IDR : VOL. 15, NO. 1, (JANUARY-JUNE, 2017) : 31-56 | ISSN : 0972-9437 |

FINANCIAL SECTOR DEVELOPMENT AND ECONOMIC GROWTH IN SOUTHERN AFRICAN CUSTOMS UNION (SACU)

Gaokgakala Maenge*, Christopher Mupimpila** and Francis Nathan Okurut*

ABSTRACT

This study presents an analysis of the impact of financial sector development on economic growth with evidence from the Southern African Customs Union (SACU). Different measures of financial sector development are utilized, and these are: two measures from the banking sector and two from the capital market. Economic growth is measured using real GDP per capita. Panel data analysis is utilized and concludes that financial sector development, measured by domestic credit to private sector and stocks traded as a percentage of GDP, has a positive and significant effect on economic growth. The study also recognizes the importance of both the banking sector and the capital market in financial sector development. Thus it is recommended that SACU countries should continue taking measures that promote the development of the financial sector, and it would be beneficial for the SACU countries to identify the missing financial institutions and take action to fill them. For example, establishment of a stock market in Lesotho in future.

1. INTRODUCTION

The link between financial sector development and economic growth has generated a lot of attention among scholars and policy makers. There has been particular emphasis on the causal relationship and the direction of causality between financial sector development and economic growth. However, it has been observed that not only the causal relationship matters but, also the extent to which the financial sector development contributes to economic growth. To date, the debate still continues with studies showing different results. Ahmad and Malik (2009) among Okurut (2013) other scholars found that financial sector development is a major contributor to economic growth, although there are some studies that indicate a negative

* Masters of Arts (Economics) Graduate, University of Botswana, Gaborone, Botswana

** Department of Economics, University of Botswana, *E-mail: mupimpi@mopipi.ub.bw; okurutf@mopipi.ub.bw*

relationship between financial sector development and economic growth which include among others Hermes and Lensink (2004).

The fragile growth of African economies and marginalization of in the global economy has been directly explained by poor diversification of African economies (Hammouda *et al,* 2009). On this note, developing countries have been motivated to introduce initiatives that are meant to diversify their economies and accelerate growth. The initiatives include among others liberalization of the financial markets to induce growth of the financial sector. Thus, financial sector development is considered as one of the new paradigms for African development.

The theoretical foundations of financial sector development and economic growth dates back to the works of Schumpeter (1911), who argues that the services offered by the financial intermediaries are vital for innovation and development (Dritsakis and Adamopoulos, 2004). The McKinnon- Shaw (1973) hypothesis's main argument was that restrictions on the banking sector, such as interest rate ceilings and directed credit policies, have negative effects on financial sector development and consequently economic growth. On the other hand, endogenous growth theory has shown that there can be sustained growth without exogenous factors, thus stressing the significance of financial development on economic growth.

A more developed financial sector provides ground for better allocation of resources, monitoring and fewer information asymmetries (Shen and Lee, 2006). By increasing the savings rate and the availability of savings for investment, facilitating and encouraging inflows of foreign capital, financial sector development boosts long-run growth. By mobilizing savings and increasing the volume of resources available for investment, financial sector contributes to economic growth.

The financial system performs quite a number of functions which include among others: facilitating trading, hedging and diversifying of risk, allocation of funds from surplus saving units to deficit spending units, and facilitating exchange of goods and services. In these functions, Levine (1997) asserts that financial sector development affects economic growth through two channels; capital accumulation and technological innovation. On capital accumulation, the level of financial development affects the steady state by influencing the rate of capital formation, by either altering the saving rate or by reallocating savings among different capital producing technologies. On technological progress, financial development affects the steady state by altering the rate of technological innovation, which includes inventing new production processes and goods.

It is generally believed that financial sector development strengthens the savings mobilization process and channels resources to fuel economic development (Kelly and Mavrotas, 2008). A key channel through which

financial development affects growth is by enabling technological innovations and low cost production methods that boost productivity. On technological innovation, the literature suggests that the level of productivity and likelihood of innovation through invention depends on the availability of finance (Dabla-Norris *et. al*., 2010). Alfaro *et al* (2004), maintain that financial sector development is necessary for a country's ability to capture the technological spillover from foreign direct investment, thereby accelerating economic growth. King and Levine (1993), suggest that "… a more-developed financial system fosters productivity improvement by choosing higher quality entrepreneurs and projects, by more effectively mobilizing external financing for these entrepreneurs, by providing superior vehicles for diversifying the risk of innovative activities, and by revealing more accurately the potentially large profits associated with the uncertain business of innovation. In these ways, better financial systems stimulate economic growth by accelerating the rate of productivity enhancement."

The present study seeks to analyze the relationship between financial sector development and economic in the Southern African Customs Union (SACU). Established in 1910, SACU is the world's oldest customs union (SACU, 2014a). It is made up of five member states, namely, Botswana, Lesotho, Namibia, South Africa and Swaziland. According to the 2002 SACU Agreement, the main objectives of SACU are to: promote the integration of SACU member countries into the world economy, facilitate cross-border movement of goods between member countries, promote conditions of fair competition in SACU, and increase investment opportunities in the common customs area (SACU, 2014b; Siphambe *et. al*., 2005).

The union has a large member, South Africa, which has a larger economy and a more developed financial sector relative to the other four countries which are small integrated developing countries. South Africa also hosts the Johannesburg Stock Exchange (JSE), one of the oldest and largest stock markets in the world while on the other hand; Lesotho does not have a stock market. Over time, the JSE became and still is the most important gold mining stock market in the world. This cannot be said for the other SACU countries, the BNLS countries. Odada and Godana (2002), argues that the interaction with an economic giant has been considered to make the BNLS better off in terms of development as compared to other Sub-Saharan countries. Despite proximity to a large emerging economy, translating financial sector growth potential into improved GDP per capita has remained difficult. This is mainly due to dependence on the South African financial sector.

One of SACU's main objectives is to facilitate the development of common policies and strategies and also to enhance economic development, diversification, and industrialization of member countries. This study

therefore, sought to address three questions in relation to some of these aspirations: First, what is the extent of financial sector development for SACU countries? Secondly, is financial sector development influencing economic growth for the BNLS countries? Lastly, is financial sector development contributing to economic growth for the union?

2. OVERVIEW OF SACU

2.1.Financial Development in SACU

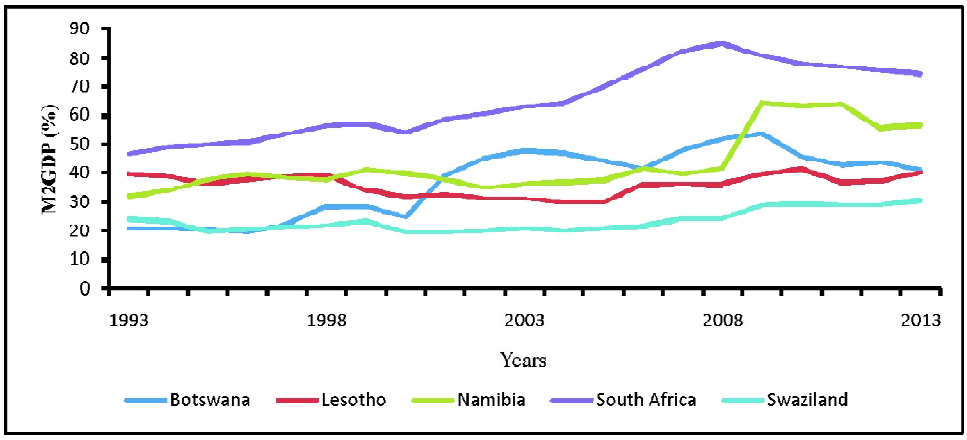
The Southern African Customs Union (SACU) is the oldest custom union in the world and is cited as one of the success stories of regional integration in Africa. The financial sector in the region is made up of the financial markets from the member countries. The main feature of the financial sector in the SACU countries is the dominance in the banking sector by South African banks. This ensures that the banking sector in other SACU countries follows trends and advances from South Africa. Despite this, there is still a wide disparity in the level of financial sector development between South Africa and the other four SACU countries.

