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# FINANCIAL DEEPENING, FINANCIAL EFFICIENCY, INTEREST RATE DEREGULATION AND POVERTY LEVELS: A CRITICAL LITERATURE REVIEW

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**Abstract**

*The current paper sought to establish the research gap on the effect of financial deepening, financial efficiency and interest rate deregulation on poverty levels. The study had a number of key findings; first, there exist mixed findings on the effect of financial deepening on poverty level with some studies establishing negative effect while others finding positive effect. Secondly, most studies have established that financial efficiency has the capacity to reduce poverty levels greatly and finally most studies tend to suggest that interest rate deregulation has a significant moderating effect on the relationship between financial deepening and Poverty levels; however, the sign of the effect was not conclusive. The study has a number of recommendations. Firstly, study suggest that ministry policy experts should ensure financial efficiency that aids in poverty eradication by coming up with policy paper that ensures financial efficiency in both the capital market and the banking sector. Secondly, the study recommend that management of financial institutions should come up with strategies of improving financial deepening by aggressively marketing financial products. The management of financial institutions should for instance develop products that are targeted at the low-income earners like micro lending to encourage financial reach in the society.*

*Keywords: Financial Deepening, Financial Efficiency, Interest Rate Deregulation, Poverty*

## INTRODUCTION

World over, the economic problem of poverty has been an area of concern for decades as world economies pool their resources to fight poverty. Various policies have been developed based on theoretical studies on the determinants of poverty. One of the policy areas has been on the financial development front based on the finance and development nexus. The association between financial development and poverty in economies of countries of the world has attracted the attention of scholars. Various studies have been carried out on the role of financial sector development on poverty eradication in both the developed nations and developing counterparts. As postulated by Otieno (2013), a financial system that is developed tends to increase the breath and access to funds while on the other hand; a financial system that is underdeveloped limits the access to funds by people. The underdeveloped financial market limits people's ability to access affordable and adequate funds hence forcing them to turn to informal sources such as moneylenders that offer high cost funds to the detriment of the business.

The concept of financial development is very broad hence; the current critical review will concentrate on two dimensions of financial development that is financial deepening and financial efficiency. Literature has consistently established a causal effect relationship between financial deepening, financial efficiency and poverty in most countries. Empirical literature has established that the relationship between financial deepening, financial efficiency is moderated by factors like interest rate deregulation and economic growth. Financial deepening generally held to generate crucial stabilizing benefits to an economy via improved transaction volumes. Financial deepening has the capacity to enhance intermediation of flows of capital without extreme fluctuations in exchange rates and asset prices (International Monetary Fund (IMF), 2011).

### Financial Deepening

The term financial deepening has been used to refer to improving access of financial services. Financial deepening may describe a situation of wider choice of financial services and a better access to financial services for different socioeconomic groups in the economy. One salient element of financial deepening is its ability to accelerate economic growth through via the extension of access to financial services to economic units without adequate access to finances. Typically, in a situation of financial system that is underdeveloped, the economic units can only have better access to financial services via the process of relationship banking. In addition, economic units finances growth of their undertakings by generating resources internally and depending less on external funding (Goswami & Sharma, 2011). Financial deepening can also be used to describe situation of improvement in the available pool of financial services that are customized to all economic units in the county. Financial deepening also describes the improved ratio of money supply to real GDP (Cole, 2008).

Conceptually, financial deepening is usually comprehended to mean that: agents and sectors are able in a position to utilize money and capital markets for the purpose of investment and savings including access to capital and money market assets like loans, insurance policies, government bonds and treasury bills. Financial intermediaries and markets are in advantaged position to make available larger volumes of capital base and manage larger turnover without necessarily causing leading to a reciprocal variability in asset prices. Additionally, in a deep financial sector, financial institutions are able to make available a broader array of assets for hedging or diversification of risks in process of risk sharing or transfer. Deep financial markets enables savers and investors to allocate the excess funds to a broader array of risk sharing instruments and quality investment and eventually allowing borrowers on the other hand to tap a wide array of risk management and financing instruments (Goswami & Sharma, 2011).

**Financial efficiency**

Financial Efficiency describes the capability of financial markets to provide high quality financial products at minimal cost. the terms financial efficiency and competition in the money and capital market are two concepts that are related in that more competitive systems are usually efficient too (Permana & Andjani, 2014). Quantitative proxies of efficiency that help in evaluation of efficiency of financial system may include total costs of financial intermediation to total assets ratio as well as spread of interest rate given by the deference between lending and deposit rates. Elements of cost of financial intermediation include cost of operations, loan loss provision, taxes, net profits and other intermediation costs. The intermediation costs can be deduced from items extracted from aggregated statement of financial position and comprehensive income statements for the specific financial institutions involved in financial intermediation. However, the difference between lending rate and deposit rate sometimes may remain extremely high even with efficiency gains since financial institutions need to create enough buffer for loan losses and charge a risk premium on financial products due to exposure to credit risks (Philippon, 2015).

