academicJournals

Vol. 9(7), pp. 68-79, July 2017
DOI: 10.5897/JEIF2017.0849
Article Number: 203E7F765505
ISSN 2006-9812
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http://www.academicjournals.org/JEIF

Journal of Economics and International Finance

Full Length Research Paper

International financial centres, global finance and financial development in the Southern Africa Development Community (SADC)

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Received 12 May, 2017; Accepted 21 June, 2017

The study evaluates the effects of global/international finance on financial development, as well as analyse the options for enhancing the flow of global finance, in the Southern Africa Development Community (SADC) region. The study is motivated by the seemingly disconnection between global finance and international financial centres and financial development in the SADC region. The study uses a cross-country dynamic panel model, and estimations established that countries with international financial centres contribute nearly double to pooled financial development in the SADC when compared to countries without. It was also established that global finance that is currently received by SADC countries has no effect on financial development in these counties. The study recommends strategies through which South Africa, a globally connected country, could link other SADC countries to global financial markets and help in driving the development of financial systems in these countries.

Key words: Financial development, global finance, international financial centres, Southern Africa Development Community (SADC).

INTRODUCTION

Financial sectors of countries are directly and indirectly affected by global financial developments. For the Southern African Development Community (SADC)[1] countries, inquest on the impact of international finance is inevitable given that the region has the highest concentration of international financial centres compared to other regions in Africa. The region has four countries, Botswana, Mauritius, South Africa and Seychelles that have international financial centres. Among these centres, South Africa and Mauritius are rated among the world's global financial centres and are two of the only three rated in Africa (Global Financial Centres Index, 2015). In addition, South Africa is a member of the BRICS (Brazil, Russia, India, China and South Africa) countries, which is a global economic zone of emerging economies that has global influence. This bloc has already made strides in financial development by establishing a development bank, the New Development

[1]SADC is a Regional Economic Community comprising 15 Member States; Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.

Bank. Additionally, SADC countries, just like other developing countries, have access to global finance through multilateral institutions such as the World Bank, International Monetary Fund (IMF) and the African Development Bank (AfDB) as developmental assistance.

The presence of international financial centres and of a globally linked financial system is expected to enhance financial development in SADC countries, given that finance respond to proximity and geography (Mobolaji, 2010; Bara, et al., 2016) Literature explains the importance of international financial centres and global finance in driving financial sectors of developing economies by attracting capital from the developed economies (Obstfeld, 2007; Adam et al., 2015; World Bank, 2010). Financial centres help domestic and foreign investors in developing countries access efficient institutions, which are often unavailable locally (Sharman, 2009). For foreign investors, International financial centres (IFCs) ease the path of entry into developing countries (Sharman, 2009). Literature also indicates that SADC countries are recipients of global finance through developmental assistance, as noted by SADC-DFRC (n.d).

This notwithstanding, the impact of global finance and international financial institutions in SADC has been evident and visible. The development finance received by majority of SADC countries has not transformed the financial sectors of the recipient countries. If anything, this finance, particularly developmental assistance, created a problem of debt and arrears, which most developing countries are grappling with. Countries are realising low inflows of private capital and foreign direct investments compared to other developing regions. Furthermore, most SADC countries are disconnected from global markets, due to their size and underdevelopment relative to global markets. Literature does not indicate the impact of global finance and significance of international financial centres in enhancing financial development in SADC.

On that background, two issues arise, firstly, whether presence of international institutions and global financial flows are of any positive effect to financial development in SADC. Secondly, how South Africa, a financially developed and connected country, could connect the region to global financial markets. As such, an empirical investigation to assess the effects of global finance and international financial centres on financial development in SADC and how other regional countries can be connected to global financial markets is, therefore, imperative. This study evaluates the effects of global/international finance on financial development in the SADC region. The study also highlights the options for enhancing the flow of global finance into the region. The motivation is to provide empirically evaluated information on the influence of global finance and international financial centres in enhancing financial development in the region. Further, the study is motivated by the need to outlay options of linking SADC to global markets.

LITERATURE REVIEW

Global finance is the financial system consisting of regulators and financial institutions that conduct their business on an international level, beyond national or regional level (http://finance.laws.com/global-finance). As recently as 1990, financial flows into developing countries from public institutions (e.g., the World Bank) were larger than those from private sources (Anderson, 1998). Foreign direct investment (FDI) flows tend to be more resilient than portfolio and bank flows, for example overseas development assistance (ODA), flows tend to be volatile and pro-cyclical with adverse consequences for macroeconomic management, especially for poor, aid-dependent countries (Antonio, 2010 citing Bulir and Hamann, 2008).

Access to global finance, outside development assistance, is normally through financial centres. Financial centres are geographical locations with agglomeration of branches and subsidiaries of financial intermediaries (Gehrig, 2000). Financial centres provide an interface between banks across time, space, currency and risk (Michie, 2012). Financial centres have existed throughout history from ancient, nearly legendary, entre-ports such as Babylon, Samarkand, Constantinople, Marrakech or Timbuktu through to London, New York, Paris, Tokyo or Shanghai (Yeandle et al., 2005). The hierarchical structure of the financial sector is an important characteristic of financial centres (Palmberg, 2012). Reed (1981) identified five distinctive categories from centres that serve a city, province, and nation to those that provide international services to contiguous countries (regional centres) to global financial centres.

