indicating that the chosen independent variables could explain 99.5 percent of the variance in Kenya's poverty levels, while the other 0.5 percent was due to other factors not investigated in this study. The F statistic was significant at a 5% level with a P = 0.000. This suggests that the model was adequate for explaining poverty levels in Kenya. Further, the findings demonstrated that financial literacy had a negative and significant influence on Kenya's poverty levels. Economic growth and public debt also had a negative and significant influence on Kenya's poverty levels. Unemployment rate had a significant positive influence on poverty levels in Kenya. The research suggests the need for policy makers to make it a requirement for educational institutions to offer financial literacy as lack of financial literacy contributes to a rise in poverty levels. The study also recommends that there is need to come up with effective measures of creating employment as high unemployment rate has an adverse effect on poverty levels. The study recommends the need for future researchers to conduct a study for a longer period of time such as the last 30 years to capture the effects of economic cycles.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Financial literacy has been embraced to be a vital remedy of the rising intricacy of financial decisions made by consumers for the last few decades (Fernades, Linch & Netemeyar, 2019). People are coming into terms with the fact that the best way to quantify success is by considering the financial well-being of a person (CFPB, 2015). Lyons (2018) further states that financial literacy influences poverty levels through financial behaviours. A country's poverty levels are influenced by the financial literacy of its citizens through their financial behaviour.

The prospect theory that was evolved by Daniel Kahneman and Amos Tversky (the two psychologists) in 1979 was the anchor theory for the current study as it applies to individual decision making under uncertainty and risk. It is a descriptive theory on how people actually make decisions. Individuals are considered to be irrational and adopt the use of heuristics in decision making, leading to systematic errors due to biased cognitive processes. Financial literacy is vital in helping reduce errors made in financial decisions and that have an impact to their poverty levels. Dual process theory by Petty and Cacioppo (1986) assumes individuals who are knowledgeable in financial matters are likely to find facts in order for them to make more informed decisions. There is also the goal setting theory which proposes that in the consumers' top wellbeing their financial behavior can be directly linked to their financial literacy levels (Locke & Latham, 1990).

Globally, both developing and advanced economies have low financial literacy (Goyal & Kumar, 2021). The worldwide financial crisis of 2008 brought out the need to promote and support the financial potential of individuals mostly through teaching them (Kempson, 2017). A study by Flat World Project found that in Kenya, 38% of adults are financially literate. As governments push

for financial inclusion, new consumers are getting into the financial markets (Klapper, Lusardi&Oudheusden, 2018). With the rapidly changing financial landscape, a wide array of attractive financial products is being introduced. Kenya has been successful in reducing the proportion of people that live way beneath the national poverty line by an average of an annualized rate of 2 percentage points between 2004/05 and 2017/18; however the absolute number of poor declined only marginally due to rapid population growth (World Bank Country Poverty Assessment Reports, 2018).

1.1.1 Financial Literacy

Financial literacy refers to the knowhow of managing, investing as well as spending money (Atakora, 2018). It is the comprehension of financial products by both consumers and investors and their perception on financial risks as well as opportunities that they put basis when making informed decisions that can contribute towards improving their financial statuses (Lusardi, Hasler & Yakoboski, 2021). As per Watanapongvanich et al. (2021), it is a mix of clients'/investors' awareness of financial products and ideas, as well as their capability as well as confidence to assess financial risks and possibilities. Financial literacy is defined in the following study as the capability to utilize financial knowledge to effectively handle and operate financial assets.

It is very important to put financial literacy on the forefront in a society. In developed countries, it is evident where financial literacy aids in making decision like timely bill payment, and managing debts that in turn advances one’s credit score thus supporting livelihoods, enhances economic growth, encourages good financial systems and also help in eradicating poverty in the long run. Financial literacy also enables one to have control on financial future, have more access to use of financial products and have less exposure to fraudulent schemes (Siekei, Wagoki & Kalio, 2017).

Various researchers have operationalized financial literacy knowledge considering different indicators. Bucher-Koenen, Alessie, Lusardi and Van Rooij (2021) and Lusardi et al. (2021) utilize indicators like budgeting, saving, borrowing and investing. Other researchers apply conceptual models of financial literacy as put forward by Goyal and Kumar (2021) covering the concepts of economic growth computation, inflation and working of risk diversification. Hasan, Le and Hoque (2021) posited that when money basics, borrowing, investing and protecting resources content areas are used, the level of financial literacy could be more accurate. Four of the very unique and important determinants of financial literacy are budgeting, savings, borrowing and investment and they were used in the current survey.

1.1.2 Poverty Levels

World Bank (2018) measured approach to ending poverty report; poverty is defined as a multidimensional aspect that entails: violence and crime, the inability to satisfy basic needs, lack of education and shocks, lack of control of resources, lack of political freedom and voice. Poverty reduction can be summarized as the collective responsibility to fight all types of deprivations with the purpose of escaping poverty and putting in place structures, institutions or societies that limit people from becoming poor or falling further into poverty (UN, 2018). All developing countries have poverty reduction as a key objective in fostering economic growth (Hassan et al, 2021); with food insecurity, unemployment rates, high illiteracy levels, health concerns, unsafe water and poor sanitation as priority development issues.

Pro-poor growth is also crucial to meeting the Sustainable Development Goals (SDGs); being the global beckon to everyone to promote the fight of poverty through inclusion of Leave No One behind principle. Following on the World Bank Goal and SDGs of ending poverty by 2030 in all its forms, Theoretical and empirical research establish that the rate of average income growth is a

key determinant towards poverty reduction (Meoli, Rossi & Vismara, 2022). Countries with a higher average income will reduce poverty faster than those with lower income. However, certain unforeseen circumstances could slow down poverty reduction by 2030. Corona Virus, for example, has shook the entire globe making it extremely difficult to uplift the extremely poor mostly found in remote areas.

Bucher-Koenen et al. (2021) propose the headcount ratio and the poverty gap as poverty measures which establish the magnitude and intensity of poverty based on national or international poverty lines and income levels. To truly depict the seriousness of impoverishment in Sub-Saharan African countries, Hamid and Loke (2021) propose the use of socio-economic indicators like per capita income, access to health care services, life expectancy at birth, availability of education, access to clean water and access to sanitation facilities. As a result, this study will measure poverty using the Multidimensional Poverty Framework developed by Scott, Berrigan, Kneebone and Zwicker (2022) aimed at measuring poverty by outlining indicators based on the SDGs that capture the many hardships encountered by poor people in relation with health, education and living standards. An adjustment will be made on the Multidimensional Poverty Framework to better reflect the key deprivations faced by the poor countries that are aligned to the SDGs. The current study adopted the multinational poverty index in measuring poverty levels.

1.1.3 Financial Literacy and Poverty Levels

It is theoretically hypothesized that financial literacy is positively linked to the way one makes his/her financial decisions thus the need for financial education to entail every aspect of finance as it would enable the individuals manage their earnings more effectively. There is a high chance for individuals who lack financial literacy to make bad decisions on their earnings such as incurring debts, investing in mortgages that are extremely expensive and making poor decisions regarding

their savings (Gignac, 2022).Researchers have argued that one of the factors affecting poverty levels is financial literacy education (Bucher-Koenen et al., 2021).

A person who has financial literacy is capable of planning, borrowing, spending wisely, saving, investing and taking risk reduction measures (Watanapongvanich et al., 2021) and even seeks financial information where necessary. Hamid and Loke (2021) in a study established that both low and high income earning countries experience a low level of financial literacy. Goyal and Kumar (2021) stated that, regardless of the development in financial markets, all economies experience financial illiteracy at high levels. Financial literacy improves the capability of individuals to understand financial information and use the details to come up with decisions on their finances. Studies have shown that literacy reduces poverty levels in all economies be they developed or developing (Meoli et al., 2022).

