Financial Sector Development and Poverty Alleviation in the SADC Region

Samkele Leve and Forget M. Kapingura*

University of Fort Hare, East London Campus, South Africa

Abstract: Financial development is widely regarded as another conduit through which poverty can be reduced. The study empirically examines the relationship between financial sector development and poverty reduction in SADC countries utilising the Generalised Method of Moments technique for the period 1980 to 2017. The empirical results indicate that the effect of the different measures of financial sector development on poverty in the SADC region is mixed. Six out of nine financial development variables have a negative effect on poverty in the SADC region. In terms of financial depth, the empirical results reveal mixed outcomes. Results on financial system stability confirm the notion that a stable financial system is beneficial to the poor. The results also reveal that financial inclusion or access to financial services significantly reduces poverty in the SADC region. The results thus suggest that financial sector development is beneficial to the poor when it is inclusive and stable. The results imply that policies aimed at ensuring a stable financial system, which is also inclusive, should be pursued if the poor are to benefit from the financial system.

Keywords: Financial sector development, poverty, GMM.

1. INTRODUCTION AND BACKGROUND TO THE STUDY

The importance of financial development in a country cannot be underestimated (King and Levine, 1993; Easterly, 1993; Pagano, 1993; Levine, 1997; Levine, Loayza and Beck 2000; Nasifeh and Khosrow, 2012; Clarke, Xu and Zou, 2003). Djoumessi (2009) highlights that an advanced financial sector improves capital allocation through ensuring that money is allocated to projects with the highest marginal productivity of capital. Lenka (2015) highlights that the modern financial sector has become integral to the development process of a country unlike in the previous years where it was thought of as playing a minor role in the growth of the economy. This has been realised by many countries given that countries are sophisticating their financial systems.

There is a host of studies which also show that financial sector development can be utilized to reduce the level of poverty in a country (Demirgüç-Kunt, and Levine, 2009; Jalilian and Kirkpatrick, 2002; Honohan, 2004) and Beck *et al*., 2007), even though the literature does not provide the same result. According to Ravallion (1997) in Beck *et al*. (2007) financial sector development may influence poverty indirectly through growth since changes in absolute poverty are directly correlated with average growth in the economy. Kappel (2010) also highlights that financial sector development influences poverty in a twofold manner. Firstly, a well-developed financial sector allows more economic agents, especially the poor, to obtain credit through participating in the financial market as well as through the availability of micro finance institutions. Secondly, a well-developed financial sector integrates the poor in the market through the availability of entrepreneurial opportunities and firms.

Of significance to note about financial systems in the SADC region is that they are predominantly Bank-Based, with the exception of South Africa which boasts both a developed banking sector and developed financial markets. Stylised facts on SADC show that the level of financial development varies across countries, with countries such as South Africa being relatively ahead in terms of financial sector development. Countries such as Namibia, Botswana and Mauritius, have reasonably developed financial markets, with Malawi, Madagascar and DRC possessing poorly developed financial markets (KPMG, 2014). Nyawata and Bird (2004) posit that before the global trend towards economic liberalization in the 1990s, many financial systems in the SADC region were repressed and therefore adopted measures to liberalize their financial systems. The types of financial intermediaries across SADC member states include primary dealers, stockbroking firms, mutual banks, foreign exchange dealers, non-bank deposit-taking institutions, pension funds, unit trust companies money lenders, commercial banks and central banks (SARB, 2014).

It is important to note that the SADC region is one of the poorest regions in the world despite being endowed in a variety of natural resources. As of 2008,

*Address correspondence to this author at the University of Fort Hare, East London Campus, South Africa; Tel: 043 704 7124; Fax: 086 725 2111;
E-mail: fkapingura@ufh.ac.za

JEL: G21I3O16.

approximately 45% of the total population lived on $1 per day. Malnutrition is on average around the range of 44% to 72% across the region. Life expectancy has been declining over the years from about 60 years to slightly below 40 years at present. Infant mortality rates remain high for the majority of countries in the SADC region, ranging above 50 per 1000 births (SADC, 2008). With regards to the poverty rate in the SADC region, generally, all the fifteen countries in the low income and low middle income categories, had high poverty levels as measured by the percentage of population below the national poverty datum line (PDL), ranging from 36 percent for Tanzania to 73 percent in Zimbabwe. For the upper middle-income group, poverty levels were relatively low, ranging from 6 percent for Mauritius to 22 percent for South Africa and 21 percent for Botswana (United Nations, 2015). Thus, the study seeks to examine the link between financial sector development and poverty alleviation in the SADC region, given that even though much has been done towards financial sector development the region is still grappled with high levels of poverty.

The majority of the available literature which have analysed the effect of financial sector development on poverty (Nasifeh and Khosrow 2012; Dhrifi 2015; Clarke *et al*. 2003; Beck *et al* 2007) have largely examined the link between the variables of interest focusing on the conventional measures of financial sector development. These include private credit to GDP, stock market size, bank asset and ratio of liquidity as a percentage of GDP to proxy financial development. The study contributes to literature on financial sector development and poverty alleviation by taking into account five dimensions of financial development, which are financial depth, stability, access, liberalization and efficiency and their impact on poverty in the SADC region.

The empirical results reveal that out of the nine dimensions of financial development, six have the ability to reduce the level poverty in the SADC region. The results imply that a blanket approach to poverty alleviation using the financial system may exacerbate rather than reduce the problem. Ensuring stable financial systems and encouraging financial inclusion in addition to broad financial development is what is likely to result in a change for the selected countries if they are to use the finance channel. The paper is made up of five sections. Following the first section, which is the introduction, section two presents the review of both theory and empirical literature on the subject. Section 3 discusses the methodology, which was utilized to analyse the variables of interest. Section 4 and 5 presents the results and conclusions of the study respectively.

2. THEORETICAL AND EMPIRICAL LITERATURE REVIEW

In terms of the relationship between financial sector development and poverty, McKinnon (1973) and Shaw (1973) posit that this relationship depends on the level of financial repression in the economy. McKinnon (1973) and Shaw (1973) contend that the domestic saving rate increases through financial deepening and hence borrowing costs can be lowered, which will stimulate investment. McKinnon (1973) states two assumptions for this proposition, firstly, that all economic participants are independent and have the ability to self-finance and secondly that all accepted investments are of indivisible values. Further, the authors state that when the economic agents have no choice but to self-finance to a point whereby investors (firms) and savers (households) are not materially distinct, indivisibilities in investment are very important. They proposed that the increased desirability of the poor holding cash balances reduces the opportunity cost of saving internally for the eventual purchase of capital goods from outside the firm household, the financial 'conduit' for capital accumulation is thereby enlarged (Jeanneney and Kpodar, 2005).