Financial efficiency in capital markets refers to a situation where spot prices of financial assets reflect fully available market intelligence. Therefore, in a financial system which is efficient, daily variations of market prices of financial assets is random and information possessed by investors on past prices may not aid in forecasting future prices movements in the market (Bazot, 2017). The bid and ask spread which is the bargain price for financial assets where the lowest price is the price a dealer is willing to buy financial asset and the highest price is the price a dealer is willing to sell a financial asset. This is adopted as proxy for efficiency of the capital markets component of wider financial markets. Markets that are more efficient tends to exhibit narrower bid–ask spreads. Since bid–ask spread is also used to reflects capital market liquidity, A detailed analysis of the level of the financial market competition and of variability of price movements would be needed to assess capital market efficiency (Bazot, 2017).

### Interest Rate Deregulation

The term deregulation of interest rate also called interest rate liberalization refers to the removal of all rules and regulations that limits the operation of market forces and controls over interest rate with the goal of allowing interest rate to be set by the forces in the financial market. Chong (2010) noted that interest rate deregulation improves the pro-activeness of monetary policy in a market-based economy by strengthening the association between market interest rates and retail bank deposit rates and improving the degree of association between market interest rate and retail bank deposit rate in the long-term. The study by Chong (2010) also noted that the level of adjustments of deposit rate of retail banks are rigid and not symmetric upwards in the periods of regulation just before deregulation. The retail-banking rate is also rigid downwards during the periods of deregulation. The elimination of interest rate regulations is associated with tight and sharp spreads between market rates and retail bank deposit rates. The Deregulation of interest rate serves to provide a platform for improved and enhanced competiveness in the process of mobilization and utilization of funds in an economy. An efficient financial sector and more productive financial institutions within the financial industry is advocated by many financial economists in that interest rate deregulation aids in mobilizing savings, boosting investment and eventually enhances the rate of economic growth.

### Poverty Rate

Poverty is a human condition that is characterized by long term lack and inability to get adequate resources, capabilities, choices, security and power needed by a human being for the enjoyment of a specified and adequate living standard and other cultural, economic, civil, political and social rights (UN, 2001). Poverty can also be described as the lack of a given quantity of material possessions including money. The concept and condition of Poverty is a multifaceted including economic, social and political element. The terms extreme poverty, absolute poverty or destitution describes the inadequate access to needed means of satisfying basic human needs including food, clothing and shelter (UNDP, 2012). The threshold of defining absolute poverty is uniform for individuals worldwide regardless of their geographical location or era they lived in. Relative poverty is said to occur to a person residing in a given country who has no enjoyment of a set minimum level of standard of living in comparison to other members of the rest of the population of the same country (Sané, 2011).

The Provision of basic needs is always constrained and limited by government's ability to deliver services. The ability of the government to deliver public goods in constrained by factors such as tax avoidance, corruption, Brain drain of health care and educational professionals, debt and loan conditions. The factors inhibit government efforts to provide for the population. The government strategies for increasing per capita income and making basic goods of life more affordable typically includes economic freedoms, welfare and provision of financial services to the economic units within an economy (Smelser and Baltes (2008). The comprehension of poverty as a form of deprivation of economic units of their capabilities and rights may include conditions and situations such as undernourishment, low income, premature mortality, illiteracy, social stigmatization and low self-esteem. The capability approach of viewing the concept and condition of poverty allows some situations that are relative to be viewed as absolute. The 'human rights approach' views poverty as a form of violation of political, economic, social and civil rights of an individual in a given jurisdiction (Sané, 2011).

**Statement of the Problem**

Most of the populace in third world countries especially in African are wallowing in poverty with majority of the inhabitants trapped in abject poverty. Over the last three decades, worldwide poverty levels have fallen greatly from above 40% to under 20 %, but the poverty levels in African countries have almost remained the same in the same period of time. Over 40% of people in sub-Saharan Africa still live in absolute poverty (African Development Bank, 2017). Poverty headcount for East African countries for $1.90 a day stands about 33.6 % of Kenya's population, 52.7% of Tanzanian population, 34.6% of Ugandan population, 60.4% for Rwandan population and 77.7% for Burundi population (World bank, 2017). Clearly, majority of East African population is surviving on less than USD 2 a day.

Empirical studies in the developed world have established that financial deepening and efficiency can help solve the problem of poverty. For instance, a study by Huang & Singh (2011) on dual effect of property rights and financial deepening on poverty in countries falling in sub-Saharan Africa region finds that stronger property rights reinforce the association between financial deepening and Poverty levels . According to Levine (2008), lack of access to financial services is one of the causes of persistent poverty as the poor who cannot borrow from financial institutions due to high unit cost of small lending that discourages banking system to lending to the poor. A study by Jacoby (2009) on the other hand finds that lack of access to credit facility worsens poverty in Peru since the poor families cannot afford to provide their school going children with appropriate education. According to Dehejia and Gatti (2003), the rate of child labour is high in countries with poor performing financial systems.