South Africa exhibits quite a developed financial sector, with Botswana gradually catching up. Aziakpono (2004) describes the financial sector of the other four countries; Botswana, Namibia, Lesotho and Swaziland (BNLS) in a number of ways. Aziakpono (2004) further observed that there is high market concentration with little competition, indicated by high interest rates spreads except for Botswana. He further notes that there is high excess liquidity in the financial sector due to low domestic investment, with private sector credit in Botswana and Namibia being granted mainly for consumption instead of productive investment (Aziakpono, 2004). Also, the financial management of the BNLS reflects different macroeconomic conditions, with the countries pursuing different fiscal policy (Siphambe *et. al*, 2005).

Despite the differences in the level of financial sector development among the SACU countries, there are some similarities. The ratio of broad money stock to GDP (M2GDP), which captures the degree of monetization, exhibits the same trends. Figure 1 shows the ratio of broad money to GDP for SACU countries over the period 1990-2013. It is clear from Figure1 that the degree of monetization is nearly the same in the SACU countries, although it is highest in South Africa, followed by Namibia, Botswana and Lesotho. It is lowest in Swaziland.

From Figure 1, it is also evident that the ratio of broad money to GDP has been rising since 1990 for all SACU countries. This could be an indicator of increasing savings, which can, in turn, be attributed to increased use of financial institutions and hence development of the financial sector. The

Figure 1: The degree of monetization in SACU



Source: Author's compilation from World Bank indicators

ratio takes a dive downwards around the years 2006-2008, which can be attributed to the world financial crisis.

The SACU countries stock markets exhibit the characteristics of emerging markets. They have low market capitalization relative to GDP, with South Africa having a slightly higher market capitalization than the others. The markets are generally illiquid with incomplete credit markets. In addition, Lesotho does not have a stock market. The stock markets are also integrated, mainly with South African corporations listed on the stock markets of the other countries; Botswana, Namibia and Swaziland (World Bank, 2014).

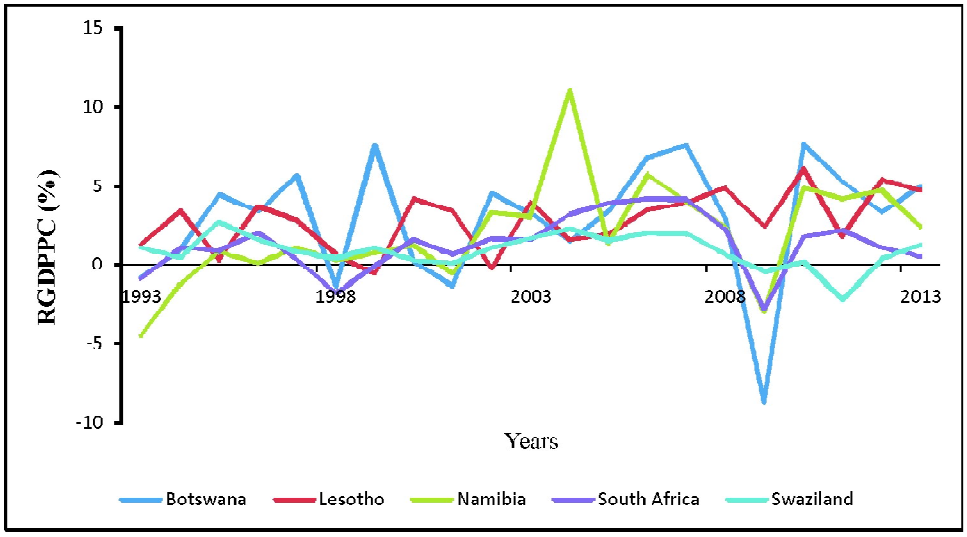
2.2.Economic Growth in SACU Countries

SACU is characterized by the economic dominance of South Africa in contrast to the size of the other four members. The BNLS depend heavily on South Africa for their trade and investment, and their performance and management differs markedly from each other and South Africa (Siphambe *et al*, 2005).

South Africa is the largest economy among the SACU countries with a high GDP per capita, with Botswana gradually catching up, having the highest GDP per capita after 2006. Even though the BNLS are dominated by South Africa in terms of economic and population size, they have experienced higher GDP per capita growth. Figure 2 indicates real GDP per capita for SACU countries.

It is evident from Figure2 that over time the SACU countries have done remarkably well, registering positive real economic growth rates, the exception being that of the 2007- 2009 economic crisis, when the SACU

Figure 2: Economic growth in SACU



Source: Author's compilation from World Bank Development Indicators

countries registered significant negative growth rates. It is therefore interesting to know the extent to which financial sector development has been a contributor to the positive real economic growth rates in the region.

2.3.Profile of the Individual SACU Countries

SACU countries have different levels of financial sector development and economic growth. Therefore, it is necessary to consider the profile of each country as follows:

2.3.1. Botswana

Since the 1980s, Botswana has managed to maintain its status as a middle income country with a GDP of $15, 751.9 in 2013 (World Bank, 2014). Over the years, Botswana has had a small but thriving financial sector with significant growth. The sector is made up of an array of financial institutions which include among others; a central bank, commercial banks, merchant banks, a number of insurance and pension funds, a stock exchange, and stock brokers. A number of the commercial banks are listed on the Botswana Stock Exchange (BSE).

The sector has experienced diversification and rapid growth over time, registering 8.7% growthand 1.2% contribution to real GDP growth in 2011, and 12.6% growth and1.8% contribution to real GDP growth in 2012 (BoB, 2012). The banking sector, mainly commercial banks, makes a larger share of the sector. In 2012 the banking sector assets stood at P58.3 billion which

was a 12.5% increase from 2011, mainly driven by an increase in loans and advances (BoB, 2012). The Botswana Stock Exchange, which sis active, trading 410.1 million shares valued at P896 million in 2012. Over the same period, market capitalization of domestic companies grew by 16%, which was boosted by an increase in the number of domestic listed companies (BoB, 2012).

Over the years, a number of financial sector reforms have been implemented to enhance growth and development of the financial sector. This include, among others, the removal of controls on interest rates and liberalization of commercial banking requirements, (BoB, 2001). In addition to the reforms, legislation has been put in place to ensure smooth running of the sector.Bank of Botswana, which was established following the decision to withdraw from the Rand Monetary Area (RMA) in 1975. It is responsible for licensing, supervision, and regulation of banks in terms of the Banking Act and associated banking regulations. On the other hand, the Non-Bank Financial Institutions Regulatory Authority (NBFIRA), which was established in 2008, is responsible regulation and provides an institutional framework for all non-bank financial institutions, (Jefferis, 2010)

2.3.2. Namibia

Namibia has one of the diverse, sophisticated and developed financial sectors in Africa made up of privately owned financial institutions. The financial institutions have strong links with South African financial institutions. The sector is made up of commercial banks, specialized banks, a stock market, and a rapidly increasing number of non-banking financial institutions.

