

FINANCIAL INTEGRATION AND ECONOMIC GROWTH IN SUB-SAHARAN AFRICA

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ABSTRACT

The paper examines the impact of financial integration on economic growth in sub-Saharan Africa (SSA). Using a dynamic panel Generalised Method of Moment (GMM), the paper finds that financial integration had a negative and significant impact on economic growth in SSA. The results also reveal that institutional quality had a negative and significant impact on economic growth in SSA. The results of the paper further show that financial development had negative impact on economic growth in the region. The paper concludes that the economies did not reap the benefits of financial integration. The government in the region needs to put in place appropriate macroeconomic policies and institutions that will drive the benefits of financial integration in order to sustain economic development.

Keywords: Economic Growth, Financial Development, Financial Integration, Institutions, Panel, Generalised Method of Moment, sub-Saharan Africa

INTRODUCTION

The nexus between financial integration and economic growth continues to be one of the most debated issues among economists. The growth path in the financially open economy differs a lot across countries, with different initial wealth, legislative institutions or financial deepening level. Some emerging countries achieved high growth after their financial integration to the world financial market, however, soon after they experienced severe financial and economic crisis in late 90s. The crisis in emerging markets in late 90s reveals specific challenges raised by their financial integration to the world market. Whether and how the financial integration can be beneficial to the growth performance is a subject of many debates among economists and policymakers.

Kose *et al* (2009), summarizing the debates, argue that the financial integration seems to have different impacts in each country and that some prerequisite conditions must be satisfied for beneficial impacts to occur. The financial development level is highly relevant and is a threshold condition suggested by their empirical works. Many theoretical works also highlight the unequal outcomes of the financial openness in different countries in the presence of the financial imperfection (e.g. Guo, 2010). When the financial market is imperfect, the financial openness can be unfavourable for poor countries, while it is favourable for the rich ones. These empirical and theoretical works suggest that, for the beneficial impacts of the financial integration to occur, we need to reduce the financial imperfection and improve the financial development. It would be desirable to understand better the reduction of the financial imperfection and the financial development in financial openness.

Mishkin (2006) enumerates various direct and indirect channels through which financial integration could have positive impacts on financial development, for example the entry of foreign financial institutions, the increase of competition and the diffusion of technology. Kose *et al* (2009) point out that in theory financial integration should catalyze domestic financial market development. Such indirect benefit may be very important, however it is not yet considered in a model with financial imperfection in financial openness. It is worthwhile to study the growth and the financial development when the financial integration can reduce the financial imperfection.

There may be one reason that such study is not yet pervasive. We often take it for granted that any problem caused by the financial development in financial openness will finally disappear because the financial development can be improved during the process of the financial integration. Despite of various growth paths in financial openness, the perspective to achieve the most favourable path seems straight forward: more involved in the financial integration and eventually acquire necessary financial development. However, we may ignore that problems may arise just on the way to the solution. Instead of developed countries or very poorly developed countries, crisis hit emerging countries suddenly, right on their way of improvements in economic and financial fundamentals and soon after their financial integration to the world financial market. The growth and the development suffer from this crisis when these countries were improving the efficiency of their opened financial sector.

On the other hand, in a perfect neoclassical textbook world, there are good arguments for a positive growth impact of integration with the international capital market, especially for developing countries. By tapping the pool of global savings capital-poor countries could free themselves of a binding constraint on economic growth, i.e. lack of capital. Closer financial integration could also strengthen domestic financial systems leading to more efficient capital allocation,

higher investment and growth (Levine, 2001). On a global level, the efficient allocation of capital and international risk sharing would be promoted (Obstfeld, 1994). However, arguments against the economic wisdom of openness to global capital flows have also been put forward. Financial integration does not have to be welfare enhancing in the presence of other distortions such as trade barriers and weak institutions, or if information asymmetries affect the proper working of the international financial market (Stiglitz, 2004).

Despite a rich body of contributions, the empirical literature remained inconclusive with regard to the financial integration-growth nexus. Empirical work by Grilli and Milesi-Ferretti (1995), Kraay (1998) and Edison *et al.* (2002) has not confirmed a robust long-term impact of financial openness on growth. Their results have mirrored the early and well-known study by Rodrik (2008) who concluded that “capital controls are essentially uncorrelated with long-term economic performance”. Yet some studies found support for a relationship between openness to the global capital market and economic growth such as Quinn (1997) and Henry (2000). More recently, researchers have analyzed whether the growth impact of financial integration was conditional on third factors such as a sound institutional framework or income levels, but the results remained mixed as well (Edwards, 2001; Edison *et al.*, 2002; Alfaro *et al.*, 2004; Klein, 2005). Detailed reviews of the literature on financial openness and growth can be found in Eichengreen (2001) and Edison *et al.* (2004).

