

Financial Integration in African Emerging Markets

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Abstract

The paper examines the issues of regional financial integration and its impact on financial market development in Africa. So the paper reviews the development of stock exchanges in Africa, and moves towards regional capital market integration.

It is acknowledged that financial integration affect several aspects of economic performance, particularly increases investment rates, technology transfers, trade openness, stimulates the development of domestic financial system and economic growth. Similarly, financial integration is recognized as a potential source of macroeconomic instability.

Despite experiencing rapid growth in number and size of financial markets, existing evidence suggests that African stock markets remain highly fragmented, small, illiquid and technologically weak, severely affecting their informational efficiency. Therefore, this study attempts to ascertain whether African stock markets can improve their informational efficiency by formally harmonizing and integrating their operations. Our results imply that formal harmonization and integration of African stock markets may improve their informational efficiency. The integration of the financial markets requires that appropriate steps be taken to create the enabling environment. This environment could be attained through common policies, institutions and regional frameworks and, above all, the necessary political commitment. The finding implies that openness promotes growth through indirect channels *via* financial development.

I. Introduction

Despite the growth of African stock markets, however, most of them remain small, illiquid and, in financial terms, inefficient. As a result their broader economic impact has so far been limited. It has been suggested that one way of overcoming these limitations is to encourage regional stock exchanges, or at least much stronger collaboration between national stock exchanges on a regional basis. There have been some initiatives in this direction, the most prominent being the establishment of a West African regional stock exchange in Abidjan in 1998. There have also been discussions regarding regional stock exchanges or integration of national exchanges. in East Africa, Central Africa and Southern Africa. However, progress in these initiatives has been slow, often reflecting the differing technical, legal and institutional standards governing markets in

different countries as well as broader economic restrictions such as exchange controls (Jefferis, 2000).

This paper reviews the development of stock exchanges in Africa, and moves towards regional capital market integration. It identifies constraints to further regional capital market integration and suggests the types of reforms that would help to move such integration forward, then shows steps for integration and the progress towards regional integration. Finally impact of regional financial integration in Africa.

The paper is organised as follows: Section 2 provides an overview of stock exchanges in Africa. Section 3 discusses moves towards regional integration amongst African stock exchanges. Sections 4 progress towards regional integration. Section 5 Methodology, Section 6 impact of regional financial integration in Africa. Sections 6 provide conclusions.

II. Stock Exchanges in Africa: An Overview

The stock markets in Africa can usefully be divided into four categories:

- i. South Africa, which dominates other African stock markets in terms of both size and sophistication.
- ii. A group of medium sized markets, many of which have been established for a long time (e.g., Egypt, Nigeria, Zimbabwe).
- iii. Small new markets that have shown rapid growth (e.g., Botswana, Mauritius, Ghana).
- iv. Small new markets that have yet to take off (e.g., Swaziland, Zambia).

African stock markets represent less than 2% of the world market capitalisation. The JSE accounts for close to 75 % of the total and is ranked on the 19th position in the world money market as concerns share capital market value. The second stock market in Africa, Cairo and Alexandria Stock Exchange, only represents 10 % of the African total. In general, the performances of African stock markets are weak and their liquidity is limited (African Union, 2008).

African emerging equity market returns are characterized by volatile, but substantial returns, which are affected considerably by varying degrees of liquidity cost ranging from 0.15% in Morocco to 53.37% in Tunisia. Many of the markets are dominated by a smaller group of blue chip stocks and intra-market liquidity differences can be extreme with differences greater than 100% in South Africa between the market aggregate and the constituents of the prestigious JSE Top 40

index. Using firm-level bid-ask quoted prices for six African markets of Morocco, Tunisia, Egypt, Kenya, BRVM and South Africa as well as two European markets of London and Paris the evidence suggests that the percentage of zero daily returns price rigidity measure and the Liu (2006) trading speed constructs perform better at representing inter and intramarket liquidity effects than price-impact measures such as Amihud (2002), (Hearna, 2011).