The banking sector, which is sound, profitable, and sufficiently capitalized, remains the major contributor to the financial sector. The total assets of the banking sector increased by 14.7% at the end of 2013 compared to 12.7% increase by June 2013 (Bank of Namibia, 2014). This increase in assets is mainly driven by the increase in loans and advances, (Bank of Namibia, 2014). The Namibia stock (NSX) exchange continues to play a significant role in the financial sector. It is characterized by dual listing of companies; a number of companies listed on the NSX are also listed on the Johannesburg Stock Exchange (JSE). By 2012, market capitalization stood at N$1, 225, 744 which is an increase from the N$1, 148, 880 recorded in 2011 (Namibia Stock Exchange, 2012). By the end of 2010 the financial sector's contribution to GDP stood at 4.3% (Bank of Namibia, 2010). In 2012, the finance, real estate and business services contributed 15% to GDP (Bank of Namibia, 2014).

Adherence to international banking regulations, financial sector reforms, the Namibian Financial Strategy, and some regulations are expected to strengthen and promote growth of the Namibian financial sector. The Bank

of Namibia, established in 1993, is responsible for regulation and supervision of the banks, and the Namibia Financial Institutions Supervisory Authority is responsible for regulation and supervision of the Namibian non-banking financial sector. Membership of the CMA and some bilateral and multilateral agreements are also contributing positively to the growth of the sector.

2.3.3. Lesotho

The Lesotho financial sector is small and growing. It is made up commercial banks with a network of branches across the country and various non-banking financial institutions. The sector has proved to be well capitalized, liquid and profitable. Commercial bank liquidity ratio increased from 70.8% in December 2012 to 83% in December 2013 (Bank of Lesotho, 2013). On the other hand credit to deposit ratio increased from 55.8% in 2012 to 58% in 2013. Over the same period, domestic credit to private sector increased from 3 546.6 Loti to 4 465.1, (Bank of Lesotho, 2013).

Over the years, the services sector, which includes the financial sector, has contributed largely to the economy of Lesotho. By 2013, the services sector was estimated to contribute about 58.2% to GDP (Bank of Lesotho, 2013). The banking sector remains solid, by 2012 the ratio of bank assets to GDP stood at 47.3% and the non-bank financial institutions had an asset base of 51.7% of GDP (Bank of Lesotho, 2013).

A number of regulatory laws which are updated from time to time and creation of safety nets to protect depositors and policy holders help to strengthen the financial sector. The Central Bank of Lesotho, established in 1798, is responsible for licensing and regulation of the financial institutions to ensure smooth running and hence development of the sector. In addition, membership of Lesotho to the CMA helps it to realize benefits such as free capital flow which helps in the growth of the financial sector. Lesotho also has some bilateral and multilateral agreements with other countries like South Africa which contribute to the development of the financial sector.

2.3.4. South Africa

Among the SACU countries, South Africa has the most developed and sophisticated financial sector. It is made up of a reserve bank, a number of commercial banks, mutual banks,foreign bank branches, non-banking financial institutions, and a stock exchange. Commercial banks from South Africa dominate the banking sectors of the other SACU countries.

The banking sector is sophisticated and operating in adherence to internationalbanking regulations. The finance, real estate and business sector has been by far the largest contributor to South Africa's GDP contributing 21.5% of GDP in 2013. In 2011, the banking assets grew by 9%

to R3.4 trillion and the bank's capital ratio was 15.1%, (South African Reserve Bank, 2012, p.84).The South African financial sector hosts the JSE, founded in 1881, which is the 19th largest stock exchange in the world by market capitalization and the largest in Africa, (JSE,2015). The JSE now has about 400 listed companies and there is also foreign listing of companies. At the end of 2013, the JSE recorded market capitalization of $1,007 billion, (JSE, 2015).

The South African Reserve Bank (SARB), founded in 1793, is responsible for licensing and regulation of the banks in terms of the Banks Act and related regulations. The Financial Services Board is responsible for regulation and legislation of the non-bank financial institutions.

2.3.5. Swaziland

The Swazi financial sector is relatively underdeveloped and undiversified. It is made up of a few commercial banks with a number of branches across the country, some insurance companies, pension funds, and a stock market. The sector is dominated by the banking sector, which to some extent is well capitalized and profitable and dominated by South African banks. By March 2014, the commercial banks' liquidity ratio was at 24.8% (Central Bank of Swaziland, 2014).The stock market, which commenced trading in 1990, is small and undiversified, market capitalization as percentage of GDP stood at 0.064% in 2009, (Swaziland Stock Exchange, 2015).

The country's membership of the CMA has great influence on the development of the financial sector. In addition, a number of reforms and legislation have been put in place to aid the development of the sector. The Central Bank of Swaziland, established in 1974, is responsible for regulating and supervising the Swazi Banks.

3. LITERATURE REVIEW

3.1.Theoretical Literature

There are different approaches to the relationship between financial sector development and economic growth. These include among others the theory of financial intermediation, endogenous growth models, the development hypothesis, the neoclassical perspective and the causal approach.

3.1.1. Financial Intermediation

This is based on the McKinnon and Shaw (1973) hypothesis, whose implication is that restrictions on the banking sector in the form of interest rate ceilings, high reserve requirement and directed credit policies hinder economic growth. According to the McKinnon and Shaw (1973) hypothesis, financial liberalization permits financial deepening, reflecting a rising use

of intermediation by investors and savers. It also allows for efficient flow of funds. This, they argue, improves efficiency by transferring capital from less productive to more productive sectors, encourages saving and reduces constraints on capital accumulation.

3.1.2. Endogenous Growth Models

Endogenous growth theories focus on the relationship between financial development and economic growth on the basis that increase in productivity is most likely to be the channel of transmission from financial development to economic growth. The endogenous growth literature predicts financial depth to be a function of real income and real rate of interest. It further predicts that the positive relationship between financial depth and output is due to the complementarities between money and capital. A positive real rate of interest increases financial depth through increasing the volume and productivity of physical capital by discouraging investors from investing in low return projects. King and Levine (1993) employed endogenous growth literature to predict the relationship between financial depth and real interest rates, and found a positive relationship.

3.1.3. Development Hypothesis

The development hypothesis sees the financial system as a necessary input into the development process, despite the lack of consensus on the matter among economists (Kitchen, 1986). Kitchen (1986) argues that financial development has a dual effect on economic growth by enhancing the efficiency of capital accumulation and contributing to raising savings rate and hence investment. Levine (1997) also argues that the financial system plays a crucial role in development through reduction of information and transaction costs and that its efficiency in the cost reduction promotes savings, investment decisions, technological innovation, and long run growth rates.

3.1.4. Neoclassical Perspective

This perspective asserts that real savings is an important variable in determining investment and the level of output. The perspective holds that a real increase in investment can only be financed by a reduction in consumption. There can be no accumulation of financial assets independent of real investment, as the financial sector only intermediates funds between lenders and borrowers (Kilimani, 2005).