Local studies in Kenya have also been carried out. Study by Ouma, (2014), on effects of real Interest Rate on the Financial Deepening in Kenya established that real interest rate had significant influence financial deepening; however, it did not relate financial deepening to poverty. Study by Otieno (2013 noted that a more developed financial system widens access to funds. However, in an underdeveloped financial sector, access to funds is limited and economic units especially the poor masses are constrained by their inability to get adequate funds hence they have to seek high costly non-formal and informal sources of funds such as moneylenders to the detrimental of their investment aspirations and improvement of their living standards. Study however ignored the effect of financial access on poverty in Kenya. A paper by Aduda, & Kalunda (2012) noted that improved proxies of financial inclusion that includes both usage and access to financial services should be adopted, since the terms access and usage are not synonymous but complementary. The study further argues that the Informal financial sector and their services ought to be included in financial deepening due to their crucial role in financial intermediation in most developing countries like Kenya. However, the study interestingly ignored the effect of the same on poverty rates in Kenya. Study by Odhiambo (2009) on effect of Interest Rate Reforms, Financial Deepening on Economic Growth in Kenya established that financial deepening and interest rate reforms affect economic growth; however, the study failed to consider effect of financial deepening on poverty rate in Kenya.

Even with presence of the above studies both globally and locally, few studies exist on the association between financial deepening, financial efficiency and poverty especially in African counties. Additionally studies that have incorporated moderating influence of interest rate deregulation on the association between financial deepening, efficiency and Poverty levels are scanty. The current study therefore sought to bridge gap in literature by examining empirical literature on the level of association between financial deepening, efficiency and Poverty levels .

**Research Objectives**

The general objective of the study was to identify the knowledge gap on the relationship between financial deepening, financial efficiency and interest rate deregulation and poverty levels. Specific research objectives included:

1. To identify knowledge gap on effect of Financial sector deepening on poverty levels.
2. To identify the knowledge gap on effect of Financial sector efficiency on poverty levels.
3. To identify the knowledge gap on the moderating effect of Interest rate deregulation on the relationship between financial deepening, financial efficiency and poverty levels.

## THEORETICAL FOUNDATIONS

The current study specifically relied on financial intermediation theory, information asymmetry theory and financial liberalization hypothesis.

### Financial Intermediation Theory

Akerlof (1970) was the originator of financial intermediation theory. The process of financial intermediation involves surplus economic units with surplus funds depositing with commercial banks who intern lend the same to deficit economic units within a country. Bisignano (1998) and Leland & Pyle (1977) noted that institutions and individuals providing financial intermediation services could be differentiated while employing four criteria: The first criterion of differentiating financial intermediaries is their main categories of liabilities otherwise majorly deposits by surplus economic units are specified for a fixed sum of money not in any way associated with performance of a their portfolio. The second way of differentiating financial intermediaries, are the kind of financial intermediaries whose deposits (liabilities) are typically short-term in nature compared to their assets. The third group of financial intermediaries are those having high component of their liabilities as deposits that demand deposits therefore they have the right to withdrawn on demand .Finally, the fourth means of categorizing institutions doing financial intermediation is when their assets and liabilities easily transferable.

A study by Scholtens and van Wensveen (2003), noted that the work of financial intermediaries is that of creation of financial products that are specialized. Financial intermediator formulates financial commodities incase it realizes it is possible to offer them for a price that takes care of all costs of providing the financial commodity inclusive of opportunity cost and direct costs. Generally, financial intermediaries exist in the financial markets due to the very nature of market imperfections concerning surplus units and deficit units. In a 'perfect' financial market condition where there are no transaction and information costs, financial intermediaries would not exist since they would be serving no purpose. In reality, most financial markets are characterized by information asymmetry hence their exist differences in access to market information between buyers and sellers of financial products. Financial markets have pronounced and elevated levels of information asymmetries that makes it crucial that intermediaries should exist to bridge the gap in information and make flow of finances between borrowers and lenders practicable. Borrowers essentially have an upper hand concerning information regarding use of funds to be borrowed. The borrower has complete information about their investment proposal compared to the lender (Leland and Pyle, 1977).

The theory underpins the current study by examining the contribution of financial intermediation to financial deepening and efficiency. Financial intermediation ensures that those with excess funds are connected with those who need finances to start business ventures. The purpose of financial intermediation is to reduce the intermediation cost hence efficiency in the financial system. However, the theory suffers from some limitation in under pinning the current study. The traditional criticism against the financial intermediation theory is that a massive number of financial assets are required for it to hold with exception of special cases only. However, with the current development of advanced methods of option pricing and pricing models and the extension of these ideas on option valuation and other derivatives have served to negate this criticism and weakness of standard market theory of financial intermediation. The dynamic trading platform and strategies have enabled the markets to effectively complete transactions even with limited number of securities being traded in the financial market.

**Information Asymmetry Theory**

This strand of theory proposed by Akerlof (1970) and Stiglitz & Weiss (1981).The theory has basis on the assumption that the borrower of funds is most likely to possess more information compared to the lender about the inherent risks of their investment project for which they are seeking funds. The information asymmetry between borrower and lender of funds to the advantage of borrower may result to the twin problems of adverse selection and moral hazard (Matthews and Thompson, 2008).These dual problems results to reduced efficiency of the flow of funds from surplus economic units to deficit economic units in need of investment funds. The retail banks and other financial intermediaries can overcome these problems in three facets: First, creating a relationship of long-term commitment with current and prospective customers, Secondly, through information sharing via credit reference bureaus and finally through delegation of monitoring of borrowers (McDonald & Schumacher, 2007).