In a very short time period, Africa has developed an equity market sector. By the end of 1996, there were only 11 operating stock markets in sub-Saharan Africa, excluding South Africa. Today, Africa has about 20 active stock exchanges, including one of the only regional stock exchanges in the world, linking eight French-speaking countries in West Africa. Capital market development across Africa is primarily aimed at domestic resources mobilization – both corporate and individual. It is also expected to increase cross-border investments and catalyze foreign direct investment by helping to establish partnerships with foreign investors. Although it is very small in comparison to the United States capital market, which has a total capitalization of \$US10 trillion, the South African stock market is valued at \$US245 billion, making it the sixteenth-largest exchange in the world. The emergence and expansion of stock markets in Africa represents a significant trend toward attracting private capital investment and integration into the global financial marketplace. With the exception of the South African market and to a limited extent the North African markets, African stock markets are fragmented, with very low capitalization and liquidity levels. The total value of African stocks outside South Africa is only 0.6 per cent of all emerging-market stocks. The exchanges are also small relative to their own economies. Market capitalization in Nigeria is only 8 per cent of GNP, while Kenya, Ghana and Zimbabwe's capitalizations are 25-35 per cent. These figures are much less than those of other emerging markets. For example, many stock market capitalizations in Asia and Latin America represent up to 100 per cent of their countries' GNP, with some close to 200 per cent (Jefferis, 2000).

As a consequence, most of these markets are excluded from the main regional equity market indices and therefore attract little Global Emerging Markets (GEM) portfolio funds. With the exception of South Africa, the small bourses created south of the Sahara are highly illiquid, with very few shares to be traded. None of the stock markets had a turnover above 10 per cent of capitalization in 1996, compared to 226 per cent in Turkey, 115 per cent in China and 85 per cent in the United States of America (IFC, 1996). Lack of liquidity is also demonstrated in large

gaps between buy and sell orders. Despite their small size, illiquidity and often-unstable political and economic environments, several leading African capital markets have recorded solid performances lately. Many of these small African markets are offering dramatic returns for investors, making them relatively immune to the global jitters hitting share values worldwide, due to their lack of correlation with developed markets. This distinct characteristic of African equity markets offers positive benefits in terms of risk diversification.

II.2 Market Efficiency

There have been few studies of the efficiency of African stock markets. However the few that have been carried out conclude, not surprisingly, that most markets are inefficient (in a financial sense, meaning that stock prices do not reflect all available information, and that prices are not therefore being appropriately priced at their equilibrium values). A variety of empirical tests can be used to assess market efficiency. Jefferis & Okeahalam (1999a) apply unit root tests to market indices to assess the efficiency of the stock markets in South Africa, Botswana and Zimbabwe over the period 1989-96, and find that the South African and Zimbabwean markets were efficient during this period, although Botswana was not, at least during the early part of the period. However the unit root test of market efficiency is not a powerful one, and subsequent analysis using different tests provides contrasting results. Jefferis & Okeahalam (1999b) use an event study of the same three markets to test the response of individual stock prices to information announcements, by evaluating the speed and efficiency with which information is incorporated into market prices. This finds that the Botswana and Zimbabwe markets are inefficient, while the Johannesburg Stock Exchange is weak form efficient. This corresponds with the findings of Smith, Jefferis & Ryoo (1999), who test whether eight African stock markets follow a random walk using multiple variance ratio tests. Of the eight markets (South Africa, Egypt, Kenya, Morocco, Nigeria, Zimbabwe, Botswana and Mauritius), only South Africa is found to follow a random walk and therefore to be weak form efficient. The lack of market efficiency can be attributed to various factors, of which lack of liquidity and lack of institutional maturity would appear to be the most important. While the JSE is not particularly liquid by global standards, it is more liquid than most other African markets, and in addition benefits from the trading of its shares on major international markets where they are cross-listed. It is also the only African market that approximates a developed market in size, and availability of information and analysis (Jefferis, 2000).