This study investigates the impact of financial integration on economic growth in sub-Saharan Africa. This study covers periods of 1980 to 2010. The paper is organized as follows: section one provides the introduction; section two describes the structure and pattern of financial flows to SSA; section three presents the literature review; section four provides methodology; section five discusses the empirical results; and section six provides concluding remark.

THE STRUCTURE AND PATTERN OF FINANCIAL FLOW TO SUB-SAHARAN AFRICA

The structure and pattern of financial flows are examined through the evolution of Foreign Direct Investment (FDI), external debt and current account in SSA. Figs. 1 and 2 below depict the evolution of financial flows in SSA.

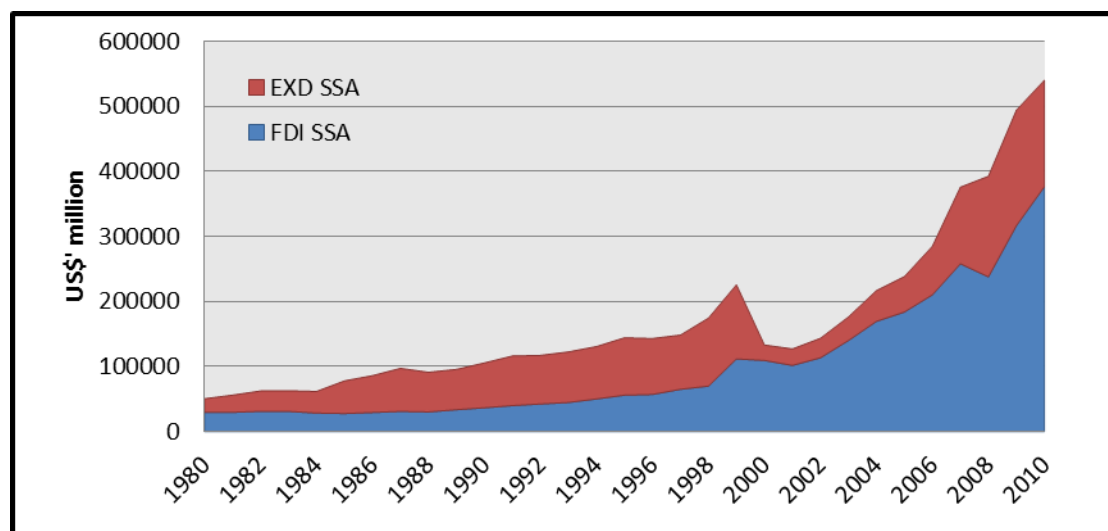


Fig. 1: Evolution of FDI and External Debt in sub-Saharan Africa

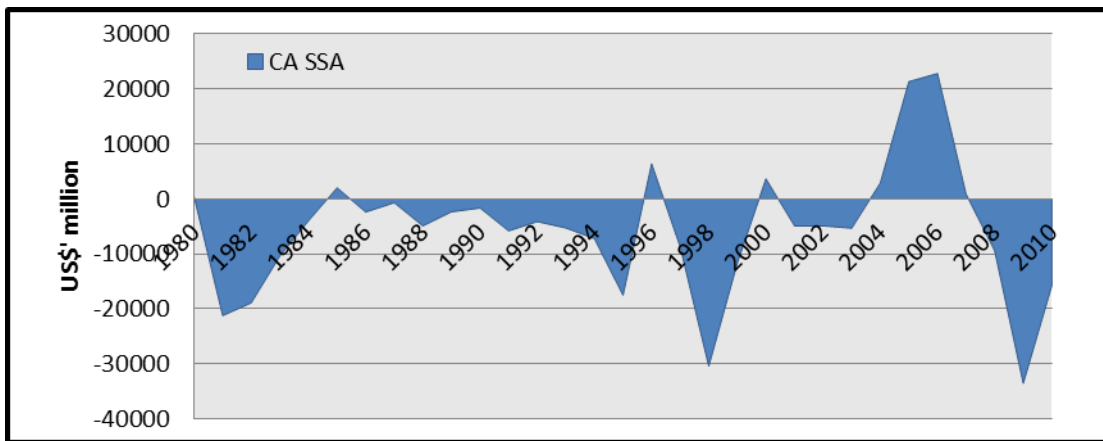


Fig. 2: Evolution of Current Account in sub-Saharan Africa

From fig. 1, a significant increase was recorded on the evolution of external debt in SSA from 1980 to 1999. External debt increased from US\$60,913.2 million in 1988 to US\$114,022.9 million in 1999, but later dropped sharply to US\$23,762.62 million in 2000. Thereafter, external debt sustained the increase up to 2009. The external debt fell immediately after 2009 from US\$177,627.6 million to US\$163,694 million in 2010. The era of economic recessions call for external sources of funds for the betterment and economic well-being of people residing in the region, while periods of booms discourage the governments to source external funding rather they agitate for relief of the economies from outstanding debts.