3.1.5. Causal Approach

Patrick (1966) identified two causal relationships between financial development and economic growth. One such relationship is the demand-following, which views financial development as dependent on upon the

growth of the real sector. He argued that creation of modern financial institutions is simply a reaction to the demand of the services by savers in the real economy. The other relationship is the supply-leading, which states that the creation of financial institutions occur before the demand to transfer resources from low growth sectors to modern growth sectors and the desire to promote an entrepreneurial response in the modern sectors.

3.2.Empirical Literature

A large amount of empirical literature exists on the effects of financial sector development on economic growth. As the debate unfolds, one area of concern to researchers has been the correct measure of financial sector development. There is no general consensus among economists that financial development is beneficial for economic growth. Some economists support the premise that among other factors, economic growth of a country is positively related to the degree of its financial sector development. Some are of the notion that financial development cannot be beneficial to economic growth.

King and Levine (1993) examined a cross section of about eighty countries for the period 1960 to 1989; found out that various measures of financial development are strongly linked to both current and future rates of economic growth. They constructed four measures of financial development. The first measure they constructed is the ratio of liquid liabilities to GDP, which they used to measure financial depth. The second measure they used is domestic credit by banks. The third measure used was credit to non-financial firms divided by total credit excluding credit to banks and lastly, they used credit to non-financial firms divided by GDP. To explore the channels through which financial development is linked to economic growth they used two sources of growth. The first source of growth examined was the rate of physical capital accumulation measured by per capita growth of physical capital and the ratio of investment to GDP. The other source of growth they used was the improvements in the efficiency with which society allocates capital measured as a growth residual after controlling for physical capital accumulation.

King and Levine (1993) found that higher levels of financial development are positively related to faster rates of economic growth, capital accumulation and economic efficiency improvements. They also found that a predetermined component of financial development is a good predictor of long run economic growth, and that higher levels of financial development are associated with high future capital accumulation, and future improvements in the efficiency with which capital is employed. Levine and Zervos (1998) extended the analysis by studying the empirical relationship between numerous measures of stock market development, banking development and long run economic growth. They measured the initial level of stock market liquidity by the

turnover ratio, the initial level of banking development by bank credit to the private sector as a ratio of GDP and found out that they were robustly correlated with future economic growth. They also confirmed that financial factors are an integral part of the growth process just like the works of King and Levine (1993).

Following the works of Calderon and Lui (2003), financial sector development measured by the ratio of broad money to GDP (M2/GDP), and the ratio of credit provided by financial intermediaries to the private sector to GDP (CREDIT/GDP) was found to have a positive effect on real GDP per capita. Even though they employed a different methodology, the Geweke decomposition, their results corroborated further the argument by King and Levine (1993) and Levine and Zervos (1998) that financial sector development contributes positively to economic growth. They included in their model other variables which are a set of controls and they included: initial human capital, initial income level, a measure of government size, black market exchange premium, and regional dummies. They also found bi-directional causality in the sample of developing countries with the supply-leading relationship being the main source of dependence. For industrial countries they found evidence of simultaneous causality with the demand-following relationship contributing more to the causal relationship.

The case of the ratio of broad money to GDP and the ratio of credit provided by financial intermediaries to the private sector to GDP as the measures of financial sector development is further confirmed by Ahmad and Malik (2009) on their empirical work on the effects of financial sector on 35 developing countries. They found that financial development affects per capita GDP mainly through its role on efficient resource allocation rather than its effect on capital accumulation. The authors further state that better functioning financial sector promotes domestic capital accumulation, which in turn spurs economic growth.

Other empirical works have singled out the importance of stock market development on economic growth. In their study, Masoud and Hardeker (2012), suggested that stock market development has a significant impact on economic growth. They identified the level of stock market influences on economic growth and how it is effectively done through liquidity provision, information sharing and monitoring, risk sharing and pooling. They also largely supported the notion that there is long run equilibrium relationship between stock market evolution and economic growth. This argument was also confirmed by Falahaty and Hook (2013).

Falahaty and Hook (2013) employed the fully modified ordinary least square and dynamic least square methods to investigate effect of financial development on economic growth in Middle East North Africa (MENA) countries for the period 1991-2009. The countries studied included Egypt,

Iran, Jordan, Kuwait, Saudi Arabia, Malta, Morocco, Oman and Tunisia. The study used two indicators of financial development namely: banking sector development and stock market development. Three measures of banking sector development were employed: private sector credit, domestic credit provided by the banking sector and liquid liabilities. Stock market development was also measured using three indicators; total share value traded, turnover ratio, and stock market capitalization. Life expectancy, population growth and investment share of real GDP per capita were used as measures of human capital, labour growth, and capital stock respectively. Real GDP per capita and non-oil real GDP per capita were used as measures of economic growth. They found strong evidence that financial development has a significant effect on economic growth, with the stock market indicators looking slightly stronger than the banking sector indicators.

In another study, Mercan and Gocer (2013) studied the effects of financial development on economic growth in the BRIC-T countries using panel data for the period 1989-2010. The BRIC-T countries are emerging markets and include: Brazil, Russia, India, China, and Turkey. The results showed that financial development increases economic growth by meeting the funding needs of the real sector. Financial sector development provides a source of funding by contributing to the effective distribution of savings and thereby supporting economic growth.

Okurut (2013), supported the notion that financial sector development measured by real money balances affect real GDP positively using panel data for the period 1990-2012 for the Southern Africa Development Community (SADC) countries. Just like in the works of Falahaty and Hook (2013), he included stock market development indicators like market capitalization, stocks traded and stocks turnover ratio which also proved to affect economic growth positively.

In a recent study, Grassa and Gazdar (2014) added to the body of literature by comparing the effects of Islamic financial development and conventional economic growth on economic growth of five Gulf Cooperation Council (GCC) countries. The five countries studied included: Bahrain, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates. They employed generalized least squares, OLS and panel framework using different indicators of financial development for the period 1996-2011. Their findings indicated strong support for the hypothesis that Islamic financial development leads to growth in the five countries by stimulating savings and investment.

3.3.Synthesis of the Literature

A significant amount of empirical work investigated the relationship between financial sector development and economic growth. Generally, most of the

literature found that financial sector development, measured by ratio of broad money to GDP, turnover ratio and market capitalization, has a positive and significant effect on economic growth measured by real GDP per capita. Despite the large volume of literature, there exist some gaps in the relationship between financial sector development and economic growth. First, most studies focus more on the causal relationship and the direction of causality. Secondly, some studies only use measures of financial development from the banking sector, neglecting the stock market while others only focus on the stock market measures. In addition, there is no consensus among scholars as to which is the correct measure of financial sector development. Lastly, studies employing panel data analysis use a combination of both developing and developing countries.

This study contributes to the literature in the finance-growth nexus by using a combination of banking sector and stock market measures as measures financial sector development. The study will also use a panel of integrated SACU countries, and also use a panel of the four small countries, the BNLS, which have almost similar economic characteristics and to avoid bias that may be arise because of the presence of South Africa, which is a lager economy as compared to the other four countries.