Moral hazard problem happens when a party in a business transaction that has better information about a transaction provides information that is misleading. The party may also have high appetite for risk due to promised incentives premiums hence they may take on unusual risks in a desperate move to get large sum of profit before the contract settles. Moral hazard happens when a party to a business transaction enters into a contract in bad faith, thus availing information that is misleading about its liabilities, assets and credit capacity. It is postulated in the theory that, moral hazard problem is usually occasioned by information asymmetric that makes it extremely difficult for lender to differentiate between good borrowers who can be trusted and bad borrowers who cannot be trusted (Richard, 2011). The theory further note that moral hazard problem high credit risk with the quality of financial assets especially bank loans falling erratically as measured by proxies such as non performing loans and loan loss provisions (Bofondi and Gobbi, 2003). Problems of moral hazard in financial institutions like banks are has become evident enough during the most recent financial crises that affected most financial institutions world over.

Information asymmetry theory is considered relevant in this study on the effect of financial deepening and efficiency on Poverty levels in that the theory explains how credit information opaqueness reduces the efficiency of financial intermediation and access to finances. The differential in information concerning the risks involved in business ventures may put the financial institutions on the disadvantaged side, as they do not possess enough information about risks of different investments of their clients. The information asymmetry makes banks to input a risk on the cost of finances making the financial products to be costly and this discourages borrowing for investment. With discouraged investments comes worsening poverty rates especially the low-income earners who may not have alternative finance sources to finance projects aimed at alleviating their poverty.

Although a very useful theory, asymmetric information theory has its own share of weaknesses. The first potential weakness relates to the kind of models developed based asymmetric information theory to analyze markets situations. Most of these models developed so far deal with market version that is over simplified with very few players or states. The models therefore fail to capture real market conditions. There is always a possibility of the model becoming too preoccupied with mathematical manipulation making it almost impossible to comprehend the complexities that is exiting in a real economic system market. Additionally, the adoption of the theory to explain happenings in real world also only consider information's asymmetries in one direction. While in real world however, there exist also information differences in the favor of the other party always deemed to be on the disadvantaged end (Fuhrmann, Ott, Looks, & Guenther, 2017). The results concerning impact of information asymmetry on financial market outcomes cannot just be expounded on basing on simple use of asymmetrical information theory only. This however, is not just about the theory itself but may more likely be the result of incomplete comprehension of the domains of the problem at hand. The theory of information asymmetry usually is too simplistic in its assumptions making it faulty in explaining real work problems of financial intermediation. For instance, the theory assumes that the borrower of finances is aware of the market interest rate and value of the loan taken while it is common knowledge that the borrowers may not have idea of the exact market lending rate since this information may not be readily available due to opaqueness of market information (Courtney and Dutta, 2017).

 

**Shaw's Financial Liberalization Hypothesis**

Shaw (1973) advanced financial liberalization theory to explain the relationship between deregulation of financial sector and financial deepening. According to Shaw (1973), financial liberalization improves ratio of private domestic savings to national income as liberalization leads to affordable loans hence most economic units take sup credit facilities for investment and other purposes. The liberalization results to growth in financial institutions hence many investors get access to credit facilities. The interest rate liberalization improves incentives for saving of idle funds with financial institutions making interest rates to fall steadily and loans affordable. With financial deepening resulting from growth in financial institutions, foreign sector respond through net capital inflows resulting from easy access to foreign capital markets. Liberalization tends to eliminate distortions in relative prices of capital with the market adjusting to give true value capital.

The process of interest rate liberalization makes it possible for optimal savings allocation via the broadening and diversification financial markets together with financial products traded there in such that investment opportunities compete favorably with available pool of savings. The economic units who save their surplus funds are given a wide range of opportunities and portfolio to choose from in the market. The financial market is said to be broad in terms of scale of operation, risks involved and maturity (Shaw, 1973). Additionally, liberalization results to integration of local and foreign capital markets thereby improving the avenues open for pooling of savings and highly specialization investments opportunities. Prices of loanable funds and investment products is the only basis for evaluating investment opportunities from a given stock of savings. In this context, Shaw (1973) stated that depth of financial sector is a crucial pre condition for innovative and competitive allocation of savings flows to investment opportunities hence financial liberalization together with associated Policies works together in bringing equitable distribution of scares resources and income earned by economic units.

Critics of financial liberalization policies however have tended to argue that the efficient markets paradigm that results to equitable allocation of income generally misleading when specifically applied to capital flows. Critiques argue that removing one market distortion with other distortions still present does not improve the welfare of the economic units (Evans, 2017). For instance if capital market has been liberalized by elimination of distortions while import market are still protected or in cases of inflexible real wage downwardly, capital flows may end up into sectors associated with comparative disadvantage meaning a reduced welfare of the citizens and economic units (Okpe, 2018). In cases of information asymmetry in financial markets countries with poor state of corporate governance practices and poor regulations and laws protections private property, then liberalization in the capital market has no change in improving welfare of citizens even with liberalization at either domestic or international level (Stiglitz, 2000).