An international financial centre (IFC) is a country or jurisdiction that provides financial services to non-residents on a scale that is incommensurate with the size and the financing of its domestic economy (Thomas et al., 2013). International financial centres (IFCs) are countries and territories with low tax rates and other features that make them attractive investment locations (Hines, 2009). A global financial centre is a place (city) where a business is conducted between organisations from all over the world, using financial instruments from

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all over the world (Yeandle et al., 2005). The first precondition for financial centre development is to form information hinterland and heartland in which financial firms can find the most accessible point for the exploitation of information flows (Zhao, 2003). Developing a financial centre involves building sophisticated human and institutional infrastructure, management of demand and supply of financial services, support of the entire range of financial institutions and participation of domestic and international entities (Thomas et al., 2013). Scale of economies, economic development, international trade, history, transportations and communications all contribute to the development of international financial centres (Michie, 2012).

Zhao (2010) identified three strands of theories to explain development of financial centres. First is the geography of finance theory that deals with the location of transactions (information centres) instead of economic production (economic hinterland) (Gordon, 2002). Second is the law and finance theory that explains financial centre development from the Anglo-American and the Continental European legal systems (Zhao, 2010). Third is the time zone theory that defines the segmentation of global markets along time zones (Poon, 2003; Wójcik, 2009). The International Financial Centres Development (IFCD) Index for 2014 reports that technology, especially emergence of real-time telecommunications networks, is bringing challenges to the traditional financial system.

Global finance and financial development

The role of global finance on financial development of developing countries is well documented. Global non-bank financial markets and institutions can drive competitiveness of banking sectors in developing countries (Obstfeld, 2007). Investment structures and financial intermediation available in IFCs help domestic and foreign investors in developing countries access efficient institutions, which are often unavailable locally (Sharman, 2009). For foreign investors, IFCs ease the path of entry into developing countries. The City of London (2011) reported that firms located in eight major International Financial Centres account for the bulk of financial service provision in the European Union.

Domestic financial development makes capital inflows from abroad more productive and over the longer term, an internationally open financial system is likely to be more competitive, transparent, and efficient (Obstfeld, 2007). Although African (SADC included) countries are known for poor regulatory systems, there has been increased participation in anti-money-laundering and combating the financing of terrorism and increased adoption of Basel global banking standards (Adam et al., 2015). Regional and pan-African banks have expanded rapidly, presenting opportunities to increase financial depth, banking efficiency and availability of long term finance (Adam et al., 2015). Financial globalization can lead to huge benefits in the long-run, particularly to the development of the financial system (Obstfeld, 2007).

The downside of global finance to developing countries is that it exposes the countries to financial crises, volatilities and contagion of global financial markets (Schmukler, 2004). Developing countries do not have absorption mechanisms to deal with effects of crises and volatility of markets. International standards on anti-money laundering and combatting financing of terrorism is leading to a withdrawal of correspondent banking and having a dampening effect on capital flow and remittances (Adam et al., 2015). African regulators fall under the risk of being pressured to implement standards too quickly and in ways they consider suboptimal (Adam et al., 2015). Growth in regional banks also carries the risk of being an additional channel for contagion in case of crises and pauses regulatory concerns on systemic risk and money laundering (Adam et al., 2015).

Empirical literature on global finance and financial development

African countries registered a number of positive accomplishments in the last decade including, large-scale non-FDI cross-border capital inflows, rapid growth of regional and pan-African banks and expansion of mobile banking (Adam et al., 2015). The World Bank (2010) indicated that the financial boom in high income countries from 2000 to 2007, together with financial innovation, generated a reduction in the price of risk, expansion in domestic credit and a rise in foreign capital inflows in developing countries.

The consequent fall in the price of risk resulted increased net capital inflows, a fall in spreads on foreign debt by 488 basis points, a 5% increase in domestic credit as a share of GDP and a fall in domestic interest rates (World Bank, 2010). These developments were subsequently followed by tripling in the valuation of equities traded on developing-economy stock markets, increase in the supply of finance available to entrepreneurs, influx of new investments and adoption of newer financial technologies (World Bank, 2010). For the Sub-Saharan Region, the World Bank (2010) reported that positive effects were registered mostly in countries connected to global financial markets. The financial boom triggered a seven percentage points increase in bank credit (relative to GDP), mainly reflecting a 12 percentage point rise in South Africa (World Bank, 2010).

A number of SADC countries have accessed global finance through multilateral lending institutions; governments, aid and investment agencies as development finance (SADC-DFRC n.d). Development finance has created a problem of debt overhang in most developing countries. Debt has a negative impact on

economic and financial development. Government debt growth weakens private credit growth as public debt ‘crowds out’ private debt (Ayadi et al., 2013). In countries with lower financial depth, public borrowing has adverse effects on financial development and macroeconomic outcomes (Ismihan and Ozkan, 2010).

Mahembe and Odiambo (2014) found that privatisation, liberalisation, economic structural-adjustment programmes and regulatory reviews led to an increase in FDI inflows into SADC countries post 2000. Mingiri et al. (2016) revealed that Foreign Direct Investment, cross-border flows and remittances have a positive impact on economic growth in the region, whilst Official Development Assistance is not. Flows of official development assistance and development finance have had mixed effects on SADC. The SADC DFRC (n.d.) found that official development assistance to SADC countries (1978-1997), did not correlate with growth and investment performance. Rather, in five SADC countries (Malawi, Namibia, Tanzania, Zambia and Zimbabwe) a negative correlation between official development assistance and domestic saving was found, suggesting that official development assistance substituted domestic public savings (SADC-DFRC n.d).

