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*Full Length Research Paper*

# Gender-wise determinant of informal sector employment in Jigjiga town: A cross sectional study

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This study indicates that in Jigjiga, the informal sector clearly plays a buffer role. From sampled respondent, the researcher analyzed the participants in the informal sector and tries to compare their earnings based on the activities they transact and the amount of income they earn. The study revealed that the average monthly earning of both gender was far better than some formal sector activities. Thus, the legal minimum wage indicates that the informal sector plays an undeniable role at the household level and the town, in general. Individual differences on employment are a function of factors which influence the demand and supply of labor; this study examines the supply side only. Probit model was used for analysis. The results of the study showed that married participants and households with large family size show significant and positive likelihood in informal sector participation. Educational level also influenced participation in the informal sector in both gender. Meanwhile, the Probit model result showed that for every male participant, the likelihood of involvement in informal sector declines as age increases and is significant while for female households, age was insignificant. Finally, in both gender, personal attributes is not a significant determinant of participation in the informal sector.

**Key words:** Self-employed informal sector employment, probit model, Jigjiga.

## INTRODUCTION

Economically, Jigjiga depends on the trade and service sector and to some extent, agriculture and manufacturing.

Although, the trade and service sector plays a major role in the economy of the town, the level of participation of female and male is different. As at the time of this study, the poverty level of the town had not been studied. However, the rest of the countries' cities/towns have high incidence of urban poverty. In Jigjiga, there is no urban social security programme or unemployment benefit. Fransen and Van Dijk (2008) opine that because of

exclusionary informality, people choose the informal sector as the best and a safety net for the poor in urban areas.

Therefore, people use employment in the informal sector with its diverse sub sectors as a risk averting mechanism. As in most Ethiopian towns, there are different sub-sector divisions of the informal sector in Jigjiga such as the distribution sector where petty traders ("gullit") sell various goods. Within all sub divisions of the informal sector, there exists gender-wise dissimilarity.

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Male and female participation in the informal sector seem different in nature. Chen (n.d.) tried to figure out the participation of women and men in the informal sector thus:

*“1. Majority of women in the informal sector are traders and local producers or casual and subcontract workers; relatively few are employers who hire paid workers”*

*2. Men and women tend to be involved in different activities even when they are involved in the same trade: in many countries, for example, male traders tend to have larger scale operations and deal in non-food items while female traders tend to have smaller scale operations and deal in food items.”*

This study however, is limited to self-employed informal sector and their role. The benefits of the informal sector are in the form of income generation and employment, especially among women, which is remarkable. Due to the economic nature of Jigjiga town, the significance of the informal sector is immense.

Sharma (2012) argues that “due to globalization, quality of life among women is reducing as the formal sector is experiencing decline and employment opportunities are fast reducing and unable to provide employment in an ever-growing population. In all these, the informal sector has an important role to play.” This study thus aims to analyze the role of the informal sector (self-employment) in income generation and the significance of gender representation.

### **Significance of the study**

1. In Ethiopia, Somali region in general and particularly Jigjiga, the contribution of informal sector is not well discussed and documented so far with respect to income generation. Analyzing the role of informal sector will help policy makers to investigate the situation and give better recommendations for the regional/ urban development of the town.

2. Though the informal sector has an undeniable role to play in the economy, if this role outweighs the role of the formal sector then it will lead to different social, political and economical crisis. Then it is better to understand this role in order to minimize the hitch.

### **LITERATURE REVIEW**

According to Sharma (2012), the informal sector can be categorized into two: traditional and modern. “Traditional informal sector is small in size and has low capital and labor productivity, static technology and household based production unit. Modern informal sector is larger in size, capital

-intensive and more technologically advance.” This is the case in Ethiopia where the formal sector is larger than the informal. The reasons given for the cause of informality varies according to different authors.

Meanwhile, Fransen and Van Dijk (2008) describe the source of informality in Addis Ababa’s as: *exclusionary informality*, when business and households are driven into informality by poverty; and *voluntary informality*, when business and households opt to be informal, based on a cost-benefit analysis.

The role of informal sector in any part of the world especially in developing world is enormous and the causes of engagement in this sector are much. The study conducted by Wamuthenya (2010) indicates that in Kenya, most informal labor activities in urban areas are driven by the need to make ends meet and are dominated by the poor (women mainly) desperate to eke out a living.