Financial literacy is linked to how a person makes financial decisions; hence financial education must cover all facets of finance to help people make the best use of their money. Financially illiterate people are more likely to get into debt, are more inclined to investing in highly expensive mortgages, with little probability of having a savings strategy and make poor financial judgments (Wafula, 2017).

1.1.4 Financial Literacy and Poverty Levels in Kenya

Kenya, a Sub-Saharan African country is among the very fast developing economies in Africa with a standard yearly development of 5.4%, which makes it the biggest economy in East Africa although this is way below their projection of 10% according to their Vision 2030 economic pillar (World Bank, 2020). The 2019 national cencus Reports indicated that Kenya has a population of 47.5 million or 12.2 million households. Of the total citizens 23.5 millions are males and and 24

million are females. The standard size of the households in the country is 3.9. Nairobi county is the most populated areahaving a population of 4.3 million which is 1.4 million households (Kenya Population and Housing Census, 2019).

Access to financial services and products has increased to 83% due to mobile money services, partnerships and innovations such as mobile banking and mobile apps. Majority of Kenyans use the services of financial providers on a monthly basis. This may imply that most of the users are salaried persons. Consumers choose financial services and products based on their needs which are summerized as meeting day to day needs, dealing with shocks and meeting future goals. At a national level, it was established that 21.7% of Kenyans are financially healthy and the level of financial literacy was at 37% (Fin Access, 2019).

Kenya Integrated Household Budget Surveys 2005/06 and 2018/19 indicates that the national poverty rate in Kenya dropped from 46.8% in 2005/06 to 34.1% in 2018/19; this was ascribed to a modest progress in the country's living standards. UNCDF (2019) holds that one way of reducing poverty levels is by increasing the level of financial literacy and adds that over time there has been little or no effort made in training citizens to develop proper spending and saving habits. Basic education systems do not provide for a comprehensive financial literacy module making the skill of financial management a relatively foreign spectacle to many.

1.2 Research Problem

Financial literacy enhances the understanding of financial matters that in turn reduces a poverty rate of a country. The type of relationship existing between financial literacy and poverty levels has risen to be a concern to scholars. Financial literacy alone may not lead to the expected financial outcomes. Some scholars argue that there exists a strong direct linear connection linking these variables (Twumasi, Jiang, Ding, Wang, & Abgenyo, 2022), while others argue that the

relationship is weak (Bucher-Koenen et al., 2021). Positive financial behaviours enhance the outcome of the interplay of financial literacy and poverty levels. Financial literacy gives an individual the knowledge on how to plan, save, borrow and invest. When individuals are able to apply the knowledge gained to manage their daily finances, they become financially stable and reduce their poverty levels (Watanapongvanich et al, 2021).

Reducing poverty is the most prominent problem faced by the government as it tries to reach its commitment of Vision 2030 (Republic of Kenya, 2018). Relying on formal statistics, it is established that 32% of the population in Kenya are poor, this means that they survive on short of a dollar everyday (KNBS, 2020). Low financial literacy can be cited as a major factor causing the high poverty levels in Kenya (Gathungu & Sabana, 2018). If the government wishes to develop a long-term plan, it should focus on financial literacy, which is the main contributor of the repeated years of poverty to the people of the country. The reason someone is poor now could be for the reason that they were never exposed to financial literacy training.

The findings of surveys on the relationship linking financial literacy levels to poverty levels have proved to be unreliable; this shows that the relationship depends on literacy factors that are different depending on the country involved. Adam, Frimpong and Boadu (2017) argue that no connection exists to link financial literacy to an individual's financial well-being while Reswari, Sundarto and Widiastuti (2018) established that the degree of financial literacy does influence the wellbeing of individuals and can lead to poverty reduction. Andoh and Nunoo (2019) based their study on how financial literacy affected financial services utilization in Ghana. They noted the importance of financial literacy by owners of MSEs in explaining to them the why they should utilize financial services. The quoted studies were carried out in different contexts. The variables were conceptualized and operationalzed differently.

Within Kenya, Wafula (2017) sought to identify how financial inclusion among small scale farmers in Tranzoia County is affected by financial literacy and established that the connection linking financial inclusion and financial literacy practices was significantly positive. Gathungu and Sabana (2018) examined financial literacy of enterprises, access to finances and cost of transactions and the performance of micro enterprises in Nairobi. It was noted that financial access was enhanced by financial literacy hence positively influencing the performance of microenterprises. Kodongo (2018) studied financial regulation, financial literacy, and how they influenced financial inclusion in Kenya. It was established that banking regulation and financial literacy improves financial access. From all those discussed local and universal studies, it is clear that many of these surveys give conflicting findings with some showing a negative relationship, others a positive one while others state no connection at all. Moreso, the surveys were conducted in different contexts and using different methodologies thus complicating the process of compiling the findings into a single context. Also, there is little done locally on the nexus between financial literacy and poverty levels in Kenya. This study leveraged on the research gaps and seeks to answer the research question; what is the effect of financial literacy on poverty levels in Kenya?

1.3 Research Objective

The study wanted to know the effect of financial literacy on poverty levels in Kenya.

1.4 Value of the Study

The results of this research will contribute to already existing theoretical as well as empirical literature on financial literacy and poverty levels. The findings will assist in development of theories as they will look into the shortcomings and relevance of already published theories. Subsequent studies could also be carried out according to the recommendation of further research.

The conclusions of the study might be useful to policy makers such as the government. The research will serve as government guide on its role in policy making and how financial literacy affects poverty levels. This would help the government identify training needs of Kenyans. It will also be of help to other ministries such as Education as it gives them insight on the needs to consider financial literacy in the school curriculum.

The conclusions will aid Kenyans in understanding the correlation between the two variables, the research is expected to be beneficial by giving them insight on the significance of financial literacy. They include finance management for instance savings, management of credit, asset accumulation, cash flow management and budgeting. All these practices would contribute to reduced stress that comes with wrong financial decisions.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section shows the different propositions that guide this research and the relationship they have with the survey variables together with all empirical linkages connecting all variables under research. The review has also enabled the development of a conceptual framework.

2.2 Theoretical Foundation

This segment examines all theories which underpin the study of financial literacy and poverty levels. The study reviewed the prospect theory, dual process theory and the goal setting theory.

2.2.1 Prospect Theory

This theory was established by psychologists Kahneman and Tversky(1979) and serves as the anchor theory for the current study. Prospect theory applies to individual decision making under risk. Decisions inclined to threat are viewed as alternative actions, related to specific probabilities (prospects) or gambles (Goldberg & Von 2001). It was developed for easy or elementary prospects having monetary benefits and disclosed probabilities. The process of making a choice is characterized by two stages. The first stage is the editing and consists of a preliminary analysis of the given prospects that often results to a simpler representation of the probabilities. The last stage involves the evaluation of the prospects to ensure that you make a choice containing the highest value. (Kahneman & Tversky, 1979). This theory has its focus on subjective decision making that is controlled by the value system of any investor (Barberis, Huang & Santos, 2001).

The theory is critiqued by Barberis (2013) who posited that Daniel Kahneman and Amos Tversky did not define the gains and losses nor guide on how to determine the reference point therefore making it hard to apply the prospect theory. Although the theory rightly describes risk attitude in investigational situations, it is still not clear if this projection will still be accurate out here in the real world where chances are low and individuals are well endowed with making sane decisions. Nwogugu (2005) further critiques the theory by arguing that decision making and risk assessment are not easily explained by stiff quantitative models since they are multi-criteria processes and thus will need processing of information. He opines that prospect theory and cumulative prospects theory are theoretical, rigid and impractical for decision making.