Empirical literature on financial centres

In SADC, there are international financial centres in South Africa, Mauritius, Seychelles and Botswana (Waris, 2014). Of these centres, South Africa and Mauritius are rated among the world’s global financial centres and are among the only three globally rated centres in Africa as rated by the Global Financial Centre Index (2015).

South Africa - Johannesburg

Johannesburg is South Africa’s largest city, the centre of South Africa’s economic hub and is located in the world’s largest gold mining area. Johannesburg generates 16% of South Africa’s GDP and attracts international banks from all over the world (Harlow, 2013). The Global Competiveness Report 2010-11 rated South Africa’s securities exchange regulation as the best in the world in terms of regulatory standards, corporate governance practices, adherence to world-class accounting and auditing standards and a well-developed insurance sector (World Economic Forum, 2012). The Xinhua-Dow Jones International Financial Centre Development (IFCD) Index for 2014 rated Johannesburg 40 out of 45 cities.

The Xinhua-Dow Jones also compared financial centres in the BRICS countries. Johannesburg fared well against other cities in almost all measures except in confidence index of financial centres and currency international recognition. Confidence analysis investigates interviewees’ confidence for the city to become a global financial centre. The degree of currency international recognition compares interviewees’ recognition of currencies of these BRICS countries. Investors and market participants do not have strong confidence in Johannesburg becoming a global financial centre. In terms of currency, the South African Rand has the lowest popularity among other BRICS currencies, indicating that the currency is still a regional currency. The rating on currency is in line with the findings of this study, in Chapter Eight, that South Africa’s money side is positively affected by spatiality, implying its dominance in neighbouring countries.

Significant progress has been made by South Africa to enhance participation of other countries in its financial sector through its ‘financial centre for Africa' strategy (Creamer, 2006). Johannesburg Securities Exchange (JSE) established the Africa Board to facilitate dual listings to firms outside South Africa. The Africa Board provides an opportunity for companies to gain a second listing on the JSE to complement the one they already have on their domestic exchange. In supporting investment in Africa, South Africa relaxed foreign-currency-asset limits on South African banks. It also allowed foreign based companies to access local institutional and retail investors on both the Johannesburg Securities Exchange (JSE) and the South Africa Bond Exchange (Creamer, 2006). In addition, the Industrial Development Corporation and the Development Bank of Southern Africa are additional sources of debt capital for regional projects (Creamer, 2006).

Mauritius

Mauritius is increasingly being recognised as a platform for investment into African countries due to its location in servicing and linking African markets to Asia (TMF Mauritius Limited, 2015). Mauritius has a substantial network of treaties and double-taxation avoidance agreements, making it a gateway for routing funds into Africa and India (UNCTAD, 2013). Mauritius instituted a vast array of financial and legal reforms among them is the establishment of a Global Business sector in 1988, whose growth has been attributed to timely fiscal incentives, a flexible regulatory framework and investment promotion and protection (Jankee, 2014). The global business sector of Mauritius supported by a growing banking sector and profitable Stock Exchange, gave a strong impetus to the Mauritius IFC (Mauritius International Financial Centre, 2011). There has been increased cooperation between Mauritius and South Africa in recent years as South African companies are now looking at other financial centres closer to home (Matutu, 2014).

Botswana

Botswana International Financial Services Centre (IFSC)

is a government agency established in 2003 to develop Botswana as a hub for cross-border financial and business services into Africa and the region (OECD, 2010). Botswana's IFSC supporting regulatory framework provides regional and international banks, international business firms, insurance companies and investment funds as an advantageous platform to penetrate new markets (www.bitc.co.bw). The attraction of the IFSC is the generous tax benefits that are granted to IFSC entities (OECD, 2010).

Seychelles

Seychelles, as an offshore financial centre was established in December 1994, following the enactment of legislation providing for international business companies and international trusts (Mitchell n.d.). The rise of Seychelles as an international financial centre has been driven by sound regulation (Fanny, 2009). The Seychelles International Financial Centre offers favourable tax structures, low government fees, and an international trade zone, all created and supported by favourable legal and regulatory regimes (Axis, 2015).

METHODOLOGY

Generally, studies on financial centres, including those of Seo (2011), Yeandle and Danev (2014) and Bourse Consult (2013), are qualitative and uses comprehensive review of literature and to an extent descriptive statistics approaches. Zhao (2010) reviews historical experiences of development of global financial centres based on their developmental conditions, pathways and determining factors. PricewaterhouseCoopers (2015) undertook a review of literature of over 60 secondary sources to consider the concept of a global financial centre, and suitability of London for social impact investment. Thomas et al. (2013) used Five Forces Industry Analysis to assess the competitive resources of Dubai as an International Financial Centre (IFC).

The current study also uses a qualitative approach particularly on strategies to enhance linkages of SADC and global financial markets. However, to prove the role and impact of international financial centres and global finance on financial development in SADC, the study applied standard cross country dynamic panel models as explained subsequently.