III. Moves towards Regional Integration amongst Stock Exchanges

As African stock markets have become larger and more widespread over the past decade, there have also been preliminary moves towards regional integration amongst these exchanges. This reflects both the needs of the exchanges themselves and the broader process of regional integration. The latter, however, has generally started with trade liberalisation and integration, whereas regional integration amongst stock markets, being part of capital market integration, has generally progressed more slowly.

III.1 Constraints to Regional Integration of Stock Exchanges

As noted above, most African stock exchanges (that is, apart from South Africa) are small and illiquid. This acts as a major constraint to attracting inflows of foreign capital (portfolio investment), which is one of the major objectives of establishing a stock exchange. These small and illiquid exchanges face a range of problems in attracting inward investment. First, the range of shares on offer is limited, and the size of potential deals is often small. These characteristics may reflect a small number of listed companies, the small size (capitalisation) of many listed companies, or the restricted availability (free float) of shares even when the number or size of companies listed is larger. Hence many markets cannot offer large enough parcels of shares or a diversified enough range of shares to be of interest to international investors, who generally have quite large minimum holding and dealing sizes. The need for large sizes of deals reflects the fact that there are economies of scale in share dealing: various institutional factors, such as dealing with laws and regulations, dealing with local agents (stockbrokers); carrying out research; setting up custody arrangements, all have a cost and unit costs are lower if they can be spread over a larger number or value of trades. More generally, the existence of different national legal, taxation and institutional regimes makes dealing with Africa difficult and costly for international investors, hence reducing potential returns and thus constraining capital flows (Jefferis, 2000).

A second problem of small exchanges is that making cross-comparisons within sectors and across companies is difficult if there are few stocks and if not all economic sectors are represented; hence the relative performance of different companies is difficult to establish.

A third problem is that of pricing: the illiquidity of exchanges means that the pricing process is not well developed. This leads to mispricing and a lack of efficiency, which in turn means that capital is not

properly priced, so that “disciplinary” role of stock markets (rewarding good performers and punishing bad ones) may not work fully. Furthermore risk is not properly priced, and stock markets may not therefore fulfil their potential as a means of allocating capital.

Another problem is poor telecommunication and computer technologies within many African countries, with a great diversity in the levels of automation and of the systems applied. The poor telecommunications and computer technologies are a constraint to any effort to facilitate cross-border transfer of funds, as well as cross-border trading and settlement that are key to facilitating regional integration of stock exchanges. Finally, exchange controls in many countries prevent the cross-border movement of capital that is essential for regional stock market integration (Jefferis, 2000).

III.2 Steps for Integration

Many advantages could result from the integration of African financial markets:

- Economies of scale, increased competition and a wider range of instruments available for both investors and savers;
- Vehicle for the mobilization of domestic resources, foreign investment and remittances, and reverse capital flight, and hence, enhanced market liquidity;
- Avenue for financing regional projects such as infrastructure projects;
- Lower transaction and capital costs;
- Governments gain a larger set of monetary and fiscal policy instruments;
- Promotion, strengthening and supporting of the private sector by providing platforms for the mobilization of productive financial capital;
- Facilitation of capacity building in countries with less developed capital Markets
- Opportunities for long-term investment financing; and
- Deepening of financial development and economic integration, key strategies for accelerating economic growth and reducing poverty in Africa.

The integration of the financial markets requires that appropriate steps be taken to create the enabling environment. This environment could be attained through common policies, institutions and regional frameworks and, above all, the necessary political commitment. For the success of the integration process, member States need to ensure that there is macroeconomic stability and an independent central bank

committed to price stability so that the real value of financial assets is protected. National policies must also be pro-growth and the capital markets backed by strong legal, regulatory and supervisory mechanisms as well as good general economic and corporate governance and a respect for property rights. To ensure the stability of an integrated market, national governments would have to harmonize their respective macroeconomic policies as well as the legislative, institutional, regulatory frameworks across countries. Solid information and communications technology (ICTs) would have to be put in place to support the high-quality, efficient and linked clearance and payment settlement systems required to facilitate financial asset transactions. The technology should also facilitate the flow of information to all stakeholders (Ayed, 2008).