From fig. 1, FDI recorded a surge in 1980s up to 1999, but later fell in 2000 and 2001 in SSA. Specifically, FDI increased from US\$30,171.5 million in 1988 to US\$111,671.4 million in 1999. It later dropped from US\$109,360.9 in 2000 to US\$101,789.5 million in 2001. The sudden reversal of FDI in 2000 and 2001 was due to global economic recession. Conversely, this FDI increased significantly from 2002 up to 2007. The global meltdown of 2007-2008 affected the flow of FDI into SSA as it recorded a sharp fall from US\$258,020.8 million in 2007 to US\$237,855.7 million in 2008. When policies that mitigate the problem of global meltdown were put in place in SSA, FDI went up significantly from US\$316,697.8 million in 2009 to US\$376,452.2 million in 2010.

As shown in fig. 2, right from 1981 to 1984, the position of current account in SSA was on deficit. In 1981, SSA recorded current account deficit of US\$21,228 million and later dropped to US\$3,964.5 million in 1983. In 1985, the economies recorded current account surplus of US\$2,053.5 million but later recorded current account deficit from 1986 to 1995. In 1996, SSA experienced economic boom and reported current account surplus. Conversely, the economies recorded significant current account deficit in 1998. The region recorded US\$6,413.9 million current account surplus in 1996 but later experienced current account deficit of US\$30,408.8 million in 1998. In 2006, significant current account surplus reported with the amount US\$22,835.2 million while significant current account deficit recorded in 2009 with the amount of US\$33,541.3 million in SSA.

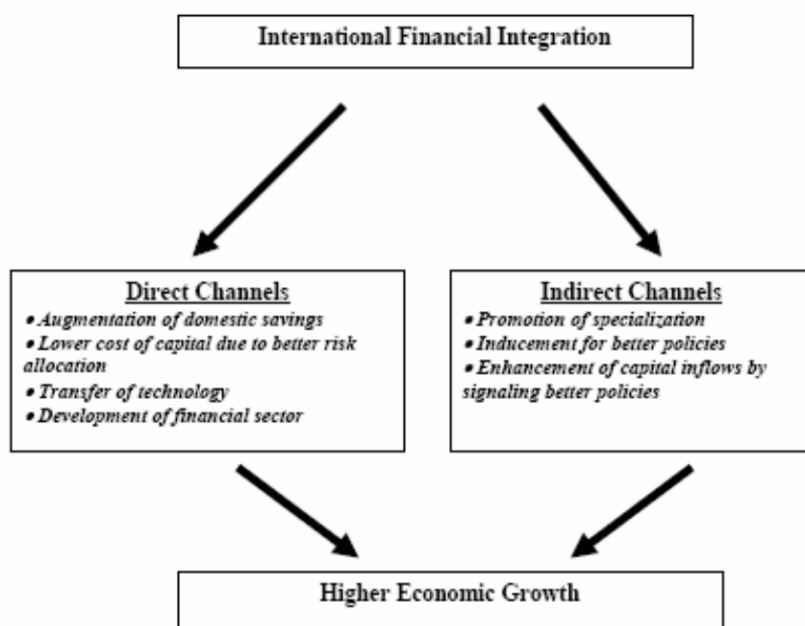
LITERATURE REVIEW

Based on the standard one-sector neoclassical growth model, the traditional theoretical channel through which financial integration affects economic growth is the augmentation of capital. In other words, the standard theory predicts that financial integration should lead to flows of capital from capital-rich economies to capital-poor economies since, in the latter, the returns to capital should be higher. In theory, these financial flows should complement limited domestic saving in capital-poor economies and, by reducing the cost of capital, allow for increased investment. Henry (2007) argues that, even in the context of the basic neoclassical model, the financing channel should imply only a temporary, rather than permanent, pickup in growth from financial integration. It is not clear, however, how important this nuance is likely to be empirically in studies that look at growth experiences over periods of just two-three decades. Certain types of financial flows could also generate technology spillovers and serve as a conduit for imbibing managerial and other forms of organizational expertise from more advanced economies.

Newer analyses emphasize the importance of indirect channels arguing that it is not just the direct financial flows, but the collateral benefits of these flows that drive the growth benefits of financial globalization (see Kose *et al.*, 2006). These indirect channels include improvements in institutions (defined broadly to include governance, the rule of law etc.) and better macroeconomic policies.