However, there are a number of theories, which have been put forward to explain the relationship between financial sector development and poverty, such as Jalilian and Kirkpatrick, (2002) and Stiglitz, (1998) who posit that financial sector development allows the poor to participate in formal financial activities. This is because financial development addresses the causes of financial market failure, including information asymmetry and the high fixed costs of small-scale lending. Stiglitz and Weiss (1981) argue that these imperfections create moral hazard and adverse selection in under-developed financial markets and thus prevent the poor from borrowing in formal financial institutions to invest in profitable activities. In the same vain, Jalilian and Kirkpatrick, (2002) and the World Bank, (2001) note that financial sector development ensures that poor people have access to finance including credit services, which empowers their productive assets, such as new and better tools, equipment, fertilizers and enhance their productivity. Theory also suggests that access to finance allows the

poor to better their investment and education opportunities (Jacoby & Skousfias, 1997; Beegle *et al*., 2003). DFID (2004) states that financial sector development enables the poor to draw down accumulated savings or to borrow money to start micro-enterprises, which eventually leads to wider access to financial services, creation of employment and higher incomes and thereby reducing poverty.

Financial sector development can indirectly affect poverty in a number of ways. Firstly, financial development can lead to poverty reduction by promoting economic growth, which is consistent with the trickle-down theory. The trickle-down theory contends that financial development can spur growth, thereby lifting the masses from poverty due to the wide avenues created by economic growth (Dollar and Kraay, 2002; Ravallion and Datt, 2002; World Bank, 1995). Secondly, economic growth could increase jobs for the poor, it has been suggested that a higher rate of growth could reduce the wage differentials between skilled and unskilled labour at a later stage of development (Galor and Tsiddon 1996). Thirdly, high growth could lead to higher tax revenues, enabling the government to allocate more fiscal resources on social spending such as health, education, and social protection, that benefits the poor; enabling them to invest more in human capital (Perroti 1993). Finally, growth increases capital accumulation in countries, this ensures that countries have more funds to investment in programmes that benefit the poor, which increases their incomes in the long term (Aghion and Bolton, 1997).

Empirically, many scholars have analysed the relationship between financial sector development and poverty alleviation, at both cross-country level and country specific. Currently, empirical literature does not provide a consensus on what the relationship between financial development and poverty nexus should be, however scholars postulate that this relationship mainly depends on the level of economic development in an economy.

Of the available time series studies, Odhiambo (2009) who examines the dynamic causality between financial development and poverty alleviation in South Africa established that poverty is reduced through financial development and economic growth. Another interesting finding of this study is that, not only does financial development cause economic growth but economic growth causes financial development as well, which leads to poverty alleviation. Using a similar approach in Kenya, Odhiambo (2010) discovered that development in financial intermediaries helps to increase domestic savings and these savings cause poverty reduction. Authors such as Khan, Ahmad and Jan (2012), Odhiambo (2013), Uddin, Shahbaz, Arouri and Teulon (2014) and Abdin (2016) have added weight to these findings by concurring that financial development does favour the poor by providing greater credit access along with savings opportunity for the poor and indirectly via promoting economic growth. On the contrary, scholars such as Khan, Ahmad and Jan (2012); Yinusa and Alimi (2014); Dauda and Makinde (2014) and Keho (2016) have failed to hypothesise a significant causation between financial development and poverty reduction. What is pertinent to notice is that this relationship may hugely be affected by the measure of financial sector development utilised in the model.

In terms of cross country studies, there are a number of studies that have been carried out that examined the link between financial sector development and poverty. Perez-Moreno (2011) discovered that in developing countries financial development causes a moderate reduction in poverty, depending on the financial development proxy used. Jeanneney and Kpodar (2011) established that financial development helps to reduce poverty directly through the McKinnon conduit effect and indirectly through economic growth. In 42 Sub-Saharan African countries, Zahonogo (2016) shows that there is a financial development threshold below which financial development has detrimental effects on the poor and above which financial development could be associated with less poverty. Seven and Coskun (2016) using dynamic panel data methods discovered that even though financial sector development increases economic growth, this does not necessarily benefit those on low-incomes in emerging countries. Naceur and Zhangl (2016) are some of the few scholars to include other dimensions of financial sector development; they discovered that amongst financial liberalization, stability, efficiency, access and depth, only financial liberalization does not significantly reduce poverty, in fact appears to worsen it.

3. DATA AND METHODOLOGY

The data utilised in the study is for the period from 1980 to 2017. The data was compiled from different

sources that have been merged into an integrated dataset. The data for the variables utilized in the study was retrieved from the World Development Bank Development indicators in annual form. The Chinn-Ito Financial Openness Index data was obtained from the Chinn-Ito Financial Openness Index website. The countries, which were selected, include Botswana, Malawi, Mauritius, Namibia, South Africa, Tanzania and Zambia. These countries were chosen based on the availability of data.

Based on the Mckinnon Conduit effect, a model was estimated based on the work of Naceur and Zhangl (2016) where financial developed is assumed to reduce the level of poverty in a country. The model is specified as follows:

$$Povgap_{i,t} = \alpha + \beta_1 FD_{i,t} + \beta_2 Y_{i,t} + \beta_3 Infl_{i,t} + \beta_4 Trade_{i,t} + \beta_5 Gov_{i,t} + \varepsilon_{i,t}$$

Where $Povgap_{i,t}$ represents the poverty gap, $FD_{i,t}$ represents Financial development, a vector of the key explanatory variables, $Y_{i,t}$ is the log of GDP per capita, $Infl_{i,t}$ is the inflation, $Trade_{i,t}$ represents trade openness, and $Gov_{i,t}$ represents government size.

3.1. Definition of Variables and a Priori Expectations

The poverty gap index is used to proxy poverty, which is the average shortage of the income of the poor from the poverty line ($1.90 a day) Naceur and Zhangl (2016).

To capture the five measures of financial development, two variables of stability, efficiency, access and depth, from the Global Financial Development Database (GFDD) are utilized while a single variable is used to capture financial liberalisation.

Two indicators which proxy financial depth are: total bank assets to GDP and banks' private credit to GDP. IMF (2016) states that due to the fact that countries in SADC do not have well-developed stock markets, the stock market's total value traded to GDP is not a good representative of financial depth. Higher values of total bank assets and private credit to GDP suggest deeper financial institutions. In such an instance, financial institutions are able to extend credit to the economy.