4. METHODOLOGY

4.1.Theoretical and Empirical Methodology

The impact of financial sector development on economic growth is usually examined on the basis of the aggregate production neoclassical growth model which takes the form:

$$Y = f(L, K, t) \tag{4.1}$$

Where Y, L, K denote output, labour and capital respectively, and t is technological progress. In his seminal work, Solow (1957) assumed Hicks-neutral technological progress, such that equation (4.1) becomes:

$$Y(t) = A(t) f(L(t), K(t)) \tag{4.2}$$

Where $A(t)$ is technological progress, the efficiency parameter, and t is time. To measure the impact of financial sector development on economic growth, the aggregate production is formulated as:

$$Y(t) = f(L(t), K(t), F(t)) \tag{4.3}$$

Where $F(t)$ denotes financial sector development as a function of time. Equation (4.3) essentially measures the neoclassical growth model without technological progress but with as an additional input. Taking time derivatives of equation (4.3) yields:

$$\dot{Y}(t) = \frac{\partial f}{\partial L}\dot{L}(t) + \frac{\partial f}{\partial K}\dot{K}(t) + \frac{\partial f}{\partial F}\dot{F}(t) \tag{4.4}$$

Where, for example, $\dot{Y}(t)$ denotes the derivative of $Y(t)$ with respect to time. Manipulation of equation (4.4) and considering that the variables are functions of time, we get:

$$\dot{Y} = \alpha\dot{L} + \beta(\frac{I}{Y}) + \gamma\dot{F} \tag{4.5}$$

Where $\frac{I}{Y} = \frac{\dot{K}}{K}$, the growth rate of capital, α, β, and γ are parameters, the elasticities of output with respect to L, K, and F respectively. Therefore, based on equation (4.5), the econometric model for this study is as stated in equation (4.6) below, Okurut (2013) employed this model for SADC countries.

$$Y_{it} = \alpha + \beta_i X_{it} + \gamma_i Z_{it} + \varepsilon_{it} \tag{4.6}$$

Where $i = 1, 2, ..., N$ are cross-sections, the SACU countries, and $t = 1, 2, ..., T$ are periods; Y is real gross domestic product per capita; X is a vector of proxies for financial sector development; Z is a vector of other regressors, it represents other determinants of economic growth besides financial sector development; is the intercept, and ε is the error term.[1]

The study seeks to utilize the following as proxies for financial sector development in SACU: money and quasi money as a percentage of GDP (M2GDP), domestic credit to the private sector (DCPRIV), stock market capitalization (MARKETCAP), and the stocks traded as a percentage of GDP (STOCKSGDP). Thus, the study intends to use two such indicators from the money market and two from the stock market. These indicators will provide a basis for comparison with the results of other studies, such as Okurut (2013), Akinlo and Akinlo (2009), Levine and Zervos (1998).

The other determinants of economic growth to be included in this study are: total labour force (LFTOT), physical capital, proxied by gross fixed capital formation (GFCF), human capital, proxied by secondary school enrolment (SESEC)[2], trade openness, the ratio of the sum of exports to imports to GDP (OPEN), inflation (CPI), and infrastructure development (TELE) measured by number of telephone lines per 100 people.

4.2.Discussion of Variables

Money and Quasi Money as Percentage of GDP (M2GDP)

This measures the monetization ratio, which measures financial depth and size of the financial sector. This measure has been used frequently by

previous researchers including, King and Levine (1993), Levine (1997), and Okurut (2013). Levine (1997) argues that the larger the size of the financial system, the more it is able to mobilize savings and channel them towards productive economic activities, and hence economic growth. With the rise in the ratio of broad money to GDP for the SACU countries, the variable M2GDP is expected to have a positive relationship with economic growth.

Domestic Credit to the Private Sector (DCPRIV)

The measure shows the extent to which funds are directed into private sector by financial intermediaries. Calderón and Liu (2003), argue that this is a better measure of financial development as it is more directly linked to investment and growth. Given the increase in domestic credit to the private sector for SACU countries over the years, we expect DCPRIV to have a positive relationship with growth.

Stock Market Capitalization (MARKETCAP)

This measure shows the growth of the stock market relative to GDP. It captures the size of the stock market. Over the years, market capitalization as percentage of GDP has been increasing for SACU countries (World Bank, 2014). Based on thisfact, market capitalization is expected to have a positive effect on economic growth.

Stocks traded as a percentage of GDP (STOCKSGDP)

This measure refers to the total value of shares traded. It shows liquidity of the stock market and complements market capitalization by showing whether market size is matched by trading World Bank (2014). Stocks traded as percentage of GDP has been low but increasing, therefore a positive effect on economic growth is expected.

The study also includes other variables which are believed to affect economic growth which are: total labour force (LFTOT), physical capital, proxied by gross fixed capital formation (GFCF); human capital; proxied by secondary school enrolment (SESEC); trade openness, the ratio of the sum of exports to imports to GDP (OPEN); and infrastructure development (TELE). These are expected to have a positive effect on economic growth. Inflation, measured by the consumer price index (CPI), is expected to have a negative effect on economic growth.

4.3.Techniques of Data Analysis

The study employspanel unit root teststo test for stationarity. These tests are the Im, Pesaran and Shin test, the Levin Lin and Chu test.The study also employs the Hausman Test, which specifies the correct specification of

the effects of the model. The test basically determines whether the individual effects and the explanatory variables are correlated. If they are correlated, the fixed effects model is the appropriate specification and if they are uncorrelated the random effects model is the suitable specification.The study utilizespanel data for the period 1993 to 2013 that was sourced from the World Bank Development Indicators.

5. EMPIRICAL RESULTS

5.1.Panel Unit Root Test

Over time, unit root tests have been common practice in time series data. It has been done in panel data just recently (Baltagi, 2005). There are a number of tests that can be employed to test for unit root in panel data. The study utilized two of the most commonly used tests, which are; those proposed by Levin Lin and Chu (2002), thereafter denoted as LLC and the Im, Pesaran and Shin (2003), thereafter denoted as IPS. The natural logarithm of the variables was taken to standardize the data before the unit root tests were carried out. The LLC and IPS unit root test results from E-views are presented in Table 1.

From Table 1 it is evident that the model contains a mixture of I (0), I (1) and I (2) variables. Three variables LFTOT, GFCF and CPI are found to be stationary at levels. Most variables are stationary at first difference, and they are; RGDPPC, LFTOT, MARKETCAP, STOCKSGDP, M2GDP, DCPRIV, and OPEN hence they are I (1). Only two variables, SESEC and TELE, arefound to be stationary at the second difference. These results are consistent for both the LLC and IPS. In conclusion, the results of the panel unit root support the hypothesis of the existence of unit root in most variables.It is therefore possible to test for the existence of a stable long-run relationship among the variables by applying panel cointegration method.

5.2.Cointegration Analysis

Since from the unit root tests performed we established existence of a unit root for some of the variables, it is necessary to test for the existence of a long run relationship. The presence of non-stationary variables implies the existence of cointegration among the variables, which in essence imply existence of a long run relationship between the variables. The Pedroni and Kao Residual cointegration test, which can accommodate more variables, was employed to test the I (1) variables for cointegration and the results are indicated in Table 2.