Researchers have used prospects theory to explain the absence of diversity in most portfolios of the households. Households may make a choice of not diversifying in positively skewed stocks to try their luck of being rich. A person thinking of investing in the stocks should look at the historical

distribution of the annual stock market returns. Because an investor is loss averse, the great dispersion displayed by the distribution is not very appealing. In order to make up for that fact, and to make sure an investor is ready to invest, he stocks need to have a quite higher rate of return than other safe investments like Treasury bills (Benartzi & Thaler, 1995). In this study, the types of investment choices made and the effect they have on the poverty levels in Kenya was determined.

2.2.2 Dual Process Theory

This theory was developed by Petty and Cacioppo (1986) and focused on societal psychology grounds. It recognizes the constraints that can be brought about by intuitive and cognitive processes on the economic assessments which tend to imply failure of financial literacy in yielding financial decisions that are sound (Lusardi & Mitchell, 2011). The Dual Process theory does not agree with the assumption that a group that has embraced financial literacy tends to base their decisions on philosophy styles, that is intuition and cognition (Glaser & Walther, 2013).

Intuition means being able to get awareness without necessarily having implication. Intuition comprises of beliefs, judgments or perceptions which are not observable logically. According to Taylor (1981) decisions based on intuition, are rational since people are so used to being influenced by their emotions influence when making decisions. Glaser and Walther (2013) argue that the informed financial investment due to the influence of financial literacy is moderated by intuition. Cognition is making of decisions systematically with contribution being detailed, summarized, stocked up, used and recuperated. As per Chan and Park (2013), it is a psychological inclusion of the ability to understand, agree, interpret, analyze and lastly administer. They observed that the individuals whose cognition was high had were keen, analytical and could think critically while making decisions.

This illustrates that workshops on financial literacy might influence decision making proficiency through the use of tactics that are simple to comprehend (Fatoki, 2014; Cole & Fernando 2008). Obago (2019) critiques the theory by arguing that the use of intuition may reduce overtime as individual obtain substantial information from financial education and persons only use intuition whenever relevant information for decision making is insufficient. The Dual process theory was applied in this research because of its allegation that individuals with high reasoning tend to find facts and it is expected that they can be moved easily by the relevant information for them to make decisions that are informed. For Kenyans to reduce their poverty levels, they need to be persuaded with facts which can be obtained by being financially literate.

2.2.3 Goal Setting Theory

This theory was pioneered by Locke (1986) and it emerged from the idea that well figured out goals and objectives propel the outcomes. Individual aims will mostly affect the effectiveness of executing duties (Locke & Latham, 1990). This theory states that definite and engaging goals combined with good feedback will always lead to good job execution. Furthermore, vague and simple goals are likely to achieve much while well defined goals result to high performance. Individuals need to be totally dedicated to reaching their goals, expect feedback while at the same time showing their ability to perform the task. This shows that when concerns and perceptions of future financial welfare motivate the increment of the efficiency of financial literacy programs (Locke, 1986).

This theory suggests that matters to do with financial literacy should always be associated with financial behavior and that this is in the total interest of the wellbeing of an individual. Hilgert, Beverly and Hogarth (2003) came up with a Financial Practices Index (FPI) centered upon behavior that is of benefit to an individual in cash flow management, credit management and

services pertaining investing and saving. A comparison between FPI results and the scores on financial literacy quiz proved highlighted a positive link between scores in financial practices index and scores in financial literacy proving the connection found to link financial knowledge of an individual to his financial practices.

Goal setting theory encourages and motivates individuals to increase their wealth. Households are constantly looking to ensuring that the goals are being attained and modifying the goals where they are attainable where they are not attained. Chemjor (2015) critiques the theory by arguing that more difficult goals may make one indulge in risky behaviors while trying to fulfill the goals in due time. There is some relevance of this theory to this study due to its consideration on poverty levels being affected by an individual’s goals and those goals influenced by the level of financial literacy.

2.3 Determinants of Poverty Levels

This section presents the determinants of poverty levels. It has been globally acknowledged that poverty is a multidimensional issue and its reduction necessitates an in-depth and comprehensive approach to enhance the economic, socio-cultural, political, human and protective capabilities of the poor as outlined below:

2.3.1 Financial Literacy

A person who is financially literate can do the planning, saving, borrowing, investing, spending, and taking risks reduction measures (Watanapongvanich et al., 2021) and even seek financial information where necessary. Lusardi et al. (2021) described financial literacy degrees to be low in high- and low-income countries. Goyal and Kumar (2021) stated that, financial illiteracy is a major challenge even in well-developed financial markets. Even where financial markets are well

developed. Financial literacy improves an individual's capability of analyzing financial information and therefore settles on proper choices about their finances. Studies have shown that literacy reduces poverty levels in both developed and developing economies (Meoli et al., 2022).

Financial literacy is linked to how a person makes financial decisions; hence financial education must cover all facets of finance to help people make the best use of their money. Financially illiterate people are more likely to get into debt, are more inclined to investing in highly expensive mortgages, lack of a savings strategy and make poor financial judgments (Siekei et al., 2017).

2.3.2 Unemployment Rates

Assuming the stock and labour markets are balancing. Then, assume a negative effect on labour demand, which causes a reduction in wages and a sudden rise in level of unemployment, ceteris paribus. High level of unemployment will lead to a decrease in disposable income to all employees involved, which in effect leads to the decrease in demand of stocks. Because of stock durability which says that the supply of stocks in the short-term is fixed, therefore stock prices are likely to lower in such an event (Hood & Waters, 2017).

The prosperity of a country is closely determined by its economy, this consists of factors like unemployment, GDP, inflation, remittances, capital supply, interest rate and exchange rates, as given by theory and empirical literature. Changes in the basics of an economy control share price movements, theses basics have an effect on future prospects (Gignac, 2022).

2.3.3 Economic Growth Rate

Economic growth plays a key role towards poverty reduction. A steeper decline in poverty rates has been associated with stronger economic growth, which is beneficial for the poor (Dollar, Kleineberg, and Kraay, 2016). According to Raghutla and Chittedi (2022), poverty reduction was

largely a consequence of economic growth, which leads to increased employment levels and higher real wages; thus establishing economic growth as the cornerstone to increased income levels. More and better paying jobs have been crucial to lifting people out of poverty (World Bank, 2018).

On the contrary, Aghaei and Lin Lawell (2022) study established that despite good underlying growth prospects, poverty levels increase due to the inequality in income distribution among the poor. According to UNFPA 2014 Population and Poverty, unsustainable population growth limits government's ability to productively invest in poverty reduction projects therefore making poverty reduction slower than expected. Well-being and per capita income growth of a country is likely to decline as population grows rapidly (Kouadio & Gakpa, 2022).

2.3.4 Public Debt

The shrinking domestic resource mobilization and increasing budget deficits among countries has immersed them into poverty traps characterized by unemployment, difficulty of paying for education, absence of proper medical care, poor sanitation, lack of industry growth and unaffordable goods and services. Governments accumulate debt out of desperation to exit poverty traps, with the aim of increasing resources for consumption smoothing and investment (Achtziger, 2022).

As a country's debt levels increase, so does the debt servicing which consists of principal and interest repayments; this in turn increases government expenditure. According to Nguyen and Su (2022), as government expenditure builds up with no any increase in revenue in return, budget deficit rises therefore creating the need for more borrowing. However, a reduction in debt leads to reduced debt service and further increased repayment capacity, therefore the amount of outstanding debt becomes more likely to be repaid (Arshed, Nasir & Saeed, 2022).

2.4 Empirical Studies

In this part, several studies associated with this study's variables were analyzed to determine the methodologies they used and the research gaps in them.

