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Effects of financial liberalization on financial market development and economic performance of the SSA region: An empirical assessment ☆

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This study investigates the role of financial liberalization in promoting financial deepening and economic growth in Sub-Saharan African countries (SSA). We apply the more efficient system GMM estimator in dynamic panel data that combines first difference and original level specification to deal with the problems of weak instruments. Our dataset covers 21 countries in Sub-Saharan Africa over the period of 1981–2009. Additionally, the paper sought to examine both the direct and indirect impacts of financial liberalization policies on economic growth and financial deepening using a much more comprehensive and recent financial liberalization dataset. The econometric results suggest that, on average, financial liberalization is negatively associated with income growth in SSA region. Our findings provide support for the skeptical empirical view of financial liberalization in emerging markets, which show that liberalization, by itself, might be associated with lower economic growth through leading to destabilization, stimulating domestic capital flight and increasing the risk of financial fragility. However, the research finds that financial liberalization does indeed impact positively on financial deepening and resource mobilization in SSA region, after controlling for key macroeconomic factors such as institutional quality, fiscal imbalances and inflation. In fact the study reports a stronger reforms effect for countries that have stronger legal institutions, protection of property rights and higher human capital. Policy-wise, the study finds that institutional and human capital factors are important in explaining growth and financial development; therefore, it is necessary for SSA governments to promote a stronger and more transparent institutional development as we move forward.

1. Introduction

Growth statistics of the Sub-Saharan African (SSA) countries show a disappointing history of poor economic performance. Following a persistent slowdown in economic growth and increases in rural poverty levels, many SSA countries adopted major policy reforms and market-friendly incentives championed by Bretton Woods institutions called "structural adjustment program" in the late 1980s. The emphasis of the structural adjustment-led reforms were creation of an enabling business environment and conditions, maintaining fiscal prudence and enhancing institutional and regulatory mechanisms to stimulate economic growth. Other major aspects of these policy reform measures included financial and trade liberalization, privatization of state monopolies, acceleration of capital market development to encourage international capital flows and adoption of an export led growth strategy.

The theoretical support for the relationship between financial liberalization, financial development and economic growth originates from the seminal works of McKinnon (1973) and Shaw (1973) (also called McKinnon–Shaw hypothesis). The proponents of financial liberalization argue that under a repressed financial system interest rates are held below their competitive levels. This effect lowers both savings and investment and causes a high disparity between the lending and borrowing rates which may also induce a lower volume of business (Kitchen, 1986, p.83). Financial liberalization is expected to correct all the non-market disparities through allowing market determination of all institutional interest rates. This will provide higher incentives for savings, lead to a higher interaction among economic agents and promote the designing of new financial instruments that will enhance risk-sharing opportunities. Thus, liberalization of financial markets is expected to lead to financial deepening as a result of increase in the volume of funds handled by the financial institutions in aggregate and enhance the efficiency of capital accumulation through an increase in productivity. Usually, in a financially repressed economy, real deposit rates are low or even negative, resulting in a lower opportunity cost of financial resources that may not "screen out" unproductive use of credit and therefore lower levels investment (Li, 1997). Liberalized financial environment is also expected to facilitate increased competition in the banking sector, which will produce

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benefits such as greater pricing competition and better service delivery. Financial market liberalization improves the speed and diversity of banking activities through transferring skills and financial technology across borders. As depicted by Fig. 1, the intermediation margin is expected to decrease in the long-run. In the short-run, the supply of credit is more inelastic (s_S) (assuming that banks have oligopolistic market power as is usual in case of SSA countries) compared to the long-run case (s_L). As financial liberalization reforms continue to remove distortions, quantity of investment increases to LF_L (mostly allocated amongst competing private investment). Through this process, market-oriented liberalization is expected to lead to financial deepening and thereby ultimately contribute to higher economic growth.

Nearly after two and half decades, the experiences of the SSA countries show that the reform measures seem to have had little positive effect. GDP growth rates show minimal improvement 1.8% in 1990–1995 to 4.0% in 2006–2008. The experiences of some of the Latin American countries such as Chile, Urugay and Argentina show that the implementations of financial liberalization measures have led to different outcomes (Greenidge and Belford, 2002). In fact, Misati and Nyamongo (2011) argue that financial liberalization is still viewed as one of the most controversial policies and empirical results have been largely inconclusive. In a recent survey of literature, Hermes and Lensink (2005) conclude that one common argument as to why the evidence remains inconclusive is due to lack of precise measurement of financial liberalization itself.