**EMPIRICAL REVIEW**

A study by Ndebbio (2004) analyzed the correlation between economic growth and financial deepening. The study holds that countries put an effort to grow real money balances and that these specific countries should strive to improve money balances to influence economic growth in the country. A working paper by Abosedra, Shahbaz & Nawaz (2016) analyzed the association between poverty reduction and financial development in Egypt while employing quarterly data for the period starting from first quarter of 1975 to last quarter of 2011. The results revealed that financial development contributed to reduced poverty rates in Egypt with credit to the domestic private sector being used as proxy for financial development in Egypt. The positive relationship between financial development and Poverty levels can be explained by the fact that financial development leads to the poor masses having access to various financial products that they can use to improve their living standards. The direct association between poverty eradication and financial development was noted to be statistically significant when M2 money supply to measure financial development and per capita income was employed to measure poverty levels.

A research by Nzotta & Okereke (2009) examined the association between economic development and financial depth for the period beginning 1986 and ending 2007 in Nigeria. Secondary data was adopted in this paper for the period covering 22 years. Findings showed that financial deepening index has been very low over the study period in Nigeria. Additionally, the paper revealed that the explanatory variables had a statistical association with the dependent variable economic growth. A study by Nwanna and Chinwudu (2016) analyzed the relationship between economic growth and financial deepening in Nigeria for the period beginning 1985 and ending in 2014. The findings showed that both stock market and money market depth proxies had statistically significant and positive influence on economic growth. A study by Sindani (2013) sought to analyze the effect of deepening on Kenya's economic development. The study targeted all commercial banking institutions that were in operation by 31st December 2011. The research findings was that the financial sector was relatively stable during the period of the study evidenced by relatively stable number of commercial banking institutions after the stringent regulatory requirements instituted by the Central bank of Kenya that had gone a long way in lowering the probability of commercial banks bankruptcy.

A study by Gries, Kraft, & Meierrieks (2009) also sought to establish relationship between Economic development, Trade openness and Financial depth in countries in Sub Sahara Africa. The results of the analysis were as follows: First, cointegration evidence established that finance, openness and growth had no significant long-run association for majority of the samples. Next, the study showed weak causal effect association between economic development and financial depth for countries in sub Saharan Africa. Specifically, finance-led kind of growth was only evident in three out of 16 cases with the research finding insignificant association between growth and finance in majority of the countries. A paper by Uddin, Shahbaz, Arouri, & Teulon (2014) analyzed the association between poverty reduction and financial depth using data for the period beginning 1976 and ending in 2010 for Bangladesh. The study showed that there was cointegration between poverty reduction and financial development with the effect between the two being strong and statistically significant.

A study by Hasan, Koetter, Lensink, & Meesters (2009) analyzed the association between economic growth, Financial depth and Bank level Efficiency. The study tests the relationship between quality finance measured by financial efficiency and economic growth for a highly comprehensive sample comprising more than 100 countries covering the study period between 1996 to 2005. The research established that finds quality of financial development and financial deepening had a statistically significant influence on growth of economy suggesting that the association between deeper capital market and better banking was indeed most beneficial for economic growth. Ewah, Esang, and Bassey (2009) examined the effect of efficiency of Nigeria's capital market on economic growth. The findings showed that efficiency of capital market does not have significant influence on economic growth of Nigeria. Ayadi, Arbak, Naceur, & De Groen (2015) examined the association between economic growth and financial development in a sample of countries from Mediterranean region for the period beginning 1985 and ending in 2009. The findings revealed that economic growth had negative association with credit to the private sector and bank deposits. Additionally, study showed that stock market size and liquidity has a significant effect on growth.

A study by Belke, Haskamp, & Setzer (2016) sought to examined whether regions with financial institutions having better quality of intermediation grow faster during good economic time and are more resilient during economic crunch. Intermediation quality of banks was measured by profit to operational costs of the banks. The findings established that banks that relatively more profit efficient encouraged economic growth in their region Ugwuanyi (2012) analyzed the association between interest rate deregulation and bank lending activities in Nigeria between the period of 1987 to 2011. The findings established the effects of the independent variables on the dependent variables was statistically significant. A research by

 

Makinde (2016) sought to examine the influence of interest rates on commercial bank deposits between the period 2000 and 2013 in Nigeria. The study adopted OLS multiple regression techniques revealing negative association between the interest rates and the commercial bank deposits.

A Paper by Ngure (2014) sought to determine the association between interest rates and financial performance of commercial banks in Kenya. The paper established that interest rates had a significant effect on financial performance of commercial banks in Kenya. Moreover, the association between interest rates and financial performance was linear and positive. The study further concluded that interest rate and bank size had a statististically significant effect on profitability of Kenyan commercial banks.