2.4.1 Global Studies

Reswari, Sudarto and Widiastuti (2018) carried out a research on how financial literacy influences financial behaviour. The aim of the research was to know the influence of demographic factors on financial literacy and the impact of financial literacy on financial behaviours of members of SMEs under the guidance of Bank of Indonesia in Banyumas. This was a case study. 83 respondents were selected from a population of 95 using convenience sampling technique. Data was processed through SPSS Version 23 and analyzed using multiple regression analysis method. It was found that the degree of financial literacy does not affect financial behaviour. This study was conducted in Indonesia whose economic and social setting is different from Kenya.

Seshan and Yang (2018) conducted a study measuring how the financial decisions of Indian migrant workers working Qatar with their wives living in India were influenced by savings post training on financial literacy. The research sample comprising 232 married, male migrant workers of Indian heritage living in Doha, Qatar, of whom 157 were randomly assigned to a three-hour financial literacy class on how to create and execute household savings plans, which was predeceased by a two hour dinner and 75 workers were not trained. There was some positive behavior change noted in the study whereby 48.4 per cent of the migrants who were invited were more likely to involve their wives in making their financial decisions. The focus of this research was on the impact of financial literacy on saving levels leaving a gap on its effect on poverty levels.

Lusardi and Tufano (2019) survey was to establish financial occurrences, debt literacy, as well as over indebtedness that existed among the Americans. They noted that from the target population, three quarters were not able to comprehend the importance of compounding of interest to their business operations. They could neither understand how effective a credit card is. However, they did acknowledge that the marginalized, women, single parents and the elderly are mostly affected by poor financial supervision and their constrained resources. The study was descriptive in nature without relating financial literacy with a dependent variable such as poverty levels.

Obago (2019) did a research on the way financial literacy impacted the running of once personal finances where he found out that most of the employed people suffered pressure that resulted from poor financial decisions such as: Mismanagement of credit card, extravagance, scarce income over-indebtedness and poor cash management. This encounter makes it hard for the employees to meet their daily needs hence low productivity and poor performance at work. Difficulties resulting from financial illiteracy have caused many organizations in the U.S to provide financial education in the workplace so as to empower the employees with personal finances management skills. The study was a review of literature and therefore lacks empiricism.

Juabin (2021) sought to investigate the link connecting financial literacy to consumer financial stability together with the relationship they have with macroeconomic stability in Ghana. A major finding that is of importance to this study is that financial literacy has a valid and positive impact to economic stability like shown by measuring the welfare of the citizens. This realization will have various effects on national financial literacy initiatives. Consumer well-being and economic stability appear to have a positive relationship that also seems and is insignificant. Still, it shows the way in which a financially secure consumer is likely to enhance aggregate demand by spending more, impacting job creation and macroeconomic growth. The Probity-Regression method

facilitated data analysis using a participant population of 960 across eight studied regions in Ghana. The study focused on consumer financial stability and therefore a conceptual gap.

2.4.2 Local Studies

Agunga (2016) explored the impact of financial literacy on financial retirement preparedness and permanent and pensionable workers. This survey investigated how the comprehension of financial instruments affects computational ability of financial preparedness and retirement benefits among employees. This study used a descriptive study design with the research population consisting of permanent and pensionable employees that work for state agencies located in Nairobi and with a 5-year experience. It sampled 4,619 employees and the findings show that financial literacy impacted computation capability on financial preparedness for retirement positively. The results reveal that demographic and financial parameters greatly affect the connection linking retirement financial preparation to financial literacy. The focus of the research was on financial literacy with financial retirement preparedness while the current study focuses on financial literacy and poverty levels.

Wafula (2017) sought to identify how financial involvement of small-scale farmers in Trans-Nzoia County is affected by financial literacy. The population target was small-scale farmers from Trans-Nzoia County. 384 farmers made the sample size. Data was collected by administering questionnaires. The analysis was carried out by applying both inferential and descriptive statistics. The used descriptive statistics comprised of means, standard deviation and percentages and frequencies. On inferential statistics, the relationship of variables is identified by applying multiple linear regressions. The research established that the access and the utilization of financial practices influenced the saving, debt management, financial planning as well as investment practices by the small-scale farmers to a greater extent. The study concludes that the link between financial

inclusion and saving, debt management, investment and financial planning practices were significantly positive. The study's focus was Trans-Nzoia County which cannot be used to generalize other parts in Kenya.

Gathungu and Sabana (2018) sought to show how entrepreneur financial literacy, financial access, transaction costs relate to performance of micro- enterprises in Nairobi City County. This survey was anchored on resource-based theory that states that given resource heterogeneity immobility and satisfaction of the requirement of value rareness, imperfect imitability and non-substitutability, the resources of an institution can give it a sustained competitive advantage. Contingency theory was also utilized in the research supporting a framework for investigating the effect of financial literacy on financial access and transaction costs. This survey revealed that financial literacy determined financial access transaction costs and performance of micro-enterprises. The focus of the study was on performance of SMEs while our current survey is centered on poverty levels in Kenya.

Dupas and Robinson (2018) carried out a study in the rural Kenya and established that an elimination cost associated with account opening had a significant positive link with the number of bank savings accounts opened and on the levels of investment among the micro entrepreneurs. The study was based on 250 self-employed people who included taxi drivers and market vendors of a market in western Kenya; a random selection was done to a half of the population target for an offer to open for them a bank savings account at bank in the village. The cost that was incurred by the research team was Ksh 450 for every account opened and every holder given at least Ksh 100 for which withdrawals were not allowed, this account was characterized by a negative interest rate because of the withdrawal charges, the individuals who got the chance of opening a savings account in this intervention were 156, those who opened and used it at least once was 47 per cent,

41 per cent became active users of the account and deposited above two times within the initial six months whereas 13% did not open an account, 40 percent did open the account but did not make any deposit. The was an increase by 38-58 per cent in average daily investment by the treatment group in the business among the market vendors, with everyday personal expenditures increasing by 37% relative to the comparison group, four to six months after the accounts were offered. There was no any substantial impact noted on the bicycle taxi drivers. This study was descriptive in nature as it failed to show how the variables under survey were related.

Nyambura (2019) wanted to determine factors affecting saving and investment of employees of Wells Fargo Kenya Limited Nairobi workers. She adopted a descriptive survey design for the research. The sample target consisted of 572 Wells Fargo Limited employees, including top management from important divisions, middle managers, together with the rest of the staff members. The research had a complete sample size of 58 staff members. Data was collected through questionnaires, and correlation analysis utilized to identify correlations in the variables under survey. This analysis was carried out by employing Excel and the Statistical Package for Social Sciences (SPSS version 24). Employees' saving and investing levels are heavily influenced by investment reasons (retirement, development, precautionary, and bequest), according to the study. Furthermore, it was discovered that various micro characteristics (financial literacy, income level, risk (nature) of work, and family size) had a significant impact on employee saving and investment levels, however religion has no impact. This was a case study of one organization which cannot be used to reflect the entire country.

2.5 Conceptual Framework

The conceptual model consists of financial literacy (independent variable), poverty levels (dependent variable), and unemployment rate, economic growth rate together with public debt performing the role of control variables. Figure 2.1 depict the study's conceptual model.