To encourage such activities as part of a necessary coping strategy is non-equivalent to encouraging the informal sector as a deliberate part of social and economic development, or relying on the sector to create those jobs that the ordinary economy cannot generate. In Jigjiga, this is also the existing reality taking place with its countable effects.

According to ILO (2013), the contribution of informal sector was ranked among the highest in West Africa countries (Benin, Niger and Togo). The informal sector excluding agriculture, accounts for more than 50% of non-agricultural gross value added (GVA). While in India, the contribution of the informal sector to the economy, excluding agriculture is also very high at 46% of non-agricultural GVA in 2008.

Concerning factors that affect self-employed informal sector participant; Wamuthenya (2010) concluded from her study in Kenya, that female household heads are more likely to work in the informal sector irrespective of age, while male household heads are more likely to work in modern wage employment. Diego and Kimie (2012) asserted that in Middle East and North Africa, informality rates among workers who attained primary and/or basic education are generally much higher than workers who attained secondary vocational and/or tertiary education.

### **METHODOLOGY**

The researcher employed primary source of data. Questionnaires were disseminated at the establishment of informal sector to fit in with the nature of the participants, and afterward samples using non-probability and probability sampling were used. The researcher applied stratified random sampling in order to analyze the gender difference, and also to determine the informal sector employment. Then both men and women grouped in each stratum and from each stratum sample of 100 units were selected purposively making the sampling non-probabilistic. In Jigjiga from total Kebeles (districts) in about 3 Kebeles, the concentration of informal sector is substantial after that the researcher gave more acknowledgment for these localities, and a total of 200 sample units were found from both gender. Even though the main informants’ were self-employed

**Table1.** Distribution of male and female workers in selected branches of the urban informal sector in Jigjiga by income own survey 2012 (in percent).

Income Birr per day	All activities		Trade in goods		Trade in food and beverage		Trade in service		Construction, manufacturing and transport	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Below 50	34.34	37.07	36.36	36.58	62.5	36.11	31.81	36.36	28	100
51-100	39.39	40.44	31.81	34.14	37.5	44.44	43.18	54.54	40	-
101-150	15.15	16.85	13.63	19.51	-	16.66	15.9	9.09	20	-
151-200	6.06	2.24	13.63	4.87	-	-	4.54	-	4	-
200 >	5.05	3.37	4.54	4.87		2.77	4.54		8	
All	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

in informal sector, participant samples were collected from public sector employees to characterize those who are not employed in the informal sector; in total the study recorded 75 respondents in both male and female. Descriptive and econometrics methods were used to analyze the objectives.

### Model specification

One of the objectives of this study was to study the determinant of the individuals' participation in the informal sector, which would be analyzed by categorizing the gender and examining it with two equations. Some of the following hypotheses are drawn to evaluate supply side factors that affect the participation in informal sector.

### Hypothesis

1. Female head households are highly involved in informal sector employment than the male head.
2. Married families are highly exposed to participate in self-employed informal sector than their counterpart bachelors.
3. Participants with low level of education are likely to be in the informal sector employment.
4. For both women and men, if the non-labor income becomes low they may likely participate in the informal sector.

To examine these and other variables, probit model was used. Probit model which is a scalar dependent variable  $Y$  is a binary variable,  $Y \in (0, 1)$ . The general expression of the model is:

$$Y^* = \alpha + \beta X' + \varepsilon \quad (1)$$

Where

$$\begin{cases} y_i = 1 \\ y_i = 0 \end{cases}$$

if  $\begin{cases} y^* > 0 \text{ there is job in informal sector for female} \\ y^* \leq 0 \text{ there is no job in informal sector for female} \end{cases}$

$Y^* = \alpha + \beta X' + \varepsilon$   $Y^*$  is unobserved, while latent variable indicates the probability to employ in the informal sector for female.  $X'$  is the vector of explanatory variables that determines the participation in the informal sector. So the model would take the form of:

$$P(Y_i=1) = \Phi(\beta X') \quad (2)$$

The other model will be for the male counterparts

$$Y^* = \alpha + \beta X' + \varepsilon \quad (3)$$

Where

$$\begin{cases} y_i = 1 \\ y_i = 0 \end{cases}$$

if  $\begin{cases} y^* > 0 \text{ there is job in informal sector for male} \\ y^* \leq 0 \text{ there is no job in informal sector for male} \end{cases}$

$Y^*$  is unobserved, while **latent variable which indicates** the probability to employ in the informal sector for male.  $X'$  is the vector of variables that is expected to affect the participation of male in the informal sector. Therefore, the model will take the form of:

$$P(Y_i=1) = \Phi(\beta X') \quad (4)$$

## RESULTS AND DISCUSSION

### The role of informal sector

#### *Income of self-employed above public sector minimum wage*

Those who are in the public sector with minimum wage must complete their primary school education in order to get the fixed level of wage rate. But if an individual who is an illiterate and unable to complete his/her primary education, then the person has to be self-employed in order to earn a living.