Two indicators are used to measure financial system stability: bank credit to bank deposit (%) and liquid assets to deposits and short term funding (%). A higher bank credit to bank deposit implies a higher possibility of a banking crisis, which may be detrimental to the poor and the general public (Gadanecz and Jayaram, 2009).

Financial efficiency is represented by the bank lending-deposit spread and stock market turnover ratio (%). Naceur and Zhangl (2016) highlight that a low bank lending-deposit spread implies high bank operating efficiency, whereas a high turnover ratio implies an efficient financial market.

Financial access is represented by bank accounts per 1,000 adults and ATMs per 1000 km. Hariharan and Marktanner (2012) states that higher values of these variables imply that when the amount of funds available increases, borrowing costs will decline while capital formation increase.

To capture the impact of financial liberalization the study will make use of the Chinn-Ito Financial Openness Index. The Chinn-Ito Financial Openness Index assesses the degree of openness in capital account transactions, ranging between -1.86 and 2.44, where 2.44 represents full liberalization (Chinn and Ito, 2007).

Several other variables that are considered as determinants of poverty and inequality were used as control variables. These include inflation, which is included for capturing the impact of macroeconomic policy on poverty and inequality. Government expenditure to GDP represents the role that the government may play in the growth of the economy and reduction of poverty. Trade openness, the amount of imports and exports as a portion of Gross Domestic Product is used in the model in order to capture international openness (Dhrifi 2015). Real GDP per capita represents the level of growth in the economy and economic activity in the model (Asad, 2012).

3.2. Estimation Techniques

The study utilised the Generalized Method of Moments (GMM) suggested by Arellano and Bond (1991). According to Batuo, Guidi, and Mlambo (2010) the system GMM is useful in encountering problems of endogeneity bias, individual specific heteroscedasticity, autocorrelation, initial conditions and omitted variable bias. The interaction between financial sector development and poverty is dynamic, an example, a decrease in poverty may lead to a rise in financial services by the poor.

3.2.1. Generalized Method of Moments (GMM)

Hansen introduced the Generalized Method of Moments in his celebrated 1982 paper. Johnston and Di Nardo (1997) state that there has been a surge in the use of GMM estimators for two main reasons:

1. *"GMM nests many common estimators, and provides a useful framework for their comparison and evaluation.*

2. *GMM provides a 'simple' alternative to other estimators, especially when it is difficult to write down the maximum likelihood estimator."*

The GMM estimator offers a number of advantages over other econometric models. Firstly, some relationships between variables are dynamic which is only captured by the GMM estimator. The GMM estimator captures the relationship without bias and inconsistency problems that are inevitable in traditional pooled or fixed effects, also known as the within group (WG), ordinary least squares (OLS) estimations (Nickell, 1981, Blundell *et al*., 2000). Secondly, the GMM estimator enables researchers to study a larger number of independent variables in a regression without the concern of endogeneity. Thirdly, the GMM estimator corrects the bias that is triggered by a reduction in data variation in the difference-GMM (a problem that is especially prevalent in highly persistent series); this bias is corrected through obtaining the level values of variables back to the regressions in the system-GMM. Therefore, removing the bias that is caused by weakened instruments improves the exactness of coefficients.

3.3. Testing the Validity of the GMM

3.3.1. The Sargan-Hansen Test for Over-Identifying Restrictions

According to Roodman (2009) one of the crucial assumptions in ensuring the validity of a GMM model is that instruments are exogenous. Roodman (2009) emphasizes that only when a dynamic panel-data instrumental variable technique model is over-identified, a test statistic for the joint validity of the moment conditions can be conducted to authenticate that the excluded instruments are correctly independent of the residual process. The appropriate test of the joint validity of the instruments utilised in the system-GMM estimation model as suggested by Arellano and Bond (1991) and Roodman (2009) is the Sargan/Hansen test for over-identifying restrictions. The Sargan's statistic is a special case of Hansen's J test under the assumption of conditional homoskedasticity.

The Sargan's statistics utilizes an estimate of the error variance from the IV regression estimated with the full set of over identifying restrictions. The null hypothesis of the Sargan test is that the instruments are uncorrelated with the error term and the vector of empirical moments is randomly distributed around 0. The Sargan/Hansen statistics can also be used to test the validity of subsets of instruments, via a "difference-in-Sargan/Hansen" test, also known as a *C* statistic. Baum, Schaffer and Stillman (2003) assert that the "robustified Sargan statistic is numerically similar to the Hansen *J* statistic computed from feasible efficient two-step GMM for that model" which is commonly referred to as the Hansen-Sargan or the Sargan-Hansen statistic.

3.3.2. The Arellano-Bond Test for Second-Order Serial Correlation

Roodman (2009) states that in addition to the Sargan statistics, an additional test to check a phenomenon that would render some lags invalid as instruments, namely, autocorrelation in the idiosyncratic disturbance term is conducted by Stata. The Arellano-Bond test for autocorrelation as developed by Arellano and Bond is specially designed to detect second-order serial correlation (AR(2)) in the idiosyncratic disturbance term within a GMM framework (Adenutsi, 2014). The Arellano-Bond test for autocorrelation is actually valid for any GMM regression on panel data, including OLS and 2SLS, as long as none of the regressors is "post determined", depending on future disturbances. The Arellano-Bond test for autocorrelation has a null hypothesis of no autocorrelation and is applied to the differenced residuals. The test for AR (1) process in first differences usually rejects the null hypothesis; as a result we will not consider it. The test for AR (2) in first differences is more important, because it will detect autocorrelation in levels.

Roodman (2009) further points out that Arellano and Bond discovered that their test had better detected lagged instruments being made invalid through autocorrelation compared to the Sargan and Hansen test. However, the author also pointed out that the test does break down as the correlation falls to 0.2, where it rejects the null of no serial correlation only half the time.