Levine (2005) and Mishkin (2006, 2008) discuss the impact of financial integration on financial sector development. Stulz (2005) focuses on institutional quality and concludes that globalization weakens certain agency problems by reducing the cost of outside finance, thereby creating incentives for firms that use more external finance to improve their governance. Gourinchas and Jeanne (2005) contend that financial integration can impose discipline on macroeconomic policies by improving the benefits of good policies and catalyzing political support for reforms while Bartolini and Drazen (1997) argue that, in exposing itself to such costs through increased financial openness, a country may signal its commitment to better macroeconomic policies.

The direct and indirect channel of capital flows in the literature can be depicted as thus



Source: Prasad, Eswar, Rogoff, Kenneth, Wei, Shange-Jin, and Kose, M. Ayhan (2003), "Effects of Financial Globalization on Developing Countries: Some Empirical Evidence", *International Monetary Fund Publishing (March)*, p. 24.

Figure (3): Financial Integration Leads to Higher Economic Growth

Moreover, researchers have explored a number of avenues to reconcile the strong theoretical prediction that financial integration should boost long-run growth and reduce the risks of consumption instability in developing economies with the weak empirical evidence. Some authors have argued that countries that do not have the right initial conditions associated with certain structural and macroeconomic factors can experience growth surges due to financial integration but they inevitably experience crises, which pulls down their long-run growth. Other authors have argued that financially integrated developing countries that lack these factors are not able to derive the full benefits of financial integration even if they can escape crises.

Kose *et al* (2006) pull these two lines of argument together to describe the conditioning variables that influence the relationship between financial integration and growth as a set of "threshold conditions." These threshold conditions help determine the nature of policy measures that could improve the growth and stability benefits of financial globalization. They include an economy's structural features-the extent of financial sector development, institutional quality, and trade integration-and also the macroeconomic policy framework.

There is a strong theoretical presumption that financial sector development not only enhances the growth benefits associated with financial globalization but also reduces vulnerability to crises. It is intuitive that well-developed domestic financial markets are instrumental in efficiently allocating foreign financial flows to competing investment projects (Wurgler, 2000). A number of more formal models have been developed to analyze the effects of capital account liberalization in economies with limited financial development. Domestic and international collateral constraints could play a particularly important role in financially underdeveloped economies where access to arm's length financing is limited. Caballero and Krishnamurthy (2001) show how, in different theoretical settings, the interaction of these constraints can lead to unpredictable and, occasionally, adverse effects of capital account liberalization.

Financial development also has a direct impact on macroeconomic stability in financially open economies. Sudden changes in the direction of capital flows tend to induce or exacerbate boom-bust cycles in developing countries that lack deep and well-functioning financial sectors (Caballero and Krishnamurthy, 2001; Aghion and Banerjee, 2005). Moreover, inadequate or mismanaged domestic financial sector liberalizations have been a major contributor to crises associated with financial integration (Mishkin, 2006). The lack of well-developed financial markets also appears to be a key reason explaining the positive association between financial integration and the relative volatility of consumption growth documented by Kose, Prasad and Terrones (2003b). For instance, Levchenko (2005) and Leblebicioglu (2006) consider dynamic general equilibrium models where only some agents have access to international financial markets. In both models, capital account liberalization leads to an increase in the volatility of aggregate consumption since agents with access to international financial markets stop participating in risk-sharing arrangements with those who do not have such access.

The arguments above are basically concluded from empirical studies in developed countries and developing countries. The empirical studies in developing countries are majorly from Asian continent, while studies in sub-Saharan Africa are still on-going. However, this study provides empirical evidence in sub-Saharan Africa for efficient policy making in the region.

METHODOLOGY AND MATERIALS

The study relied on secondary data and utilized annual time series data. Empirical investigation was carried out on the basis of the sample covering the period 1980 to 2010 for twenty-one countries in SSA, namely: Botswana, Burundi, Cameroon, Central African Republic, Chad, Congo, Gabon, Gambia, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Nigeria, Seychelles, Sierra Leone, South Africa, Sudan, Swaziland, Togo and Zambia¹.

Regarding financial globalization, Kose *et al.* (2009) argue in favour of quantity-based, *de facto* measures and the early literature had used mostly *de jure* measures, such as those based on the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). However, such measures do not fully capture the degree of enforcement and effectiveness of capital controls as well as regulations in other fields that affect capital flows. In addition, domestic financial markets might not be liquid enough to efficiently diminish price differentials, so that price-based measures may under estimate the true degree of financial integration. Therefore, quantity-based measures were used in this study. Following the study of Friedrich, Schnabel and Zettelmeyer (2010), this paper used four indicators of *de facto* financial globalization. First, we use the standard measure of gross financial globalization, defined as the sum of total foreign assets and total foreign liabilities in percent of GDP (FAI) and sourced from International Financial Statistics (IFS), 2011. Gross measures of financial integration have the advantage that they also capture risk-sharing benefits of financial integration. Then we consider various measures taking into account only foreign liabilities (capturing only the financing side of financial integration), distinguishing different types of foreign liabilities: foreign direct investment (FDI) and external debt (EXD), both expressed in percent of GDP and sourced from United Nations Conference on Trade and

¹ The twenty-one countries included in the study were randomly selected from the list of countries in SSA.