The researcher found from his own survey in the informal sector that the least income was birr 600/month in the year 2012, which was higher than birr 420 per month (legal minimum wage rate).

As indicated in Table 1, the researcher found four categorical division of informal sector namely those who trade processed local item (food and beverage) was



heavily dominated by female (82%), but the rest was managed by male counterpart.

Related to this analysis, the result shows that average income earned by female who participate in this sector is

birr 2281/month and the male gets birr 1616/month which is far more than the

**Table 2.** Regression result on factors that affect participation in informal sector for male.

Participate	Coef.	Std. Err	z	P>  z	(95% Conf. Interval)	
Age	-0.4774467	0.2208812	-2.16	0.031*	-.9103658	-.0445276
Agesque	0.0054563	0.0030399	1.79	0.073**	-.0005017	.0114144
Married	0.8468169	0.4379968	1.93	0.053**	-.0116411	1.705275
Non labor income	0.1725958	0.4594352	0.38	0.707	-.7278806	1.073072
Head	1.037696	0.4511442	2.30	0.021*	.1534698	1.921923
Hn size	0.1635625	0.0674799	2.42	0.015*	.0313043	0.2958208
Years educa	-0.2521022	0.043298	-5.82	0.000***	-.3369647	-.1672397
cons	10.13134	3.776025	2.68	0.007 ***	2.73047	17.53222

Note: 0 failures and 1 success completely determined. \*=Significant at 5% , \*\* =Significant at 10%, \*\*\*= Significant at 1%; Correctly predicted = (count R<sup>2</sup>= 88.65 percent); Specificity = 78.05 percent; Sensitivity = 93.00%.

legal minimum wage. The second categories went to trade in goods.

This sector also share the same story of its predecessor but men are slightly favored because the average monthly earning of female and male were birr 2486 and 2488/month, respectively. The story for the third group (these who participate in service) being the average monthly earning of female was birr 1762/month and for men birr 2296/month.

Finally, the combination of manufacturing, construction and transport in male has an average monthly benefit of birr 2632/month and 952/month for female.

**Gender bias: Income difference between men and women**

Even though there are mixed groups of self-employed informal sector, the researcher for simplicity used four respective categories. These division with respect to gender is quite different, for instance in Jigjiga male dominate in manufacturing, construction and transport sub sectors, since there are only 4% of female.

But participation of female in trade, food and beverage is about 82% and only 18% in male. From the survey by the year 2012 in Jigjiga, there was direct correlation between the number of participant and their revenue. The more a gender is congested in a sector the more s/he can be more profitable, because division of job/labor creates specialization.

The study took the following case to strengthen the notion, most female were not involved in activities that require physical strength like manufacturing as it was in Jigjiga, so in this sector female would not gain much profit if they partake in manufacturing.

Meanwhile, male also didn't partake in activities like trade in food and beverage because they can't easily

operate as female did. Based on the analysis made using the categories discussed earlier, it implies that in Jigjiga there is gender bias with respect to earning. The average earning of male was birr 2258/month but for female it was 1870/month.

**Analysis of gender wise determinants of informal sector employment**

The dependent variable in the model was having a job in the informal sector which was used separately for men and women. 0 was assumed if the individual has no job and 1 otherwise. Seven explanatory variables were selected as main supply side factors that include personal background affecting employment decision in informal sector in the study area. And the following analyses were drawn (Tables 2 and 3).

**Household head**

In Ethiopia generally and Jigjiga specifically, a person can be called as head of household if s/he plays leading role in providing for the family economically. Accordingly, job search is more intensive for male headed household. For male, there is positive probability of participating in the informal sector and significant with marginal effect (ME) of 0.23% point if he is head of the household. While for the female, the likelihood of participating in the informal sector is positive and has the ME of 0.049% but it is insignificant at 1, 5 and 10%, respectively.