Table 1: Descriptive Statistics

	Poverty	ATMs	Bankaccounts	Bankcreditodeposit	Banklending& deposit	Bankspriv atecredit	Chinnitofinancialopenness	Exportstoo GDP	GDPper capita	Government expenditure	Inflation	Liquidassetstodeposits	Stockmarketturnover	TotalbankassetstoGDP
Mean	16.84	7.45	154.4	75.6	9.04	23.60	-0.65	34.27	3.14	18.77	14.26	52.24	13.31	28.35
Median	11.70	1.30	126.8	68.3	6.72	13.38	-1.19	30.46	2.15	18.65	10.90	38.03	4.84	19.28
Maximum	46.10	54.73	876.8	137.3	32.79	77.84	2.37	75.12	19.63	31.55	112.6	181.8	1081.	87.67
Minimum	4.80	0.32	12.50	23.3	0.43	2.59	-1.90	10.26	-10.95	8.284	-0.11	5.44	0.02	4.567
Std.Dev.	11.25	10.88	159.9	29.8	6.40	20.57	1.38	13.56	6.096	5.08	12.39	49.14	76.14	21.37
Skewness	0.92	2.3	1.76	0.35	1.25	0.99	1.39	0.54	0.77	0.09	3.75	1.53	13.69	1.08
Kurtosis	2.70	9.01	6.70	1.95	4.00	2.64	3.46	2.525	3.55	2.31	25.21	4.61	192.4	2.905
Sum	3420.2	1513.4	31358.2	15364.7	1836.30	4791.5	-133.0	6957.7	638.47	3810.0	2895.3	10604.9	2702.3	5755.9
SumSq.Dev.	25570.7	23940.4	5165860.	179818.2	8288.22	85519.07	386.0	37191.8	7508.30	5216.3	31031.	487795.3	1171143.	92334.1
Observations	203	203	203	203	203	203	203	203	203	203	203	203	203	203

Source: Author's computation using *Stata 14* Econometric Software.

Table 2: Correlation Matrix (Relationship between Poverty and the Variables Used in the Study)

Correlation Probability	Poverty	ATMs	Bank accounts	Bank credit to deposit	Bank lending & deposit	Banks private credit	Chinn ito financial openness	Exports to GDP	GDP per capita	Government expenditure	Inflation	Liquid assets to deposits	Stock market turnover	Total bank assets to GDP
Poverty	1.0													
ATMs	-0.28	1.00												
Bank accounts	-0.18	0.80	1.00											
Bank credit to deposit	-0.50	0.05	-0.16	1.00										
Bank lending & deposit	0.38	-0.28	-0.16	-0.48	1.0									
Banks private credit	-0.52	0.12	-0.11	0.86	-0.49	1.0								
Chinn ito financial openness	0.03	0.23	0.22	-0.28	0.03	-0.20	1.0							
Exports to GDP	-0.26	0.59	0.46	0.10	-0.39	0.05	0.23	1.0						
GDP per capita	0.37	0.01	0.20	-0.20	0.06	-0.22	0.07	-0.17	1.0					
Government expenditure	-0.32	0.44	0.35	0.33	-0.57	0.25	-0.19	0.63	-0.19	1.0				
Inflation	0.13	-0.29	-0.19	-0.36	0.31	-0.33	-0.17	-0.20	-0.03	-0.16	1.0			
Liquid assets to deposits	0.10	-0.34	-0.16	-0.33	0.31	-0.47	-0.13	-0.41	0.01	-0.25	0.34	1.0		
Stock market turnover	-0.12	0.29	0.10	0.06	-0.08	0.15	-0.05	0.07	-0.02	0.08	-0.08	-0.07	1.0	
Total bank assets to GDP	-0.46	0.08	-0.17	0.837	-0.48	0.99	-0.20	-0.00	-0.22	0.22	-0.30	-0.45	0.15	1.0

4. PRESENTATION OF EMPIRICAL RESULTS

4.1. Descriptive Statistics

Table **1** reports the summary statistics for all the variables used in the chapter. The mean value of poverty is 16 with a standard deviation of 11. The mean of the bank credit to bank deposit variable is 75 and the standard deviation is 29. The mean of the total bank assets to GDP and banks private credit to GDP is 28 and 23, respectively signalling that in general banks in the SADC do not have much financial depth, which is necessary in a well-functioning financial economy. From Table **1**, the positive skewness of our variables indicates that the observed values of the variables have a long tail to the right. The mean of the stock market turnover variable is 13 and the standard deviation is 76, which is reasonable considering that most of the countries in SADC region do not have highly developed stock markets.

4.2. Correlation Matrix

Table **2** presents the correlation between poverty and total bank assets to GDP, banks' private credit to GDP, bank credit to bank deposit (%), liquid assets to deposits and short term funding (%), bank lending-deposit spread, stock market turnover ratio (%), bank accounts per 1 000 adults, ATMs per 1 000 km, Chinn-Ito Financial Openness Index, government expenditure to GDP, inflation, exports to GDP, GDP per capita. As illustrated in Table **2**, the correlation between poverty, bank accounts per 1 000 adults, ATMs per 1 000 km, banks' private credit to GDP, bank credit to bank deposit (%), total bank assets to GDP, stock market turnover ratio (%) and government expenditure to GDP is negative, which implies that these variables are beneficial in reducing poverty. On the other hand, the correlation between poverty and liquid assets to deposits and short term funding (%), Chinn-Ito Financial Openness Index, Inflation, and GDP per capita is positive, implying that these variables exacerbate poverty in the selected SADC countries. An interesting observation is that the highest correlation, in excess of 50%, is exhibited by banks' private credit to GDP, implying that other variables do not possess a very strong direct correlation with poverty. However, these preliminary results are insufficient to arrive at a conclusion. Further tests will be reviewed out in the next sections.

4.3. Presentation and Discussion of the Empirical Results on the Effect Of Financial Sector Development on Poverty

The empirical results on the effect of the nine measures of financial development on poverty are presented in Table **3**. This section presents empirical results on the impact that financial depth, financial system stability, financial efficiency, financial liberalization and financial access have on poverty in the SADC region.

The empirical results indicate that the effect of the different measures of financial sector development on poverty in the SADC region is mixed. Beginning with the baseline model, the results indicate that 6 out of 9 financial development variables, such as bank private credit to GDP, liquid assets to deposits and short term funding (%), ATMs per 100 km and stock market turnover have a negative effect on poverty in the SADC region of which 3 of them are statistically significant.

In terms of financial depth, the empirical results in the baseline model presents mixed results. Firstly, bank private credit to GDP was found to have a negative effect on poverty in the SADC region. The variable was found to be significant at the 1 % level. This implies a 1% increase in private credit leads to an 88 % reduction in poverty. This result was found to be consistent with the a *priori* expectation and is also in line with a number of studies such as Beck, Demirgüc-Kunt, Levine (2007), Dhrifi and Maktouf (2013) and Rewilak (2018). These authors argue that private credit increases the income share growth rate of the poorest quintile and therefore finance helps the poor above and beyond the impact of financial development on aggregate growth. However, this is in contrast to Jeanneney and Kpodar (2011) who highlight that in developing countries access to credit is still regarded as a challenge for the poor. This implies that an increase in private credit is not necessarily filtered through to the poor in order to improve their well-being.