## Summary of Empirical Review and Research gaps

Table 1: Summary of knowledge gap

| Researcher and focus of study | Study methodology | Research Findings | Research Gaps |
|---|---|---|---|
| Singh and huang (2015) examined the association between property rights, Financial Deepening and Poverty in countries in Sub-Saharan Africa | The paper analyzed data from 37 countries in Africa for the period beginning 1992 to 2006.<br>The study used panel data regression model to examine the association between poverty and financial deepening | Study showed that relationship between Financial deepening and poverty and income inequality were statistically significant | The study omitted the effect of financial efficiency on poverty |
| Hasana, Koetterb, Lensink and Meesters (2008) examined the relationship between financial deepening, Bank Efficiency and Economic Growth | The paper tests the association between financial efficiency and economic growth for a sample of 100 countries for the study period beginning 1996 to 2005. | The study established that financial efficiency and financial deepening had a statistically significant influence on economic growth | The study did not relate bank efficiency and financial death to poverty |
| Abosedra , Shahbaz and Nawaz(2015) examined the relationship between reduction of poverty and financial development in Egypt | The research used quarterly data for the period beginning 1975 and ending in 2011.<br>Research also used Granger causality test to establish the direction of causal effect relationship between financial development and poverty reduction. | The direct association was established when M2 was adopted as measure of financial development and income per capita as indicator for poverty. | The study did not consider the effect of financial efficiency on poverty |

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|---|---|---|---|
| Ndebbio (2004) examined the association between economic growth and financial deepening in sub Saharan countries. | Proxies for financial deepening was money supply to national income ratio and the proxy for economic growth was growth in per capita real money balances.<br>The study adopted multivariate simple ordinary least squares. | The research established sub-Saharan countries that put effort to grow real money balances influenced their economic growth greatly | Study did not follow up on effect of financial deepening through economic growth on poverty |
| Gries, Kraft & Meierrieks (2009) analysed the relationship between economic development, Financial Deepening and Trade Openness in selected Sub-Saharan Africa | The study carried out causality test between economic development and financial deepening for sixteen countries from Sub-Saharan African.<br>Study used unit root to examine stationarity in the study variables<br>Study also used Granger causality test to establish the causal effect relationship between study variables. | Study established that there was weak causal effect relationship between trade openness, financial deepening and economic development. | The study did not follow up on effect of financial deepening on poverty through economic growth and development |
| Ferreira (2012) examined the influence of efficiency of banking institutions on economic growth in the European Union | The efficiency of banking institutions was measured using Data Envelopment Analysis and banking sector concentration was measured by Herfindahl-Hirschman Index (HHI).<br>The paper was a panel study covering all 27 European Union countries beginning 1996 to 2008.<br>Paper analyzed the influence of banking sector concentration and bank efficiency on the Gross Domestic Product (GDP. | The results showed that growth of economy was positively influenced by bank cost efficiency and banking sector concentration | Study did not follow up on effect of bank efficiency on poverty through economic growth |
| Nzotta & Okereke, (2009) examined the association between economic development and financial deepening in Nigeria for the period beginning 1986 and ending 2007 in Nigeria | Study employed OLS to examine the relationship between financial deepening and economic development in Nigeria.<br>Nine proxies were used to measure financial deepening both in the money and capital market | Study established that financial depth had a statistical significant association with financial economic development | Study did not follow up on effect financial deepening on poverty through economic growth and development |