Empirical model

The study tests the effects of international financial centres and global finance on financial development in SADC using standard cross-country dynamic panel models. A dummy variable for international financial centres that takes a value of one when a country has an international financial centre and zero otherwise is introduced. Due to the presence of a dummy variable, the study only uses Random Effects to estimate the panel model. In line with that, the study chose the Wallace and Hussain estimator of component variances that uses only OLS residuals ahead of other methods such as that of Swamy and Arora, and Wansbeek and Kapteyn who used fixed effects residuals (Phiromswad, 2007). Below are the empirical models to estimate the impact of international financial centres and global finance on financial development in SADC.

International Financial Centres and Financial Development Model

The model used to analyse the effects of financial centres on financial development in SADC is stated in Equation 1.

$$FD_{it} = \beta_1 + \beta_2 FD_{it-1} + \beta_3 GGDPPC_{it} + \beta_4 TO_{i,t} + \beta_5 FO_{it} + \beta_6 RIR_{i,t} + \beta_7 IFC_{it} + \varepsilon_{it} \quad (1)$$

Where, FD is financial development (as measured by four variables namely Domestic Credit, Liquid Liabilities Bank Credit to Private Sector and Broad Money (all proportionalised to GDP); RINT is real interest rate, and TO and FO are trade and financial openness respectively; IFC is a dummy for International Financial Centres. The IFC dummy variable takes a value of one when a country has a financial centre and zero otherwise. Growth in Gross Domestic Product per Capita (GGDPPC) supports financial development though increased demand for financial services. Trade and Financial Openness are expected to aid increased flows of investment and international finance into a country. Real interest rates are also an important determinant in deciding placement of investment portfolios even across countries.

Global Finance and Financial Development Model

The study again uses the Dynamic Panel Model to estimate the effects of international/global finance on financial development in SADC (Equation 2). Estimations were carried out using fixed and random effects.

$$FD_{it} = \beta_1 + \beta_2 FD_{it-1} + \beta_3 GGDPPC_{it} + \beta_4 TO_{i,t} + \beta_5 FO_{it} + \beta_6 RIR_{i,t} + \beta_7 FDI_{it} + \beta_8 ODA_{it} + \varepsilon_{it} \quad (2)$$

Where FDI is Foreign Direct Investment and ODA is Official Development Assistance. The variables used to measure global finance are Foreign Direct Investment (FDI) and Official Development Assistance (ODA)[2]. Foreign Direct Investment refers to investments involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy in an enterprise residing in an economy other than that of the foreign direct investor (UNCTAD, 2007). Foreign direct investment remains the largest source of private financial flows (Anderson, 1998). Official Development Assistance (ODA) is defined as government aid designed to promote the economic development and welfare of developing countries (OECD, 2016). The rationale for using these variables as measures of international finance is that most SADC countries have received this kind of finance more than other forms of international finance.

Variables for financial development

This study used total domestic credit by the banking sector to GDP; liquid liabilities, broad money and bank credit to private sector to GDP (Private credit) as proxies for measuring financial development. The rationale of using a number of measures is that what represents an appropriate measure of financial development proved to be controversial in the literature (Ghirmay, 2004). Literature generally use variables that capture the degree of financial intermediation, efficiency of the financial sector, monetisation of the financial system, the role of commercial banks in allocating funds, and the relative importance of the stock market (Lawrence and Longjam, 2003). Domestic credit capture the full degree of intermediation in developing countries, as governments –

[2] Lack of data prevent use of other variables such as Portfolio Investment

Table 1. Financial centres and financial development in SADC.

Variable		Domestic credit	Liquid liability	Private credit	Broad money
Constant		2.9454(0.0611)*	1.9791(0.0069)***	0.6959 (0.3759)	0.0785 (0.0001)***
Financial development (-1)		0.9631(0.0000)***	0.9386(0.0000)***	0.9541 (0.0000)***	0.6639 (0.0000)***
GGDPPC		-0.0600(0.6231)	-0.1235(0.0089)***	-0.0430 (0.4642)	-0.0039 (0.0003)***
Trade openness		-0.0215(0.1153)	0.0033(0.6101)	0.0049 (0.4702)	0.0003 (0.1135)
Financial openness		0.1436(0.7798)	0.3470(0.1109)	0.0951 (0.7093)	0.0092 (0.0877)*
Real interest rates		-0.0113(0.5877)	-0.0001(0.9828)	0.0037 (0.7216)	-0.0002 (0.2470)
Dummy international financial centre		3.2944(0.0517)*	1.9652(0.0210)**	1.6732 (0.0602)*	0.1154 (0.0000)***
	R-sqd	*0.9344*	*0.9294*	*0.9156*	*0.7442*
Diagnostic tests	*AdjR-sqd*	*0.9335*	*0.9284*	*0.9144*	*0.7406*
	Prob(F)	*0.0000*	*0.0000*	*0.0000*	*0.0000*

*t-statistic (probability); ***. **, * significant at 1, 5 and 10% levels respectively. Source: Author's own calculation.

which provide infrastructure for economic development, often borrow from the financial markets (Adusei, 2012). Government borrowing not only affects credit to other sectors in domestic markets but often also invite interference by government in the markets as well, which affects financial development (Bara et al., 2016). Credit to the private sector represents an accurate indicator (proxy) and if often used in literature as it is a measure of the quantity and quality of investment (Beck et al., 2000). Liquid liabilities reflect the overall size of the financial intermediary sector in a country. Liquid liabilities are used as a measure of "financial depth" and thus of the overall size of the financial intermediation sector (King and Levine, 1993). Ideally, the study should have included a fourth measure (stock market capitalisation) to capture the non-bank financial sector but lack of data and limited development of stock markets in most SADC countries renders the variable inappropriate.