**Age**

The regression coefficient on age dictates that as age increase by one, the probability of female to participate in the informal sector will increase and its marginal effect is 0.05%. Whether a female is aged or young she can participate in the sector. An individual (female) participate without age restriction because to undertake in this

activity, the participant's attitude is not considered. But the narrative on male counterpart seems reverse because, the likelihood of participating in the informal sector will decrease if the age of male increase by one with negative marginal effect at

**Table 3.** Regression result on factors that affect participation in informal sector for female.

Participate	Coef.	Std. Err.	z	P>  z	(95% Conf. Interval)	
Age	0.0398005	0.1486133	0.27	0.789	-0.02514763	0.3310773
Agesque	-0.0021521	0.0022396	-0.96	0.337	-0.0065416	0.0022374
Married	0.8522837	0.4836714	1.76	0.078	-0.0956949	1.800262
Non	-0.4647819	0.5413097	-0.86	0.391	-1.525729	0.5961656
Head	0.3496737	0.5145897	0.68	0.497	-0.6589036	1.358251
Hh size	0.1952182	0.0674425	2.89	0.004	0.0630334	0.3274031
Year sed	0.2867182	0.0498279	-5.75	0.000	-0.3843707	-0.1890489
cons	2.145038	2.408159	0.86	0.373	-2.864942	6.864942

\*=Significant at 5%, \*\* = Significant at 10%, \*\*\*= Significant at 1%; Correctly predicted = count  $R^2 = 89.55$  percent; specificity = 77.78 percent; sensitivity = 93.88percent.

0.068%. Interestingly, when male become aged they chose more leisure time and avoid the informal sector.

### Married

Marital status variable had positive and significant effect on informal sectors involvement for both genders with marginal effect of 0.136 for male and 0.138% for female. Irrespective of the sex, whoever is married has the responsibility over the household. Wherever we compare the circumstance of female marital status, her labor participation is highly influenced by the decision of her husband income. It seems conceivable that the participation of married woman and man in informal sector is related positively, which was compatible with results of the model.

### Years of education

The parameter for the years of education suggests that if the female/male participant increases the years of education by one, the involvement of women/men in the informal sector will decrease, and statistically significant with negative marginal effect of 0.042 and 0.0365%, respectively. For an individual having a job in the formal/public sector, the person is obliged to have formal educational qualification. The destiny of those who are illiterate will be to rely on informal sector.

### House hold size

A large household may mean an increase in financial constraints of the household, thus requires involvement in the job market. A large household with non-working adult members, especially females may relieve the mother of some of the domestic responsibilities such as looking after young children thus enabling them to sell in the market. Here, the effect on the probability of being employed (female and male) would be positive and significant with marginal effect of 0.029 and 0.023%, respectively.

### Conclusion

The study used cross-sectional data collected in the year 2012 and covers both women and men from the age group of 16 to 60. The survey covered a sample of 275 urban respondents with the informal sector participants being 71 and 73% for both male and female, respectively. Respondents of informal public/private sector were 29 and 27% for both male and female respectively.

Descriptive and econometrics method of analysis were used to answer the objectives of the study. Even though most of the participants in the informal sector were illiterate who couldn't complete their secondary school education, those in the formal sector were able to complete theirs.

But it is incredible to compare the legal minimum wage rate and monthly income (revenue) of informal sector self-employee. The average monthly earning of self employed informal sector participant of all grouped sector was birr 2064/month which is far better than birr 420/month for public sector participant who got the minimum wage rate.

In Jijiga town, there was gender bias with respect to earning in different categories. Male are slightly favored than female in general activities of informal sector, because the average earning of male was birr 2258/month but it was mere 1870/month for female.

From sampled survey, the researcher analyzed participant in the informal sector. The average monthly earning of both sexual categories indicates how far some formal sector activities have gone. From the survey, the researcher found that from the female respondent, about 30.61% are household head and 87% of male are also head of the household.

Probit model was used to analyse the determinants of participation in informal sector for both genders separately

used STATA 10 software package. Comparing the two sexes, the variable called head of the household have different significance. For male participant, there was positive likelihood of participating in the informal sector. While for female, although the probability of participation increased, being head of the household it had zero effect because most female participates were not head of the household.