Development (UNCTAD), 2011. Further, we consider net foreign assets (defined as the difference between foreign assets and foreign liabilities) in percent of GDP (NFA) and sourced from World Development Indicators (WDI), 2011, which serves as a valuation-change adjusted equivalent to the current account.

This paper used two institutional quality indexes (government effectiveness (GEF) and rule of law (ROL) sourced from World Governance Indicators (WGI), 2011) constructed by Kaufmann *et al.* (2004). The criterion that is used in choosing them is a possible linkage between such indexes of the quality of a government and the capital flows into a country. Vector of control variables are trade openness (TRO) sourced from UNCTAD, 2011; domestic credit provided by banking sector (DCB), inflation (INF) and interest rate (INT) sourced from WDI, 2011. Real GDP sourced from WDI, 2011 and expressed in log form.

To evaluate the impacts of financial integration on economic growth, the study considers a panel of i countries, observed over t periods of time. This paper adopts endogenous growth model in line with Schularick and Steger (2006). Conventionally, the popular Cobb Douglas production function can be written as

$$Y_{it} = A_{it} F(K_{it}, L_{it}) = K_{it}^{\alpha} (AL_{it})^{1-\alpha} \quad 1$$

where $\alpha, 1-\alpha > 0$

Y represents output production by combining capital K and efficiency of labour AL and $\alpha, 1-\alpha$ are the parameters representing the output elasticity of each input. By simple modification and abstracting from the argument of endogenous theory proponent that the labour and capital are embodiment of several other inputs that are also directly responsible to changes in output growth even when the traditional inputs are unchanged. Thus, one of such possible input is the institutional quality committed into production process. In line with this argument, institutional quality can be included in Eq (1) as thus:

$$Y_{it} = K_{it}^{\alpha} IQ_{it}^{\gamma} (AL_{it})^{1-\alpha-\gamma} \quad 2$$

where $\alpha, \gamma \geq 0$

IQ_{it} is the indicator of institutional quality and it is an increasing function designed to capture the three ways by which the model enhances the nature of relationship between financial integration and output through quality of institutions. We study the model with the variables expressed in terms of effective units of labour, and define $y = Y / AL$, $k = K / AL$ and $iq = IQ / AL$. Using these variables, the production function is written as thus:

$$y = k_{it}^{\alpha} iq_{it}^{\gamma} \quad 3$$

The model represented by Eq (3) can be rewritten in linear form as:

$$y_{it} = \beta_1 + \beta_2 k_{it} + \beta_3 iq_{it} \quad 4$$

In order to incorporate other macroeconomic variables that might also impact on the growth of output, we introduce x in Eq (4). Therefore, Eq (4) can be re-written as follows:

$$y_{it} = \beta_1 + \beta_2 k_{it} + \beta_3 iq_{it} + \beta_4 x_{it} \quad 5$$

where x equals other macroeconomic variables.

Apart from the financial integration and institutional quality, evidences from previous studies have shown that many other factors are significant determinant of real growth (see Eichengreen *et al.*, 2009; Quinn and Toyoda, 2008;

Schularick and Steger, 2006; Luca and Spatafora, 2012). This paper incorporated other macroeconomic variables in the above model we have

$$y_{it} = \beta_1 + \beta_2 k_{it} + \beta_3 iq_{it} + \beta_4 to_{it} + \beta_5 fd_{it} + \beta_6 if_{it} + \beta_7 in_{it} + \varepsilon_{it} \quad 6$$

Where y_{it} equals real gross domestic product; k_{it} equals financial integration indicators; iq_{it} indicates institutional quality indicators; to_{it} equals trade openness; fd_{it} equals financial development indicator; if_{it} equals inflation rate; and in_{it} equals interest rate. ε_{it} equals error correction terms.