RESULTS AND DISCUSSION

SADC international financial centres and financial development

Table 1 presents results of the effects of financial centres on financial development in SADC. The results show that the coefficients for dummy variables for financial centres are all positive and significant, indicative of a positive effect of international financial centres on financial development. The results imply that countries with international financial centres contribute more to financial development in SADC than countries without international financial centres. Indicatively, International Financial Centres are supporting development of financial markets in home markets and less for other countries.

The contribution by countries with international financial centres is highest in domestic credit and lowest in broad money. The results therefore, suggest that international financial centres enhance the availability of credit in SADC countries more than they enhance growth in money supply.

These results are in line with the findings of Jankee (2014) that financial centres support financial development. They are suggesting that global finance could contribute to development of financial sectors in SADC. Literature states that investment structures and financial intermediation available in international financial centres assist domestic and foreign investors in developing countries to access efficient institutions, which are often unavailable locally (Sharman, 2009). As such, SADC countries need efficient financial intermediation in their financial sectors in order to enhance financial development.

Since the result show internal impact of IFCs mostly on credit, the study reviews its trend in countries that have international financial centres. Figure 1 shows the trend of domestic credit and bank credit to private sector for Botswana, Mauritius, Seychelles and South Africa.

The observable trend is that credit generally grew in these countries over the period under study, and the growth could partly be attributed to the development of financial centres in these countries. The World Bank (2010) indicated that the financial boom in high income countries from 2000 to 2007, together with financial innovation, generated a reduction in the price of risk, expansion in domestic credit and a rise in foreign flows in developing countries.

International finance and financial development in SADC

Estimations were made using Dynamic Panel Models that considered fixed and random effects. The results in Table 2 show the fixed effect estimations. The results show that both foreign direct investment and official development assistance have statistically insignificant coefficients implying that international finance has no effect on financial development in SADC. The results are suggesting that in SADC international finance in the form of foreign direct investment and official development assistance has no support to domestic financial sectors. Interpreting the results based on the sign, FDI has a

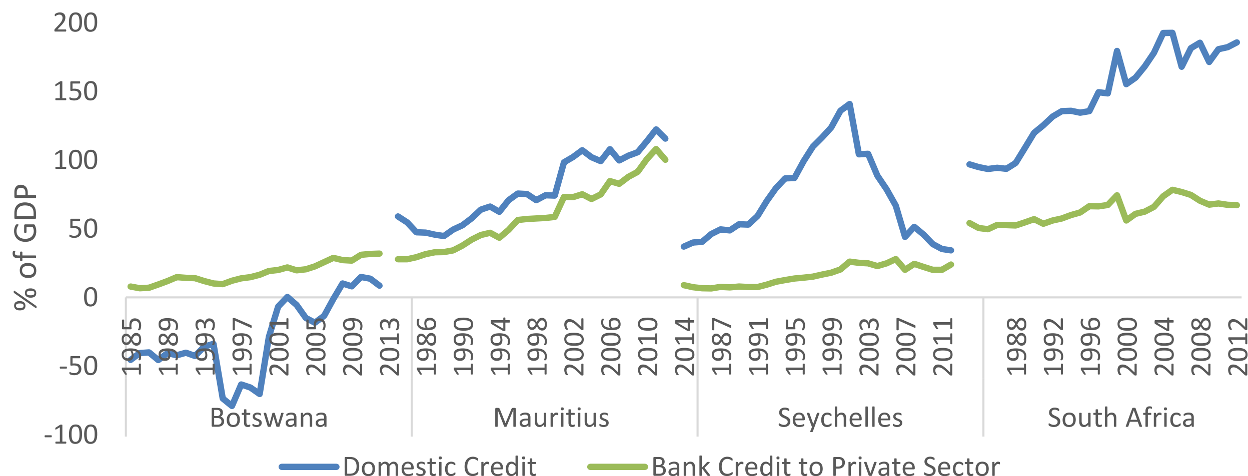

Figure 1. Trend in credit for countries with international financial centres. Source: World Development Indicators (2015).

Table 2. Fixed effects-international finance and financial development in the SADC.

Variable		Domestic credit	Liquid liability	Private credit	Broad money
Constant		9.5965 (0.0002)***	4.9649(0.0000) ***	4.1533 (0.0013)***	0.1383 (0.0000)***
Financial development (-1)		0.8126 (0.0000)***	0.8577 (0.0000)***	0.7785 (0.0000)***	0.6394 (0.0000)***
GGDPPC		-0.1849 (0.1356)	-0.1585 (0.0009)***	-0.1247 (0.0365)**	-0.0042 (0.0001)***
Trade openness		-0.0220(0.3888)	0.0029(0.7686)	0.0163 (0.1848)	0.00001 (0.09476)
Financial openness		1.4288(0.0418)**	0.5458 (0.0448)**	1.1603 (0.0011)***	0.0113 (0.0627)*
Real interest rates		-0.0370(0.1267)	-0.0046 (0.6141)	0.0060 (0.6037)	-0.0002 (0.2335)
Foreign direct investment		0.0589(0.5798)	-0.0086 (0.8321)	0.0066 (0.8963)	0.0010 (0.2398)
Official Development Assistance (ODA)		0.0065(0.5839)	0.0075(0.1021)	0.0053 (0.3582)	0.000003(0.9714)
Diagnostic tests	R-Sqd	*0.9412*	*0.9573*	*0.9329*	*0.8637*
	AdjR-sqd	*0.9384*	*0.9551*	*0.9295*	*0.8567*
	F-stat	*315.201*	*441.065*	*273.688*	*124.645*
	Prob(F)	*0.0000*	*0.0000*	*0.0000*	*0.0000*

*t-statistic (probability); ***. **, * significant at 1, 5 and 10% levels respectively. Source: Author's own calculation.

positive sign on domestic credit, private capital and broad money, and a negative sign on liquid liabilities. ODA has a positive sign on all measures of financial development in SADC. Effectively, the results suggest that international finance, although currently insignificant, has the potential to support financial development in SADC.