As age increase by one, the probability of female to participate in the informal sector will increase. But the importance of age on participation would be insignificant though the statistical relationship between age and participation is positive. But the reality on the ground did not confirm this. But the story on male counterpart seems inverse, because the likelihood of participating in the informal sector will decrease if the age of male increase by one and it is significant.

Irrespective of the gender, being married has a lot of responsibilities. Married men are breadwinners of the household, meanwhile female also share burden of the male. In the case of the developing world, comparing the circumstance of females who are married and not married, her labor participation is highly influenced by the decision of her husband income. Therefore, it's plausible for married women and men; their participation in the informal sector is related positively.

The parameter for the years of education suggests that; if female/male participant increase, the years of education by the involvement women/men in informal sector would decrease.

Apparently for a large household with non-working adult members, females especially may relieve women of some of the domestic responsibilities such as looking after young children thus enabling them to sell in the market. Here, the effect on the probability of being in informal employment for female and male would be positive if there is large household size.

## CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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*Full Length Research Paper*

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

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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)<sup>1</sup> 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

<sup>1</sup>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, entrepôts 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)<sup>2</sup>. 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 –

<sup>2</sup> 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)***
	<i>R-sqd</i>	<i>0.9344</i>	<i>0.9294</i>	<i>0.9156</i>
<i>Diagnostic tests</i>	<i>AdjR-sqd</i>	<i>0.9335</i>	<i>0.9284</i>	<i>0.9144</i>
	<i>Prob(F)</i>	<i>0.0000</i>	<i>0.0000</i>	<i>0.0000</i>

\*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 is 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

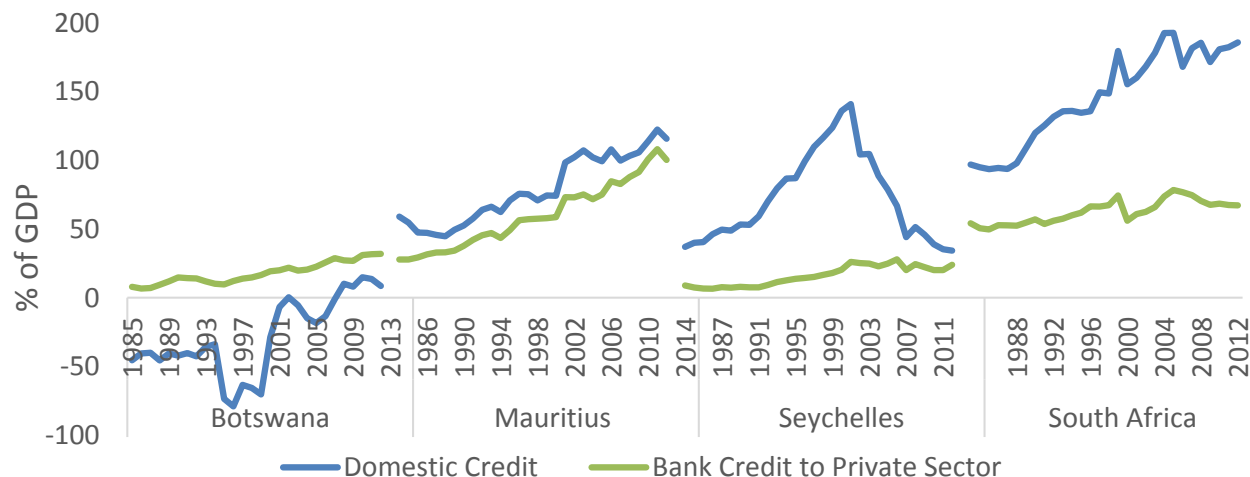


Figure 1. Trend in credit for countries with international financial centres. Source: World Development Indicators (2015).

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)
<i>Diagnostic tests</i>				
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)
	<i>R-Sqd</i>	<i>0.9344</i>	<i>0.9526</i>	<i>0.9242</i>
	<i>Adj. R-sqd</i>	<i>0.9333</i>	<i>0.9518</i>	<i>0.9230</i>
<i>Diagnostic tests</i>	<i>F-stat</i>	<i>869.156</i>	<i>1226.268</i>	<i>744.549</i>
	<i>Prob (F)</i>	<i>0.0000</i>	<i>0.0000</i>	<i>0.0000</i>

\*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 country'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 predominantly 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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