The operation of financial markets is a very complex process that requires specific skill sets. Member States would therefore have to commit to develop sufficient capacity and skills at all levels, including governments, regulators, brokers, auditors, stock exchanges and regional institutions, so as to ensure the smooth operation of the markets. To improve liquidity, governments also need to use the financial markets for privatization of well-functioning State-owned enterprises as well as bond issues. The political commitment and the adoption of consistent policies by governments are paramount for the success of market integration (Hearna, 2011).

IV Progress towards Regional Integration

Given the small and fragmented capital markets in Africa, the markets need to be integrated in order to unlock the economic potential of the continent and alleviate the mass poverty that afflicts its people. The integration of markets would entail the reduction or removal of fiscal, infrastructure, legal and regulatory barriers, in order to facilitate transactions and the movement of financial capital and services. Capital market integration often involves the harmonization of laws, regulations and standards among countries so as to achieve the desired levels of mobility of capital and financial services. The harmonization process could take the form of member States adopting similar laws. Through the harmonization process, standards are created to act as guideposts for the operation of the markets in a region. The harmonization process ensures that differences in the technical content of standards are prevented or eliminated, because the markets are forced to adopt international treaties and regulatory principles.

Although regional integration amongst African stock exchanges is still at an early stage, there has nevertheless been some progress. The first stage of integration is cross-listing of stocks, whereby a single stock is listed on more than one exchange. If this is associated with open registers (whereby stocks can be moved from one country's register to another without restriction), this will lead to a common pricing of the stock on the different exchanges, with the price determined by trading on both exchanges. Cross-listings are assisted by the adoption of common listing standards across exchanges. This course has been pursued by SADC stock exchanges, which are in the process of adopting common rules and requirements for listings as the first step towards regional integration. This initiative is being promoted by the SADC Stock Exchange Committee (SADSEC), whose members are Botswana, Lesotho, Mauritius, Namibia, South Africa, Zambia and Zimbabwe.

The first fully-fledged regional stock exchange (as opposed to cooperation or crosslistings between separate national exchanges) is the Bourse Regional des Valeurs Mobilières (BRVM), established in Abidjan in 1998 on the basis of the old Côte D'Ivoire exchange. The establishment of this regional exchange is clearly facilitated by the fact that the member countries share a common currency (the CFA franc) and thus have no restrictions on capital movements between themselves. Discussions have also taken place on regional integration of stock exchanges in East Africa (Kenya, Uganda and Tanzania). With more general moves towards reviving regional cooperation in East Africa, some observers believed that the Nairobi Stock Exchange, which dates back to 1954 and which has relaxed rules on foreign ownership of shares in recent years, should have been developed as the market for all listed companies in the region. Instead, Tanzania and Uganda decided to open their own stock exchanges, although the number of listings has so far been very low, due partly to slow progress with privatisation programmes and restrictions on foreign ownership. There are currently discussions on facilitating cross-listings. In central Africa, the UDEAC members Cameroon, CAR, Chad, Congo (Brazzaville), Equatorial Guinea and Gabon have had discussions on a regional exchange. In a parallel with the West African situation, these countries already share a currency (the CFA franc) and a central bank, but unlike West Africa do not have an existing exchange that can form the basis for a regional market (Jefferis, 2000).

In the proposal on the creation of a Pan-African stock market by the African Union in January 2006, it was indicated that the Pan-African Stock Exchange is not designed « to replace local stock exchanges but to strengthen their role on the local financial market, and spread the use of

financial and monetary securities throughout the continent owing to its promising financial and economic resources”. Thus the shape of the integration at the continental level is to be determined by the choice of the most efficient option and by imagining a progressive solution taking into account the diversity of African economies (African Union, 2008).