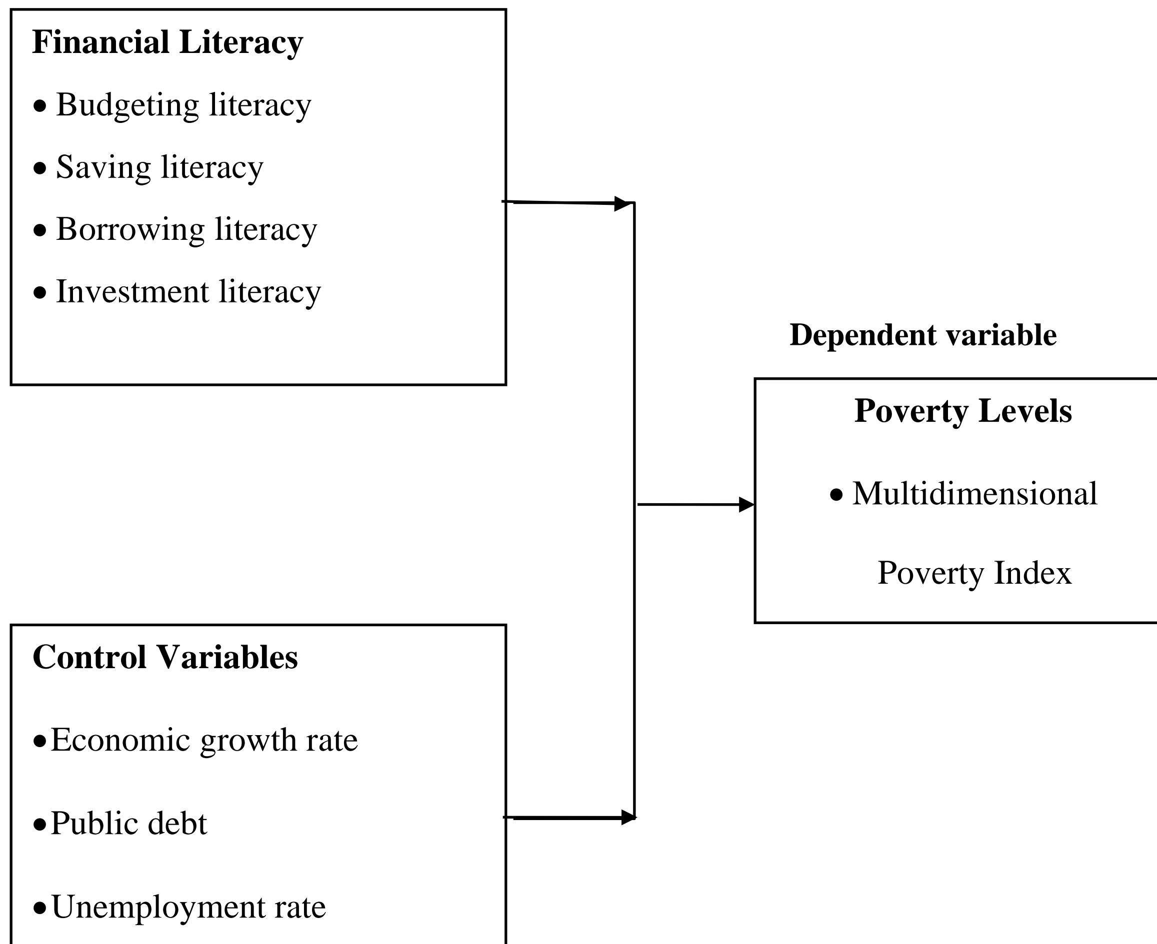

Figure 2.1: Conceptual Model

Source: Author (2022)

2.6 Summary of Empirical Review and Research Gaps

All the theoretical reviews illustrated the expected relationship linking financial literacy to poverty levels. The main determinants of poverty levels are outlined and given in details. From these studies however, there are gaps that need to be filled. The reviews show that there is a varied connection between financial literacy and poverty levels. The differences between them can be based on their different operationalization of financial literacy by different researchers thereby indicating that findings are dependent on operationalization model.

Additionally, many surveys utilized distinct designs with some relying on empirical reviews to make conclusions and others use existing literature to measure how the variables relate. Their outcomes are varied inconclusive findings that do not show the specific relationship that financial literacy has with poverty levels. This highlights requirement for additional study in future research to bridge the gap through conceptualizing the impact of financial literacy on poverty levels.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section shows procedures used to conduct the study. The chapter discusses the research design, population, data collection methods, operationalization of the variables and data analysis procedures.

3.2 Research Design

A descriptive research design was adopted for the study. A descriptive design was utilized in establishing the relationship among the chosen variables. This design described public debt and economic growth variables by considering their means and standard deviations. This design was suitable as it allows the researcher do the comparison of the findings and plays an important role in answering what, where and how questions.

3.3 Data Collection

This study solely utilized secondary data. This data was obtained from Central Bank reports and KNBS reports existing from January 2002 to December 2021 quarterly which was compiled in a data collection sheet. This quarterly period of twenty years is viable to give sufficient data that can be used to perform the objectives of the study. A secondary data collection sheet was used in compiling the secondary data collected. The specific data collected included; financial literacy index, unemployment rate, GDP growth rate, public debt as well as multidimensional poverty index.

3.4 Diagnostic Tests

Diagnostic tests were carried out before engaging in equation estimation to make sure that there was no violations on the assumptions made in the traditional linear regression model. This is because, breaking of these assumptions leads to skewed and inefficient parameter estimations.

3.4.1 Stationarity Test

Stationarity means that all attributes (variance, means) of the data collected are constant and does not change with time. Spurious regression is a characteristic of a data that is non-stationary with time (Cooper & Schindler, 2018). This research tested for unit root using the Augmented Dickey Fuller (ADF) test. Robust standard errors were utilized whenever the data in this study could not pass the test.

3.4.2 Co integration Test

Co integration prior to the VAR analysis was carried out to see if the variables have a long-run or short-run correlation. For this research, Johansen test was used to detect co integration.

3.4.3 Normality Test

All residuals of response variables are often considered normally distributed to mean in normality tests (Khan, 2018). This was established using Jarque-Bera tests. If the data fails the test, extra information was gathered. On the acquired data, the researcher also used natural logarithms.

3.4.4 Multicollinearity Test

A correlation matrix was adopted to find out the multicolinearity, adopting a threshold of 0.8 (Cooper & Schindler, 2018). Multicollinearity helps eradicate big standard errors that may result from minute standard errors and indeterminate regression coefficients. The standard errors avoided

would otherwise compromise the null hypothesis rejecting it or failing to reject it. Tolerance levels and variance inflation factors (VIF) were used. Any multicollinear variables was removed from the research and a new metric chosen and replaced with the colinear variable.

3.4.5 Autocorrelation

Durbin Watson test for serial correlation was employed in this study to determine autocorrelation. Khan (2018) says that failure to consider serial correlation leads to poor parameter estimates and also prejudiced standard errors. This test adopted a no serial correlation null hypothesis. Any data that that seemed to have cross-sectional dependency would be arrested through lagging of the dependent variable.

3.5 Data Analysis

SPSS version 24 was adopted for analysis. All findings were presented on tables. Descriptive statistics were used to calculate the measures of central tendency and dispersion like mean and standard deviation for each component. Inferential statistics depended on correlation and regression. The magnitude of the relationship among the variables of the study was influenced by correlation, while cause and effect was influenced by regression. The connection linking the variables under survey was established linearly using a multiple regression model.

3.5.1 Analytical Model

The following equation was applicable:

$$Y_{it} = \beta_{0it} + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$$

Where: Y = Poverty levels measured using the Multidimensional Poverty Index

β_0 = y intercept of the regression equation.

β_1, β_2, β_3, β_4 = are the regression coefficients

X_1 = Financial literacy measured using the financial literacy index

X_2 = Economic growth rate measured as quarterly GDP growth rate

X_3 = Public debt measured as log quarterly public debt

X_4 = Unemployment measured as quarterly unemployment rate

ε = error term

3.5.2 Tests of Significance

Parametric tests were adapted to show the significance of the whole model and every single variable. The F-test worked out the significance of the model doing this by utilizing ANOVA and at the same time coefficient significance being ascertained using a t-test.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND FINDINGS

4.1 Introduction

This chapter has the summary of the conclusions of this research. The main aim of the study was to determine how financial literacy influences poverty levels in Kenya. The following sections consist of descriptive statistic, diagnostic test and analysis of correlations, regression and discussion of results.