Consistent with the *apriori* expectation again, the relationship between total bank assets as a percentage of GDP and poverty was found to be negative. The variable is significant at 1 % level. This implies that an increase in the financial book of banks has the ability to reduce poverty. The increase in the bank assets implies that banks can be in a better position to extend loans which may be accessed by the poor quintile of the population who may invest in education and business thus reducing the level of poverty. Model 2

Table 3: The GMM Estimation Results on the Relationship Financial Development and Poverty in the SADC Region, 1980-2011

Dependent variable: Poverty

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Constant	36.3927*** (0.000)	33.6001 *** (0.000)	29.3899*** (0.000)	21.0892*** (0.000)	24.7493*** (0.000)	42.3876*** (0.000)
Banks' PC to GDP	-0.8845*** (0.000)	-0.4242*** (0.000)				
Total BA to GDP	-0.5338*** (0.000)	-0 .1832* (0.075)				
BC to BD (%)	0.01392 (0.536)		0.1701*** (0.000)			
LA to D and STF (%).	-0.0676*** (0.000)		-0.0508*** (0.000)			
BL-D spread	-0.0775 (0.207)			-0.5230*** (0.000)		
SM turnover	-0.0029 (0.426)			-0.0053 (0.239)		
Bank Accounts (1,000 adults)	0.0684*** (0.007)				0.0339 (0.335)	
ATMs per 1000 km	-0.0212 (0.607)				-0.3399*** (0.000)	
Chinn-Ito	2.0592*** (0.000)					2.310*** (0.000)
Inflation	-0.1098*** (0.000)	-0.1182*** (0.006)	-0.0669*** (0.002)	-0.0998*** (0.000)	-0.0692** (0.031)	-0.0427 (0.327)
Government Expense to GDP	-0.7075 (0.000)	-0.6467*** (0.000)	-0.5252*** (0.000)	-0.5932*** (0.000)	-0.9612*** (0.000)	-1.5027*** (0.000)
Exports % of GDP	-0.0024 (0.949)	-0.0128** (0.027)	-0.0765** (0.043)	-0.1606*** (0.000)	-0.0255 (0.656)	-0.1216 (0.101)
GDP per capita	0.5118 (0.000)	0.6280*** (0.000)	0.6448*** (0.000)	0.9765*** (0.000)	1.0854*** (0.000)	1.1839*** (0.000)
Arellano-Bond test for AR(2)	0.840	0.972	0.762	0.769	0.549	0.740
Observations	222	223	223	222	222	223
Sargan (p-value)	0.000	0.000	0.000	0.000	0.000	0.000
Countries	7	7	7	7	7	7

Notes: Standard errors reported in parentheses ( ). *,**,*** indicates significance of the coefficients at 10 %/5 %and 1 % level of significance, respectively.

results are consistent with the results of the baseline model.

The empirical results reveal that the effect of financial system stability variables on poverty in the baseline model is positive and statistically insignificant. However, in the third model when the variable is estimated alone the variable is positive and significant. This result conforms to the *apriori* expectation. This implies that a higher bank credit to bank deposit ratio may be an indication that a banking system is more unstable. This result is consistent with Rewilak (2015) who argues that an unstable banking system is prone to economic crises, and as the burden on the poor due to a crisis is usually high, it would be expected that a more financially stable sector may reduce poverty. These results are also supported by Jeanneney and Kpodar (2011), Boukhatem (2016) and Naceur and

Zhang (2016). These authors do also highlight that the stability of financial institutions helps to reduce poverty and the effect of financial development could partly be overshadowed out by macroeconomic and financial instability generated by financial markets expansion as the poor are the most affected.

With regards to measures of financial efficiency, namely the bank lending-deposit spread and stock market turnover ratio, the empirical results indicate that these measures of financial efficiency reduce the poverty levels in the SADC region. Empirical results indicate that the relationship between bank lending-deposit spread and poverty is negative and significant, which implies that a 1% decrease in the bank lending-deposit spread will reduce poverty levels by 7.75%. This is consistent with Kpodar and Singh (2011) who suggest that relatively more vibrant banking systems in terms of credit, assets, and deposits would be more conducive to lower levels of poverty. This is also in consonance with Dhrifi and Maktouf (2013) who argue that improvements in the efficiency of financial intermediation in a country, contribute to higher returns on investment and thus to lower rates of poverty. Furthermore, efficient financial institutions are motivated to decrease overhead costs, which improves risk management and offering new financial instruments and services to the market to keep up with competitors which leads to a rise in investment and poverty reduction.

In terms of stock market efficiency, the results in both the baseline model and model 4 are consistent with the *apriori* expectations and theory. The results reveal that the effect of stock market efficiency on poverty is negative and statistically insignificant. This result suggests that *ceteris paribus,* a 1% increase in the stock market turnover ratio will lead to a 0.29% reduction in poverty. This finding is consistent with Naceur and Zhangl (2016) who hypothesised a beneficial effect of increasing stock market efficiency for poverty reduction in a sample of 143 countries. These results also to a greater extent are in line with Abdin, (2016) who emphasised that development in the financial sector can improve the efficiency of capital allocation by reducing information gaps that allows the poor to obtain relevant information about investment opportunities. In the same vein, Akhter and Daly (2009) argue that a more efficient financial system should be in a strong position to identify the poor and provide them with the correct financial services they require.

In terms of financial access, the empirical results reveal that only the number of ATMs per 1000 km, impacts poverty negatively in the SADC region, these results are consistent with *apriori* expectations. The results suggest that a 1% increase in financial access as measured by the number of ATM outlets per 1000 km is associated with a 2.12% decrease in poverty. These results are consistent with Rewilak (2018) who indicated that the absence of financial infrastructure, including a lack of terminals may result in the poor being financially excluded which implies that the benefits of financial development are not realised by the poor regardless of the size of financial depth in the economy. The results are also consistent with Jeanneney and Kpodar (2011) who hypothesize that banking geographical coverage, which itself improves with the level of financial development reciprocally reinforces the positive impact of an increase in the liquidity ratio on the income of the poor.

With regards to the measures of financial liberalization, the empirical results reveal that financial liberalization is likely to exacerbate poverty levels in the SADC region. The results indicate that the measure of financial liberalization, the Chinn-Ito index is positive and highly significant. These results are consistent with Arestis and Caner (2009) who discovered that countries with more liberalized capital account regimes have higher poverty rates even though the results were not statistically significant. However, these findings are not in line with their earlier study, in which Arestis and Caner (2004) established that financial liberalisation has a negative relationship with poverty.