The advantages expected from setting-up this market at the continental level are identical to those which prevailed for the launch of regional stock markets but that have not, so far, been achieved by the latter: increase the depth and the liquidity of the present financial market, attract higher volume of resources towards investment, promote the modernization and efficiency of financial operations, develop intra-continental trade and economic growth, promote competition among enterprises on the one hand and between the banking sectors and the non-banking financial sector on the other, benefit from economies of scale and reduce the administrative burden of international enterprises. With new information technologies and globalisation, the stock exchange has lost the features of a fixed structure and basically gained the shape of a mechanism based on transactions likely to emanate from any part of the world. However, in financial matters where the commitment of operators, and the protection of the public and stakeholders’ confidence are primordial, realism and pragmatism should feed the process of evaluating and designing the project of the Pan African stock market. It falls in line with a comprehensive project of setting up African financial institutions (African Investment Bank, African Central Bank and African Monetary Fund) that the African Union is promoting in a bid to further the development of financial systems and African economies (African Union, 2008).

Recognizing the need for the pooling of financial resources, African regional economic communities (RECs) are beginning to establish subregional capital markets to overcome the limitations of their fragmented capital markets. RECs recognize the need to integrate and consolidate financial markets as a vehicle for promoting economic development on the continent. Furthermore, financial integration would enhance competition, promote efficiency and productivity and facilitate the flow of information. They are pursuing strategies of financial integration through programmes for the harmonization of regulatory and legislative frameworks and policies and the promotion of cross-border investments and listing of securities. Overall, regional financial integration is expected to establish stronger links with financial systems and capital markets in more developed countries.

Some of the RECs have established institutions to support regional financial cooperation. Regional development banks operate in CEMAC, COMESA, EAC, ECOWAS, UEMOA and UMA. The role and functions played by the financial institutions are: collecting of deposits and granting of loans to individuals and enterprises; transmission of stock exchange orders and management of interactions between financial institutions through the central bank; financial intermediation on short-term and long-term considerations and receiving public funds. Furthermore, the regional institutions have limited relations with the national institutions, in most cases dealing only through the central banks.

Relationship between national and regional financial institutions

RECs: Interaction between national and regional financial institutions
COMESA The PTA Bank: has a relationship with commercial banks in the region. e.g. co-financing arrangements, floating of local currency bonds. The clearing house also has a close relationship with central banks
EAC Not much interaction. Basically not serving the same clients.

ECOWAS At UEMOA: national banks are branches of the regional central bank (BCEAO).

SADC: Regional financial institutions are not yet in place.

UEMOA: Interaction between financial institutions through the central bank.

In order to promote the creation of regional financial institutions, the RECs are making attempts to deregulate the financial environment. Some of the RECs are instituting policies to support their deregulation efforts, as summarized in Some of the measures taken to deregulate the market include the liberalization of capital markets; liberalization of exchange rate controls, convertibility of national currencies and liberalization of national banking laws. With respect to international standards, member States are making efforts to eliminate controls on capital transfer and capital repatriation.

Africa has already experienced the integration of stock markets, especially in West, Central, Southern and East Africa. The results obtained fail to meet the expectations. But this lacklustre performance is due to known problems that if corrected could improve the situation. Faced with the size of African stock markets which on the whole are small-barely 1% of global capitalization-and the inadequate liquidity of all the consolidated African stock exchanges, many stakeholders (African and foreign political and economic decision makers, experts and researchers, etc.) consider a more advanced integration of existing stock

markets as the way forward to be explored rapidly and seriously. The President of the Association of African Central Banks (AACB) at the end of a symposium on the theme “Capital markets and mobilization of resources for poverty reduction and growth” stated that “the integration of financial markets was crucial for Africa and that there was no need for each country to develop its own Wall Street on the continent” (African Union, 2008).

IIV Methodology

This study uses a sample of African countries. The selection of these countries was mainly determined by the data availability on our variables of financial integration. Our panel data covers the period of 1980 to 2010, allowing us to examine the effects of extensive economic and structural changes over those years. Growth of real GDP per capita (real GDP per capita is in constant prices (gy), population growth (n) and investment rate (INV) are from *World Development Indicators* (World Bank). Indicators of financial development are either taken from or computed using the IMF’s *International Financial Statistics* (IFS). Our indicators of macroeconomic stability (inflation (INF) and government spending (GOV) (as a share of GDP)) are taken from IMF and World Bank sources respectively. The human capital indicator (EDU) (years of schooling) and the institutional structure variable ($INST$) of political and economic freedom is taken from the World Database.