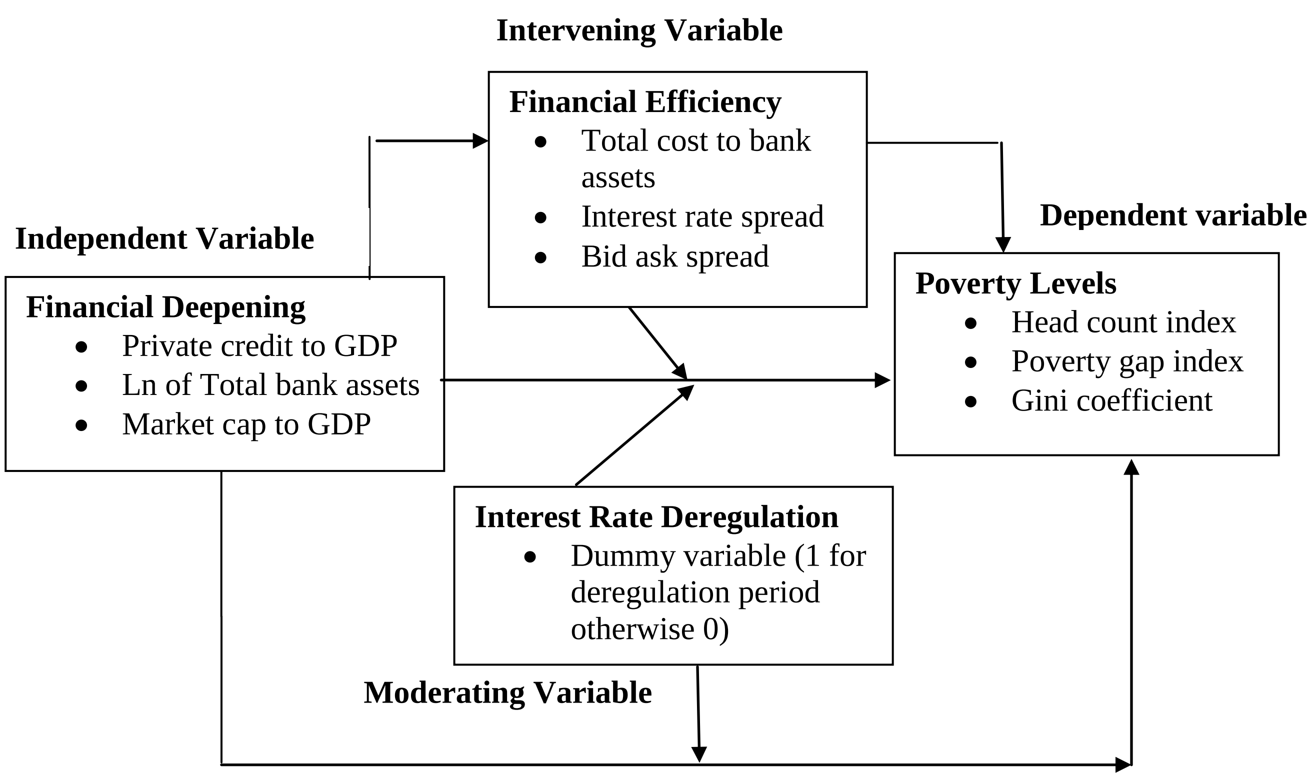
| | | | |
|---|---|---|---|
| Nwanna and Chinwudu (2016) examined the association between economic growth and financial deepening in Nigeria between the period beginning 1985 to 2014.<br>The research specifically examined the influence of stock market deepening and commercial bank deepening on economic growth of Nigeria. | The study used ordinary least square (OLS) with economic growth being regressed against stock market deepening and banking deepening.<br>The following proxies measured financial deepening: private credit sector, market capitalization, money supply and financial savings.<br>The study adopted time series data covering the year between 1985 to 2014 | The findings showed that both stock money market based and capital market based depth had statistically significant and positive association with economic growth. | Study did not follow up on effect financial deepening on poverty through economic growth and development |
| Sindan (2013) examined how economic development is influenced by financial deepening in Kenya. | The research used secondary data extracted from Central Bank of Kenya and Deloite reports.<br>Research was a census entire Banking sector examining all the 44 commercial banks licensed by CBK | The research showed that financial deepening was relatively due to adoption of TMS, automation of bank process. | Study did not go further into effect of financial deepening on poverty in Kenya |
| Ewah, Esang, & Bassey(2009) analysed the influence of stock market efficiency level on economic growth of Nigeria | Study employed time series data beginning 1961-2004<br>Data extracted were on stock interest rate, market capitalization, treasury financial assets, money supply and total market transaction<br>The study adopted OLS which was multiple regression in nature | The results revealed that the efficiency of stock market in Nigeria has not contributed much to the economic growth of Nigeria. | Study did not relate capital market efficiency to poverty |
| Ajisafe & Ajide (2014) examined the association between economic growth and bank in Nigeria for the period beginning 1986 and ending 2012 | Study used vector error correction in the analysis of the association between variables. | The research showed that improvement of efficiency and competitiveness of the financial markets leads to enhanced economic growth. | The study omitted effect of financial deepening and interest rate deregulation on economic growth<br>Study did not follow up on effect of bank efficiency on poverty through economic growth |

| | | | |
|---|---|---|---|
| Ugwuanyi (2012) analyzed the association between interest rate deregulation and bank lending activities in Nigeria | The study adopted ordinary least square techniques to examine the influence of interest deregulation on bank lending activities. between the period of 1987 to 2011 | The effect of interest rate deregulation on bank lending activities was statistically significant | The study omitted effect of interest rate deregulation on financial efficiency |

**Proposed Conceptual Fframework**

After the critical literature review, this paper conceptualizes the relationship among the financial deepening, financial efficiency, interest rate deregulation, and Poverty levels as demonstrated in the figure 1.

Figure 1: conceptual framework




In the proposed conceptual framework, the independent variable is financial deepening, the intervening variable is financial efficiency, the moderating variable is interest rate deregulation and the dependent variable is poverty levels.

## SUMMARY

Concerning the first objective of the review, their exists mixed findings on the effect of financial deepening on poverty. some studies find that financial deepening has the capacity to improve the living standards of citizens by reducing the poverty rates. For instance, Abosedra, Shahbaz and Nawaz (2015) who examine the Causal effect relationship between Financial Deepening and Poverty Reduction in Egypt finding that development in the financial sector has a potential of resulting the poor having access to financial services including credit and insurance-risk services. However, other emprical studies have either established statistically insignificant influence or negative influence of financial deepening on poor popele acesss to finacial services. paper by Singh and Huang (2015) examined the association between Financial Deepening, Property Rights and Poverty in Sub-Saharan Africa establishig that Financial deepening could lead to widened income inequality and worsened poverty.

Regarding the second objective on the mediating effect of financial efficiency on poverty levels. Most studies have established that financial efficiency has the capacity to reduce poverty levels greatly for instance paper by Hasana, Koetterb, Lensink and Meesters (2008) on the association between of Bank Efficiency, Financial Deepening and Economic Growth established that bank cost effciency had a significanr postive effect on economic growth and poverty. Research by Ajisafe & Ajide (2014) on the association between bank competition and economic growth in Nigeria between the periods 1986 and 2012 showed that strengthening the competitiveness and efficiency of the banking ector improved the economic growth and lead to reduction of poverty in Nigeria in the study period hence effect of bank efficiency on poverty eradication was statistically significant.