4.2 Descriptive Analysis

Descriptive statistics of all variables on which analysis was done are listed in the table below. Quarterly information was gathered and analyzed using SPSS version 24 software during a ten-year period (2012 to 2021).

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Poverty Levels	80	31.890	49.980	39.91300	5.861777
Financial literacy	80	21.3000	39.1000	30.690000	5.4829448
Economic growth	80	-.047	.060	.0418	.037684
Public debt	80	14.100	16.000	15.18776	.528596
Unemployment rate	80	.092	12.400	.72463	2.695425
Valid N (listwise)	80				

Source: Research Findings (2022)

4.3 Diagnostic Tests

Diagnostic tests were done before even handling the regression model. Co-integration, Multicollinearity, normality, autocorrelation, and stationarity tests were conducted in the survey.

4.3.1 Stationarity Test

The research variables were subjected to a unit-root test to establish if the data was stationary. The unit root test was ADF test. With a standard statistical significance level of 5%, the test was compared to their corresponding p-values. In this test, the null hypothesis states that every variable has a unit root, and the alternative hypothesis is that the variables are stationary. Findings depicted in Table 4.2.

Table 4.2: Stationarity Test

	Critical value at 95%	DFT statistic	P-value
Poverty levels	-2.447	-3.271	0.000
Financial literacy	-2.447	-3.337	0.000
Economic growth	-2.447	-4.748	0.000
Public debt	-2.447	-3.755	0.000
Unemployment rate	-2.447	-4.826	0.000

Source: Research Findings (2022)

As demonstrated in Table 4.2, this test concludes that the data is stationary at a 5% level of statistical significance since the p-values all fall below 0.05.

4.3.2 Co-integration Test

This test was done to establish if the explanatory variables show a long run or short run interrelationship. The results are as shown in Table 4.3

Table 4.3: Co-integration Test Results

	Eigen Value	Trace Statistic	Critical value at 95%	P-value
Financial literacy	0.123	23.13	26.03	0.000
Economic growth	0.083	61.02	62.07	0.000
Public debt	0.301	20.01	26.79	0.000
Unemployment rate	0.189	27.22	28.76	0.000

Source: Research Findings (2022)

The findings indicate all variables to be having a p value of less than 0.05 therefore establishing that variables show a long-run or short run relationship.

4.3.3 Normality Test

To see if they had a normally distributed data, the researcher used the Jarque-Bera tests. If the p-value falls above 0.05, we conclude that there is normal distribution of data and vice versa. Table 4.4 summarizes the results of the test.

Table 4.4: Normality Test Results

	Jarque-Bera Coefficient	**P-value**
Poverty levels	2.587	0.100
Financial literacy	5.304	0.202
Economic growth	1.763	0.315
Public debt	2.153	0.227
Unemployment rate	3.145	0.201

Source: Research Findings (2022)

Since the data displayed a p value of above 0.05 therefore having a uniform distribution, the researcher adopted the alternative hypothesis. This data was fit to be subjected to tests and analysis like for variance, regression and Pearson's Correlation analyses.

4.3.4 Multicollinearity

In a multiple regression model, multicollinearity is displayed whenever predictor variables exhibit a substantial relationship. An event where independent variables have great correlations is unfortunate. Parameters are said to have multicollinearity if they have a perfect linear connection. Outcomes for the test on multicollinearity were displayed in Table 4.5.

Table 4.5: Co linearity Statistics

	Co linearity Statistics	
	Tolerance	VIF
Financial literacy	.166	6.134
Economic growth	.103	8.998
Public debt	.138	7.217
Unemployment rate	.101	8.834

Source: Research Findings (2022)

VIF value is used where values that fall below 10 are not multi-linear. One condition for multiple regressions to occur is that no strong connection should be evidenced among variables. Given by the outcomes, every VIF variable is below 10 as indicated in table 4.5which shows that independent variables in the study experience no significant statistical multi-linearity.

4.3.5 Autocorrelation

A serial correlation test established the relationship of error terms for different times. For the research to obtain the desired model parameters, the Durbin Watson serial correlation test was used to carry out the analysis of autocorrelation in the data, which is a major shortcoming in the data analysis that must be examined. The findings are shown in Table 4.6.

Table 4.6: Autocorrelation Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.997[a]	.995	.994	.436277	2.377

a. Predictors: (Constant), Unemployment rate, Public debt, Financial literacy, Economic growth

b. Dependent Variable: Poverty Levels

Source: Research Findings (2022)

From the null hypothesis, no first-order serial/auto correlation exists. The 2.377 Durbin Watson statistical varies from 1.5 to 2.5 indicating no serial correlation.

4.4 Correlation Analysis

Pearson correlation was employed to establish the relationship linking poverty levels in Kenya to the characteristics of the study (financial literacy, public debt, economic growth and rate of unemployment). The results are as shown in Table 4.7.

Table 4.7: Correlation Analysis

		Poverty Levels	Financial literacy	Economic growth	Public debt	Unemployment rate
Poverty Levels	Pearson Correlation	1				
	Sig. (2-tailed)					
Financial literacy	Pearson Correlation	-.996**	1			
	Sig. (2-tailed)	.000				
Economic growth	Pearson Correlation	-.424**	-.465**	1		
	Sig. (2-tailed)	.000	.000			
Public debt	Pearson Correlation	-.338**	.330**	-.175	1	
	Sig. (2-tailed)	.002	.003	.120		
Unemployment rate	Pearson Correlation	.317**	.355**	-.473**	.315**	1
	Sig. (2-tailed)	.004	.001	.000	.004	

**. Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N=80

Source: Research Findings (2022)

From the study's findings, a strong negative that is statistically significant relationship exists between financial literacy and poverty levels (r = -.996, p = .000). The correlation results further revealed a moderate negative and significant statistical connection between economic growth and poverty levels (r = -.424, p = .000). Public debt exhibited a weak negative and significant

association with poverty levels in Kenya (r = -.338, p = .002). The rate of unemployment too displays a significant and positive interrelationship to poverty levels in the Kenyan economy (r = .317, p = .004).

4.5 Regression Analysis

Financial literacy, economic growth, public debt, together with the rate of unemployment was utilized as agents to predict poverty levels in Kenya. The test was done at 5% level of significance. Table 4.8 to 4.10 displays the results.

Table 4.8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.997[a]	.995	.994	.436277	2.377

a. Predictors: (Constant), Unemployment rate, Public debt, Financial literacy, Economic growth

b. Dependent Variable: Poverty Levels

Source: Research Findings (2022)

The R squared indicator indicates how the explanatory variables may describe variations in the response variable. As indicated in Table 4.8, the R square was 0.995, indicating that change in financial literacy, economic growth, public debt, and the unemployment rate account for 99.5 percent of Kenya's poverty levels. With other factors ignored in the research account for 0.5 percent of the variance in poverty levels in Kenya. The correlation coefficient (R) of 0.997 showed a significant connection amongst predictor factors and poverty levels.

Table 4.9: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2700.198	4	675.050	3546.587	.000[b]
	Residual	14.275	75	.190		
	Total	2714.474	79			

a. Dependent Variable: Poverty Levels

b. Predictors: (Constant), Unemployment rate, Public debt, Financial literacy, Economic growth

Source: Research Findings (2022)

The value of P obtained by ANOVA is 0.000, which is less than p=0.05. This demonstrates that the model's importance described how financial literacy, growth of the economy, public debt, and unemployment affect Kenya's poverty levels.