To assess the relationship between financial integration, financial development and economic growth in Africa, we utilize the Generalized Method of Moments (GMM) approach for panel data analyses. Thus as proposed by (Ahmed, 2011), let us consider a model in such a way that:

$$gy_{it} = a y_{it-1} + b IFI_{it} + c X_{it} + u_i + e_{it} \quad (1)$$

where gy is GDP per capita growth, the subscripts i and t denote country and time period (with $i \in [1, N]$ and $t \in [1, T]$; and also assuming that N is large and T small), y_{it} represents the logarithm of initial income per capita, IFI is an indicator of financial integration, X represent a vector of weakly exogenous and predetermined covariates which include time effects (5-year period dummies), u_i is the unobservable country-specific fixed effect for country i and e_{it} is a disturbance term. For the practical purpose of eliminating time-invariant country specific effects, we take first difference of equation (1) to obtain:

$$\Delta gy_{it} = a \Delta y_{it-1} + b \Delta IFI_{it} + c \Delta X_{it} + \Delta e_{it} \quad (2)$$

Where Δ indicates first difference operator. To deal with a number of shortcomings in the first differenced GMM including the potential endogeneity problem, correlation among key variables and low precision, orthogonality conditions or instrumental-variable approaches are applied [where lags of specified variables in levels are used as instrument for predetermined and endogenous variables and strictly exogenous variables are instrumented by their first order differences in equation (1)]. Given equation (2), lagged values would constitute valid instruments only if our explanatory variables are weakly exogenous and error terms e_{it} cannot be serially correlated. More specifically these assumptions imply:

$$\begin{aligned}
 E(y_{it-s} \cdot (e_{it} - e_{it-1})) &= 0 \quad \text{for all } s \geq 2; t = 3, \dots, T \\
 E(X_{it-s} \cdot (e_{it} - e_{it-1})) &= 0 \quad \text{for all } s \geq 2; t = 3, \dots, T
 \end{aligned} \tag{3}$$

Given equation (3), it is then possible to use lagged values of endogenous and predetermined variables dated $t - 2$ as instruments.

We examine the impact of financial integration policies of African countries. It is expected that international or regional integration lowers the cost of capital, in addition to increasing the pool of investment available, and provides entrepreneurs access to international capital. We introduce five commonly used measures of financial integration: the aggregate stock of external asset and liabilities to GDP (IFI1); the stock of liabilities as a share of GDP (IFI2); the ratio of inflows and out flows of capital (foreign direct investment and portfolio inflows) to GDP (FLO); the ratio of inflows of capital (foreign direct investment and portfolio inflows) to GDP (INFLO); and a *de jure* (rule-based) measure of financial openness (IMF). All these variables are in log form.

Table 1: International financial integration and growth

	IFI1 (1)	IFI2 (2)	FLO (3)	INFLO (4)	IMF (5)	FLO1 (6)	INFLO1 (7)
y0	-0.043** (0.024)	-0.032** (0.017)	-0.041* (0.020)	-0.027 (0.019)	-0.042* (0.016)	-0.024* (0.011)	-0.034** (0.019)
IFI Indicator	-0.037 (0.031)	-0.012 (0.030)	0.227 (0.427)	0.900* (0.389)	-0.002 (0.006)	0.116 (0.243)	0.012 (0.014)
EDU	0.032** (0.017)	0.026** (0.015)	0.029** (0.016)	0.018 (0.013)	0.021* (0.008)	0.025** (0.013)	0.037* (0.018)
INF	-0.052* (0.015)	-0.052* (0.017)	-0.099* (0.036)	-0.044** (0.026)	-0.047* (0.008)	-0.034** (0.018)	-0.103* (0.017)
GOV	0.102 (0.088)	0.140 (0.122)	-0.022 (0.074)	-0.052 (0.083)	-0.103 (0.250)	-0.121 (0.147)	-0.215* (0.110)
TO	-0.028* (0.013)	-0.043* (0.013)	-0.018** (0.010)	-0.011** (0.006)	0.031 (0.032)	-0.036* (0.014)	-0.041 (0.036)
N	-0.262 (1.073)	0.102 (0.601)	0.192 (0.840)	-0.104 (0.473)	-1.649* (0.773)	-0.134 (0.322)	-0.835* (0.414)
INST	-0.004 (0.014)	-0.002 (0.025)	-0.015* (0.006)	-0.009* (0.004)	-0.012* (0.005)	-0.016* (0.007)	-0.027** (0.015)
Obs	125	125	110	115	115	140	140
AB AR(1) (p-value)	0.572	0.209	0.851	0.778	0.608	0.334	0.319
AB AR(2) (p-value)	0.668	0.651	0.338	0.380	0.976	0.413	0.627
Hansen test (p-value)	0.905	0.805	0.901	0.815	0.95	0.497	0.506