Table 1
Panel Unit Root Tests

		LLC		*IPS*		
Variable	*Level*	*Individual Intercept*	*Intercept +Trend*	*Individual Intercept*	*Intercept +Trend*	*Order of Integration*
RGDPPC	0	0.05504	-1.04243	1.77099	-0.42050	
		(0.5219)	(0.1486)	(0.9617)	(0.3371)	
	1	-5.53907	-5.02989	-3.79368	-2.59198	I(1)
		(0.0000)	(0.0000)	(0.0001)	(0.0048)	
LFTOT	0	-1.86376	-4.18791	-0.13035	-3.15007	I(0)
		(0.0312)	(0.0000)	(0.4481)	(0.0008)	
	1					
GFCF	0	-5.14111	-2.60600	-4.13112	-2.04310	I(0)
		(0.0000)	(0.0046)	(0.0000)	(0.0205)	
	1					
SESEC	0	0.50903	-5.92830	1.55754	-1.64948	
		(0.6946)	(0.0000)	(0.9403)	(0.0495)	
	1	2.20857	8.63221	-0.80699	-1.25119	
		(0.9864)	(1.0000)	(0.2098)	(0.1054)	
	2	-2.81114	0.32018	-4.15993	-1.77097	I(2)
		(0.0025)	(0.6256)	(0.0000)	(0.0383)	
MARKETCAP	0	-1.08023	0.40327	-0.78609	0.93945	
		(0.1400)	(0.6566)	(0.2159)	(0.8262)	
	1	-3.72357	-3.48669	-3.33169	-2.24225	I(1)
		(0.0001)	(0.0002)	(0.0004)	(0.0125)	
STOCKSGDP	0	-2.52480	-1.49318	-1.57810	-0.25021	
		(0.0058)	(0.0677)	(0.0573)	(0.4012)	
	1	-3.37941	-3.23015	-3.40163	-2.63731	I(1)
		(0.0004)	(0.0006)	(0.0003)	(0.0142)	
M2GDP	0	-0.61658	0.27354	0.79738	1.28192	
		(0.2688)	(0.6078)	(0.7874)	(0.9001)	
	1	-4.23938	-3.60406	-3.75129	-2.76249	I(1)
		(0.0000)	(0.0002)	(0.0001)	(0.0029)	
DCPRIV	0	-0.09706	-0.96415	0.66162	-0.84715	
		(0.4613)	(0.1675)	(0.7459)	(0.1985)	
	1	-2.41924	-0.83034	-3.54369	-2.03170	
		(0.0078)	(0.2032)	(0.0002)	(0.0211)	
CPI	0	-2.48666	-1.58841	-2.46369	-1.70437	I(0)
		(0.0064)	(0.0561)	(0.0069)	(0.0442)	
OPEN	0	-0.24633	0.34426	-0.31132	0.67918	
		(0.4027)	(0.6347)	(0.3778)	(0.7515)	
	1	-2.61411	-1.96738	-2.86463	-2.09525	I(1)
		(0.0045)	(0.0246)	(0.0021)	(0.0181)	
TELE	0	-2.73636	-2.30175	-1.06955	-1.05090	
		(0.0031)	(0.0107)	(0.1424)	(0.1467)	
	1	-1.51292	-0.17516	-2.39041	-1.01181	
		(0.0651)	(0.4305)	(0.0084)	(0.1558)	
	2	-4.50370	-3.34672	-6.05635	-4.65421	
		(0.0000)	(0.0004)	(0.0000)	(0.0000)	I(2)

Values in parenthesis are the P-values.

Table 2
Pedroni Panel Cointegration

No Deterministic Trend

RGDPPC MARKETCAP STOCKSGDP M2GDP DCPRIV OPEN

	Common AR coefs (within Dimension				*Individual AR coefs (between dimension*		
	v-statistic	*Rho-stat*	*PP-stat*	*ADF-stat*	*rho-stat*	*PP-stat*	*ADF-stat*
T-statistic	-0.587890	0.979927	-1.743535	-0.295092	1.698194	-2.671578	-0.304994
P values	0.7217	0.8364	0.0406	0.3840	0.9553	0.0038	0.3802

DETERMINISTIC TREND AND INTERCEPT

	Common AR coefs (within Dimension				*Individual AR coefs (between dimension*		
	v-statistic	*Rho-stat*	*PP-stat*	*ADF-stat*	*rho-stat*	*PP-stat*	*ADF-stat*
T-statistic	-0.411298	1.878433	-0.872347	0.654671	2.544546	-1.052065	1.298481
P values	0.6596	0.9698	0.1915	0.7437	0.9945	0.1464	0.9029

Table 5.2 shows the PedroniCointegration tests, on the upper panel is the cointegration results with no deterministic trend, and the lower panel shows the cointegration results with deterministic trend and intercept. From the results with no deterministic trend, it is evident that majority of the coefficients are not significant, leading to failure to reject the null hypothesis of no cointegration. Similarly, from the test with deterministic trend and intercept, majorityof the coefficients are not significant and therefore we fail to reject the null hypothesis of no cointegration.

Table 3
Kao Cointegration

	t-statistic	*Prob*
ADF	-2.285757	0.0111
Residual variance	0.017026	
HAC variance	0.018910	

Table 5.3 shows the results of the Kao cointegrationtest. From the table it is evident that the probability of the ADF statistic is significant at the 5% significance level, leading to a rejectionof the null hypothesis of no cointegration. We therefore, can conclude that according to the Kao test the variables are cointegrated.

The three tests employed to test for cointegration present mixed results. Out of three, two indicate that there is no cointegration, and only one shows the presence of cointegration. Since the majority indicates that there is no cointegration, which in essence indicates that there is no long run relationship between the variables, we can conclude that the variables are

not cointegrated. In other words, there is no long run relationship between the variables or if it exists then it is a weak long run relationship.

5.3.Financial Sector Development and Economic Growth

The empirical model was estimated using the panel OLS with fixed effects model for SACU countries covering the period 1993 to 2013. Three models were estimated, the first model included all the variables plus a first lag of the dependent variable and first lags of financial sector development indicators, and model II excluded market capitalization only. Since South Africa is significantly larger than the other four countries, in Model III South Africa was excluded to see if it would change the results substantially. The models were run in logarithms. After rejection of the Random effects model by the Hausman test, fixed effects were specified to take into account heterogeneity of the countries.

The model diagnostics of the estimated models show a high adjusted R-squared, indicating the high explanatory power of the models. The models also have significant F-statistics which is an indication that they were correctly specified. Furthermore, the models have Durbin-Watson statistics ranging between 1.62 and 2.14, which are higher than 1.5, and this is an indication of the absence of the problem of autocorrelation. The results of the estimated models are shown in Table 4

The results in Table 4 indicate that financial sector development plays a crucial role in economic growth. The results indicate a statistically significant relationship between the financial sector development and economic growth. From the results, a one percent increase in domestic credit to private sector leads to an increase in economic growth by about 0.008% and a percentage increase in stocks traded as a percentage of GDP leads to a 0.1% increase in real GDP per capita. The significant positive coefficients of domestic credit to the private sector (DCPRIV) and stocks traded as percentage of GDP (STOCKSGDP) shows the importance to economic growth of both the banking sector and the capital market. The results are consistent with the findings of other scholars (King and Levine, 1993; Ahmad and Malik, 2009; Okurut, 2013). It can be argued that both the banking sector and the capital market are important for economic growth in SACU, with the stock market being more significant than the banking sector.

On the other hand, the coefficient of M2GDP is negative and significant, which is contrary to the expected sign. It is evident that an increase in M2GDP by 1% leads to a decline in real GDP by about 0.8%. However, this can be attributed to the fact that in developing countries, a rise in M2GDP may lead to higher inflation rates, which may lead to failure to translate private savings into viable investment and consequently impacting negatively on economic growth. Market capitalization (MARKETCAP), which

is the other measure of financial sector development, has a positive coefficient even though it is insignificant. This can be due to the fact that SACU stock markets are illiquid. However, the lagged value of MARKETCAP has a positive and significant coefficient, implying a positive relation between economic growth and market capitalization of the previous year.