The objective of this paper is captured through the use of the Generalized Method of Moments (GMM) estimators for estimation suggested for the dynamics of adjustment that were developed by Arellano and Bond (1991), and Blundell and Bond (1998). The choice of this technique is to correct for endogeneity problem in the model. Also, by estimating Eq (6) using OLS could produce biased results as they would suffer from an endogeneity problem where both the independent and dependent variables could influence each other. To solve this problem, exogenous instrument variables are required. However, using such variables for a two-staged least squares estimation could also yield biased estimates as exogenous instrument variables may be weak. To avoid this problem, Arellano and Bond (1991) proposed the use of a Generalized Method of Moments (GMM) to produce more efficient estimates where lagged values of the independent variables are used as instruments. Empirical estimation in this paper employed the same approach and use lagged value of the independent variable as instruments. The estimated model is specified as thus

$$y_{it} - y_{i,t-1} = \delta(y_{i,t-1} - y_{i,t-2}) + \alpha(k_{i,t-1} - k_{i,t-2}) + \beta(iq_{i,t-1} - iq_{i,t-2}) + \beta'(X_t - X_{i,t-1}) + (\varepsilon_t - \varepsilon_{i,t-1}) \quad 7$$

EMPIRICAL RESULTS

This section captures the econometric technique of analysis and shows the relationship between financial integration and economic growth in sub-Saharan Africa. Table 1 below showed the descriptive statistics summary of the variable under study.

Table 1: Descriptive Statistics Results

	DCB	FAL	FDI	GDP	GEF	INF	INT	ROL	TRO
Mean	30.08	48.09	2.91	3.36	-0.24	11.64	6.12	-0.25	32.50
Median	21.13	0.56	1.24	3.58	0.00	8.10	5.74	0.00	26.45
Maximum	195.3	107.4	46.48	33.62	0.67	183.3	57.4	0.85	103.9
Minimum	-72.9	-0.05	-28.6	-19.0	-1.71	-100	-51.6	-1.72	2.62
Std. Dev.	25.54	21.76	5.59	5.28	0.48	20.01	11.59	0.52	20.39
Skewness	1.65	4.77	3.27	0.10	-1.49	3.31	-0.50	-0.97	0.85
Kurtosis	8.06	29.88	21.84	7.06	4.06	27.32	6.67	3.26	3.13
Jarque-Bera	993.0	220.7	1079.3	450.2	273.5	173.1	394.7	105.5	79.8
Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Observations	651	651	651	651	651	651	651	651	646
Cross-section	21	21	21	21	21	21	21	21	21

Table 1 showed that all the series display a high level of consistency as their mean and median values fall within the maximum and minimum values of the series. Also, the standard deviation of the data series is very low which implies that the deviation of actual data from its mean value is very small. For a further test of normality, we can test whether the mean and median of the distribution are nearly equal, whether the skewness is approximately zero, and whether the kurtosis is close to 3. A more formal test of normality is the one given by the Jarque-Bera (JB) statistic. The Jarque-Bera statistic follows a chi-square distribution with 2 degree of freedom, all the data series used in the study rejects the assumption of normal distribution at 1% due to the high value of JB and a small p-value.

The results in table 2 below show the impact of financial integration on economic growth in sub-Saharan Africa.

Table 2: Dynamic Panel GMM Result

Variable	Financial Integration		FDI	
GDP _{t-1}	0.249*** (4.819)	0.222*** (4.477)	0.267*** (5.238)	0.270*** (5.295)
DCB	-0.172** (-2.106)	-0.084 (-1.155)	-0.179*** (-3.605)	-0.186*** (-3.781)
FAL	-0.028* (-1.723)	-0.038*** (-2.773)	----	----
FDI	----	----	-0.465** (-2.422)	-0.478** (-2.486)
GEF	0.633 (1.097)	----	-0.521** (-2.210)	----
ROL	----	0.563 (0.828)	----	-0.955*** (-3.214)
INF	0.017 (1.136)	0.014 (1.019)	-0.014 (-0.696)	-0.014 (-0.709)
INT	0.080*** (4.414)	0.084*** (5.463)	0.063*** (3.406)	0.058*** (3.131)
TRO	0.390*** (6.384)	0.375*** (6.674)	0.422*** (5.284)	0.425*** (5.408)
C	-0.163 (-0.827)	-0.125 (-0.619)	-0.124 (-1.028)	-0.144 (-1.203)
Instrument Rank	15	15	15	15
J-statistics	14.13	18.05	7.68	6.86
Observation	584	584	584	584

*, **, *** indicate 10%, 5% and 1% level of significance. Figures in parenthesis are t-statistic

The validity of the instruments chosen was confirmed. The instrument rank (15) is greater than the number of estimated coefficients (07) which indicates the validity of instrument rank, and it was further affirmed by the significance of J-statistics.

Table 2 above shows the results of the nexus between financial integration and economic growth in sub-Saharan Africa. The results reveal that financial integration has a negative and significant impact on economic growth in sub-Saharan Africa. This implies that financial integration could not enhance economic activities in the region, it might be as a result of poor macroeconomic policies and weak institutions. The negative and significant impact of FDI on economic growth in sub-Saharan Africa corroborated the result above. This result could be explained by the fact that there exist repatriated capital flight in the region and it is inimical to growth enhancing in the economies.