The fixed effect results were tested for robustness by running random effects estimations on the same model. The results of the random effects are presented in Table 3. Random effects estimation results show that only ODA has positive significant effects on liquid liability. All other coefficients are not significant. The study, however, conducted a Hausman test in order to identify the model that should be adopted and the result showed that fixed effects prevailed over random effects.

The results in general showed that global finance has no effect on financial development in SADC. Despite there being no previous studies to compare with, the results are not surprising. The nature of FDI that comes into SADC countries is mainly directed toward extractive industries (Mahembe, 2014). Extractive industries are capital intensive and most of this capital is in the form of equipment and machinery. As such, the FDI flows into the country come in the form of plant, equipment and machinery, which apparently would not have a direct effect on domestic financial markets. In addition, corporates that bring in such Foreign Direct Investment are able to source finance from global off-shore markets and would rely minimally on domestic markets. As such, the effect on Foreign Direct Investment of local financial systems remains minimal.

In respect of Official Development Assistance, the results are explained by the fact that development assistance in SADC is mainly intended for poverty

Table 3. Random effects-international finance and financial development in SADC.

Variable		Domestic credit	Liquid liability	Private credit	Broad money
Constant		3.3256 (0.0318)**	1.2558 (0.0384)**	0.9791 (0.1916)	0.0596 (0.0000)***
Financial development (-1)		0.9775 (0.0000)***	0.9742 (0.0000)***	0.9743 (0.0000)***	0.7812 (0.0000)***
GGDPPC		-0.0444(0.7063)	-0.1101 (0.0153)**	-0.0330 (0.5583)	-0.0034 (0.0011)
Trade openness		-0.0210(0.1299)	0.0010 (0.08584)*	0.0070 (0.2917)	0.0004 (0.0046)***
Financial openness		0.6086(0.1972)	0.3163(0.0919)*	0.3715 (0.1073)	0.0174 (0.0000)***
Real Interest rates		-0.0139(0.4899)	-0.0021 (0.7831)	0.0010 (0.9135)	-0.0002 (0.1239)
Foreign direct investment		0.0445(0.6463)	-0.0384 (0.3047)	-0.0361 (0.4388)	-0.0002 (0.8061)
Official Development Assistance		0.0007(0.9291)	0.0062 (0.0484)**	-0.0020 (0.6071)	0.00006 (0.3337)
Diagnostic tests	*R-Sqd*	*0.9344*	*0.9526*	*0.9242*	*0.8251*
	Adj. R-sqd	*0.9333*	*0.9518*	*0.9230*	*0.8222*
	F-stat	*869.156*	*1226.268*	*744.549*	*287.901*
	Prob (F)	*0.0000*	*0.0000*	*0.0000*	*0.0000*

*t-statistic (probability); ***, **, * significant at 1, 5 and 10% levels, respectively. Source: Author's own calculation.

reduction and humanitarian aid. A significant portion of this assistance comes in the form of goods and services targeted at the beneficiaries, with little financial flows. For example, with food aid, donors and aid agencies normally bring in the food rations to the vulnerable and affected, with minimal assistance coming in the form of finance. Such kind of assistance does not support neither the domestic financial sector nor local production in the recipient countries, which otherwise would have supported the domestic financial sectors.

The weak effect of the Official Development Assistance and Foreign Direct Investment in enhancing financial development in SADC necessitates consideration and expansion of other forms of global finance. Private portfolios, international bonds and other global financial market instruments need to be intensively expanded. This justifies the need to connect SADC countries with global financial markets. Literature indicates that financial globalisation could lead to the development of financial systems in the long-run (Obstfeld, 2007). Notwithstanding the problems of volatility and others associated with global financial markets, SADC largely needs to be connected to global markets in order to enhance development of its economies and financial systems. The following is an analysis of the strategies of linking SADC countries with global financial markets.

Linking SADC to global financial markets

The arguments in support of having global financial markets linked to and supporting financial development in SADC countries are contentious. Nonetheless, it remains important for SADC to connect to global financial markets in order to enhance financial and economic growth. Literature reviewed shows that global finance has a positive effect on economic growth (City of London, 2011) and that financial centres support financial development (Jankee, 2014; World Bank, 2010).

It is, however, important to point out from the onset that applicability and feasibility of the strategies and options suggested below is conditional on addressing some of the SADC countries' perennial challenges. The majority of SADC countries are riddled with the usual problems associated with low income countries, including poverty, underdeveloped financial systems, lack of adequate infrastructure and high levels of financial exclusion. These problems combine with internal conflicts, instabilities and lack of political will in some countries, to draw back coordination of any developmental activities in the region. This notwithstanding, the strategies remain optimal in guiding SADC to access global finance that can enhance financial development in the region.