Table 4
Financial Sector Development and Economic Growth

Dependent variable RGDPPC

VARIABLE	*MODEL I*	*MODEL II*	*MODEL III*
CONSTANT	—18.69496	-16.86805	—8.537894
	(-3.585419)*	(-3.458571)*	(-4.578015)*
LFTOT	1.680426	1.534968	0.655935
	(4.070625)*	(3.902285)*	(4.562743)*
GFCF	0.043379	0.037865	0.001598
	(0.993246)	(0.896992)	(1.019607)
D(SESEC,2)	—5.916101	-5.593222	0.214735
	(-3.500786)**	(-3.623349)*	(2.343375)***
D(MARKETCAP)	0.010259		0.193258
	(0.127084)		(2.651974)**
D(STOCKSGDP)	0.102461	0.088501	0.104580
	(2.460858)***	(2.145300)***	(4.805239)*
D(M2GDP)	-0.849827	-0.802263	-0.143828
	(-3.675078)*	(-3.351525)**	(-0.641896)
D(DCPRIV)	0.007334	0.007279	0.530303
	(2.452660)**	(2.408308)**	(1.947739)***
CPI	-0.100539	-0.108999	-0.051284
	(-1.960961)***	(-2.14859)***	(-2.749668)**
D(OPEN)	-0.005566	0.093227	0.249219
	(-0.015332)	(0.259821)	(0.833666)
D(TELE,2)	0.044576	-0.051814	0.450385
	(1.101359)	(-0.089843)	(1.980785)***
RGDPPC(-1)	-0.755844	-0.728848	-0.000129
	(-4.764184)*	(-3.856528)*	(-3.359908)*
GFCF(-1)	-0.008973	-0.007156	-0.001955
	(-0.191065)	(-0.145898)	(-1.250311)
DCPRIV(-1)	-0.140167	-0.098746	
	(-0.604822)	(-0.404858)	
MARKETCAP(-1)	0.296074	0.279804	0.010069
	(2.433784)**	(2.240670)**	(2.879805)**
	MODEL DIAGNOSTICS		
R- squared	0.906778	0.890589	0.716500
Adjusted R-squared	0.693700	0.685445	0.483029
f-statistic	4.255609	4.341271	3.068906
Prob(F-statistic)	0.029848	0.021082	0.015283
Durbin –Watson statistic	1.740123	1.629564	2.135609

Values in parenthesis are the t-statistics and *, **, *** denote significance at the 1%, 5% and 10% levels

From examination of other factors that determine economic growth, it is evident that total labour force (LFTOT) has a positive and significant

impact on economic growth. A larger labour force can affect economic growth on both the demand and supply side; on the supply side it provides a source of efficient human capital, and on the demand side it is a source of consumption for goods and services. Although insignificant, gross fixed capital formation also has a positive sign as expected.

Secondary school enrollment has a negative and statistically significant coefficient and the expectation was that it positively contributes to economic growth. This could be attributed to the fact that schooling can create human capital and the growth of human capital may have a negative impact on total factor productivity and hence a negative impact on economic growth. This is an indication that secondary school education is not providing the type of education required for economic growth and this could be attributed to a number of reasons. First, the issue of quality of education; it is worth noting that secondary school enrollment measures only the quantity and not the quality of education.Secondly, there can be a high level of attrition from secondary to tertiary combined with high unemployment among the youth. Lastly, it is possible that a better measure of human capital is college and university education as well as vocational and tertiary education.

Inflation, measured by CPI, has a negative and significant coefficient as expected, showing that inflation negatively affects economic growth. This is based on the argument that inflation reduces the value of money, forcing people to use their savings to compensate for the increase in prices, which implies that fewer funds are made available for investment and hence lower economic growth. This result is consistent with the findings of other scholars (Ahmad and Malik, 2009; and Okurut, 2013). Trade openness (OPEN) and infrastructure development (TELE) had no significant effect on economic growth even though their coefficients are positive. The expectation was that both OPEN and TELE have a positive and significant effect on economic growth.

In Model III, the model was run using data from the BNLS countries, South Africa was excluded. The main reason for excluding it was that it is relatively large and has a relatively developed financial sector compared to the other four countries and its presence might bias the results. From the results, it is evident that even without South Africa; financial sector plays a positive and significant role in economic growth of the BNLS countries. The coefficients of most measures of financial sector development are positive and significant. MARKETCAP, STOCKSGDP and DCPRIV all have positive and significant coefficient implying that the financial sector through both the banking sector and the capital market contributes positively to economic growth. The model further shows other significant determinants of economic growth and they include; LFTOT, SESEC and TELE which contribute

positively to economic growth. CPI on the other hand has a negative relationship with economic growth.

6. CONCLUSIONS AND POLICY RECOMMENDATIONS

6.1.Summary and Conclusions

A number of studies, both theoretical and empirical, have been carried out to examine the relationship between financial sector development and economic growth employing different methodologies. The studies carried out have provided mixed results; some found a positive relationship, some studies found a negative result, and for others no relationship was found. Due to the disparities of the SACU countries; the large size of South Africa relative to the other four countries, and the history of official integration which poses a problem of having a union within a union, it was found necessary to study the relationship between financial sector development and economic growth in SACU.

The present study utilizes panel data analysis to investigate the relationship between financial sector development and economic growth in SACU. The study utilizes a number of measures for financial sector development and they include both the banking sector and the capital market measures. Economic growth is measured by real GDP per capita. The study also includes other variables which are believed to have an effect on economic growth. The study goes further to investigate the relationship between financial sector and economic growth in the BNLS countries.

The major finding of the study is that financial sector development, measured by domestic credit to private sector and a stock traded as percentage of GDP, contributes positively to economic growth and can be very helpful to SACU countries to grow their economies. It can be concluded that both the banking sector and the capital market are important for economic growth in the sense that they make available funds for productive investment. In addition, total labour force has a positive and significant effect on economic growth. Surprisingly and contrary to expectation secondary school enrollment is found to have a negative and significant effect on economic growth for the SACU countries. Inflation was also found to have a negative impact on economic growth, consistent with economic theory and previous researches. Other variables like: OPEN and TELE are found to be statistically insignificant, even though, they had the expected signs. The results hold even when South Africa, the SACU large economy, is excluded from the model.

6.2.Policy Recommendations

The financial sector has proved to be playing a significant role in Economic growth; it is therefore advisable for SACU countries continue taking

measures aimed at promoting the growth of both the banking sector and the capital markets. The recommendations are as follows;

First, the absence of particular types of financial institutions is some countries has proven to be hindering the contribution of the financial sector to economic growth. It is therefore recommended that, the necessary financial institutions be established. Even though this could take time due to policy making bureaucracies, it would be beneficial for the SACU countries to identify the missing financial institutions and take action to fill them. For example, establishment of a stock market in Lesotho.

Secondly, reforms to increase stock market liquidity and liberalization of the financial sector should be implemented. Although the debate of whether to regulate or deregulate the banking sector still continues, it is recommended that regulation be done as deemed necessary. It is advisable for the small SACU economies to try to resolve structural and institutional irregularities to strengthen their financial sectors. In addition, the financial sector should be closely monitored to mitigate against potential risk especially arising from non-banking financial institutions

Thirdly, it has been found that inflation poses a major problem to both economic growth and financial sector development. It is therefore recommended that the SACU countries should try as much as possible to curb inflation and maintain it at desirable and manageable levels.