The results further show that financial development has a negative and significant impact on economic growth in sub-Saharan Africa. This implies that financial institutions in sub-Saharan Africa are not well structured and developed to promote economic growth in the region. The results show that institutional quality (government effectiveness) has a negative and significant impact on economic growth in sub-Saharan Africa. The results revealed that government effectiveness in sub-Saharan Africa is associated with a lower economic growth in the region. This implies that the government participation in the economy is ineffective and hence inimical to economic growth. In addition, institutional quality (rule of law) has a negative and significant impact on economic growth in sub-Saharan Africa. The result shows that rule of law is not well entrenched in the region; and hence associated with a lower economic growth. This also indicates that the judicial system in the region is weak and property rights might not receive adequate protection; thus local and international investors are discouraged from investing heavily in the economies. This explains why the economy has not witnessed significant growth.

Trade openness has a positive and significant effect on economic growth in sub-Saharan Africa. It could be inferred from these results that openness of sub-Saharan Africa to international trade would help a lot in improving economic activities in the region. Interest rate has significant and positive impact on economic growth in sub-Saharan Africa. This implies that an economy with high interest rate will attract capital inflows because every investor or lender is looking for economy where returns on their funds are encouraging which in turn accumulate more capitals to develop the region.

CONCLUDING REMARKS

The study investigated financial integration – growth nexus in sub-Saharan Africa. Results of the dynamic panel GMM show that financial integration had negative impact on economic growth in sub-Saharan Africa. The results also revealed that institutional quality had a negative and significant impact on economic growth in sub-Saharan Africa. The results of the paper further showed that financial development had negative impact on economic growth in the region. One of the implications of these results was that the economies did not reap the benefits of financial integration. The government in the region needs to put in place appropriate macroeconomic policies and institutions that will drive the benefits of financial integration in order to sustain economic development in the countries. Another implication from the results showed that the economies are characterised with poor institutional quality and this is inimical to sustainable economic development in the countries. Much attention should be focused on how strong institutional quality would be launched and sustained in order for the economies to witness a significant growth. Lastly, financial sectors in the countries need to be further developed in order for the sectors to accelerate economic growth in the region.

REFERENCES

- Aghion, P., A. Banerjee (2005). "Volatility and Growth: Clarendon Lectures in Economics". Oxford University Press, New York.
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S., Sayek, S. (2004). "FDI and economic growth: the role of local financial markets." *Journal of International Economics* 64(1), 89–112.
- Arellano, M. and Bond, S. (1991). "Some tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations" *Review of Economic Studies* 58 (2), pp 277-297.
- Bartolini, L., A. Drazen (1997). "Capital-account liberalization as a signal." *American Economic Review* 87(1), 138–154.
- Blundell, R. and Bond, S. (1998). "Initial Conditions and Moment Restrictions in Dynamic Panel Data Models", *Journal of Econometrics*. 87, pp. 115-143.
- Caballero, R. J., Krishnamurthy, A. (2001). "International and domestic collateral constraints in a model of emerging market crises." *Journal of Monetary Economics* 48(3), 513–548.
- Edison, H. J., Klein, M., Ricci, L., Sløk, T. (2004). "Capital account liberalization and economic performance: survey and synthesis." IMF Staff Papers 51(2). International Monetary Fund, Washington.
- Edison, H. J., Levine, R., Ricci, L. and Slok, T. (2002) "International financial integration and economic growth", NBER Working Paper 9164.
- Edwards, S. (2001). "Capital mobility and economic performance: are emerging economies different?" NBER Working Papers 8076, National Bureau of Economic Research, Cambridge, MA.
- Eichengreen, B. J. (2001). "Capital account liberalization: what do cross-country studies tell us?" *World Bank Economic Review* (15), 341–65.
- Eichengreen, B., Gullapalli, R. and Panizza, U. (2009). "Capital account liberalization, financial development and industry growth: a synthetic view". Working paper n. 144
- Friedrich, C., Schnabel, I. and Zettelmeyer, J. (2010). "Financial integration and growth- Is emerging Europe different?" European Bank for Reconstruction and Development (EBRD), Working paper No. 123.
- Gourinchas, P. O., Jeanne, O. (2005). "Capital mobility and reform." IMF Manuscript. International Monetary Fund, Washington.
- Grilli, V. and Milesi-Ferretti, G. M. (1995). Economic Effect and Structural Determinants of Capital Controls., IMF Staff Papers, Vol. 42, No. 3.
- Guo L. (2010). "Credit monitoring and development: The impact of financial integration". Université de Paris I Panthéon Sorbonne.
- Henry, P. B. (2000). "Stock market liberalization, economic reform, and emerging market equity prices." *Journal of Finance* 55(2), 529–564.