In terms of control variables, inflation has a negative and significant relationship with poverty. This prediction is not consistent with the *apriori* expectation and Arestis and Caner (2009) and Kpodar (2006) who hypothesise that a reduction in the inflation is beneficial to the poor by reducing the cost acquiring financial services, increasing the real value of assets and the purchasing power of household incomes. A possible reason for this result may be that the majority of countries in the SADC region experience low levels of inflation. According to Arestis and Caner (2009), the relationship between poverty and government expenditure has ambiguous *apriori* expectation as an increase in government consumption may or may not impact poverty, depending on the allocation of spending amongst income groups. Our empirical results state that an increase in government spending reduces poverty in the SADC region; this implies that government spending is disproportionately beneficial towards the poor. Results from Nabeela (2012) show that government spending on education and law and

order significantly contributes to poverty reduction while government spending on budget deficit and economic and community services appeared to be responsible for poverty in Pakistan. In the case of the SADC region it is suggested that public expenditure in some countries increases the economic activities and output which reduces poverty, for example Seleteng and Motelle (2015) state that in South Africa, government spending has a positive effect on growth, whereas in a country such as Mauritius government expenditure has a negative impact on growth.

The results demonstrate that per capita income growth has a significant poverty-increasing effect where a 1% increase in per capita incomes increases poverty by 118%, this finding is contrary to Dhrifi and Maktouf (2013) who discovered that per capita income growth has a significant poverty-reducing effect where a 1% increase in per capita incomes reduces poverty by 2%. A possible reason for the lack of congruence in the results may be explained by the argument that over the past few decades SSA has been experiencing jobless growth which was not beneficial to the general public. Hanson and Léautier (2013) further emphasise that commodity dependent economies such as Botswana, Lesotho and South Africa had high economic growth which was jobless as their rates of unemployment were high despite achieving good GDP growth.

Exports as a percentage of GDP show a negative and statistically significant relationship. These results are consistent with the findings of Beck, Demirgüç-Kunt and Levine (2007) who found that trade openness reduces poverty. Trade openness reduces poverty in a variety of channels. Belser (2000) concluded that labour intensive exports have the potential to create jobs by better utilising the country's comparative advantage. On the other hand, Dollar and Kraay (2002) hypothesised that trade openness causes growth which subsequently helps in reducing poverty. Dollar and Kraay (2004) further emphasised that developing countries should embrace trade liberalization as a vital policy tool for substantially reducing poverty.

4.4. Diagnostic Test Results

The Sargan test of over identifying restrictions shows that all instruments used in the model are valid. With a p-value of 0.000 the study therefore fails to reject the null and concludes that all over identifying restrictions are valid. The results of the Arellano-Bond test for second-order serial correlation reveal that there is no second-order autocorrelation. With the AR (2) values above 0.5, we therefore fail to reject the null and conclude that there is no second-order autocorrelation.

5. CONCLUSION

In this study a one-step system GMM was carried out in order to assess the impact of the different dimensions financial development on poverty in selected counties within the SADC region. The results observed indicate that 6 out of the 9 financial development variables have a negative impact on poverty in the selected SADC countries under review. These findings reveal that in terms of financial depth, only private credit significantly reduces the poverty rate. Results on financial system stability confirm the notion that a stable financial system is beneficial to the poor. Financial efficiency as proxied by the bank lending-deposit spread and the stock market turnover ratio also significantly reduces poverty in the selected SADC countries. The importance of financial inclusion or access cannot be underestimated; results reveal that an increase in the number of ATM outlets available to the public significantly reduces the poverty rate in the SADC region. The empirical results also underscore the importance of liberalising capital accounts and catalysing savings in order to extend services to traditionally excluded sections of the population. Finally, diagnostic test results were conducted in the model; these results reveal that all instruments used in the model are valid and that there is no second-order autocorrelation.

REFERENCES

Abdin J. Financial development and poverty reduction: exploring the links between the issues using evidence from Bangladesh. Int J Fin Res. 2016; 7(4): 44. https://doi.org/10.5430/ijfr.v7n4p44

Adenutsi DE. Financial liberation and international remittances in Sub-Saharan Africa: a panel data analysis[dissertation on internet]: Stellenbosch University; 2014. [cited 17 Nov 2017]. Available from https://scholar.sun.ac.za/handle/10019.1/96136.

Aghion P, Bolton P. A theory of trickle-down theory and development. Rev Econ Stu. 1997; 64(2): 151-172. https://doi.org/10.2307/2971707

Akhter S, Daly KJ. Finance and poverty: evidence from fixed effect vector decomposition. Eme Mar Rev. 2009; 10(3): 191-206. https://doi.org/10.1016/j.ememar.2009.02.005

Arellano M, Bond S. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. Rev Econ Stu. 1991; 58: 277-297. https://doi.org/10.2307/2297968

Arestis P, Caner A. Financial liberalization and poverty: channels of influence. [Internet]. The Levy Economics Institute Working Paper No. 411. 2004 [cited 2018 Oct 16]. Available from https://link.springer.com/chapter/10.1057/9780230522381_3.

Asad H. Effective financial development, inequality and poverty [dissertation on internet]: University of Exeter; 2012 [cited 17

Nov 2017]. Available from https://ore.exeter.ac.uk/repository/bitstream/handle/10036/3583/AsadH_fm.pdf?sequence=1

Batuo ME, Guidi F, Mlambo K. (2010). Financial development and income inequality: evidence from African countries. [Internet]. Munich Personal RePEc Archive MPRA Paper No. 25658. 2010 [cited 2017 Oct 16]. Available from https://mpra.ub.uni-muenchen.de/25658/1/MPRA_paper_25658.pdf.

Baum CF, Schaffer ME, Stillman S. Instrumental variables and GMM: estimation and testing. Stata J. 2003; 3(1): 1-31. https://doi.org/10.1177/1536867X0300300101

Beck T, Demirgüç-Kunt A, Levine R. Finance, inequality, and the poor. J Eco Gro. 2007 Jan; 12(1): 27-49. https://doi.org/10.1007/s10887-007-9010-6

Beegle K, Dehejia R, GAtti R. Child labor, crop shocks, and credit constraints. [Internet]. NBER Working Paper 10088. 2003 [cited 2018 Oct 16]. https://doi.org/10.3386/w10088

Belser P. Vietnam: on the road to labor-intensive growth? [Internet]. World Bank Publications vol. 238. 2000 [cited 2018 Oct 16]. https://doi.org/10.1596/1813-9450-2389

Blundell R, Bond S, Windmeijer F. Estimation in dynamic panel data models: improving on the performance of the standard gmm estimator. Adv in Econ. 2000; 15. https://doi.org/10.1920/wp.ifs.2000.0012

Boukhatem J. Assessing the direct effect of financial development on poverty reduction in a panel of low-and middle-income countries. Res Int Bus and Fin. 2016; 37: 214-230. https://doi.org/10.1016/j.ribaf.2015.11.008

Chinn MD, Ito H. A new measure of financial openness. J Comp Pol Analysis. 2007; 10(3): 309-322. https://doi.org/10.1080/13876980802231123

Clarke G, Xu LC, Zou H. Finance and income inequality: test of alternative theories. [Internet]. World Bank Policy Research Working Paper 2984. 2003 [cited 2018 Oct 16]. Available from http://documents.worldbank.org/curated/en/892521468762914086/Finance-and income-inequality-test-of-alternative-theories.