The table presents the results of the system GMM estimation. Columns (1) to (7) report results using different financial integration indicators: IFI1, IFI2, FLO, INFLO, IMF, FLO1 and INFLO1 respectively. We instrument our predetermined and weakly exogenous variables using their levels lagged two and three times in the first differenced equation (2) and using their first-differences lagged once in the level equation (1). From the Hansen and AR tests, we do not observe any serious problem with the specification of the model and the choice of our instruments.

Overall, this finding indicates that African economies that were more open to international capital flows during the period of our study do not seem to grow faster than the rest. This lack of a robust relationship between international financial integration and economic growth, even under this dynamic panel estimation technique, that addresses potential endogeneity (between capital flow and GDP), leads us to a number of experimental empirical questions. Importantly, the finding could imply that openness promotes growth through indirect channels *via* financial development. The growth effect could also be conditional to other factors such as institutional characteristics, macroeconomic environment or other economic conditions. More generally, the lack of any robust relationship could also just be an indication that ‘the financial market integration that has thus far taken place is still insufficient to show up significantly in the

data. The later argument is typically supported by the fact that most of the financial instruments issued in African markets continue to concentrate on short-term maturities. Commercial banking structures still remain rigid in Africa and foreign participation and penetration in financial sectors, such as insurance and pension funds, is an ongoing process. It is noted that in some African countries, for example Kenya, complementary financial reforms are resisted by some influential politicians to preserve entrenched interests. To fully reap economic benefits of integration in financial markets, further harmonization of underlying legal and regulatory frameworks and tax systems are needed. Further liberalization of financial services at sub-national and national levels is also needed to enhance long-run financial intermediation.

From the results, it is observable that inflation (INF) is negative and strongly significant at the 1 percent level. Thus the evidence supports the view that uncertainty about macroeconomic and price development negatively influences growth. The results show that institutional deficiencies have a negative impact on economic growth. As such institutional innovation (such as good governance, enforcement of rule of law, protection of property rights and investors, and stable political environment) is crucial for economic success. Openness to international trade is found to be negatively affecting growth in African countries.

IIIIV Impact of Regional Financial Integration in Africa

International financial integration is generally perceived as a process by which financial systems and markets become more integrated (or are better linked) through financial flows – with those of closer regions and with rest of the world. We examined the trends in financial integration and capital flows between 1980 and 2010, which also coincides with the era of international financial openness. For the sake of comparability, we look at the trends in net flows of investment and that of financial deepening in African countries compared to other transition economies such as those of East Asia and the Pacific (developing only), and Latin America countries. Growth in the developing economies of East Asia is seen to have improved in recent decades, averaging 9.7% in the period between 2001 and 2005 compared to 2.2% in African economies over the same period. Following the adoption of trade and capital account liberalization, private and external capital flows to emerging East Asia and Pacific countries are seen to be strong, as the region attracted a significant proportion of foreign direct investment and portfolio flows during the 1990s and post-2000 period. Following the structural adjustment programme and macroeconomic stabilization in late

1980s, foreign direct investment (net inflows % GDP) in African economies stood at about 1% in 1991-1995 and more than doubled by the year 2008. We see evidence of an expansion in domestic private credit and an upward trend in portfolio investment in the post liberalization period in African economies. It is estimated that private equity and debt inflows have now reached a record high of \$53 billion in 2007, while bond flows to African economies have grown markedly, increasing by \$7.03 billion between 2006 and 2007 alone, indicating an increase in international banking activity in the recent years (Macias and Massa, 2009).