A number of studies have so far examined the links between financial liberalization and economic performance in the context of sub-Saharan African countries. In an attempt to provide better measure of financial liberalization, Fowowe (2008) uses two indexes to test the role of financial openness in growth. However, it is important to note that some typical control variables are omitted. Some of these key variables that are either critical or potentially correlated with the financial liberalization indices, that were not controlled for, include population growth and human capital, level of institutional development (legal systems and economic freedom), and concomitant policy reforms (fiscal policy). McDonald and Schumacher (2007) emphasize that legal and institutional development is essential in creating a better functioning financial system and therefore should be given a higher priority when examining the impact of financial liberalization efforts in SSA. Other studies such as Aziakpono (2004), Allen and Ndikumana (2000) and Matsheka (1998) have either employed a more general measures of financial development

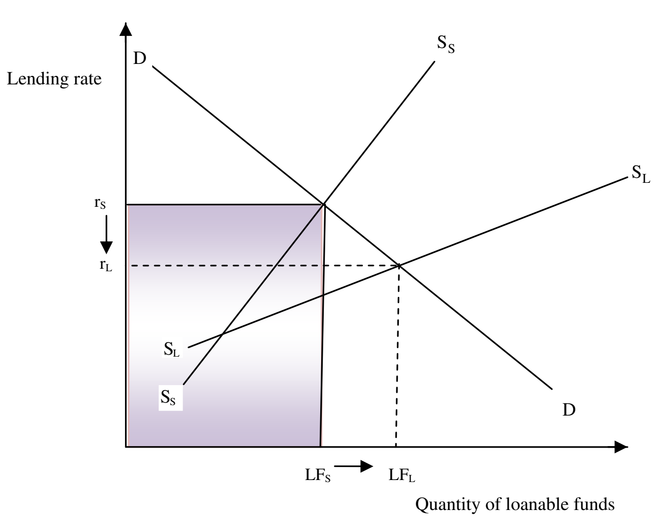

Fig. 1. Changes in intermediation margin and loan volume following financial liberalization.

index (which did not identify time-specific liberalization process)[1] or do not capture gradual progression, institutional transformation and phase-wise liberalization of the financial markets.

This study aims to improve on previous empirical research in SSA region such as Fowowe (2008) by utilizing financial liberalization indices that adequately capture the gradual nature and intensity financial market reforms.[2] Additionally, we employ Chin–Ito index which is a measure of extent and the intensity of capital controls.[3] Secondly, many of the studies that evaluate the benefits from financial liberalization (such as Bekaert et al., 2005; Arestis, 2005; Arestis et al., 2002; Bandiera et al., 2000) have either utilized cross-country analysis or diverse sample countries. It is understood that countries in different regions have diverse financial and asset characteristics, varying levels of economic development and different institutional set-up. Here, the study combines rich panel structure with a focused and relatively more homogenous group of countries from developing world. Thirdly, while using the most recent data on financial liberalization, financial market development and legal and institutional development, the research aims to examine the independent effects of market liberalization and development of institutions on SSA's economic growth, as well as their potential interaction effects. A fourth aim is to investigate the indirect benefits of financial sector liberalization in which it can act as a catalyst for further financial market development. We investigate this empirical relationship using system GMM technique which is preferred in the presence of the endogeneity of the regressors and has better finite sample properties.[4] While looking at the relationship between financial liberalization and sub-Saharan Africa's economic growth, this empirical examination will be useful not only to the policy makers and political leaders, but also provide some policy insight for future reforms.

The rest of this paper is organized as follows. The next section provides reviews of the relevant literature and focuses on the links between financial liberalization, financial development and growth. Section 3 contains the data, empirical model and methodological framework. Section 4 discusses major empirical results and conclusion and policy implications are presented in Section 5.

2. Impact of financial market liberalization in Africa: A brief assessment

Table 1 presents some stylized facts on growth and financial market development trends for the 21 countries in our sample. It is observable that real GDP per capita growth show minimal improvement in post reform era. In terms of savings (% GDP), the trend is again less encouraging, as domestic savings rates remain low by international standard. The ratio of investment (% GDP) remains generally low for most African countries compared to levels in other developing countries and in relation to the resources needed. Trends in both these later variables will hamper the region's future economic growth. The flow of FDI to the region has moderately improved (from 0.45% in 1980–1990 to about 2.2% in 2001–2005) for SSA as a whole, although there are some reports suggesting that FDI inflow is concentrated in the mining and oil extraction industries (see, for example, Boocock, 2002). However, the close economic cooperation between China and Africa in recent years and improvement in Sino-African trade is expected to boost FDI to Africa. According to these individual country statistics presented, one can

[1] For example Aziakpono (2004) utilizes ratio of liquid liabilities to GDP while earlier studies such as Seck and El Nil (1993) and Oshikoya (1992) have used real interest rate as a proxy for financial liberalization.

[2] For robustness and sensitivity analysis, we construct our own continuous index that captures five major moves towards liberalization in SSA's financial markets.

[3] Some of the recent studies that have utilized Chin–Ito index of financial liberalization in their empirical analysis include Yalta and Yalta (2012); Arestis and Caner (2009) and Eichengreen et al., (2009).

[4] See for example Bond et al. (2001).