Dauda RO, Makinde KO. Financial sector development and poverty reduction in Nigeria: a vector autoregression analysis. Asian Econ and Fin Rev. 2014; 4(8): 1040.

Demirgüç-Kunt A, Levine R. Finance and inequality: theory and evidence. [Internet]. NBER Working Paper No. 15275. 2009 [cited 2017 Oct 25]. https://doi.org/10.1596/1813-9450-4967

Department for International Development (DFID). The importance of financial sector development for growth and poverty reduction. [Internet Policy Division Working Paper 12886. 2004 [cited 2018 Oct 16]. Available from https://ideas.repec.org/p/ags/dfidpd/12886.html

Dhrifi A, Maktouf S. Financial liberalization and poverty: the threshold effect of financial development. Int J Bus and Man Inv. 2013; 2(11): 1-10.

Dhrifi A. Financial development and poverty: what role for growth and inequality. Int J Academic Res in Acc, Fin and Man Sci. 2013; 3(4): 119-129.

Dhrifi A. Financial development and the growth-inequality-poverty triangle. J Knlw Econ. 2015; 6(4):1163-1176. https://doi.org/10.1007/s13132-014-0200-0

Djoumessi EC. Financial development and economic growth: a comparative study between Cameroon and South Africa [dissertation on the internet]: University of South Africa; 2009 [cited 2017 Oct 02]. Available http://uir.unisa.ac.za/bitstream/handle/10500/2746/dissertation_djoumessi_%20e.pdf;jsessionid=339EE6EE6149F62F3A671E92FA4AFE72?sequence=1

Dollar D. Kraay A. Growth is good for the poor. J Econ Gro. (2002; 7(3): 195-225. https://doi.org/10.1023/A:1020139631000

Easterly W. How much do distortions affect growth? J Mon Econ. 1993 Nov; 32(4): 187-212. https://doi.org/10.1016/0304-3932(93)90002-W

Gadanecz B, Jayaram K. Measures of financial stability: a review. [Internet]. IFC Bulletin No 31. 2009 [cited 2018 Oct 16]. Available from https://www.bis.org/ifc/publ/ifcb31ab.pdf.

Galor O, Tsiddon D. Income distribution and growth: the kuznets hypothesis revisited. Economica. 1996; 63: 103-17. https://doi.org/10.2307/2554811

Hanson KT, Leautier F. Jobless economic growth in Africa: is there a role for agriculture. J Afri Dev. 2013; 15(2): 1-17.

Hariharan G, Marktanner M. The growth potential from financial inclusion. [Internet]. ICA Institute and Kennesaw State University. 2012 [cited 2018 Oct 16]. Available from http://www.frbatlanta.org/documents/news/conferences/12intdev/12intdev_Hariharan.pdf.

Honohan P. Financial development, growth and poverty: how close are the links? [Internet]. World Bank Policy Research Working Paper, 3203. 2004 [cited 2018 Dec 12]. https://doi.org/10.1596/1813-9450-3203

International Monetary Fund. Financial development in Sub-Saharan Africa: promoting inclusive and sustainable growth. [Internet]. IMF Publication. 2016 [cited 2018 Oct 16]. Available from https://www.imf.org/external/pubs/ft/dp/2016/afr1605.pdf.

Jacoby H, Skoufias E. Risk, financial markets, and human capital. Rev Econ Stu. 1997; 64(3): 311-335. https://doi.org/10.2307/2971716

Jalilian H, Kirkpatrick C. Does financial development contribute to poverty reduction? J Dev Stu. 2007; 41(4): 636-656. https://doi.org/10.1080/00220380500092754

Jeanneney SG, Kpodar K. Financial development and poverty reduction: can there be a benefit without a cost? J Dev Stu. 2011; 47(1): 143-163. https://doi.org/10.1080/00220388.2010.506918

Jeanneney SG, Kpodar K. Financial development, financial instability and poverty. [Internet] 2005 Feb 11 [cited 2017 May 15]. Available from https://halshs.archives-ouvertes.fr/halshs-00564573.

Johnston J, Di Nardo J. Econometric methods. international editions. J Econ Lit. 1997; 35(3): 688-726.

Kappel V. The effects of financial development on income inequality and poverty. Proceedings of the German Development Economics Conference; 2010: Hannover, Germany. https://doi.org/10.2139/ssrn.1585148

Keho Y. Revisiting the financial development and poverty reduction nexus for Sub-Saharan African countries: evidence from causality tests in the time and frequency domains. Int J Econ and Fin Iss. 2016; 6(4). https://doi.org/10.5430/ijfr.v8n4p90

Khan AD, Ahmad I, Jan WU. Financial development and poverty alleviation: time series evidence from Pakistan. Wld Appl Sci J. 2012; 18: 1576-1581.

King G, Levine R. Finance and growth: schumpeter might be right? Qtly J Econ 1993 Aug; 108 (3): 1076-1107 https://doi.org/10.2307/2118406

Klynveld Peat Marwick Goerdeler (KPMG). Insights into african capital markets: the african debt market [intenet]. 2014 Aug 25 [cited 2018 June 12]. Available from https://assets.kpmg/content/dam/kpmg/pdf/2016/07/What-influences-FDI-into-Africa.pdf.

Kpodar K, Singh RJ. Does financial structure matter for poverty? evidence from developing countries. [Internet]. World Bank Policy Research Working Paper; WPS5915 2011/12/01. 2011 [cited 2018 Oct 16]. Available from https://openknowledge.worldbank.org/handle/10986/3685.

Lenka SK. Measuring financial development in india: a PCA approach. Theo Apl Econ. 2005;1:187-198.

Levine R, Loayza N, Beck T. Financial intermediation and growth: causality and causes. J Mon Econ. 2000 Aug ; 46 (1): 31-77. https://doi.org/10.1016/S0304-3932(00)00017-9

Levine R. Financial development and economic growth: views and agenda. J Econ Lit. 1997 Jun ; 35(2): 688-726.