The discussion presented subsequently could be regarded as recommendations for global finance and financial development in SADC. Their inclusion, at this stage, is meant to enhance discussion on the empirical results and is part of a qualitative analysis of how international and global finance could support financial sector development in SADC.

Creating information and economic hinterlands for the SADC

The geography of finance deals with the location of transactions (information centres/hinterland) instead of economic production (economic hinterland) (Zhao, 2010 citing Gordon, 2002). The information hinterland provides the best access point for the profitable exploitation of valuable information flows (Zhao et al., 2004). Information hinterland is a centre of information and investment whilst economic hinterlands dominate and lead production activities (Zhao, 2010). The SADC region can be structured such that South Africa would establish itself as the information centre with other SADC countries being

the economic hinterlands with primary focus on production. South Africa becomes the centre and a conduit for global markets engagement by SADC countries and would be coordinating financial information from global financial markets. On the other hand, SADC countries become economic hinterlands with well-coordinated and structured production that provides activity for and feed information to the financial centre for relaying to the global financial markets.

Initial arrangements could be structured around companies and corporates currently listed on the Johannesburg Stock Exchange or those that JSE's Africa Board is targeting. SADC has a potential to attract global financial markets by setting production activities that create value through value adding of its existing range of tradable commodities that are being exported in primary state. Xinhua-Dow Jones (2014) pointed out that distribution of international financial centres is closely related to the world's economy and trade pattern. As such, SADC's link to global markets becomes a function of its production and trading. Related to this, given that the SADC and Africa domestic markets are small to sustain and guarantee demand for its commodities, linkages with established and big markets remain critical. As such, part of the connections that South Africa could be facilitating is access to global economic markets to enhance demand for the value added products.

Restructuring and shifting economic activity

The lack of development of financial sectors in some SADC countries has been attributed to low economic activity in these countries. Although Thomas et al. (2013) indicated that the size of a county's financial sector is largely unrelated to the size of a country's population and GDP, a strong economy is required for effective financial sector development. The rise of the Chinese economy in the world economy in the post financial crisis potentially drove growth, roles and positions of Chinese financial centres in the global financial centres network (Zhao, 2010).

City of London (2011) added that financial service businesses are affected by a country's growth, economic policy, tax rates, and the ease, speed and cost of implementing business decisions. Existing growth in South Africa propelled the country to its current rating in the global financial markets. Going forward, South Africa needs the SADC region in order to boost its economic base and improve its positioning in global financial ratings. Regional integration creates a big economic hinterland for South Africa that can be used to enhance its linkage, and therefore, rating in global financial markets. Fundamentally, development of economic hinterlands in SADC pulls with it financial development. As has been extensively debated in literature, the major challenge to economic development in SADC and other developing countries is the lack of investment capital to finance that development. Most FDI that comes into SADC is resource seeking, as 63% of the US$290 Billion in FDI received by SADC during the period 2003 to April 2013, was invested in the extractive sectors (Mahembe, 2014). This investment is made by multinational companies that seek not only to enhance production, but also to increase return on their investment. The multinationals are, however, headquartered in developed economies or other emerging regions and actively participate in financial centres or markets in these regions. The multinationals gain access to global finance in their parent regions, whilst production activities are happening elsewhere, including in SADC countries. Technically, SADC countries are therefore economic hinterlands for some global financial centres in other regions.

A dynamic change in this structure could redirect global finance into SADC, in line with Zhao (2010) that changes in global information hinterlands cause financial centres to evolve. Advances in technology, the free movement of capital, and the need to service an increasingly global clientele are creating opportunities for the establishment of new world class financial centres (Securities Industrial Association, 2007). South Africa is linked to SADC as well as other Africa countries, which are grossly underserved; countries that can sustain high growth rates; and countries that are endowed with untapped potential and South Africa can leverage on these to redirect the flow of global markets to the SADC.

Furthermore, a drive towards regional and pan African financial institutions becomes critical for SADC. The financial sector has already made progress in this regard through establishing regional pan-African banks and financial institutions, such as Standard Bank, Ecobank, NEDBANK, BancABC and ABSA that are replacing pre-dominantly European based banks.

Wholesale provision of global finance into the region

The financial sectors of most SADC countries are too small and underdeveloped to establish direct linkages with global markets. Global financial markets may perceive SADC financial markets as risky and underdeveloped to warrant their attention. However, integration of a number of these small markets creates one significant market. Global markets could provide wholesale finance to South Africa for onward lending to SADC countries. South Africa could attract this wholesale finance by floating bonds or other market instruments to raise funds for regional projects. The primary target could be infrastructure projects that the SADC region needs, whose requirements are estimated at US$500 billion (OECD, 2015). The OECD-SADC Policy Brief (2015) pointed out that poor infrastructure is preventing the region from reaching their full growth potential in sectors such as tourism, agriculture, mining or commerce.

South Africa could utilise its strong financial sector to raise these funds in global financial markets. South Africa would then provide development finance to the SADC, on commercial terms, through its development institutions such as the Industrial Development Cooperation, the Land Bank and the Development Bank of South Africa. As South Africa provides development finance in SADC countries, it works with local financial sectors thereby enhancing development of domestic financial markets. Pan African banks in South Africa could also be another avenue for channelling global finance into the SADC financial sectors.