Concerning the third objective on the moderating role of interest rate deregualtion on poverty levels. Most studies in the Empirical literature tends to suggest that interest rate deregulation has a significant moderating influence on the association between financial deepening and poverty rates. For instance, Ugwuanyi (2012) on the association between interest rate deregulation and bank lending in Nigeria showed that interest rate deregulation has statistically significant influence on bank lending. Financial liberalization programmes such as interest rate deregulation are meant to remove government intervention and control in the financial system of an economy that tends to be counterproductive towards banks efficiency (McKinnon, 1973). The government control policies negatively alters price mechanism and competition in the banking industry. Financial repression by government control has for a long time been held responsible below par operation of commercial banks in developing countries (Kumbhakar and Sarkar, 2003, Isik and Hassan, 2003).

## CONCLUSIONS

Based on the study findings. The effect of financial deepening on poverty levels is not conclusive due to mixed findings. A few questions remain unanswered. For instance some studies establishing positive relationship while others, establish negative relationship. Another question is that why do studies that find positive relationship between financial deepening, financial efficiency and economic growth do not find same positive relationship with improved income distribution. The study therefore concluded that the influence of financial deepening on poverty is not conclusive and requires additional studies to be done.

The effect of financial efficiency on poverty level is however relatively clearly with most studies supporting the view that improved financial efficiency leads to reduced cost of finances for investment. This in turn encourages investment activities that directly attacks the menace of poverty. Studies have revealed that financial efficiency can improve access to finances by borrowers of finance who are interested in investment. Moreover, financial efficiency has been found to improve cost effectiveness of financial institutions thereby allowing them to offer financial products at relatively lower costs hence improved investments that leads to poverty reduction especially among low-income earners.

Finally, the effect of interest rate deregulation on relationship between financial development and Poverty levels is significant as seen in most empirical studies examined in this current study. The financial deregulation leads to efficient resource allocation that leads to efficiency in the financial sector in the end. However, the studies on effect of interest rate deregulations have not been conclusive enough with studies establishing conflicting results regarding the sign of the relationship between interest rate deregulation and poverty levels. The study current study therefore concludes that effect of interest rate deregulation on financial performance needs further examination.

## IMPLICATIONS

The study wishes to recommend to Policy makers in the ministry of planning and finance to come up with policies of ensuring financial deepening and efficiency. The ministry policy experts should use the study findings that suggest that financial efficiency may aid in poverty eradication by coming with policy paper that ensures financial efficiency both in the capital market and the banking sector. The improved financial efficiency should lead to availing finances to the poor at the lowest possible costs hence ensuring promising investment. the policy experts should also encourage financial deregulation as most studies tends to argue that financial sector deregulation has a significant moderating effect on the relationship between financial deepening and Poverty levels . The ministry policy experts should discourage the national government from pursuing financial regulations like interest rate regulations that tend to crowd out the poor from accessing finances for investment aimed at poverty eradication.

The study recommends that the government therefore to reinforce existing policies that will go a long way in encouraging the public to save more money with commercial banks therefore creating a pool of savings within the money market. the improvement on the rate of interest rate paid to depositors on their deposits for example, will go along way in encouraging households to save more. In addition, the study further recommends the intensification of financial inclusion policies through increased access and usage of formal banking services while reducing banks transaction costs. This will encourage more people to participate in economic activities, to borrow and invest more.

Finally, the study wishes to recommend to practioners in the financial markets. Management of financial institutions like commercial banks should use the study findings to come up with strategies of ensuring financial penetration. The management of financial institutions should aggressively market financial products to ensure improved reach. The management of financial institutions should intend to develop products that are targeted at the low income earners like micro lending to encourage financial reach in that segment of the society. The management of financial institutions should also embrace innovations and technology to improve financial efficiency of their respective institutions.

## SCOPE FOR FUTURE RESEARCH

The study only concentrated on financial deepening and financial efficiency on Poverty levels. The research would recommend further detailed study on the financial markets as a whole by incorporating money markets in the study and other variables in the capital markets like market size. A deeper analysis on the role that foreign direct investment (FDI) plays in the development of our capital markets should be carried out.

Given mixed findings on the relationship between financial deepening and poverty rates, the study wishes to recommend to researchers and scholars to examine further the issue of financial deepening on Poverty levels in details while employing a variety of research methods to come up with conclusive evidence on the effect of financial deepening on poverty levels. The studies should also compare different proxies of financial deepening and Poverty levels to examine if the is still differences in the findings.

The study also finds that most studies on financial deepening to Poverty levels have used economic growth as a mediating variable to capture the indirect impact of financial deepening on poverty. The study therefore recommends that the current study should be replicated with economic growth as the second mediating variable. Additionally, since the empirical literature has not established conclusive effect of interest rate deregulation on the relationship between financial deepening and poverty rates, the study recommends further research on effect of interest rate deregulation to using a variety of measures to get conclusive evidence on the effects of interest rate deregulation on finance deepening and poverty Nexus.

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