McKinnon RI. Money and capital economic development. Wld Dev, Els 1973; 2(3): 87-88. https://doi.org/10.1016/0305-750X(74)90098-9

Nabeela A. The impact of government spending on poverty reduction: evidence from Pakistan 1972 to 2008. Afri Bus Man 2012; 6(3). https://doi.org/10.5897/AJBM11.922

Naceur SB, Zhang1 R. Financial development, inequality and poverty: some international evidence. [Internet]. IMF Working Paper WP/16/32. 2016 [cited 2017 Oct 16]. https://doi.org/10.5089/9781498359283.001

Nasifeh B, Khosrow P. Financial development and income inequality relationship in Iran. Mid-East J Sci Res. 2012 Aug; 12(7): 906-914.

Nickell SJ. Biases in dynamic models with fixed effects. Econometrica. 1981; 49: 1417-1426. https://doi.org/10.2307/1911408

Nyawata O, Bird G. Financial liberalisation in southern africa: an assessment. Dev Pol Rev. 2004; 22(3): 287-307. https://doi.org/10.1111/j.1467-7679.2004.00250.x

Odhiambo NM. Finance-growth-poverty nexus in south africa: a dynamic causality linkage. J Soc-Econ. 2009; 38: 320-325. https://doi.org/10.1016/j.socec.2008.12.006

Odhiambo NM. Is financial development a spur to poverty reduction? Kenya's experience. J Econ Stu. 2010; 37: 343-353. https://doi.org/10.1108/01443581011061311

Odhiambo NM. Is financial development pro-poor or pro-rich? empirical evidence from Tanzania. J Dev Eff. 2013; 5(4): 489-500. https://doi.org/10.1080/19439342.2013.866154

Pagano M. Financial markets and growth: an overview. Eur Econ J 1993; 37: 613-622. https://doi.org/10.1016/0014-2921(93)90051-B

Perez-Moreno S. Financial development and poverty in developing countries: a causal analysis. Emp Econ. 2011; 41(1): 57-80. https://doi.org/10.1007/s00181-010-0392-5

Perroti R. Political equilibrium, income distribution, and growth. Rev Econ Stu.1993; 60(4): 755-76. https://doi.org/10.2307/2298098

Ravallion M, Datt G. Why has economic growth been more pro-poor in some states of india than others? J Dev Econ. 2002; 68(2): 381-400. https://doi.org/10.1016/S0304-3878(02)00018-4

Ravallion M. Can high-inequality developing countries escape absolute poverty? Econ Lett. 1997; 56(1): 51-57. https://doi.org/10.1016/S0165-1765(97)00117-1

Rewilak J. The impact of financial crises on the poor. J Int Dev. 2018; 30(1): 3-19. https://doi.org/10.1002/jid.3334

Rewilak J. The role of financial development in poverty reduction. Rev Dev Fin. 2015; 7: 169-176. https://doi.org/10.1016/j.rdf.2017.10.001

Roodman D. How to do xtabond2: an introduction to difference and system GMM in stata. Stata J. 2009; 9(1): 86-136. https://doi.org/10.1177/1536867X0900900106

Seleteng M, Motelle S. Sources of economic growth in the Southern African Development Community. [Internet]. Central Bank of Lesotho Working Paper. 2015 [cited 2018 Oct 16]. Available from https/Downloads/essa_2811.pdf.

Seven U, Coskun Y. Does financial development reduce income inequality and poverty: evidence from emerging countries. Eme Mar Rev. 2016; 26: 34-63. https://doi.org/10.1016/j.ememar.2016.02.002

Shaw ES. Financial deepening in economic development. Amer J Agric Econ. 1973; 56 (3): 670. https://doi.org/10.2307/1238641

South African Reserve Bank (SARB). Financial sector development and economic growth in SADC. 2014 Aug [cited 2018 Jan 24]. Available from https://www.sadcbankers.org/Lists/News%20and%20Publications/Attachments/197/FSD%20Final%20August%202014.pdf.

Southern African Development Community (SADC). SADC Finance and Investment Protocol (FIP). 2006 Aug 18 [cited 2017 Jun 25]. Available from https://www.sadc.int/files/4213/5332/6872/Protocol_on_Finance__Investment2006.pdf.

Stiglitz J. The role of the state in financial markets. Proceedings of the World Bank Annual Conference on Development Economics;1998 April 20-21; Washington D.C. United States.

Stiglitz JE, Weiss A. Credit rationing in markets with imperfect information. Amer Econ Rev. 1981;71(3): 393-410.

Uddin GS, Shahbaz M, Arouri M, Teulon F. Financial development and poverty reduction nexus: a cointegration and causality analysis in Bangladesh. Econ Mod. 2014; 36: 405-412. https://doi.org/10.1016/j.econmod.2013.09.049

United Nations. Recent Economic and Social Conditions in Southern Africa, and Prospects for 2015; and the State of Equality in Southern Africa. 2015 Jul 13 [cited 2017 Jun 25]. Available from https://www.uneca.org/sites/default/files/uploaded-documents/SROs/SA/ICE21/economic_and_social_conditions_in_southern_africa_in_2014.pdf

World Bank. Bangladesh: from counting the poor to making the poor count. poverty reduction and economic management network. [Internet]. World Bank Report No. 17534. 1995 [cited 2018 Oct 16]. Available from http://documents.worldbank.org/curated/en/566581468768606423/pdf/multi-page.pdf.

World Bank. World development report 2000/2001: attacking poverty. [Internet]. World Bank Publications vol. 238. 2001 [cited 2018 Oct 16]. Available from https://openknowledge.worldbank.org/handle/10986/11856.

Yinusa O, Alimi OY. (2014). Financial Development, Income Inequality and Poverty Reduction in Nigeria. 2014 Mar 24 [cited 2018 Jun 25]. Available from https://scholar.google.co.za/scholar?hl=en&as_sdt=0%2C5&q=FINANCIAL+DEVELOPMENT%2C+INCOME+INEQUALITY+AND+POVERTY+REDUCTION+IN+NIGERIA&btnG=.

Zahonogo P. Financial development and poverty in developing countries: evidence from Sub-Saharan Africa. Int J Econ and Fin. 2016; 9(1): 211. https://doi.org/10.5539/ijef.v9n1p211

Received on 01-10-2019 Accepted on 13-11-2019 Published on 27-12-2019

DOI: https://doi.org/10.6000/1929-7092.2019.08.110