The relevance of various variables was determined using the model coefficients. The statistics of t and values of p were used to accomplish this. This study is significant since it allowed the researcher to determine which independent variables were chosen (Financial literacy, economic growth, public debt and unemployment rate) significantly influences the poverty levels of the Kenyan economy. The importance of the association between the two variables was shown by the sig. column's p-value. With a confidence level of 95%, a p-value of less than 0.05 was judged to be statistically significant, which is the most conservative estimate. Table 4.10 summarizes the findings.

Table 4.10: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	77.094	1.495		51.585	.000
	Financial literacy	-1.089	.011	-1.019	-102.674	.000
	Economic growth	-5.868	1.589	-.038	-3.694	.000
	Public debt	-.215	.101	-.019	-2.130	.036
	Unemployment rate	.072	.022	.033	3.326	.001

a. Dependent Variable: Poverty Levels

Source: Research Findings (2022)

Table 4.10 shows that financial literacy; economic growth and unemployment rate had a sizeable negative impact on poverty levels as indicated by negative coefficients and p values less than 0.05. Unemployment rate was established to posses' positive and considerable outcome on poverty levels, as shown from the positive coefficient and a p value less than 0.05.

The following regression was estimated:

$Y = 77.094 - 1.089X_1 - 5.868X_2 - 0.215X_3 + 0.072X_4$

Where,

Y = Poverty levels

X_1= Financial literacy

X_2= Economic growth

X_3= Public debt

X_4= Unemployment rate

Using the constant = 77.094, we can see that if certain independent variables (financial literacy, economic growth, public debts, and unemployment rates) were rated zero, poverty levels would be 77.094. Increasing financial literacy by one unit would decrease poverty by 1.089 units;

increasing economic growth by 1 unit would decrease poverty levels by 5.868 while increasing public debt by one unit would cause the poverty levels to decline by 0.215. Increasing unemployment rate by 1 unit would lead to a rise in poverty levels by 0.072 units.

4.6 Discussion of Research Findings

This research had an aim of seeing the way in which the predictor variables impacted the poverty levels in the Kenyan context. Independent variables included financial literacy, economic growth, public debt and unemployment rate. This research tried to show poverty levels being a dependent variable. The multidimensional poverty index was measured poverty levels. Correlation as well as regression analysis were utilized to show the connection linking the independent to dependent variables.

The Pearson model showed a strong negative and notable statistical connection linking financial literacy to poverty levels. The outcomes further showed a moderate negative and significant statistical connection between economic growth and poverty levels. Public debt exhibited a weak negative and significant association with poverty levels in Kenya. The rate of unemployment too has a positive and significant connection to the poverty levels in the Kenyan economy.

The independent variables accounted for 99.5% of variances in poverty levels, in accordance with the summary of the model. The predictor variables of this research had explanatory power that fitted a 95% confidence level like indicated by the 0.000 p value that was way below the threshold of significance that is 5%. Therefore, the overall model employed in this study is a good and sufficient prediction model to determine the poverty levels in Kenya.

This research is in agreement with Juabin (2021) who sought to determine the connection linking financial literacy to consumer financial stability and their relationships with macroeconomic

stability in Ghana. A major and a crucial determination is that financial literacy has a considerable and positive relationship to economic stability as measured by citizens' welfare. This finding contains various impacts on national financial literacy initiatives. Consumer well-being and economic stability have an insignificant but positive relationship. However, it shows how a consumer who is financially secure can enhance aggregate demand by spending more, impacting job creation and macroeconomic growth.

The research is also in agreement with Gathungu and Sabana (2018) who tried to determine the connection linking entrepreneur financial literacy, financial access, transaction costs and performance of micro- enterprises in Nairobi City County in Kenya. This research was anchored on resource-based theory which states that given resource heterogeneity immobility and satisfaction of the requirement of value rareness, imperfect imitability and non-substitutability, the resources of an institution can lead to its sustained competitive advantage. The study also used contingency theory which supports a framework for examining influence of financial literacy on financial access and transaction costs. The survey revealed that financial literacy influenced financial access transaction costs and performance of micro-enterprises.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The major motive of this study was to investigate the way financial literacy influences the poverty levels in Kenya. The findings from the above sections are outlined in this chapter together with the conclusions and limitations of this study. This section also outlines the strategies that can be adopted by policymakers. It also carries the recommendations.

5.2 Summary of Findings

The study assessed how financial literacy influenced the poverty levels in Kenya. Financial literacy, economic growth, public debt, as well as unemployment were adopted to be the predictor variables of the research. The study used descriptive design to do analysis and data collection. Secondary data was obtained from CBK as well as KNBS and prepared using SPSS version 24 program. The study used data of 20 years compiled quarterly.

The findings revealed a strong negative and significant statistical connection between financial literacy and poverty levels. The correlation results further revealed a moderate negative and significant statistical connection between economic growth and poverty levels. Public debt exhibited a weak negative and significant association with poverty levels in Kenya. The rate of unemployment too has a significant and positive connection with the poverty levels in the Kenyan economy.

The R-square coefficient was 0.995, meaning that the selected predictors can explain 99.5% of poverty levels in Kenya, with 0.5% of growth changes relating to factors not considered in this research. This study showed that independent factors together had a significant effect on poverty

levels. ANOVA stresses that the F statistic with p=0.000 is considerable at 5 percent demonstrating that the model had the capability to capture independent variables effect on the poverty levels in Kenya.

The regression results further discovered that if the selected independent variables (financial literacy, economic growth, public debts, and unemployment rates) were rated zero, poverty levels would be 77.094. Increasing financial literacy by one unit would decrease poverty by 1.089 units; increasing economic growth by 1 unit would decrease poverty levels by 5.868 while increasing public debt by one unit would cause the poverty levels to decline by 0.215. Increasing unemployment rate by 1 unit would lead to a rise in poverty levels by 0.072 units.

5.3 Conclusion

The outcomes of this study show that the poverty levels in Kenya are negatively influenced by financial literacy. This study concludes that increasing financial literacy causes a decrease in poverty levels. The researcher concluded that economic growth has a sizeable negative influence on poverty levels implying that growth of the economy reduces poverty levels. This study also finds that public debt carries a considerable impact on poverty levels in the country. Unemployment rate was found have a significant positive effect on poverty levels and so it is concluded that unemployment rate accelerates poverty.

The study concludes that the factors under research – financial literacy, economic growth, public debt and the unemployment rate – affect poverty levels by describing 99.5% of the variations. This means that the non-model variables are only responsible for 0.5% of variations of poverty levels in the country. It is therefore substantial to infer that the outlined factors affect the poverty levels as shown in the ANOVA summary by p values less than 0.05.

The conclusions of this research concurred with Obago (2019) who did a study on how financial literacy impacted the running of once personal finances where he found out that most of the employed people suffered pressure that resulted from poor financial decisions such as: Mismanagement of credit card, extravagance, scarce income over-indebtedness and poor cash management. This encounter makes it hard for the employees to meet their daily needs hence low productivity and poor performance at work. Difficulties resulting from financial illiteracy have caused many organizations in the U.S to provide financial education in the workplace so as to empower the employees with personal finances management skills.

5.4 Recommendations

Outcomes show that financial literacy possesses a negative and considerable effect on poverty levels in Kenya implying a rise in financial literacy can have an adverse effect on poverty levels. This research suggests the requirement for policymakers to come with guidelines and policies requiring education institutions to offer financial literacy courses at all levels. The government should also invest resources to boost financial literacy as this will be a sure way of reducing poverty levels.

This study has demonstrated that the rate of unemployment has a positive and significant effect on the poverty levels in the country. It therefore recommends that several approaches are required to make sure that the factors that lead to unemployment are well handled to make sure that the unemployment is regulated to prevent further poverty levels. When the country will be able to reduce the current unemployment rate, it will enhance its production which will see the decrease of the existing poverty.