- Henry, P. B. (2007). "Capital account liberalization: theory, evidence, and speculation." *Journal of Economic Literature* 45(4), 887-935.
- Klein, M. (2005). "Capital account liberalization, institutional quality and economic growth: theory and evidence." NBER Working Papers 11112. National Bureau of Economics Research, Cambridge, MA.
- Klein, M. and Olivei, G. (2009). Capital Account Liberalization, Financial Depth, and Economic Growth. *Journal of International Money and Finance*
- Kose, M. A., Prasad, E. S., Rogoff, K., Wei, S. J. (2006). "Financial globalization: a reappraisal." IMF Working Paper 06/189. International Monetary Fund, Washington. Forthcoming in IMF Staff Papers.
- Kose, M.A., Prasad, E., Rogoff K. and Wei, S.-J. (2009). "Financial globalization: a Re-appraisal". IMF Staff Papers 56(1), 8-62.
- Kose, M.A., Prasad, E., Rogoff, K. and Wei, S.-J. (2010). "Financial globalization and economic policies". In: Rodrik, D., Rosenzweig, M., (Eds.), *Hand book of Development Economics, Volume 5*. Elsevier, Amsterdam, pp.4283-4359.
- Kose, M. A., Prasad, E. S., Terrones, M. E. (2003b). "Financial integration and macroeconomic volatility." IMF Staff Papers 50, 119–142.
- Kraay, A. (1998). "In search of the macroeconomic effects of capital account liberalization." Manuscript, World Bank (unpublished).
- Leblebicioglu, A. (2006). "Financial integration, credit market imperfections and consumption smoothing." Working Paper, North Carolina State University.
- Levchenko, A. A. (2005). "Financial liberalization and consumption volatility in developing countries." IMF Staff Papers 52(2). International Monetary Fund, Washington.
- Levine, R. (2001). "International financial integration and economic growth." *Review of International Economics* 9(4), 684–698.
- Levine, R. (2005). "Finance and growth: theory and evidence." In: Aghion, P., Durlauf, S. (Eds.), *Handbook of Economic Growth*, vol. 1A, 865–934. Elsevier, Amsterdam.
- Luca, O. and Spatafora, N. (2012). "Capital Inflows, Financial Development, and Domestic Investment: Determinants and Inter-Relationships". IMF Working Paper, WP/12/120.
- Mishkin, F. S. (2006). "The Next Great Globalization: How Disadvantaged Nations Can Harness Their Financial Systems to Get Rich". Princeton University Press, Princeton.
- Mishkin, F. S. (2008). "Why We Shouldn't Turn Our Backs on Financial Globalization." IMF Staff Papers.
- Obstfeld, M. (1994), "Risk-taking, Global Diversification, and Growth," *American Economic Review*, Vol.84, No.5, pp. 1310–29.
- Osada, M. and Saito, M. (2010), "Financial integration and economic growth: An empirical analysis using international panel". *Bank*

of Japan Working Paper Series.

Prasad, E. S., Rogoff, K., Wei, S. J., Kose, M. A. (2003). "Effects of Financial Globalization on Developing Countries: Some Empirical Evidence." IMF Occasional Paper 220. International Monetary Fund, Washington.

Quinn, D. (1997). "The Correlates of Change in International Financial Regulation". *The American Political Science Review*, 91, 531-551.

Quinn, D.P. and Toyoda, A.M. (2008). "Does capital account liberalization lead to growth?" *Review of Financial Studies*, 21(3), 1403-1449.

Rodrik, D., Subramanian, A. (2008). "Why did financial globalization disappoint?" Manuscript, Harvard University. IMF Staff Papers.

Schularick, M. and Steger, T.M. (2006). "Does financial integration spur economic growth? New evidence from the first era of financial globalization". Institute of Economic Research (WIF), economic working paper series.

Schularick, M. and Steger, T.M. (2008) 'Financial Integration, Investment, and Economic Growth: Evidence from Two Eras of Financial Globalization' *Review of Economics and Statistics, Working Paper, No. 75, pp 1-25.*

Stiglitz, J. (2004). "Capital-market liberalization, globalization, and the IMF." *Oxford Review of Economic Policy* 20(1), 57-71.

Stulz, R. (2005). "The limits of financial globalization." *Journal of Finance* 60(4), 1595-1637.

Wurgler, J. (2000). "Financial markets and the allocation of capital." *Journal of Financial Economics* 58(1-2), 187-214.

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