Commercialisation of solutions to SADC's financial and other challenges

SADC countries face a number of challenges including poverty, hunger, infrastructure deficit and social inequality. In the financial sector, the countries have significant levels of financial exclusion when compared to other regions outside Africa. SADC countries have for decades been receiving global finance in the form of development assistance, donor funds, grants and aid towards addressing these challenges. Unfortunately most of these challenges persist, despite the huge support in developmental assistance and humanitarian aid. In addition, some of the financial support extended to SADC countries for development has created a problem of debt and arrears overhang, which is now worsening these countries' challenges.

A commercial approach to solving these problems could provide a sustainable solution and this has been evident in the financial sector. Evidence supports the hypothesis that developed financial institutions and financial markets drive economic development, alleviate poverty and improve standards of living (Thomas et al., 2013). Mobile money and financial innovation has helped to reduce financial exclusion, with micro finance and wholesale funding to SMEs also enhancing increased access to credit by the marginalised. Mobile money and microfinance were pioneered as donor funded projects in Kenya, Bangladesh and other places. The successful commercialisation of the initiatives has assisted in enhancing financial inclusion in most countries, including SADC countries. These have grown to be embraced in the formal financial system by established banking institutions.

SADC countries could address their problems of financial sector underdevelopment by commercialising financial inclusion initiatives, increase competition and bring in more capital, especially from global markets.

Support deepening of financial systems in SADC countries

The lack of financial infrastructure and fragmented financial regulation remains the primary hindrances to financial development in SADC. Countries do not have the capacity to roll out adequate financial infrastructure that could drive financial inclusion. As such, countries need to cooperate in infrastructure development and take advantage of technology and financial innovation to reach out to the financially excluded and the underserved. South Africa could provide financial structures for the development of such infrastructure, on commercial and sustainable arrangements, which guarantees viability to the provider and affordability to the users.

In addition, there are SADC countries that may need to develop off-shore or international financial centres. South Africa, together with other countries that already have such centres, could provide the knowledge, expertise, technical assistance in terms of setting up regulations, policies and structures for such centres. Theory indicates that global non-bank financial markets and institutions can drive competitiveness of banking sectors in developing countries (Obstfeld, 2007). Furthermore, international financial centres can ease the path of entry by investors into developing countries and provide support for economic growth among developing countries (Sharman, 2009). Further to that, SADC could build a network of financial centres, starting with the existing ones, and use these to attract global finance into the SADC region.

Financial integration

The feasibility of the options discussed above is hinged on the region fostering ahead with economic and financial integration. The SADC financial sectors are in their current state fragmented, lack cohesion or uniformity in terms of regulations, and are too small to draw significant investment on their own (OECD-SADC Policy Brief, 2015). Regional integration and cooperation creates a more attractive environment for foreign investment, builds regional infrastructure and goods markets, and capitalise on economies of scale across sectors (OECD-SADC Policy Brief, 2015). Financial integration not only harmonises these markets in terms of policy and regulation but also creates one big market for the region that can attract global finance and improve internal access, depth and efficiency of financial sectors. Financial integration creates well-coordinated and unified financial markets that result in reducing barriers to transaction facilitation, information symmetries and knowledge economies (Jarvis, 2009). The significant progress in the SADC towards financial integration is encouraging, including the establishment of the SADC finance and investment protocol and cooperation in monetary policy, exchange rates and stock market management. The experiences of financial and economic integration in other regions, such as the European Union, should guide the integration path of the SADC.

Conclusion

This study reviewed the role of global finance and international financial centres on financial development in SADC. Estimations established that countries with international financial centres contribute nearly double to financial development in SADC when compared to countries without. Global finance currently received by SADC countries has no effect on financial development in the SADC. A number of SADC countries do not have direct access to global financial markets given their underdeveloped finance sectors and access could be easily created through South Africa, a globally connected country.

This study analysed the possible options and strategies through which South Africa could facilitate the flow of global finance into SADC countries. Suggested options include, creating information and economic hinterlands for SADC; wholesale provision of global finance into the region; commercialisation of solutions to the challenges of SADC countries; providing support for deepening the financial systems in SADC countries; and financial integration.

It can be concluded that the global finance that has been flowing to SADC in the form of grants, aid and donor funds is not sustainable to eliminate challenges that the SADC countries face. It is necessary for these countries to attract commercial global finance from open financial markets. For commercial global finance flows to increase in SADC, the countries need to cooperate and harmonise their regulation, policies and structuring of financial markets. SADC needs to forge ahead with increasing economic cooperation as well as enhancing financial integration.

Findings also suggest that global finance from global financial markets is needed in SADC to support development of financial infrastructure, increase availability of low cost credit, and for the development of the non-banking sector. Creating linkages with global financial markets could support financial development in SADC countries.

In that regard, South Africa has a bigger role to play in terms of connecting SADC countries and global financial markets. Other countries such as Mauritius, Botswana and Seychelles are also pivotal in assisting with increasing the flow of global finance in the region, through their financial centres. In order to enhance access to international finance, the study suggests the creation of information centres in South Africa with SADC countries as economic hinterlands, commercialisation of solutions to SADC countries financial challenges, financial integration and support for deepening of financial systems in SADC countries. Further to that, SADC could build a network of financial centres, starting with the existing ones, and use these to attract global finance into the SADC region and for development of financial centres in other countries. However, for global financial flows to increase in the SADC, countries need to enhance and promote intra-regional financial flows.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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