Lastly, given that SACU is a regional trading bloc, it is recommended that the SACU countries establish an integrated financial sector and make use of cross border financial institutionsso as to realize the benefits on a larger scale and for economies of scale.

Notes

1. Equation (5) is the theoretical equation, where growth depends on labour, capital and financial development. In equation (6) besides L, K and F, additional factors affecting economic growth are considered. The transition from equation (5) to equation (6) is based on the fact that there are other factors, besides those in equation (5), which determine economic growth as stated in equation (6).
2. The neoclassical model with endogenous growth augments the Solow model by improvements in education particularly secondary school enrollment; therefore secondary school enrollment is introduced in the model to take into account productivity.

References

Ahmad, E. and A. Malik (2009), "Financial Sector Development and Economic Growth: An Empirical Analysis of Developing Countries,"*Journal of Economic Cooperation and Development,* Vol. 30(1): 17-40.

Akinlo, A.A. and O.O. Akinlo (2009), "Stock Market Development and Economic Growth: Evidence from Seven Sub-Sahara African Countries," *Journal of Economics and Business,* Vol61(2): 162-171.

Alfaro, L., *et al*. (2004), "FDI and Economic Growth: The Role of Local Financial Markets," *Journal of International Economics,* vol. 64(1):89-112.

Aziakpono, M.J. (2004), "Financial Development and Economic Growth in Southern Africa," in Grandes, M. and N. Pinaud, (Eds), *Reducing Capital Cost in SouthernAfrica*, Paris: OECD Publishing, 2005, pp. 137-167.

Baltagi, B. H. (2005), *Econometric Analysis of Panel Data,* Third Edition, Manhattan: John Wiley and Sons, Inc.

Bank of Botswana.(2012), *Annual Report 2012,* Gaborone.

Bank of Namibia (2014).*Financial Stability Report,* March 2014, Windhoek.

Bank of Namibia (2010), *Namibia Financial Sector Strategy: 2011-2021,* Windhoek.

Bank of Lesotho, (2013), *Annual Report,* December 2013, Maseru.

Calderon, C. and L. Liu (2003), "The Direction of Causalitybetween Financial Development and Economic Growth," *Journal of Development Economics*,vol. 72(1):321–334.

Central Bank of Swaziland. (2014), *Annual Report*, December 2014, Mbabane.

Dabla-Norris, E *et al* (2010), "FDI Flows to Low-Income Countries: Global Drivers and Growth Implications,"*IMF Working Paper* No. 10/132.

Dritsaki, M., C. Dritsaki and A. Adamopoulos (2004), "A Causal Relationship Between Trade, Foreign Direct Investment and Economic Growth for Greece," *American Journal of Applied Sciences* vol.1(3): 230-250.

Falahaty, M. and L. S. Hook (2013), "The Effect of Financial Development in the MENA Region," *Journal of Economic Cooperation and Development,* Vol.34 (3): 35-60.

Grassa, R. and K. Gazdar (2014),"Financial Development and Economic Growth in GCC Countries ", *International Journal of Social Economics,* Vol. 41 (I6):493 – 514.

Hammouda, H.B., Karingi, S.N., Njuguna, A.E., and Jallab, M.S. (2009). "Growth, productivity and diversification in Africa, *Journal of Productivity analysis,* Vol. 33(2): 125 -146.

Hassan, M.K, B. Sanchez and J. Yu (2011), "Financial Development and Economic Growth: New Evidence from Panel Data," *The Quarterly Review of Economics and Finance,*Vol 51: 88–104.

Hermes, N. and R. Lensink (2004), "Foreign Direct Investment, Financial Development and Economic Growth," *Journal of Development Studies, Taylor and Francis Journals*, Vol. 40 (1): 142-163.

Jeffries, K (2010), "Botswana's financial sector overview: 2009/10," *Botswana: Selected issues and statistical appendix***.** IMF Country Report No. 04/212.

Johannesburg Stock Exchange (2015); available online *https://www.jse.co.za/*

Kagochi, J.M. *et al* (2013), "Does Financial Development Hold the Key to Economic Growth?:The Case of Sub-Saharan Africa," *Journal of Developing Areas*, Vol. 47(2):61-79.

Kelly, R. and G. Mavrotas (2008), "Savings and Financial Sector Development: Panel Cointegration Evidence from Africa," *European Journal of Finance,* vol.14:563-581.

Kilimani N. (2005), "Financial development and economic growth: Empirical evidence from Uganda," Unpublished MA (Economics) Dissertation, University of Botswana.

King, R. and R. Levine (1993), "Finance, Entrepreneurship and Growth: Theory and Evidence," *Journal of Economics*, Vol.32 (3):513-542.

(1993), "Finance and Growth: Schumpeter Might Be Right," *Quarterly Journal of Economics,* vol. 108 (3):717-737.

Kitchen, R. L. (1986), *Finance for the Developing Countries,* Chichester: Wiley

Levine, R. (1997), "Financial Development and Economic Growth: Views and Agenda," *Journal of Economic Literature*, Vol 35(1):688–726.

Levine, R. and S. Zervos (1998), "Stock Markets, Banks and Economic Growth", *American Economic Review*, Vol. 88:537-558.

Masoud, N. and G. Hardaker (2012), "The Impact of Financial Development on Economic Growth," *Studies in Economics and Finance,* Vol. 29(3):148 – 173.

McKinnon, R. (1973).*Money and Capital in Economic Development*. Brookings Institutions: Washington DC.

Mercan M. and I. Göçer (2013), "The Effect of Financial Development on Economic Growth in BRIC-T Countries: Panel Data Analysis,"*Journal of Economic and Social Studies* Vol. 3(1):199-216.

Namibia Stock Exchange (2012), *Annual Report,* December 2012, Windhoek.

Nielsen, H., E. Uanguta and S. Ikhide, (2005), "Financial integration in the common monetary area," *South African Journal of Economics,* Vol. 73(4):710-721.

Odada, J.E. and Godana, T. (2002), "Sources of Growth in Africa: A case study of Namibia. *University of Namibia Research paper.*

Okurut, F.N. (2013), "Financial sector development and economic growth in Southern Africa Development Community (SADC)," *Indian Development Review,* Vol. 11(2):205-219.

Pagano, M. (1993), "Financial Markets and Growth: An Overview", *European Economic Review*, Vol. 37: 613-622.

Patrick, H.T. (1966), "Financial Development and Economic Growth in Underdeveloped Countries, *"Economic Development and Cultural Change,* Vol.14 (2):174 –189.

Reserve Bank of South Africa (2012).*Annual Report,* December 2012, Pretoria.

SACU.2014a. *History of SACU.* Available online; *http://www.sacu.int/*

SACU.2014b. *Objectives of SACU.* Available online; *http://www.sacu.int/*

Shaw, E. S. (1973). *Financial Deepening in Economic Development.* Oxford University Press: New York.

Shen C. and C. Lee (2006), "Same Financial Development yet Different Economic Growth: Why?", *Journal of Money, Credit and Banking,* Vol. 38(7):1907-1944.

Siphambe H.K. *et al* (2005). *Economic Development of Botswana: Facets, Policies, Problems and Prospects*. Bay Publishing: Gaborone.

Swaziland Stock Exchange, (2015). Available online; *http://www.ssx.org.sz/*

World Bank (2014).*World Development Indicators*. Available online;*http://data.worldbank.org/data-catalog/world-development-indicators*.