Our initial inspection reveals that there seems to be an interaction among the indicators of international and regional financial integration and domestic financial deepening, and that financial integration may have fostered cross-border capital movements to spur growth. On the other hand, although there has been some harmonization programmes to integrate the financial markets of the African region, financial openness has also enhanced the problem of capital flight. It is estimated that cumulative capital flight from African economies totaled about US\$285 billion in the year 2000 (Boyce and Ndikumana, 2000) and that capital outflows from Africa have more than doubled in the period between 1991 and 2003, averaging over \$US15 billion per year (Ndikumana, 2005). We observe that although net inflows are generally higher than outflows, capital outflows are as high as those from the East Asia region which is a bigger economy, and even higher than those from Latin America. It has been argued that most of the financial markets in Africa lack depth (the problem of market thinness), provide limited financial services and have inadequate liquidity, and financial products offered have a strong short-term bias (see ADB, 2010). Given the economic potential of the African continent, stronger regional integration could be used to support growth in international trade, poverty reduction, and access to international financial markets on better terms (Ahmed, 2011).

A key issue that has limited the successful development of regional integration seems to be that not many African nations were willing to subordinate national policy goals with common regional strategic goals. As a result, there has been frequent policy reversal, even after reaching consensus on joint policy actions.

Strong financial markets and institutions play an important role in supporting economic development, because they enhance the exchange of goods and services, the mobilization of resources (both domestic and international), the efficient allocation of factors of production, and the

diversification of risk. The economic literature shows strong evidence of a positive relationship between developed financial markets and economic growth. Although some form of financial development has taken place in Africa in recent years, financial market activities remain very shallow, with low capitalization and inadequate liquidity in capital markets. Most financial instruments issued in Africa have very short-term maturities. Bank financing continues to be concentrated at the short end of the term structure. Consequently, the spread between lending and deposit rates remains very high and the ratio of non-performing loans is also high, indicating a weakness in the financial market structure on the continent. Furthermore, only a limited number of financial instruments are issued on the financial markets, making it extremely difficult to hedge against financial market risk in Africa.

Finally, Africa needs deep, efficient and well-established financial markets, including bond markets and stock exchanges, to mobilize the necessary domestic resources to support its development objectives, particularly the Millennium Development Goals (MDGs). These markets would help increase the quantity and productivity of investment, bolster competition in the financial sector, and improve corporate governance. Furthermore, capital markets provide policymakers with an array of tools to conduct monetary policy also serve as vehicles for Africa to integrate into the global economy.

Conclusion

Development of Africa's capital markets and a deeper degree of financial intermediation are crucial for the mobilization of resources needed to carry out regional integration objectives, particularly in the areas of growth and development. The need to integrate local financial markets into the globalized financial system implies that regional standards should be raised to meet international standards. African financial markets are attempting to integrate within the continent. However, their integration into the global market is still a distant target. Financial integration in Africa comes mainly through the creation of development banks by the regional economic communities to support regional integration objectives. In general, the macroeconomic and institutional set-up of countries within Africa has not favoured the development of integrated markets. A number of different types of policies can foster integration.

Direct policies such as eliminating controls and impediments to the free mobility of financial capital or creating specific agreements between

countries or within regions can serve as a basis for financial integration. Types of indirect policies that play an important role for future financial integration include the adoption of international best practices on accounting standards, disclosure of information and tax regimes. Other useful instruments include harmonizing regulations that govern information sharing, and allowing cross-border information sharing. Even if full harmonization of regulations is reached, however, problems with key national institutions and macroeconomic instability can hinder the process of financial integration. Protection of property rights and legal stability must also be safeguarded.

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