This study also demonstrated that public debt impacts negatively on poverty levels. This implies that higher public debt is likely to reduce poverty levels in the Kenyan economy. The research suggests the requirement for policymakers in Kenya such as the Central Bank and the National Treasury in order to make sure that public debt obtained is utilized for development because this affects the economy positively leading to a reduction in poverty levels.

5.5 Limitations of the Study

This study embraced a 20 years period (2001-2021). It gives no substantial evidence that in an added time frame, the findings will not change. Additionally, it is not certain that these findings will be sustained after 2021, things might change. Extra timeframe is reliable because it comprises instances with economic shifts like recessions and booms.

The main drawback of the study was the quality of data. It is not possible to reliably state the results obtained in the survey as the correct reflection of the general situation. Accuracy and reliability of the data collected are assumed to a certain point. Additionally, because of the existing circumstances, computing the data has been incoherent. This study uses secondary data as opposed to primary data. The determinants of growth have been partially considered because of unavailability of data for all determinants.

Regression models were used to conduct data analysis. It would be impossible for the researchers to generalize outcomes because of the setbacks accruing from model utilization like erroneous and deceptive conclusions resulting from a change in value of variable. Whenever data is put in a regression model, it is impossible to process it through another previous model.

5.6 Suggestions for Further Research

The aim of the study was to determine the impact financial literacy on poverty levels of the Kenyan economy. A research that focuses on primary data or mixes primary data with secondary data is recommended so as to recognize qualitative elements that might have been overlooked in the current research.

This research failed to consider all independent variables that affect poverty levels of an economy. A suggestion therefore arises to include other factors in future studies in order to come up with more specific findings. These factors include money supply, balance of payments, corruption, cost of labour, and inflation. Providing details how each of them affects poverty levels will enable policymakers make decision on the steps to take in order to control their poverty levels.

Because of unavailability of data, this study focused on the latest 20 years. Other future studies should employ a wider range to come up with a valid conclusion. This study was also under restriction because it only focused solely on Kenya. Additional survey should be conducted in other nations to determine results. In conclusion, the investigator adopted a regression model to do a confirmation or rejection of the findings. Any studies in future should adopt independent methods to confirm or eject their findings.

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APPENDICES

Appendix I: Data Collection Instrument

Year	Quarter	Financial literacy index	Multidimensional poverty index	Unemployment rate	Public debt	GDP growth rate
2002						
2003						

2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						

2021						

Appendix II: Research Data

Year	Qr	Financial literacy	Economic growth	Public debt	Unemployment rate	Poverty Levels
2002	1	21.300	0.112	14.582	0.100	49.980
	2	21.300	0.107	14.623	0.103	49.980
	3	21.300	0.119	14.678	0.104	49.980
	4	21.300	0.123	14.693	0.104	49.980
2003	1	22.400	0.111	14.774	0.104	48.670

Year	Qr	Financial literacy	Economic growth	Public debt	Unemployment rate	Poverty Levels
	2	22.400	0.114	14.840	0.105	48.670
	3	22.400	0.119	14.888	0.106	48.670
	4	22.400	0.122	14.934	0.106	48.670
2004	1	23.600	0.106	14.993	0.106	47.320
	2	23.600	0.107	15.061	0.106	47.320
	3	23.600	0.113	15.108	0.107	47.320
	4	23.600	0.117	15.141	0.107	47.320
2005	1	24.700	0.110	15.192	0.107	46.440
	2	24.700	0.107	15.265	0.107	46.440
	3	24.700	0.111	15.309	0.108	46.440
	4	24.700	0.114	15.334	0.109	46.440
2006	1	25.300	0.109	15.385	0.110	45.190
	2	25.300	0.108	15.427	0.111	45.190
	3	25.300	0.107	15.449	0.111	45.190
	4	25.300	0.105	15.473	0.112	45.190
2007	1	26.100	0.106	15.499	0.113	44.360
	2	26.100	0.106	15.550	0.114	44.360
	3	26.100	0.106	15.606	0.114	44.360
	4	26.100	0.104	15.613	0.116	44.360
2008	1	27.400	0.103	15.651	0.117	43.980
	2	27.400	0.104	15.685	0.118	43.980
	3	27.400	0.104	15.719	0.119	43.980

Year	Qr	Financial literacy	Economic growth	Public debt	Unemployment rate	Poverty Levels
	4	27.400	0.099	15.752	0.119	43.980
2009	1	28.5000	0.099	15.786	0.121	42.590
	2	28.5000	0.100	15.819	0.122	42.590
	3	28.5000	0.100	15.853	0.123	42.590
	4	28.5000	0.094	15.886	0.123	42.590
2010	1	29.1000	0.097	14.133	0.121	41.250
	2	29.1000	0.098	14.175	0.122	41.250
	3	29.1000	0.098	14.251	0.123	41.250
	4	29.1000	0.092	14.248	0.123	41.250
2011	1	30.700	0.055	14.243	0.092	40.440
	2	30.700	0.053	14.294	0.094	40.440
	3	30.700	0.052	14.334	0.097	40.440
	4	30.700	0.055	14.388	0.098	40.440
2012	1	31.800	0.111	14.399	0.098	39.330
	2	31.800	0.114	14.454	0.099	39.330
	3	31.800	0.119	14.511	0.099	39.330
	4	31.800	0.122	14.551	0.100	39.330
2013	1	32.700	0.106	14.582	0.100	38.220
	2	32.700	0.107	14.623	0.103	38.220
	3	32.700	0.113	14.678	0.104	38.220
	4	32.700	0.117	14.693	0.104	38.220
2014	1	33.400	0.110	14.774	0.104	37.440

Year	Qr	Financial literacy	Economic growth	Public debt	Unemployment rate	Poverty Levels
	2	33.400	0.107	14.840	0.105	37.440
	3	33.400	0.111	14.888	0.106	37.440
	4	33.400	0.114	14.934	0.106	37.440
2015	1	34.200	0.109	14.993	0.106	36.100
	2	34.200	0.108	15.061	0.106	36.100
	3	34.200	0.107	15.108	0.107	36.100
	4	34.200	0.105	15.141	0.107	36.100
2016	1	35.300	0.106	15.192	0.107	34.220
	2	35.300	0.106	15.265	0.107	34.220
	3	35.300	0.106	15.309	0.108	34.220
	4	35.300	0.104	15.334	0.109	34.220
2017	1	36.000	0.103	15.385	0.110	33.560
	2	36.000	0.104	15.427	0.111	33.560
	3	36.000	0.104	15.449	0.111	33.560
	4	36.000	0.099	15.473	0.112	33.560
2018	1	36.600	0.099	15.499	0.113	33.040
	2	36.600	0.100	15.550	0.114	33.040
	3	36.600	0.100	15.606	0.114	33.040
	4	36.600	0.094	15.613	0.116	33.040
2019	1	37.000	0.097	15.651	0.117	32.240
	2	37.000	0.098	15.685	0.118	32.240
	3	37.000	0.098	15.719	0.119	32.240

Year	Qr	Financial literacy	Economic growth	Public debt	Unemployment rate	Poverty Levels
	4	37.000	0.092	15.752	0.119	32.240
2020	1	38.6000	0.055	15.786	0.121	32.000
	2	38.6000	0.053	15.819	0.122	32.000
	3	38.6000	0.052	15.853	0.123	32.000
	4	38.6000	0.055	15.886	0.123	32.000
2021	1	39.100	0.056	15.821	12.400	31.890
	2	39.1000	0.058	15.927	12.400	31.890
	3	39.1000	0.06	15.936	12.400	31.890
	4	39.1000	0.059	15.984	12.400	31.890